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1 **2.1 Exhibit 1: ADMINISTRATIVE DOCUMENTS**

2 **2.1.2 EXECUTIVE SUMMARY**

3 **MANAGEMENT DISCUSSION AND ANALYSIS**

4 **Overview**

5 Welland Hydro-Electric System Corp. ("Welland Hydro" or "WHESC") is located in the Niagara
6 Peninsula and incorporated pursuant to the Ontario Business Corporations Act with its head office in
7 the City of Welland. The corporation owns and operates electricity distribution infrastructure serving
8 approximately 23,000 residential and commercial customers in the City of Welland. The business of
9 Welland Hydro is regulated by the OEB under the Ontario Energy Board Act, 1998 (Ontario). Welland
10 Hydro-Electric System Corp is 100 percent owned by its shareholder (Welland Hydro-Electric Holding
11 Corp.) which is 100 percent owned by its shareholder (the City of Welland).

12 Welland Hydro receives electricity from the provincial electricity grid and transports it safely and reliably
13 across a distribution network covering a service territory of 81 square kilometers. WHESC's
14 distribution equipment includes 13 substations, 338 kilometers of overhead lines, 142 kilometers of
15 underground cable, over 2,300 transformers and over 8,000 poles.

16 As a condition of its distribution licence, WHESC is also required to meet energy conservation and
17 demand management ("CDM") targets established by the OEB.

18 For this rebasing application, the main budgeting themes include the need to maintain staff at current
19 levels while still providing for succession planning; the need to ensure that elements of the distribution
20 system that are at end of life are rehabilitated or replaced; continued focus on sustainable cost savings
21 to contain growth in operating costs while meeting new or expanded requirements; the need to
22 normalize capital spending while continuing to provide an adequate distribution system to meet the
23 requirements of current and future customers; and maintaining the competitive distributions rates of
24 WHESC within the Niagara Region.

25 In conjunction with focusing on planned operating and capital expenditures for the 2016 Bridge Year
26 and the 2017 Test Year, management's planning review included an extensive assessment to ensure
27 that there was alignment with the OEB's RRFE objectives (Customer Focus, Operational
28 Effectiveness, Public Policy Responsiveness, and Financial Performance). Business strategies
29 included emphasis on improvements in productivity, maintenance of safety and reliability, provision of
30 excellent service to customers, and steady financial returns for the shareholder.

1 WHESC's Vision and Mission Statements and strategic objectives are as follows:

2 **Corporate Vision Statement**

3 ***Welland Hydro will remain a community-owned asset and continue to collaborate with others,***
4 ***embracing best practices to implement appropriate product and service innovations in a timely***
5 ***manner within an ever-changing provincial policy environment.***

6 **Corporate Mission Statement**

7 ***Welland Hydro is a community owned asset whose team of highly skilled professionals are***
8 ***committed to distributing safe, reliable power and generating renewable energy that enhance***
9 ***the quality of life in Welland.***

10 **Strategic Objectives**

- 11 • ***Deliver balanced financial and social returns by investing in quality distribution***
12 ***infrastructure***
- 13 • ***Promote a culture of energy conservation and sustainable energy to our customers and***
14 ***employees that is consistent with the energy initiative of our shareholder and Province***
- 15 • ***Be a leader in efficient, safe, reliable, and economic distribution of energy at***
16 ***competitive distribution rates***
- 17 • ***Provide a workplace environment which promotes communication, values and retains***
18 ***employees, and attracts personnel as required***
- 19 • ***Enhances our position as an asset to our shareholder and the community by engaging***
20 ***all stakeholders in strategic objectives***

21 **Performance in Meeting Corporate Objectives**

22 Outlined below is Welland Hydro's approach in its Business Plan in order to deliver on its goals and
23 objectives. A copy of Welland Hydro-Electric System Corp.'s 2017 Business Plan is attached in
24 Appendix 1-A.

1 Welland Hydro is proud of its performance outcomes over the past five years as shown in its 2015
2 Scorecard presented Appendix 1-B. An overview by past performance and future plans and objectives
3 are discussed by performance outcome below.

4 **CUSTOMER FOCUS**

5 ***“Services are provided in a manner that responds to identified customer preferences”***

6 **Customer Satisfaction Survey Score**

7 Since 2014 Welland Hydro has conducted surveys of its customer base. For all three years Welland
8 Hydro has received an “A” in Customer Satisfaction Score Level increasing the percentage of customer
9 satisfaction to 90% in 2015 from 88% a year earlier. First Contact Resolution also increased from 78%
10 in 2014 to 84% in 2015. Welland Hydro believes this is the result of its commitment to maintaining
11 exceptional customer care and to continuing to find ways to improve the customer experience.

12 **Objective: Maintain a Customer Satisfaction Score Level of “A”.**

13 **Customer Satisfaction 90%**

14 See Section 2.1.7 Table 1-20 for Performance Improvement Targets

15 **OEB Service Quality Indices**

16 Welland Hydro has consistently exceeded performance targets set by the OEB. Welland Hydro
17 participates in a scorecard survey prepared by Elenchus comparing WHESC’s results with other LDCs
18 in the province. Below is Welland Hydro’s 2015 score and 2015 ranking for LDCs (6) in the Niagara
19 region (Welland Hydro, Grimsby Power, Horizon Utilities, Niagara on the Lake Hydro, Niagara
20 Peninsula Energy, Canadian Niagara Power, and excluding areas served by Hydro One) by
21 performance measure:

22	New Residential/Small Business Service Connected on Time	100.0%	1st
23	Scheduled Appointments Met on Time	98.5%	5th
24	Telephone Calls Answered on Time	98.5%	1st

25 **Objective: 100% success on OEB Service Quality Indices**

26 See Section 2.1.7 Table 1-19 for Performance Improvement Targets

1 **Billing Accuracy**

2 Welland Hydro believes that this performance measure is very important to its customers. Since the
 3 inception of this measure in 2014 Welland Hydro has had a billing accuracy of 99.99% for each of the
 4 two years. WHESC's 2015 score and 2015 ranking amongst Niagara LDCs are as follows:

5 Billing Accuracy 99.99% 1st

6 **Objective: 99.5% Billing Accuracy**

7 See Section 2.1.7 Table 1-20 for Performance Improvement Targets

8 **Competitive Distribution Rates**

9 Welland Hydro has taken a balanced approach to OM&A expenses, Capital Expenditures, and Returns
 10 to its shareholder to set rates which are competitive with LDCs in Ontario and the Niagara Region.
 11 One of the measures Welland Hydro believes is a key indicator of distribution rates charged to
 12 customers is Annual Revenue per Customer Class as found in the Annual Yearbook of Distributors.
 13 For 2015, Welland Hydro had the 25th lowest revenue per Residential customer, the 12th lowest
 14 revenue per General Service < 50 kW customer, and the 35th lowest for GS>50 kW/ Large Use/Sub-
 15 transmission customers out of 71 LDCs in Ontario. Table 1-1 compares Welland Hydro's 2015 Annual
 16 Revenues per customer class to LDCs (6) in the Niagara Region.

17 **Table 1-1 2015 Revenue per Customer By Class**

Residential Customers		
1	Welland Hydro-Electric System Corp.	\$ 294
2	Grimsby Power Incorporated	\$ 297
3	Horizon Utilities Corporation	\$ 303
4	Niagara-on-the-Lake Hydro Inc.	\$ 329
5	Niagara Peninsula Energy Inc.	\$ 371
6	Canadian Niagara Power Inc.	\$ 391
General Service <50kW Customers		
1	Welland Hydro-Electric System Corp.	\$ 594
2	Grimsby Power Incorporated	\$ 661
3	Niagara-on-the-Lake Hydro Inc.	\$ 812
4	Horizon Utilities Corporation	\$ 824
5	Niagara Peninsula Energy Inc.	\$ 887
6	Canadian Niagara Power Inc.	\$ 961
General Service >50kW, Large User (>5000kW) and Sub Transmission		
1	Grimsby Power Incorporated	\$ 4,398
2	Niagara-on-the-Lake Hydro Inc.	\$ 6,767
3	Welland Hydro-Electric System Corp.	\$ 8,840
4	Niagara Peninsula Energy Inc.	\$ 9,255
5	Horizon Utilities Corporation	\$ 11,162
6	Canadian Niagara Power Inc.	\$ 20,015

1 The annual proposed increase for Residential Distribution rates is approximately \$27/year. The
2 addition of this amount to the existing 2015 annual residential distribution revenue would bring annual
3 distribution revenue to \$324/year (\$294 + \$27). At \$324/year WHESC would still have the third lowest
4 Residential rates in the Niagara Region even when increases in rates at other LDCs is not taken into
5 account. The same principle applies to the GS<50 customer class where annual proposed increases
6 are approximately \$54/year. The addition of this amount to the existing 2015 annual GS<50
7 distribution revenue would bring annual distribution revenue to \$648/year (\$594 + \$54). WHESC
8 would still have the lowest GS<50 distribution rates in Niagara.

9 **Objective: Distribution Rates that are competitive with other LDCs in Niagara and Ontario**

10 Plan to meet Welland Hydro's Customer Focus Objectives (tied to RRFE Customer Focus and
11 Operational Effectiveness Outcomes)

12 Welland Hydro's approach is to balance customer preferences with regulatory requirements, when
13 necessary. While additional Customer Service representatives could be hired to improve Service
14 Quality indicators, WHESC customers have told us that it is more important to control costs; therefore,
15 focus will be placed on maintaining these objectives. To ensure an understanding of customers' needs
16 and expectations, Welland Hydro solicits feedback from its customers. As a result, Welland Hydro has
17 introduced Customer Connect software which provides customers with on line access to billing, e-
18 billing, and time of use information for their accounts. Customer documents are now all stored
19 electronically in document storage software providing easy access to Customer Service
20 representatives to respond to customer inquiries. Included in the 2017 Test Year Capital plan is
21 software that would allow WHESC customers to submit required documents on-line in order to improve
22 customer service. However, many of WHESC's customers still prefer the option to meet in person
23 with Customer Service representatives for all aspects of their account including making payments.

24 In order make better use of billing staff time, WHESC introduced Automated Billing Platform software
25 into its CIS to automatically perform time consuming routine tasks. Billing personnel now have
26 additional time to review for the correctness of bills sent to customers. Welland Hydro believes that
27 this is key to maintaining its exceptional billing accuracy statistics without adding additional employees.

28 Welland Hydro plans to maintain its competitive distribution rates through continuous improvements
29 related to OM&A expenses and strategic capital investments. Both of these expenditures will be
30 discussed in the Operational Effectiveness section below.

1 **OPERATIONAL EFFECTIVENESS**

2 ***“Continuous improvement in productivity and cost performance achieved; and distributors***
3 ***deliver on system reliability and quality objectives.”***

4 **Safety**

5 Welland Hydro incorporates health & safety into all aspects of its business. Health & Safety measures
6 safeguard not only WHESC employees but the general public as well. This requires that Welland
7 Hydro’s assets are maintained in a safe condition so as to never cause injury to employees or the
8 public. Below are the 2015 Scorecard Safety performance measures.

9	Level of Public Awareness	84.00%
10	Level of Compliance with Ontario Regulation 22/04	Compliant
11	Serious Electrical Incident Index:	
12	Number of General Public Incidents	0
13	Rate per 10, 10, 1000 km of line	0.00%

- 14 **Objectives: Public Awareness Level 80%**
- 15 **Compliant with Ontario Regulation 22/04**
- 16 **Zero Serious General Public Incidents**
- 17 **Zero Lost Time Accidents**
- 18 **IHSA Safety Group – Stage One GOLD in 2017**
- 19 See Section 2.1.7 Table 1-21 for Performance Improvement Targets

20 Plan to meet Welland Hydro’s Health, Safety and Wellness Objectives (tied to RRFE Customer Focus
21 and Operational Effectiveness Outcomes)

22 In keeping with its Mission Statement to promote safety as a top priority, Welland Hydro uses injury
23 prevention training and procedures within the corporation, and organizes programs to promote safety
24 in the community.

25 Internally, Joint Health and Safety Committee members conduct workplace inspections, in addition to
26 formal reviews of all safety incidents. This committee supplements active participation in the Ontario
27 Health and Safety Acts’ Internal Responsibility System.

28 Welland Hydro’s commitment to health and safety has been recognized by the Infrastructure Health
29 and Safety Association with the ZeroQuest Silver Effort award. The ZeroQuest Program is a safety
30 management system that is sponsored by the Infrastructure Health & Safety Association that uses a

1 system of progressive audits on processes to manage safety and wellness programs in line with
2 corporate objectives. WHESC plans on reaching Stage One GOLD status in 2017.

3 Externally, since 2007 Welland Hydro has sponsored and participated in Electrical Safety and
4 Conservation presentations in the 20 elementary schools in the City of Welland. This program
5 educates one quarter (25%) of the students in WHESC's service territory on an annual basis.

6 **System Reliability**

7 Welland Hydro's SAIDI and SAIFI results were 1.74 (<2.27 target) and 1.39 (<1.80 target) respectively
8 in 2015. Actual results compared favorably to targets for both indices. Welland Hydro believes that
9 its results are directly attributable to investments made in distribution infrastructure over the past 10
10 years. As part of the customer engagement process, customers were asked specifically about their
11 opinions on the number of outages and the duration of outages. Responses were mainly dependent
12 on individual needs. Lengthy outages were more likely to affect a business's ability to maintain normal
13 operations and maintain their own customer satisfaction. However, for the most part customers
14 believed that the reliability of electrical power provided by Welland Hydro was excellent and was
15 meeting their expectations.

16 A comparison of Welland Hydro's performance on SAIDI and SAIFI for 2015 with LDC's (6) in the
17 Niagara Region is as follows:

18 SAIFI (Frequency of Interruptions)	3rd
19 SAIDI (Duration of Interruptions)	3rd

20 **Objectives: SAIFI < 2.0**

21 **SAIDI < 1.8**

22 **Actual Capital Spending 2017-2021 (+/- 10%)**

23 See Section 2.1.7 Table 1-22 for Performance Improvement Targets

24 As indicated above Welland Hydro believes that its capital investment strategy has had significant
25 impact on the reliability indices and loss factor. As a result, plans to continue to meet these objectives
26 are outlined in the Distribution System Plan which covers the five year forecasted period.

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

29 Welland Hydro's capital plan is described in detail in the DSP in Exhibit 2, Appendix 2-A. The DSP
30 provides the OEB and all interested stakeholders with an overview of Welland Hydro's asset planning

1 objectives and goals, a review of Welland Hydro’s asset-related operational performance over a five-
 2 year historical period, a preview of Welland Hydro’s planned expenditures for the forecast period, and
 3 a detailed justification of Welland Hydro’s planned capital expenditures in the 2017 Test Year. Key
 4 elements which shaped the Distribution System Plan include:

- 5 • Customer feedback;
- 6 • Public and worker safety;
- 7 • Challenges associated with aging infrastructure;
- 8 • A long-term approach to ensuring a reliable supply of electricity is available for present and
 9 future customers; and
- 10 • The use of technology and innovation to better service to customers and equip Welland Hydro
 11 employees with the tools they need to effectively manage assets for optimal performance and
 12 cost.

13 In order to monitor capital spending throughout the period covered by the DSP, WHESC will include
 14 in the business plan reporting both the current year capital spending versus plan and cumulative capital
 15 spending versus plan. Project Summary Reviews will also be prepared to compare actual versus
 16 planned expenditures to analyze spending variances on individual projects.

17 **Cost Control**

18 The performance indicators for cost control are Efficiency Assessment, Total Cost per Customer, and
 19 Total Cost per Km of Line. The performance results from 2015 for Welland Hydro and the six LDCs
 20 in the Niagara Region are provided below in Table 1-2.

21 **Table 1-2 Cost Control Performance**

Local Distribution Company	Efficiency Group	Efficiency Percentage	Total Cost per Customer	Total Cost per Km of Line
Welland Hydro Ranking	1st	1st	1st	4th
Welland Hydro	2	-17.0%	\$493	\$23,293
Niagara Peninnsula Energy	3	4.5%	\$744	\$19,871
Canadian Niagara Power	4	13.2%	\$778	\$21,726
Grimsby Power	2	-17.0%	\$575	\$26,284
Niagara on the Lake Hydro	3	-3.4%	\$706	\$19,106
Horizon Utilities	3	-4.3%	\$557	\$38,389

1 Although Welland Hydro has provided the above Table 1-2 it is important to review Welland Hydro's
2 performance on a year over year basis and the impact of 2017 OM&A and 2017 Capital Expenditure
3 levels on future performance. Welland Hydro's actual performance in 2015 was 18.7% below
4 predicted. This was an improvement over 2014 results which were 17.3% below predicted. The
5 current three year average results (2013-2015) of 17.0% below predicted was also an improvement
6 from last year's three year average results (2012-2014) which were 14.3% below predicted.

7 In addition to comparing current efficiency levels to past results, the updated Filing Requirements
8 require distributors to complete the PEG forecasting model using data from the 2016 Bridge Year and
9 2017 Test Year. The purpose of the model is to provide the OEB with a directional indicator of
10 efficiency impacts as a result of this application. As discussed in Section 2.1.7 later in this Exhibit,
11 Welland Hydro's efficiency percentage improves to -19.1% for the three year average from 2015-2017.
12 Welland Hydro believes that its OM&A programs and capital expenditures for the 2017 Test Year are
13 prudent and in line with customer and corporate goals.

14 **Objectives: Group 2 Efficiency Assessment**

15 **Efficiency Percentage -15% +/- 2%**

16 See Section 2.1.7 Table 1-23 for Performance Improvement Targets

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

19 Operating, Maintenance and Administrative ("OM&A") expenses, are described in detail in Exhibit 4.
20 Exhibit 4 Table 4-1 summarizes the increase in OM&A of \$6,370,000 in the 2013 COS to \$6,999,907
21 in the 2017 Test Year. The compound average annual increase in OM&A over the 2013 COS is 2.4%,
22 which reflects the combined effects of productivity improvements, general inflation, and increases
23 beyond the control of WHESC such as locates, regulatory costs and bad debts. The compound annual
24 increase in OM&A excluding increases to expenditures beyond WHESC's control would be 1.9% over
25 the 2013 COS. Exhibit 4 Table 4-2 summarizes the cost drivers for OM&A.

26 More specifically, the increase was partially attributable to:

- 27
- 28 • Base salary increases for union and management employees;
 - 29 • Progression for both union and management employees paid below 100 percent in their
30 position-job-rate. Majority of these increases related to employees in 2013 COS below the
31 100% standard for the position-job-rate;
 - Significant reduction in Post-Employment Benefits for new hires;

- 1 • A reduction of two employees in the 2017 Test Year compared to the 2013 COS;
- 2 • Upgrade in the Accounting Analyst to a CPA to assist with IFRS, regulatory compliance and
- 3 succession planning. WHESC's goal is to provide succession planning by increasing skill
- 4 levels of current positions without increasing total headcount;
- 5 • Elimination of a Vehicle Mechanic position and replace with an engineer to assist in
- 6 implementing productivity and efficiency improvements as well as succession planning. This
- 7 change will provide significant improvements to WHESC's current engineering skill set without
- 8 increasing total headcount;
- 9 • Improvements to CIS, Financial, and Operating software systems;
- 10 • Non-wage & benefit inflation; and;
- 11 • Expenses beyond the control of the LDC, in particular locate costs and OEB Assessment Fees
- 12 (Regulatory Expenses).
- 13

14 **PUBLIC POLICY RESPONSIVENESS**

15 *“Distributors deliver on obligations mandated by government (e.g. in legislation and in*
16 *regulatory requirements imposed further to Ministerial directives to the Board.)*

17 **Conservation & Demand Management**

18 As discussed below Welland Hydro successfully attained 115.9% of its targeted kWh targets for the
19 saveONenergy conservation program from 2011-2014. This required Welland Hydro to interact with
20 all customer classes in both group and one on one formats.

21 For 2015, WHESC has achieved 6.78% of its 2015-2020 Net Energy Savings target according to the
22 IESO's CDM results. WHESC began the Conservation First Framework in October 2015 and
23 continues to build momentum from the Commercial Sector. Whole Home Residential and small
24 Business Lighting Programs will be launched by the IESO to enhance our savings in 2016 and 2017.
25 The recently completed Achievable Potential Study, completed by the IESO, indicates that our original
26 assigned target should be lowered by 5 gigawatt hours, which, if considered for adjustment at the mid-
27 term review, would put our Net Energy Savings for 2015 at 8.48% for 2015. Also, WHESC has a large
28 streetlight conversion project that began in 2015 and has not yet been completed, which will enhance
29 our Net Energy Savings position.

30 **Objective: 100% of Targeted Savings by 2020**

1 **Connection of Renewable Generation**

2 There have been no requirements for a Connection Impact Study within WHESC's service territory
3 since 2011. Welland Hydro has successfully connected micro-embedded generation facilities 100%
4 on time from 2013-2015.

5 **Objective: Connection Impact Assessments on Time 100%**

6 **Connect Micro-embedded Generation Facilities on Time 90%**

7 See Section 2.1.7 Table 1-25 for Performance Improvement Targets

8 Plan to meet Welland Hydro's Conservation and Demand Management Objectives (tied to RRFE
9 Customer Focus and Public Policy Responsiveness Outcomes)

10 Welland Hydro has been a leader in delivering CDM programs to its customers under the Ontario
11 Power Authority (OPA) "Every Kilowatt Counts" 2007-2010 CDM program, and most recently the 2011-
12 2014 OPA "saveONenergy" CDM program. As of October 1, 2015 WHESC is delivering CDM
13 programs for the 2015-2020 Conservation First Framework (CFF) CDM program.

14 Over the years Welland Hydro has worked closely with many commercial, industrial, and institutional
15 customers, vendors and service providers, and has partnered with local agencies, to deliver innovative
16 CDM programs. Since 2007, the company has successfully offered its customer OPA conservation
17 programs across all customer segments. For residential customers, these have included: Heating &
18 Cooling Incentive; Energy Efficiency Product Coupons; and Fridge & Freezer Pickup, as well as the
19 Home Assistance Program for Low Income customers.

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

25 Through the delivery of these programs, Welland Hydro exceeded its 2014 cumulative persistent
26 energy savings target by the end of 2014 as confirmed by the OPA's 2014 Verified Results Report
27 achieving 115.9%.

28 Welland Hydro's successful CDM delivery has generated additional revenues for the utility. Under the
29 2011-2014 CDM program a Cost & Efficiency Performance incentive of \$146,802 was received.
30 Welland Hydro itself has also directly participated in CDM programs, through lighting efficiency
31 upgrades.

1 In addition to delivering the provincial saveONenergy conservation programs, Welland Hydro
2 continued to support other local conservation programs and activities such as the Region of Niagara
3 Water Festival for elementary school students. WHESC provided the local library with “Kill-a-Watt”
4 meters to lend out to residents to assist them in conducting their own home energy audits.

5 The CDM results enjoyed by Welland Hydro customers have been attained in part through
6 collaborative efforts with a number of local and regional partners. These partners include local
7 agencies and non-profit organizations such as the Chamber of Commerce, the Hope Center, Region
8 of Niagara, as well as various municipal departments (City of Welland LED Streetlight Replacement
9 Program) for joint promotion of energy efficiency programs. Welland Hydro has collaborated with
10 neighboring LDCs as well as regional LDCs for program delivery cost sharing, joint marketing and
11 promotion, sharing best practices, as well as identifying and removing barriers to program participation.
12 Welland Hydro CDM staff designed energy conservation playing cards and booklets which have been
13 distributed by many LDCs across Ontario. Welland Hydro has also explored potential conservation
14 program opportunities with Enbridge Gas, the gas distribution utility servicing the City of Welland.

15 Welland Hydro intends to continue to lead in delivering CDM programs to its customers

16 **FINANCIAL PERFORMANCE**

17 ***“Financial viability is maintained; and savings from operational effectiveness are sustainable.”***

18 **Financial Ratios**

19 Welland Hydro’s performance in 2015 related to Financial Ratios are outlined below.

20	Liquidity: Current Ratio (Current Assets/Current Liabilities)	1.50
21	Leverage: Total Debt to Equity Ratio	0.84
22	Profitability: Regulatory Return on Equity Deemed	8.93%
23	Profitability: Regulatory Return on Equity Achieved	8.72%

24 Since 2013, Welland Hydro has achieved its Regulatory Return on Equity through the implementation
25 of sustainable savings programs for OM&A. During this period, full-time employees were reduced
26 from 43 in the 2013 COS to 41 which has been maintained for the 2017 Test Year. Welland Hydro
27 has focused on succession planning since the 2013 COS application. The succession plan included
28 a goal of no additional employees to be added to headcount. To accomplish this a management and
29 union positions were evaluated to see if reductions or changes could be made to improve operational
30 efficiencies and upgrade skill levels required for succession planning. As a result, in addition to the

1 reduction of two employees, Welland Hydro has upgraded its accounting position from clerical to a
2 CPA, to assist with complex issues related to IFRS and regulatory requirements. In the 2017 Test
3 Year a key adjustment is being made to reduce the number of vehicle mechanics from two to one and
4 hire an engineer. This change will strengthen WHESC's operations and engineering teams, and
5 provide succession planning without significant additional costs.

6 Welland Hydro's strong balance sheet is reflected in both the Liquidity Current Ratio and Debt to Equity
7 Leverage Ratio. Sufficient profits have been retained since 2013 to provide for the equity portion of
8 capital expenditures in excess of depreciation levels. This is done through a prudent dividend policy
9 which maintains a minimum of 40% of profits.

10 Welland Hydro manages debt with a goal of timing long term debt to actual requirements. There is
11 currently sufficient cash reserves and short term line of credit facilities in place to manage capital
12 spending and working capital requirements through the 2017 Test Year.

13 **Objectives: Target Net Income of \$1.23 Million**

14 **Return on Deemed Equity 9.19%**

15 **Current Ratio > 1.0**

16 **Debt/Equity Ratio < 1.5**

17 See Section 2.1.7 Table 1-26 for Performance Improvement Targets

18 Plan to meet Welland Hydro's Financial Performance Objectives (tied to RRFE Customer Focus,
19 Operational Effectiveness, and Public Policy Responsiveness Outcomes)

20 Welland Hydro's 2017 Business Plan contains prudent levels of OM&A and Capital Spending to ensure
21 reliability and customer service levels are maintained or improved. The capital spending and rate
22 impacts have been shared with customer focus groups for the Residential and General Service < 50
23 kW customer classes. For the most part the majority of these customers agreed with Welland Hydro's
24 plans for these expenditures and felt rate increases were reasonable to ensure the reliability of the
25 distribution system. Welland Hydro's proposed distribution rates for 2017 will remain competitive
26 within Ontario and Niagara which is important to customers.

27 Completion of the PEG model shows that Welland Hydro's OM&A and Capital Program for the 2017
28 Test Year will have no negative impact on its efficiency assessment. Welland Hydro is committed to
29 maintaining the reductions in total employees as sustainable savings. Throughout the period covered
30 by the 2017 COS Rate Application, Welland Hydro will continue to seek out additional savings and
31 efficiencies both internally and through collaboration with other LDCs.

1 **2.1.3 ADMINISTRATION**

2 **Legal Application**

3 **IN THE MATTER OF** the Ontario Energy Board Act, 1998, 5.0. 1998, c.15, 3 Schedule B, as
4 amended (the “OEB Act”);

5 **AND IN THE MATTER OF** an Application by Welland Hydro-Electric System Corp. under
6 Section 78 of the OEB Act to the Ontario Energy Board for an Order or Orders approving or
7 fixing just and reasonable rates and other service charges for the distribution of electricity as
8 of May 1, 2017.

9 **Applicant’s Name**

10 Welland Hydro-Electric System Corp (the “Applicant” or “WHESC” or “Welland Hydro” or “System
11 Corp.”).

12 **Background**

13 1. The Applicant is a corporation incorporated pursuant to the *Business Corporations Act*
14 (Ontario) with its head office at 950 East Main Street, Box 280, Welland, Ontario. The Applicant
15 carries on the business of distributing electricity within the City of Welland.

16 2. The Application has been prepared pursuant to the OEB’s Renewed Regulatory Framework
17 for Electricity Distributors as detailed in the Report of the Board dated October 18, 2013 (the
18 “RRFE”).

19 3. The Application followed Chapter 2 of the OEB’s Filing Requirements for Electricity Distribution
20 Rate Applications last revised on July 14, 2016 (the “Filing Requirements”) in preparing the
21 Application. There are no known deviations from the Filing Requirements in this Application.

22 4. The Applicant has prepared a Consolidated Distribution System Plan (“DSP”) in accordance
23 with Chapter 5 of the OEB’s Filing Requirements for Electricity Transmission and Distribution
24 Applications.

25 5. The Applicant acknowledges that the OEB will publish an update to the cost of capital
26 parameters and that these matters will affect the Revenue Requirement that the Applicant has
27 requested in this Application.

1 September 30, 2016

2 Ross Peever
3 President & Chief Executive Officer

4 Wayne Armstrong
5 Director of Finance and Chief Operating Officer

6 **Certification of Evidence**

7 As part of the Minimum Filing Requirements July 14, 2016, an application filed with the OEB must
8 include a certification by a senior officer of the applicant that the evidence filed is accurate, consistent
9 and complete to the best of his or her knowledge.

10 I, Ross Peever, President & CEO of Welland Hydro-Electric System Corp. certify that the evidence
11 filed is accurate, consistent, and complete to the best of my knowledge.

12 September 30, 2016

13 Ross Peever
14 President & CEO

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

16 Welland Hydro-Electric System Corp.
17 950 East Main Street, P.O. Box 280
18 Welland, Ontario
19 L3B 5P6

20 **The Applicant's Primary Application Contact:**

21 Wayne Armstrong, CPA, CMA
22 Director of Finance & Chief Operating Officer
23 Phone: 905-732-1381 ext. 234
24 Fax: 905-732-0266
25 Email: warmstrong@wellandhydro.com

1 **The Applicant's Legal Representation:**

2 Borden Ladner Gervais LLP
3 Bay Adelaide Centre, East Tower
4 22 Adelaide Street West
5 Toronto, Ontario M5H 4E3
6 John A.D. Vellone
7 Telephone: 416-367-6730
8 Fax: 416-361-2758
9 Email: jvellone@blg.com

10 **Applicants Internet Access Social Media Accounts**

11 The Application and related materials will be posted on the Welland Hydro website, and will be
12 available for viewing at the following internet address:

13 <https://www.wellandhydro.com>

14 Welland Hydro's social media channel addresses are as follow:

15 www.twitter.com/wellandhydro

16 The Application will also be available on the Board's website at www.ontarioenergyboard.ca, under
17 Board File Number EB-2016-010.

18 **Statement as to who is affected By Application and Publication**

19 Customers within all of WHESC's customer classes will be impacted by the changes in distribution
20 rates proposed in this rate application. Bill Impacts by customer class are discussed in section 2.1.5
21 later in this Exhibit. In addition, the application may affect principal and third party interests in microFIT
22 generation contracts as a result of the proposed change in the monthly service charge. There are no
23 other proposed changes in this rate application which will have a material impact on customers.

24 If directed by the OEB, Welland Hydro is proposing that notices related to the Application in English
25 appear in the Tribune, an English language newspaper having the largest daily circulation of
26 approximately 7,000 (26,500 on Thursdays) according to the best information available.

27 Additionally, if directed by the OEB, Welland Hydro is proposing that the notices related to the
28 Application in French be published in one issue of Le Regional which is a French weekly newspaper

1 serving Welland and the Niagara Region with a circulation of approximately 7,000 according to the
 2 best information available.

3 **Bill Impacts for Public Notice of Application**

Welland Hydro herein proposes the bill impacts that result only from distribution cost changes as per sub-total A of Tariff Schedule and Bill Impacts spreadsheet model to be used for the notice of application for a typical residential customer using 750 kWh per month and for a General Service < 50kW customer using 2000 kWh per month.

4 Residential Customer Using 750 kWh per month: \$2.28, 8.40%

5

Customer Class:	RESIDENTIAL SERVICE CLASSIFICATION
RPP / Non-RPP:	RPP
Consumption:	750 kWh
Demand:	- kW
Current Loss Factor:	1.0532
Proposed/Approved Loss Factor:	1.0476

	Current OEB-Approved			Proposed			Impact	
	Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change
Monthly Service Charge	\$ 18.76	1	\$ 18.76	\$ 23.44	1	\$ 23.44	\$ 4.68	24.95%
Distribution Volumetric Rate	\$ 0.0105	750	\$ 7.88	\$ 0.0078	750	\$ 5.85	\$ (2.03)	-25.71%
Fixed Rate Riders	\$ 0.50	1	\$ 0.50	\$ 0.20	1	\$ 0.20	\$ (0.30)	-60.00%
Volumetric Rate Riders	\$ -	750	\$ -	\$ 0.0001	750	\$ (0.08)	\$ (0.08)	
Sub-Total A (excluding pass through)			\$ 27.14			\$ 29.42	\$ 2.28	8.40%
Line Losses on Cost of Power	\$ 0.1114	40	\$ 4.44	\$ 0.1114	36	\$ 3.98	\$ (0.47)	-10.53%
Total Deferral/Variance Account Rate Riders	-\$ 0.0019	750	\$ (1.43)	-\$ 0.0016	750	\$ (1.20)	\$ 0.23	-15.79%
GA Rate Riders					750	\$ -	\$ -	
Low Voltage Service Charge	\$ -	750	\$ -		750	\$ -	\$ -	
Smart Meter Entry Charge (if applicable)	\$ 0.7900	1	\$ 0.79	\$ 0.7900	1	\$ 0.79	\$ -	0.00%
Sub-Total B - Distribution (includes Sub-Total A)			\$ 30.94			\$ 32.98	\$ 2.04	6.58%
RTSR - Network	\$ 0.0078	790	\$ 6.16	\$ 0.0077	786	\$ 6.05	\$ (0.11)	-1.81%
RTSR - Connection and/or Line and Transformation Connection	\$ 0.0061	790	\$ 4.82	\$ 0.0060	786	\$ 4.71	\$ (0.10)	-2.16%
Sub-Total C - Delivery (including Sub-Total B)			\$ 41.92			\$ 43.75	\$ 1.82	4.35%
Wholesale Market Service Charge (WMSC)	\$ 0.0036	790	\$ 2.84	\$ 0.0036	786	\$ 2.83	\$ (0.02)	-0.53%
Rural and Remote Rate Protection (RRRP)	\$ 0.0013	790	\$ 1.03	\$ 0.0013	786	\$ 1.02	\$ (0.01)	-0.53%
Standard Supply Service Charge	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
Debt Retirement Charge (DRC)								
Ontario Electricity Support Program (OESP)	\$ 0.0011	790	\$ 0.87	\$ 0.0011	786	\$ 0.86	\$ (0.00)	-0.53%
TOU - Off Peak	\$ 0.0870	488	\$ 42.41	\$ 0.0870	488	\$ 42.41	\$ -	0.00%
TOU - Mid Peak	\$ 0.1320	128	\$ 16.83	\$ 0.1320	128	\$ 16.83	\$ -	0.00%
TOU - On Peak	\$ 0.1800	135	\$ 24.30	\$ 0.1800	135	\$ 24.30	\$ -	0.00%
Total Bill on TOU (before Taxes)			\$ 130.46			\$ 132.25	\$ 1.80	1.38%
HST		13%	\$ 16.96		13%	\$ 17.19	\$ 0.23	1.38%
Total Bill on TOU			\$ 147.42			\$ 149.45	\$ 2.03	1.38%

6

1 General Service < 50 kW Customer Using 2000 kWh per month: \$4.94, 10.53%

Customer Class:	GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION
RPP / Non-RPP:	RPP
Consumption:	2,000 kWh
Demand:	- kW
Current Loss Factor:	1.0532
Proposed/Approved Loss Factor:	1.0476

	Current OEB-Approved			Proposed			Impact	
	Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change
Monthly Service Charge	\$ 29.23	1	\$ 29.23	\$ 32.65	1	\$ 32.65	\$ 3.42	11.70%
Distribution Volumetric Rate	\$ 0.0086	2000	\$ 17.20	\$ 0.0096	2000	\$ 19.20	\$ 2.00	11.63%
Fixed Rate Riders	\$ 0.48	1	\$ 0.48	\$ -	1	\$ -	\$ (0.48)	-100.00%
Volumetric Rate Riders	\$ -	2000	\$ -	\$ -	2000	\$ -	\$ -	-
Sub-Total A (excluding pass through)			\$ 46.91			\$ 51.85	\$ 4.94	10.53%
Line Losses on Cost of Power	\$ 0.1114	106	\$ 11.85	\$ 0.1114	95	\$ 10.60	\$ (1.25)	-10.53%
Total Deferral/Variance Account Rate Riders	-\$ 0.0019	2,000	\$ (3.80)	-\$ 0.0012	2,000	\$ (2.40)	\$ 1.40	-36.84%
GA Rate Riders					2,000	\$ -	\$ -	-
Low Voltage Service Charge	\$ -	2,000	\$ -		2,000	\$ -	\$ -	-
Smart Meter Entity Charge (if applicable)	\$ 0.7900	1	\$ 0.79	\$ 0.7900	1	\$ 0.79	\$ -	0.00%
Sub-Total B - Distribution (includes Sub-Total A)			\$ 55.75			\$ 60.84	\$ 5.09	9.13%
RTSR - Network	\$ 0.0069	2,106	\$ 14.53	\$ 0.0068	2,095	\$ 14.25	\$ (0.29)	-1.97%
RTSR - Connection and/or Line and Transformation Connection	\$ 0.0052	2,106	\$ 10.95	\$ 0.0051	2,095	\$ 10.69	\$ (0.27)	-2.44%
Sub-Total C - Delivery (including Sub-Total B)			\$ 81.24			\$ 85.78	\$ 4.54	5.59%
Wholesale Market Service Charge (WMSC)	\$ 0.0036	2,106	\$ 7.58	\$ 0.0036	2,095	\$ 7.54	\$ (0.04)	-0.53%
Rural and Remote Rate Protection (RRRP)	\$ 0.0013	2,106	\$ 2.74	\$ 0.0013	2,095	\$ 2.72	\$ (0.01)	-0.53%
Standard Supply Service Charge	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
Debt Retirement Charge (DRC)	\$ 0.0070	2,000	\$ 14.00	\$ 0.0070	2,000	\$ 14.00	\$ -	0.00%
Ontario Electricity Support Program (OESP)	\$ 0.0011	2,106	\$ 2.32	\$ 0.0011	2,095	\$ 2.30	\$ (0.01)	-0.53%
TOU - Off Peak	\$ 0.0870	1,300	\$ 113.10	\$ 0.0870	1,300	\$ 113.10	\$ -	0.00%
TOU - Mid Peak	\$ 0.1320	340	\$ 44.88	\$ 0.1320	340	\$ 44.88	\$ -	0.00%
TOU - On Peak	\$ 0.1800	360	\$ 64.80	\$ 0.1800	360	\$ 64.80	\$ -	0.00%
Total Bill on TOU (before Taxes)			\$ 330.91			\$ 335.38	\$ 4.47	1.35%
HST		13%	\$ 43.02		13%	\$ 43.60	\$ 0.58	1.35%
Total Bill on TOU			\$ 373.93			\$ 378.98	\$ 5.05	1.35%

2

3 **Statement of Request Hearing Form**

4 The Applicant requests that this Application be disposed of by way of a written hearing in order to
 5 expedite the proceeding and minimize costs.

6 **Rate Order Requirement for Implementation**

7 Welland Hydro requests that the Board make its Rate Order effective May 1, 2017 in accordance with
 8 the Filing Requirements.

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

13 **Statement of Deviations from the Filing Requirements**

14 Welland Hydro has not, to the best of its knowledge, deviated from the final Board's Chapter 2 Filing
 15 Requirement for Electricity Distribution Rate Applications revised on July 14, 2016 and Chapter 5
 16 Consolidated Distribution System Plan Filing Requirements revised on March 28, 2013.

1 **Statement of Changes to Methodologies Used**

2 The pro-forma projections for the 2016 Bridge Year and 2017 Test Year have been prepared in
3 accordance with Welland Hydro's usual process (including the use of MIFRS accounting), with the
4 following exceptions:

- 5 • Exclusion of non-regulated activities;
- 6 • Rates for distribution and sales of energy are assumed to be effective January 1st (full
7 year impact) for both the 2016 Bridge Year and 2017 Test Year; and,
- 8 • Regulatory costs have been amortized over the five year application period.

9 For the above noted exceptions, the only change since the 2013 Cost of Service Application is an
10 increase in the amortization period for regulatory costs from four years to five years.

11 **Statement of Confirming Monthly Billing**

12 Per the July 14, 2016 Minimum Filing Requirements the OEB requires a statement confirming that the
13 distributor will have implemented monthly billing for all customers by December 31, 2016 pursuant to
14 the OEB's April 15, 2015 DSC amendment.

15 Welland Hydro confirms that it began billing customers monthly in 2011, well before the implementation
16 of the OEB's April 15, 2015 DSC amendment.

17 **Board Direction from Previous EDR Decisions**

18 In WHESC's 2013 Cost of Service Application EB-2012-0173 there was a requirement to file a
19 Lead/Lag Study with this application. The settlement agreement was subsequently amended by the
20 OEB in a Decision and Vary Order dated May 19, 2016 (EB-2016-0147) to remove the requirement
21 for a Lead/Lag Study as discussed in Exhibit 6 of this application.

22 Welland Hydro has not received any other utility-specific directions from the Board since submitting its
23 last Cost of Service application (EB-2012-0173) for May 1, 2013 distribution rates and no such
24 directions are outstanding presently.

25 **Statement regarding Conditions of Service**

26 The current version of WHESC's Conditions of Service is publically available for on-line viewing,
27 printing and downloading from WHESC's website at <https://www.wellandhydro.com>.

1 Rates and charges which are the subject of this rate Application are not contained in the Conditions
2 of Service.

3 The changes to the WHESC Conditions of Service that have taken place since the 2013 COS (filed
4 2012) are outlined below:

5 **Changes 2012 - 2016**

6 Table of Contents has been updated.
7 Section 1.2 "Related Codes and Governing Laws" has been updated.
8 Section 1.5 "Contact Information" has been updated.
9 Section 2.1 "Connections" has been updated.
10 Section 2.1.7 "Contracts" has been updated.
11 Section 2.2.1 "Reason for Disconnection" has been updated.
12 Section 2.2.2 "Disconnection Notification" has been added.
13 Section 2.3.1 "Limitations on the Guarantee of Supply" has been updated.
14 Section 2.3.2.1 "Emergency Services" has been updated.
15 Sections 2.4.1 "Service Connection" has been updated.
16 Section 2.4.1.1 "Customers Switching to Retailer" has been updated.
17 Section 2.4.1.2 "Supply Deposits and Agreements" has been updated.
18 Section 2.4.1.3 "Additional Charges" has been updated.
19 Section 2.4.2.1 "Standard Supply Service" has been added.
20 Section 2.4.2.2 "Retailer Supply" has been added.
21 Section 2.4.2.3 "Wheeling of Energy" has been added.
22 Section 2.4.3 "Deposits" has been updated.
23 Section 2.4.3.1 "Account set-up Charge" has been updated.
24 Section 2.4.3.2.1 "Distributor- Consolidated Billing and Standard Supply Service" has been added.
25 Section 2.4.3.2.2 "Retailer-Consolidated Billing" has been added.
26 Section 2.4.3.2.3 "Split Billing" has been added.
27 Section 2.4.3.3 "Opening and Closing of Accounts" has been added.
28 Section 2.4.3.4 "Customer Service Rules for Low Income Customers" has been added.
29 Section 2.4.3.4.1 "Definition of a Low-Income Customer" has been added.
30 Section 2.4.3.4.2 "Rules Regarding Security Deposits for Low Income Customers" has been added.
31 Section 2.4.3.4.3 "Under and Over-billing of a Low Income Customer" has been added.
32 Section 2.4.3.4.4. "LEAP" has been added.
33 Section 2.4.3.4.5 "Rules Regarding Equalized Billing and/or Payment Plan Options for Low Income
34 Customers" has been added.
35 Section 2.4.3.4.6 "Rules Regarding Disconnection Suspension" have been added.
36 Section 2.4.3.4.7 "Disconnection Notices and Telephone Calls" has been added.
37 Section 2.4.3.4.8 "Down Payments" has been added.
38 Section 2.4.3.5 "AMP Repayment Time Periods" has been added.
39 Section 2.4.3.5.1 "Service Charges and Late payment Charges- Low Income Customers" has been
40 added.
41 Section 2.4.3.5.2 "AMP Agreements – Low Income Customers" has been added.
42 Section 2.4.3.6 "General Service and Large User Customer Deposits" has been updated.

1 Section 2.4.3.7 “New Residential Customers – Owners & Tenants”, (Types of Security Deposits,
2 Security Deposit Exemptions, Collection of Security Deposit, Review of Security Deposits, Refund of
3 Deposits) have been updated.
4 Section 2.4.4 “Billing” has been updated.
5 Section 2.4.4.1 “Estimates” has been updated.
6 Section 2.4.4.2 “Billing Errors” has been updated.
7 Section 2.4.5 “Payment and Late Payment Charges has been updated.
8 Section 2.4.5.2 “AMP Agreements- Residential Customers” has been updated.
9 Section 2.4.5.4 “Final Notice of Disconnection” has been updated.
10 Section 2.4.5.5 “Reconnection of Electrical Service” has been updated.
11 Section 2.4.5.11 “Pre-Authorized Equal Monthly Payment Plan” has been updated.
12 Section 2.4.5.13 “Damaged Electrical Equipment has been added.
13 Section 2.5 “Customer Information has been updated.
14 Section 2.6.1 “Pole Attachments” has been added.
15 Section 2.6.2 “Service over Swimming Pools” has been added.
16 Section 2.6.3 “Moving Oversized Loads” has been added.
17 Section 2.6.4 “Preventative Programs (Tree Trimming, Fault Locates and Repairs) have been added.
18 Section 2.6.5 “Customer Owned Primary Lines” has been added.
19 Section 2.6.6 “Customer Owned Substations” has been added.
20 Section 3.2.1.1 “General Service Classification” has been updated.
21 Section 3.3 “Embedded Generation Facilities” has been added.
22 Section 3.3.1 “Design Requirements” has been added.
23 Section 3.3.2 “Micro-Generation Facilities (less than or equal to 10 kW)” has been added.
24 Section 3.3.3 “Other Generation Facilities” has been added.
25 Section 3.3.4 “Net Metering” has been added.
26 Section 3.4 “Embedded Market Participant” has been added.
27 Section 3.5 “Embedded Distributor” has been added.
28 Section 3.6 “Unmetered Connections” has been updated.
29 Section 3.6.1 “Street Lighting “has been updated.
30 Section 3.6.2 “Unmetered Scattered Load” has been updated.
31 Section 3.6.3 “Sentinel Lighting” has been updated.
32 Section 4 “Glossary of Items has been updated.

33 There are no expected changes to WHESC’s Conditions of Service as a result of this application.

34 **Confirmation of Rates and Charges**

35 As part of the Minimum Filing Requirements July 14, 2016 Welland Hydro herein confirms that there
36 are no rates or charges listed in the Conditions of Service that are not on the distributor’s Tariff of
37 Rates and Charges.

1 September 30, 2016

2 Wayne Armstrong

3 Director of Finance & Chief Operating Officer

4 Perry Orosz

5 Director of Customer Service & Human Resources

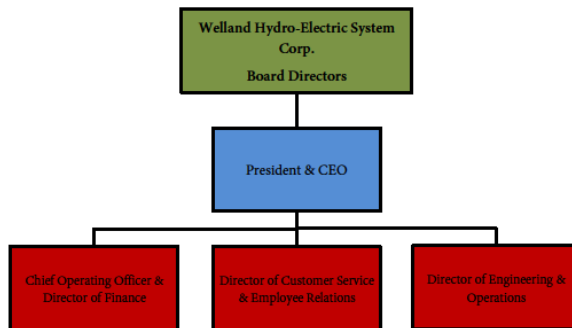
6 **Utility Organizational Structure**

7 Welland Hydro-Electric System Corp. is a for-profit, taxable corporation and is a wholly-owned
8 subsidiary of Welland Hydro-Electric Holding Corp. under the Ontario's Electricity Act (1998). The
9 Ontario Energy Board (OEB) has issued Electricity Distribution Licence ED-2003-002 to Welland
10 Hydro-Electric System Corp. (valid until October 9, 2023) to provide electrical distribution services to
11 the City of Welland.

12 **High Level Organization Chart**

13 A high level organizational chart for WHESC is presented below.

UTILITY ORGANIZATIONAL CHART



1 **Board of Directors**

2 Welland Hydro-Electric Holding Corp. is governed by a four-member Board of Directors that is
3 appointed by the shareholder (City of Welland). The Board is comprised of the Mayor of the City of
4 Welland, the President & CEO of WHESC, and two independent community leaders who are appointed
5 by City Council.

6 Welland Hydro-Electric System Corp. is governed by a six-member Board of Directors. The Board is
7 comprised of the President and CEO of WHESC, one representative of City Council who sits on the
8 Board as long as he or she is a duly elected Council Member, the two members from Welland Hydro-
9 Electric Holding Corp.'s Board of Directors, and two independent community leaders who are
10 appointed by the shareholder (Welland Hydro-Electric Holding Corp. appointment by Welland City
11 Council).

12 For the purposes of Welland Hydro-Electric System Corp. "independent" is defined as not an employee
13 of the Corporation, not a member of City Council, and not a member of Welland Hydro-Electric Holding
14 Corp.'s Board of Directors.

15 The Board of Welland Hydro-Electric System Corp is responsible for overseeing the governance and
16 operation of the business and has a specific mandate to:

- 17 • Ensure that distribution rates are fair and competitive with rates charged in the industry;
- 18 • Enhance the quality and reliability of electrical supply;
- 19 • Maintain the value of the distribution assets; and
- 20 • Operate the business in a way that fosters innovation and encourages employee satisfaction
21 and retention.

22 **Utility Corporate Entities Organizational Structure**

23 Welland Hydro-Electric System Corp. is a wholly-owned subsidiary of Welland Hydro-Electric Holding
24 Corp. which is 100% owned by the City of Welland. A chart illustrating WHESC's corporate affiliates
25 is provided in Appendix 1-C. Welland Hydro-Electric Holding Corp. owns 100% of Welland Hydro
26 Energy Services Corp. For the most part, this subsidiary performs streetlight and sentinel light
27 maintenance on behalf of WHESC. Relationships between WHESC and affiliates is presented in detail
28 in Exhibit 4 Section 2.4.3.2 Shared Services and Corporate Cost Allocation.

1 **Planned Changes in Corporate Structure**

2 Welland Hydro-Electric Holding Corp. is not planning on any changes to its corporate structure.

3 **List of Specific Approvals Requested**

4 In this proceeding, Welland Hydro is requesting the following approvals:

- 5 1. Approval pursuant to Section 78 of the *Ontario Energy Board Act, 1998* to charge
6 distribution rates effective May 1, 2017 to recover a service revenue requirement of
7 \$10,636,334 which includes a revenue deficiency of \$1,056,407 as detailed in Exhibit 6.
8 The schedule of proposed rates is set out in Exhibit 8.
- 9 2. Approval of the Distribution System Plan as outlined in Exhibit 2 Appendix 2-A.
- 10 3. Approval of a revised Microfit monthly service charge as outlined in Exhibit 7.
- 11 4. Approval to adjust the Retail Transmission Rates – Network and Connection as detailed
12 in Exhibit 8.
- 13 5. Approval to eliminate separate Retail Transmission Rates for Interval versus Non-Interval
14 customers within the General Service 50 to 4,999 kW class.
- 15 6. Approval to continue to charge Wholesale Market and Rural Rate Protection Charges
16 approved in the Board Decision and Order in the matter of WHESC's 2016 Distribution
17 Rates (EB-2015-0109).
- 18 7. Approval to continue the Specific Service Charges, Retail Service Charges, and
19 Transformer Allowance approved in the Board Decision and Order in the matter of
20 WHESC's 2016 Distribution Rates (EB-2015-0109).
- 21 8. Approval of two new Specific Service Charges as outlined in Exhibit 8.
- 22 9. Approval of the proposed loss factors as detailed in Exhibit 8.
- 23 10. Approval of the rate riders for a one year disposition of the Group 1 and Group 2 and Other
24 Deferral and Variance Accounts as detailed in Exhibit 9.
- 25 11. Approval of the rate riders for a one year period to dispose of the difference from 2014-
26 2016 in Net Book Value of Property, Plant and Equipment, as a result of WHESC's

1 changes to early retirement of assets which are no longer subject to pooling under IFRS.
2 These adjustments are recorded in Account 1575, IFRS-CGAAP Transitional PP&E
3 Amounts as explained in Exhibit 9.

4 12. Approval of the rate riders for a one year disposition of the Lost Revenue Adjustment
5 Mechanism Variance Account ("LRAMVA") for lost revenue from 2013 to 2014 resulting
6 from 2011 to 2015 OPA programs as detailed in Exhibit 4.

7 13. Approval to continue to use Deferral and Variance Account 1557 MIST Meters Capital and
8 OM&A until WHESC's next Cost of Service Rate Application.

9 14. Approval to obtain payment from the IESO for Ratepayer Protection under O. Reg. 330/09
10 in the amount of \$5,172 annually by payment of \$431 monthly for Renewable Generation
11 Connection-Provincial Amount as detailed in Exhibit 2. Start date affective January 1,
12 2017.

13 15. Approval to obtain a one-time payment from the IESO for Ratepayer Protection under O.
14 Reg. 330/0 in the amount of \$8,136 for Renewable Generation Connection-Provincial
15 Amounts as detailed in Exhibit 2. Cumulative Provincial Amounts to December 31, 2016.

16 WHESC may request such other approvals as Welland Hydro may submit and the Board may allow.

17 As required by the filing guidelines Chapter 2 Appendices 2-A Requested Approvals has been
18 completed and is attached in Appendix 1-D.

19 **OEB Checklist Completion**

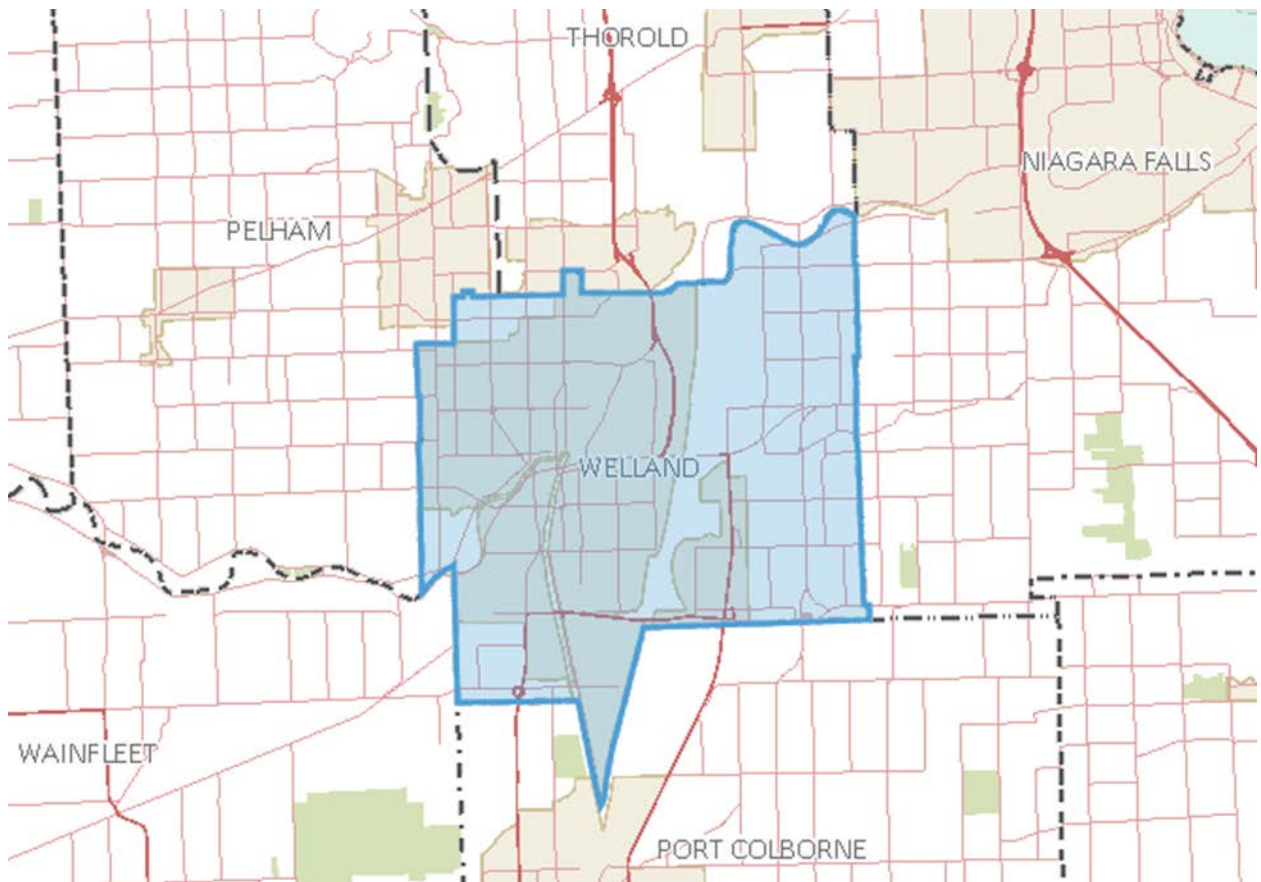
20 Welland Hydro has prepared this application paying strict attention to the Minimum Filing
21 Requirements July 14, 2016 and the OEB 2017 COS Checklist. Welland Hydro is of the opinion that
22 this application is presented in full and complete compliance to all requirements. A completed 2017
23 COS Checklist is attached in Appendix 1-E.

24 **2.1.4 DISTRIBUTION SYSTEM OVERVIEW**

25 WHESC has been supplying electrical service to customers within the City of Welland for over one
26 hundred years. WHESC had 22,666 customers as of the end of 2015, including over 20,700 residential
27 customers, with a service territory of 81 square kilometers. Figure 1-1 below illustrates WHESC's
28 service territory boundaries.

1

Figure 1-1 Service Area Map



2

3 Attributes of the service area are as follows:

4 Service Area:	Description of the Applicant:
5 COMMUNITY SERVED:	City of Welland
6 TOTAL SERVICE AREA (All Urban):	81 sq. km
7 OVERHEAD KM OF LINE	338 km
8 UNDERGROUND KM OF LINE	142 km
9 SERVICE AREA POPULATION:	50,631
10 MUNICIPAL POPULATION:	50,631

11 Welland Hydro services all customers within the City of Welland's boundary. Electricity is supplied by
 12 one high voltage transformer station owned and operated by Hydro One.

1 **Neighboring Distributors**

2 Neighboring utilities include Niagara Peninsula Energy (Niagara Falls), Canadian Niagara Power (Port
3 Colborne), and Hydro One (Thorold, Pelham, Wainfleet).

4 **Host\Embedded Distributor**

5 Welland Hydro has no retail metered embedded utilities connected to its distribution system. However,
6 WHESC does supply electricity to a limited number of services (21) that are designated as customers
7 of CNP (6), NPEI (14), and HONI (1). It is expected these customers will be served directly by their
8 respective distributors by the end of 2017.

9 Welland Hydro is not embedded in another utilities distribution system.

10 **Statement Deemed Distribution Assets:**

11 Welland Hydro does not have any transmission or high voltage assets (>50kV) deemed previously by
12 the Board as distribution assets and does not have any such assets for which WHESC is seeking
13 Board approval to be deemed as distribution assets in this Application.

14 **2.1.5 Application Summary**

15 **2.1.5(A) Revenue Requirement**

16 WHESC is requesting the approval of its proposed Service Revenue Requirement for 2017 in the
17 amount of \$10,636,334 which provides for the recovery of the following:

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

22 The 2017 Service Revenue Requirement represents an increase of \$1,346,296 or 14.5% over the
23 2013 Board-approved service revenue requirement as shown in Table 1-3: Service Revenue
24 Requirement.

1

Table 1-3: Service Revenue Requirement.

Service Revenue Requirement	2013 Approved (A)	2017 Proposed (B)	Difference (C) = (B) - (A)	%
OM&A	6,359,000	6,987,007	628,007	9.9%
LEAP	11,000	12,900	1,900	17.3%
Depreciation	1,228,565	1,429,600	201,035	16.4%
PPE 1576 Adjustment Base	-143,383	0	143,383	100.0%
PPE 1576 Adjustment Return	-33,093	0	33,093	100.0%
Return on Rate Base	1,814,479	2,106,053	291,574	16.1%
PILS	53,472	100,775	47,303	88.5%
Total	9,290,040	10,636,334	1,346,296	14.5%
Rate Base Average Fixed Assets	25,464,079	29,494,306	4,030,227	15.8%
Rate Base Working Capital Allowance	5,971,788	4,018,082	-1,953,706	-32.7%
Rate Base	31,435,867	33,512,388	2,076,521	6.6%
Return on Rate Base	5.77%	6.28%	0.51%	

2

3 Below is a discussion of differences between the 2013 COS and 2017 Test Year for components
 4 of Revenue Requirement.

5 **Return on Rate Base**

6 The Return on Rate Base is comprised of total Rate Base multiplied by the Weighted Average Cost
 7 of Capital ("WACC"). Actual Rate Base is comprised of Average Fixed Assets and Working Capital
 8 Allowance. Rate Base is described in detail in Exhibit 6. Table 1-3 above shows the impact of
 9 WHESC's capital spending versus depreciation since the 2013 COS. The increase in Average
 10 Fixed Assets has been partially offset by a significant reduction in Working Capital Allowance. This
 11 is the result of a decrease from 12% of total Working Capital in 2013 COS to 7.5% of total Working
 12 Capital in the 2017 Test Year. The Actual WACC has increased from 5.77% in 2013 COS to 6.28%
 13 in the 2017 Test Year which is detailed in Exhibit 5. WHESC acknowledges that the Return on
 14 Rate Base is subject to change based upon updated rates of return on Equity and Debt to be
 15 published by the OEB prior to the end of 2016. WHESC will recalculate this value when those
 16 updates become available.

17 **Operating Maintenance & Administration ("OM&A") Expense Increase**

18 OM&A increases of \$628,007 are detailed in Exhibit 4, Table 4-2. The increase in OM&A is
 19 comprised of increases of \$194,723 related to Wages & Benefits and \$435,184 related to third
 20 party expenses. Exhibit 4 Table 4-2 details two expenditures which are primarily not under

1 WHESC's control. They are Locates/Ontario One Call and Regulatory Expenses which have
2 increased by \$104,681 since the 2013 COS. When these items are excluded, overall OM&A has
3 increased by \$523,326 or 8.2% over the four year period since the 2013 COS. WHESC has worked
4 diligently to find sustainable costs reductions since the 2013 COS while maintaining or improving
5 its services to customers.

6 **Depreciation Expense**

7 WHESC's depreciation amount has increased by \$201,035 compared to the 2013 COS. This increase
8 is detailed in Exhibit 4, Table 4-24. Overhead and underground capital spending projects account for
9 47% of the increase in depreciation followed by Vehicles at 37%. WHESC has purchased a double
10 bucket truck and new digger derrick truck in the 2016 Bridge Year. All other assets categories account
11 for 16% of the total increase in depreciation.

12 **Payments-In-Lieu of Taxes ("PILS") Increase**

13 The increase in the PILS component is primarily as a result of the increase in WHESC's tax rate of
14 19.5% in the 2013 COS compared to 26.5% in the 2017 Test Year. In 2014, WHESC was no longer
15 eligible to claim the Ontario Small Business Tax Deduction. This deduction is now subject to the same
16 restriction as the Federal Small Business Tax Deduction.

17 **2013 COS Account 1576**

18 WHESC elected to adopt changes to assets useful lives and overhead capitalization policies effective
19 January 1, 2012. As a result, the impact of these changes for 2012 Actuals were to be credited to
20 account 1576 and distributed to customers as part of the 2013 COS. The methodology used by the
21 OEB at that time reduced distribution rates through two separate adjustments. The first is a reduction
22 for the base amount credited to account 1576 for 2012 Actuals. The second adjustment reflected the
23 annual return on the base amount credited to 1576. The OEB changed its methodology for the
24 treatment of Account 1576 shortly after WHESC's 2013 rates were finalized. The new methodology
25 used a Rate Rider to dispose of both the base and return on 1576 as opposed to reducing distribution
26 rates. Once the Account 1576 Rate Rider expired there would be no increase in a distributors
27 distribution rates as is this case with WHESC. Both methodologies would produce the same customer
28 bill impact, however in the case of WHESC, distribution rates increase as opposed to a favorable rate
29 rider expiring. As a result of the rate setting methodology in place in WHESC's 2013 COS total service
30 revenue requirement increases by \$176,476 in the 2017 Test Year.

1 **Revenue Deficiency**

2 Based on the projected load forecast and customer growth for the 2017 Test Year, Welland Hydro has
3 estimated a revenue deficiency of \$1,056,407 based on its current rates. The computation of the
4 revenue deficiency is shown in Exhibit 6 Table 6-4 Revenue Deficiency Determination.

5 Therefore, Welland Hydro seeks the OEB's approval to revise its electricity distribution rates. The
6 rates proposed to recover its projected revenue deficiency are set out in Exhibit 8 Appendix 8-C
7 Proposed Tariff of Rates and Charges.

8 The information presented in this Application sets out Welland Hydro's forecasted results for the 2017
9 Test Year. Welland Hydro is also presenting the historical actual information for fiscal years 2013,
10 2014, and 2015, and forecast for the 2016 Bridge Year.

11 The main drivers of the revenue deficiency, as outlined in Exhibit 6 Table 6-5 Revenue Deficiency by
12 Revenue Requirement Component are:

- 13 • An increase in OM&A of approximately \$367,000
- 14 • Increase in depreciation expenses of approximately \$151,000
- 15 • Incremental return on rate base of \$217,000
- 16 • Increase in PILs of \$45,000
- 17 • Loss of Large User Distribution Revenue of \$98,000
- 18 • Accounting for 1576 Base & Return amounts of \$176,000

19 **2.1.5(B) Budgeting and Accounting Assumptions**

20 Developing WHESC's budget is a key process as it identifies past successes as well as future
21 initiatives and projections for capital and operating costs. Assumptions provided by the management
22 team for the capital and operating budgets are tested to ensure they support WHESC's core business
23 objectives as well as being prudent and financially sustainable.

24 WHESC's 2017 Cost of Service Rate Application has been filed in accordance with Modified
25 International Financial Reporting Standard ("MIFRS"). Both the 2016 Bridge and 2017 Test Years
26 have been compiled using the MIFRS method of presentation. WHESC adopted changes to asset
27 useful lives, assets componentization, and overhead capitalization policies in fiscal 2012 which were
28 incorporated into rates in the 2013 COS. Upon adoption of IFRS effective January 1, 2015, impacts
29 flowing from the elimination of pooled assets and changes related to WHESC's employee future
30 benefits have been identified and included in service revenue requirement in this application. These

1 impacts are detailed in Tab App.2-Y MIFRS Summary Impacts Chapter 2 Appendices spreadsheet
2 attached in Appendix 1-F.

3 WHESC has reviewed expenses on a line item by line item basis and made the appropriate
4 adjustments with the best information available. Unless otherwise specified, inflation was set at 2%
5 for both the 2016 Bridge Year and 2017 Test Year.

6 Customer growth is considered during budget development but not mathematically included in
7 budgeted amounts in any significant way when developing both capital and operating budgets for the
8 2016 Bridge or proposed 2017 Test Year. The customer growth in Welland has been relatively stable
9 at the rate of approximately 1% per year.

10 WHESC provides detailed explanations in the applicable sections of the application for the major
11 components of the budget; revenue, OM&A and capital. Assumptions and methods of calculation from
12 these exhibits for the 2017 Test Year are as follows:

13 **Revenue**

14 The Total Customer/Connections are forecasted to increase slightly based on the forecast by rate
15 class which was determined using a geometric mean analysis. This is reflective of current conditions
16 in Welland Hydro's service area. Other revenues were viewed on an item-by-item basis and were
17 either based on historical indicators or business plans moving forward.

18

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

21 **Operating Maintenance and Administration Expense**

22 OM&A expenses have been developed based on the department managers' or supervisors' operating
23 plans. These plans are reviewed by senior management, and are prepared with a mindset of
24 containing costs while still providing an acceptable level of service and reliability.

25 Staffing levels are based on the estimated time required to complete the operating plans. The 2017
26 Test Year full time equivalent ("FTE") employee compliment is forecasted to remain at the 2016 Bridge
27 level of 41. This is a decrease of two when compared to the FTE in the 2013 COS of 43.

- 1 • Union wage increases are based on the union contract which was effective April 1, 2015 and
2 expires on March 31, 2018. The scheduled rate increases for April 1, 2016 and April 1, 2017
3 are 1.9% in each year.
- 4 • Management wage increases are forecasted at 2.0% in both the 2016 Bridge Year and 2017
5 Test Year.
- 6 • Regulatory costs for this application have been normalized over the five year life of the
7 application.
- 8 • WHESC used an inflation rate of 2% where the expense increase could not be specifically
9 identified.

10 **Amortization**

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

12 **PILs**

13 Regulatory PILS have been calculated using the Board Approved model with the exception of the 2016
14 Bridge Year loss carryforward which is discussed in detail in Exhibit 4.

15 PILS are forecasted to increase mainly due to the fact that WHESC's tax rate has increased from 19.5
16 % to 26.5% in 2014. This is the result of WHESC no longer being eligible for the Ontario Small
17 Business Tax Deduction.

18 **Capital**

19 The Capital Budget was formulated on a project by project basis. Distribution asset related projects
20 were prioritized based on multiple factors as explained in the Distribution System Plan ("DSP").

21 General asset related projects were submitted by managers and supervisors on a project by project
22 basis. Major projects were based on a building & grounds needs, a fleet replacement schedule, and
23 computer/hardware assessments.

24 **2.1.5(C) Load Forecast Summary**

25 WHESC's load forecast is weather normalized and considers factors such as historical power
26 purchased load, weather, calendar related factors and local economic conditions.

1 As outlined in Exhibit 3, WHESC has used the same regression analysis methodology approved by
 2 the Board in its 2013 Cost of Service Application (EB-2012-0173). The regression analysis was
 3 conducted on historical electricity purchases to produce an equation that will predict weather
 4 normalized power purchases in 2017. The weather normalized purchased energy forecast is adjusted
 5 by a historical loss factor to produce a weather normalized billed energy forecast which is allocated to
 6 rate class using historical billing data by rate class.

7 Based on the load forecast methodology, the total 2017 Test Year kWh forecast is 347,356,298 which
 8 is a 17.6% decrease over the 2013 Board Approved kWh forecast of 421,635,735. This decrease
 9 reflects the impact of CDM savings, loss of the large user account, as well as the slower economic
 10 condition of Welland.

11 **Customer/Connection**

12 The forecast of customers by rate class was determined using a geometric mean analysis. Based
 13 upon the geometric mean analysis, the expected number of customers/connections for the 2017 Test
 14 Year is 30,599 which is a 2.5% increase over the 2013 Board Approved customers/connections of
 15 29,847. In 2014 WHESC's only Large Use customer shut down its manufacturing facilities which had
 16 monthly peak demands in excess of 13,000 kW and represented over 10% of total system kWhs
 17 consumed.

18 Consumption and Customer/Connection comparison are summarized in Table 1-4 below:

19 **Table 1- 4 Customer/Connection Counts & Consumption**

Customer Class	2013 Customer /Connections Approved		2017 Customer /Connections Proposed		Change	
Residential	20,432		21,042		610	
GS<50 kW	1,696		1,783		87	
GS 50 to 4,999 kW	169		149		-20	
Large User	1		0		-1	
Streetlights	6,750		6,853		103	
Sentinel Light	574		515		-59	
Unmetered Loads	225		257		32	
Total	29,847		30,599		752	
Customer Class	2013 Approved		2017 Proposed		Change	Change
	kWh	kW	kWh	kW	KWH	kW
Residential	162,565,618		161,051,510		-1,514,108	
GS<50 kW	54,784,534		54,658,680		-125,854	
GS 50 to 4,999 kW	141,530,394	396,002	128,665,764	362,937	-12,864,630	-33,065
Large User	59,538,701	168,818	0	0	-59,538,701	-168,818
Streetlights	1,273,281	3,552	1,282,067	3,560	8,786	8
Sentinel Light	831,977	2,297	753,964	2,077	-78,013	-220
Unmetered Loads	1,111,230		944,313		-166,917	
Total	421,635,735	570,669	347,356,298	368,574	-74,279,437	-202,095

1 **2.1.5(D) Rate Base and Capital Plan**

2 **Distribution System Plan**

3 In creating the Distribution System Plan (the “DSP” as attached in Exhibit 2), WHESC believes the
 4 objective and scope of the 2017 – 2021 investment plan speaks directly to the RRFE and Welland
 5 Hydro’s corporate objectives of distributing electricity safely at competitive rates while seeking to
 6 promote increased reliability, sustainable cost savings efficiencies, and customer value.

7 Table 1-5 below provides a summary of the 5 year historic and 5 year forecasted capital investment
 8 plan.

9 **Table 1- 5: Capital Investments.**

Historical Five Year Summary						
Category	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Bridge	Average
System Access	225,766	85,482	111,353	94,079	147,000	132,736
System Renewal	1,233,301	1,504,700	1,710,305	1,773,585	1,683,000	1,580,978
System Service	8,300	4,047	55,500	33,237	0	20,217
General Plant	417,631	517,076	322,389	281,463	801,800	468,072
Total	1,884,998	2,111,305	2,199,547	2,182,364	2,631,800	2,202,003
DSP Five Year Summary						
Category	2017 Test	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast	Average
System Access	204,501	250,000	250,000	190,000	150,000	208,900
System Renewal	1,834,485	1,495,000	1,775,000	1,920,000	1,770,000	1,758,897
System Service	110,000	260,000	35,000	35,000	35,000	95,000
General Plant	265,000	305,000	400,000	295,000	525,000	358,000
Total	2,413,986	2,310,000	2,460,000	2,440,000	2,480,000	2,420,797

10

1 **Historic Drivers 2012 – 2016 versus DSP Drivers 2017-2021**

2 **System Access**

3 The increased average spending in System Access in the DSP compared to the historical five year
4 period is for the most part related to meters. Meter replacements are the major driver in System
5 Access in the DSP and account for 56% of spending in this category. From 2018 to 2019 WHESC
6 expects to spend approximately \$120,000 on the OEB mandated installation of MIST meters for
7 customers in the GS>50 class. In addition, the initial seal period for smart meters installed in 2009 will
8 expire in 2019. Measurement Canada expects utilities to pre-sample their meter population prior to
9 applying for a final extension period. The new sampling procedure will require additional smart meter
10 stock beyond what is required for residential growth and field failures. New Service and Capital
11 Contributions to Subdivision Developers account for the balance of spending in the DSP.

12 **System Renewal**

13 System Renewal accounts for the majority of capital spending in both the Historic Five Year Period
14 (72%) and the DSP Period (73%). The increased average spending in System Renewal between the
15 Historic and DSP periods for the most part is related to substation renewal as WHESC replaces,
16 upgrades, and standardizes four of its thirteen substations.

17 Addressing aging infrastructure is the main driver of spending in this category. Specifically, addressing
18 end-of-life overhead, underground, and substation components which pose safety and reliability risks.
19 During the planning process for renewal projects, WHESC evaluates future system requirements and
20 possible voltage conversions. This can be shown by the decrease in the requested loss factor in this
21 application which has reduced customer energy related charges by approximately \$250,000 per year.

22 **System Service**

23 The main driver of System Service work is to improve the overall system reliability by investing in
24 technology that improves the visibility of the system performance and isolates problems faster allowing
25 for quicker responses to outages. Increases to average System Service investments in the DSP plan
26 relate to RTU/Relay replacements at two of its substations. WHESC has been experiencing
27 operational issues with the relays at these substations which are from the same manufacturer and
28 same vintage. Although WHESC has made repairs to extend their useful lives, further delay in
29 replacement could cause significant reliability issues.

1 **General Plant**

2 Average spending in General Plant actually decreases in the DSP versus the Historical Period. The
 3 emphasis in the Historical Period focused on computer hardware/software and three significant large
 4 truck replacements with a total cost of \$1,004,715. The vehicle replacement program during the
 5 Historical Period will allow WHESC to reduce the vehicle mechanics staff from two to one in the 2017
 6 Test Year.

7 The main driver in the DSP for General Plant investments will be on up-grades to existing buildings &
 8 grounds including replacement of the service center parking lots and service center roof. These
 9 expenditures will ensure the current facilities meet WHESC's and customer needs for many years to
 10 come.

11 The DSP and WHESC's Capital Expenditure Plan seeks to find the right balance between capital
 12 investments in new infrastructure, and operating and maintenance costs so that the combined total
 13 cost over the life of an asset is minimized. The proposed levels of capital investment, for each category
 14 and in total, are relatively consistent throughout the DSP period. Investment drivers are also expected
 15 to be consistent during the DSP barring any unforeseen extraordinary expenditures.

16 **Rate Base**

17 WHESC's rate base for the 2017 Test Year is calculated at \$33,512,388. Total rate base has
 18 increased by \$2,076,521 between the 2013 Board Approved amounts and the 2017 Test Year,
 19 representing a total increase of 6.61%. Table 1-6 below presents a summary of WHESC's rate base
 20 for the 2013 Board Approved Year, 2013-2015 Historical Years, 2016 Bridge Year, and 2017 Test
 21 Year.

22 **Table 1-6: Summary of Rate Base**

Description	2013 Actual	2013 Approved	2014 Actual	2015 Actual	2016 Bridge	2017 Test	2013 Board Approved to 2017 Test
Opening Balance, January 1	25,113,591	25,090,180	25,872,710	26,894,319	27,630,302	29,014,773	3,924,593
Closing Balance, December 31	25,872,710	25,837,980	26,894,319	27,630,302	29,014,773	29,973,839	4,135,859
Net Fixed Average Average	25,493,150	25,464,080	26,383,514	27,262,310	28,322,537	29,494,306	4,030,226
Allowance For Working Capital	5,754,588	5,971,788	5,919,544	5,938,921	6,366,498	4,018,083	-1,953,706
Rate Base	31,247,738	31,435,868	32,303,059	33,201,231	34,689,035	33,512,388	2,076,521
Annual Change \$		-188,130	1,055,320	898,173	1,487,803	-1,176,646	
Annual Change %		-0.60%	3.38%	2.78%	4.48%	-3.39%	6.61%

24 Please refer to Exhibit 2 for detailed discussion on changes to rate base.

1 **Capital Expenditures**

2 Total capital expenditures requested for the 2017 Test Year amount to \$2,413,986. This represents
 3 an increase of \$437,621 compared to the 2013 Board approved amount; a 22% increase, or 5.5%
 4 average yearly increase.

5 Table 1-7 below outlines capital spending for the 2013 Board Approved Year and the 2017 Test Year.

6 **Table 1- 7 Capital Spending 2013 Board Approved versus 2017 Test Year**

7

Description	2013 Approved	2017 Test	2013 Board Approved to 2017 Test
System Access	135,000	204,501	69,501
System Renewal	1,334,200	1,834,485	500,285
System Service	35,000	110,000	75,000
General Plant	472,165	265,000	-207,165
Total	1,976,365	2,413,986	437,621
Percentage Change			22.14%
Percentage Annual Growth			5.54%

8

9 Besides four years of inflation, the comparison of the 2013 Approved and 2017 Test Year capital
 10 spending shows WHESC's commitment to maintaining the reliability of the distribution system. In the
 11 2017 Test Year, WHESC also started a substation renewal program which was not included in the
 12 2013 Approved amount. WHESC has made reductions to General Plant investments in the 2017 Test
 13 Year in order to level total capital spending for the year.

14 **Renewable Energy Connections and Regional Planning**

15 WHESC uses a comprehensive approach to its distribution system planning which includes all
 16 categories of investments including renewable generation connections, and regional planning as
 17 required. This comprehensive approach ensures the investments made by WHESC are efficient and
 18 that they support the goals identified by the Board in the Filing Requirements. WHESC confirms that
 19 there are no material costs requested for Renewable Generation Connections, smart grid, and regional
 20 planning. WHESC has requested a capital expenditure in the 2017 Test Year of \$14,501 related to
 21 the Direct Benefit portion of a Renewable Generation Connection completed in 2014. A request has
 22 been made to recover the Provincial Benefit portion of the Renewable Generation Connection

1 expansion by way of payments from the IESO of approximately \$500 per month. For more details
 2 related to Renewable Energy Connections please see Exhibit 2.

3 **Renewable Energy Investments**

4 WHESC's distribution system has been planned and proactively built and equipped to handle
 5 forecasted renewable generation. As part of the DSP, WHESC prepared a Green Energy Plan and
 6 has submitted this plan to the IESO. Based on the evaluation of the distribution system to accept
 7 green energy generation connections, no constraints have been identified in the system, preventing
 8 the connection of renewable energy generation installations. On this basis, WHESC is not proposing
 9 any capital investments for capacity upgrades on its distribution system to accommodate the
 10 applications for the connection of any REG plant over the forecast period of the DSP.

11 **2.1.5(E) Operations, Maintenance and Administration Expense**

12 WHESC is proposing recovery through distribution rates of \$6,999,907 in Operating, Maintenance and
 13 Administration (OM&A) costs for the 2017 Test Year.

14
 15 OM&A expenditures in the 2017 Test Year of \$6,999,907 represents an increase of \$629,907 or 9.9%
 16 (2.47% annually) over the 2013 Board Approved OM&A expenditures of \$6,370,000. The following
 17 Table 1-8 summarizes the changes.

18 **Table 1-8: OM&A 2013 Board Approved and 2017 Test Year.**

Expenses	2013 Board Approved	2017 Test	Change \$	Change %	Annual %
Distribution Expenses - Operation	1,392,257	1,508,493	116,236	8.3%	2.09%
Distribution Expenses - Maintenance	1,621,552	1,884,210	262,658	16.2%	4.05%
Total Operation & Maintenance	3,013,809	3,392,703	378,894	12.6%	3.14%
Billing and Collecting	1,407,275	1,539,473	132,198	9.4%	2.35%
Community Relations	134,249	144,123	9,874	7.4%	1.84%
Administrative and General Expenses	1,803,667	1,910,708	107,041	5.9%	1.48%
Total Administrative & Customer	3,345,191	3,594,304	249,113	7.4%	1.86%
Total OM&A Excluding Donations	6,359,000	6,987,007	628,007	9.9%	2.47%
Donations - Leap	11,000	12,900	1,900	17.3%	4.32%
Total Recoverable OM&A	6,370,000	6,999,907	629,907	9.9%	2.47%

19 The proposed OM&A expenditures for the 2017 Test Year have been derived through a detailed
 20 budgeting and business planning process aligned to meet WHESC's core business objectives. These
 21 expenditures are required to allow WHESC to maintain the distribution business service quality and

1 reliability standards in compliance with the Distribution System Code and other regulatory bodies
 2 (IESO, Ministry of Energy, ESA, etc.). The OM&A costs in the 2017 Test Year reflect the resourcing
 3 mix and investments required to meet customer and broader public policy requirements for the duration
 4 of the 4th Generation IRM plan term.

5 Committing to all of these objectives coupled with other pressures, such as increased labor costs and
 6 inflation, has resulted in increased cost. However, WHESC continues to focus on increasing
 7 operational effectiveness to help offset rising costs. In fact, the most recent OEB Scorecard data for
 8 2015 positions Welland Hydro as having the 8th lowest cost per customer out of the 71 LDCs in Ontario.

9 A summary of the Cost Drivers is presented in Table 1-9 below.

10 **Table 1-9 Cost Drivers**

Item	\$ Amount	Total Increase %	Annual Increase %
2013 Board Approved OM&A Expenses	6,370,000		
Total Wage & Benefit Cost Drivers	194,723	3.1%	0.76%
Non Wage & Benefits Cost Drivers Excluding Locates/Regulatory/Bad Debt	297,538	4.7%	1.17%
Locates/Ontario One Call & Regulatory Expenses (beyond LDC Control)	104,681	1.6%	0.41%
Bad Debt Expense - increased time of use rates	32,965	0.5%	0.13%
Total Expense Cost Drivers	629,907		
2017 Test Year OM&A	6,999,907	9.9%	2.47%

11 Many cost drivers underpin the budget developed for the 2017 Test Year. Table 1-9 above provides
 12 a summary of the cost drivers between Wages & Benefits and Non-Wage & Benefit expenses. This
 13 table is a summary of Table 4-2 in Exhibit 4 where cost drivers are discussed in detail. WHESC has
 14 tempered the impact to inflation on Wages & Benefits in OM&A in the 2017 Test Year by reducing
 15 FTEs from 43 in the 2013 COS to 41 in the 2017 Test Year. In addition, within the 41 FTEs in the
 16 2017 Test Year, WHESC has made adjustments to allow for succession planning without adding
 17 additional employees. An example is the elimination of a vehicle mechanic and replacement with a
 18 certified engineer. Non-wage related expenses have been impacted by inflation and enhancements
 19 to operating systems. In 2014, WHESC implemented many automation features to its billing system
 20 to allow focus on bill accuracy as opposed to manual procedures. Also installed in 2014 was a
 21 document storage assist that will aid WHESC in implementing record storage requirements initiated
 22 by the OEB. Approximately 2% of the 9.9% increase since the 2013 COS which include locates,
 23 regulatory costs, and bad debts are for the most part beyond the control of WHESC. An inflation rate
 24 of 2% has been used where the expense increase could not be specifically identified for non-wage
 25 related expenses.

1 Total compensation cost for the 2017 Test Year versus the 2013 Approved are detailed in Table 1-10
 2 below.

3 **Table 1-10 Total Compensation**

	Last Rebasing Year - 2013-Board Approved	2017 Test Year	Change \$	Change %	Annual Change %
Total Salary and Wages including Overtime					
Management (including executive)	\$ 1,385,904	\$ 1,528,126	\$ 142,222	10.26%	2.57%
Non-Management (union and non-union)	\$ 2,041,774	\$ 2,244,008	\$ 202,234	9.90%	2.48%
Total	\$ 3,427,678	\$ 3,772,134	\$ 344,456	10.05%	2.51%
Total Benefits					
Management (including executive)	\$ 336,525	\$ 360,666	\$ 24,141	7.17%	1.79%
Non-Management (union and non-union)	\$ 566,574	\$ 610,229	\$ 43,655	7.71%	1.93%
Total	\$ 903,099	\$ 970,895	\$ 67,796	7.51%	1.88%
Total Compensation (Salary, Wages, & Benefits)					
Management (including executive)	\$ 1,722,429	\$ 1,888,792	\$ 166,363	9.66%	2.41%
Non-Management (union and non-union)	\$ 2,608,348	\$ 2,854,237	\$ 245,889	9.43%	2.36%
Total Compensation Before OPEB	\$ 4,330,777	\$ 4,743,029	\$ 412,252	9.52%	2.38%
Retiree Benefits Premiums	\$ 135,842	\$ 103,766	-\$ 32,076		
Retiree Benefits Accrual	\$ 19,816	\$ -	-\$ 19,816		
Total Compensation including OPEB	\$ 4,486,435	\$ 4,846,795	\$ 360,360	8.03%	2.01%

4 The above Table 1-10 represents total Wage & Benefit costs before allocations to OM&A, Capital, and
 5 Third Party Billings. Although the annual increase in Total Compensation including OPEB is
 6 approximately 2% per year, WHESC has had to make efficiency gains to mitigate total increases.
 7 WHESC had significant employee retirements in 2011/12. As a result, many of the new hires were
 8 included in the 2013 COS at wage levels far below full pay scale levels. Progression pay increases
 9 account for approximately \$138,000 of total increases in Wages & Benefits. In addition, WHESC has
 10 replaced two positions with higher paying positions to improve skill levels and provide alternatives for
 11 succession planning without adding positions. In order to offset these increases, WHESC has reduced
 12 its FTE's by 2 since the 2013 COS.

13 WHESC has experienced significant changes in its business environment since the last Cost of
 14 Service Application in 2013. Customers, or at least their expectations, have changed. Also, WHESC
 15 has had to adapt to, respond to, and/or implement multiple provincial policies.

1 WHESC has been required to support a number of provincial policy initiatives, including, but not limited
2 to:

- 3 i) mandatory purchase and deployment of smart meters and conversion to time of use billing;
- 4 ii) mandatory framing of time of use billing data through the provincial meter data management
5 repository;
- 6 iii) mandatory cost prudence review of smart meter spending;
- 7 iv) implementation of the *Green Energy and Green Economy Act*, including the increased focus
8 on renewable generation at homes and businesses;
- 9 v) implementation of Low Income Energy Assistance Program;
- 10 vi) new options and assistance for low income customers;
- 11 vii) mandatory customer service rules including new collection obligations;
- 12 viii) mandatory, as a condition of maintaining a Distributor's Licence, achievement of demand and
13 energy conservation results 2011 - 2014;
- 14 ix) development of plans/targets for a new CDM framework for the 2015 - 2020 period;
- 15 x) renewed Regulatory Framework with its incremental requirements around asset planning,
16 customer engagement, reporting, rate setting and maintaining a score card;
- 17 xi) new and incremental reporting requirements to the IESO, the Board and the ESA; and
- 18 xii) new OEB initiatives related to document storage and governance

19 Welland Hydro is one of the lowest cost utilities in the province while delivering highly reliable services
20 and customer value. Cost controls are achieved by counteracting the cost of new requirements and
21 regulations with innovation, process improvements and fiscal restraint. Maintaining an appropriate
22 level of reliability and customer service is paramount for the Company's ability to provide customer
23 value. Pacing expenditures, economic efficiency and cost effectiveness are integral parts of Welland
24 Hydro's planning, processes and operations.

25

1 **2.1.5(F) Cost of Capital**

2 WHESC has prepared its Application in accordance with the Board’s guidelines provided in the Report
 3 of the Board on Cost of Capital for Ontario’s Regulated Utilities (the “Cost of Capital Report”) issued
 4 on December 11, 2009.

5 For the purposes of preparing this Application, WHESC has used the cost of capital parameters issued
 6 by the Board on October 15, 2015 for 2016 Cost of Service Rate Applications for rates with effective
 7 dates in 2016.

8 Table 1-11 below provides a summary of the Cost of Capital Parameters as per the October 15, 2015
 9 letter.

10 **Table 1-11 Cost of Capital**

Rates Effective	Return on Equity (ROE)	Deemed Long-term Debt Rate	Deemed Short-term Debt Rate	Weighted Average cost of Capital (WACC)
January 1, 2016	9.19%	4.54%	1.65%	6.28%

11
12

13 Table 1-12 below compares the 2017 proposed cost capital used in this application to the 2013 Final
 14 Board Approved.

15 **Table 1-12 Weighted Average Cost of Capital**

	2013 COS %	2017 Test Year %
Capital Structure		
Deemed Short Term Debt %	4.00%	4.00%
Deemed Long Term Debt %	56.00%	56.00%
Deemed Equity %	40.00%	40.00%
Rates of Return		
Short Term Interest	2.08%	1.65%
Long Term Interest	3.78%	4.54%
Return on Equity	8.93%	9.19%
Weighted Average Cost of Capital	5.77%	6.28%

16

17 Welland Hydro will update its evidence to reflect future Board cost of capital parameters for rates with
 18 effective dates in 2017, prior to the issuance of the Board’s decision for its Application. Welland Hydro
 19 proposes no deviations from the Board’s Cost of Capital methodology.

20 Please reference Exhibit 5 for complete details on the calculation of the Cost of Capital included in this
 21 application.

1 **2.1.5(G) Cost Allocation and Rate Design**

2 WHESC has not deviated from the Board's cost allocation and rate design methodology. In addition,
 3 there are no significant changes proposed to revenue-to-cost ratios and fixed/variable splits with the
 4 exception of the Residential Class. The OEB has determined that the Residential Class will move to
 5 100% fixed costs over a four year period beginning in 2016 as outlined in Exhibit 8.

6 **Cost Allocation**

7 The data used in the updated cost allocation study is consistent with WHESC's cost data that supports
 8 the proposed 2017 revenue requirement outlined in this Application. The breakout of assets, capital
 9 contributions, depreciation, accumulated depreciation, customer data and load data by primary, line
 10 transformer and secondary categories were developed from the best data available to WHESC, its
 11 engineering records, and its customer and financial information systems.

12 In accordance with the Report of the Board "Review of Electricity Distribution Cost Allocation Policy,
 13 dated March 31, 2012", whereby the Board stated that "default weighting factors should now be utilized
 14 only in exceptional circumstances, WHESC has developed and utilized its own weighting factors for
 15 the purposes of preparing the Cost Allocation Model. The 2017 Cost Allocation Study has resulted in
 16 a change in the cost allocations by rate class resulting for WHESC's weighting factors.

17 As shown in Table 1-13, the resulting 2017 cost allocation study indicates that revenue to cost ratios
 18 for all customer classes are within the Board's range.

19 **Table 1-13: Revenue to Cost Ratios.**

Rate Class	2013 Board Approved	Updated Cost Allocation Study	2017 Proposed Ratios	2018 - 2021 Proposed Ratios	Board Targets Min to Max	
Residential	106.5%	104.8%	104.8%	104.8%	85.0%	115.0%
General Service < 50 kW	96.1%	95.8%	95.8%	95.8%	80.0%	120.0%
General Service > 50 kW	80.0%	76.8%	84.7%	84.7%	80.0%	120.0%
Street Lights	89.3%	367.7%	120.0%	120.0%	80.0%	120.0%
Sentinel Lights	106.5%	67.7%	84.7%	84.7%	80.0%	120.0%
Unmetered Scattered Load	106.5%	146.7%	120.0%	120.0%	80.0%	120.0%

20
 21 Please reference Exhibit 7 for further explanation of Welland Hydro's proposed Cost Allocation.

1 **Rate Design**

2 WHESC proposes to design its 2017 distribution rates to maintain the current weighted average
 3 Fixed/Variable proportions assumed in its current rates, with the exception of the Residential rate
 4 class. This exception is due to the implementation of fixed rates for the Residential rate class,
 5 consistent with implementation of the recent Board Policy entitled “A New Distribution Rate Design for
 6 Residential Electricity Customers (EB-2012-0140) as detailed in Exhibit 8. Table 1-14 outlines a
 7 comparison of the 2016 current to the 2017 proposed distribution rates.

8 **Table 1-14: Distribution Charges**

Customer Class	Monthly Service Charge			Unit of Measure	Volumetric Charge (Excluding Transformer Allowance)		
	2016 Current	2017 Proposed	% Difference		2016 Current	2017 Proposed	% Difference
Residential	\$18.76	\$23.44	24.95%	kWh	0.0105	0.0078	-25.71%
GS<50 kW	\$29.23	\$32.64	11.67%	kWh	0.0086	0.0096	11.63%
GS 50 to 4,999 kW	\$281.42	\$348.97	24.00%	kW	2.4614	2.9644	20.44%
Streetlights	\$1.99	\$0.64	-67.84%	kW	8.3543	2.6738	-67.99%
Sentinel Light	\$2.69	\$3.85	43.12%	kW	6.0251	8.6255	43.16%
Unmetered Loads	\$11.93	\$10.78	-9.64%	kWh	0.0079	0.0071	-10.13%

9
 10 The increase in the Residential Fixed Monthly Service Charge reflects the second year of transition to
 11 fully fixed distribution charges for the class. The significant reduction in Streetlights and Unmetered
 12 Loads represents the impact of the Board’s Cost Allocation Policy for Unmetered Loads (EB-2012-
 13 0383) issued on October 15, 2015. For the most part, reductions in these categories are offset by
 14 increases in the GS 50 to 4,999 kW and Sentinel Light classes. In 2014, WHESC lost its last remaining
 15 Large Use customer. As a result, WHESC no longer requires rates for the Large Use class in this
 16 application. The transformer allowance of (\$.70/kW) has not changed in this rate application.

17 WHESC is proposing to change the current microFIT monthly service charge of \$5.40 to \$11.25 as
 18 discussed in Exhibit 7.

19 **Specific Service Charges**

20 WHESC is proposing to introduce two new service charges as follows:

21 Collection of account charge – no disconnection – during regular hours	\$30.00
22 Collection of account charge – no disconnection – after regular hours	\$165.00

23 This is discussed further in Exhibit 8 Section 2.8.6.

1 **Loss Factor**

2 WHESC is proposing to reduce its loss factors from those currently approved, see Table 1-15 Capital
3 Investments. The details concerning loss factor calculations are provided in Exhibit 8. Reductions in
4 loss factors charged results in significant savings to customers and reflects WHESC's commitment to
5 continuous improvement.

6 **Table 1-15 Loss Factors**

	Current	Proposed
Total Loss Factor - Secondary Metered Customers < 5000 kW	1.0532	1.0476
Total Loss Factor - Primary Metered Customers < 5000 kW	1.0427	1.0371

7 **2.1.5(H) Deferral and Variance Accounts**

8 As outlined in Exhibit 9, WHESC is requesting approval for the disposition of Group 1, Group 2 and
9 Other Deferral and Variance Accounts in the amount of \$194,115 owing to customers. This includes
10 an RSVA – Global Adjustment amount of \$ 202,844 being owed from Non-RPP customers only. The
11 remaining amount \$396,959 is owed to all customers. WHESC is proposing a one year disposition
12 period for all Deferral and Variance Accounts. No new deferral accounts are being requested.

13 **2.1.5(I) Bill Impacts**

14 In preparing this application, WHESC has considered the impacts on its customers, with a goal of
15 minimizing those impacts. Bill impacts resulting only from distribution cost changes as per sub-
16 total A of the Tariff Schedule and Bill Impacts spreadsheet model are detailed in Table 1-16
17 below. Table 1-16 also includes total bill impacts for each customer classification and
18 electricity usage. Incorporated in the overall monthly bill impact is the effect of the following major
19 components of the electricity bill:

- 20 • Distribution rates (monthly service charge and volumetric rates);
- 21 • Disposition of deferral and variance accounts;
- 22 • Revised Retail Transmission rates;
- 23 • Wholesale Market Service rates; and
- 24 • Loss Factors

1

Table 1-16 Distribution Charge and Total Bill Impacts

Rate Class/Description	kWh	kW	Current Distribution Charge Subtotal A	Proposed Distribution Charge Subtotal A	\$ Change	% Change
Residential - TOU	750		\$27.14	\$29.42	\$2.28	8.40%
Residential 10th Percentile - TOU	308		\$22.49	\$26.01	\$3.52	15.65%
General Service Less Than 50 kW	2,000		\$46.91	\$51.85	\$4.94	10.53%
General Service 50 to 4,999 kW Non-RPP	32,400	60	\$429.50	\$526.63	\$97.13	22.61%
General Service 50 to 4,999 kW Non-RPP	1,091,088	3,648	\$6,666.59	\$8,525.98	\$1,859.39	27.89%
Unmetered Scattered Load	150		\$13.13	\$11.84	-\$1.29	-9.82%
Sentinel Lighting	120	0.3	\$4.51	\$6.44	\$1.93	42.79%
Street Lighting	16	0.044	\$2.36	\$0.76	-\$1.60	-67.80%
Rate Class/Description	kWh	kW	Current Total Bill	Proposed Total Bill	\$ Change	% Change
Residential - TOU	750		\$147.42	\$149.45	\$2.03	1.38%
Residential 10th Percentile - TOU	308		\$74.06	\$77.81	\$3.75	5.06%
General Service Less Than 50 kW	2,000		\$373.93	\$378.93	\$5.00	1.34%
General Service 50 to 4,999 kW Non-RPP	32,400	60	\$5,387.41	\$5,537.79	\$150.38	2.79%
General Service 50 to 4,999 kW Non-RPP	1,091,088	3,648	\$179,351.62	\$181,663.22	\$2,311.60	1.29%
Unmetered Scattered Load	150		\$39.10	\$37.53	-\$1.57	-4.02%
Sentinel Lighting	120	0.3	\$24.16	\$26.24	\$2.08	8.61%
Street Lighting	16	0.044	\$5.41	\$3.60	-\$1.81	-33.46%

2

3 Detailed bill impact sheets by customer class are presented in Exhibit 8 Appendix 8-D. Based upon
 4 the customer total bill impacts found in Table 1-16 above, WHESC is not proposing any rate mitigation
 5 in this application as all impacts are below 10% of total bill.

6 **2.1.6 CUSTOMER ENGAGEMENT**

7 **Customer Engagement**

8 The RRFE Report contemplates enhanced engagement between distributors and their customers to
 9 provide better alignment between distributor operational plans and customers' needs and
 10 expectations.

11 Welland Hydro listens to customers to understand their needs and expectations for the services we
 12 provide. Through telephone customer surveys, consultation groups, interviews with key customers,
 13 trending issues through calls to the office, website and other customer engagement activities Welland
 14 Hydro is able to identify issues or services where customers would like more information or additional
 15 services or tools to help manage their electricity needs. Welland Hydro is both proactive in resolving
 16 customer issues and reactive to issues that are raised during the consultation processes and every
 17 day in our business operations.

1 **Customer Consultation - 2017 Rate Application Review**

2 In response to the Ontario Energy Board's filing requirements on the specific proposals contained in
3 this Application, Innovative Research Group Inc. (INNOVATIVE) was commissioned by Welland Hydro
4 to help the utility design, collect feedback and document its customer engagement and consultation
5 process as part of the development of Welland Hydro's 2017 Cost of Service (COS) Rate Application
6 Review, which incorporates both capital infrastructure and operational plans. A complete copy of the
7 INNOVATIVE Customer Consultation Report is attached as Appendix 1-G.

8 Considering both the challenge of engaging a representative group of customers and the challenge
9 of a lack of knowledge, a process was developed based on three key principles:

- 10 1. Use random-sampling research elements to ensure a representative sample of customers
11 are engaged.
- 12 2. Focus on fundamental value choices. Look for questions that ask people to choose between
13 key outcomes rather than focus on the technical questions of how to reach those outcomes.
- 14 3. Create an opportunity for the public to learn the basics of the distribution system so they can
15 provide a more informed point of view.

16 Based on the principles outlined above, INNOVATIVE worked with Welland Hydro staff to design a
17 multifaceted customer engagement program which included a combination of qualitative and
18 quantitative research elements. This consultation was designed to engage various rate classes and
19 collect feedback on preferences and priorities as they relate to Welland Hydro's 2017 Rate Application
20 Review.

21 The consultation encompassed three core elements of customer engagement:

22 1. **General Service and Residential Consultation Groups:**

23 This qualitative phase of the consultation was designed to educate customers, assess their
24 preferences and priorities, gauge reaction to proposed rate changes, and ultimately help
25 inform the quantitative phases of the consultation. The groups were randomly recruited and
26 held in Welland, Ontario. A workbook was used to provide the participants with core
27 information about both the provincial and local electricity system, and Welland Hydro's
28 proposed capital investment and operating spending to maintain system reliability, as well as
29 the rate impact for each respective rate class. Participants were provided incentives in
30 recognition of their time commitment.

1 2. **Large Customer Validation Interviews:**

2 A number of key accounts and large general service (GS > 50 kW) customers were consulted
3 on the proposed plan by Welland Hydro staff. INNOVATIVE followed-up by telephone with
4 these customers after their consultation session to validate the process and to verify that
5 Welland Hydro provided them with the information they needed to provide informed feedback
6 on the proposed plan.

7 3. **Random Telephone Surveys:**

8 INNOVATIVE conducted telephone surveys with residential and general service (GS < 50 kW)
9 customers to provide a quantitative assessment of key aspects of the system plan. Customer
10 lists for both respondent groups were provided by Welland Hydro and the sample was
11 randomly selected by INNOVATIVE.

12 The outcome of the consultations resulted in findings on the needs and preferences of Welland Hydro's
13 residential and general service customer base from the Random Telephone Surveys and the
14 Residential and General Service Consultation Groups.

15 The overview includes feedback from 16 customers who participated in the *qualitative stage* of the
16 consultation where we explored the range of issues related to Welland Hydro's rate application, as
17 well as feedback from another 501 residential customers and 25 low-volume general services (GS <
18 50 kW) who responded to the quantitative stage where INNOVATIVE documented the incidence of
19 *needs* and *preferences* across the customer population.

20 **Customer Needs and Preferences**

21 **Affordable electricity and service**

22 It is true that many customers are feeling a "financial pinch" when it comes to their electricity bills.
23 However, at the same time Welland Hydro customers feel that they are well served by Welland Hydro.

- 24 • A majority (60%) of residential customers agree that "*The cost of my electricity bill has a major*
25 *impact on my finances and requires I do without some other important priorities*";
- 26 • A majority of residential customers (86%) say they are satisfied with Welland Hydro's services.

27 When considering the cost of reliable electric service, a majority of customers say they are willing to
28 pay a bit more if that means better service reliability.

- 29 • Considering the cost of Welland Hydro's plan 15 of 16 (93%) residential and general
30 service customers (Consultation Groups) agree that the rate is reasonable and I support
31 it, or I don't like it, but I think the rate increase is necessary. From the telephone survey,

1 68% of general service customers and 72% of residential customers, either support the
2 rate increase or don't like it, but think the rate increase is necessary.

3 **Reliability of Service**

4 The qualitative consultation activities spent additional time exploring the impacts of outages on
5 customers, acceptable frequencies and durations of outages. Those findings are detailed in the
6 following section. The telephone surveys built on the qualitative feedback and asked questions about
7 customer preferences on the trade-off between cost and reliability. In regard to the number of outages
8 experienced by customers:

- 9 • Many customers didn't experience any outages (36%) in the last 12 months. The rest were
10 most likely to experience either one (19%) or two (15%) recent outages. Of those impacted,
11 most experienced an outage of one hour or less with 29% who recall it as less than 15 minutes.

12 Based on the above figures from the residential and general service respondents in the telephone
13 survey, the overall impact on households and businesses was relatively insignificant. Asking
14 respondents to think back to their most recent power outage:

- 15 • More than 6-in-10 (62%) residential customers say the power outage they experienced was
16 only a *minor inconvenience*.

17 When it comes to system reliability, a majority of residential and general service customers want to
18 see continued spending on upgrades and maintenance.

19 **Regarding frequency and duration of outages:**

20 In regards to the number and length of power outages, 19% of Welland Hydro customers think capital
21 should be invested at a level which reduces the number of power outages while 50% think capital
22 investment should match what is needed to maintain the current number of outages. Therefore, 69%
23 of Welland Hydro customers think that Welland Hydro should invest what is needed to reduce/maintain
24 the number and length of power outages.

25 Survey respondents were informed of Welland Hydro's proposed capital investment required to
26 maintain system reliability and then asked to think about reliability in terms of bill impact. Almost 7 out
27 of every 10 (69%) of residential customers and 80% of general service customers feel Welland Hydro
28 should spend what is needed to maintain system reliability from the telephone survey.

1 **Customer Service, Communication and E-billing (Consultation groups and telephone surveys)**

- 2 • A strong majority of residential customers feel satisfied with either their customer service
3 (68%) or their communications materials from Welland Hydro (73%).
- 4 • 3-in-4 (76%) think Welland Hydro is doing a *good job* in communicating to its customers
5 regarding consumption management.
- 6 • Over half (56%) of residential customers are *not interested* in changing to e-billing. Among
7 those who are interested, a third (33%) claim to have *not heard or thought about it*.

8 **System Challenges and Priorities**

- 9 • The majority (54%) of residential customers feel that Welland Hydro *should invest what it*
10 *takes to replace the system's aging infrastructure to maintain system reliability*.
- 11 • The run-to-failure approach is not supported by residential customers. Two-thirds (65%) of
12 residential customers would prefer to *replace equipment before it breaks down vs. waiting for*
13 *its full value* (26%).
- 14 • Residential customers prefer that Welland Hydro *has the equipment and tools they need to*
15 *manage the system* (62%) over *making do with the equipment it already has* (32%).
- 16 • More than 8-in-10 (82%) acknowledge the importance of investing now in modernizing the
17 grid, even though there are other areas that require investment.

18 **Customer Reaction to Rate Increase**

19 Based on the results from the telephone survey and consultation groups, customers do not like a rate
20 increase but they believe the rate increase is necessary, reasonable and they support it.

21 All participants in the general service consultation group felt that Welland Hydro is doing at least a
22 good job when it comes to planning for the future.

23 Ultimately, all but one participant, from the consultation groups, supported the proposed rate increase.
24 Three felt *the rate increase is reasonable, and supported it outright*, while five felt that, *while they don't*
25 *like it, they think the proposed increase is necessary*.

26 **Large Customer Validation Interviews**

27 Between August 16th and August 23rd, 2016 Innovative Research Group conducted five validation
28 interviews with Welland Hydro key customers chosen based on electricity usage and impact on the
29 community. Welland Hydro staff met with key account holders on the details of the proposed

1 Distribution System Plan in early August and INNOVATIVE followed up by telephone to validate the
2 process and to verify customers had information to provide informed feedback. Key customers were
3 encouraged to provide open and confidential feedback to INNOVATIVE.

4 **Overall Take-Away**

5 Overall, the key account customers interviewed by INNOVATIVE are satisfied with the consultation
6 process, and the job Welland Hydro has done in communicating the proposed Distribution System
7 Investment Plan. These customers feel that they received the information needed to understand how
8 their organizations will be impacted by the proposed plan. Most feel that the process of system renewal
9 is on track and progressing at the right speed. Furthermore, customers felt they had the opportunity
10 to raise concerns and ask questions during the meeting.

11 Most key accounts understand the need for the rate increase, think it's reasonable, and support the
12 plan. However, the industrial customer interviewed expressed serious concern and opposes the rate
13 increase.

14 **Customer Experience and Expectations**

15 Overall, key account customers found Welland Hydro's consultation to be helpful in understanding the
16 proposed investment plan and the impacts to their organizations. All five respondents felt the plan
17 was well explained, regardless of their views of the plan itself. Several respondents remarked that
18 they had learned a lot from meeting with Welland Hydro, and had a better understanding of how the
19 distribution system works in Welland.

20 **Coverage of Distribution System Topics**

21 The five key accounts interviewed by INNOVATIVE stated that Welland Hydro's Distribution System
22 Plan covered the key areas they expected and was not missing any information. When going through
23 the distribution plan, Welland Hydro explained the impacts of the plan and the resulting proposed rate
24 increases on each organization.

25 *"They took the time to answer all of my questions. Going in, I had only the tip of the iceberg in*
26 *terms of knowledge about the system. I learned a lot."*

27 **Rate of System Renewal**

28 The key account customers did not agree unanimously on Welland Hydro's proposed rate of system
29 renewal. INNOVATIVE interviewed an industrial customer who expressed frustration at the rate of

1 renewal and believes that Welland Hydro is *proceeding too quickly*. His perception is that Welland
2 Hydro is not as efficient as it could be, and that the utility should find savings internally and demonstrate
3 that effort to its customers before turning to ratepayers for additional funds to invest in the system.

4 *“I’m opposed to this rate application from a financial responsibility point of view. I’d like to see*
5 *Welland Hydro look at areas of waste in its business to find savings before turning to*
6 *ratepayers for an increase”.*

7 However, all other key account customers agreed that Welland Hydro’s proposed rate of system
8 renewable is proceeding at *about the right pace*.

9 **Rate Impacts**

10 Three out of five key account customers interviewed *support the proposed rate increase and feel it is*
11 *reasonable*; one customer *doesn’t like it but thinks it’s necessary*, and one *opposes the rate increase*
12 *and feels it is unreasonable*. This industrial customer explained that electricity rates are a significant
13 cost to his business, and explained that they would soon make his business in Welland unsustainable,
14 requiring the business to relocate.

15 *“This affects my business’ bottom line. Electricity is my second biggest cost driver. It used*
16 *to be third, but electricity is now a greater cost than labour. It’s getting to the point where the*
17 *plant’s going to need to be relocated across the border.”*

18 However, the other four key account customers support the proposed distribution system plan and the
19 resulting rate increase. These respondents understand the need for investment in order to maintain
20 the system from a cost-benefit perspective.

21 *“Welland Hydro has the same goal as every business – do what needs to be done while keeping*
22 *costs low.”*

23 *“Of course it would be great if there were no increase. But I do not want to let the infrastructure*
24 *fail – so with that in mind the increase is reasonable.”*

25 *“The reasons behind the rate increase seem very reasonable, such as: improving*
26 *infrastructure, GIS database, and asset replacement. For most, the extra costs are very*
27 *manageable [...] I fully support the rate increases.”*

28 **Summary- Customer Consultation 2017 Rate Application Review**

29 Welland Hydro conducted telephone surveys of residential and general service customers, conducted
30 focus group sessions with residential and general service groups and met with five customers in the

1 greater than 50kW rate class. Welland Hydro reviewed the Distribution System Investment Plan and
 2 the potential impact on their bill to get the best feedback from customers to shape Welland Hydro’s
 3 Distribution System Investment Plan. Based on the information from the INNOVATIVE Market
 4 Research telephone surveys, group consultations and large customer individual interviews, most
 5 customers think the plan is reasonable and support the plan. The complete review can be found in
 6 detail in Appendix 1-G.

7 **Welland Hydro’s Response to Customer Preferences**

8 Throughout its comprehensive customer engagement process summarized above, Welland Hydro has
 9 informed various customer classes of the proposals being considered for inclusion in this application
 10 and reviewed feedback provided by these customers.

11 **A. Bill Impacts**

12 The following estimated bill impacts were reviewed in the focus groups held by INNOVATIVE as part
 13 of their research. The bill impacts for residential customers for the focus groups were estimated using
 14 a residential 750 kWh per month and general service less than 50 kW at 2000 kWh per month.

15 **Table 1-17- Bill Impacts Used for Customer Consultations – Residential**

Estimated Typical Residential Annual Increase in Monthly Bill (5 year forecast)					
	Year	Average Residential Bill (2)	Distribution Portion of Bill (3)	Incremental Rate Change (before HST)	% Change (2) on total bill
<i>Current Rate</i>	2016	\$147.82	\$27.14		
<i>Rebased Rate</i>	2017	\$149.96	\$29.30	\$2.16	1.45%
<i>Forecast(1)</i>	2018	\$150.57	\$29.84	\$0.54	0.4%
<i>Forecast(1)</i>	2019	\$151.19	\$30.39	\$0.55	0.4%
<i>Forecast(1)</i>	2020	\$151.82	\$30.95	\$0.56	0.4%
<i>Forecast(1)</i>	2021	\$152.46	\$31.52	\$0.57	0.4%

(1) Preliminary estimates subject to change. Assumes 1.85% rate of inflation (2018-2021).

(2) Assumes all charges on the average electricity bill remain constant at 2016 levels, aside from distribution charges.

(3) Estimates are calculated excluding distribution pass through charges.

1

Table 1-18 - Bill Impacts Used for Customer Consultations – Commercial

Estimated Typical GS<50 kW Annual Increase in Monthly Bill (5 year forecast)

	Year	Average GS<50kW Bill (2)	Distribution Portion of Bill (3)	Incremental Rate Change (before HST)	% Change (2) on total bill
<i>Current Rate</i>	2016	\$375.00	\$46.91		
<i>Rebased Rate</i>	2017	\$379.14	\$51.84	\$4.93	1.10%
<i>Forecast(1)</i>	2018	\$380.22	\$52.80	\$0.96	0.3%
<i>Forecast(1)</i>	2019	\$381.33	\$53.78	\$0.98	0.3%
<i>Forecast(1)</i>	2020	\$382.45	\$54.77	\$0.99	0.3%
<i>Forecast(1)</i>	2021	\$383.59	\$55.78	\$1.01	0.3%

(1) Preliminary estimates subject to change. Assumes 1.85% rate of inflation (2018-2021).

(2) Assumes all charges on the average electricity bill remain constant at 2016 levels, aside from distribution charges.

2

(3) Estimates are calculated excluding distribution pass through charges.

3

The majority of customers surveyed (>68%) agreed that the rate increases shown above are reasonable and support it, or don't like it, but believe the rate increase is necessary. Since the customer engagement process was completed, there have been minor reductions in both the forecasted 2017 Distribution Charge and the forecasted 2017 Total Bill for both customer classes when a comparison is made to the Bill Impact Sheets included on page 27 of this Exhibit.

8

The above forecasted 2017 Total Bill impacts reflect a reduction of Welland Hydro's loss factor applied for in the 2017 Test Year from 1.0532 to 1.0427. This reduction is estimated to save customers \$250,000 annually in electricity related charges.

11

B. Distribution System Plan

12

The Distribution Service Plan contained Welland Hydro's capital spending plans and introduced customers to indices related to system reliability such as SAIDI and SAIFI. Customers were very satisfied with the current reliability of power supplied by Welland Hydro and wanted the company to take the necessary steps to ensure reliability is maintained or improved. When introduced to the concept of running assets to end of life, customers expressed apprehension and their preferences were to replace assets before they failed. As a result, customers felt that Welland Hydro's System Renewal capital spending program included in the DSP was proceeding at the right pace and the resulting bill increases were reasonable and warranted. When asked about Welland Hydro providing its employees with new equipment or making do with existing equipment, customers responded that they want Welland Hydro to "be wise" in these type of expenditures but were still in favor of WHESC providing its employees with the necessary equipment to perform their duties. As a result, WHESC

22

1 will continue to monitor its spending in General Plant capital additions to ensure a balance between
2 vehicles, software systems, and buildings & grounds are maintained on a year over year basis.

3 Welland Hydro identified one project from the 2017 Test Year General Plant capital spending for which
4 it was looking for specific customer feedback. The expenditure was related to improvements to
5 Customer Service options by introducing the ability to file forms and documents online. Total Cost of
6 the Project was \$40,000 and was identified as “discretionary”. Less than half of the respondents felt
7 that this should be implemented in 2017 with the majority saying it would be “nice to have” versus
8 “need to have”. Within its April, 2016 Customer Survey conducted by Simul Corporation, Welland
9 Hydro introduced a new survey question in preparation for the 2017 Cost of Service Rate Application.
10 Customers were asked about their willingness to pay for specific items including “Increased self-
11 service options on the Website”. The results showed that 70% of customers surveyed are not willing
12 to pay for these services.

13 After reviewing customer feedback, WHESC decided to leave this project within the DSP and has
14 included it in the 2017 Test Year. Upgrades to computer software systems are \$50,000 or less for
15 each year included in the DSP. Given the billing environment in which LDCs are required to meet
16 ongoing changes some flexibility is required to finance these changes. However, Welland Hydro has
17 noted its customer’s feedback and will consider its investments diligently within this area of capital
18 spending.

19 **Additional Customer Engagement Activities**

20 **Customer Engagement Session – Town Hall Meeting August 25, 2015**

21 In August, 2015 WHESC held a customer engagement session with residential customers. One
22 hundred and fifty customers were contacted to attend the session with twenty three (23) confirming
23 their attendance and thirteen (13) customers actually attending. The purpose of the residential
24 engagement session was to generate feedback from residential customers and learn what Welland
25 Hydro can do to improve its services, products and communications in preparation for the 2017 Cost
26 of Service Rate Application. Customers were given a short presentation on customer service, e-billing,
27 bill presentment, billing, outage management and prioritizing capital investments and electrical safety.
28 A question and answer session followed and customers were asked to complete a short questionnaire.
29 The following items were brought forward by our customers during the meeting:

- 30 - Payment preferences are PAP, financial institutions, and online payments, but customers still
31 want to maintain the option to make payments in person at Welland Hydro’s service center.

- 1 - Customers prefer communicating with Welland Hydro in person or by telephone as opposed
- 2 to emails or social media.
- 3 - Customers would like an online portal to sign contracts, provide identification and set up
- 4 services, but are not willing to pay for this service.
- 5 - Customers felt it is important to continue to upgrade infrastructure but less willing to have
- 6 these improvements increase their monthly bills.
- 7 - Bill presentment (Customer Connect) is a tool customers were not overly familiar with but may
- 8 now want to have access to online.

9 **Customer Surveys by Simul Corporation 2014, 2015, 2016**

10 Welland Hydro works hard every day to provide high quality services that ensure the safe, reliable and
 11 affordable provision of electricity distribution services. Welland Hydro benchmarks very well against
 12 the Ontario key customer service quality metrics. Welland Hydro will continue Customer Service
 13 Surveys every two years. Below are some key results from the April, 2016 survey. In completing the
 14 2017 COS Rate Application Welland Hydro has included operating and capital expenditures it believes
 15 are necessary to continue delivering the type of service customers in Welland value and expect.

16 <u>Issue</u>	<u>Welland Hydro</u>	<u>Ontario</u>
17 Customer Focused and values customers	83%	76%
18 Deals professionally with customer problems	87%	82%
19 Is a company that is easy to do business with	87%	81%
20 Keeps its promise to customers & community	89%	80%
21 Is a trusted and trustworthy Company	89%	81%

22 A copy of Chapter 2 Appendices 2-AC Customer Engagement Activities Summary is provided below
 23 in Figure 1-2 below.

1

Figure 1-2

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.
Meetings with City of Welland and Region of Niagara Scattered Load rates in 2017 Rate Application and bill impacts.	Region of Niagara advised that scattered load has very little impact on their costs. City of Welland were also advised of scattered load bill impacts.	WHESC explained impact of scattered load rates in rate application and impact on future bills for the City of Welland and the Region of Niagara as they represent the majority of the scattered load customers.
City of Welland Corporate Calls for Commercial Customers Welland Hydro is part of the City of Welland team which meets with individual commercial customers (13-15 customers) annually in 2014, 2015 and 2016.	Customer needs identified were issues with momentary outages, power quality, e-billing, Class A vs Class B in regard to Global adjustment, electricity usage and CDM questions.	Customer follow up meetings were held to discuss and resolve issues in regard to outages and power quality, assist with registration for e-billing, review Class A and Class B, electricity usage and CDM.
Meetings with two large industrial customers (GS>50kW) Welland Forge and Welded Tube.	Meetings were held with Welded Tube to assist with power quality issues. Meetings were held with Welland Forge to review Class A and B status and options.	Power quality meetings were held with Welded Tube as well as contact information to dedicated staff for any future issues. Welland Forge has become a Class A customer after reviewing all variables and options through meetings with WHESC and the IESO.
IESO and WHESC Focus Group Meetings July 27/28, 2015 IESO organized Focus Group meetings for Residential, Commercial, and Contractors from WHESC regarding CDM SaveONenergy Programs.	Residential customers and commercial customers advised that they complete CDM projects as a concern for the environment. Customers are aware of CDM Programs, believe they will reduce consumption, but probably only maintain cost as rates are increasing. Customers believe electricity cost is expensive and cannot afford a lot of increases in their electricity bills. Customers would like to see higher incentives for they CDM Programs. For the most part they mistrust of the Ontario government in regards to the electricity market.	WHESC markets programs through newspaper and social media to assist customers with program information, WHESC completes applications to make the process easier for customers when required. Customer Connect is used to assist customers with understanding usage and costs and TOU rate impacts. WHESC is a member of the Welland Pelham Chamber of Commerce, Niagara Industrial Association (NIA), and SEART (Special Events Application Review Team) to understand potential growth, address customer questions, and understand the needs of customers.
Meeting with Region of Niagara - August 2015	Review the Region of Niagara projects over the next 5 years and any concerns in regards to service issues. Projects discussed included lighting projects at water pump sights and a retrofit project at the Water Treatment Plant.	WHESC assisted with applications for Water Treatment Plant retrofit that is currently taking place and provided information for the lighting retrofit projects.
Customer Engagement Focus Group Residential Customers August 25, 2015 - 13 customers attended	Customers want accurate bills, Pre-Authorized Payment options, communication by telephone, and reliable power. However, they do not want to pay higher electricity rates. They like the online Customer Connect tool and overall are happy with WHESC Customer Service. Customers were made aware of what to do around downed wires and to call before digging. One customer requested a visit from Welland Hydro staff in regards to an old service at their site.	WHESC maintains +99% accuracy for billing. WHESC developed an online PAP portal now used by customers. Automated calls are sent for any planned or emergency outages and 48 hour calls for non payment issues. WHESC is currently updating its Customer Connect to enhance online site (test system currently). Safety Advertising on radio is taken out twice per year along with continuing Elementary School Safety and Conservation programs. WHESC is currently developing Customer Connect and Outage Management App for mobile devices.
Hope Centre Meetings (LEAP and OESP Agency) WHESC meetings with HOPE Centre Executive Director and Hope Centre staff to review issues with LEAP, OESP, Low Income Customers and Senior Citizens	Customers are concerned with high costs and want to access information online. Customers are having some difficulty understanding OESP and seniors are sometimes too proud to come to the Hope Centre for assistance.	WHESC and the Hope Centre held two special days, one at City Hall in Welland and one at WHESC to register and explain LEAP, OESP and Customer Connect (online billing presentation information and e-billing) to customers.
Customer Engagement 2016 Rate Application WHESC worked with Marketing Innovations to create a Customer Engagement Plan to present rate changes and bill impacts to WHESC Customers via- Telephone Surveys, Two Focus Group Sessions and Individual Meetings with 5 GS> 50 kW customers. reference is Customer Consultation Report 2017 Rate Application Review	Please refer to Customer Consultation Report 2017 Rate Application Exhibit 1 for a Review for Customers needs and preferences identified.	Please refer to Customer Consultation Report 2017 Rate Application Exhibit 1 for a Review for Customers needs and preferences identified.

2

3 **2.1.7 PERFORMANCE MEASUREMENT**

4 As discussed in the Minimum Filing Requirements July 14, 2016 under the Renewed Regulatory
 5 Framework a distributor is expected to continuously improve its understanding of the needs and
 6 expectations of its customers and its delivery of services. To facilitate performance monitoring and
 7 benchmarking of distributors the OEB uses a scorecard approach.

8 The Report of the Board of Performance Measures for Electricity Distributors: A Scorecard Approach
 9 sets out the OEB's policies on the measures that will be used by the OEB to assess a distributor's
 10 effectiveness and continuous improvement in achieving the four outcomes which form the basis of the
 11 RRF Report.

12 In this section, Welland Hydro presents discussion on its performance for each of the distributor's
 13 scorecard measures over the last five years, and explains the drivers for its performance with the focus
 14 in plan(s) for continuous improvement.

1 Implicit with this discussion Welland Hydro is providing a forecast of its efficiency assessment using
 2 the PEG forecasting model for the test year for the purposes of providing the OEB with a directional
 3 indicator of efficiency. The following is Welland Hydro's submission with respect to the above noted
 4 requirements.

5 **Discussion**

6 **Customer Focus**

7 Customer focus is a performance outcome that measures the extent to which “services are provided
 8 in a manner that responds to customer preferences” and is divided into two categories: Service Quality
 9 and Customer Satisfaction.

10 **Service Quality**

11 Service Quality is evaluated based on meeting OEB specified targets for three criteria:

- 12 • New Residential/Small Business Services Connected on Time (90% of the time)
- 13 • Scheduled Appointments Met on Time (90% of the time)
- 14 • Telephone Calls Answered on time (65% of the time)

15
 16 As Table 1-19 below illustrates, WHESC has surpassed these targets for each of the last five years
 17 (2011-2015).

18
 19 **Table 1-19 Service Quality**

Service Quality Measures	OEB Target	2011	2012	2013	2014	2015	Performance Improvement Targets
New Residential/Small Business Service Connected on time	90.0%	100.0%	100.0%	100.0%	94.0%	100.0%	100.0%
Scheduled appointments met on time	90.0%	99.7%	99.7%	99.4%	99.7%	98.5%	99.5%
Telephone Calls answered on tme	65.0%	99.9%	98.4%	99.0%	96.9%	98.5%	98.5%

20 **New Residential/Small Business Service Connected on Time**

21 In 2015, WHESC connected 100% of its 237 eligible low-voltage residential and small business
 22 customers (those utilizing connections under 750 volts) to its system within the five-day timeline
 23 prescribed by the OEB. This score exceeds the OEB-mandated threshold of 90%. Welland Hydro is
 24 consistently able to achieve high levels of compliance in this area due to the existing workflow
 25 processes and computer systems that are used to monitor the status of each job.

1 **Scheduled Appointments Met on Time**

2 WHESC scheduled 1,347 appointments with its customers in 2015 to complete work requests by the
3 customer or the customers' representative. The utility met 98.5% of these appointments on time,
4 which significantly exceeds the industry target of 90%. The duties and obligations of this requirement
5 are well communicated to and known by WHESC' staff, which has contributed to Welland Hydro's
6 success in this area.

7 **Telephone Calls Answered on Time**

8 In 2015, 31,980 calls were made to Welland Hydro which represents on average 134 calls per day.
9 The percentage of calls answered in 30 seconds or less was 98.5% which exceeds the OEB-mandated
10 target of 65%. WHESC updated its phone hardware and software systems in 2013/14. The new
11 phone system included automated solutions creating efficiencies where Customer Contact
12 Representatives have additional time in order to maintain exceptional customer care and find ways to
13 improve the customer experience.

14 **Service Quality Plan(s) for Continuous Improvement**

15 WHESC's current performance for Service Quality metrics far exceed the current OEB targets and are
16 in line with WHESC's Corporate objectives. As a result of WHESC's current performance
17 measurements any performance improvement targets set must be evaluated against increased costs.
18 Marginal increases to the current service quality indicators would require additional manpower which
19 WHESC believes would not add sufficient customer value. As a result, WHESC has not included any
20 new OM&A in this rate application to address improvements to Service Quality metrics. However,
21 Scheduled Appointments Met On Time performance decreased slightly in 2015 from previous years.
22 A performance improvement target for Scheduled Appointments has been set at 99.5%. WHESC
23 believes it can use the meter department technicians to supplement the serviceman during peak
24 periods to improve 2015's performance without additional OM&A costs. Performance improvement
25 targets for these indices can be summarized as follows:

- 26 ✓ New Residential/Small Business Service Connected on Time – No change currently at 100%
- 27 ➤ Scheduled Appointments Met on Time – Increase target to 99.5% in live with previous years
- 28 ✓ Telephone Calls Answered on Time – No change currently at 98.5%

29 **Customer Satisfaction**

30 Customer satisfaction is evaluated based on three performance measures:

- 1 • First Contact Resolution
- 2 • Billing Accuracy (98%)
- 3 • Customer Satisfaction Survey Results

4 These measures have only been in place for the last two years; Welland Hydro's performance for
 5 those years is found in Table 1-20 below.

6 **Table 1-20 Customer Satisfaction**

Customer Satisfaction Measures	OEB Target	2014	2015	Performance Improvement Targets
First Contact Resolution	n/a	78.0%	84.0%	85.0%
Billing Accuracy	98.0%	99.99%	99.99%	99.99%
Customer Satisfaction Survey Results	n/a	88.0%	90.0%	90.0%

8

9 **First Contact Resolution**

10 Welland Hydro strives to serve customers in a friendly and professional manner and to answer their
 11 questions and resolve their issues within the first call. In 2015, Welland Hydro had great success on
 12 the First Contact Resolution measure, increasing performance from 78% in 2014 to 84% in 2015. The
 13 performance indicator is gathered from information provided in a telephone survey of customers who
 14 have contacted Welland Hydro in the previous year. WHESC also uses the results of the annual
 15 Customer Satisfaction Survey to learn what is working and what areas require improvement.

16 **Billing Accuracy**

17 In 2015, WHESC issued 275,968 invoices and achieved an overall billing accuracy rate of 99.99%.
 18 To supplement validation and editing processes, the CIS system uses audits and controls to ensure
 19 the accuracy of bill calculations. Any billing irregularities are investigated, analyzed and evaluated for
 20 impacts and if additional control processes are required. To assist efficiencies in billing analysis,
 21 WHESC introduced Automation Platform Software into the CIS in 2015. This software automates time
 22 consuming, repetitive running of certain job functions freeing up billing staff to focus on analyzing bill
 23 verification journals. WHESC viewed this option as less costly and more efficient than increasing
 24 billing staff. Welland Hydro considers this measurement to be of high importance to its customers and
 25 makes every effort to ensure that bills are sent out in a complete and accurate manner.

1 **Customer Satisfaction Survey Results**

2 For the past few years, Welland Hydro has engaged a third party service provider to conduct a
3 Customer Satisfaction Survey. The purpose of WHESC's involvement in these surveys is to determine
4 a benchmark for measuring the level of satisfaction customers experience with all areas of service
5 and, equally important, to identify any areas for improvement. The survey asks a core set of questions
6 that provide benchmarks year-to-year, such as overall satisfaction, reliability, outages, customer
7 contact representatives, billing accuracy, social media, and customer expectations and customer
8 needs.

9 In 2015, the percentage of customers that were Very Satisfied or Fairly Satisfied with Welland Hydro
10 was 90% which represents an increase of 2% over 2014 results. Another measure developed by the
11 survey provider, is a "Customer Satisfaction Survey Report Card" that measures utilities against their
12 peers across Ontario on Customer Care, Company Image, and Management Operations. Although
13 not reported on the OEB Scorecard, Welland Hydro received an "A" rating, which exceeded the
14 Ontario LDC Average Score of "B+".

15 In 2015, questions regarding Operating and Capital Expenses were included to determine the
16 customer's perspective on capital expenditures. Capital expenditures questions surveyed customers
17 on "run to failure" versus "proactively replacing equipment" and their level of confidence in WHESC's
18 judgement on prioritizing and making decisions on these investments. Additional questions relating to
19 customers' willingness to pay more for items such as increased tree trimming (reliability), extended
20 office hours, education on conservation and public safety, and outage management systems.
21 Customers were surveyed on how much more per month they would be willing to pay for items that
22 they considered to be a direct benefit to themselves.

23 WHESC believes the survey is a valuable tool for gauging customers' awareness of changes in the
24 industry, their level of satisfaction with the services Welland Hydro provides, and identifying any areas
25 of improvement to services. Welland Hydro's goal is to provide service excellence in all we do, and
26 plans to continue surveying customers to benchmark service levels and develop service
27 enhancements.

28 **Customer Satisfaction Plan(s) for Continuous Improvement**

29 WHESC continues to excel in its Customer Satisfaction metrics which are in line with WHESC's
30 Corporate Objectives. As previously mentioned, an automated billing platform was introduced which
31 has allowed billing personnel more time to review bills before they are issued which has resulted in
32 Billing Accuracy far exceeding OEB targets. WHESC plans to continue its current performance on

1 **Level of Public Awareness of Electrical Safety**

2 In 2015, WHESC conducted a new public awareness survey (developed by the ESA) among a
3 representative sample of its customers. The survey helped to gauge the public's awareness of
4 fundamental safety precautions related to electricity. Welland Hydro achieved a score of 84% in the
5 survey.

6 **Compliance with Ontario Regulation 22/04**

7 Over the past five years, Welland Hydro has been found to be compliant with Ontario Regulation 22/04
8 (Electrical Distribution Safety). This success was achieved by Welland Hydro's strong commitment to
9 safety and adherence to company policies, procedures and Safe Work Practices. The Electrical
10 Distribution Safety Regulation (Ontario Regulation 22/04) establishes objectives based electrical
11 safety requirements for the design, construction, and maintenance of electrical distribution systems
12 owned by licensed distributors. Specifically, the regulation requires the approval of equipment, plans,
13 specifications and inspection of construction before they are put into service.

14 The Electrical Safety Authority (ESA) performs Due Diligence Inspections (DDI) throughout the year
15 to ensure utilities remain compliant with the objectives set out in Ontario Regulation 22/04. Welland
16 Hydro has a process in place for responding to DDI's and for reporting back to the ESA on the action
17 plans taken within the specified time period.

18 **Serious Electrical Incident Indices**

19 Welland Hydro experienced no reportable incidents over the last five years.

20 **Safety Plan(s) for Continuous Improvement**

21 WHESC has met all of the OEB metrics relating to safety which are in line with WHESC's Corporate
22 Objectives. WHESC is committed to the safety of its employees, contractors and the general public.
23 The Level of Public Awareness is a new safety metric for which there is no OEB metric. As a result,
24 WHESC has not set a performance improvement target for this metric and believes that the next survey
25 will provide better information as to whether additional efforts and costs are required. WHESC will
26 continue its current spending on elementary school safety training programs and the electrical safety
27 messages broadcast on local radio. Performance improvement targets for these indices can be
28 summarized as follows:

- 29 ✓ Level of Public Awareness of Electrical Safety – To be reviewed based upon additional survey
- 30 ✓ Compliance with Ontario Regulation 22/04 – Currently compliant

1 Welland Hydro's reliability performance is a clear indicator of its commitment to deliver electricity on a
2 reliable basis to customers within the City of Welland. WHESC's engineering staff analyze the utility's
3 reliability data and performance and initiate actions or direct projects in areas that need improvement.
4 WHESC will continue to invest in assets and infrastructure to ensure the system's continued reliability.

5 **System Reliability Plan(s) for Continuous Improvement**

6 WHESC met its OEB targets for system reliability metrics in 2015 with a slightly higher SAIDI metrics
7 compared to 2014. WHESC's 2015 performance indicators are in line with WHESC's Corporate
8 Objectives. WHESC's customer engagement activities shows that its customers are satisfied with the
9 current system reliability performance. However, they have indicated their desire for WHESC to
10 continue to make prudent capital expenditures to at a minimum maintain current performance but being
11 mindful of rate impacts. As part of this application WHESC submitted its first Distribution System Plan
12 which introduces more formal asset management processes and procedures. These processes
13 include commitments to managing project costs and timing of projects versus budget over the five year
14 period which will allow WHESC to make more informed decisions and prioritization of capital
15 expenditures to improve reliability metrics.

16 WHESC believes that past and proposed capital expenditures on the distribution system will result in
17 improved metrics compared to 2015 and has set a performance improvement target for SAIDI of 1.53
18 in line with 2014 performance. Performance improvement targets for these indices can be
19 summarized as follows:

- 20 ➤ Average Number of Hours that Power to a Customer is interrupted (SAIDI)
21 Improve performance to 1.53
- 22 ✓ Average Number of Times that Power to a Customer is interrupted (SAIFI)
23 Maintain current performance at 1.39

24 **Asset Management**

25 The Asset Management category measures the progress of the Distribution System Plan (DSP)
26 implementation.

27 **Distribution System Plan Implementation Progress**

28 Welland Hydro's DSP implementation is "on track" in the 2015 Scorecard Results.

29 As part of this rate application, WHESC has filed its first Distribution System Plan in Exhibit 2 Appendix
30 2-A.

1 **Cost Control**

2 Cost control is measured in three ways:

- 3 • Efficiency Assessment
- 4 • Total Cost per Customer
- 5 • Total Cost per Km of Line

6 Over the last five years, Welland Hydro has achieved the following results on these measures as
 7 shown in Table 1-23 below.

8 **Table 1-23 Cost Control Measures**

Cost Control Measures	2011	2012	2013	2014	2015	Performance Improvement Targets
Efficiency Assessment	n/a	2	2	2	2	2
Efficiency Performance Current Year	-16.2%	-10.4%	-15.2%	-17.3%	-18.7%	-19.9%
Efficiency Performance 3 Year Avg.	n/a	n/a	-13.9%	-14.3%	-17.0%	-19.1%
Total Cost per Customer	\$463	\$482	\$472	\$483	\$493	\$518
Total Cost per km of line	\$33,562	\$23,071	\$23,533	\$23,278	\$23,293	\$24,917

9 **Efficiency Assessment**

10 The total costs for Ontario local electricity distribution companies are evaluated by the Pacific
 11 Economics Group LLC (“PEG”) on behalf of the OEB to produce a single efficiency ranking. The
 12 electricity distributors are divided into five groups based on the magnitude of the difference between
 13 their respective individual actual and predicted costs. In 2015, Welland Hydro achieved a Group 2
 14 ranking for the fourth consecutive year. Group 2 distributors are defined as having actual costs that
 15 are 10% to 25% below predicted costs. Group 2 is considered “better than average efficiency” – in
 16 other words. Welland Hydro’s costs are better than the average cost range for distributors in the
 17 Province of Ontario.

18 Welland Hydro’s actual performance in 2015 was 18.7% below predicted. This was an improvement
 19 over 2014 results which were 17.3% below predicted. The current three year average results (2013-
 20 2015) of 17.0% below predicted was also an improvement from the last three year average results
 21 (2012-2014) which were 14.3% below predicted. While it may be reasonable to assume that the next
 22 step would be to reach Group 1 efficiency, consideration must be given to possible impacts to the
 23 distribution system and maintaining all other reporting and scorecard measurements. As a result,

1 WHESC has established a goal of remaining in Group 2 at 15% +/- 2% and will continue to monitor
 2 both capital and OM&A spending and its impacts on Efficiency Assessment.

3 The updated Filing Requirements require distributors to complete and file forecasts of Welland Hydro's
 4 efficiency assessment using the PEG forecasting model for the 2017 Test Year. The purpose of the
 5 model is to provide the OEB with a directional indicator of efficiency. Table 1-24 below reflects the
 6 Summary of Results of the completed PEG model which has been filed with this application.

Table 1-24 Forecasted Benchmarking Results

Summary of Cost Benchmarking Results			
Welland Hydro-Electric System Corp.			
	2015 (History)	2016 (Bridge)	2017 (Test Year)
Cost Benchmarking Summary			
Actual Total Cost	11,180,484	11,364,629	11,960,287
Predicted Total Cost	13,473,782	13,705,631	14,591,724
Difference	(2,293,297)	(2,341,002)	(2,631,438)
Percentage Difference (Cost Performance)	-18.7%	-18.7%	-19.9%
Three-Year Average Performance			-19.1%
Stretch Factor Cohort			
Annual Result	2	2	2
Three Year Average			2

7 As can be seen in Table 1-24 forecasts for the 2016 Bridge Year and 2017 Test Year have not been
 8 adversely impacted by expenditures in this rate application. In fact, the forecasted three-year average
 9 performance of (19.1% 2015 – 2017) is favorable when compared to current three-year average
 10 efficiency of (17.0%). This positions Welland Hydro well within its targeted efficiency performance and
 11 provides the needed flexibility to adapt and respond to unforeseen events and increasing regulatory
 12 requirements of the Board and the Provincial Legislature.

1 **Total Cost per Customer**

2 Total cost per customer is calculated as the sum of Welland Hydro's capital and operating costs divided
3 by the total number of customers that Welland Hydro serves. The cost performance result for 2015 is
4 \$493/customer which is an increase of \$10/customer (2.1%) over 2014. Since 2011, total cost per
5 customer has increased by only 6.5%. Welland Hydro has consistently ranked in the lowest cost per
6 customer among LDCs in Ontario.

7 Welland Hydro will continue to replace distribution assets proactively along a carefully managed
8 timeframe in a manner that balances system risk and customer rate impacts. Welland Hydro will also
9 continue to implement productivity and improvement initiatives to help offset some of the costs
10 associated with future system improvement and enhancements. Customer engagement initiatives will
11 also continue in order to ensure customers have an opportunity to share their viewpoint on Welland
12 Hydro's capital spending.

13 **Total Cost per Km of Line**

14 This measure used the same total cost that is used in the Cost per Customer calculation above. The
15 total cost is divided by the kilometers of line that Welland Hydro operates to serve its customers.
16 Welland Hydro's 2015 rate is \$23,293 per km of line which is almost identical to 2014 costs. These
17 costs have remained fairly stable since 2012. Welland Hydro points out that the 2011 cost per km of
18 line is not correct as a result of WHESC reporting an incorrect km of line in RRR reporting during that
19 period.

20 **Cost Control Plan(s) for Continuous Improvement**

21 WHESC has consistently showed year over year improvements in its three year efficiency performance
22 metric since 2013. Current metrics are in line with WHESC's Corporate Objectives. Performance
23 improvement targets for all cost control metrics are based on the completion of the PEG model
24 provided by the OEB using information from the 2017 Cost of Service Rate Application. The current
25 year and three year average for the 2017 Test Year shows that WHESC has submitted a cost of
26 service rate application which delivers improvements to the current and three year efficiency metrics
27 and provides customers with excellent value for the rates they are charged. The 2017 Test Year
28 metrics are a result of WHESC's commitment to continuous improvement since the 2013 COS
29 Application. They include a reduction of two FTEs since 2013, upgrades to staffing skill levels with the
30 addition of an engineer and chartered accountant without additional FTEs, improvements to existing
31 reporting systems including new document management software and automated billing platform
32 software to provide better customer service while maintaining outstanding billing accuracy, and

1 negotiated changes in the current collective agreement to control current and future early and post-
2 retirement benefit costs while controlling wage increases to current inflation levels.

3 Performance improvement targets for these indices can be summarized as follows:

- 4 ➤ Efficiency Assessment 2017 Test Year – Increase performance target to (19.9%)
- 5 ➤ Efficiency Assessment 2017 Test Year Three Year Average – Increase performance target to
6 (19.1%)

7 **Public Policy Responsiveness**

8 Public Policy Responsiveness measures the extent to which “utilities deliver on obligations mandate
9 by government” and is divided into two categories: Conservation and Demand Management and
10 Connection of Renewable Energy.

11 **Conservation & Demand Management**

12 Conservation and Demand Management is measured by the Net cumulative Energy Savings achieved
13 by the utility.

14 **Net Cumulated Energy Savings**

15 The 2015 measurement for Conservation & Demand Management marks the first assessment under
16 the current 2015-2020 framework. Welland Hydro successfully exceeded its targeted GWh reduction
17 target for the 2011-2014 framework by 15.9%. According to the IESO’s 2015 CDM results, WHESC
18 has achieved 6.78% of its current 2015-2020 Net Energy Savings target of 25.5 GWh. WHESC began
19 the Conservation First Framework in October, 2015 and continues to build momentum in the
20 Commercial Sector. Whole Home Residential and Small Business Lighting Programs are being
21 launched and will enhance conservation results in 2016 and 2017. The City of Welland will also
22 complete conversion of post top streetlights to LED in 2016. Completion of this project will have a
23 significant impact on savings percentages reported in the next OEB Scorecard.

24 The IESO recently completed an Achievable Potential Study which indicates that the target for WHESC
25 should be lowered from the current target of 25.5 GWh to 20.425 GWh. Should the reduction be
26 approved at the mid-term review, Net Energy Savings for 2015 would be revised to 8.48%.

27 **Connection of Renewable Generation**

28 This performance category is measured based on two criteria:

- 1 • Renewable Generation Impact Assessments Completed on Time
- 2 • New Micro-embedded Generation Facilities Connect on Time

3

4 Over the last five years, Welland Hydro's results on these two measures are presented in Table 1-25
 5 below.

6 **Table 1-25 Connection of Renewable Generation**

Connection of Renewable Generation Measures	OEB Target	2011	2012	2013	2014	2015	Performance Improvement Targets
Renewable Generation Impact Assessments Completed on Time		50.0%	n/a	n/a	n/a	n/a	100.0%
New Micor-embedded Generation Facilities Connected on Time	90.0%	n/a	n/a	100.0%	100.0%	100.0%	100.0%

7 There have been no Renewable Generation Impact Assessments required since 2011.

8 In 2015, new Micro-embedded Generation Facilities (17) were all connected on time 100% of the time.

9 **Connection of Renewable Generations Plan(s) for Continuous Improvement**

10 WHESC has connected renewable generation projects 100% on time since 2013. As a result, there
 11 are no performance improvement targets have been set.

12 **Financial Performance**

13 Financial Performance measures the extent to which "financial viability is maintained and savings from
 14 operational effectiveness are sustainable" and is evaluated by financial ratios in four areas:

- 15 • Liquidity: Current Ratio (current assets/current liabilities)
- 16 • Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio
- 17 • Profitability : Regulatory – Deemed (included in rates)
- 18 • Return on Equity – Achieved

19 Welland Hydro's achievement on these measures over the past five years are presented in Table 1-
 20 26 below.

1

Table 1-26 Financial Performance

Financial Ratio Measures	2011	2012	2013	2014	2015	Performance Improvement Targets
Liquidity: Current Ratio (current assets/current liabilities)	2.87	2.84	1.42	1.61	1.50	>1.0
Leverage: Total Debt to Equity Ratio	1.23	1.16	1.15	0.87	0.84	<1.5
Profitability: Regulatory Deemed	8.01%	8.01%	8.93%	8.93%	8.93%	9.14%
Profitability: Achieved	5.74%	6.73%	10.50%	9.98%	8.72%	9.14%

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

3 Current assets represent cash and other assets that are expected to become cash within the next
 4 year. Conversely, current liabilities are financial obligations that are anticipated to be paid within a
 5 year. A ratio that is greater than 1 may be an indicator that a company is able to meet its financial
 6 obligations coming due within the next year. A higher ratio of current assets to current liabilities
 7 provides a greater comfort zone since it indicates that current liabilities can be paid, while leaving
 8 excess funds for ongoing operations. A ratio of less than 1 could be a signal that a company may not
 9 be able to keep up with its upcoming payments, indicating insufficient cash flows from profits or the
 10 need for financing.

11 Welland Hydro's 2015 current ratio of 1.5 is in line with the past three years. The ratio is impacted by
 12 items such as accounts receivable and liabilities for electricity which can fluctuate significantly. The
 13 level of capital investments versus depreciation can also impact the current ratio.

14 **Leverage: Total Debt to Equity Ratio**

15 The OEB has set a deemed capital structure of 60% debt and 40% equity for LDCs in Ontario. This
 16 deemed structure assumes a debt to equity ratio of 1.5 (60/40). A debt to equity ratio of more than 1.5
 17 indicates that a distributor is more highly leveraged than the deemed structure and may have difficulty
 18 obtaining any required debt to finance capital investments and meet working capital requirements.
 19 WHESC's 2015 leverage ratio of 0.84 indicates that it is currently operating with less actual debt than
 20 deemed debt. WHESC believes that it is imperative to be able to fund capital expenditures to maintain
 21 the reliability of the distribution system. WHESC's current and forecasted capital expenditures
 22 exceeds depreciation amounts. The excess in capital spending over depreciation is currently being
 23 funded thru cash reserves. Maintaining WHESC's current profitability levels and current dividend

1 policy are necessary to ensure that sufficient profits are generated and retained so that debt/equity
2 ratios are not negatively impacted.

3 **Profitability: Regulatory Return on Equity – Deemed (included in rates)**

4 Welland Hydro's current distribution rates were approved by the OEB and included an expected
5 (deemed) regulatory return on equity of 8.93%. The OEB allows a distributor to earn within +/- 3% of
6 the expected return on equity. When a distributor performs outside of this range, the actual
7 performance may trigger a regulatory review of the distributor's revenues and costs structure by the
8 OEB.

9 **Profitability: Regulatory Return on Equity - Achieved**

10 Welland Hydro's regulatory return on equity ("ROE") achieved in 2015 was 8.72% which is well within
11 the +/- range allowed by the OEB and in line with the 8.93% deemed in rates. Welland Hydro has
12 generated sustainable efficiencies in OM&A since the 2013 COS. These were required to offset the
13 loss of revenue from the Large Use customer class in 2014. However, with Average Net Fixed Assets
14 forecast to continue to grow in the 2016 Bridge Year and 2017 Test Year, WHESC projects that future
15 reported ROE percentages will decrease.

16 **Financial Performance Plan(s) for Continuous Improvement**

17 WHESC's liquidity and leverage ratios continue to be in a strong position to meet its future obligations
18 and are in line with current Corporate Objectives. With capital expenditures forecast to exceed
19 depreciation in the 2017 COS Rate Application the liquidity ratio will decrease compared to 2015 actual.
20 WHESC has sufficient cash reserves and existing lines of credit in place to meet its short term capital
21 spending and working capital requirements thru the 2017 Test Year. The performance improvement
22 target for ROE reflects the rate of returns for Cost of Capital when the application was originally
23 submitted and will be revised to reflect the recently announced returns for 2017 COS Rate
24 Applications. Performance improvement targets for these indices can be summarized as follows:

- 25 ✓ Liquidity: Current Ratio (Current Assets/Current Liabilities)
- 26 – Maintain a ratio above 1
- 27 ✓ Leverage: Total Debt to Equity Ratio
- 28 – Maintain a ratio below 1.5
- 29 ➤ Profitability: Regulatory Return on Equity – Achieved
- 30 – Achieve ROE as per 2017 Cost of Capital Parameters

1 **Performance Measurement Impacts on Business Plan & 2017 COS Rate Application**

2 WHESC performs a self-assessment of its scorecard metrics performance on an annual basis. This
3 has driven WHESC commitment to continuous improvement which is reflected in its 2017 Business
4 Plan and 2017 COS Rate Application. The following highlights scorecard measurement self-
5 assessments and the corresponding impacts on the business plan;

6 Customer Focus

7 Customer Satisfaction – WHESC initiated information sessions with customers to obtain feedback on
8 its 2017 COS Rate Application. Customers want to have the opportunity meet with WHESC staff face
9 to face should they like to pay their bill in person or discuss concerns they may have. As a result, this
10 plan maintains current expenditures related to customer service and access to WHESC's employees
11 for its customers.

12 Operational Effectiveness

13 System Reliability (SAIDI/SAIFI) - WHESC's 2017 Rate Application's capital expenditure plan places
14 an emphasis System Renewal Projects to maintain/improve WHESC's reliability of service. These
15 expenditures include the continuation of the program to replace and standardize WHESC's
16 substations. In addition, end of life capital asset replacements are evaluated for voltage upgrades
17 which have contributed to the reduction in the line loss factor included in this rate application.

18 Cost Control Efficiency Assessment/Cost Per Customer – WHESC 2017 Rate Application includes a
19 balance in capital spending and OM&A expenditures which increases its current cost efficiency
20 assessment year over year since 2013. The commitment to continuous improvement in the 2017 Test
21 Year is reinforced with the strategic replacement of a vehicle maintenance mechanic with an engineer.
22 WHESC believes this not only controls costs but strengthens its workforce going forward and its ability
23 to improve its assessment management process going forward.

24 Financial Performance

25 Liquidity/Leverage/Profitability – The 2017 Rate Application presents a plan which will maintain
26 WHESC's strong financial performance metrics. This plan provides for profitability levels required to
27 fund capital expenditure requirement to maintain a safe and reliable grid and sufficient profits are
28 reinvested into the system ensuring minimal impact on financial performance indicators.

1 **2.1.8 FINANCIAL INFORMATION**

2 **Audited Financial Statements:**

3 Copies of WHESC's 2014 (2013/2014) and 2015 (2014/2015) Audited Financial Statements are
4 provided in Appendix 1-H and Appendix 1-I.

5 **Reconciliation between Audited Financial Statements and Regulatory Accounting:**

6 Reconciliations of WHESC's Audited Financial Statements to the annual RRR Trial Balance for 2014
7 and 2015 are provided as Appendix 1-J 2014 - OEB versus CGAAP, Appendix 1-K 2014 - CGAAP
8 versus IFRS, and Appendix 1-L 2015 – OEB versus IFRS. Appendix 1-J balances OEB reporting to
9 the CGAAP statements for 2014. The 2014 differences between OEB and CGAAP are presentation
10 adjustments only. In 2015, WHESC adopted IFRS reporting standards effective January 1, 2015
11 retroactive to January 1, 2014. Appendix 1-K details the reconciliation between 2014 CGAAP
12 statements and 2014 IFRS statements under IFRS included in the 2015 Audited Financial Statements.
13 The reconciliation has been separated into three classifications; Post-Employment Benefits, Pole Line
14 Generation, and other IFRS Adjustments. The Post-Employment Benefits adjustments impact balance
15 sheet and income statements on a retroactive basis. The Pole Line Generation expansion in 2014
16 was incorrectly recorded by WHESC in 2014. This entry corrects the IFRS reporting to remove the
17 expansion from accounts 1531 and 1995. As a result, the expansion is included in account 1531/1532
18 for OEB purposes and 1830 Fixed Assets for IFRS purposes. For IFRS purposes, one half year
19 depreciation has been recognized in 2014. The other IFRS adjustments in 2014 are for presentation
20 only purposes. Appendix 1-L details 2015 OEB versus 2015 IFRS statements. This reconciliation has
21 three adjusting entries. The first is the continuation in differences due to the accounting for the Pole
22 Line Generation including an additional full year of depreciation in 2015. The second column includes
23 two entries which were included for 2015 OEB reporting and excluded from 2015 financial statements.
24 They include the LRAM amounts in account 1568 and Settlement Services (Account 5315) expenses
25 related to green energy generation included in account 1532. These entries will be made for financial
26 statement reporting in 2016. The IFRS Adjustment column are items related to financial presentation
27 only which are numerous but offsetting.

28 WHESC has a limited amount of non-utility assets related to four Renewable Generation installations
29 (10 kW solar array). These assets are excluded from Rate Base in this application. Revenues and
30 expenses related to Renewable Generation are included in financial statements for 2014 and 2015.
31 The revenues and expenses associated with Renewable Generation and CDM are detailed in Exhibit
32 3. For the purposes of the 2016 Bridge Year and 2017 Test Year these revenues and expenses are
33 assumed to be NIL.

1 **Annual Report**

2 An Audit and Finance Committee Meeting was held on April 13, 2016 to review WHESC's 2015
3 Financial Statements, Deloitte's Report to the Audit Committee on the 2015 Audit, and Quotations for
4 Audit & Tax Services from 2016-2018. There was no Management's Discussion and Analysis included
5 in the package provided to Audit Committee members for the meeting.

6 Welland Hydro-Electric Holding Corp. does not publish an annual report or an MD&A. As a result, this
7 requirement is not applicable.

8 **Rating Agency Report**

9 Not available

10 **Prospectuses or Information Circulars**

11 WHESC has no past or planned prospectuses, information circulars, or other similar documents.

12 **Changes in Tax Status**

13 Welland Hydro-Electric System Corp. is a corporation incorporated pursuant to the Ontario Business
14 Corporations Act and has not had a change in tax status since its last Cost of Service Application. In
15 2014, WHESC was no longer entitled to the Ontario Small Business Tax Deductions. These
16 deductions are now interpreted in the same manner as the Federal Small Business Tax Deduction for
17 which WHESC is not entitled to.

18 **Statement of Accounting Standard Used:**

19 ***Existing/Proposed Accounting Orders***

20 The Accounting Standard Board ("AcSB") deferred mandatory adoption of IFRS for qualifying rate-
21 regulated entities to January 1 2015. However, per the Board's letter of July 17, 2012, electricity
22 distributors electing to remain on CGAAP were required to implement regulatory accounting changes
23 for depreciation expenses and capitalization policies by January 1, 2013. WHESC confirms it
24 implemented the regulatory accounting changes for depreciation in 2012 and overhead capitalization
25 during its 2012 fiscal year end. No changes have been made to these policies since the 2013 COS.

1 ***Accounting Standard used in application***

2 Welland Hydro's 2017 Cost of Service Rate Application has been filed in accordance with Modified
3 International Reporting Standards ("MIFRS"). The two changes upon adoption of IFRS are related to
4 early retirement of assets previously pooled and Employee Future Benefits (IAS 19). WHESC had no
5 early retirement of assets previously pooled in 2014, therefore no adjusting entries were required for
6 this item. Changes made to Employee Future Benefits are detailed in Appendix 1-K and resulted in a
7 very small adjustment to Employee Future Benefits expense and Employee Future Benefits Liability
8 in 2014 which has been adjusted to Retained Earnings. The deferral and amortization of actuarial
9 gains/losses related to Employee Future Benefits has been eliminated under MIFRS. As the adjusting
10 entries made to 2014 were immaterial all schedules for 2014 Actual, 2015 Actual, 2016 Bridge, and
11 2017 Test years are considered to be in accordance with MIFRS.

12 For external financial statement purposes, Welland Hydro implemented International Financial
13 Reporting Standard ("IFRS") effective January 1, 2015. The Company had previously chosen to
14 accept the available deferral to IFRS due to issues surrounding rate-regulated accounting for
15 regulatory assets and liabilities, which have now been temporarily resolved.

16 For rate-making purposes, the most significant impacts to moving to MIFRS are capital asset
17 componentization, elimination of indirect capitalized burdens, and extended useful lives. As WHESC
18 implemented these changes effective January 1, 2012 the corresponding impacts are included in
19 current rates. The changes related to Early Retirement of Assets Previously Pooled and Employee
20 Future Benefits do not have a significant impact on Revenue Requirement in this application. WHESC
21 has completed OEB Chapter 2 Appendices 2-Y Summary of Impacts to Revenue Requirement and
22 included a copy in Appendix 1-F.

23 There have been many changes in the presentation of the Income Statement and Balance Sheet under
24 IFRS. An example is contributed capital amortization, which has been reclassified from depreciation
25 expense to other revenue for financial reporting purposes. However, reclassification in the Balance
26 Sheet and Income Statement have no impact on Revenue Requirement and are not listed in Chapter
27 2 Appendices 2-Y.

28 ***Compliance with the Uniform System of Accounts***

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

1 ***Accounting Treatment of Non-Utility Businesses***

2 WHESC has engaged in a limited amount of renewable generation activities since 2012. Welland
3 Hydro confirms that accounting for these activities were segregated from WHESC's rate regulated
4 activities in accordance with the Board's Guidelines: Regulation and Accounting Treatments for
5 Distributor-Owned Generation Facilities G-2009-0300 dated September 15, 2009.

6 Further, WHESC is engaged in the delivery of the Ontario Power Authority's conservation and demand
7 management programs. The accounting for these activities is segregated from WHESC's rate
8 regulated activities in accordance with the Board's Accounting Procedures Handbook for Electricity
9 Distributors.

10 **2.1.9 Distributor Consolidation**

11 WHESC has not acquired or amalgamated with another distributor(s) since its last rebasing
12 application.

Appendix 1-A

Welland Hydro-Electric System Corp.

2017 Business Plan



**Business Plan
2016-2017**

Submitted By:

**Ross Peever, B.Sc., C.E.T.
President & CEO
&
Executive Team
September 22, 2016**

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TAB – A

CORPORATE STATEMENTS & OBJECTIVES

WHESC's Vision and Mission Statements and strategic objectives are as follows:

Corporate Vision Statement

Welland Hydro will remain a community-owned asset and continue to collaborate with others, embracing best practices to implement appropriate product and service innovations in a timely manner within an ever-changing provincial policy environment.

Corporate Mission Statement

Welland Hydro is a community owned asset whose team of highly skilled professionals are committed to distributing safe, reliable power and generating renewable energy that enhance the quality of life in Welland.

Strategic Objectives

- *Deliver balanced financial and social returns by investing in quality distribution infrastructure*
- *Promote a culture of energy conservation and sustainable energy to our customers and employees that is consistent with the energy initiative of our shareholder and Province*
- *Be a leader in efficient, safe, reliable, and economic distribution of energy at competitive distribution rates while providing best value and quality for customers*
- *Provide a workplace environment which promotes communication, values and retains employees, and attracts personnel as required*
- *Enhances our position as an asset to our shareholder and the community by engaging all stakeholders in strategic objectives*

TAB – B

CORPORATE OBJECTIVES

PERFORMANCE & TARGETS

CUSTOMER FOCUS

“Services are provided in a manner that responds to identified customer preferences”

Particulars		2011	2012	2013	2014	2015	OEB Target	Objective
Customer Focus								
Service Quality								
New Residential/Small Business Services Connected On Time	Scheduled Appointments Met On Time	100.00%	100.00%	100.00%	94.00%	100.00%	90.00%	100% Success
	Telephone Calls Answered on Time	99.70%	99.70%	99.40%	99.70%	98.50%	90.00%	
		99.90%	98.40%	99.00%	96.90%	98.50%	65.00%	
Customer Satisfaction								
First Contact Resolution	Billing Accuracy				78.00%	84.00%		80.00%
	Customer Satisfaction Survey Results				99.99%	99.99%	98.00%	99.50%
	Customer Satisfaction Survey Score				88.00%	90.00%		90.00%
					A	A		A
Distribution Rates		Welland Hydro seeks to charge competitive distribution rates compared to other LDCs in Niagara and Ontario (see 2015 comparison)						

**Statistics by Customer Class
For the year ended
December 31, 2015**

Distribution Revenue per Customer

Residential Customers

1	Welland Hydro-Electric System Corp.	\$	294
2	Grimsby Power Incorporated	\$	297
3	Horizon Utilities Corporation	\$	303
4	Niagara-on-the-Lake Hydro Inc.	\$	329
5	Niagara Peninsula Energy Inc.	\$	371
6	Canadian Niagara Power Inc.	\$	391

General Service <50kW Customers

1	Welland Hydro-Electric System Corp.	\$	594
2	Grimsby Power Incorporated	\$	661
3	Niagara-on-the-Lake Hydro Inc.	\$	812
4	Horizon Utilities Corporation	\$	824
5	Niagara Peninsula Energy Inc.	\$	887
6	Canadian Niagara Power Inc.	\$	961

**General Service >50kW, Large User (>5000kW)
and Sub Transmission**

1	Grimsby Power Incorporated	\$	4,398
2	Niagara-on-the-Lake Hydro Inc.	\$	6,767
3	Welland Hydro-Electric System Corp.	\$	8,840
4	Niagara Peninsula Energy Inc.	\$	9,255
5	Horizon Utilities Corporation	\$	11,162
6	Canadian Niagara Power Inc.	\$	20,015

OPERATIONAL EFFECTIVENESS

“Continuous improvement in productivity and cost performance achieved; and distributors deliver on system reliability and quality objectives.”

Particulars	2011	2012	2013	2014	2015	OEB Target	Objective
Operational Effectiveness							
Safety							
Level of Public awareness					84.00%		80.00%
Level of Compliance with Ontario Regulation 22/04	C	C	C	C	C	C	C
Serious Electrical Incident Index - Number of General Public Incidents	0	0	0	0	0	0	0
Serious Electrical Incident Index - Rate per 10, 100, 1000 km of line	0.00	0.00	0.00	0.00	0.00	0.00	0.00
System Reliability							
Average Number of Hours that Power to a Customer is Interrupted	2.84	1.26	4.86	1.53	1.74	<2.27	<2.00
Average Number of Times that Power to a Customer is Interrupted	1.92	1.33	2.34	1.76	1.39	<1.80	<2.00
Asset Management							
Distribution System Plan Implementation Progress				On Track	On Track		Complete 2017 COS
2017-2021 Capital Spending							+/-10%
Cost Control							
Efficiency Assessment Group		2	2	2	2		2
Efficiency Performance Current Year	-16.2%	-10.4%	-15.2%	-17.3%	-18.7%		-15% +/- 2%
Efficiency Performance Three Year Average			-13.9%	-14.3%	-17.0%		-15% +/- 2%
Total Cost per Customer	\$463	\$482	\$472	\$483	\$493		
Total Cost per Km of Line	\$33,562	\$23,071	\$23,533	\$23,278	\$23,293		

Summary of Cost Benchmarking Results

Welland Hydro-Electric System Corp.

	2015 (History)	2016 (Bridge)	2017 (Test Year)	2018	2019	2020
Cost Benchmarking Summary						
Actual Total Cost	11,180,484	11,364,629	11,960,287	na	na	na
Predicted Total Cost	13,473,782	13,705,631	14,591,724	na	na	na
Difference	(2,293,297)	(2,341,002)	(2,631,438)	na	na	na
Percentage Difference (Cost Performance)	-18.7%	-18.7%	-19.9%	na	na	na
Three-Year Average Performance			-19.1%	na	na	na
Stretch Factor Cohort						
Annual Result	2	2	2	na	na	na
Three Year Average			2			

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.)

Particulars	2010	2011	2012	2013	2014	2015	OEB Target	Objective
Public Policy Responsiveness								
Conservation and Demand Management								
Net Cumulative Energy Savings (Percent of target achieved)		38.53%	58.69%	102.08%	115.93%	6.78%	25.50 GWh	100.00%
Connection of Renewable Generation								
Renewable Generation Connection Impact Assessments Completed On Time	0.00%	50.00%	N/A	N/A	N/A	N/A		100.00%
New Micro-embedded Generation Facilities Connected On Time				100.00%	100.00%	100.00%	90.00%	90.00%

FINANCIAL PERFORMANCE

“Financial viability is maintained; and savings from operational effectiveness are sustainable.”

Particulars	2011	2012	2013	2014	2015	OEB Target	Objective
Financial Performance							
Financial Ratios							
Liquidity: Current Ratio (Current Assets/Current Liabilities)	2.87	2.84	1.42	1.61	1.50		>1.00
Leverage: Total Debt (includes short-term and long-term debt to Equity Ratio	1.23	1.16	1.15	0.87	0.84		<1.50
Profitability: Regulatory Return on Equity: Deemed	8.01%	8.01%	8.93%	8.93%	8.93%		
Profitability: Regulatory Return on Equity: Achieved	5.70%	6.70%	10.50%	9.98%	8.72%		
2017 Regulatory Target Net Income							\$1.23 Million
2017 Regulatory Return on Equity: Deemed							9.19%

TAB – C1

APPLICATION OVERVIEW

2017 COST OF SERVICE RATE APPLICATION

OVERVIEW

1) Administrative

- Initial Filing of Distribution System Plan (“DSP”)
- Extensive Customer Engagement
- Possible OEB Customer Engagement Day
- Renewed Regulatory Framework for Electricity (“RRFE”)
- Consumer-Centric Needs and Preferences

2) Revenue Deficiency & Distribution Rate Increase

- Revenue Deficiency of \$1,056,407 at current rates
- 11.7% Proposed increase in current rates

3) Revenue Deficiency Drivers

- PP&E 1576 Adjustment 2.0%
- Loss of Large User 1.1%
- Depreciation 1.7%
- OMA & PILS 4.6%
- Return on Rate Base 2.3%
11.7%

4) OM&A Expense

- 2017 Proposed Budget \$6,999,907
- 9.9% over 2013 Cost of Service (2.4%/year)
- Reduction in Full Time Employees from 43 to 41
- Increased Locates & Regulatory Cost (OEB Assessment)
- 2013 COS new employees below 100% job level
- Continue focus on succession planning
- Vehicle Mechanic reduction of one replaced with Engineer
- Need to find further sustainable savings

5) Capital Expenditures

- 2017 Capital Expenditures \$2,400,000
- 2017-2021 Consistent Capital Spending Levels
- Focus on System Renewal – New Overhead & Underground
- Balanced approach to Software, Vehicles, and Buildings & Grounds

Revenue Deficiency

Line No.	Particulars	Initial Application	
		At Current Approved Rates	At Proposed Rates
1	Revenue Deficiency from Below		1,056,407
2	Distribution Revenue	9,049,877	9,049,877
3	Other Operating Revenue Offsets - net	530,050	530,050
4	Total Revenue	9,579,927	10,636,334
5	Operating Expenses	6,999,907	6,999,907
6	Depreciation Expenses	1,429,600	1,429,600
7	Deemed Interest Expense	874,137	874,137
8	Total Cost and Expenses	9,303,644	9,303,644
9	Utility Income Before Income Taxes	276,283	1,332,690
10	Tax Adjustments to Account Income per 2017 PILS model	-876,937	-876,937
11	Taxable Income	-600,654	455,753
12	Income Tax Rate	26.5%	26.5%
13	Income Tax on Taxable Income	-159,173	120,775
14	Income Tax Credits	-20,000	-20,000
15	Utility Net Income	455,456	1,231,915
16	Utility Rate Base	33,512,388	33,512,388
17	Deemed Equity Portion of Rate Base	13,404,955	13,404,955
18	Income/(Equity Portion of Rate Base)	3.40%	9.19%
19	Target Return - Equity on Rate Base	9.19%	9.19%
20	(Deficiency)/Sufficiency in Rate of Return	-5.79%	0.00%
21	Indicated Total Rate of Return	3.97%	6.28%
22	Requested Total Rate of Return on Rate Base	6.28%	6.28%
23	(Deficiency)/Sufficiency in Total Rate of Return	-2.31%	0.00%
24	Target Return on Equity	2,106,052	2,106,052
25	Revenue Deficiency Before Tax	776,459	0
26	Revenue Deficiency After Tax	1,056,407	

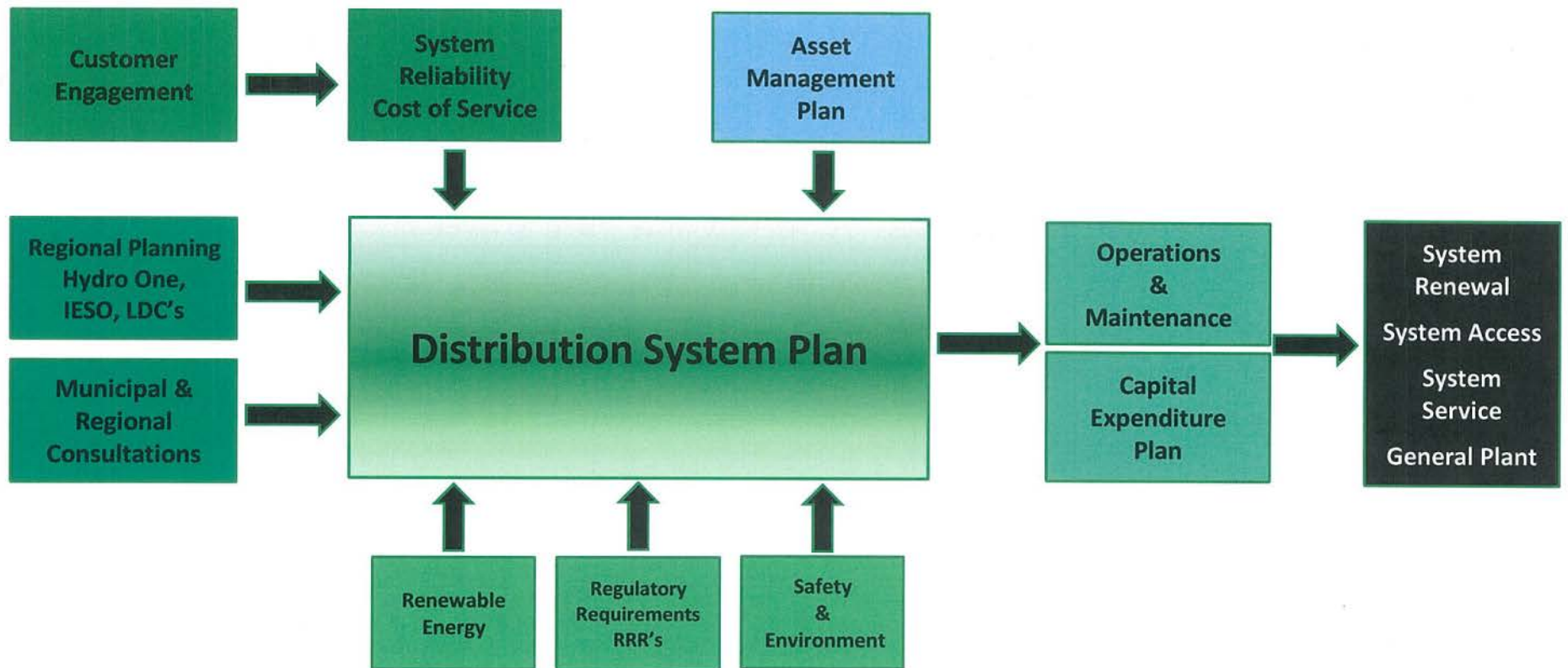
Revenue Deficiency Drivers

Service Revenue Requirement	2013 Approved (A)	2017 Revenue at Existing Rates Allocated in Proportion to 2013 Approved (B)	2017 Proposed (C)	Revenue Deficiency (D = C - B)
OM&A	6,359,000	6,619,826	6,987,007	367,181
LEAP	11,000	11,451	12,900	1,449
Depreciation	1,228,565	1,278,957	1,429,600	150,643
Return on Rate Base	1,814,479	1,888,903	2,106,053	217,150
PILS	53,472	55,665	100,775	45,110
Total Before Adjustments	9,466,516	9,854,803	10,636,334	781,531
Adjustments				
Loss of Large User	0	-98,400	0	98,400
PPE 1576 Adjustment Base	-143,383	-143,383	0	143,383
PPE 1576 Adjustment Return	-33,093	-33,093	0	33,093
Total After Adjustments	9,290,040	9,579,927	10,636,334	1,056,407

	2013 Approved (A)		2017 Proposed (C)	Difference (C - A)
Rate Base Average Fixed Assets	25,464,079		29,494,306	4,030,227
Rate Base Working Capital Allowance	5,971,788		4,018,082	-1,953,706
Rate Base	31,435,867		33,512,388	2,076,521
Return on Rate Base	5.77%		6.28%	0.51%

TAB – C2

DISTRIBUTION SYSTEM PLAN OVERVIEW



CHAPTER 5 – CONSOLIDATED DISTRIBUTION SYSTEM PLAN

Investment Categories

System Access

System Access investments account for just under 10% of the capital expenditures for 2017. The investments in system access are in response to customer requests for connections. **WHESC** must complete requested connections in order to remain compliant with regulations. The estimated expenditures for this category is based on investment from previous years, taking into consideration forecasted developments in the service area.

System Renewal

System Renewal projects make up the largest category of investments for 2017 and account for over 72% of total capital expenditures. Projects in this category consist of the replacement of distribution assets. Applying **WHESC's** asset management process, **WHESC** has determined many of these assets are in poor condition and susceptible to failure in the near term if not replaced. System renewal investments also address reliability and, where practical, voltage conversions which have greatly contributed to **WHESC's** reduced loss factor in 2017. The reduction in the loss factor from past conversion projects is expected to generate savings in customer's power and power related billings of approximately \$250,000 in the 2017 Test Year.

System Service

System Service expenditures account for a small portion of the overall allocation of capital investment. The amount invested in this category in 2017 is largely composed of the replacement of current SCADA software and related communication equipment. SCADA investments are required to maintain system efficiency, reliability, and support in responding to certain power disruption events.

General Plant

General plant expenditures account for just over 10% of capital expenditures for 2017. The amount invested in this category in the Test Year is largely composed of expenditures related to maintaining buildings and grounds at **WHESC's** current service center. These upgrades to facilities are required to ensure the current facilities meet the needs of **WHESC** and its customers for years to come.

5 Year Capital Spending

OEB Investment Category	FORECAST PERIOD					Average Annual Investment	% of Annual Investment
	2017	2018	2019	2020	2021	2017-2021	2017-2021
System Access	204,501	250,000	250,000	190,000	150,000	208,900	8.6 %
System Renewal	1,834,485	1,495,000	1,775,000	1,920,000	1,770,000	1,758,897	72.7 %
System Service	110,000	260,000	35,000	35,000	35,000	95,000	3.9 %
General Plant	265,000	305,000	400,000	295,000	525,000	358,000	14.8 %
Totals	2,413,986	2,310,000	2,460,000	2,440,000	2,480,000	2,420,797	

Capital Projects Table

Projects	2012 Revised	2013 Revised	2014	2015	2016 Bridge Year	2017 Test Year	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Reporting Basis	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
System Access										
Municipal Relocations										
Woodlawn Road Widening Rice to First Avenue	287,848									
Contributed Capital Region of Niagara - Woodlawn Wellington Street Road Widening	-124,159			32,821						
Contributed Capital City of Welland - Wellington System Expansion - Generation					-3,000	14,501				
Sub-Total Municipal Relocations	163,689	0	0	32,821	-3,000	14,501	0	0	0	0
Customer Connections										
New Overhead/Underground Service Connections	39,404	9,908	40,922	42,577	40,000	40,000	40,000	40,000	40,000	40,000
Expansions (Subdivisions)										
Clare Estates 1	9,160									
Elmwood Estates	28,368									
Hunter's Pointe - Galloway	26,515									
Hunter's Pointe - Block 150	2,316									
Shipview Court	10,175									
Webber Estates		28,503								
Blue Rive Estates		16,214								
Hunter's Pointe - Masters		9,864								
Hunter's Pointe - Highlands		14,820								
Coyle Creek 2 & 3			6,800							
Pine Creek			6,919							
Clare Estates 2			1,902							
Coyle Creek 4			8,112							
Tetherwood 2			6,583							
Michael Drive				4,230						
Clare Estates 3				10,068						
Lochness North 1				10,112						
Sub Total Subdivisions - Plan	76,534	69,401	30,316	24,410	50,000	50,000	50,000	50,000	50,000	50,000
Expansions (Transformers/Meters)										
Contributed Capital Sale of Transformers/Meters	-74,519	-59,359	-29,240	-56,586	0	0	0	0	0	0
Retail Meters										
Smart Meters	17,202	65,532	63,482	50,857	60,000	100,000	100,000	100,000	100,000	60,000
Communication Equipment - Metro Collector	3,456									
Computer Equipment - Smart Meter Diagnostics			5,873							
MIST Meter Replacements							60,000	60,000		
Sub-Total Retail Meters	20,658	65,532	69,355	50,857	60,000	100,000	160,000	160,000	100,000	60,000
Sub-Total System Access	225,766	85,482	111,353	94,079	147,000	204,501	250,000	250,000	190,000	150,000

Capital Projects Table

Projects	2012 Revised	2013 Revised	2014	2015	2016 Bridge Year	2017 Test Year	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Reporting Basis	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
System Renewal Projects										
Substation Renewal										
MS 3 Battery Charger Replacement				8,227						
MS 4 Primary Cabling		3,532								
MS 5 Fencing	6,627									
MS 5 HV Switchgear - 5T2	46,065									
MS 5 HV Switchgear - 5T1				51,032						
MS 6 Transformer & Primary Cabling	100,995									
MS 7 Switchgear & Primary Cabling	828				200,000					
MS 8 Transformer/Switchgear/Primary Cabling						50,000	100,000	100,000		
MS 9 Switchgear & Primary Cabling								50,000	50,000	100,000
MS 10 HV Switchgear & Primary Cabling							125,000			
MS 12 Transformer & Primary Cabling	47,270			30,290						
MS 14 Transformer/Switchgear/Primary Cabling				48,350		120,000				
Sub-Total Substation Renewal	201,785	3,532	0	137,899	200,000	170,000	225,000	150,000	50,000	100,000
Overhead Line Renewal										
Pole Replacement 4.16kV First Ave-College Park to Woodland	37,692									
Pole Replacement 4.16kV Summitt Ave	17,011									
Aqueduct Area 4.16kV Rebuild-Birch,Cedar,Beechwood	73,440									
Pole Replacement 4.16kV Market Square	17,473									
Regent Street Rebuild/Conversion 2.4kV to 16kV	292,255									
Mayfair Estates Rebuild/Conversion 2.4kV to 16kV	69,810									
Niagara Street South of Quaker Rebuild/Conversion 4.16kV to 27.6kV	33,324									
Plymouth Road-St. Mary's School Rebuild/Conversion 4.16kV to 27.6kV	25,473									
Netherby Road @ Townline Tunnel Rebuild/Conversion 2.4kV to 16kV	17,375	20,185								
Maple,Bald,Denistoun,Hooker Rebuild/Conversion 4.16kV to 27.6kV	193,692	2,992								
PCB Transformer Replacements	13,660	51,238								
Cohoe Street 4.16kV Rebuild		12,538								
Pine Street 4.16kV Rebuild		28,469								
Circuit North of Crowland TS 27.6kV Rebuild		12,305								
Pole Replacement 4.16kV Woodview Estates-Trent Avenue		29,178								
Garner Avenue 4.16kV Rebuild		83,995	4,318							
Fitch Street-First Ave to Prince Charles Rebuild/Conversion 2.4kV to 16kV		31,326								
Wilton & Riverside Rebuild/Conversion 4.16kV to 27.6kV		262,157								
McCormick & Dufferin Rebuild/Conversion 2.4kV to 16kV		66,862								
Cady Street Rebuild/Conversion 2.4kV to 16kV		22,122								
Southworth Rebuild/Conversion 4.16kV to 27.6kV		335,986								
Lancaster Drive Rebuild/Conversion 4.16kV to 27.6kV		54,193								
Major Street 27.6kV Rebuild			323,827							
Division & Burger Rebuild/Conversion 4.16kV to 27.6kV			295,502							
Bald St West and Denistoun Rebuild/Conversion 2.4kV to 16kV			32,978							
Clare Avenue & Woodlawn Rebuild/Conversion 4.16kV to 27.6kV			112,907							
Harriet Street Rebuild/Conversion 2.4kV to 16kV			27,181							
Wallace Avenue Rebuild/Conversion 2.4kV to 16kV			45,980							
James Street 4.16kV Rebuild			5,393	13,477						
Orchard,Wright,Deere Rebuild/Conversion 2.4kV to 16kV			156,366	175,959						
Lincoln,Wilton,Riverside Rebuild/Conversion 4.16kV to 27.6kV			4,475	61,145						
Grange Avenue 4.16kV Rebuild				37,806						
Southworth Rebuild 8F3 Feeder				69,369						
Fitch Street & Westdale Rebuild/Conversion 2.4kV to 16kV				70,026						
Hellems Ave-King Street Conversion 4.16kV to 27.6kV				97,672						

Capital Projects Table

Projects	2012 Revised	2013 Revised	2014	2015	2016 Bridge Year	2017 Test Year	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Reporting Basis	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
System Renewal Projects										
Overhead Line Renewal										
Hellems Ave- Dorothy to Park Rebuild/Conversion 4.16kV to 27.6kV				269,045	300,000					
Fitch Street @ MS7 4.17/27.6kV Rebuild to accommodate upgrade					75,000					
Lincoln Street east of Denistoun 27.6kV Rebuild					50,000					
Church St/Niagara Street Rebuild/Conversion 4.16kV to 27.6kV					450,000	300,000				
Wellington Street-East Main to Eastdale Rebuild/Conversion 4.16kV to 27.6kV					88,000	250,000				
Bradley Ave 4.16kV Rebuild to accommodate Robert St U/G						49,485				
Ross Street/Kennedy Street Rebuild/Conversion 4.16kV to 27.6kV						150,000	100,000			
Ontario Road Corridor to Canal Rebuild/Conversion 4.16kV to 27.6kV							300,000			
Lincoln Street-Coventry to Schoefield Rebuild/Conversion 4.16kV to 27.6kV								440,000		
Duncan Street-Hagar to East Main Rebuild/Conversion 4.16kV to 27.6kV								300,000	320,000	
Clare-Thorold to Steven Rebuild/Conversion 4.16kV to 27.6kV									100,000	
Dorothy Street-River Road to Ross St Rebuild/Conversion 2.4kV to 16kV									100,000	
Denistoun Street-Hooker to Welland River Rebuild/Conversion 4.16kV to 27.6kV									250,000	
Myrtle Avenue Rebuild/Conversion 4.16kV to 27.6kV									165,000	
Rusholme Road 27.6kV Rebuild										150,000
Classic/Lewis Street Rebuild/Conversion 2.4kV to 16kV										350,000
King Street-Lincoln to Regent Rebuild/Conversion 4.16kV to 27.6kV										300,000
Hellems Ave-Park to Lincoln Rebuild/Conversion 4.16kV to 27.6kV										310,000
Sub-Total Overhead Line Renewal	791,205	1,013,546	1,008,927	794,499	963,000	749,485	400,000	740,000	935,000	1,110,000
Underground Line Renewal										
Preston Place 4.16kV Rebuild	23,178									
Whiteoak Cr 4.16kV Rebuild	21,629									
McComb 4.16kV Rebuild	79,076	5,503								
Oak Street Rebuild/Conversion 2.4kV to 16kV	21,791	45,650								
Ontario Road Canal Crossing-Backup Cable		20,075								
Woodlawn/Lincoln/Division Canal Crossing-Backup Cable		41,856								
Preston, Wiltshire, McCoil 4.16kV Rebuild		171,993								
Graystone Area Rebuild/Conversion 2.4kV to 16kV		17,970	380,376	54,285						
Clairmount/Bettes Rebuild/Conversion 2.4kV to 16kV		30,590	31,397							
Birch & Linwood Rebuild/Conversion 2.4kV to 16kV			38,603							
Rice Road Rebuild/Conversion 4.16kV to 27.6kV			85,950	17,256						
Humberstone/Townline Tunnel 27.6 kV Rebuild				345,567						
Regatta Drive-Primary Loop 2.4kV Rebuild				23,771						
Wilson Road to New Seniors Residence Rebuild/Conversion 4.16kV to 27.6kV				133,567						
Woodington/Champlain 2.4kV Rebuild					100,000					
Silvan/Newleaf Phase 1 Rebuild/Conversion 2.4kV to 16kV					210,000					
Maureen Ave 2.4kV Rebuild						125,000				
Riverview Drive Rebuild/Conversion 4.16kV to 27.6kV						150,000				
Robert Street Rebuild/Conversion 2.4kV to 16kV						150,000				
Silvan/Newleaf Phase 2 Rebuild/Conversion 2.4kV to 16kV						280,000				
Royal Oak 2.4kV Rebuild							160,000			
Page Drive-Whiteoak Cr 2.4kV Rebuild							250,000			
Loyalist/Lisa/Jennifer Rebuild/Conversion 2.4kV to 16kV							300,000			
Glenayr/McGill 2.4kV Rebuild								300,000		
Glen Park Drive/Court Rebuild/Conversion 2.4kV to 16kV								300,000		
Centennial Drive Rebuild/Conversion 2.4kV to 16kV								125,000		
Rolling Acres 2.4kV Rebuild									200,000	
Bridlewood/Chapel Hill Rebuild/Conversion 2.4kV to 16kV									300,000	
Apple/Brant Rebuild/Conversion 2.4kV to 16kV									125,000	
Erin & Steven Rebuild/Conversion 2.4kV to 16kV									150,000	150,000
Nottingham Ave 2.4kV Rebuild										250,000

Capital Projects Table

Projects	2012 Revised	2013 Revised	2014	2015	2016 Bridge Year	2017 Test Year	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Reporting Basis	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
System Renewal Projects										
Miscellaneous Renewal										
Miscellaneous Pole Replacements	78,259	89,289	107,968	101,094	100,000	100,000	50,000	50,000	50,000	50,000
Miscellaneous Transformer Replacements	27,771	81,026	39,399	73,031	50,000	50,000	50,000	50,000	50,000	50,000
Transformers New Developments	74,519	59,359	29,240	56,586	0	0	0	0	0	0
Change in Transformer Inventory	-128,126	-117,628	-43,991	36,030	0	0	0	0	0	0
Miscellaneous Underground Rebuild	30,926	582	32,436	0	30,000	30,000	30,000	30,000	30,000	30,000
Miscellaneous Overhead Primary	11,288	41,357	0	0	30,000	30,000	30,000	30,000	30,000	30,000
Sub-Total Miscellaneous Renewal	94,637	153,985	165,052	266,741	210,000	210,000	160,000	160,000	160,000	160,000
Sub-Total System Renewal Projects	1,233,301	1,504,700	1,710,305	1,773,585	1,683,000	1,834,485	1,495,000	1,775,000	1,920,000	1,770,000
System Service										
Scada/Substation System Service										
Scada Switches/Remote Fault Indicators/Radio Systems	8,300	4,047		5,326		60,000	35,000	35,000	35,000	35,000
MS1 - RTU/Relay Replacements							100,000			
MS5 - RTU/Relay Replacements							75,000			
Scada SmartVU/Server Upgrade						50,000	50,000			
Scada Software ICCP			55,500	27,911						
Sub-Total System Service	8,300	4,047	55,500	33,237	0	110,000	260,000	35,000	35,000	35,000
General Plant										
Furniture & Equipment										
Furniture & Equipment	11,025	1,403	0	0	0	0	0	0	0	0
Computer Hardware										
Computer Equipment Miscellaneous	13,289	14,809	14,064	42,657	25,000	25,000	25,000	25,000	25,000	25,000
Computer Equipment FileNexus Test Server			7,645							
Computer Equipment HP Scanners (4)			6,536							
Computer Equipment Cisco Firewall			9,705							
Computer Equipment Server/Lan/Battery Backup			45,922							
Computer Equipment Engineering Server			13,353							
Computer Equipment Engineering Plotter			7,839							
Computer Equipment Mcare Tablets (4)			7,560	8,984						
Computer Equipment Backup Server from Tape to Disk				15,683						
Sub-Total Computer Equipment	13,289	14,809	112,624	67,324	25,000	25,000	25,000	25,000	25,000	25,000
Computer Software										
Computer Software Northstar Customer Connect	11,250		3,750							
Computer Software Northstar CIS Version 6.4			42,844	-3,427						
Computer Software Northstar CIS Automation Platform				8,400						
Computer Software Northstar CIS Cognos License				5,667						
Computer Software Cayenta Financials Implementation	58,433									
Computer Software Cayenta Financials Fixed Assets Module/Upgrade				35,490	25,000					
Computer Software Spidaweb	4,411									
Computer Software Autocad	4,620									
Computer Software FileNexus Document Storage License/Modules		68,401	31,492							
Computer Software FileNexus Customer Online Forms					40,000	40,000				
Computer Software Multispeak Outage Manager		16,621								
Sub Total Computer Software - Plan	78,714	85,022	78,086	46,130	65,000	40,000	50,000	50,000	50,000	50,000

Capital Projects Table

Projects	2012 Revised	2013 Revised	2014	2015	2016 Bridge Year	2017 Test Year	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Reporting Basis	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
General Plant										
Communication Equipment										
Communication Equipment - New Phone System	0	68,771	3,495	0	0	0	0	0	0	0
Measurement & Testing Equipment										
Measurement & Testing Equipment	2,996	-711	0	0	0	0	0	0	0	0
Tools										
Tools	0	0	5,980	0	5,500	5,000	5,000	5,000	5,000	5,000
Automotive Equipment & Vehicles										
2013 Freightliner Double Bucket Truck		325,615								
2005 Backyard Digger & Trailer Used			32,500							
2014 Brooks Brothers Pole Trailer			23,327							
Rebuild GMC Digger Derrick Rebuild Motor (Truck 31 - 1988)			9,296							
Rebuild International Single Bucket Truck Sub frame (Truck 11 - 2000)			23,648							
2015 Nissan Van (Truck 8 - 2001)				27,099						
2015 Dump Trailer				4,400						
2016 International Double Bucket Truck (Truck 9 - 1998)				117,800	246,300					
2016 3/4 Ton Pickup Truck (Truck 3 - 1995)					40,000					
2016 1/2 Ton Pickup Truck (Truck 1 - 2000)					35,000					
2016 International Digger Derrick (Truck 31 - 1988)					315,000					
2017 1/2 Ton Pickup Truck (Truck 36 - 2000)						35,000				
2017 1/2 Ton Pickup Truck (Truck 37 - 2000)						35,000				
2018 3/4 Ton Pickup Truck (Truck 24 - 1997)							50,000			
2018 Forklift Replacement (Truck 43 - 2002)							50,000			
2019 3/4 Ton Pickup Truck (Truck 42 - 2005)								45,000		
2021 International Bucket Truck (Truck 11 - 2000)									120,000	250,000
2020 Passenger Van (Truck 41 - 2005)									30,000	
2020 Utility Van (Truck 44 - 2007)									40,000	
2021 3/4 Ton Pickup Truck (Truck 51 - 2010)										50,000
2022 International Digger Derrick (Truck 18 - 1990)										120,000
Sub Total Automotive Equipment & Vehicles	0	325,615	88,771	149,299	636,300	70,000	100,000	45,000	190,000	420,000
Buildings & Grounds										
Roof Replacement Administrative Office - Board Room Area	19,453									
Main Office & Conference Room Renovations	157,810									
Atrium Replacement/New Customer Service Area	134,344									
Building Renovations - Ladies Washrooms		22,167								
Building Renovations - Men's Washrooms			33,433							
Building Upgrades PDB Shed				3,425						
Building Upgrades A/C Multizone				15,285						
Building Upgrades Fire Alarm System					70,000					
Building Upgrades Stair Lift to Lower Level						25,000				
Service Centre Parking Lot Repaving						100,000	100,000			
Building Upgrades - Plan							25,000	25,000	25,000	25,000
Service Centre Roof Replacement								250,000		
Sub-Total Buildings & Grounds	311,607	22,167	33,433	18,710	70,000	125,000	125,000	275,000	25,000	25,000
Renewables - Non Rate Regulated										
Renewable Generation Microfits	81,719	-1,958	0	0	0	0	0	0	0	0
Sub-Total General Plant	499,350	515,118	322,389	281,463	801,800	265,000	305,000	400,000	295,000	525,000
Total Before Renewable & Non-Rate Regulated	1,966,717	2,109,347	2,199,547	2,182,364	2,631,800	2,413,986	2,310,000	2,460,000	2,440,000	2,480,000
Less Renewable Generation Microfits	-81,719	1,958	0	0	0	0	0	0	0	0
Total Regulated	1,884,998	2,111,305	2,199,547	2,182,364	2,631,800	2,413,986	2,310,000	2,460,000	2,440,000	2,480,000

TAB – C3

CUSTOMER ENGAGEMENT

2017 RATE APPLICATION

OVERVIEW

Customer Engagement

WELLAND HYDRO-ELECTRIC SYSTEM CORP.-

Customer Consultation 2017 Rate Application Review

In response to the Ontario Energy Board's filing requirements on the specific proposals contained in the Application, Innovative Research Group Inc. (INNOVATIVE) was commissioned by Welland Hydro to help the utility design, collect feedback and document its customer engagement and consultation process as part of the development of Welland Hydro's 2017 Cost of Service (COS) Rate Application Review, which incorporates both capital infrastructure and operational plans.

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 (LDCs) to demonstrate services are provided in a manner that responds to identified customer needs and preferences.

Three Core Elements of Customer Engagement

- General Service and Residential Consultation groups
- Large Customer validation interviews
- Random telephone surveys

Overall satisfaction across consultation activities-” considering the cost of WHESC’s plan would you say...”

Q. Considering the cost of Welland Hydro’s plan, would you say ...

Response	Directional (Focus Groups)		Generalizable (Telephone Surveys)	
	Low-volume GS	Residential	Low-volume GS	Residential
The rate increase is reasonable and I support it	n=33%	n=43%	n=24%	34%
I don’t like it, but I think the rate increase is necessary	n=56%	n=57%	n=44%	38%
The rate increase is unreasonable and I oppose it	n=11%	n=0	n=28%	23%
Don’t know / Refused	n=0	n=0	n=4%	5%
TOTAL	n=9	n=7	n=25	n=501

Customer Needs and Preferences

- Competitive distribution costs
- Reliability of service
- Customer service, and communication through phone, in person in the office, online (email) and twitter
- Conservation programs to assist with reducing usage of electricity

TAB – C4

BILL IMPACTS AND COST ALLOCATION

2017 COST OF SERVICE RATE APPLICATION

OVERVIEW BILL IMPACTS & COST ALLOCATION

1) Cost Allocation

- Updated 2017 Cost Allocation Module
- New OEB Directives Related to Unmetered Accounts (Streetlights & Unmetered Scattered Load)

2) Bill Impacts

- Residential & GS <50 kW in line with overall % increase
- General Service > 50 kW and Sentinel Lights higher rates
- Streetlights & Unmetered Scattered lower rates

3) Residential Fixed to Variable

- Year 2 of a 4 year phase to 100% fixed charges
- Higher Increase to lower volume accounts
- Lower Increase to higher volume accounts

4) Rate Mitigation

- Total Bill Impacts below 10% increase
- No rate mitigation required

Bill Impact Summary

Rate Class/Description	kWh	kW	Current Distribution Charge Subtotal A	Proposed Distribution Charge Subtotal A	\$ Change	% Change
Residential - TOU	750		\$27.14	\$29.42	\$2.28	8.40%
Residential 10th Percentile - TOU	308		\$22.49	\$26.01	\$3.52	15.65%
General Service Less Than 50 kW	2,000		\$46.91	\$51.85	\$4.94	10.53%
General Service 50 to 4,999 kW Non-RPP	32,400	60	\$429.50	\$526.63	\$97.13	22.61%
General Service 50 to 4,999 kW Non-RPP	1,091,088	3,648	\$6,666.59	\$8,525.98	\$1,859.39	27.89%
Unmetered Scattered Load	150		\$13.13	\$11.84	-\$1.29	-9.82%
Sentinel Lighting	120	0.3	\$4.51	\$6.44	\$1.93	42.79%
Street Lighting	16	0.044	\$2.36	\$0.76	-\$1.60	-67.80%
Rate Class/Description	kWh	kW	Current Total Bill	Proposed Total Bill	\$ Change	% Change
Residential - TOU	750		\$147.42	\$149.45	\$2.03	1.38%
Residential 10th Percentile - TOU	308		\$74.06	\$77.81	\$3.75	5.06%
General Service Less Than 50 kW	2,000		\$373.93	\$378.93	\$5.00	1.34%
General Service 50 to 4,999 kW Non-RPP	32,400	60	\$5,387.41	\$5,537.79	\$150.38	2.79%
General Service 50 to 4,999 kW Non-RPP	1,091,088	3,648	\$179,351.62	\$181,663.22	\$2,311.60	1.29%
Unmetered Scattered Load	150		\$39.10	\$37.53	-\$1.57	-4.02%
Sentinel Lighting	120	0.3	\$24.16	\$26.24	\$2.08	8.61%
Street Lighting	16	0.044	\$5.41	\$3.60	-\$1.81	-33.46%

Customer Class: RESIDENTIAL SERVICE CLASSIFICATION

RPP / Non-RPP: RPP

Consumption 750 kWh

Demand - kW

Current Loss Factor 1.0532

Proposed/Approved Loss Factor 1.0476

	Current OEB-Approved			Proposed			Impact	
	Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change
Monthly Service Charge	\$ 18.76	1	\$ 18.76	\$ 23.44	1	\$ 23.44	\$ 4.68	24.95%
Distribution Volumetric Rate	\$ 0.0105	750	\$ 7.88	\$ 0.0078	750	\$ 5.85	\$ (2.03)	-25.71%
Fixed Rate Riders	\$ 0.50	1	\$ 0.50	\$ 0.20	1	\$ 0.20	\$ (0.30)	-60.00%
Volumetric Rate Riders	\$ -	750	\$ -	\$ 0.0001	750	\$ (0.08)	\$ (0.08)	
Sub-Total A (excluding pass through)			\$ 27.14			\$ 29.42	\$ 2.28	8.40%
Line Losses on Cost of Power	\$ 0.1114	40	\$ 4.44	\$ 0.1114	36	\$ 3.98	\$ (0.47)	-10.53%
Total Deferral/Variance Account Rate Riders	\$ 0.0019	750	\$ (1.43)	\$ 0.0016	750	\$ (1.20)	\$ 0.23	-15.79%
GA Rate Riders				\$ -	750	\$ -	\$ -	
Low Voltage Service Charge	\$ -	750	\$ -		750	\$ -	\$ -	
Smart Meter Entity Charge (if applicable)	\$ 0.7900	1	\$ 0.79	\$ 0.7900	1	\$ 0.79	\$ -	0.00%
Sub-Total B - Distribution (includes Sub-Total A)			\$ 30.94			\$ 32.98	\$ 2.04	6.58%
RTSR - Network	\$ 0.0078	790	\$ 6.16	\$ 0.0077	786	\$ 6.05	\$ (0.11)	-1.81%
RTSR - Connection and/or Line and Transformation Connection	\$ 0.0061	790	\$ 4.82	\$ 0.0060	786	\$ 4.71	\$ (0.10)	-2.16%
Sub-Total C - Delivery (including Sub-Total B)			\$ 41.92			\$ 43.75	\$ 1.82	4.35%
Wholesale Market Service Charge (WMSC)	\$ 0.0036	790	\$ 2.84	\$ 0.0036	786	\$ 2.83	\$ (0.02)	-0.53%
Rural and Remote Rate Protection (RRRP)	\$ 0.0013	790	\$ 1.03	\$ 0.0013	786	\$ 1.02	\$ (0.01)	-0.53%
Standard Supply Service Charge	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
Debt Retirement Charge (DRC)								
Ontario Electricity Support Program (OESP)	\$ 0.0011	790	\$ 0.87	\$ 0.0011	786	\$ 0.86	\$ (0.00)	-0.53%
TOU - Off Peak	\$ 0.0870	488	\$ 42.41	\$ 0.0870	488	\$ 42.41	\$ -	0.00%
TOU - Mid Peak	\$ 0.1320	128	\$ 16.83	\$ 0.1320	128	\$ 16.83	\$ -	0.00%
TOU - On Peak	\$ 0.1800	135	\$ 24.30	\$ 0.1800	135	\$ 24.30	\$ -	0.00%
Total Bill on TOU (before Taxes)			\$ 130.46			\$ 132.25	\$ 1.80	1.38%
HST	13%		\$ 16.96	13%		\$ 17.19	\$ 0.23	1.38%
Total Bill on TOU			\$ 147.42			\$ 149.45	\$ 2.03	1.38%

Customer Class: **GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION**

RPP / Non-RPP: RPP

Consumption 2,000 kWh

Demand - kW

Current Loss Factor 1.0532

Proposed/Approved Loss Factor 1.0476

	Current OEB-Approved			Proposed			Impact	
	Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change
Monthly Service Charge	\$ 29.23	1	\$ 29.23	\$ 32.65	1	\$ 32.65	\$ 3.42	11.70%
Distribution Volumetric Rate	\$ 0.0086	2000	\$ 17.20	\$ 0.0096	2000	\$ 19.20	\$ 2.00	11.63%
Fixed Rate Riders	\$ 0.48	1	\$ 0.48	\$ -	1	\$ -	\$ (0.48)	-100.00%
Volumetric Rate Riders	\$ -	2000	\$ -	\$ -	2000	\$ -	\$ -	-
Sub-Total A (excluding pass through)			\$ 46.91			\$ 51.85	\$ 4.94	10.53%
Line Losses on Cost of Power	\$ 0.1114	106	\$ 11.85	\$ 0.1114	95	\$ 10.60	\$ (1.25)	-10.53%
Total Deferral/Variance Account Rate Riders	-\$ 0.0019	2,000	\$ (3.80)	-\$ 0.0012	2,000	\$ (2.40)	\$ 1.40	-36.84%
GA Rate Riders				\$ -	2,000	\$ -	\$ -	-
Low Voltage Service Charge	\$ -	2,000	\$ -	\$ -	2,000	\$ -	\$ -	-
Smart Meter Entity Charge (if applicable)	\$ 0.7900	1	\$ 0.79	\$ 0.7900	1	\$ 0.79	\$ -	0.00%
Sub-Total B - Distribution (includes Sub-Total A)			\$ 55.75			\$ 60.84	\$ 5.09	9.13%
RTSR - Network	\$ 0.0069	2,106	\$ 14.53	\$ 0.0068	2,095	\$ 14.25	\$ (0.29)	-1.97%
RTSR - Connection and/or Line and Transformation Connection	\$ 0.0052	2,106	\$ 10.95	\$ 0.0051	2,095	\$ 10.69	\$ (0.27)	-2.44%
Sub-Total C - Delivery (including Sub-Total B)			\$ 81.24			\$ 85.78	\$ 4.54	5.59%
Wholesale Market Service Charge (WMSC)	\$ 0.0036	2,106	\$ 7.58	\$ 0.0036	2,095	\$ 7.54	\$ (0.04)	-0.53%
Rural and Remote Rate Protection (RRRP)	\$ 0.0013	2,106	\$ 2.74	\$ 0.0013	2,095	\$ 2.72	\$ (0.01)	-0.53%
Standard Supply Service Charge	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
Debt Retirement Charge (DRC)	\$ 0.0070	2,000	\$ 14.00	\$ 0.0070	2,000	\$ 14.00	\$ -	0.00%
Ontario Electricity Support Program (OESP)	\$ 0.0011	2,106	\$ 2.32	\$ 0.0011	2,095	\$ 2.30	\$ (0.01)	-0.53%
TOU - Off Peak	\$ 0.0870	1,300	\$ 113.10	\$ 0.0870	1,300	\$ 113.10	\$ -	0.00%
TOU - Mid Peak	\$ 0.1320	340	\$ 44.88	\$ 0.1320	340	\$ 44.88	\$ -	0.00%
TOU - On Peak	\$ 0.1800	360	\$ 64.80	\$ 0.1800	360	\$ 64.80	\$ -	0.00%
Total Bill on TOU (before Taxes)			\$ 330.91			\$ 335.38	\$ 4.47	1.35%
HST	13%		\$ 43.02	13%		\$ 43.60	\$ 0.58	1.35%
Total Bill on TOU			\$ 373.93			\$ 378.98	\$ 5.05	1.35%

Customer Class:	GENERAL SERVICE 50 TO 4,999 KW SERVICE CLASSIFICATION	
RPP / Non-RPP:	Non-RPP (Other)	
Consumption	32,400	kWh
Demand	60	kW
Current Loss Factor	1.0532	
Proposed/Approved Loss Factor	1.0476	

	Current OEB-Approved			Proposed			Impact	
	Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change
Monthly Service Charge	\$ 281.42	1	\$ 281.42	\$ 348.78	1	\$ 348.78	\$ 67.36	23.94%
Distribution Volumetric Rate	\$ 2.4614	60	\$ 147.68	\$ 2.9642	60	\$ 177.85	\$ 30.17	20.43%
Fixed Rate Riders	\$ -	1	\$ -	\$ -	1	\$ -	\$ -	
Volumetric Rate Riders	\$ 0.0066	60	\$ 0.40	\$ -	60	\$ -	\$ (0.40)	-100.00%
Sub-Total A (excluding pass through)			\$ 429.50			\$ 526.63	\$ 97.13	22.62%
Line Losses on Cost of Power	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	
Total Deferral/Variance Account Rate Riders	-\$ 0.3118	60	\$ (18.71)	-\$ 0.3229	60	\$ (19.37)	\$ (0.67)	3.56%
GA Rate Riders				\$ 0.0015	32,400	\$ 48.60	\$ 48.60	
Low Voltage Service Charge	\$ -	60	\$ -	\$ -	60	\$ -	\$ -	
Smart Meter Entry Charge (if applicable)	\$ -	1	\$ -	\$ -	1	\$ -	\$ -	
Sub-Total B - Distribution (includes Sub-Total A)			\$ 410.79			\$ 555.86	\$ 145.07	35.31%
RTSR - Network	\$ 2.3625	60	\$ 141.75	\$ 2.3145	60	\$ 138.87	\$ (2.88)	-2.03%
RTSR - Connection and/or Line and Transformation Connection	\$ 1.8027	60	\$ 108.16	\$ 1.9948	60	\$ 119.69	\$ 11.53	10.66%
Sub-Total C - Delivery (including Sub-Total B)			\$ 660.70			\$ 814.42	\$ 153.71	23.26%
Wholesale Market Service Charge (WMSC)	\$ 0.0036	34,124	\$ 122.85	\$ 0.0036	33,942	\$ 122.19	\$ (0.65)	-0.53%
Rural and Remote Rate Protection (RRRP)	\$ 0.0013	34,124	\$ 44.36	\$ 0.0013	33,942	\$ 44.12	\$ (0.24)	-0.53%
Standard Supply Service Charge	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
Debt Retirement Charge (DRC)	\$ 0.0070	32,400	\$ 226.80	\$ 0.0070	32,400	\$ 226.80	\$ -	0.00%
Ontario Electricity Support Program (OESP)	\$ 0.0011	34,124	\$ 37.54	\$ 0.0011	33,942	\$ 37.34	\$ (0.20)	-0.53%
Average IESO Wholesale Market Price	\$ 0.1077	34,124	\$ 3,675.12	\$ 0.1077	33,942	\$ 3,655.58	\$ (19.54)	-0.53%
Total Bill on Average IESO Wholesale Market Price			\$ 4,767.62			\$ 4,900.70	\$ 133.08	2.79%
HST	13%		\$ 619.79	13%		\$ 637.09	\$ 17.30	2.79%
Total Bill on Average IESO Wholesale Market Price			\$ 5,387.41			\$ 5,537.79	\$ 150.38	2.79%

Customer Class: **UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION**

RPP / Non-RPP: **RPP**

Consumption **150** kWh

Demand **-** kW

Current Loss Factor **1.0532**

Proposed/Approved Loss Factor **1.0476**

	Current OEB-Approved			Proposed			Impact	
	Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change
Monthly Service Charge	\$ 11.93	1	\$ 11.93	\$ 10.77	1	\$ 10.77	\$ (1.16)	-9.72%
Distribution Volumetric Rate	\$ 0.0079	150	\$ 1.19	\$ 0.0071	150	\$ 1.07	\$ (0.12)	-10.13%
Fixed Rate Riders	\$ -	1	\$ -	\$ -	1	\$ -	\$ -	-
Volumetric Rate Riders	\$ 0.0001	150	\$ 0.02	\$ -	150	\$ -	\$ (0.02)	-100.00%
Sub-Total A (excluding pass through)			\$ 13.13			\$ 11.84	\$ (1.30)	-9.86%
Line Losses on Cost of Power	\$ 0.1114	8	\$ 0.89	\$ 0.1114	7	\$ 0.80	\$ (0.09)	-10.53%
Total Deferral/Variance Account Rate Riders	-\$ 0.0019	150	\$ (0.29)	-\$ 0.0016	150	\$ (0.24)	\$ 0.05	-15.79%
GA Rate Riders					150	\$ -	\$ -	-
Low Voltage Service Charge	\$ -	150	\$ -	\$ -	150	\$ -	\$ -	-
Smart Meter Entity Charge (if applicable)	\$ -	1	\$ -	\$ -	1	\$ -	\$ -	-
Sub-Total B - Distribution (includes Sub-Total A)			\$ 13.73			\$ 12.39	\$ (1.34)	-9.78%
RTSR - Network	\$ 0.0069	158	\$ 1.09	\$ 0.0068	157	\$ 1.07	\$ (0.02)	-1.97%
RTSR - Connection and/or Line and Transformation Connection	\$ 0.0052	158	\$ 0.82	\$ 0.0051	157	\$ 0.80	\$ (0.02)	-2.44%
Sub-Total C - Delivery (including Sub-Total B)			\$ 15.65			\$ 14.26	\$ (1.39)	-8.85%
Wholesale Market Service Charge (WMSC)	\$ 0.0036	158	\$ 0.57	\$ 0.0036	157	\$ 0.57	\$ (0.00)	-0.53%
Rural and Remote Rate Protection (RRRP)	\$ 0.0013	158	\$ 0.21	\$ 0.0013	157	\$ 0.20	\$ (0.00)	-0.53%
Standard Supply Service Charge	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
Debt Retirement Charge (DRC)	\$ 0.0070	150	\$ 1.05	\$ 0.0070	150	\$ 1.05	\$ -	0.00%
Ontario Electricity Support Program (OESP)	\$ 0.0011	158	\$ 0.17	\$ 0.0011	157	\$ 0.17	\$ (0.00)	-0.53%
TOU - Off Peak	\$ 0.0870	98	\$ 8.48	\$ 0.0870	98	\$ 8.48	\$ -	0.00%
TOU - Mid Peak	\$ 0.1320	26	\$ 3.37	\$ 0.1320	26	\$ 3.37	\$ -	0.00%
TOU - On Peak	\$ 0.1800	27	\$ 4.86	\$ 0.1800	27	\$ 4.86	\$ -	0.00%
Total Bill on TOU (before Taxes)			\$ 34.60			\$ 33.21	\$ (1.39)	-4.02%
HST	13%		\$ 4.50	13%		\$ 4.32	\$ (0.18)	-4.02%
Total Bill on TOU			\$ 39.10			\$ 37.53	\$ (1.57)	-4.02%

Customer Class:	SENTINEL LIGHTING SERVICE CLASSIFICATION	
RPP / Non-RPP:	RPP	
Consumption	120	kWh
Demand	0.3	kW
Current Loss Factor	1.0532	
Proposed/Approved Loss Factor	1.0476	

	Current OEB-Approved			Proposed			Impact	
	Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change
Monthly Service Charge	\$ 2.69	1	\$ 2.69	\$ 3.85	1	\$ 3.85	\$ 1.16	43.12%
Distribution Volumetric Rate	\$ 6.0251	0.3	\$ 1.81	\$ 8.6259	0.3	\$ 2.59	\$ 0.78	43.17%
Fixed Rate Riders	\$ -	1	\$ -	\$ -	1	\$ -	\$ -	-
Volumetric Rate Riders	\$ 0.0297	0.3	\$ 0.01	\$ -	0.3	\$ -	\$ (0.01)	-100.00%
Sub-Total A (excluding pass through)			\$ 4.51			\$ 6.44	\$ 1.93	42.86%
Line Losses on Cost of Power	\$ 0.1114	6	\$ 0.71	\$ 0.1114	6	\$ 0.64	\$ (0.07)	-10.53%
Total Deferral/Variance Account Rate Riders	-\$ 0.7090	0	\$ (0.21)	-\$ 0.6821	0.3	\$ (0.20)	\$ 0.01	-3.79%
GA Rate Riders				\$ -	120	\$ -	\$ -	-
Low Voltage Service Charge	\$ -	0	\$ -	\$ -	0	\$ -	\$ -	-
Smart Meter Entity Charge (if applicable)	\$ -	1	\$ -	\$ -	1	\$ -	\$ -	-
Sub-Total B - Distribution (includes Sub-Total A)			\$ 5.00			\$ 6.87	\$ 1.86	37.25%
RTSR - Network	\$ 2.2003	0	\$ 0.66	\$ 2.1670	0	\$ 0.65	\$ (0.01)	-1.51%
RTSR - Connection and/or Line and Transformation Connection	\$ 1.6792	0	\$ 0.50	\$ 1.6448	0	\$ 0.49	\$ (0.01)	-2.05%
Sub-Total C - Delivery (including Sub-Total B)			\$ 6.17			\$ 8.01	\$ 1.84	29.90%
Wholesale Market Service Charge (WMSC)	\$ 0.0036	126	\$ 0.45	\$ 0.0036	126	\$ 0.45	\$ (0.00)	-0.53%
Rural and Remote Rate Protection (RRRP)	\$ 0.0013	126	\$ 0.16	\$ 0.0013	126	\$ 0.16	\$ (0.00)	-0.53%
Standard Supply Service Charge	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
Debt Retirement Charge (DRC)	\$ 0.0070	120	\$ 0.84	\$ 0.0070	120	\$ 0.84	\$ -	0.00%
Ontario Electricity Support Program (OESP)	\$ 0.0011	126	\$ 0.14	\$ 0.0011	126	\$ 0.14	\$ -	0.00%
TOU - Off Peak	\$ 0.0870	78	\$ 6.79	\$ 0.0870	78	\$ 6.79	\$ -	0.00%
TOU - Mid Peak	\$ 0.1320	20	\$ 2.69	\$ 0.1320	20	\$ 2.69	\$ -	0.00%
TOU - On Peak	\$ 0.1800	22	\$ 3.89	\$ 0.1800	22	\$ 3.89	\$ -	0.00%
Total Bill on TOU (before Taxes)			\$ 21.38			\$ 23.22	\$ 1.84	8.61%
HST	13%		\$ 2.78	13%		\$ 3.02	\$ 0.24	8.61%
Total Bill on TOU			\$ 24.16			\$ 26.24	\$ 2.08	8.61%

Customer Class:	STREET LIGHTING SERVICE CLASSIFICATION	
RPP / Non-RPP:	Non-RPP (Other)	
Consumption	16	kWh
Demand	0.044	kW
Current Loss Factor	1.0532	
Proposed/Approved Loss Factor	1.0476	

	Current OEB-Approved			Proposed			Impact	
	Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change
Monthly Service Charge	\$ 1.99	1	\$ 1.99	\$ 0.64	1	\$ 0.64	\$ (1.35)	-67.84%
Distribution Volumetric Rate	\$ 8.3543	0.044	\$ 0.37	\$ 2.6741	0.044	\$ 0.12	\$ (0.25)	-67.99%
Fixed Rate Riders	\$ -	1	\$ -	\$ -	1	\$ -	\$ -	
Volumetric Rate Riders	\$ 0.0533	0.044	\$ 0.00	\$ -	0.044	\$ -	\$ (0.00)	-100.00%
Sub-Total A (excluding pass through)			\$ 2.36			\$ 0.76	\$ (1.60)	-67.89%
Line Losses on Cost of Power	\$ 0.1077	1	\$ 0.09	\$ 0.1077	1	\$ 0.08	\$ (0.01)	-10.53%
Total Deferral/Variance Account Rate Riders	-\$ 0.4104	0	\$ (0.02)	-\$ 0.6571	0.044	\$ (0.03)	\$ (0.01)	60.11%
GA Rate Riders				\$ 0.0015	16	\$ 0.02	\$ 0.02	
Low Voltage Service Charge	\$ -	0	\$ -	\$ -	0	\$ -	\$ -	
Smart Meter Ently Charge (if applicable)	\$ -	1	\$ -	\$ -	1	\$ -	\$ -	
Sub-Total B - Distribution (includes Sub-Total A)			\$ 2.43			\$ 0.83	\$ (1.60)	-65.70%
RTSR - Network	\$ 2.1955	0	\$ 0.10	\$ 2.1623	0	\$ 0.10	\$ (0.00)	-1.51%
RTSR - Connection and/or Line and Transformation Connection	\$ 1.6755	0	\$ 0.07	\$ 1.6411	0	\$ 0.07	\$ (0.00)	-2.05%
Sub-Total C - Delivery (including Sub-Total B)			\$ 2.60			\$ 1.00	\$ (1.60)	-61.51%
Wholesale Market Service Charge (WMSC)	\$ 0.0036	17	\$ 0.06	\$ 0.0036	17	\$ 0.06	\$ (0.00)	-0.53%
Rural and Remote Rate Protection (RRRP)	\$ 0.0013	17	\$ 0.02	\$ 0.0013	17	\$ 0.02	\$ (0.00)	-0.53%
Standard Supply Service Charge	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
Debt Retirement Charge (DRC)	\$ 0.0070	16	\$ 0.11	\$ 0.0070	16	\$ 0.11	\$ -	0.00%
Ontario Electricity Support Program (OESP)	\$ 0.0011	17	\$ 0.02	\$ 0.0011	17	\$ 0.02	\$ -	0.00%
Average IESO Wholesale Market Price	\$ 0.1077	16	\$ 1.72	\$ 0.1077	16	\$ 1.72	\$ -	0.00%
Total Bill on Average IESO Wholesale Market Price			\$ 4.79			\$ 3.19	\$ (1.60)	-33.45%
HST 13%			\$ 0.62	13%		\$ 0.41	\$ (0.21)	-33.45%
Total Bill on Average IESO Wholesale Market Price			\$ 5.41			\$ 3.60	\$ (1.81)	-33.45%

TAB – D

2017 BUISNESS PLAN

FINANCIAL STATEMENTS

2017 BUSINESS PLAN

OVERVIEW FINANCIAL STATEMENTS

1) Income Statement

- Statements presented in OEB format
(Presentation differences to IFRS)
- 2017 Regulatory Income \$1.2 Million
- 2017 Regulatory Return on Rate Base 6.28%
- May 1st Bill Impacts (Proposed)
- 2017 Budget Income \$1.0 Million

2) Balance Sheet

- Capital Spending in excess of Depreciation
- Anticipate no additional financing requirements
- Short term working capital through existing LOC

**Welland Hydro-Electric System Corp.
2017 BUDGET BALANCE SHEET**

Account Description	2015 OEB Actual	2016 Budget	2017 Budget
Current assets			
Cash & cash equivalents	2,294,206	790,275	68,486
1100-Customer Accounts Receivable	1,917,258	1,974,776	2,034,019
1104-Accounts Receivable - Recoverable Work	265,033	270,334	275,740
1120-Accrued Utility Revenues	5,075,618	5,227,887	5,384,723
1130-Accumulated Provision for Uncollectable Accounts - Credit	(124,767)	(128,510)	(132,365)
1140-Interest and Dividends Receivable	2,557	2,557	2,557
Receivables & unbilled	7,135,699	7,347,043	7,564,674
1330-Plant Materials and Operating Supplies	383,357	406,200	430,183
Inventory	383,357	406,200	430,183
1200-Accounts Receivable from Associated Companies	106,337	101,081	96,090
1210-Notes Receivable from Associated Companies	1	1	1
Inter-company receivables	106,338	101,082	96,091
1180-Prepayments	219,996	224,396	228,884
2290-Commodity Taxes	49,228	49,228	49,228
Other current assets	269,226	273,624	278,112
Current assets	10,188,826	8,918,224	8,437,546
1805-Land	158,686	158,686	158,686
1806-Land Rights	70,296	70,296	70,296
1808-Buildings and Fixtures	96,568	96,568	96,568
1815-Transformer Station Equipment - Normally Primary above 50 kV	467,359	467,359	467,359
1820-Distribution Station Equipment - Normally Primary below 50 kV	4,164,764	4,364,764	4,534,764
1830-Poles, Towers and Fixtures	9,283,201	10,051,201	10,725,187
1835-Overhead Conductors and Devices	13,417,624	13,537,624	13,652,624
1840-Underground Conduit	1,318,104	1,483,104	1,708,104
1845-Underground Conductors and Devices	11,193,215	11,464,215	11,794,215
1850-Line Transformers	6,941,437	7,200,437	7,635,437
1855-Services	859,971	899,971	939,971
1860-Meters	3,055,726	3,055,726	3,095,726
1908-Buildings and Fixtures	2,555,397	2,625,397	2,750,397
1915-Office Furniture and Equipment	90,446	90,446	90,446
1920-Computer Equipment - Hardware	251,752	264,352	289,352
1925-Computer Software	897,969	998,459	1,038,459
1930-Transportation Equipment	1,704,481	2,184,029	2,218,606
1935-Stores Equipment	30,023	30,023	30,023
1940-Tools, Shop and Garage Equipment	83,043	88,543	93,543
1945-Measurement and Testing Equipment	20,450	20,450	20,450
1955-Communication Equipment	298,231	298,231	298,231
1960-Miscellaneous Equipment	315,235	315,235	315,235
1980-System Supervisory Equipment	776,733	776,733	836,733
1995-Contributions and Grants - Credit	(511,181)	(564,181)	(614,181)
2055-Construction Work in Progress--Electric	153,290	0	0
Capital in Inventory	0	0	0
2075-Non-Utility Property Owned - Generation Facilities	247,506	247,506	247,506
Property plant & equipment	57,940,326	60,225,173	62,493,736
2105-Accumulated Amortization of Electric Utility Plant - Property, Plant and Equipment	(29,909,231)	(30,962,898)	(32,272,395)
2180-Accumulated Depreciation of Non-Utility Property - Generation	(43,359)	(55,732)	(68,105)
Accumulated depreciation	(29,952,590)	(31,018,630)	(32,340,500)
Property plant & equipment net	27,987,736	29,206,543	30,153,236
1806-Land Rights	0	0	0
1925-Computer Software	0	0	0
2055-Construction Work in Progress-Intangibles	0	0	0

Account Description	2015 OEB Actual	2016 Budget	2017 Budget
2120-Accumulated Amortization of Electric Utility Plant - Intangibles	0	0	0
Intangible assets net	0	0	0
1508-Other Regulatory Assets	12,432	28,432	28,432
1531-Renewable Connection Capital Deferral Account	86,187	84,410	84,410
1532-Renewable Connection OM&A Deferral Account	9,968	20,145	20,145
1551-Smart Meter Enity Charge Variance Account	6,697	(2,150)	(2,150)
1568-LRAM Variance Account	34,965	34,965	34,965
1575-IFRS-CGAAP Transitional PP&E Amounts	35,287	64,607	64,607
1589-RSVA - Commodity (GA)	354,095	199,913	199,913
1595-Disposition and Recovery of Regulatory Balances	226,001	(155,341)	0
Adjustment IFRS	0	0	0
Regulatory assets	765,632	274,981	430,322
1460-Other Non-Current Assets	1,879,443	1,879,443	1,879,443
Other non-current assets	1,879,443	1,879,443	1,879,443
Total Assets	40,821,637	40,279,192	40,900,548
2205-Accounts Payable	398,430	405,988	413,697
2208-Customer Credit Balances	200,072	200,072	200,072
2210-Customer Deposits	1,482,521	1,482,521	1,482,521
2220-Miscellaneous Current and Accrued Liabilities	4,190,388	4,316,100	4,445,583
2250-Debt Retirement Charges (DRC) Payable	187,712	187,712	187,712
2290-Commodity Taxes	0	0	0
2294-Accrual for Taxes, "Payments in Lieu" of Taxes, Etc.	135,000	0	0
Accounts payable & accrued charges	6,594,123	6,592,393	6,729,585
2292-Payroll Deductions / Expenses Payable	218,104	218,104	218,104
Other current liabilities	218,104	218,104	218,104
Current Liabilities	6,812,227	6,810,497	6,947,689
2550-Advances from Associated Companies	13,499,953	13,499,953	13,499,953
Inter-company long-term debt & advances	13,499,953	13,499,953	13,499,953
1576-Accounting Changes under CGAAP	191,174	47,793	0
1580-RSVA - Wholesale Market Services	782,760	729,848	729,848
1584-RSVA - Network Charges	234,585	150,132	150,132
1586-RSVA - Connection Charges	34,530	71,094	71,094
1588-RSVA - Commodity (Power)	31,519	(506,832)	(506,832)
IFRS Adjustment	0	0	0
Regulatory liabilities	1,274,568	492,035	444,242
2320-Other Miscellaneous Non-Current Liabilities	1,547,444	1,547,444	1,547,444
Deferred Revenue IFRS	0	0	0
Other deferred amounts & customer deposits	1,547,444	1,547,444	1,547,444
2306-OPEB Liability	1,583,297	1,572,730	1,569,655
Employee future benefits	1,583,297	1,572,730	1,569,655
Total liabilities	24,717,489	23,922,659	24,008,983
3005-Common Shares Issued	12,953,180	12,953,180	12,953,180
3010-Contributed Surplus	9,380,844	10,600,427	11,332,812
3045-Unappropriated Retained Earnings	(113,167)	(113,167)	(113,167)
3046-Balance Transferred From Income	1,219,583	732,385	1,035,032
3049-Dividends Payable-Common Shares	(7,452,500)	(7,932,500)	(8,432,500)
3055-Adjustment to Retained Earnings	116,208	116,208	116,208
3090-Accumulated Other Comprehensive Income	0	0	0
Shareholders' equity	16,104,148	16,356,533	16,891,565
Total Liabilities & Shareholder's Equity	40,821,637	40,279,192	40,900,548
Balance Sheet Total	0	0	(0)

**Welland Hydro-Electric System Corp.
2017 BUDGET INCOME STATEMENT**

Account Description	2015 OEB Actual	2016 Budget	2017 Budget
Sales of Electricity			
4006-Residential Energy Sales	16,374,956	18,198,807	18,761,681
4025-Street Lighting Energy Sales	212,520	166,309	144,678
4030-Sentinel Energy Sales	77,677	88,377	87,907
4035-General Energy Sales	19,476,532	20,940,912	20,616,962
4055-Energy Sales for Retailers/Others	644,700	0	0
4062-Billed - WMS	1,394,481	2,149,818	2,160,763
4076-Billed - Smart Meter Entity Charges	209,653	214,381	216,381
4066-Billed - NW	2,703,150	2,554,261	2,543,534
4068-Billed - CN	2,080,905	2,063,746	2,042,624
Adjustment IFRS	0	0	0
Sales of Electricity	43,174,574	46,376,611	46,574,530
4080-Distribution Services Revenue	8,800,223	8,899,045	9,049,877
May 1st Revenue Adjustments	0	(58,164)	704,271
4086-SSS Revenue	68,913	70,692	77,574
4082-Retail Services Revenues	17,071	10,339	10,339
4084-Service Transaction Requests (STR) Revenues	377	377	377
Adjustment IFRS	0	0	0
Distribution Revenue	8,886,584	8,922,289	9,842,438
4210-Rent from Electric Property	163,602	164,075	164,557
4225-Late Payment Charges	72,853	73,781	73,781
4235-Miscellaneous Service Revenues	187,890	189,829	189,829
Adjustment IFRS	0	0	0
Other Operating Revenues	424,345	427,685	428,167
Power and Distribution Revenue	52,485,503	55,726,585	56,845,135
4705-Power Purchased	25,824,415	28,432,435	28,649,258
4707-Charge - Global Adjustment	10,961,970	10,961,970	10,961,970
4708-WMS	1,394,481	1,684,024	1,692,598
4714-NW	2,703,150	2,554,261	2,543,534
4716-CN	2,080,905	2,063,746	2,042,624
4751-Smart Meter Entity Charges	209,653	214,381	216,381
4730-Rural Rate Assistance Expense	0	465,794	468,165
Adjustment IFRS	0	0	0
Power Supply Expenses Total	43,174,574	46,376,611	46,574,530
Revenues from Service-Distribution	9,310,929	9,349,974	10,270,605
4310-Regulatory Credits	143,382	143,382	47,793
4355-Gain on Disposition of Utility and Other Property	184	8,428	(20,892)
4375-Revenues from Non-Utility Operations	192,245	37,180	37,180
4380-Expenses of Non-Utility Operations	(14,210)	(14,210)	(14,210)
4390-Miscellaneous Non-Operating Income	27,901	29,579	29,579
Miscellaneous Revenue	349,502	204,359	79,450
4405-Interest and Dividend Income	38,381	9,811	4,906
Interest Income	38,381	9,811	4,906
Other Income	387,883	214,170	84,356
Expenses			
5005-Operation Supervision and Engineering	238,998	246,053	269,861
5010-Load Dispatching	150,533	152,734	165,074
5012-Station Buildings and Fixtures Expense	16,691	17,350	17,697
5016-Distribution Station Equipment - Operation Labour	16,981	17,483	19,184
5017-Distribution Station Equipment - Operation Supplies and Expenses	129,204	132,578	135,828

Account Description	2015 OEB Actual	2016 Budget	2017 Budget
5020-Overhead Distribution Lines and Feeders - Operation Labour	163,804	168,657	184,836
5025-Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	44,001	58,910	60,271
5040-Underground Distribution Lines and Feeders - Operation Labour	210,588	195,840	221,942
5055-Underground Distribution Transformers - Operation	5,011	4,861	4,929
5065-Meter Expense	223,098	285,677	303,539
5085-Miscellaneous Distribution Expense	97,365	97,280	100,981
5095-Overhead Distribution Lines and Feeders - Rental Paid	23,970	23,874	24,351
Distribution Expenses - Operation Total	1,320,244	1,401,297	1,508,493
5105-Maintenance Supervision and Engineering	83,978	87,266	95,380
5110-Maintenance of Buildings and Fixtures - Distribution Stations	15,656	15,062	15,326
5114-Maintenance of Distribution Station Equipment	59,280	57,589	57,118
5120-Maintenance of Poles, Towers and Fixtures	188,644	187,445	191,226
5125-Maintenance of Overhead Conductors and Devices	475,431	480,380	486,356
5130-Maintenance of Overhead Services	322,557	327,211	332,998
5135-Overhead Distribution Lines and Feeders - Right of Way	174,760	182,444	186,818
5145-Maintenance of Underground Conduit	3,195	3,311	3,300
5150-Maintenance of Underground Conductors and Devices	187,635	187,469	188,879
5155-Maintenance of Underground Services	143,005	142,852	142,331
5160-Maintenance of Line Transformers	91,509	91,183	90,704
5175-Maintenance of Meters	88,664	91,910	93,774
Distribution Expenses - Maintenance Total	1,834,314	1,854,122	1,884,210
5310-Meter Reading Expense	25,152	25,781	26,088
5315-Customer Billing	846,403	898,776	935,784
5320-Collecting	415,753	409,478	423,913
5325-Collecting - Cash Over and Short	(119)	0	0
5335-Bad Debt Expense	61,809	115,000	117,300
5340-Miscellaneous Customer Accounts Expenses	33,235	34,756	36,388
Billing and Collecting Total	1,382,233	1,483,791	1,539,473
5405-Supervision	45,165	46,571	49,043
5410-Community Relations - Sundry	7,848	8,579	8,798
5415-Energy Conservation	70,295	77,554	81,692
5420-Community Safety Program	3,928	3,500	3,570
5515-Advertising Expense	1,050	1,000	1,020
Community Relations Total	128,286	137,204	144,123
5605-Executive Salaries and Expenses	373,402	387,485	398,742
5610-Management Salaries and Expenses	477,066	572,550	591,077
5615-General Administrative Salaries and Expenses	371,055	367,944	381,912
5630-Outside Services Employed	129,944	142,546	145,207
5645-Post Retirement Benefits	84,342	98,163	103,766
5655-Regulatory Expenses	63,752	91,973	146,402
5665-Miscellaneous Expenses	130,332	126,318	132,593
5680-Electrical Safety Authority Fees	9,968	10,793	11,009
Administrative	1,639,861	1,797,772	1,910,708
6205-Donations - LEAP	11,500	11,750	12,900
6205-Donations	6,831	10,000	10,000
Donations	18,331	21,750	22,900
Administrative & General	3,168,711	3,440,517	3,617,204
5705-Amortization Expense - Property, Plant and Equipment	1,304,209	1,366,650	1,429,600
Amortization Expense Non Utility Assets	0	0	0
Amortization Expense Total	1,304,209	1,366,650	1,429,600
6005-Interest on Long Term Debt	0	0	0
6030-Interest on Debt to Associated Companies	859,215	843,747	843,747

Account Description	2015 OEB Actual	2016 Budget	2017 Budget
6035-Other Interest Expense	22,827	6,886	6,886
Financing	882,042	850,633	850,633
Total Expenses	8,509,520	8,913,219	9,290,140
Net Income Before Taxes	1,189,292	650,925	1,064,821
6110-Income Taxes	127,169	(81,459)	29,790
6115-Provision for Deferred Taxes - Income Statement	(157,463)	0	0
Adjustment IFRS	0	0	0
Income Taxes	(30,294)	(81,459)	29,790
Net Income (Loss)	1,219,583	732,385	1,035,032
Net movement in regulatory balances, net of tax	0	0	0
Net income (Loss) for the year and net movement in regulatory balances	1,219,583	732,385	1,035,032
Other Comprehensive Income	0	0	0
Comprehensive Income (Loss)	1,219,583	732,385	1,035,032

TAB – E

OEB VERSUS FINANCIAL STATEMENT REPORTING

Welland Hydro-Electric System Corp.
2015 BALANCE SHEET RECONCILIATION OEB VERSUS FINANCIAL STATEMENTS

Account Description	IFRS	Pole Line Generation	OEB Entry Only	IFRS Adjustment	2015 OEB Actual
Current assets					
Cash & cash equivalents	2,294,206	0	0	0	2,294,206
1100-Customer Accounts Receivable	1,917,258				1,917,258
1104-Accounts Receivable - Recoverable Work	265,033				265,033
1120-Accrued Utility Revenues	5,075,618				5,075,618
1130-Accumulated Provision for Uncollectable Accounts - Credit	(124,767)				(124,767)
1140-Interest and Dividends Receivable	2,557				2,557
Receivables & unbilled	7,135,699	0	0	0	7,135,699
1330-Plant Materials and Operating Supplies	283,357			100,000	383,357
Inventory	283,357	0	0	100,000	383,357
1200-Accounts Receivable from Associated Companies	106,337				106,337
1210-Notes Receivable from Associated Companies	1				1
Inter-company receivables	106,338	0	0	0	106,338
1180-Prepayments	219,996				219,996
2290-Commodity Taxes	0			49,228	49,228
Other current assets	219,996	0	0	49,228	269,226
Current assets	10,039,596	0	0	149,228	10,188,826
1805-Land	158,686				158,686
1806-Land Rights	0			70,296	70,296
1808-Buildings and Fixtures	35,341			61,227	96,568
1815-Transformer Station Equipment - Normally Primary above 50 kV	414,656			52,703	467,359
1820-Distribution Station Equipment - Normally Primary below 50 kV	1,732,995			2,431,770	4,164,764
1830-Poles, Towers and Fixtures	8,096,424	(88,852)		1,275,629	9,283,201
1835-Overhead Conductors and Devices	4,989,104			8,428,520	13,417,624
1840-Underground Conduit	1,169,615			148,489	1,318,104
1845-Underground Conductors and Devices	3,902,557			7,290,658	11,193,215
1850-Line Transformers	3,609,713			3,331,723	6,941,437
1855-Services	721,759			138,212	859,971
1860-Meters	2,271,653			784,073	3,055,726
1908-Buildings and Fixtures	1,466,702			1,088,695	2,555,397
1915-Office Furniture and Equipment	35,205			55,241	90,446
1920-Computer Equipment - Hardware	220,047			31,705	251,752
1925-Computer Software	0			897,969	897,969
1930-Transportation Equipment	641,715			1,062,766	1,704,481
1935-Stores Equipment	1,414			28,609	30,023
1940-Tools, Shop and Garage Equipment	25,167			57,876	83,043
1945-Measurement and Testing Equipment	6,319			14,131	20,450
1955-Communication Equipment	188,989			109,242	298,231
1960-Miscellaneous Equipment	222,556			92,679	315,235
1980-System Supervisory Equipment	285,254			491,479	776,733
1995-Contributions and Grants - Credit	0			(511,181)	(511,181)
2055-Construction Work in Progress--Electric	117,800			35,490	153,290
Capital in Inventory	100,000			(100,000)	0
2075-Non-Utility Property Owned - Generation Facilities	228,894			18,612	247,506
Property plant & equipment	30,642,567	(88,852)	0	27,386,613	57,940,326
2105-Accumulated Amortization of Electric Utility Plant - Property, Plant and Equipment	(2,311,914)	2,665		(27,599,982)	(29,909,231)
2180-Accumulated Depreciation of Non-Utility Property - Generation	(24,747)			(18,612)	(43,359)
Accumulated depreciation	(2,336,661)	2,665	0	(27,618,594)	(29,952,590)
Property plant & equipment net	28,305,906	(86,187)	0	(231,981)	27,987,736
1806-Land Rights	10,025			(10,025)	0
1925-Computer Software	568,824			(568,824)	0
2055-Construction Work in Progress-Intangibles	35,490			(35,490)	0
2120-Accumulated Amortization of Electric Utility Plant - Intangibles	(246,233)			246,233	0
Intangible assets net	368,106	0	0	(368,106)	0
1508-Other Regulatory Assets	12,432				12,432
1531-Renewable Connection Capital Deferral Account	0	86,187			86,187
1532-Renewable Connection OM&A Deferral Account	0	2,665	7,303		9,968
1551-Smart Meter Entry Charge Variance Account	6,697				6,697
1568-LRAM Variance Account	0		34,965		34,965
1575-IFRS-CGAAP Transitional PP&E Amounts	35,287				35,287
1589-RSVA - Commodity (GA)	354,095				354,095

Account Description	IFRS	Pole Line Generation	OEB Entry Only	IFRS Adjustment	2015 OEB Actual
1595-Disposition and Recovery of Regulatory Balances	226,001				226,001
Adjustment IFRS	332,364			(332,364)	0
Regulatory assets	966,876	88,852	42,268	(332,364)	765,632
1460-Other Non-Current Assets	1,547,444			331,999	1,879,443
Other non-current assets	1,547,444	0	0	331,999	1,879,443
Total Assets	41,227,928	2,665	42,268	(451,224)	40,821,637
2205-Accounts Payable	398,430				398,430
2208-Customer Credit Balances	200,072				200,072
2210-Customer Deposits	1,482,521				1,482,521
2220-Miscellaneous Current and Accrued Liabilities	4,190,388				4,190,388
2250-Debt Retirement Charges (DRC) Payable	187,712				187,712
2290-Commodity Taxes	(49,228)			49,228	0
2294-Accrual for Taxes, "Payments in Lieu" of Taxes, Etc.	135,000				135,000
Accounts payable & accrued charges	6,544,895	0	0	49,228	6,594,123
2292-Payroll Deductions / Expenses Payable	218,104				218,104
Other current liabilities	218,104	0	0	0	218,104
Current Liabilities	6,762,999	0	0	49,228	6,812,227
2550-Advances from Associated Companies	13,499,953				13,499,953
Inter-company long-term debt & advances	13,499,953	0	0	0	13,499,953
1576-Accounting Changes under CGAAP	191,174				191,174
1580-RSVA - Wholesale Market Services	782,760				782,760
1584-RSVA - Network Charges	234,585				234,585
1586-RSVA - Connection Charges	34,897			(367)	34,530
1588-RSVA - Commodity (Power)	31,519				31,519
IFRS Adjustment	1,547,444			(1,547,444)	0
Regulatory liabilities	2,822,379	0	0	(1,547,811)	1,274,568
2320-Other Miscellaneous Non-Current Liabilities	0			1,547,444	1,547,444
Deferred Revenue IFRS	500,085			(500,085)	0
Other deferred amounts & customer deposits	500,085	0	0	1,047,359	1,547,444
2306-OPEB Liability	1,583,297				1,583,297
Employee future benefits	1,583,297	0	0	0	1,583,297
Total liabilities	25,168,713	0	0	(451,224)	24,717,489
3005-Common Shares Issued	12,953,180				12,953,180
3010-Contributed Surplus	9,379,957	887			9,380,844
3045-Unappropriated Retained Earnings	(113,167)				(113,167)
3046-Balance Transferred From Income	1,175,537	1,778	42,268		1,219,583
3049-Dividends Payable-Common Shares	(7,452,500)				(7,452,500)
3055-Adjustment to Retained Earnings	0			116,208	116,208
3090-Accumulated Other Comprehensive Income	116,208			(116,208)	0
Shareholders' equity	16,059,215	2,665	42,268	0	16,104,148
Total Liabilities & Shareholder's Equity	41,227,928	2,665	42,268	(451,224)	40,821,637
Balance Sheet Total	0	0	0	0	0

Welland Hydro-Electric System Corp.
2015 INCOME STATEMENT OEB VERSUS FINANCIAL STATEMENTS

Account Description	IFRS	Pole Line Generation	OEB Entry Only	IFRS Adjustment	2015 OEB Actual
Sales of Electricity					
4006-Residential Energy Sales	16,374,956				16,374,956
4025-Street Lighting Energy Sales	212,520				212,520
4030-Sentinel Energy Sales	77,677				77,677
4035-General Energy Sales	19,476,532				19,476,532
4055-Energy Sales for Retailers/Others	644,700				644,700
4062-Billed - WMS	1,394,481				1,394,481
4076-Billed - Smart Meter Entity Charges	209,653				209,653
4066-Billed - NW	2,703,150				2,703,150
4068-Billed - CN	2,080,905				2,080,905
Adjustment IFRS	1,160,815			(1,160,815)	0
Sales of Electricity	44,335,389	0	0	(1,160,815)	43,174,574
4080-Distribution Services Revenue	8,800,223				8,800,223
May 1st Revenue Adjustments	0				0
4086-SSS Revenue	68,913				68,913
4082-Retail Services Revenues	17,071				17,071
4084-Service Transaction Requests (STR) Revenues	377				377
Adjustment IFRS	382,892		34,965	(417,857)	0
Distribution Revenue	9,269,476	0	34,965	(417,857)	8,886,584
4210-Rent from Electric Property	0			163,602	163,602
4225-Late Payment Charges	0			72,853	72,853
4235-Miscellaneous Service Revenues	0			187,890	187,890
Adjustment IFRS	200,012			(200,012)	0
Other Operating Revenues	200,012	0	0	224,333	424,345
Power and Distribution Revenue	53,804,877	0	34,965	(1,354,339)	52,485,503
4705-Power Purchased	25,824,415				25,824,415
4707-Charge - Global Adjustment	10,961,970				10,961,970
4708-WMS	1,394,481				1,394,481
4714-NW	2,703,150				2,703,150
4716-CN	2,080,905				2,080,905
4751-Smart Meter Entity Charges	209,653				209,653
4730-Rural Rate Assistance Expense	0				0
Adjustment IFRS	704,561			(704,561)	0
Power Supply Expenses Total	43,879,135	0	0	(704,561)	43,174,574
Revenues from Service-Distribution	9,925,742	0	34,965	(649,778)	9,310,929
4310-Regulatory Credits	0			143,382	143,382
4355-Gain on Disposition of Utility and Other Property	0			184	184
4375-Revenues from Non-Utility Operations	0			192,245	192,245
4380-Expenses of Non-Utility Operations	0			(14,210)	(14,210)
4390-Miscellaneous Non-Operating Income	0			27,901	27,901
Miscellaneous Revenue	0	0	0	349,502	349,502
4405-Interest and Dividend Income	29,155			9,226	38,381
Interest Income	29,155	0	0	9,226	38,381
Other Income	29,155	0	0	358,728	387,883
Expenses					
5005-Operation Supervision and Engineering	238,998				238,998
5010-Load Dispatching	150,533				150,533
5012-Station Buildings and Fixtures Expense	16,691				16,691
5016-Distribution Station Equipment - Operation Labour	16,981				16,981
5017-Distribution Station Equipment - Operation Supplies and Expenses	129,204				129,204
5020-Overhead Distribution Lines and Feeders - Operation Labour	163,804				163,804
5025-Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	44,001				44,001
5040-Underground Distribution Lines and Feeders - Operation Labour	210,588				210,588
5055-Underground Distribution Transformers - Operation	5,011				5,011
5065-Meter Expense	223,098				223,098
5085-Miscellaneous Distribution Expense	97,365				97,365
5095-Overhead Distribution Lines and Feeders - Rental Paid	23,970				23,970
Distribution Expenses - Operation Total	1,320,244	0	0	0	1,320,244
5105-Maintenance Supervision and Engineering	83,978				83,978
5110-Maintenance of Buildings and Fixtures - Distribution Stations	15,656				15,656
5114-Maintenance of Distribution Station Equipment	59,280				59,280
5120-Maintenance of Poles, Towers and Fixtures	188,644				188,644

Account Description	IFRS	Pole Line Generation	OEB Entry Only	IFRS Adjustment	2015 OEB Actual
5125-Maintenance of Overhead Conductors and Devices	475,431				475,431
5130-Maintenance of Overhead Services	322,557				322,557
5135-Overhead Distribution Lines and Feeders - Right of Way	174,760				174,760
5145-Maintenance of Underground Conduit	3,195				3,195
5150-Maintenance of Underground Conductors and Devices	187,635				187,635
5155-Maintenance of Underground Services	143,005				143,005
5160-Maintenance of Line Transformers	91,509				91,509
5175-Maintenance of Meters	88,664				88,664
Distribution Expenses - Maintenance Total	1,834,314	0	0	0	1,834,314
5310-Meter Reading Expense	25,152				25,152
5315-Customer Billing	853,706		(7,303)		846,403
5320-Collecting	415,753				415,753
5325-Collecting - Cash Over and Short	(119)				(119)
5335-Bad Debt Expense	61,809				61,809
5340-Miscellaneous Customer Accounts Expenses	33,235				33,235
Billing and Collecting Total	1,389,536	0	(7,303)	0	1,382,233
5405-Supervision	45,165				45,165
5410-Community Relations - Sundry	7,848				7,848
5415-Energy Conservation	70,295				70,295
5420-Community Safety Program	3,928				3,928
5515-Advertising Expense	1,050				1,050
Community Relations Total	128,286	0	0	0	128,286
5605-Executive Salaries and Expenses	373,402				373,402
5610-Management Salaries and Expenses	477,066				477,066
5615-General Administrative Salaries and Expenses	371,055				371,055
5630-Outside Services Employed	137,894			(7,950)	129,944
5645-Post Retirement Benefits	84,342				84,342
5655-Regulatory Expenses	63,752				63,752
5665-Miscellaneous Expenses	130,332				130,332
5680-Electrical Safety Authority Fees	9,968				9,968
Administrative	1,647,811	0	0	(7,950)	1,639,861
6205-Donations - LEAP	11,500				11,500
6205-Donations	6,831				6,831
Donations	18,331	0	0	0	18,331
Administrative & General	3,183,964	0	(7,303)	(7,950)	3,168,711
5705-Amortization Expense - Property, Plant and Equipment	1,315,590	(1,778)		(9,603)	1,304,209
Amortization Expense Non Utility Assets	12,374			(12,374)	0
Amortization Expense Total	1,327,964	(1,778)	0	(21,977)	1,304,209
6005-Interest on Long Term Debt	0				0
6030-Interest on Debt to Associated Companies	859,215				859,215
6035-Other Interest Expense	6,886			15,941	22,827
Financing	866,101	0	0	15,941	882,042
Total Expenses	8,532,587	(1,778)	(7,303)	(13,986)	8,509,520
Net Income Before Taxes	1,422,310	1,778	42,268	(277,064)	1,189,292
6110-Income Taxes	127,169				127,169
6115-Provision for Deferred Taxes - Income Statement	(157,463)				(157,463)
Adjustment IFRS	(121,728)			121,728	0
Income Taxes	(152,022)	0	0	121,728	(30,294)
Net Income (Loss)	1,574,332	1,778	42,268	(398,792)	1,219,583
Net movement in regulatory balances, net of tax	(398,792)			398,792	0
Net income (Loss) for the year and net movement in regulatory balances	1,175,537	1,775	42,265	0	1,219,583
Other Comprehensive Income	0	0	0	0	0
Comprehensive Income (Loss)	1,175,537	1,775	42,265	0	1,219,583

Welland Hydro-Electric System Corp.
2016 & 2017 INCOME STATEMENT OEB VERSUS FINANCIAL STATEMENTS

Account Description	2016 OEB Forecast	2016 Adjustment	2016 Budget	2017 OEB Forecast	2017 Adjustment	2017 Budget
Sales of Electricity						
4006-Residential Energy Sales	18,198,807		18,198,807	18,761,681		18,761,681
4025-Street Lighting Energy Sales	166,309		166,309	144,678		144,678
4030-Sentinel Energy Sales	88,377		88,377	87,907		87,907
4035-General Energy Sales	20,940,912		20,940,912	20,616,962		20,616,962
4055-Energy Sales for Retailers/Others	0		0	0		0
4062-Billed - WMS	2,149,818		2,149,818	2,160,763		2,160,763
4076-Billed - Smart Meter Entity Charges	214,381		214,381	216,381		216,381
4066-Billed - NW	2,554,261		2,554,261	2,543,534		2,543,534
4068-Billed - CN	2,063,746		2,063,746	2,042,624		2,042,624
Adjustment IFRS	0		0	0		0
Sales of Electricity	46,376,611	0	46,376,611	46,574,530	0	46,574,530
4080-Distribution Services Revenue	8,899,045		8,899,045	9,049,877		9,049,877
May 1st Revenue Adjustments		(58,164)	(58,164)	1,056,407	(352,136)	704,271
4086-SSS Revenue	70,692		70,692	77,574		77,574
4082-Retail Services Revenues	10,339		10,339	10,339		10,339
4084-Service Transaction Requests (STR) Revenues	377		377	377		377
Adjustment IFRS	0		0	0		0
Distribution Revenue	8,980,453	(58,164)	8,922,289	10,194,574	(352,136)	9,842,438
4210-Rent from Electric Property	164,075		164,075	164,557		164,557
4225-Late Payment Charges	73,781		73,781	73,781		73,781
4235-Miscellaneous Service Revenues	189,829		189,829	189,829		189,829
Adjustment IFRS	0		0	0		0
Other Operating Revenues	427,685	0	427,685	428,167	0	428,167
Power and Distribution Revenue	55,784,749	(58,164)	55,726,585	57,197,271	(352,136)	56,845,135
4705-Power Purchased	39,394,405	(10,961,970)	28,432,435	39,611,228	(10,961,970)	28,649,258
4707-Charge - Global Adjustment	0	10,961,970	10,961,970	0	10,961,970	10,961,970
4708-WMS	1,684,024		1,684,024	1,692,598		1,692,598
4714-NW	2,554,261		2,554,261	2,543,534		2,543,534
4716-CN	2,063,746		2,063,746	2,042,624		2,042,624
4751-Smart Meter Entity Charges	214,381		214,381	216,381		216,381
4730-Rural Rate Assistance Expense	465,794		465,794	468,165		468,165
Adjustment IFRS	0		0	0		0
Power Supply Expenses Total	46,376,611	0	46,376,611	46,574,530	0	46,574,530
Revenues from Service-Distribution	9,408,138	(58,164)	9,349,974	10,622,741	(352,136)	10,270,605
4310-Regulatory Credits	143,382		143,382	0	47,793	47,793
4355-Gain on Disposition of Utility and Other Property	8,428		8,428	(20,892)		(20,892)
4375-Revenues from Non-Utility Operations	0	37,180	37,180	0	37,180	37,180
4380-Expenses of Non-Utility Operations	0	(14,210)	(14,210)	0	(14,210)	(14,210)
4390-Miscellaneous Non-Operating Income	29,579		29,579	29,579		29,579
Miscellaneous Revenue	181,389	22,970	204,359	8,687	70,763	79,450
4405-Interest and Dividend Income	9,811		9,811	4,906		4,906
Interest Income	9,811	0	9,811	4,906	0	4,906
Other Income	191,200	22,970	214,170	13,593	70,763	84,366
Expenses						
5005-Operation Supervision and Engineering	246,053		246,053	269,861		269,861
5010-Load Dispatching	152,734		152,734	165,074		165,074
5012-Station Buildings and Fixtures Expense	17,350		17,350	17,697		17,697
5016-Distribution Station Equipment - Operation Labour	17,483		17,483	19,184		19,184
5017-Distribution Station Equipment - Operation Supplies and Expenses	132,578		132,578	135,828		135,828
5020-Overhead Distribution Lines and Feeders - Operation Labour	168,657		168,657	184,836		184,836
5025-Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	58,910		58,910	60,271		60,271
5040-Underground Distribution Lines and Feeders - Operation Labour	195,840		195,840	221,942		221,942
5055-Underground Distribution Transformers - Operation	4,861		4,861	4,929		4,929
5065-Meter Expense	285,677		285,677	303,539		303,539
5085-Miscellaneous Distribution Expense	97,280		97,280	100,981		100,981
5095-Overhead Distribution Lines and Feeders - Rental Paid	23,874		23,874	24,351		24,351
Distribution Expenses - Operation Total	1,401,297	0	1,401,297	1,508,493	0	1,508,493
5105-Maintenance Supervision and Engineering	87,266		87,266	95,380		95,380
5110-Maintenance of Buildings and Fixtures - Distribution Stations	15,062		15,062	15,326		15,326
5114-Maintenance of Distribution Station Equipment	57,589		57,589	57,118		57,118
5120-Maintenance of Poles, Towers and Fixtures	187,445		187,445	191,226		191,226
5125-Maintenance of Overhead Conductors and Devices	480,380		480,380	486,356		486,356
5130-Maintenance of Overhead Services	327,211		327,211	332,998		332,998
5135-Overhead Distribution Lines and Feeders - Right of Way	182,444		182,444	186,818		186,818
5145-Maintenance of Underground Conduit	3,311		3,311	3,300		3,300
5150-Maintenance of Underground Conductors and Devices	187,469		187,469	188,879		188,879
5155-Maintenance of Underground Services	142,852		142,852	142,331		142,331
5160-Maintenance of Line Transformers	91,183		91,183	90,704		90,704

Account Description	2016 OEB Forecast	2016 Adjustment	2016 Budget	2017 OEB Forecast	2017 Adjustment	2017 Budget
5175-Maintenance of Meters	91,910		91,910	93,774		93,774
Distribution Expenses - Maintenance Total	1,854,122	0	1,854,122	1,884,210	0	1,884,210
5310-Meter Reading Expense	25,781		25,781	26,088		26,088
5315-Customer Billing	890,376	8,400	898,776	935,784		935,784
5320-Collecting	409,478		409,478	423,913		423,913
5325-Collecting - Cash Over and Short			0			0
5335-Bad Debt Expense	115,000		115,000	117,300		117,300
5340-Miscellaneous Customer Accounts Expenses	34,756		34,756	36,388		36,388
Billing and Collecting Total	1,475,391	8,400	1,483,791	1,539,473	0	1,539,473
5405-Supervision	46,571		46,571	49,043		49,043
5410-Community Relations - Sundry	8,579		8,579	8,798		8,798
5415-Energy Conservation	77,554		77,554	81,692		81,692
5420-Community Safety Program	3,500		3,500	3,570		3,570
5515-Advertising Expense	1,000		1,000	1,020		1,020
Community Relations Total	137,204	0	137,204	144,123	0	144,123
5605-Executive Salaries and Expenses	387,485		387,485	398,742		398,742
5610-Management Salaries and Expenses	572,550		572,550	591,077		591,077
5615-General Administrative Salaries and Expenses	367,944		367,944	381,912		381,912
5630-Outside Services Employed	142,546		142,546	145,207		145,207
5645-Post Retirement Benefits	98,163		98,163	103,766		103,766
5655-Regulatory Expenses	91,973		91,973	146,402		146,402
5665-Miscellaneous Expenses	126,318		126,318	132,593		132,593
5680-Electrical Safety Authority Fees	10,793		10,793	11,009		11,009
Administrative	1,797,772	0	1,797,772	1,910,708	0	1,910,708
6205-Donations - LEAP	11,750		11,750	12,900		12,900
6205-Donations	0	10,000	10,000	0	10,000	10,000
Donations	11,750	10,000	21,750	12,900	10,000	22,900
Administrative & General	3,422,117	18,400	3,440,517	3,607,204	10,000	3,617,204
5705-Amortization Expense - Property, Plant and Equipment	1,366,650		1,366,650	1,429,600		1,429,600
Amortization Expense Non Utility Assets			0			0
Amortization Expense Total	1,366,650	0	1,366,650	1,429,600	0	1,429,600
6005-Interest on Long Term Debt	0		0	0		0
6030-Interest on Debt to Associated Companies	811,723	32,024	843,747	874,137	(30,390)	843,747
6035-Other Interest Expense		6,886	6,886		6,886	6,886
Financing	811,723	38,910	850,633	874,137	(23,504)	850,633
Total Expenses	8,855,909	57,310	8,913,219	9,303,644	(13,504)	9,290,140
Net Income Before Taxes	743,429	(92,504)	650,925	1,332,690	(267,869)	1,064,821
6110-Income Taxes	(56,946)	(24,513)	(81,459)	100,775	(70,985)	29,790
6115-Provision for Deferred Taxes - Income Statement			0			0
Adjustment IFRS			0			0
Income Taxes	(56,946)	(24,513)	(81,459)	100,775	(70,985)	29,790
Net Income (Loss)	800,375	(67,990)	732,385	1,231,915	(196,883)	1,035,032
Net movement in regulatory balances, net of tax	0	0	0	0	0	0
Net income (Loss) for the year and net movement in regulatory balances	800,375	(67,990)	732,385	1,231,915	(196,883)	1,035,032
Other Comprehensive Income	0	0	0	0	0	0
Comprehensive Income (Loss)	800,375	(67,990)	732,385	1,231,915	(196,883)	1,035,032

Appendix 1-B

Welland Hydro-Electric System Corp.

2015 OEB Scorecard

Scorecard - Welland Hydro-Electric System Corp.

Performance Outcomes	Performance Categories	Measures	2011	2012	2013	2014	2015	Trend	Target	
									Industry	Distributor
Customer Focus Services are provided in a manner that responds to identified customer preferences.	Service Quality	New Residential/Small Business Services Connected on Time	100.00%	100.00%	100.00%	94.00%	100.00%		90.00%	
		Scheduled Appointments Met On Time	99.70%	99.70%	99.40%	99.70%	98.50%		90.00%	
		Telephone Calls Answered On Time	99.90%	98.40%	99.00%	96.90%	98.50%		65.00%	
	Customer Satisfaction	First Contact Resolution				78%	84			
		Billing Accuracy				99.99%	99.99%		98.00%	
		Customer Satisfaction Survey Results				88%	90			
Operational Effectiveness Continuous improvement in productivity and cost performance is achieved; and distributors deliver on system reliability and quality objectives.	Safety	Level of Public Awareness					84.00%			
		Level of Compliance with Ontario Regulation 22/04 ¹	C	C	C	C	C		C	
		Serious Electrical Incident Index	Number of General Public Incidents	0	0	0	0	0		0
	Rate per 10, 100, 1000 km of line		0.000	0.000	0.000	0.000	0.000		0.000	
	System Reliability	Average Number of Hours that Power to a Customer is Interrupted ²	2.84	1.26	4.86	1.53	1.74		2.27	
		Average Number of Times that Power to a Customer is Interrupted ²	1.92	1.33	2.34	1.76	1.39		1.80	
	Asset Management	Distribution System Plan Implementation Progress				On Track	On Track			
	Cost Control	Efficiency Assessment		2	2	2	2			
Total Cost per Customer ³		\$463	\$482	\$472	\$483	\$493				
Total Cost per Km of Line ³		\$33,562	\$23,071	\$23,533	\$23,278	\$23,293				
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 Cumulative Energy Savings ⁴					6.78%		25.50 GWh	
	Connection of Renewable Generation	Renewable Generation Connection Impact Assessments Completed On Time	50.00%							
		New Micro-embedded Generation Facilities Connected On Time			100.00%	100.00%	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)	2.87	2.84	1.42	1.61	1.50			
		Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio	1.23	1.16	1.15	0.87	0.84			
		Profitability: Regulatory Return on Equity	Deemed (included in rates)	8.01%	8.01%	8.93%	8.93%	8.93%		
			Achieved	5.74%	6.73%	10.50%	9.98%	8.72%		

1. Compliance with Ontario Regulation 22/04 assessed: Compliant (C); Needs Improvement (NI); or Non-Compliant (NC).
 2. The trend's arrow direction is based on the comparison of the current 5-year rolling average to the fixed 5-year (2010 to 2014) average distributor-specific target on the right. An upward arrow indicates decreasing reliability while downward indicates improving reliability.
 3. A benchmarking analysis determines the total cost figures from the distributor's reported information.
 4. The CDM measure is based on the new 2015-2020 Conservation First Framework. This measure is under review and subject to change in the future.

Legend:

5-year trend
 up down flat

Current year
 target met target not met

2015 Scorecard Management Discussion and Analysis (“2015 Scorecard MD&A”)

The link below provides a document titled “Scorecard - Performance Measure Descriptions” that has the technical definition, plain language description and how the measure may be compared for each of the Scorecard’s measures in the 2015 Scorecard MD&A:

[http://www.ontarioenergyboard.ca/OEB/ Documents/scorecard/Scorecard Performance Measure Descriptions.pdf](http://www.ontarioenergyboard.ca/OEB/Documents/scorecard/Scorecard%20Performance%20Measure%20Descriptions.pdf)

Scorecard MD&A - General Overview

The 2015 scorecard reflects another very successful year for Welland Hydro (“WHESC”) as actual performance measures exceeded industry targets in every category. The results reflect WHESC’s commitment to a locally owned distribution company providing safe reliable power at competitive rates thru prudent planning of distribution system capital expenditures and cost management. WHESC continues to seek ways to meet the needs of its valued customers, employees, shareholder, regulators, energy conservation initiatives, and renewable generation projects. The results also reflect the efforts of WHESC’s committed professional staff members to accomplishing these goals while maintaining a financially strong company able to meet the needs of its customers now and in the future.

Service Quality

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

In 2015, WHESC connected 100% of 237 eligible new low-voltage and small business customers to the distribution system within the five-day timeline as prescribed by the Ontario Energy Board (OEB). WHESC exceeded the OEB mandated threshold of 90%.

- **Scheduled Appointments Met On Time**

WHESC scheduled 1347 appointments with customers in **2015**. WHESC completed 98.5% appointments on time – exceeding the industry target of 90%.

- **Telephone Calls Answered On Time**

In 2015, WHESC's Contact Centre representatives answered 98.5% of 31,980 calls within 30 seconds or less, above the OEB mandated 65% target for timely call response. WHESC also used the Customer Satisfaction Survey to identify the primary information customers require when calling our office to ensure Contact Centre representatives are well informed in accessing the necessary information to answer any inquiries from customers.

Customer Satisfaction

- **First Contact Resolution**

First Contact Resolution measurements have not been previously defined across the industry. The OEB has instructed all electricity distributors to review and develop measurements in these areas.

First Contact Resolution requires front line staff to be prepared to respond to customer issues effectively, accurately and to the complete satisfaction of the customer. WHESC staff need to be well trained to develop expertise in the ability to listen and communicate with customers. Customer Contact representatives have quick access to information required to address customer concerns, needs, and preferences. As part of the 2015 Customer Satisfaction Survey (telephone survey), 406 customers were asked if they contacted WHESC by phone or in person and were asked about the following six aspects of their most recent experience with a representative from WHESC:

1. Information - quality of information provided
2. Staff attitude - level of courtesy
3. Professionalism - knowledge of staff
4. Delivery - helpfulness of staff
5. Timeliness - length of time it took to get information requested by the customer
6. Accessibility

WHESC's First Contact Resolution performance is reflected in the high percentages shown below for customers who were Very Satisfied or Fairly Satisfied with the response received to their questions or concerns.

80% - The time it took to contact someone.

69% - The time it took someone to deal with the issue.

83% - Helpfulness of the staff who dealt with the problem.

76% - Knowledge of the staff who dealt with the customer.

91% - Courtesy of the staff that dealt with the issue.

76% - Quality of information provided by staff that dealt with the issue.

79% - Overall very or fairly satisfied with most recent telephone or in-person contact experience.

- **Billing Accuracy**

WHESC issued 275,968 invoices during 2015, with a billing accuracy of 99.99% which far exceeds the OEB Standard of 98%.

- **Customer Satisfaction Survey Results**

WHESC engages a third party to conduct by telephone, a Customer Satisfaction Survey. This survey provides information that identifies areas to improve customer service at all levels and departments within WHESC. Customer inputs and opinions are sought on a wide range of topics, including: social media, overall satisfaction with WHESC, reliability, customer contact representatives, outages, billing accuracy, corporate image, customer expectations, and customer needs. WHESC uses the survey results to assist in developing processes to meet or exceed customer's expectations. In the 2015 OEB Scorecard WHESC reported that the percentage of customers that were Very Satisfied or Fairly Satisfied with WHESC were 90% which is an improvement over 2014 results. Another measure developed by the survey provider, is a "Customer Satisfaction Survey Report Card" that measures utilities against their peers across Ontario on Customer Care, Company Image, and Management Operations. Although not reported on the scorecard, WHESC received an "A" rating, which exceeded the Ontario LDC Average Score of "B+".

Safety

○ Public Safety

○ Component A – Public Awareness of Electrical Safety

WHESC completed its first Public Electrical Safety Survey in 2015. The results indicate that a significant number of customers/contractors (84%) have a good knowledge or have received some information pertaining to the six core measurement questions. WHESC will continue to promote electrical safety in the community through the use of elementary school safety programs and a variety of electrical safety radio campaigns.

○ Component B – Compliance with Ontario Regulation 22/04

The metric measuring Ontario Regulation 22/04 (the 'Regulation') assesses an LDC's compliance with the ESA's standard for safety performance based on requirements for the design, construction, and maintenance of electrical distribution systems. Over the past four years, WHESC was independently audited and found to be in compliance with Regulation 22/04. The audit consisted of a review of the Declaration of Compliance, Due Diligence inspections, Public Safety Concerns, and Compliance Investigations.

○ Component C – Serious Electrical Incident Index

WHESC has had no serious electrical incidents resulting in death or critical injury over the last five years.

System Reliability

System Reliability is key component of the OEB's Renewed Regulatory Framework. Distributors are required to measure system reliability indices with a goal towards continuous improvements. The two metrics used to track individual distributor's system reliability performance are Customer Outage Duration and Customer Power Outage Frequency. The score card shows the distributor's performance over a five year period. All distributors have a potential exposure to significant year over year volatility experienced due to major weather events. As weather impacts become more prevalent, they will continue to influence year over year volatility.

○ Average Number of Hours that Power to a Customer is Interrupted

Recovering from power outages as quickly as possible is valued by customers. System Average Interruption Duration Index (SAIDI) is the formula used to measure the average number of hours that power to a customer is interrupted. SAIDI is equal to the sum of all interruption durations / total number of customers served. The Wind Storm of 2011 and the Ice Storm of 2013 resulted in SAIDI indices above normal in their respective years. The performance index in 2015 at 1.74 was well below the five year average target of 2.27. Programs such as vegetation control, capital spending, and outage management system initiatives will continue to be evaluated with a goal to maintain and produce continuous improvements.

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

System Average Interruption Frequency Index (SAIFI) is equal to the Total number of Customer Interruptions experienced by all customers (excluding interruptions caused by upstream Loss of Supply events to the distributor) / Average number of customers served. In 2015, WHESC reported an average of 1.39 outages per customer and has consistently been within the OEB defined acceptable range. SAIFI performance has been trending lower due to WHESC's commitment to improving system reliability. Indices are reviewed regularly to identify negative trends in feeder performance. Ratepayer and utility affordability are balanced with distribution system risk.

Asset Management

- **Distribution System Plan Implementation Progress**

The Distribution System Plan ("DSP") outlines WHESC's forecasted capital expenditure requirements over the next five years. Replacement programs for aging assets form part of WHESC's DSP which will be submitted for the first time as part of the 2017 Cost of Service Rate Application scheduled for filing in September, 2016. WHESC has engaged its customers as part of the DSP process, seeking their input on WHESC's forecasted capital spending plans. As the DSP has not currently been approved by the OEB, WHESC has reported the progress as on track.

Cost Control

- **Efficiency Assessment**

Total Costs for Ontario's distribution companies ("LDCs") are evaluated by the Pacific Economics Group LLC on behalf of the OEB to produce a single efficiency ranking. LDCs are divided into five groups based on the magnitude of the difference between their respective individual actual and predicted costs. In 2015, WHESC maintained its position in the second efficiency group (Actual Costs 10% to 25% below Predicted Costs). This placed WHESC well within the top 20 electricity distributors in all of Ontario for cost efficiency. Performance in 2015 showed actual costs 18.7% below predicted. This increased WHESC's three year average performance from 14.3% below expected costs in 2014 to 17.0% below expected costs in 2015. The improved performance reflects WHESC's commitment to finding continuous improvements throughout all processes.

- **Total Cost per Customer**

Cost per Customer is calculated as the sum of Capital and Operating related costs divided by the Total Customers. Results for 2015 at \$493 per customer represents a 2.1% increase over 2014 results. These results can be impacted by one off costs such as emergency repairs and regulatory costs on a year by year basis. A comparison of 2015 Cost per Customer to 2011 results, shows a 6.5% increase over the four year period, in line with inflation over the same period. WHESC will continue to implement productivity and improvement initiatives as well as continuing to "level" capital replacement spending programs.

- **Total Cost per Km of Line**

This measure divides Total Costs by the Total Km of Line maintained by a distributor. Actual cost per Km of line serviced by WHESC in 2015 remained flat compared to 2014. Since 2012, actual costs per KM of line have increased by 1.0% over a three year period. WHESC is committed to service both new and existing customers at reasonable costs while maintaining or improving reliability.

Conservation & Demand Management

- **Net Cumulative Energy Savings**

According to the IESO's 2015 CDM results, WHESC has achieved 6.78% of its current 2015-2020 Net Energy Savings target of 25.5 GWh. WHESC began the Conservation First Framework in October, 2015 and continues to build momentum in the Commercial Sector. Whole Home Residential and Small Business Lighting Programs are being launched and will enhance WHESC's conservation results in 2016 and 2017. The recently completed Achievable Potential Study completed by the IESO, indicates that WHESC's original assigned target should be lowered from the current target of 25.5 GWh to 20.425 GWh. Should the reduction be approved at the mid-term review, WHESC's Net Energy Savings for 2015 would be revised to 8.48%. WHESC currently has a large streetlight conversion project that began in 2015 and is scheduled for completion in 2016. Completion of this project will have a significant impact on 2016 savings percentages to target.

Connection of Renewable Generation

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

There have been no impact assessments requested since 2011 within WHESC's service territory.

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

In 2015, WHESC successfully connected 100% of all new micro embedded generation facilities within the prescribed time frame of five business days. Microfit is a Feed in Tariff project of less than 10 Kw. In 2015, there were 17 Microfit projects connected to WHESC's distribution system.

Financial Ratios

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

As an indicator of financial health, a current ratio that is greater than 1 is considered good as it indicates that the company can pay its short term debts and financial obligations. WHESC has consistently had a current ratio greater than 1. The majority of current assets is related to receivables and unbilled revenues whereas current liabilities are for the most part related to amounts owed to the IESO for power purchased. There was no significant change with this ratio in 2015 compared to 2014.

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

The OEB has set a deemed capital structure of 60% debt and 40% equity for LDC's in Ontario. This deemed structure assumes a debt to equity ratio of 1.5 (60/40). A debt to equity ratio of more than 1.5 indicates that a distributor is more highly leveraged than the deemed capital structure. WHESC's 2015 leverage ratio of 0.84 indicates that it is currently operating with less actual debt than deemed debt. For an LDC, it is imperative to be able to fund capital expenditures to maintain the reliability of the distribution system. WHESC's current and forecasted capital expenditures exceeds depreciation amounts. The excess in capital spending over depreciation is currently being funded thru cash reserves. Maintaining WHESC's current profitability levels and current dividend policy are necessary to ensure that sufficient profits are generated and retained so that debt/equity ratios are not negatively impacted.

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

WHESC's current distribution rates were approved by the OEB and include an expected (deemed) regulatory return of 8.93%. The OEB allows a distributor to earn within +/- 3% of the expected return on equity. When a distributor performs outside of this range, the actual performance may trigger a regulatory review of the distributor by the OEB.

- **Profitability: Regulatory Return on Equity – Achieved**

WHESC's achieved return in 2015 was 8.72%, slightly below its deemed rate of return of 8.93% but well within the +/- 3% allowed by the OEB. Capital expenditures in 2015 continued to exceed depreciation levels and has increased the deemed equity year over year contributing to the slightly lower return rate. WHESC has also produced sustainable OM&A savings during the past few years that have contributed to maintaining its deemed rate of return at regulatory returns in 2015.

Note to Readers of 2015 Scorecard MD&A

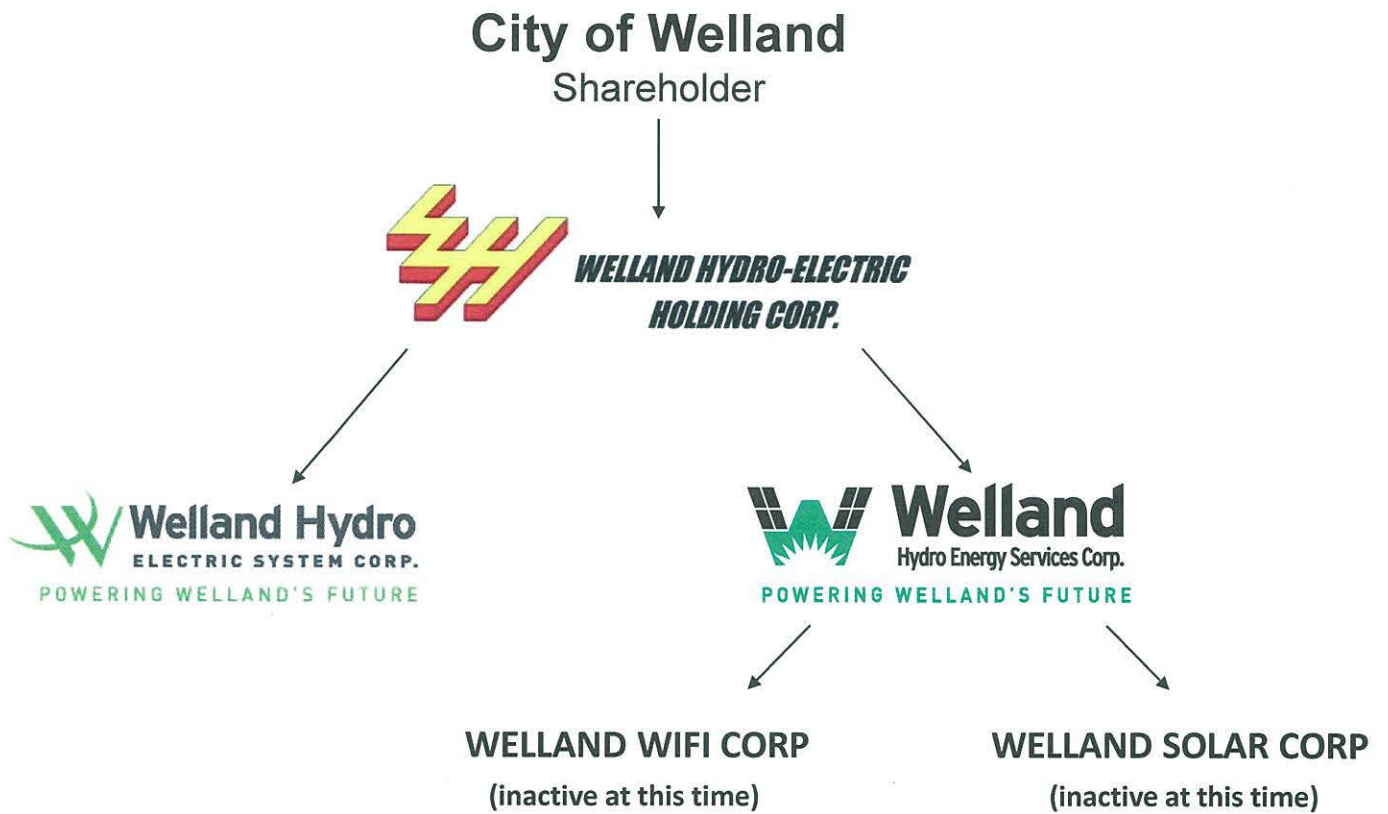
The information provided by distributors on their future performance (or what can be construed as forward-looking information) may be subject to a number of risks, uncertainties and other factors that may cause actual events, conditions or results to differ materially from historical results or those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

Appendix 1-C

Welland Hydro-Electric System Corp.

Affiliate Relationship Chart

Corporate Entities Relationship Chart



Appendix 1-D
Chapter 2 Appendices
2-A Requested Approvals

Appendix 2-A List of Requested Approvals

The distributor must fill out the following sheet with the complete list of specific approvals requested and relevant section(s) of the legislation must be provided. All approvals, including accounting orders (deferral and variance accounts) new rate classes, revised specific service charges or retail service charges which the applicant is seeking, must be separately identified, as well being clearly documented in the appropriate sections of the application.

Additional requests may be added by copying and pasting blank input rows, as needed.

If additional requests arise, or requested approvals are removed, during the processing of the application, the distributor should update this list.

Welland Hydro-Electric System Corp. is seeking the following approvals in this application:

1	Approval to charge distribution rates effective May 1, 2017 to recover a service revenue requirement of \$10,636,334 which includes a revenue deficiency of \$1,056,407 as detailed in Exhibit 6. The schedule of proposed rates is set out in Exhibit 8.
2	Approval of the Distribution System Plan as outlined in Exhibit 2 Appendix 2-A.
3	Approval of a revised Microfit monthly service charge as outlined in Exhibit 7.
4	Approval to adjust the Retail Transmission Rates – Network and Connection as detailed in Exhibit 8.
5	Approval to eliminate separate Retail Transmission Rates for Interval versus Non-Interval customers within the General Service 50 to 4,999 kW class.
6	Approval to continue to charge Wholesale Market and Rural Rate Protection Charges approved in the Board Decision and Order in the matter of WHESC's 2016 Distribution Rates (EB-2015-0109).

7	Approval to continue the Specific Service Charges, Retail Service Charges, and Transformer Allowance approved in the Board Decision and Order in the matter of WHESC's 2016 Distribution Rates (EB-2015-0109).
8	Approval of two new Specific Service Charges as outlined in Exhibit 8.
9	Approval of the proposed loss factors as detailed in Exhibit 8.
10	Approval of the rate riders for a one year disposition of the Group 1 and Group 2 and Other Deferral and Variance Accounts as detailed in Exhibit 9.
11	Approval of the rate riders for a one year period to dispose of the difference from 2014-2016 in Net Book Value of Property, Plant and Equipment, as a result of WHESC's changes to early retirement of assets which are no longer subject to pooling under IFRS. These adjustments are recorded in Account 1575, IFRS-CGAAP Transitional PP&E Amounts as explained in Exhibit 9.
12	Approval of the rate riders for a one year disposition of the Lost Revenue Adjustment Mechanism Variance Account ("LRAMVA") for lost revenue from 2013 to 2014 resulting from 2011 to 2015 OPA programs as detailed in Exhibit 4.
13	Approval to continue to use Deferral and Variance Account 1557 MIST Meters Capital and OM&A until WHESC's next Cost of Service Rate Application.
14	Approval to obtain payment from the IESO for Ratepayer Protection under O. Reg. 330/09 in the amount of \$5,172 annually by payment of \$431 monthly for Renewable Generation Connection-Provincial Amount as detailed in Exhibit 2. Start date of date with effect January 1, 2017.
15	Approval to obtain a one-time payment from the IESO for Ratepayer Protection under O. Reg. 330/0 in the amount of \$8,136 for Renewable Generation Connection-Provincial Amounts as detailed in Exhibit 2. Cumulative Provincial Amounts to December 31, 2016.

Appendix 1-E
2017 OEB Checklist

2017 Cost of Service Checklist

Welland Hydro-Electric System Corp.

EB-2016-0110

Filing Requirement
Page # Reference

Date: October 28, 2016

		Yes/No/N/A	Evidence Reference, Notes
GENERAL REQUIREMENTS			
Ch 1, Pg. 2	Certification by a senior officer that the evidence filed is accurate, consistent and complete	Yes	Exhibit 1 Page 25 Line 6-14.
Ch 1, Pg. 3	Confidential Information - Practice Direction has been followed	N/A	
Ch 2, Pg. 3	Chapter 2 appendices in live Microsoft Excel format	Yes	Chapter 2 Appendices Excel Module filed with this application.
4	If applicable, late applications filed after the commencement of the rate year for which the application is intended to set rates is converted to the following rate year.	N/A	
4	Aligning rate year with fiscal year - request for proposed alignment	N/A	
5	Text searchable and bookmarked PDF documents	Yes	Completed.
6	Materiality threshold; additional details beyond the threshold if necessary	Yes	Exhibit 4 Section 2.4.3 Page 16 Line 1-10.
7	State accounting standard(s) used in historical, bridge and test years. Provide a summary of changes to its accounting policies made since the applicant's last cost of service filing. Identify all material changes or confirm no material changes in the adoption of IFRS. Appendix 2-Y	Yes	Accounting Standards Statement Exhibit 1 Page 82 Line 3-5. No changes in accounting policies since 2013 COS Exhibit 1 Pages 81-82. Changes from IFRS Exhibit 1 Page 81 Line 25. Appendix 2-Y Exhibit 1 Appendix 1-F.
RESS Guideline	Two hardcopies of application sent to OEB the same day as electronic filing (p10 of RESS Guideline)	Yes	Two hardcopies sent to OEB October 27, 2016.
EXHIBIT 1 - ADMINISTRATIVE DOCUMENTS			
<i>Table of Contents</i>			
9	Table of Contents listing major sections and subsections of the application. Electronic version of application appropriately bookmarked to provide direct access to each section	Yes	Complete.
<i>Executive Summary</i>			
9	Plain language description of objectives and business plan and how they relate to the application and the RRFE objectives. Description should aid the OEB in understanding the impacts of the business plan on key areas such as customer service, system reliability, costs and bill impacts. Description of how customer feedback is reflected	Yes	Exhibit 1 Section 2.1.2.
<i>Administration</i>			
9	Primary contact information (name, address, phone, fax, email)	Yes	Exhibit 1 Page 25 Line 20-25.
9	Identification of legal (or other) representation	Yes	Exhibit 1 Page 26 Line 1-9.
9	Applicant's internet address for viewing of application and any social media accounts used by the applicant to communicate with customers	Yes	Exhibit 1 Page 26 Line 10-17.
10	Statement identifying customers materially affected by the application including any change to any rate or charge and specific statement of what individual customer or customer groups would be affected by the proposed change	Yes	Exhibit 1 Page 26 Line 18-23.
10	Statement identifying where notice should be published and why	Yes	Exhibit 1 Page 26 Line 24-28. Page 27 Line 1-2.
10	Bill impacts - distribution only impacts for 750 kWh residential and 2000 kWh GS<50 (sub-total A of Tariff Schedule and Bill Impact Spreadsheet Model) to be used for notice	Yes	Exhibit 1 Page 27-28.
10	Form of hearing requested and why	Yes	Exhibit 1 Page 28 Line 3-5.
10	Requested effective date	Yes	Exhibit 1 Page 28 Line 6-12.
3 & 10	Statement identifying all deviations from Filing Requirements; identify concerns with models or changes to models	Yes	Exhibit 1 Page 28 Line 13-16. Concerns with Tax Model Noted in Exhibit 4.
10	Statement identifying and describing any changes to methodologies used vs previous applications	Yes	Exhibit 1 Page 29 Line 1-10.
10	Statement confirming that the distributor will have implemented monthly billing for all customers by December 31, 2016	Yes	Exhibit 1 Page 29 Line 11-16.
10	Identification of OEB directions from any previous OEB Decisions and/or Orders. The applicant must clearly indicate how these are being addressed in the current application (e.g., filing of a study as directed in a previous decision)	Yes	Exhibit 1 Page 29 Line 17-24.
10 & 11	Reference to Conditions of Service - LDC does not need to file Conditions of Service, but must provide reference to website and confirm version is current; identify if there are changes to Conditions of Service (a) since last CoS application or (b) as a result of the current application. Confirmation that there are no rates and charges linked in the Conditions of Service that are not in the distributor's Tariff of Rates and Charges must be provided	Yes	Exhibit 1 Pages 29-31.
11	Description of the corporate and utility organizational structure, showing the main units and executive and senior management positions within the utility. Include a corporate entities relationship chart, showing the extent to which the parent company is represented on the utility company's Board of Directors and a description of the reporting relationships between utility and parent company management. Also include any planned changes in corporate or operational structure, including any changes in legal organization and control	Yes	Exhibit 1 Pages 32-34.
11	List of approvals requested (and relevant section of legislation), including accounting orders - a PDF copy of Appendix 2-A should be provided in this section	Yes	Exhibit 1 Pages 34-34. Appendix 2-A Exhibit 1 Appendix 1-D.

2017 Cost of Service Checklist

Welland Hydro-Electric System Corp.

EB-2016-0110

Filing Requirement
Page # Reference

Date: October 28, 2016

		Yes/No/N/A	Evidence Reference, Notes
Distribution System Overview			
11	Description of Service Area (including map, communities served)	Yes	Exhibit 1 Section 2.1.4 Pages 35-37.
11	Description of whether the distributor is a host distributor and/or embedded distributor. Identification of embedded and/or host distributors; if partially embedded provide %load from host distributor. If the distributor is a host, the applicant should identify whether there is a separate Embedded Distributor customer class or if any embedded distributors are included in other customer classes such as GS > 50 kW	Yes	Exhibit 1 Page 37 Line 4-9.
11	Statement as to whether or not the distributor has had any transmission or high voltage assets deemed by the OEB as distribution assets and whether or not there are any such assets the distributor is seeking approval for in this application	Yes	Exhibit 1 Page 37 Line 10-13.
Application Summary			
At a minimum, the items below must be provided. Applicants must also identify all proposed changes that will have a material impact on customers.			
12	Revenue Requirement - service RR, increase (\$ and %) from change from previously approved, main drivers	Yes	Exhibit 1 Section 2.1.5 (A) Pages 37-40.
12	Budgeting and Accounting Assumptions - economic overview and identification of accounting standard used for test year and brief explanation of impacts arising from any change in standards	Yes	Exhibit 1 Section 2.1.5 (B) Pages 40-42.
12	Load Forecast Summary - load and customer growth, % change in kWh and customer numbers, methodology description	Yes	Exhibit 1 Section 2.1.5 (C) Pages 42-43.
12	Rate Base and DSP - major drivers of DSP, rate base for test year, change from last approved (\$ and %), capital expenditures requested for the test year, change in capital expenditures from last approved (\$ and %), summary of costs requested for renewable energy connections/expansions, any O.Reg 339/09 planned recovery, capex for test year, change from last approved, costs for any REG-related, smart grid, regional planning projects	Yes	Exhibit 1 Section 2.1.5 (D) Pages 44-48.
13	OM&A Expense - OM&A for test year and change from last approved (\$ and %), summary of drivers, inflation assumed, total compensation for test year and change from last approved (\$ and %).	Yes	Exhibit 1 Section 2.1.5 (E) Pages 48-51.
13	Cost of Capital - Statement regarding use of OEB's cost of capital parameters; summary of any deviations	Yes	Exhibit 1 Section 2.1.5 (F) Page 52.
13	Cost Allocation & Rate Design - summary of any deviations from OEB methodologies, significant changes and summary of proposed mitigation plans	Yes	Exhibit 1 Section 2.1.5 (G) Pages 53-55.
13	Deferral and Variance Accounts - total disposition (RPP and non-RPP), disposition period, new accounts requested	Yes	Exhibit 1 Section 2.1.5 (H) Page 55.
13	Bill Impacts - total impacts (\$ and %) for all classes for typical customers	Yes	Exhibit 1 Section 2.1.5 (I) Pages 55-56.
Customer Engagement			
13 & 14	Overview of customer engagement activities; description of plans and how customer needs, preferences and expectations have been reflected in the application.	Yes	Exhibit 1 Section 2.1.6 Pages 56-67. Exhibit 1 Appendix 1-G.
14	Discussion on how customers were informed of the proposals being considered for inclusion in the application and the value of those proposals to customers i.e. costs, benefits, and the impact on rates	Yes	Exhibit 1 Section 2.1.6 Pages 56-67. Exhibit 1 Appendix 1-G.
14	Discussion of any feedback provided by customers and how the feedback shaped the final application	Yes	Exhibit 1 Section 2.1.6 Pages 56-67. Exhibit 1 Appendix 1-G.
14	Reference to any other communication sent to customers about the application i.e. bill inserts, town hall meetings or other forms of out reach and the feedback received from customers through these engagement activities	Yes	Exhibit 1 Section 2.1.6 Pages 56-67. Exhibit 1 Appendix 1-G.
14	Complete Appendix 2-AC Customer Engagement Activities Summary - identify how outcomes have shaped the application	Yes	Exhibit 1 Section 2.1.6 Page 67.
14	All responses to matters raised in letters of comment filed with the OEB.	N/A	None at this time.
Performance Measurement			
14 & 15	Discussion of performance for each of the distributor's scorecard measures over the last five years; drivers for its performance, plans for continuous improvement, identify performance improvement targets, forecast of efficiency assessment using the PEG forecasting model for the test year, discussion on how distributor's self-assessment has informed its business plan and the application	Yes	Exhibit 1 Section 2.1.7 Page 67-79.
Financial Information			
15	Non-consolidated Audited Financial Statements for 2 most recent years (i.e. 3 years of historical actuals)	Yes	Exhibit 1 Appendix 2-H & 2-I.
15	Detailed reconciliation of AFS with regulatory financial results filed in the application, with identification of any deviations that are being proposed	Yes	Exhibit 1 Page 80.
15	Annual Report and MD&A for most recent year of distributor and parent company, if applicable	Yes	Exhibit 1 Page 80 Line 31-32 and Page 81 Page 1-4.
15	Rating Agency Reports, if available; Prospectuses, etc. for recent and planned public issuances	Yes	Exhibit 1 Page 81 Line 5-6.
15	Any change in tax status	Yes	Exhibit 1 Page 81 Lines 9-14.
15	Existing accounting orders and departures from the accounting orders and USoA	Yes	Exhibit 1 Pages 81-82.
15	Accounting Standards used for financial statements and when adopted	Yes	Exhibit 1 Page 82 Lines 6-9.
16	Confirmation that accounting treatment of any non-utility business has segregated activities from rate regulated activities	Yes	Exhibit 1 Page 82 Lines 26-30.
Distributor Consolidation			
16	If a distributor has acquired or amalgamated with another distributor, identify any incentives that formed part of the acquisition or amalgamation transaction if the incentive represents costs that are being proposed to remain or enter rate base and/or revenue requirement.	N/A	Exhibit 1 Section 2.1.9 Page 83.

2017 Cost of Service Checklist

Welland Hydro-Electric System Corp.

EB-2016-0110

Filing Requirement
Page # Reference

Date: October 28, 2016

		Yes/No/N/A	Evidence Reference, Notes
EXHIBIT 2 - RATE BASE			
<i>Overview</i>			
16	Completed Fixed Asset Continuity Schedule (Appendix 2-BA) - in Application and Excel format	Yes	Section 2.2.1.1 Pages 19-23.
16 & 17 & 18	Opening and closing balances, average of opening and closing balances for gross assets and accumulated depreciation; working capital allowance (historical actuals, bridge and test year forecast)	Yes	Table 2-1 Page 5 Summary of Rate Base Table 2-2 Page 6 Summary of Working Capital.
17	Continuity statements (year end balance, including interest during construction and overheads). Explanation for any restatement (e.g. due to change in accounting standards) Year over year variance analysis; explanation where variance greater than materiality threshold Hist. OEB-Approved vs Hist. Actual Hist. Act. vs. preceding Hist. Act. Hist. Act. vs. Bridge Bridge vs. Test	Yes	Variance Analysis of Rate Base (Net Book Value & Working Capital Allowance) Page 6-11.
17	Opening and closing balances of gross assets and accumulated depreciation must correspond to fixed asset continuity statements. If not, an explanation must be provided (e.g., WIP, ARO). Reconciliation must be between net book value balances reported on Appendix 2-BA and balances included in rate base calculation	Yes	Adjustment for Contributed Capital IFRS, Correction Pole Line Expansion - Renewable Energy. Neither of these adjustments impact Gross Fixed Assets or Accumulated Depreciation balances (Net Zero).
<i>Gross Assets - PP&E and Accumulated Depreciation</i>			
18	Breakdown by function and by major plant account; description of major plant items for test year	Yes	Section 2.2.1.2 Table 2-16, Table 2-17, Table 2-18.
18	Summary of approved and actual costs for any ICM(s) and/ or ACM approved in previous IRM applications	Yes	Page 32 Summary of ACM/ICM Line 23-25.
18	Continuity statements must reconcile to calculated depreciation expenses and presented by asset account	Yes	Depreciation Expenses in Continuity match Depreciation Calculation Exhibit 4.
18	All asset disposals clearly identified in the Chapter 2 Appendices for all historical, bridge and test years and if any amounts related to gains or losses on disposals have been included in Account 1575 IFRS - CGAAP Transitional PP&E Amount	Yes	Page 32 Asset Disposals Line 11-22.
<i>Allowance for Working Capital</i>			
18	Working Capital - 7.5% allowance or Lead/Lag Study or Previous OEB Direction	Yes	Section 2.2.1.3 Overview Page 33. Accepted 7.5%. Previous OEB Direction EB-2016-0147 varied.
19	Lead/Lag Study - leads and lags measured in days, dollar-weighted	N/A	No Lead Lag Required or Submitted.
19	Cost of Power must be determined by split between RPP and non-RPP customers based on actual data, use most current RPP (TOU) price, use current UTR. Should include SME charge.	Yes	Cost of Power Page 35-37
<i>Treatment of Stranded Assets Related to Smart Meter Deployment</i>			
19	Stranded Meters - if the recovery of stranded conventional meters replaced by smart meters has not been reviewed and approved, a proposal for a Stranded Meter Rate Rider must be made Explanation for approaches that are not the OEB approach Completed Appendix 2-S.	Yes	Section 2.2.1.4 Page 38 N/A to WHESC. Disposed of in 2013 COS EB-2012-0173.

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		Yes/No/N/A	Evidence Reference, Notes
Capital Expenditures			
21	As applicable - file evidence that demonstrates that regional issues have been appropriately considered and where applicable addressed in developing the applicant's proposed capital expenditure plan. As part of its planning an applicant should consider municipal planning, including any plans for expansion of boundaries from a regional perspective to demonstrate the most cost effective solutions are being considered	Yes	Section 2.2.2.1 Planning Page 38-39.
22	DSP filed as a stand-alone document; a discrete element within Exhibit 2	Yes	Exhibit 2 Appendix 2-A.
22	Complete Appendix 2-AB - historical years must be actuals, forecasts for the bridge and test years	Yes	Section 2.2.2.2 Page 40.
22	Complete Appendix 2-AA along with: explanation for variances, including that of actuals v. OEB-approved amounts for last OEB-approved CoS application; for capital projects that have a project life cycle greater than one year, the proposed accounting treatment, including the treatment of the cost of funds for construction work-in-progress	Yes	Section 2.2.2.2 Pages 47-51.
22	Non-distribution activities - capital expenditures and reconciliation to total capital budget	Yes	Table 2-26D Page 51.
22	If applicable, details of any capital contributions made or forecast to be made to a transmitter with respect to a Connection and Cost Recovery Agreement. Details to be provided include, initial forecast used to calculate contribution, amount of contribution (if any), true-up dates and potential true-up payments	N/A	Not applicable to WHESC.
23	Discussion outlining capital and operating efficiencies realized as a result of the deployment and operationalization of smart meters and related technologies (e.g., AMI communications networks, ODS) in its networks. Qualitative and quantitative description and support should be provided as applicable	Yes	Section 2.2.2.2 Page 53 Lines 14-22.
23	Description of how incremental conservation initiatives have been considered in order to defer or avoid future infrastructure projects as part of distribution system planning processes	Yes	Section 2.2.2.2 Page 53 Line 23- to Page 54 Line 2.
23	If applying for funding through distribution rates to pursue activities such as energy efficiency programs, demand response programs, energy storage programs etc. the application must include a consideration of the projected affects to the distribution system on a long term basis and the projected expenditures. Distributors should explain the proposed program in the context of the distributors five year Distribution System Plan or explain any changes to its system plans that are pertinent to the program	N/A	Not applicable to WHESC.
23	Changes to capitalization policy since its last rebasing application as a result of the OEB's letter dated July 17, 2012 or for any other reasons, the applicant must identify the changes and the causes of the changes.	Yes	Section 2.2.2.3 Page 58 Line 9-14.
24	Appendix 2-D complete; identification of burden rates and burden rates prior to changes, if any	Yes	Section 2.2.2.4 Page 60 No changes to Overhead Rates or Policies since 2013 COS Rate Application.
25	Generation Facilities - If applicable, proposal to divide the costs of eligible investments between the distributor's ratepayers and all Ontario ratepayers per O.Reg. 330/09: - Appendices 2-FA through 2-FC identifying all eligible investments for recovery	Yes	Section 2.2.2.5 Pages 60-62.
New Policy Options for the Funding of Capital			
25	Distributor may propose ACM capital project coming into service during Price Cap IR (a discrete project documented in DSP). Provide cost and materiality calculations to demonstrate ACM qualification	N/A	Section 2.2.2.6 Page 63 Lines 1-16.
Addition of ICM Assets to Rate Base			
26	Distributor with previously approved ICM(s) - schedule of ICM amounts, variances and explanation	N/A	Section 2.2.2.7 Page 63 Line 17-19.
26 & 27	Balances in Account 1508 sub-accounts, reconciliation with proposed rate base amounts; recalculated revenue requirement should be compared with rate rider revenue	N/A	Section 2.2.2.7 Page 63 Line 17-19.
Service Quality and Reliability Performance			
27	5 historical years of ESQRs, explanation for any under-performance vs standard and actions taken	Yes	Section 2.2.2.8 Pages 63-64.
27	5 historical years of SAIDI and SAIFI - for all interruptions, all interruptions excluding loss of supply, and all interruptions excluding major events; explanation for any under-performance vs 5 year average and actions taken	Yes	Section 2.2.2.8 Page 64.
27	Distributors may propose SAIDI and SAIFI benchmarks different than 5 year average; provide rationale	N/A	No change requested.
27	Completed Appendix 2-G	Yes	Section 2.2.2.8 Page 64.

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Filing Requirement Page # Reference	Description	Yes/No/N/A	Evidence Reference, Notes
Ch 5 p9	Where applicable, explanation for section headings other than Chapter 5 headings; cross reference table	N/A	
Ch 5 p9-10	Distribution System Plan Overview - key elements, sources of cost savings, period covered, vintage of information on investment drivers, changes to asset management process since last DSP filing, dependencies	Yes	Section 5.2.1 Page 12
Ch 5 p10-11	Coordinated Planning with 3rd parties - description of consultations - deliverables of the Regional Planning Process, or status of deliverables - OPA letter in relation to REG investments (Ch 5 p8&9) and Dx response letter	Yes	Section 5.2.2 Page 18
Ch 5 p11	Performance Measurement - identify and define methods and measures used to monitor DSP performance - summary of performance and trends over historical period. Must include SAIFI and SAIDI for all interruptions and all interruptions excluding loss of supply - explain how information has affected DSP	Yes	Section 5.2.3 Page 23
Ch5 p12	Asset Management Process Overview - description of AM objectives/corporate goals and how Dx ranks objectives for prioritizing investments	Yes	Section 5.3.1 Page 50
Ch5 p12	Inputs/Outputs of the AM process and information flow for investments; flowchart recommended	Yes	Section 5.3.1b Page 52
Ch 5 p13	Overview of Assets Managed - description of service area (including evolution of features in forecast period affecting DSP), - description of system configuration - service profile and condition by asset type (tables and/or figures) - date data compiled - assessment of degree the capacity of system assets is utilized	Yes	Section 5.3.2 Page 61
Ch 5 p13-14	Asset Lifecycle Optimization - description of asset lifecycle optimization policies and practices, including asset replacement and refurbishment, maintenance planning criteria and assumptions - description of asset life cycle risk management policies and practices, assessment methods and approaches to mitigation	Yes	Section 5.3.3 Page 69
Ch 5 p14-15	Capital Expenditure Plan Summary for significant projects and activities to be undertaken - capability to connect new load or Gx customers, total annual capex over forecast period by investment category, description of how AMP and Capex planning have affected capital expenditures for each category - list, description and total capital cost of material capital expenditures sorted by category (table recommended) - information related to Regional Planning Process (Needs Assessment Report, Regional Planning Status Letter, Regional Infrastructure Plan - as appropriate) - description of customer engagement - Dx expectations of system development over next 5 years - list, description and total capital cost of projects planned in response to customer preferences, to take advantage of technology based opportunities, to study innovative processes (table recommended)	Yes	Section 5.4 Page 77
Ch 5 p15	Capital Expenditure Planning Process Overview - description of capex planning objectives/criteria/ assumptions, relationship with AM objectives, policy on consideration of non-distribution alternatives, processes used to identify projects in each investment category, customer feedback and impact on plan, method and criteria used to prioritise REG investments	Yes	Section 5.4.1 Page 77
Ch 5 p16	System Capability Assessment for REG - REG applications > 10 kW, number and MW of REG connections for forecast period, capacity of Dx to connect REG, connection constraints	Yes	Section 5.4.3 Page 95
Ch 5 p16-18 Ch 2 p24	Capital Expenditure Summary by Investment Category - completed Table 2 of Ch 5 for historical and forecast period, explanation of markedly different variances plan vs actual, explanation of markedly different variances year over year Table 2 of Ch 5 is provided in Excel format in Appendix 2-AB (must provide actual totals for historical years, as a minimum)	Yes	Section 5.4.4 Page 97
Ch5 p19	Overall Plan - comparative expenditures by category over historical period, forecast impact of system investment on O&M, drivers of investments by category, information related to Dx system capability assessment	Yes	Section 5.4.5.1 Page 105
Ch 5 p19-25	Material Investments - For each project that meets materiality threshold set in Ch 2 p10 - general information - total capital, customer attachments, dates, risks, variances, REG investments - evaluation criteria - may include: efficiency, customer value, reliability, etc. - category specific requirements for each project - system access, system renewal, system service, general plant (as applicable)	Yes	Section 5.4.5.2 Page 110

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		Yes/No/N/A	Evidence Reference, Notes
EXHIBIT 3 - OPERATING REVENUE			
<i>Load and Revenue Forecasts</i>			
28	Explanation of causes, assumptions and adjustments for volume forecast. Economic assumptions and data sources for customer and load forecasts	Yes	Pages 4-7 Summary of Load and Customer/Connection Forecast.
28	Explanation of weather normalization methodology	Yes	Pages 4-7 Summary of Load and Customer/Connection Forecast.
28	Quantification of any impacts arising from the persistence of historical CDM programs as well as the forecasted impacts arising from new programs in the bridge and test years through the current 6-year CDM framework.	Yes	Page 9 Line 26 CDM Activity Variable. Excel Spreadsheet Welland 2017 Load Forecast CDM Activity Tab.
29	Completed Appendix 2-IB; the customer and load forecast for the test year must be entered on RRWF, Tab 10	Yes	See Chapter 2 Appendices Module. Exhibit 3 Appendix 3-B.
29 & 30	Multivariate Regression Model - rationale for choice, regression statistics, explanation of weather normalization methodology, sources of data for endogenous and exogenous variables, any binary variables used to either account for individual data points or to account for seasonal or cyclical trends or for discontinuities in the historical data, explanation of any specific adjustments made; data used in load forecast must be provided in Excel format, including derivation of constructed variables	Yes	Section 2.3.1.1 - Section 2.3.1.2 Pages 8-16.
30	NAC Model - rationale for choice, data supporting NAC variables, description of accounting for CDM including licence conditions, discussion of weather normalization considerations	Yes	Section 2.3.1.1 - Section 2.3.1.2 Pages 8-16.
30 & 31	CDM Adjustment - account for CDM in 2017 load forecast. Consider impact of persistence of historical CDM and impact of new programs. Adjustments may be required for IESO reported results which are full year impacts	Yes	Section 2.3.1.3 Page 17-18.
31	CDM savings for 2017 LRAMVA balance and adjustment to 2017 load forecast; data by customer class and for both kWh and, as applicable, kW. Provide rationale for level of CDM reductions in 2017 load forecast	Yes	Section 2.3.1.3 Page 17-18.
31	Completed Appendix 2-I	Yes	See Chapter 2 Appendices Module. Exhibit 3 Appendix 3-B.
<i>Accuracy of Load Forecast and Variance Analyses</i>			
31	Completed Appendix 2-IB	Yes	See Chapter 2 Appendices Module. Exhibit 3 Appendix 3-B.
31	For customer/connection counts - identification as to whether customer/connection count is shown in year end or average format, year-over-year variances in changes of customer/connection counts with explanation of major changes, explanations of bridge and test year forecasts by rate class, for last rebasing variance analysis between last OEB-approved and actuals with explanations for material differences	Yes	Page 5 Line 7-8 Customer Counts on an Average Basis excluding Street Lights, Sentinel Lights, Unmetered Load.
31 & 32	For consumption and demand - explanation to support how kWh are converted to kW for applicable demand-billed classes, year-over-year variances in kWh and kW by rate class and for system consumption overall (kWh) with explanations for material changes in the definition of or major changes over time (should be done for both historical actuals against each other and historical weather-normalized actuals over time), explanations of the bridge and test year forecasts by rate class, variance analysis between the last OEB-approved and the actual and weather-normalized actual results	Yes	Section 2.3.1.3 Page 19 Billed KW Load Forecast Line 4.
32	For revenues - calculation of bridge year forecast of revenues at existing rates, calculation of test year forecasted revenues at existing and proposed rates, year-over-year variances in revenues comparing historical actuals and bridge and test year forecasts	Yes	Table 3-1 in Section 2.3.1 provides 2016 Bridge and 2017 Test Year Base Revenue at Current Rates (Full Year Impacts). Variance Analysis in 2.3.2.
32	With respect to average consumption, for each rate class, distributors are to provide weather-actual and weather-normalized average annual consumption or demand per customer as applicable for last OEB approved and historical, weather normalized average annual consumption or demand per customer for the bridge and test years, explanation of the net change in average consumption from last OEB-approved and actuals from historical, bridge and test years based on year-over-year variances and any apparent trends in data	Yes	Section 2.3.2 Pages 23-31.
<i>Other Revenue</i>			
33	Completed Appendix 2-H	Yes	Section 2.3.3 Page 32.
33	Variance analysis - year over year, historical, bridge and test	Yes	Section 2.3.3 Pages 32-33.
33	Any new proposed specific service charges, or proposed changes to rates or application of existing specific service charges	Yes	See Exhibit 8 Section 2.8.6 .
33	Revenue from affiliate transactions, shared services, corporate cost allocation	Yes	Account 4210 Rent Building - City of Welland see Exhibit 4.
33	Distributors must identify any discrete customer groups that may be materially impacted by changes to other rates and charges	N/A	No material changes.

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		Yes/No/N/A	Evidence Reference, Notes
EXHIBIT 4 - OPERATING COSTS			
<i>Overview</i>			
34	Brief explanation of test year OM&A levels, cost drivers, significant changes, trends, inflation rate assumed, business environment changes	Yes	Section 2.4.1 Pages 3-7.
<i>Summary and Cost Driver Tables</i>			
34	Summary of recoverable OM&A expenses; Appendix 2-JA	Yes	Section 2.4.2 Page 10
34	Recoverable OM&A cost drivers; Appendix 2-JB	Yes	Section 2.4.2 Page 11
34	Recoverable OM&A Cost per customer and per FTE; Appendix 2-L	Yes	Section 2.4.2 Page 15
34	Identification of change in OM&A in test year in relation to change in capitalized overhead.	N/A	No Change in Capitalized Overhead since 2013 COS.
35	OM&A variance analysis for test year with respect to bridge and historical years; Appendix 2-D	Yes	Appendix 2-D See Exhibit 2 Page 60 Section 2.2.2.4.
<i>Program Delivery Costs with Variance Analysis</i>			
35	Completed Appendix 2-JC OM&A Programs Table - completed by program or major functions; include variance analysis limited to variances that are outliers, between test year and last OEB approved and most recent actuals, including an explanation for each significant change whether the change was within or outside the applicant's control and explanation of why	Yes	Section 2.4.3 Page 17 followed by Variance Analysis pages 17-21.
35	For each significant change within the applicant's control describe business decision that was made to manage the cost increase/decrease and the alternatives	Yes	Section 2.4.3 Variance Analysis pages 17-21. Also pages 11-15.
<i>Workforce Planning and Employee Compensation</i>			
35	Employee Compensation - completed Appendix 2-K	Yes	Section 2.4.3.1 Page 21
35	Description of previous and proposed workforce plans, including compensation strategy	Yes	2013 COS Workforce Plan versus 2017 COS Workforce Plan discussed on Page 5 Line 5-15. Current Workforce Plan also discussed in Section 2.4.3.1.
36	Discussion of the outcomes of previous plans and how those outcomes have impacted their proposed plans including an explanation of the reasons for all material changes to headcount and compensation. Explanation for all years includes: - year over year variances - basis for performance pay, eligible employee groups, goals, measures, and review process for pay-for-performance plans, - relevant studies (e.g. compensation benchmarking)	Yes	Section 2.4.3.1 Workforce Planning and Employee Compensation Page 21-22.
36	Details of employee benefit programs including pensions for last OEB approved, historical, bridge and test; must agree with tax section	Yes	Section 2.4.3.1 Benefits Costs Pages 23-24.
36	Most recent actuarial report on employee benefits, pension and OPEBs	Yes	Exhibit 4 Appendix 4-C. Discussed pages 27-29.
36	Completed Appendix 2-KA - accounting method for pension and OPEBs	Yes	Section 2.4.3.1 Page 29.
<i>Shared Services and Corporate Cost Allocation</i>			
36	Identification of all shared services among affiliates and parent company; identification of the extent to which the applicant is a "virtual utility"	Yes	Section 2.4.3.2 starting on Page 30. WHESC is not a "virtual utility".
36 & 37	Allocation methodology for corporate and shared services, list of costs and allocators, including any third party review	Yes	Section 2.4.3.2 Pages 35-37.
37	Completed Appendix 2-N for service provided or received for historical, bridge and test; including reconciliation with revenue included in Other Revenue	Yes	Section 2.4.3.2 Pages 30-35. Rental of Space to City of Welland included in Other Revenue in Exhibit 3.
37	Shared Service and Corporate Cost Variance analysis - test year vs last OEB approved and most recent actual	Yes	Section 2.4.3.2 Page 37.
37	Identification of any Board of Director costs for affiliates included in LDC costs	Yes	Section 2.4.3.2 Page 36 lines 27-28.
<i>Non-Affiliate Services, One-Time Costs, Regulatory Costs</i>			
37	Purchased Non-Affiliated Services - file a copy of procurement policy (signing authority, tendering process, non-affiliate service purchase compliance)	Yes	Exhibit 4 Appendix 4-D
37	For material transactions that are not in compliance with procurement policy, or that were undertaken pursuant to exceptions contemplated within the policy, an explanation as to why as well as a summary of the nature and cost of the product, and a description of the specific methodology used for selecting the vendor	Yes	Section 2.4.3.3 Page 38 lines 8-9.
37	Identification of one-time costs in historical, bridge, test; explanation of cost recovery in test (or future years)	Yes	Section 2.4.3.4 Pages 39-40.
38	Regulatory costs - breakdown of actual and forecast, supporting information related to CoS application, proposed recovery (i.e. amortized?). Completed Appendix 2-M	Yes	Section 2.4.3.5 Pages 40-42 including Table 4-21 Board Appendix 2-M.
<i>LEAP, Charitable and Political Donations</i>			
38	LEAP - the greater of 0.12% of forecasted service revenue requirement or \$2,000 should be included in OM&A and recovered from all rate classes	Yes	Section 2.4.3.6 Page 42 Lines 7-17.
38	Detailed information for all contributions that are claimed for recovery	N/A	No other contribution are claimed for recovery.
38	Charitable Donations - the applicant must confirm that no political contributions have been included for recovery	Yes	Section 2.4.3.7 Page 42 Lines 18-24.

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		Yes/No/N/A	Evidence Reference, Notes
Depreciation, Amortization and Depletion			
39	Explanations for any useful lives of an asset that are proposed that are not within the ranges contained in the Kinectrics Report	Yes	Page 46
18 & 39	Depreciation, Amortization and Depletion details by asset group for historical, bridge and test years. Include asset amount and rate of depreciation/amortization. Must agree to accumulated depreciation in Appendix 2-BA under rate base	Yes	Section 2.4.4 Pages 43-55.
39	Identification of any Asset Retirement Obligations and associated depreciation, accretion expense	N/A	No asset retirement obligations recognized.
39	Identification of historical depreciation practice and proposal for test year. Variances from half year rule must be documented and supporting rationale provided	Yes	Section 2.4.4 Pages 43-55.
39	Copy of depreciation/amortization policy, or equivalent written description; summary of changes to depreciation/amortization policy since last CoS	Yes	Section 2.4.4 Pages 43-55.
40	Explanation of any deviations from the practice of depreciating significant parts or components of PP&E separately	N/A	WHESC continues to componentize assets as required.
40	For any depreciation expense policy or asset service lives changes since its last rebasing application: - identification of the changes and detailed explanation for the causes of the changes, including any changes subsequent to those made by January 1, 2013 -use of Kinectrics study or another study to justify changes in useful life - list detailing all asset service lives tied to USoA, detail differences in TUL from Kinectrics and explain differences outside of minimum and maximum TUL range from Kinectrics; Appendix 2-BB -File applicable depreciation appendices as provided in Chapter 2 MIFRS Appendices (Appendix 2-CA to 2-CK)	Yes	Appendix 2-BB Page 48, Appendix 2-CH Pages 50-54, Useful lives versus Kinectrics study Page 46 Lines 19-22.
PILs and Property Taxes			
40	Completed version of the PILs model (PDF and Excel); derivation of adjustments for historical, bridge, test years	Yes	PILS Model filed with Application
40	Supporting schedules and calculations identifying reconciling items	Yes	Section 2.4.5 Pages 55-62.
41	Most recent federal and provincial tax returns	Yes	Exhibit 4 Appendix 4-F.
15 & 41	Financial Statements included with tax returns if different from those filed with application	N/A	Same as Financials Statements filed in Exhibit 1.
41	Calculation of Tax Credits; redact where required (filing of unredacted versions is not required)	Yes	Section 2.4.5 Pages 58-59.
41	Supporting schedules, calculations and explanations for other additions and deductions	Yes	Section 2.4.5 Pages 59-62.
41	Explanation of how taxes other than income taxes or PILS (e.g. property taxes) are derived	Yes	Section 2.4.5.1 Page 62 Property Taxes.
Non-recoverable and Disallowed Expenses			
41	Exclude from regulatory tax calculation any non-recoverable or disallowed expenses	Yes	Section 2.4.5 Page 58 Lines 24-26 for exclusion of regulatory. Section 2.4.5.1 Page 62 Lines 3-6 for non-recoverable and disallowed expenses.
Integrity Checks			
41	Completion of Integrity checks listed on p.41; statement confirming completion	Yes	Section 2.4.5.2 Page 63. Statement on Lines 6-7.
Conservation and Demand Management			
43 & 44	LRAMVA - disposition of balance. Distributors must provide new LRAMVA Workform in a working Excel file and provide the following: - statement indicating use of most recent input assumptions when calculating lost revenue - statement indicating reliance on most recent CDM evaluation report from IESO; copy of report - Tables for each rate class showing lost revenue by year; list of programs applicable to rate class. Within each separate rate class table, a list of all the CDM programs/initiatives applicable to that rate class and the energy savings (kWh) and peak demand (kW) savings assigned to those programs/initiatives. For peak demand (kW) savings, the monthly multiplier amount used to convert the peak demand (kW) savings value included in the IESO's final results report into an annual value for each program - lost revenue calculations - energy savings by class and OEB-approved variable charge - statement that indicates if carrying charges are requested	Yes	Section 2.4.6.2 Pages 64-67.
44	Third party report for any OEB-approved programs	N/A	IESO 2011-2014 Final CDM Report see Exhibit 4 Appendix 4-H.

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		Yes/No/N/A	Evidence Reference, Notes
EXHIBIT 5 - COST OF CAPITAL AND CAPITAL STRUCTURE			
<i>Capital Structure</i>			
45	Statement that LDC adopts OEB's guidelines for cost of capital and confirms that updates will be done. Alternatively - utility specific cost of capital with supporting evidence	Yes	Page 2 Line 6-8 Adopts OEB guidelines and confirms updates will be done.
45	Completed Appendix 2-OA for last OEB approved and test year	Yes	Section 2.5.2 Page 4.
45	Completed Appendix 2-OB for historical, bridge and test years	Yes	Section 2.5.2 Page 5.
45	Explanation for any changes in capital structure	Yes	Section 2.5.1 Pages 2-3 Cost of Long Term Debt-Repayment of Loan.
<i>Cost of Capital (Return on Equity and Cost of Debt)</i>			
45	Calculation of cost for each capital component	Yes	Section 2.5.2 Page 4 Table 5-2.
45	Profit or loss on redemption of debt	N/A	Not applicable to WHESC.
45	Copies of promissory notes or other debt arrangements with affiliates	Yes	Exhibit 5 Appendix 5-A
45	Explanation of debt rate for each existing debt instrument	Yes	Section 2.5.2 Pages 2-3.
45	Forecast of new debt in bridge and test year - details including estimate of rate	N/A	No new debt forecasted.
46	If proposing any rate that is different from the OEB guidelines, a justification of the proposed rate(s), including key assumptions	N/A	Not requesting different return rates.
46	Notional Debt - difference between actual debt thickness and deemed debt thickness attracts the weighted average cost of actual long-term debt rate (unless 100% equity financed)	Yes	Section 2.5.2 Page 3 Line 11-17. No actual third party debt and new debt forecasted therefore used deemed rate.
<i>Not-for-Profit Corporations</i>			
47	Not for Profit Corporations - evidence that excess revenue is used to build up operating and capital reserves	N/A	Not applicable to WHESC.
47	Detailed calculation for test year revenue requirement based on its Reserve Requirement	N/A	Not applicable to WHESC.
47	The proposed reserves and rationale for the need to establish each reserve, the time period of building up the reserves, and the procedure and policy of each reserve	N/A	Not applicable to WHESC.
47	Description of the governance of the not-for-profit corporation	N/A	Not applicable to WHESC.
47	If there are approved reserves from previous OEB decisions provide the following: -any changes to the reserve policies and rationale for the changes since last CoS limits of any capital and/or operating reserves as approved by the OEB and identify decisions -current balances of any established capital and/or operating reserves -list withdrawals from capital and operating reserves, identify amounts and purpose of withdrawal -if limits on capital and operating reserves achieved provide a proposal for utilization of amounts -if limits on reserves not achieved provide rationale and the detail for its forecast of the Reserve Requirement for the test year	N/A	Not applicable to WHESC.
EXHIBIT 6 - REVENUE DEFICIENCY/SUFFICIENCY			
48	Calculation of delivery-related Revenue Deficiency/Sufficiency (excluding cost of power and associated costs): net utility income, rate base, actual return on rate base, indicated rate of return, requested rate of return, deficiency/sufficiency, gross deficiency/sufficiency. Deficiency/sufficiency must also be net of other costs (e.g. LV costs, RSVAs, smart meter and other DVA balances).	Yes	Section 2.6 Table 6-4 Page 7.
48	Summary of drivers for test year deficiency/sufficiency, how much each driver contributes; references in application evidence mapped to drivers	Yes	Section 2.6 Table 6-5 Pages 8-9.
49	Impacts of any changes in methodologies to deficiency/sufficiency	N/A	No changes in methodology. Impact of accounting for Account 1576 in 2013 COS has been discussed on pages 10-12 and impacts revenue deficiency.
<i>Revenue Requirement Work Form</i>			
49	RRWF - in PDF and Excel. Revenue requirement, def/sufficiency, data entered in RRWF must correspond with other exhibits	Yes	Exhibit 6 Appendix 6-A. Module filed with the application.
49	If the enhanced RRWF cannot reflect a distributor's proposed rates accurately, the distributor must file its rate generator model	N/A	WHESC has filled RRWF module with the application.

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		Yes/No/N/A	Evidence Reference, Notes
EXHIBIT 7 - COST ALLOCATION			
<i>Cost Allocation Study Requirements</i>			
50	Completed cost allocation study using the OEB-approved methodology or a comparable model must be filed reflecting future loads and costs and be supported by appropriate explanations and live Excel spreadsheets. Sheets 11 and 12 of the RRWF must also be completed. Live Excel version of 2017 cost allocation model will be filed (updated load profiles or scaled version of HONI CAIF). Model must be consistent with test year load forecast, changes to customer classes and load profiles.	Yes	All applicable models submitted with application.
50	Explanation provided if a distributor is unable to update its load profiles and confirm that it intends to put plans in place to update its load profiles the next time a cost allocation model is filed	Yes	Page 5 Lines 15-21.
51	Description of weighting factors, and rationale for use of default values (if applicable)	Yes	Pages 3-4 Weighting Factors.
51	Hard copy of sheets I-6, I-8, O-1 and O-2 (first page)	Yes	Exhibit 7 Appendix 7-A.
51 & 52	Host Distributor - evidence of consultation with embedded Dx - Statement regarding embedded Dx support for approach to allocation of costs - If embedded Dx is separate class - class in cost allocation study and RRWF, Sheet 11 - If new embedded Dx class - rationale and supporting evidence (cost of serving, load served, asset ownership information, distribution charges); include in cost allocation study and RRWF, Sheet 11 - If embedded Dx billed as GS customer - , include with the GS class in cost allocation model and Appendix 2-P. Provide cost of serving, load served, asset ownership information, distribution charges, appropriateness of rate class. File Appendix 2-Q.	N/A	Page 8 Embedded Distributor Class.
52	Unmetered Loads (including Street Lighting) - Confirmation of communication with unmetered load customers when proposing changes to the level of the rates and charges or the introduction of new rates and charges	Yes	Page 8 - Unmetered Loads Lines 4-10.
52	microFIT - if the applicant believes that it has unique circumstances which would justify a certain rate, appropriate documentation must be provided	Yes	Page 8 - microFIT class Lines 11-24
53	Standby Rates - if seeking approval on final basis, provide evidence that affected customers have been advised. If seeking changes to standby charges, provide rationale and evidence that affected customer have been advised.	N/A	Not seeking standby rates in the rate application.
53	New customer class or eliminated customer class - rationale and restatement of revenue requirement from previous CoS	Yes	Page 8 New Customer Class. Page 8 Eliminated Customer Class.
<i>Class Revenue Requirements</i>			
53 & 54	To support a proposal to rebalance rates, the distributor must provide information on the revenue by class that would apply if all rates were changed by a uniform percentage. Ratios must be compared with the ratios that will result from the rates being proposed by the distributor.	Yes	Tables 7-6, 7-7, 7-8 consistent with RRWF Tab 11. See Exhibit 6 Appendix 6-A for RRWF and module filed with this application.
<i>Revenue to Cost Ratios</i>			
54	If R:C ratios outside deadband based on model - distributors must include cost allocation proposal to bring them within the OEB-approved ranges. In making any such adjustments, distributors should address potential mitigation measures if the impact of the adjustments on the rates of any particular class or classes is significant.	N/A	All Proposed Revenue to Cost Ratios are within OEB Approved ranges as per Table 7-7 on page 7.
55	If Cost Allocation Model other than OEB model used - exclude LV, exclude DVA such as smart meters	N/A	Filed OEB Cost Allocation module with this application.

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		Yes/No/N/A	Evidence Reference, Notes
EXHIBIT 8 - RATE DESIGN			
55	Monthly fixed charges - 2 decimal places; variable charges - 4 decimal places	Yes	Section 2.8.2 Table 8-7 Proposed Distribution Rates Page 7.
<i>Fixed Variable Proportion</i>			
55 & 56	The following is to be provided in relation to the fixed/variable proportion of proposed rates: -Current F/V with supporting info -Proposed F/V proportion with explanation for any changes (billing determinants from proposed load forecast) -Comparison between current and proposed monthly fixed charges with the floor and ceiling as in cost allocation study Analysis must be net of rate adders, funding adders, and rate riders	Yes	Section 2.8.1 Table 8-3 Current Fixed Variable Split, Section 2.8.2 Page 3 Line 12-13 maintain current fixed/variable split, Section 2.8.2 Table 8-5 comparison fixed monthly charges on Page 5.
<i>Rate Design Policy</i>			
56	LDCs must propose changes to residential rates consistent with policy to transition to fully fixed monthly distribution service charge.	Yes	Section 2.8.2 Page 4 Line 14 to Page 5 Line 7.
56	Proposal follows approach set out in Tab 12 of RRWF	Yes	See Exhibit 6 Appendix 6-A for RRWF documentation.
57	If applicable, distributor with seasonal residential class must propose identical rate design treatment for such a class	N/A	Not applicable to WHESC.
<i>RTSRs</i>			
57	Retail Transmission Service Rate Work Form - PDF and Excel	Yes	Exhibit 8 Appendix 8-A. Module filed with this application.
57	RTSR information must be consistent with working capital allowance calculation	Yes	See Exhibit 2 Table 2-23 Cost of Power page 37 versus Section 2.8.3 Table 8 page 7 in Exhibit 8.
<i>Retail Service Charges</i>			
57	If proposing changes to Retail Service Charges or introduction of new rates and charges - evidence of consultation and notice	N/A	Section 2.8.4 No changes to Retail Service Charges proposed.
<i>Regulatory Charges</i>			
57	Wholesale Market Service Rate - reflect current approved rate in application or justify otherwise	Yes	Section 2.8.5 Regulatory Charges - WHSR reflects current approved rate.
<i>Specific Service Charges</i>			
58	Specific Service Charge description/purpose/reason for new and revised SSC; calculations to support charges	Yes	Section 2.8.6 Page 9. Rates developed by comparisons to Other LDCs with similar charges.
58	Identification in the Application Summary all proposed changes that will have a material impact on customers, including charges that may affect a discrete group.	N/A	Not material to any customer class.
58	Identification of any rates and charges in Conditions of Service that do not appear on tariff sheet. Explain nature of costs, provide schedule outlining revenues or capital contributions 2012-2015, bridge and test years. Whether these charges should be included on tariff sheet	N/A	Section 2.8.6 Line 10-11. No rates & charges in Conditions of Service that are not in current Tariff Sheet.
58	Ensure revenue from SSCs corresponds with Operating Revenue evidence	Yes	Revenue from SSC outlined in Exhibit 3 Section 2.3.3.
<i>Low Voltage Service Rates</i>			
58	Forecast of LV cost, sum of host distributors charges	N/A	Section 2.8.7 Not applicable to WHESC.
58 & 59	Low Voltage Cost (historical, bridge, test), variances and explanations for substantive changes	N/A	Section 2.8.7 Not applicable to WHESC.
59	Support for forecast LV, e.g. Hydro One Sub-Transmission charges	N/A	Section 2.8.7 Not applicable to WHESC.
59	Allocation of LV cost to customer classes (typically proportional to Tx connection revenue)	N/A	Section 2.8.7 Not applicable to WHESC.
59	Proposed LV rates by customer class	N/A	Section 2.8.7 Not applicable to WHESC.

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		Yes/No/N/A	Evidence Reference, Notes
Loss Factors			
59	Proposed SFLF and Total Loss Factor for test year	Yes	Section 2.8.8 Pages 9-11.
59	Statement as to whether LDC is embedded including whether fully or partially	Yes	Section 2.8.8 Page 9 Lines 19-20.
59	Study of losses if required by previous decision	N/A	No study required from previous decision.
59	3-5 years of historical loss factor data - Completed Appendix 2-R	Yes	Section 2.8.8 Page 10 Table 8-9.
59	If proposed loss factor >5%, explanation and action plan to reduce losses going forward	N/A	Proposed per Table 8-10 on page 11 less than 5%.
59	Explanation of SFLF if not standard	N/A	Table 8-10 on page 11 shows WHESC used Standard SFLF.
Tariff of Rates and Charges			
59	Current and proposed Tariff of Rates and Charges filed in the Tariff Schedule/Bill Impacts Model - each change must be explained and supported in the appropriate section of the application	Yes	Section 2.8.9 Exhibit 8 Current Tariff Appendix 8-B, Exhibit 8 Proposed Tariff Appendix 8-C.
60	Explanation of changes to terms and conditions of service if changes affect application of rates	N/A	Changes to terms and conditions have no impacts on rates.
Revenue Reconciliation			
60	Calculations of revenue per class under current and proposed rates; reconciliation of rate class revenue and other revenue to total revenue requirement	Yes	Table 7-8 in Exhibit 7 shows revenue per class under current rates \$9,049,877, under proposed rates \$10,106,284, and miscellaneous revenue \$530,050. Total under proposed rates and miscellaneous revenue of \$10,636,334 equals total revenue requirement as per Table 6-4 in Exhibit 6.
60	Completed RRWF - Sheet 13 - rates and charges entered on this sheet should be rounded to the same decimal places as tariff	Yes	Section 2.8.10 Table 8-11 on Page 12.
Bill Impact Information			
60	Completed Bill Impacts Model for all classes in the distributor's tariff schedule. Bill impacts must identify existing rates, proposed changes to rates, and detailed bill impacts.	Yes	Bill Impacts Model submitted with application. See Exhibit 8 Appendix 8-D.
60	Impact of changes resulting from the as-filed application on representative samples of end-users (i.e. volume, % rate change and revenue). Commodity and regulatory charges held constant	Yes	Bill Impacts Model submitted with application. See Exhibit 8 Appendix 8-D.
60	Rates and charges input in the tariff schedule and Bill Impacts Model rounded to the decimal places as shown on the existing tariff	Yes	Exhibit 8 Appendix 8-C proposed rates and charges input into bill impacts module.
61	Bill impacts provided for typical customers and consumption levels. Must provide residential 750 kWh, residential at the lowest 10th percentile and GS<50 2,000 kWh. Bill impacts must be provided for a range of consumption levels relevant to the service territory.	Yes	Bill Impacts Model submitted with application. See Exhibit 8 Appendix 8-D. Residential at 750 kWh and GS<50 at 2000 kWh also shown in Exhibit 1.
61	If applicable, for certain classes where one or more customers have unique consumption and demand patterns, the distributor must show a typical impact and provide an explanation	N/A	Bill Impacts Model submitted with application. See Exhibit 8 Appendix 8-D.
Rate Mitigation			
61	Evidence showing that the monthly service charge would not rise by more than \$4 per year due only to the rate design change, and that the total bill impact, reflecting all proposed changes in the application, will not exceed 10%. If either of these criteria is not met, some form of mitigation may be required (i.e. extending transition period).	Yes	Residential monthly service charge increase from Table 8-5 (\$4.68) less than \$4/month when excluding Residential Adjustment amount of \$2.49 as per Table 8-4. No Total Bill Impacts exceed 10% as per Appendix 8-D.
62	Evaluation of bill impact for residential customer at 10th consumption percentile. Describe methodology for determination of 10th consumption percentile. File mitigation plan for whole residential class if impact >10% for these customers.	Yes	Section 2.8.12.1 Mitigation Plan Approaches.
62 & 63	Mitigation plan if total bill increase for any customer class is >10% including: specification of class and magnitude of increase, description of mitigation measures, justification, revised impact calculation. The Tariff Schedule and Bill Impacts Model must reflect any mitigation plan proposed.	N/A	No Total Bill Impacts >10% as per Appendix 8-D.
63	Rate Harmonization Plans, if applicable - including impact analysis	N/A	Not applicable to WHESC.

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		Yes/No/N/A	Evidence Reference, Notes
EXHIBIT 9 - DEFERRAL AND VARIANCE ACCOUNTS			
63	List of all outstanding DVA and sub-accounts; provide description of DVAs that were used differently than as described in the APH	Yes	Table 9-1 Page 5.
63	Completed DVA continuity schedule for period following last disposition to present - live Excel format	Yes	Module filed with application.
63	Confirm use of interest rates established by the OEB by month or by quarter for each year	Yes	Table 9-2 Page 9.
64	Explanation if account balances in continuity schedule differs from trial balance in RRR and AFS	Yes	Account Balances Page 3, Adjustments to Deferral and Variance Accounts Page 6
64	Identification of Group 2 accounts that will continue/discontinue going forward, with explanation	Yes	Page 11, Page 12 Table 9-4
64	Statement as to any new accounts, and justification.	N/A	WHESC has not used any new deferral accounts.
64	Statement whether any adjustments made to DVA balances previously approved by OEB on final basis; explanation, amount of adjustment and supporting documents	Yes	Page 2 Line 25 & 26
64	Breakdown of energy sales and cost of power by USoA - as reported in AFS mapped and reconciled to USoA. Provide explanation if making a profit or loss on commodity.	Yes	Table 9-3 Page 11
64	Statement confirming that IESO GA charge is pro-rated into RPP and non-RPP; provide explanation if not pro-rated.	Yes	Page 3 Line 1 & 2
One-Time Incremental IFRS Costs			
64 & 65	Request for disposition of Account 1508 sub-account IFRS Transition Costs if balances are still in account and not previously requested for disposition: - completed Appendix 2-YA -statement whether any one time IFRS transition costs are embedded in 2017 revenue requirement, where and why it is embedded, and the quantum -explanation for material variances in Account 1508 sub-account IFRS Transition Costs Variance - explanation on why costs incurred after adoption of IFRS, if any, and the nature of the costs - statement that no capital costs, ongoing IFRS compliance costs are recorded in 1508 sub-account; provide explanation if this is not the case	Yes	Page 12 Section 2.9.1, Table 9-5 on Page 13, One-Time Costs Statement Page 12 Line 17 & 18, Statement no capital costs, ongoing IFRS compliance in 1508 Page 12 Line 19-21.
Account 1575, IFRS-CGAAP Transitional PP&E Amounts			
65 & 66	1575 IFRS-CGAAP PP&E account - Account 1575 and 1576 can't be used interchangeably - breakdown of balance, including explanation for each accounting change; Appendix 2-EA - listing and quantification of drivers - volumetric rate rider to clear 1575; separate rider must be on a fixed basis for the residential class; - rate of return component is to be applied to 1575 but not recorded in 1575 - statement confirming no carrying charges applied to 1575 - explanation for the basis of the proposed disposition period to clear Account 1575 rate rider - show the balance in DVA continuity schedule	Yes	2.9.2 Page 14 1575, Table 9-6 Summary of Charges by Year, Appendix 2-ES Table 9-7 on Page 15, Rate Riders for Account 1575 see Table 9-13 on Page 22, WHESC has not requested a return on account 1575 Page 14 Line 14 & 15, no interest applied to account 1575 as can be seen in Table 9-8, Account 1575 shown in DVA continuity schedule.
Account 1576, Accounting Changes under CGAAP			
67	Changes to depreciation and capitalization in 2012 or 2013 - Account 1576 IFRS-CGAAP PP&E - Appendix 2-BA must not be adjusted for 1576 - breakdown of balance related to 1576, Appendix 2-EB or 2-EC drivers of change in closing net PP&E identified and quantified - volumetric rate rider to clear 1576; the rider for the residential class must be on a fixed basis - rate of return component is to be applied to 1576 but not recorded in 1576 - statement confirming no carrying charges applied to 1576 - explanation for the basis of the proposed disposition period to clear Account 1576 rate rider - show the balance in DVA continuity schedule	N/A	Account 1576 was used in Welland Hydro's 2013 COS EB-2012-0173.
Retail Service Charges			
67 & 68	Retail Service Charges - material balance in 1518 or 1548 - confirm variances are incremental costs of providing retail services; identify drivers for balances - provide schedule identifying all revenues and expenses listed by USoA for 2013, actual/forecast for bridge and test year - state whether Article 490 of APH has been followed; explanation if not followed	N/A	No balances in 1518 or 1548 variance accounts.
68	Retail Service Charges - zero balance in 1518 or 1548 - state whether Article 490 of APH has been followed; explanation if not followed	Yes	Statement on Article 490 of APH Section 2.9.4 Page 16 Line 14-19.

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		Yes/No/N/A	Evidence Reference, Notes
<i>Disposition of Deferral and Variance Accounts</i>			
68	Identify all accounts for which LDC is seeking disposition; identify DVA for which LDC is not proposing disposition and the reasons why	Yes	Section 2.9.5 on Page 16.
68	Statement whether DVA balances before forecasted interest match the last AFS; explain any variances	Yes	Page 3 Account Balances Section
68	Provide an explanation of variance > 5% between amounts proposed for disposition and amounts reported in RRR for each account.	N/A	No variances between RRR and disposal amounts. Page 3 Line 5-7.
68	Provide explanations if variances are < 5% threshold if the variances in question relate to: (1) matters of principle (i.e. conformance with the APH or prior OEB decisions, and prior period adjustments); and/or, (2) the cumulative effect of immaterial differences over several accounts total to a material difference between what is proposed for disposition in total before forecasted interest and what is recorded in the RRR filings	N/A	No variances between RRR and disposal amounts. Page 3 Line 5-7.
68	Show relevant calculations: rationale for allocation of each account, proposed billing determinants	Yes	Table 9-9 to Table 9-14 detail rate rider calculations
68	Propose charge type (fixed or variable) for recovery purposes in accordance with Rate Design Policy	Yes	Table 9-9 to Table 9-14 detail rate rider calculations
68	Propose rate riders for recovery or refund of balances that are proposed for disposition. The default disposition period is one year; if the applicant is proposing an alternative recovery period must provide explanation.	Yes	All rate riders requested over the one year default period.
69	Establish separate rate riders to recover balances in the RSVA's from Market Participants who must not be allocated the RSVA balances related to charges for which the MP's settle directly with the IESO.	Yes	Table 9-9 to Table 9-14 detail rate rider calculations
69	Proposed disposition of Account 1580 sub-account CBR Class B in accordance with the CBR Accounting Guidance. In the DVA continuity schedule, applicants must indicate whether they serve any Class A customers. Account 1580 sub-account CBR Class A is not to be disposed through rates proceedings but rather follow the OEB's accounting guidance.	Yes	1580 Sub Account CBR separated in DVA continuity schedule. WHESC did not serve and Class A customers during 2015.
<i>Global Adjustment</i>			
69	Establishment of a separate rate rider included in the delivery component of the bill that would apply prospectively to Non-RPP customers when clearing balances from the GA Variance Account	Yes	Table 9-9 to Table 9-14 detail rate rider calculations
69	Indicate whether a Class B customer switched to Class A during the 2015 rate year in DVA Continuity Schedule	Yes	Section 2.9.5.1 on page 23.
70	Description of settlement process with IESO or host distributor, specify GA rate used for each rate class, itemize process for providing estimates and describe true-up process, details of method for estimating RPP and non-RPP consumption, treatment of embedded generation/distribution.	Yes	Page 23 Global Adjustment and the IESO Settlement Process
<i>Establishment of New Deferral and Variance Accounts</i>			
70	New DVA - information provided which addresses that the requested DVA meets the following criteria: causation, materiality, prudence; include draft accounting order.	Yes	Section 2.9.5.6 on page 26

TOTAL "NO"

0

Appendix 1-F
Chapter 2 Appendices
2-Y MIFRS Summary of Impacts

File Number:

EB-2016-0110

Exhibit:

1

Tab:

Appendix 1-F

Schedule:

Page:

Date:

Appendix 2-Y
Summary of Impacts to Revenue Requirement
from Transition to MIFRS

Revenue Requirement Component	2017 MIFRS	2017 CGAAP ¹	Difference	Reasons why the revenue requirement component is different under MIFRS
Closing NBV 2016	\$ 29,014,773	\$ 29,079,379	-\$ 64,606	Pooling of Assets eliminated under IFRS
Closing NBV 2017	\$ 29,973,839	\$ 30,063,765	-\$ 89,926	Pooling of Assets eliminated under IFRS
Average NBV	\$ 29,494,306	\$ 29,571,572	-\$ 77,266	
Working Capital	\$ -	\$ -	\$ -	No impacts on working capital
Rate Base	\$ 29,494,306	\$ 29,571,572	-\$ 77,266	
Return on Rate Base	\$ 1,852,242	\$ 1,857,095	-\$ 4,852	WACC 2017 Test Year 6.28%
			\$ -	
OM&A			\$ -	
Depreciation	\$ 1,429,600	\$ 1,437,573	-\$ 7,973	Depreciation Expense on Pooled Assets Eliminated
PILs or Income Taxes			\$ -	
			\$ -	
Less: Revenue Offsets	\$ 29,320	\$ -	\$ 29,320	Early Retirement of Assets reducing Revenue Offsets
			\$ -	
			\$ -	
			\$ -	
Insert description of additional item(s)			\$ -	
Total Base Revenue Requirement	\$ 3,311,162	\$ 3,294,668	\$ 16,494	

1. Applicants must provide a summary of the dollar impacts of MIFRS to each component of the revenue requirement (e.g. rate base, operating costs, etc.), including the overall impact on the proposed revenue requirement. Accordingly, the applicants must identify financial differences and resulting revenue requirement impacts arising from the adoption of MIFRS as compared to CGAAP. If the applicant is reflecting the changes in capitalization and depreciation policies for the first time in a rebasing application, then the comparison in the above table should be between MIFRS and CGAAP before the change in accounting policies. If the applicant changed capitalization and depreciation policies and reflected these changes in a previous rebasing application, the comparison in the above table should be between MIFRS and CGAAP after the change in accounting policies.

Appendix 1-G
Innovative Customer
Consultation Report



Customer Consultation Report

2017 Rate Application Review

Prepared for:

Welland Hydro Electric System Corporation
950 East Main Street
Welland, Ontario
L3B 5P6



Customer Consultation Report

2017 Rate Application Review

August 23, 2016

This report has been prepared by Innovative Research Group Inc. (“INNOVATIVE”) for Welland Hydro Electric System Corporation (“Welland Hydro”).

The conclusions drawn and opinions expressed are those of the authors.

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Introduction

About this Consultation

Innovative Research Group Inc. (INNOVATIVE) was commissioned by Welland Hydro to help the utility design, collect feedback and document its customer engagement and consultation process as part of the development of Welland Hydro's 2017 Cost of Service (COS) Rate Application Review, which incorporates both capital infrastructure and operational plans.

Welland Hydro's 2017 Rate Application Review is a key element of its next distribution cost of service (COS) rate application. The outcome of this application will determine Welland Hydro's electricity distribution rates for next year – beginning May 2017 through to April 2018 – 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 (LDCs) to demonstrate services are provided in a manner that responds to identified customer needs and preferences¹. 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 Welland Hydro's 2017 Rate Application Review.

This process of identifying and reacting to customer needs and preferences towards Welland 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

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 Welland Hydro's Rate Application 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 Welland 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 Welland Hydro's 2017 Rate Application Review.

The consultation encompassed three 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 help inform the quantitative phases of the consultation. The groups were randomly recruited and held in Welland, Ontario. A workbook was used to provide the participants with core information about both the provincial and local electricity system, and Welland 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. **Large Customer Validation Interviews:** A number of key accounts and large general service (GS > 50 kW) customers were consulted on the proposed plan by Welland Hydro staff. INNOVATIVE followed-up by telephone with these customers after their consultation session to validate the process and to verify that Welland Hydro provided them with the information they needed to provide informed feedback on the proposed plan.
3. **Random Telephone Surveys:** INNOVATIVE conducted telephone surveys with residential and general service (GS < 50 kW) customers to provide a quantitative assessment of key aspects of the system plan. Customer lists for both respondent groups were provided by Welland Hydro and the sample was randomly selected by INNOVATIVE.

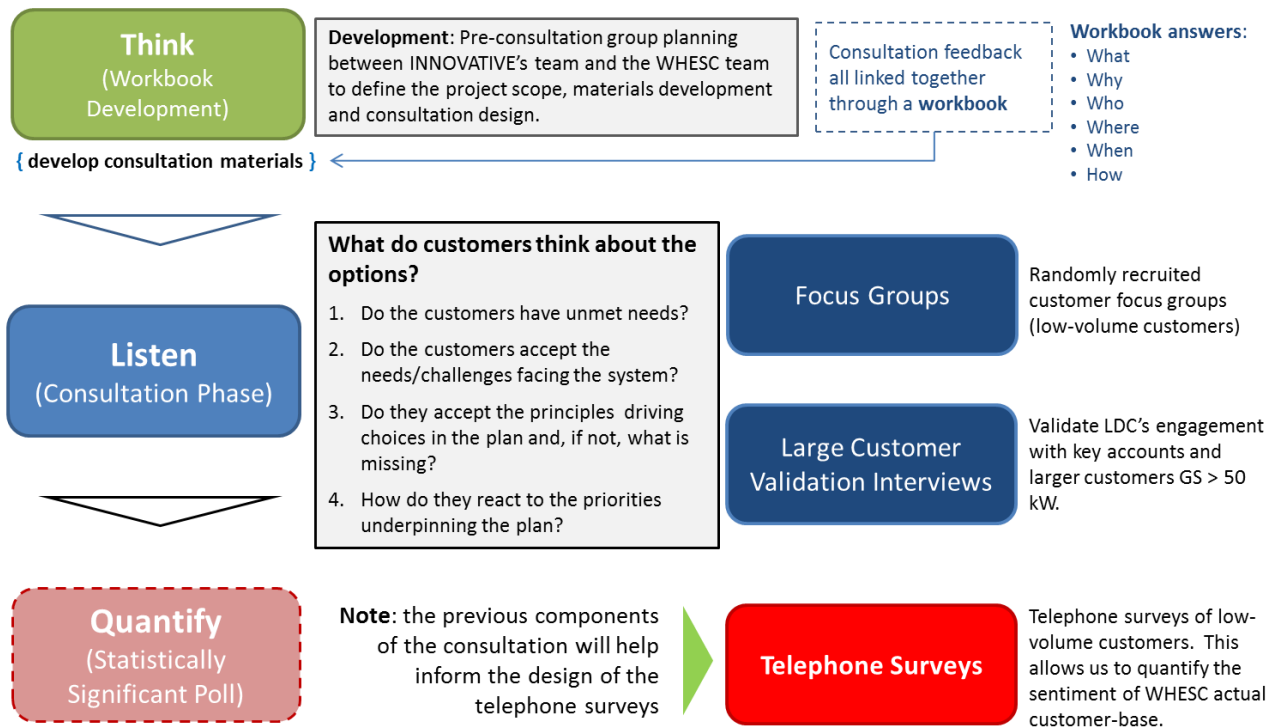
There were three stages in developing and implementing Welland Hydro's customer consultation:

- **Think:** The first stage was to develop the core background material and key questions for the workbook. INNOVATIVE and Welland 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.

- **Listen:** The second step was to determine the range of views held by the public regarding the system plan through qualitative elements of the process. This included holding two customer discussion groups using randomly recruited samples of residential and general service customers as well as validation interviews with larger, non-residential 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 Welland Hydro customers. The design of the surveys was in part informed based on the feedback from the qualitative research previous qualitative research components.

Customer Engagement Stages



Workbook Development

As we noted earlier, a key challenge in obtaining customer feedback on Welland Hydro's rate application is the lack of knowledge customers have regarding Ontario's electricity system and Welland Hydro's role as the local distributor within the system. Welland 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.

Development of the consultation workbook began in mid 2016. 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 Welland Hydro was provided by the utility.

The final consultation workbook had five distinct chapters:

1. **What is this Consultation About?** The purpose of the section was to inform readers of where this consultation fits in the context of electricity planning in Ontario.
2. **Electricity 101:** This section described how Ontario's electricity system works and the players involved in operating and regulating the electricity system as it relates to Welland Hydro's customers.
3. **Welland Hydro's Distribution System Today:** This section detailed the structure and key elements of Welland Hydro's distribution system.
4. **Pressures on the Distribution System:** This section described the various challenges facing Welland Hydro's distribution system and provided an overview of recent and current initiatives to manage these challenges. This section also included information on cost drivers, how the utility works to find efficiencies and costs savings, and provided an overview of both historical and forecasted capital and operating spending between 2012 and 2021.
5. **What will Welland Hydro's Plan Cost Customers?** This section detailed the estimated bill impact of the plan on the average customer in the rebase year and provided forecasted bill impacts for the following four years.

Although customer experience and familiarity with the electricity 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 < 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 Welland 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 are relatively straight-forward. We started with a basic satisfaction question and then asked an open-ended question about how Welland 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 take a bit more effort as they require educating customers so they can make an informed trade-off between competing options; typically, between maintaining system reliability and cost implications. Here, we were looking for value choices rather than technical issues. Key topics for preferences included:

- What should the balance be between system reliability and rate impact?
- What should Welland Hydro's priority be when planning its level of investment in replacing aging infrastructure?
- How important is system modernization to customers?
- Should Welland Hydro be playing a bigger role in CDM program delivery?
- Should Welland Hydro invest in discretionary programs to help digitize the customer experience?

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 opposes 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 consultation process itself.

The workbook for residential customers can be found in the **Appendix** of this report.

Executive Summary

The following section provides the detailed findings on the needs and the preferences of Welland Hydro's general service and residential customer base. In this section, we provide a high level overview of Welland Hydro customers' needs and preferences.

The overview includes feedback from 16 customers who participated in the *qualitative stage* of the consultation where we explored the range of issues related to Welland Hydro's rate application, as well as feedback from another n=501 residential customers and n=25 low-volume general services (GS < 50 kW) who responded to the quantitative stage where we documented the incidence of *needs and preferences* across the customer population.

Due to the qualitative design of the focus groups and the limited sample size of the general service telephone survey, the summary below will focus primarily on the generalizable results obtained from the residential customer telephone survey.

Customer Needs & Preference

Continued delivery of high quality services

Almost all Welland Hydro customers are satisfied with the job the utility is doing at running the electricity distribution system. This pattern was consistent across all rate classes in all phases of the customer consultation.

Overall Satisfaction across Consultation Activities

Q. Thinking specifically about the services provided to you and your community by Welland Hydro, overall, how satisfied are you with the services that you receive?

Response	Directional (Focus Groups)		Generalizable (Telephone Surveys)	
	Low-volume GS	Residential	Low-volume GS ²	Residential
Very satisfied	n=4	n=3	n=11	43%
Somewhat satisfied	n=5	n=3	n=12	43%
Neither satisfied or dissatisfied	n=0	n=0	n=0	4%
Somewhat dissatisfied	n=0	n=1	n=1	4%
Very dissatisfied	n=0	n=0	n=0	3%
Don't know / Refused	n=0	n=0	n=1	3%
TOTAL	n=9	n=7	n=25	n=501

² Results from the low-volume general service sample should be interpreted only as directional due to the limited sample size.

When asked what Welland Hydro can do better to improve services, many customers were either satisfied and had nothing to suggest or simply didn't know how the utility could improve services.

However, among those who did have suggestions, comments focused on three areas:

- Lowering rates;
- Improve customer communications and service; and
- Improve power quality and reliability.

This paradox of *lower rates* while seeking *improvements in reliability and customer services* is the key dilemma the consultation sought to explore and better understand through identify customer preferences on the trade-off between costs and various services.

Reliability of Service

The consultation focused deeper on the question of power reliability. In both the qualitative and quantitative phases of the consultation, information about the distribution system's current average level of reliability was provided to customer. The consultation collected feedback on satisfaction with the current level of reliability, Welland Hydro's efforts to address reliability and the impact of power outages.

The qualitative consultation phases explored the impacts of outages on customers, acceptable frequencies, and durations of outages. Those findings are detailed in the following section, in the qualitative phases of the customer consultation.

The telephone surveys built on the qualitative research and asked questions about customer preferences on the trade-off between cost and reliability.

A plurality of customers didn't experience any outages (36%) in the last 12 months. The rest were most likely to experience either one (19%) or two (15%) recent outages. Asking respondents to think back to their most recent power outage over the past 12 months:

- More than 6-in-10 (62%) residential customers say their most recent power outage was only a *minor inconvenience*, while 22% said it caused no inconvenience at all.
- Residential customers overwhelmingly feel satisfied with *the reliability of electricity service as judged by the number of power outages experienced* (90%); *the amount of time it takes to restore power when power outages occur* (85%); and *the quality of power delivered as judged by the absence of voltage fluctuations that can result in the flickering or dimming of lights* (85%).

When it comes to addressing power outages, a majority of residential customers want to see spending focused on maintaining the current number and duration of outages that are experienced.

Regarding the number of power outages:

- One-in-five (19%) residential customers think Welland Hydro should spend what is needed to reduce the number of power outages, while half (50%) think they should spend what is needed to maintain the current level. Only 16% state that they would accept more power outages in order to keep customer costs from rising.

Regarding the length of power outages:

- Almost seven-in-ten (69%) residential customers think Welland Hydro should spend what is needed to either reduce (20%) or maintain (49%) the length of power outages. One-in-five (21%) say they would accept longer power outages to help minimize customer costs from rising.

Customer Service, Communications, and E-Billing

In addition to power reliability, the consultation also looked at customer service and communications. Feedback from the qualitative research suggested a number of customers were dissatisfied with communications and customer service received from Welland Hydro. The generalizable, quantitative research below suggests otherwise.

- A strong majority of residential customers feel satisfied with both their customer service (68%) or their communications from Welland Hydro (73%).
- Furthermore, 3-in-4 (76%) think Welland Hydro is doing a *good job* in providing information on available tools and programs that can help with managing household electricity consumption.
- Over half (56%) of residential customers are *not interested* in changing to e-billing. Among those who are interested, a third (33%) claim to have *not heard or thought about it*.

System Challenges & Priorities

Survey respondents were informed of Welland Hydro's proposed capital investment required to maintain system reliability and then asked to think about reliability in terms of bill impact. For the most part, residential customers appear to support investing in the distribution system, even if this results in increases to their monthly electricity bill.

- The majority (54%) of residential customers feel that Welland Hydro *should invest what it takes to replace the system's aging infrastructure to maintain system reliability*, even if this results in an increase on their electricity bills.
- A "run-to-failure" approach for non-critical infrastructure is not supported by Welland Hydro residential customers. Two-thirds (65%) of residential customers would prefer to *replace non-critical infrastructure before it breaks down vs. waiting for non-critical infrastructure to breakdown in order to get its full value* (26%).
- Residential customers prefer Welland Hydro *has the equipment and tools they need to manage the system* (62%) over *making do with the tools, buildings and equipment it already has* (32%).
- More than 8-in-10 (82%) acknowledge the importance of investing now in modernizing the distribution system, even though there are other areas that require investment.
- A majority (59%) currently do not participate in any type of conservation programming, but when prompted, 7-in-10 (71%) say they would be willing to participate in a program if it would help them reduce their household electricity consumption.

Affordable electricity and service

It is true that many customers are feeling a “financial pinch” when it comes to their electricity bills. However, at the same time Welland Hydro customers feel that they are well served by the electricity system in Ontario.

- A majority (60%) residential customers agree that “*The cost of my electricity bill has a major impact on my finances and requires I do without some other important priorities*”;
- While customers may feel their electricity bill has a significant impact, 65% of residential customers agree that “*Customers are well served by the electricity system in Ontario.*”

Customer Reaction to Proposed Rate Increase

Asking customers whether they support or oppose a rate increase puts many participants in a difficult spot. It is clear that many customers have an issue with the idea of “supporting” a rate increase. While they do not want or like a rate increase, they often are not actually opposed to a rate increase. In fact, many feel a rate increase is needed. As such, we created a response for these customers: “*I don’t like it, but I think the rate increase is necessary*”.

Other customers have no problem in expressing outright support for a rate increase. The statement we provided for them is “*The rate increase is reasonable and I support it*”.

When we refer to the combination of these two groups – *I don’t like it but it’s necessary and I support the rate increase* – we refer to the level of “**social permission**”.

Referring to the generalizable results from the residential telephone surveys, 71% of residential customers provide social permission for Welland Hydro’s proposed rate increase. That is, 34% think it’s reasonable and support it, 38% accept it but don’t like it, and 23% think it’s unreasonable and oppose it.

Overall Satisfaction across Consultation Activities

Q. *Considering the cost of Welland Hydro’s plan, would you say ...*

Response	Directional (Focus Groups)		Generalizable (Telephone Surveys)	
	Low-volume GS	Residential	Low-volume GS	Residential
The rate increase is reasonable and I support it	n=3	n=3	n=6	34%
I don’t like it, but I think the rate increase is necessary	n=5	n=4	n=11	38%
The rate increase is unreasonable and I oppose it	n=1	n=0	n=7	23%
Don’t know / Refused	n=0	n=0	n=1	5%
TOTAL	n=9	n=7	n=25	n=501

Top 3 Reasons for Willing Acceptance [residential respondents]

Q: And why do you say that? [Asked of residential respondents who had an opinion on Welland Hydro's proposed rate increase] [Reasonable, support it]

Maintenance/Infrastructure spending is necessary for reliable service	44%
Increase is not too much	39%
Increases are inevitable/prices rise/inflation	4%

As seen throughout Welland Hydro's customer consultation, there is no simple answer to electricity utility spending and investing from the customer's perspective. Rate increases are undesirable, but lower reliability is clearly unacceptable and a proactive and consistent approach to system maintenance appears to be understood and accepted by customers. As a result, Welland Hydro's customers accept the proposed spending and investment plan and its accompanying rate increase as an unfortunate necessity of maintain system reliability and customer services they have come to expect from their utility.

Focus Group Consultation

Focus Group Consultation

with Residential and
General Service customers

PURPOSE: To gain qualitative input on Welland Hydro's plan from residential and GS < 50 kW customers and to help inform the design of the subsequent telephone surveys.

Summary

General Satisfaction:

Overall, both general service and residential participants are satisfied with the service Welland Hydro provides. All general service focus group participants were either somewhat or very satisfied, as were residential participants save one who was somewhat dissatisfied. In both groups, satisfaction was tied to power quality issues, such as blips and surges, and customer service experiences. residential participants reported largely positive customer services experiences but several general service participants expressed frustration when dealing with Welland Hydro's customer service representatives, particularly regarding the collections and disconnections processes.

System Reliability:

General service participants were concerned with reliability and the impact that an outage or power quality issue would have on their business. Shorter, more frequent outages can significantly damage equipment, while longer outages can negatively impact businesses' customers and employees. Both types of reliability issues can result in lost productivity and financial losses. No general service participant felt that it is reasonable to have an outage last two or more hours, and nearly half felt that an outage should be restored in *less than 15 minutes*.

While several of the residential participants expressed concerns over power quality issues such as momentary interruptions, none voiced strong concerns about outages despite the fact that three people reported experiencing between *two and four* outages lasting *one minute or more* in the past year. The residential group understood that outages are often caused by factors that are outside of Welland Hydro's control, such as adverse weather. Five Residential group members felt that an outage should be restored within *less than an hour*.

Most participants in both groups believe that Welland Hydro should invest what it takes to replace aging infrastructure to maintain system reliability, even if that leads to an increase of a few dollars over the next couple of years. This view was held unanimously among residential participants, while two general service group members felt that WHESC should lower its level of investment to manage the bill impact to customers, even if that negatively affects reliability.

Social Acceptance of Plan:

Discussion of Welland's slowing economy and shrinking customer base was present throughout both focus groups. Despite this economic reality, nearly all participants in both the general service and residential groups felt that Welland Hydro's proposed plan is headed in the right direction,

with the exception of one participant from the general service group who felt that the plan is headed in the wrong direction.

While the majority of participants don't like the idea of a rate increase, they understand it is necessary. A third of the general service participants believe the rate increase is reasonable and support it outright; among residential participants, three of seven participants support the rate increase outright.

The following table illustrates these findings.

Q: Considering what you know about the local distribution system, which of the following best represents your point of view?

Response	GS	RS	COMBINE D
The rate increase is reasonable and I support it	3	3	6
I don't like it, but I think the rate increase is necessary	5	4	9
The rate increase is unseasonable and I oppose it	1	-	1
Don't know	-	-	-
Total	9	7	16

Note: "GS" = general service less than 50 kW customers, while "RS" = residential customers.

Methodology

About the General Service and Residential Customer Consultation

INNOVATIVE was engaged by Welland Hydro to conduct general service and residential customer consultation sessions designed to identify the needs and preferences of customers as they relate to the utility's proposed spending on the distribution system.

The consultation sessions were held in Welland on July 26th, 2016. A total of 16 general service and residential customers participated in these consultation sessions.

General service under 50 kW Rate Class	9 participants
Residential Rate Class	7 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. Customers qualified for the consultation if they manage or oversee their organization's electricity bill, to ensure they are 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 with primary or shared responsibility for paying the electricity bill.

Customer recruitment was randomly drawn from full customer lists were provided by Welland Hydro.

An incentive of \$100 was provided to all general service and \$80 to all residential customers who participated in the consultation sessions.

Both focus group 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 Welland Hydro in July 2016.

The workbook themes included the following:

1. What is this Consultation About?
2. Electricity 101
3. Welland Hydro's Distribution System Today
4. Pressures on the Distribution System
5. What will Welland Hydro's Plan Cost Customers?

At the beginning of the sessions, the facilitator provided an overview of the purpose of the consultation and why Welland 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 various issues covered in the workbook, and the implications for participants or their organizations.

While the consultation largely followed this structure, discussions arose organically as participants explored the workbook. Questions and comments were addressed by the moderator, and depending on the topic (i.e. whether or not it fell within the scope of this consultation), participants' impressions were further probed.

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 related to the proposed distribution system plan, feedback collected from this phase of the consultation was used to inform the design of the telephone survey consultation phases of Welland 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

In order to provide context for the consultation, the focus group participants were first provided an overview of the electricity system in Ontario, and were introduced to the various means by which customer feedback is collected. Focus group members were introduced to Ontario's Long Term Energy Plan and the Regional Planning undertaken by the IESO, and were informed that this consultation would be centred on Welland Hydro's distribution planning and upcoming rate application.

At this point, the moderator took the opportunity to educate participants on the Ontario Energy Board (OEB) and how the electricity system is regulated. The moderator also noted that the results of this consultation will be submitted to the OEB as evidence by Welland Hydro as part of the rate application process.

The moderator explained that Welland Hydro's portion of the electricity bill makes up about 12%, which are largely fixed costs. It was also clarified that there are many other components other than Welland Hydro that make up the bill.

The general service participants were then introduced to the proposed rate increase that Welland Hydro projects is necessary to operate, maintain, and modernize the system in the next five years. The moderator provided more information on the electricity system as a whole, the assets Welland Hydro owns, and the services the utility provides. After this overview, participants were asked about their level of familiarity with the various parts of the electricity system prior to this consultation. None felt that they were *very familiar*, and three felt they were *somewhat familiar, but could not explain the details to others*.

After receiving an overview of the system, eight participants felt that Ontario's electricity system had been explained *somewhat or very well*; one participant felt that it had *not been explained very well*.

General Satisfaction

General service participants voiced their different experiences with Welland Hydro. When asked to report satisfaction levels, all participants indicated feeling either *very satisfied* or *somewhat satisfied* with the service Welland Hydro provides. As a group, satisfaction generally related to two areas: reliability and customer service. Despite providing the utility with high satisfaction ratings, several participants voiced concerns with the level of customer service they had received, and emphasized the importance of reliability to their businesses. Both areas will be discussed further in this report.

Customer Service

While participants reported high levels of satisfaction with Welland Hydro, concerns with customer service were expressed by a number of participants during the group discussion. One participant relayed the frustration she experienced when trying to set up a new account after relocating her

business, and with gaps in Welland Hydro's data as she took over a WHESC account from the previous business owner, resulting in her business being disconnected three times in 2015.

Welland Hydro could give a little more care to the customer data portion. It needs a better customer relationship management system.

Participants voiced frustration around what they perceive as inadequate communication regarding the disconnections process, and agreed the utility could improve its customer communications. Concern was expressed for those in Welland who are struggling financially, and one participant noted he would like to see more of a "buffer zone" around disconnections.

In that area [disconnections], Welland Hydro is really heavy handed.

Not all participants shared those customer service concerns. A third of the participants said they had never experienced any customer service issues with the utility.

System Reliability

General service customers were asked how many outages (defined as a power interruption lasting longer than one minute) they had experienced in the previous year, and responses varied. Three participants reported *one* outage in the past year, one had experienced *two* outages, and two participants experienced *three* outages in the past year. Overall, participants did not vocalize significant complaints about outages as defined and agreed that the reliability in Welland is quite good, but they did underscore the importance of reliability to business continuity and productivity.

Reliability is really important for my business, and [Welland Hydro's] reliability is good. The quality of the power, how clean it is, is important to us too, and there's always room for improvement. Cleaner power would be nice, but I'm sure it would be more expensive.

There was a range of opinions regarding the frequency of outages participants consider reasonable in a year: one participant felt *no outage* is reasonable, two felt *one* is reasonable, two felt *two* are reasonable, two felt *three* are reasonable, and one participant felt *four* outages a year is reasonable. In terms of outage duration, opinion was again diverse: four felt *less than fifteen minutes* is reasonable, two felt *30 minutes to an hour* is reasonable, and two felt that *less than two hours* is reasonable. The remaining participant *didn't know*.

Impact of Outages

The impact of outages to general service customers varies depending the nature of the business, but there was consensus that power quality issues can damage equipment. One participant has backup generators to protect his electronic equipment from such issues.

We had a brownout, and there were power surges. It was pretty frightening to think about what could happen to the building. Thinking about the potential damage to equipment. We are counting on that steady flow of power, but if you don't experience a brown out or surge, you never think about it.

Longer outages can result in lost productivity, such as having to send employees home, and lost revenue, because clients are not able to use the services of the business.

Our equipment is quite expensive, if there were frequent short outages, that would take its toll on the equipment. Longer outages would affect us because we'd have employees sitting idle, and we can't service our clients. Either type is not good, but so far haven't had much of an issue.

From a client service perspective, longer outages are worse, because my clients can't be using my service.

If it was out for more than an hour, it would cost my business a few hundred dollars an hour. Luckily our system's more reliable than that.

Capital Investment and Operating Budget

Opinion was divided when thinking about the balancing act between reliability and the cost of running the system. Three participants *would be willing to accept more and longer power outages if that meant there would be a decrease to their distribution rates*, while six participants *would be willing to pay a bit more on their distribution rates to maintain the current level of service*.

When asked about projects that focus on replacing aging equipment in poor condition, seven participants felt that *Welland Hydro should invest what it takes to replace the system's aging infrastructure, even if that increases the monthly electricity bill by a few dollars over the next few years*.

For us, the cost of being down one hour would be in the hundreds of dollars. If my bill were to increase let's say by \$5 or \$10 a month, over a year that's less than the couple of hundred dollars it would cost to be down for a few hours.

The current reliability is ok and the few dollars more per month is definitely worth it to keep the power on.

My building is really old, and every year we're putting in thousands just to keep it going. If we had the ability to get all the renovations done in one shot, it would be better, and I think it's the same thing for Welland Hydro. If you piecemeal repairs, you're dealing with the same problems over and over.

Two participants felt differently, saying that *Welland Hydro should lower its investment in renewing aging infrastructure, even if that means more or longer outages*.

My business isn't ruled by technology, so if there's an outage every month, it's not as bad an impact for me as on other businesses.

If my tenants have an outage that lasts half an hour, it's no big deal to me, they're paying the same rent.

When asked about the equipment Welland Hydro needs to run the system and its business (such as vehicles and IT systems), two participants felt the utility *should make do with the equipment and IT systems it already has*.

If Welland Hydro has a lot of big projects that they need to do, they should be trying to make do with the equipment they already have to help cover the costs of these other projects.

Seven participants, however, felt that *Welland Hydro should have the equipment and tools they need to manage the system safely, efficiently, and reliably*.

I look at efficiencies, and newer vehicles mean more efficiencies which mean more savings.

What would make me happy is if Welland Hydro had more user-friendly, customer-friendly services and communications.

Two participants felt that the discretionary investment in computer software customer online forms should be implemented in 2017.

It would help avoid a lot of mistakes if I can log in and update my own profile, manage my own bill, and make my own partial payments.

However, the remaining nine participants felt that this project is a “nice to have”, “not a need to have”.

Cost Drivers

Most participants felt that after reviewing the section in the workbook on cost drivers, they understood the cost drivers that Welland Hydro is responding to at *least somewhat well* (2 *very well*, 6 *somewhat well*). One participant did not understand the cost drivers well at all. In terms of managing these cost drivers, eight participants felt that Welland Hydro is doing at least a good job (3 *very good*, 5 *good*). One participant *didn't know* how to answer this question.

Conservation and Demand Management (CDM)

Three participants had *previously participated in a CDM program*, while four *had not*, and two *didn't know* if they had.

Welland Hydro was very professional about assisting with the lighting retrofit, and the program was very helpful.

When asked about the likelihood of participating in future CDM programs, five participants were *very likely* to participate, three were *somewhat likely*, and one participant said they were *not very likely* that they would partake in a CDM program in future.

Proposed Plan and Rate Impact

All participants felt that Welland Hydro is doing at least a good job when it comes to planning for the future (6 *good*, 3 *very good*).

Ultimately, all but one participant supported the proposed rate increase. Three felt *the rate increase is reasonable, and supported it outright*, while five felt that, *while they don't like it, they think the proposed increase is necessary*.

I believe that we should keep the system up and running and \$8 dollars over the next few years is not a lot. If people can afford a pack of cigarettes and a case of beer, they can afford a few extra dollars a month.

\$60 a year extra is not going to going to make or break a business, but Welland Hydro should have been allocating for these repairs over the years.

Only one participant opposed the proposed increase.

This is not Toronto or Ottawa. This is Welland, a poor city. How are these poor people going to pay when they don't have the money?

Residential Rate Class

Prior to the consultation, residential participants reported low familiarity with the provincial electricity system and the services that Welland Hydro provides: five identified *as having heard of some of the terms and organizations mentioned, but knew very little about Ontario's electricity system*, and two *knew nothing about Ontario's electricity system, aside from receiving a bill from Welland Hydro*. After reading through the introductory section of the workbook and hearing the moderator's overview, participants' understanding of the system improved: all seven participants felt that Ontario's electricity system had been explained either *very well* (5) or *somewhat well* (2).

General Satisfaction

Most residential participants were satisfied with the services Welland Hydro provides; only one participant reported being *somewhat dissatisfied*. While participants had largely positive impressions of their interactions with Welland Hydro, concerns were raised over power quality issues and the deposit required to set up a new account.

Customer Service

Most residential customers recalled positive interactions with Welland Hydro from a customer service perspective.

I set up a new account and it was a pleasant experience.

In the past, if my tenants didn't pay their bills on time, Welland Hydro gave extra time to pay the bills. We were actually able to talk to the person who makes those decisions.

My experience has been alright, but it was stressful when I got disconnected for a \$120 bill.

However, several did object to the deposit that is required to open a Welland Hydro account, even if their account with a previous local distribution company was in good standing.

System Reliability

Residential participants reported a range of experiences with reliability: one person had *not experienced any outages* last longer than one minute in the past year, three participants reported *one* outage as defined, two participants experienced *two*, and one person reported *more than four outages* in the last year. On the whole, residential participants largely did not voice concerns with outages.

I rarely have an outage, even in bad weather. And if there is an outage, it feels like Welland Hydro will take care of it.

However, several participants raised concerns over power quality issues.

Every time I come home after going away, it seems the power's gone off. The clocks have to be reset. This has happened about five times.

A couple times a month I'll wake up to the clocks needing to be reset, or the lights will flicker.

Participants held diverse views on the frequency and duration of outages that they deem to be reasonable in a year. Two each felt that *two or three outages a year is reasonable*; one participant said *one outage* a year is reasonable, and two *didn't know*. Two participants felt that it is reasonable for an outage to last less than *15 minutes*; two felt *15-30 minutes* is reasonable, one participant thought *30 minutes to less than an hour* is reasonable, and two did not answer the question.

I'm pretty tolerant of outages, especially due to weather issues, because those are out of everyone's control.

While participants do not want to see their bills increase, they also recognized the importance of reliable electricity service. The group agreed that it does not want current reliability levels to decrease; participants rely on the current service levels that Welland Hydro provides in order to go about their lives. When thinking about the balancing act between reliability and the cost of running the system, five of the seven participants stated they *would be willing to pay a bit more to maintain the current level of reliability*. One respondent *didn't know* and one did not formally answer the question.

I'd be willing to pay a bit more to maintain because the system needs to be replaced, and we do get good service

I'm satisfied with the current level of reliability, and I don't want my bill to go up, but I don't want reliability to go down either

Capital Investment and Operating Budget

The discussion turned to replacing aging equipment in poor condition, and the residential group agreed that while it does not want to pay more, it recognizes the need to invest in system renewal. All participants felt that *Welland 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*. One participant, who acknowledged she struggles financially to make ends meet in Welland, explained that as the age of the system increases, so does the risk of equipment failure. A small increase on her bill would be acceptable in order to help maintain current reliability levels and prevent a "huge failure".

To me it sounds like [Welland Hydro] wants money to redo everything, but at the same time, you can see that the system's old.

Employee safety was also a consideration for participants; some expressed concerns over Welland Hydro employees working on aging infrastructure and equipment.

All residential participants felt that when it comes to investing in vehicles, tools, and IT systems, *while Welland 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*.

I want them to also consider hybrid vehicles and technologies of the future.

As in the earlier parts of the discussion, while participants do not like the idea of paying more, they agree that Welland Hydro should have the necessary resources to make non-discretionary investments and to manage the distribution system. However, opinion was divided in terms of discretionary investments in the system. When asked about the proposed investment in computer software on-line forms, three participants felt this project is a "nice to have", and three felt *it should be implemented in 2017* (one participant *didn't know*).

When it comes to e-billing, three participants reported being *very interested in changing to e-billing*, one was *somewhat interested*, and three were *already signed up for e-billing*.

The only reason I haven't switched to e-billing is because I haven't gotten anything for it. There's no incentive to switch.

Welland Hydro could be saving on staff if every customer switched to e-billing. I have.

Cost Drivers

After reviewing the workbook section on cost drivers and participating in the group discussion, some participants felt they had a good understanding of Welland Hydro's cost drivers, while others did not. One participant reported understanding the cost drivers that Welland Hydro is responding to *very well*, three reported understanding them *somewhat well*, two participants felt they *did not understand very well*, and one *did not feel they understood the issues well at all*.

When asked to rate how well Welland Hydro is managing these cost drivers, most participants gave the utility a positive rating: one felt the utility is doing a *very good* job, while five felt it is doing a *good* job (one *didn't know*).

Several participants wondered why the City of Welland does not intervene to "help Welland Hydro" manage these costs, while others wondered why utilities do not set aside reserves to pay for future investments in the system. This was an opportunity for the moderator to clarify Welland Hydro's relationship with the City of Welland, and the OEB policy that local distribution companies are not permitted to accumulate reserve funds.

Conservation and Demand Management (CDM)

Six of the seven participants reported *having participated in a Welland Hydro CDM program*. When asked about the likelihood of participating in a future Welland Hydro CDM program to reduce electricity consumption, six said they would be *very likely* to participate, and one participant would be *somewhat likely* to participate.

Electricity rates are reasonable, and you can offset the increasing cost of wages and maintenance etc. by participating in conservation programs.

Proposed Plan and Rate Impact

After going through the workbook and engaging in the focus group discussion, all seven participants felt *Welland Hydro's investment plan is going in the right direction*.

When asked to rate the job Welland Hydro is doing when it comes to planning for the future, a majority of participants felt Welland Hydro is doing a *good job* (three *good*, one *very good*), while *two didn't know* and one participant did not answer the question.

Ultimately, despite emphasizing the importance of Welland Hydro trying to run its system as efficiently as possible, and the fact that most participants voiced not liking the idea of their bills increasing, all residential participants supported Welland Hydro's proposed rate increase. Three supported it outright, saying *the proposed rate increase is reasonable and I support it*, while four said while *I don't like it, I think the proposed rate increase is necessary*.

The longer we wait to invest in the system, the most expensive it will be.

Being on a single income, things get tight, but that's not Welland Hydro's fault.

There has to be an investment to get us where we want to be and take into account efficient technology. There is no better option than to play catch up and then even out the rates.

How Can the Consultation Process Be Improved?

Overall, participants found the consultation to be informative, and found the information in the workbook to be accessible and well presented. Several general service and residential participants expressed a desire to have more time to go through the workbook and to continue the discussion.

Too much information. I didn't have enough time to read and absorb it in the time given.

The workbook is extremely informative and educational. Very detailed and colourful – not boring.

We take electricity for granted, and before this [consultation] I did too.

I like the in-person format [for a consultation] – this format's my preference.

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. Before this consultation, how familiar were you with the various parts of the electricity system, how they work together, and which services Welland Hydro is responsible for?

	GS	RS	TOTAL
Very familiar and could explain the detail of Ontario's electricity system to others	-	-	-
Somewhat familiar, but could not explain all the details of Ontario's electricity system to others	3	-	3
Have heard of some of the terms and organizations mentioned in this workbook, but knew very little about Ontario's electricity system	5	5	10
Aside from receiving a bill from Welland Hydro, I knew nothing about Ontario's electricity system	1	2	3
TOTAL	9	7	16

2. Given what have read so far, how well do you feel Ontario's electricity system has been explained to you?

	GS	RS	TOTAL
Very well	4	5	9
Somewhat well	4	2	6
Not very well	1	-	1
Not well at all	-	-	-
Don't know	-	-	-
TOTAL	9	7	16

3. Generally, how satisfied are you with the service you receive from Welland Hydro?

	GS	RS	TOTAL
Very satisfied	4	3	7
Somewhat satisfied	5	3	8
Neither satisfied nor dissatisfied	-	-	-
Somewhat dissatisfied	-	1	1
Very dissatisfied	-	-	-
Don't know	-	-	-
TOTAL	9	7	16

5. In 2015, the average Welland Hydro customer experienced one power outage per year (i.e. one minute or more). Do you recall how many outages you experienced in the past year?

	GS	RS	TOTAL
None	-	1	1
One	3	3	6
Two	1	2	3
Three	2	-	2
Four	-	-	-
More than four	-	1	1
Don't know	3	-	3
TOTAL	9	7	16

6. How many power outages do you feel are reasonable in a year?

	GS	RS	TOTAL
No outage is acceptable	1	-	1
One	2	1	3
Two	2	2	4
Three	2	2	4
Four	1	-	1
Five or more	-	-	-
Don't know	1	2	3
TOTAL	9	7	16

7. What do you feel is a reasonable duration for a power outage?

	GS	RS	TOTAL
No outage is acceptable	-	-	-
Less than 15 minutes	4	2	6
15 to less than 3- minutes	-	2	2
3- minutes to less than 1 hour	2	1	3
1 hour to less than 2 hours	2	-	2
2 hours or more	-	-	-
Don't know	1	-	1
Missing value	-	2	2
TOTAL	9	7	16

8. No distribution system can deliver perfectly reliable electricity service. There is a balancing act between reliability and the cost of running the system. Please select which statement comes closest to your point of view.

	GS	RS	TOTAL
I would be willing to accept more and longer power outages if that meant there would be a decrease to my distribution rates on my electricity bill	3	-	3
I would be willing to pay a bit more on my distribution rates to maintain the current level of reliability	6	5	11
I would be willing to pay much more on my distribution rates to improve the level of reliability I currently receive from Welland Hydro	-	-	-
Don't know	-	1	1
Missing Value	-	1	1
TOTAL	9	7	16

9. With regards to projects focused on replacing aging equipment in poor condition, which of the following statements best represents your point of view?

	GS	RS	TOTAL
Welland Hydro should invest what it takes to replace the system's aging infrastructure to maintain system reliability, even if that increases my monthly electricity bills by a few dollars over the next few years.	7	7	14
Welland 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.	2	-	2
Don't know	-	-	-
TOTAL	9	7	16

10. As a company, Welland Hydro needs vehicles and tools to service the power lines and IT systems to manage the system and customer information. Which of the following statements best represents your point of view?

	GS	RS	TOTAL
Welland Hydro should find ways to make do with the equipment and IT systems it already has.	2	-	2
While Welland 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.	7	7	14
Don't know	-	-	-
TOTAL	9	7	16

11. Listed above as one of the proposed 2017 capital projects is a discretionary investment in computer software customer online forms. This software will give customers more control and convenience with managing their accounts online. Which of the following statements best represents your point of view?

	GS	RS	TOTAL
This is a “nice to have” project not a “need to have” project.	7	3	10
This project should be implemented in 2017.	2	3	5
Don’t know	-	1	1
TOTAL	9	7	16

12. E-billing, or electronic billing, saves money on postage and paper. The more customers who use e-billing, the more money Welland Hydro saves; savings which ultimately get passed along to customers. How interested would you be in changing to e-billing?

	GS	RS	TOTAL
Very interested	3	3	6
Somewhat interested	4	1	5
Not very interested	-	-	-
Not at all interested	-	-	-
Already signed up for e-billing	1	3	4
Don’t know	1	-	1
TOTAL	9	7	16

14. How well do you feel you understand the cost drivers that Welland Hydro is responding to?

	GS	RS	TOTAL
Very well	2	1	3
Somewhat well	6	3	9
Not very well	-	2	2
Not well at all	1	1	2
Don't know	-	-	-
TOTAL	9	7	16

15. How would you rate the job Welland Hydro is doing to manage these cost drivers?

	GS	RS	TOTAL
Very good	3	1	4
Good	5	5	10
Poor	-	-	-
Very Poor	-	-	-
Don’t know	1	1	2
TOTAL	9	7	16

17. One of the most cost effective ways for Welland Hydro to reduce its required investments in the distribution system is through customer uptake of conservation programs. When customers consume less electricity at peak demand times, less strain is put on the distribution system and as a result, customers save money in two ways:

- 1) a lower level of investment is required by Welland Hydro to expand and maintain the distribution system's capacity to deliver electricity; and
- 2) customers may pay less when they reduce their electricity consumption.

Have you ever participated in a Welland Hydro conservation program?

	GS	RS	TOTAL
Yes	3	6	9
No	4	1	5
Don't know	2	-	2
TOTAL	9	5	16

18. How likely are you to participate in future Welland Hydro conservation programs that could help reduce your electricity consumption?

	GS	RS	TOTAL
Very likely	5	6	11
Somewhat likely	3	1	4
Not very likely	1	-	1
Not at all likely	-	-	-
Don't know	-	-	-
TOTAL	9	7	16

19. From what you have read here and what you may have heard elsewhere, does WHESC's investment plan seem like it is going in the right direction or the wrong direction?

	GS	RS	TOTAL
Right direction	8	7	15
Wrong direction	1	-	1
Don't know	-	-	-
TOTAL	9	7	16

20. How would you rate the job Welland Hydro is doing when it comes to planning for the future?

	GS	RS	TOTAL
Very good	3	1	4
Good	6	3	9
Poor	-	-	-
Very poor	-	-	-
Don't know	-	2	2
Missing value	-	1	1
TOTAL	9	7	16

21. 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	3	3	6
I don't like it but I think the rate increase is necessary	5	4	9
The rate increase is unreasonable and I oppose it	1	-	1
Don't know	-	-	-
TOTAL	9	7	16

Large Customer Validation Interviews

Large Customer Validation Interviews
with large non-residential customers

PURPOSE: To validate the consultation process and verify that Welland Hydro provided large customers (i.e. Key Accounts and General Service over 50 kW) with the information they needed to form an opinion on the utility's proposed plan.

Methodology

Between August 16th and 23rd, 2016, Innovative Research Group (INNOVATIVE) conducted five validation interviews with Welland Hydro key account customers. Welland Hydro staff briefed key account customers on the details of their proposed Distribution System Plan in early August, and INNOVATIVE followed-up by telephone in order to validate the process and to verify that customers received the information needed to provide informed feedback on Welland Hydro's proposed plan.

All of the validation interviews were conducted over the telephone and lasted approximately three to five minutes. Key account participants were encouraged to provide open and confidential feedback regarding the consultation process and their thoughts on the proposed plan.

NOTE: Results contained within this report are based on a very limited sample and should be interpreted as directional only. Customer names have been withheld in the report to protect confidentiality.

Recruiting Key Account Participants

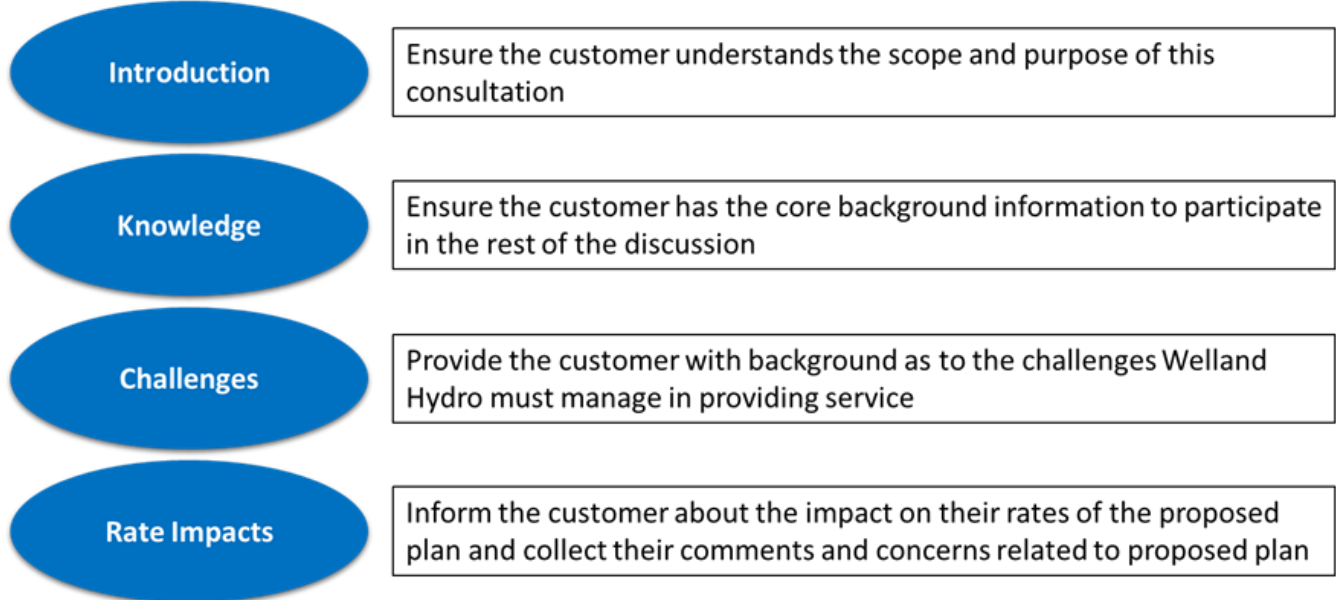
As Welland Hydro conducted their key account consultations, contact information for the five organizations was shared with INNOVATIVE. Key account status, which is typically based on the largest electricity usage, was based on Welland Hydro's criteria. This consultation was in conjunction with regular engagement practices between Welland Hydro and their key accounts.

Key Account Consultation Process

Welland Hydro and INNOVATIVE staff developed a comprehensive framework to consult with key accounts in order to gather feedback on the proposed Distribution System Plan. Key account customers will be uniquely affected by the proposed plan; understanding and responding to their needs and preferences is a key component of the broader consultation.

The framework of the key account consultation is based on the broader consultation workbook used with both residential and general service customers. However, key account customers generally know more about the distribution system and have a more specific understanding of their needs vis-a-vis the system. Therefore, these consultations focused on individual organizations' unique relationship with Welland Hydro. Organizations of this size and consumption class want to understand how their organization will be directly affected by the proposed investment plan, and this consultation framework allowed for customization to provide this detailed information.

Key Account Interview Structure



Participant Feedback

The following section highlights the general feedback from the key account rate class group. Key account customers were encouraged to provide additional comments or feedback throughout the validation interviews with INNOVATIVE consultants.

Overall Take-Away

Overall, the key account customers interviewed by INNOVATIVE are satisfied with the consultation process, and the job Welland Hydro has done in communicating the proposed Distribution System Investment Plan. These customers feel that they received the information needed to understand how their organizations will be impacted by the proposed plan. Most feel that the process of system renewal is on track and progressing at the right speed. Furthermore, customers felt they had the opportunity to raise concerns and ask questions during the meeting.

Most key accounts understand the need for the rate increase, think it's reasonable, and support the plan. However, the industrial customer interviewed expressed serious concern and opposes the rate increase.

Customer Experience and Expectations

Overall, key account customers found Welland Hydro's consultation to be helpful in understanding the proposed investment plan and the impacts to their organizations. All five respondents felt the plan was well explained, regardless of their views of the plan itself. Several respondents remarked that they had learned a lot from meeting with Welland Hydro, and had a better understanding of how the distribution system works in Welland.

Coverage of Distribution System Topics

The five key accounts interviewed by INNOVATIVE stated that Welland's Distribution System Plan covered the key areas they expected and was not missing any information. When going through the distribution plan, Welland Hydro explained the impact that the plan and the proposed rate increase would have on each organization.

"They took the time to answer all of my questions. Going in, I had only the tip of the iceberg in terms of knowledge about the system. I learned a lot."

Rate of System Renewal

The key account customers did not agree unanimously on Welland Hydro's proposed rate of system renewal. INNOVATIVE interviewed an industrial customer who expressed frustration at the rate of renewal and believes that Welland Hydro is *proceeding too quickly*. His perception is that Welland Hydro is not as efficient as it could be, and that the utility should find savings internally and demonstrate that effort to its customers before turning to ratepayers for additional funds to invest in the system.

"I'm opposed to this rate application from a financial responsibility point of view. I'd like to see Welland Hydro look at areas of waste in its business to find savings before turning to ratepayers for an increase".

However, all other key account customers agreed that Welland Hydro's proposed rate of system renewable is proceeding at *about the right pace*.

Rate Impacts

Three out of five key account customers interviewed *support the proposed rate increase and feel it is reasonable*; one customer *doesn't like it but thinks it's necessary*, and one *opposes the rate increase and feels it is unreasonable*. This industrial customer explained that electricity rates are a significant cost to his business, and explained that they would soon make his business in Welland unsustainable, requiring the business to relocate.

"This affects my business' bottom line. Electricity is my second biggest cost driver. It used to third, but electricity is now a greater cost than labour. It's getting to the point where the plant's going to need to be relocated across the border."

However, the other four key account customers support the proposed distribution system plan and the resulting rate increase. These respondents understand the need for investment in order to maintain the system from a cost-benefit perspective.

"Welland Hydro has the same goal as every business – do what needs to be done while keeping costs low."

"Of course it would be great if there were no increase. But I do not want to let the infrastructure fail – so with that in mind the increase is reasonable."

"The reasons behind the rate increase seem very reasonable, such as: improving infrastructure, GIS database, and asset replacement. For most, the extra costs are very manageable [...] I fully support the rate increases."

Validation Interview Questionnaire Results

The following tables are the tabulations of key account customer feedback to validation questions INNOVATIVE asked when following up on Welland Hydro's consultation sessions.

Respondents have been assigned a code to ensure their *anonymity*. Additional comments and feedback from key account participants are included in the body of this report. Participants were encouraged to expand on their responses wherever they found necessary.

1. Can you please confirm that you recently spoke with a representative of Welland Hydro to discuss their Distribution System Plan?

Response	KA1	KA2	KA3	KA4	KA5	Count
Yes	1	1	1	1	1	5
No	-	-	-	-	-	-
Total	1	1	1	1	1	5

2. Did you have an opportunity to express any concerns about how well Welland Hydro is meeting your needs?

Response	KA1	KA2	KA3	KA4	KA5	Count
Yes	1	1	1	1	1	5
No	-	-	-	-	-	-
Total	1	1	1	1	1	5

3. Did Welland Hydro do a good job explaining the challenges they are facing in maintaining the system?

Response	KA1	KA2	KA3	KA4	KA5	Count
Yes	1	1	1	1	1	5
No	-	-	-	-	-	-
Total	1	1	1	1	1	5

4. Did the Distribution System Plan cover the key areas you expected?

Response	KA1	KA2	KA3	KA4	KA5	Count
Yes	1	1	1	1	1	5
No	-	-	-	-	-	-
Total	1	1	1	1	1	5

5. Do you feel Welland Hydro's proposed rate of system renewal is too fast, too slow or about right?

Response	KA1	KA2	KA3	KA4	KA5	Count
Too fast	-	-	1	-	-	1
Too slow	-	-	-	-	-	-
About right	1	1	-	1	1	4
Total	1	1	1	1	1	5

6. Considering what you know about the local distribution system, which of the following best represents your point of view:

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

This next section examines the telephone survey results of 501 residential and 25 general service customers. However, due to the limited sample size of the general service telephone survey (n=25), the summary below will focus primarily on the generalizable results obtained from the residential customer telephone survey.

Familiarity and Satisfaction

- More than 7-in-10 (74%) residential customers are familiar with their local distribution system and a strong majority (86%) are satisfied with the job Welland Hydro is doing managing the system.
- When asked how service could be improved, nearly half (46%) suggest Welland Hydro could improve its rates. Still 3-in-10 (30%) residential customers feel nothing could be done to improve Welland Hydro's service.

Electricity Bill Knowledge

- Only about 1-in-4 (27%) residential customers are familiar with how much of their monthly bill is allocated to Welland Hydro. When the amount is explained to respondents, most (55%) residential customers think the amount is *reasonable*.

System Reliability

- A plurality of customers didn't experience any outages (36%) in the last 12 months. The rest were most likely to experience either one (19%) or two (15%) recent outages. Of those impacted, most experienced an outage of hour or less with 29% who recall it as less than 15 minutes.
- More than 6-in-10 (62%) residential customers say the power outage they experienced was only a *minor inconvenience*.
- Residential customers overwhelmingly feel satisfied with *the reliability of electricity service as judged by the number of power outages experienced (90%); the amount of time it takes to restore power when power outages occur (85%); and the quality of power delivered as judged by the absence of voltage fluctuations that can result in the flickering or dimming of lights (85%)*.
- Half of customers feel Welland Hydro should *spend what is needed to maintain both the number (50%) and length (49%) of outages*.

Customer Service, Communications and E-Billing

- A strong majority of residential customers feel satisfied with either their customer service (68%) or their communications materials from Welland Hydro (73%).
- 3-in-4 (76%) think Welland Hydro is doing a *good job* in communication to its customers regarding consumption management.
- Over half (56%) of residential customers are *not interested* in changing to e-billing. Among those who are interested, a third (33%) claim to have *not heard or thought about it*.

System Challenges & Priorities

- A majority (54%) of residential customers feel that Welland Hydro *should invest what it takes to replace the system's aging infrastructure to maintain system reliability*.
- The run-to-failure approach is not supported by residential customers. Two-thirds (65%) of residential customers would prefer to *replace equipment before it breaks down vs. waiting for its full value* (26%).
- Residential customers prefer Welland Hydro *has the equipment and tools they need to manage the system* (62%) over *making do with the infrastructure it already has* (32%).
- More than 8-in-10 (82%) acknowledge the importance of investing now in modernizing the grid, even though there are other areas that require investment.
- The majority (59%) do not currently participate in Welland Hydro conservation, but when prompted more than 7-in-10 would be willing to participate.

Overall Assessment of Plan

Residential Acceptance: 71%

- A strong majority (71%) of residential customers accept the rate increase. 34% think it's reasonable and support it, 38% would accept it but don't like it, and 23% think it's unreasonable and oppose it.

Top 3 Reasons for Willing Acceptance

Q: And why do you say that? [Asked of residential respondents who had an opinion on Welland Hydro's proposed rate increase] [Reasonable, support it]

Maintenance/Infrastructure spending is necessary for reliable service	44%
Increase is not too much	39%
Increases are inevitable/prices rise/inflation	4%

Methodology

INNOVATIVE conducted two customer surveys by telephone for Welland Hydro:

1. A residential customer survey conducted among **501 respondents** between August 5th and August 11th, 2016.
2. A general service customer survey conducted among **25 respondents** between August 8th and August 17th, 2016.

Participants were randomly selected from customer lists provided by Welland Hydro (18,216 residential records and 958 general service records).

- A sample of 501 residential customers is considered accurate to within ± 4.3 percentage points, 19 times out of 20.
- A sample of 25 general service customers is considered accurate to within ± 19.4 percentage points, 19 times out of 20 (*due to the size of the margin of error on general service customers, these results should be interpreted as directional only*).

The margin of error in both surveys will be larger within each sub-grouping of the samples.

Questionnaire Design

The questionnaire was designed to simulate the experience of the Workbook-led Consultation Sessions. This included a combination of educating the customer, asking them to reflect on their experience with the distribution system, and probing for value judgements on trade-offs between system reliability and bill impact.

As part of simulating the workbook experience, the questionnaires were informed by both positive and negative feedback from previous customer engagement research. 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. 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, Welland Hydro provided INNOVATIVE with a confidential list containing **18,216** 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 Welland Hydro since at least January 1, 2015. The information contained in the contact list included customer name, telephone number, the first 3 digits of the customer's service address, and total annual electricity usage between January 1 and December 31, 2015.

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 Welland 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.

Welland 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 was drawn from a list of **958** which was provided to INNOVATIVE by Welland 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 5pm.

While best attempts were made to survey as large a group of general service customers, given the limited available number of customers in this rate class, INNOVATIVE was only able to survey 25 general service customers.

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 day a new sample was released from the contact list to replace completed or retired numbers.

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, 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.

The following table illustrates the segmentation of the residential and general service customer survey samples by usage quartile. Note due to the sample size, general service customers were not subdivided into smaller groups.

Customer Type		Total Sample	Low	Medium-Low	Medium-High	High
Residential	Target	500	125	125	125	125
	Actual	501	125	125	126	125
	Difference	+1	0	0	+1	0
General service	Target	NA				
	Actual	25				
	Difference	NA				

Sample Weights

The sample has not been weighted as stratified random samples are accurate representations of Welland Hydro’s customer distribution and type.

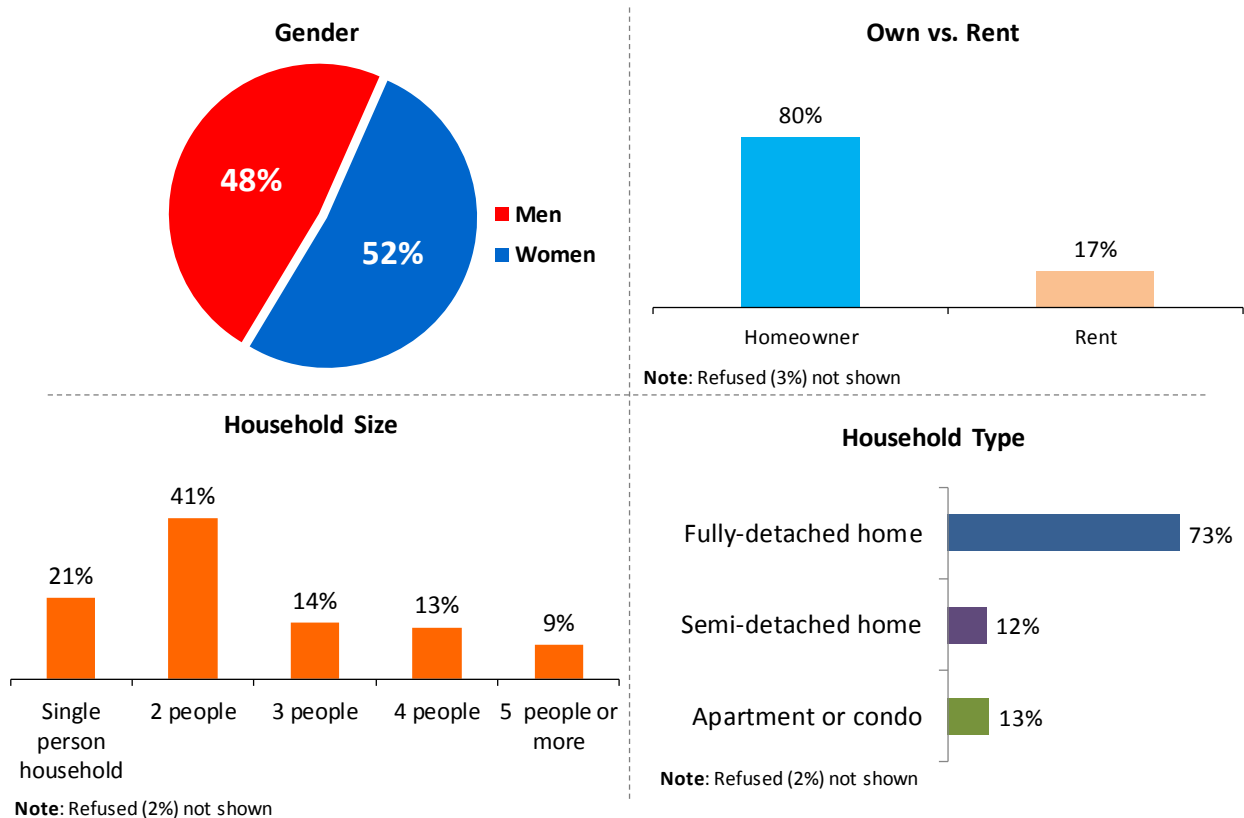
Financial Flexibility

One measure noted throughout this report is “financial flexibility”, also referred to as “financial strain” or “struggle”. Financial strain was determined by agreement with a customer input statement which indicated that the cost of their electricity bill has a major impact and requires customers to do without – or put off – other investments or spending priorities. Customers who agreed with this statement (responded *strongly agree* or *somewhat agree*) were classified as financially strained. This measure was included in a cross-tabulation of the survey results. They were also asked if they feel customers are well-served by the electricity system in Ontario.

Demographic Profiles

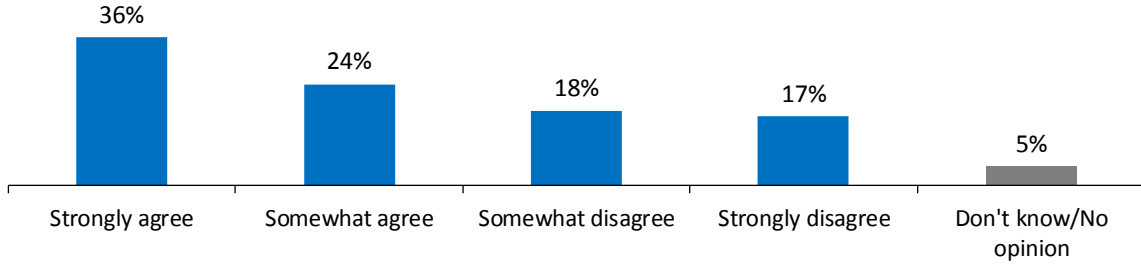
The charts and graphs below detail the demographic and psychographic characteristics of respondents that completed the Residential Ratepayer Survey [n=501].

Figure A: Residential Customer Profile



Financial Strain

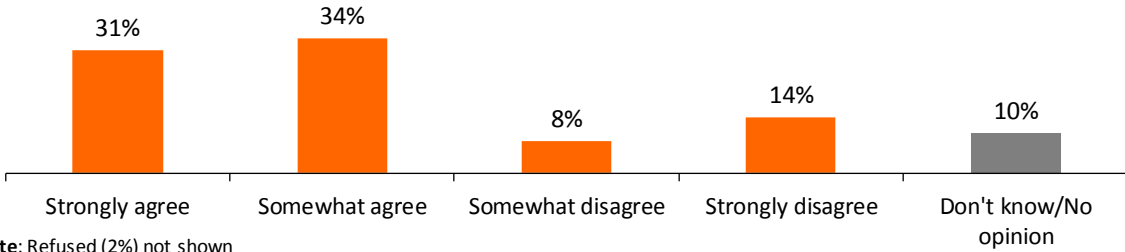
The cost of my electricity bill has a major impact on my finances and requires I do without some other important priorities.



Note: Refused (1%) not shown

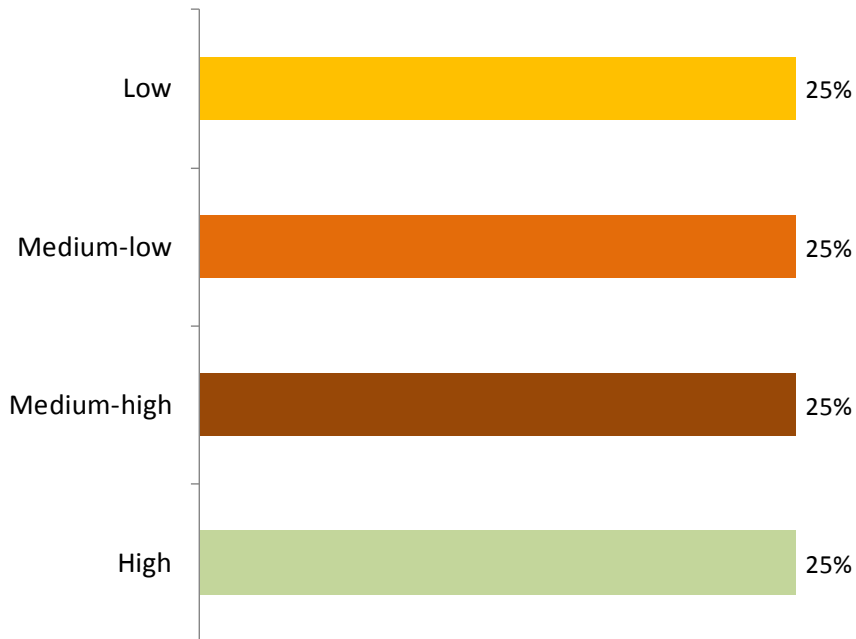
Service of Ontario's Electricity System

Customers are well served by the electricity system in Ontario.



Note: Refused (2%) not shown

Annual Consumption



Respondent Feedback

Familiarity and Satisfaction

In this initial section of the survey, customers were asked their familiarity with Welland Hydro as well as their satisfaction with the level of service they receive. As a follow-up, customers were asked if anything could be done to improve Welland Hydro's service.

Familiarity and Satisfaction Summary

- More than 7-in-10 (74%) residential customers say they are familiar with Welland Hydro, broken down as follows: 27% *very familiar*, 47% *somewhat familiar* and 18% *not familiar*.
 - Familiarity appears to increase with consumption (low: 71%; high: 80%).
- A strong majority (86%) are satisfied with the service they receive from Welland Hydro. More than 4-in-10 (43%) are *very satisfied* or *somewhat satisfied* (43%). Only 7% are not satisfied.
 - Those not financially strained (91%) are more satisfied than those struggling to pay their electricity bill (82%).
 - Low consumption customers are the most satisfied (91% vs. 82% medium-high and high).
- Nearly half (46%) of residential customers, when prompted to give specific feedback, suggested Welland Hydro could improve its service by *lowering rates*. 3-in-10 (30%) residential customers feel *nothing could be done* to improve Welland Hydro's service. No other suggestion was offered by more than 4% of its residential customers.

Preamble for Familiarity and Satisfaction Section

Before commencing the General Satisfaction section, respondents were first given this brief introduction:

“To begin, I'd like to ask you some questions about your electricity service.

Today we want to talk about **Welland Hydro** and the local electricity system in your community. This is the system that takes the electricity from provincial transmission towers and brings it to your home through a network of wires, poles and other equipment that is owned and operated by **Welland Hydro**.”

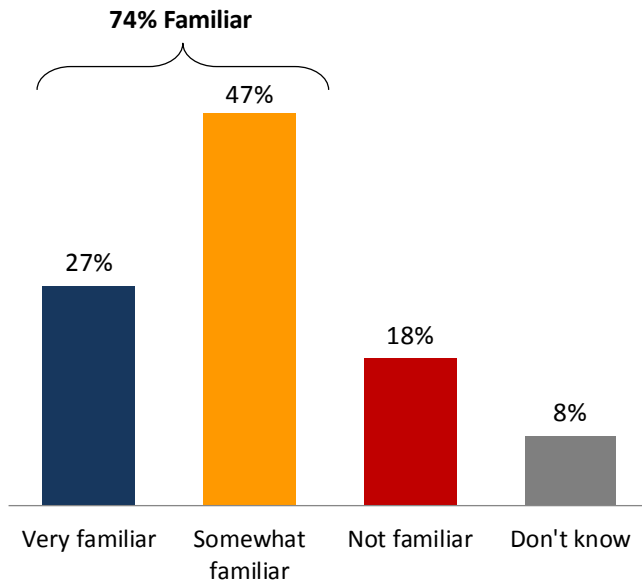
Familiarity with Local Electricity Distribution System

Nearly 3-in-4 (74%) residential customers are familiar with Welland Hydro. More than a quarter (27%) say they are “very familiar”, almost half (47%) say they are somewhat familiar and 18% say they are not familiar at all.

- There is little difference in familiarity between those financially impacted by their electricity bill and those who are not.
- Familiarity with Welland Hydro increases with electricity consumption, from 71% among low consumption users to 80% among high consumption ones.

Figure 1: Familiarity with the Local Distribution System

Q How familiar are you with **Welland Hydro**, which operates the electricity distribution system in your community? Would you say you are *very familiar*, *somewhat familiar*, *not familiar* or would you say you *don't know*?
[asked of all respondents; n=501]

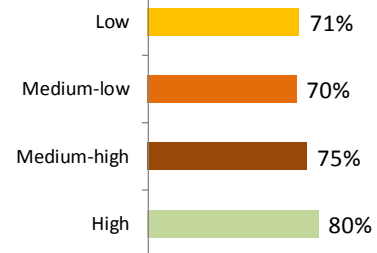


Sample Breakdown ▶▶ *Those who say "familiar"*

Electricity Bill Impacts Finances



Consumption Level



17 of the 25 general service customers surveyed are familiar with Welland Hydro (9: "very familiar"; 8 "somewhat familiar"), four are not familiar and four don't know how to answer.

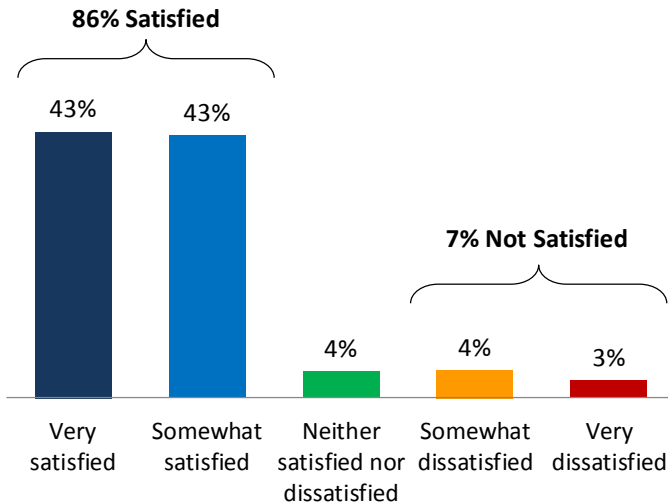
Satisfaction with Services Received from Welland Hydro

A majority of residential customers (86%) say they are satisfied with Welland Hydro's services. Only 7% say they are not satisfied with 4% who can't decide either way.

- There is a 9% satisfaction gap between those who feel their electricity bill impacts their finances (82%) and those who feel it does not (91%).
- Low-range consumption customers are the most satisfied (91%) while high consumption customers score 9 points lower (82%).

Figure 2: Satisfaction with Welland Hydro

Q Thinking specifically about the services provided to you and your community by **Welland Hydro**, overall, how satisfied are you with the services that you receive from **Welland Hydro**. Would you say you are *very satisfied*, *somewhat satisfied*, *neither satisfied nor dissatisfied*, *somewhat dissatisfied*, *very dissatisfied* or would you say you *don't know*?
[asked of all respondents; n=501]



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

Among general service customers, 23 of 25 are satisfied (11: "very satisfied"; 12: "somewhat satisfied") with only one dissatisfied customer and one who doesn't know enough to say.

Improving Service

In a follow-up question, customers were asked if there were any actions Welland Hydro could take to improve its service. Responses to the question were open-ended, including probing for more than one-word answers, and questions were coded by INNOVATIVE consultants and ranked accordingly.

The most frequently suggested improvement by residential customers is to lower rates (46%). That being said, 3-in-10 (30%) residential customers don't feel there is anything else Welland Hydro could do to improve its service.

Sample Breakdown ▶▶ *Those who say "satisfied"*

Electricity Bill Impacts Finances



Consumption Level

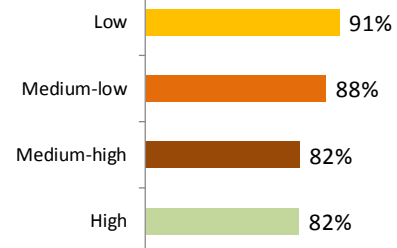
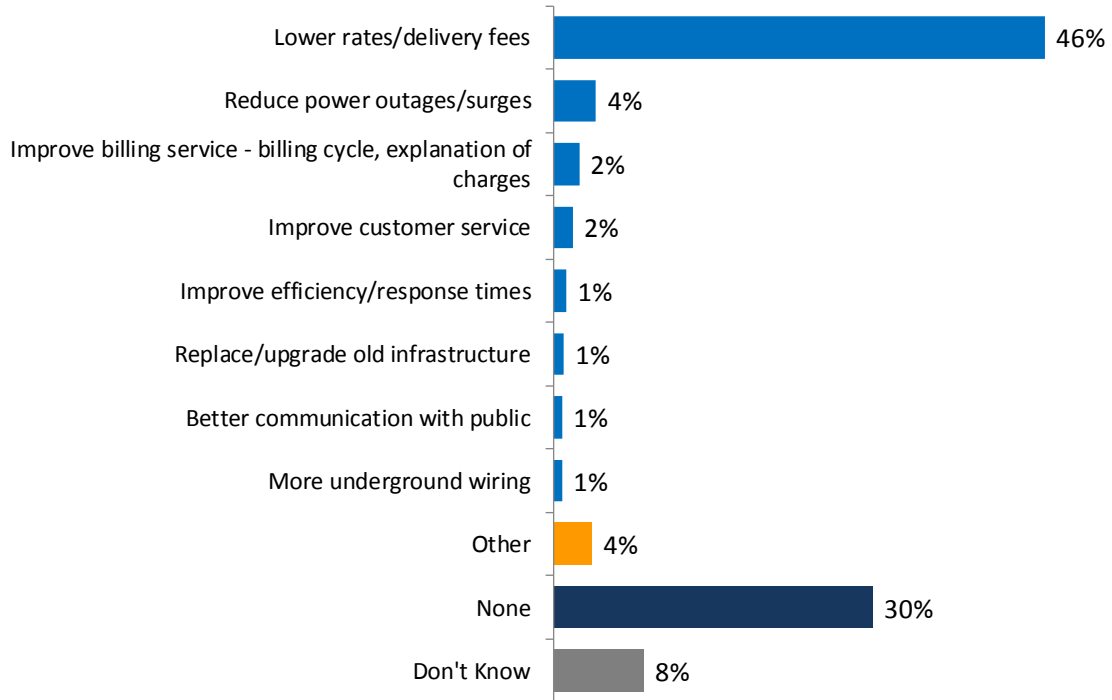


Figure 3: Improving Service



Is there anything in particular that **Welland Hydro** can do to improve its service to you?
[asked of all respondents; n=501]



Note: 'Refused' (1%) not shown

General services customers shared the same sentiment as residential as it pertains to lowering rates:

- 11 of 25 suggest Welland Hydro could improve service by lowering rates;
- 1 of 25 suggest the utility could improve power quality;
- 6 of 25 were happy with the service they currently receive; and
- 7 of 25 don't know how Welland Hydro could improve its service to them.

Bill Knowledge and Impact

Before questions on familiarity about their monthly bill, customers were read a preamble explaining that, although Welland Hydro collects the payment, they only retain around 18% of the customers' bills.

Electricity Bill Knowledge Summary

- Only about 1-in-4 (27%) residential customers say they were familiar with the percentage of their electricity bill allocated to Welland Hydro before taking the survey.
 - Familiarity appears to increase slightly with consumption and also financial “flexibility” vis-à-vis their monthly bill.
- Most (55%) residential customers think the amount allocated to Welland Hydro is *reasonable* with just 2-in-10 (20%) who feel it is *not reasonable* and about 1-in-4 (24%) who *don't know* how to respond.
 - Low consumption (63%) users and the financially flexible (65%) are a bit more likely to think the 18% allocated to Welland Hydro is a reasonable amount.

Preamble for Bill Knowledge & Impact Section

Below is the preamble for residential customers on bill familiarity:

"I'd now like to talk with you about your electricity bill ...

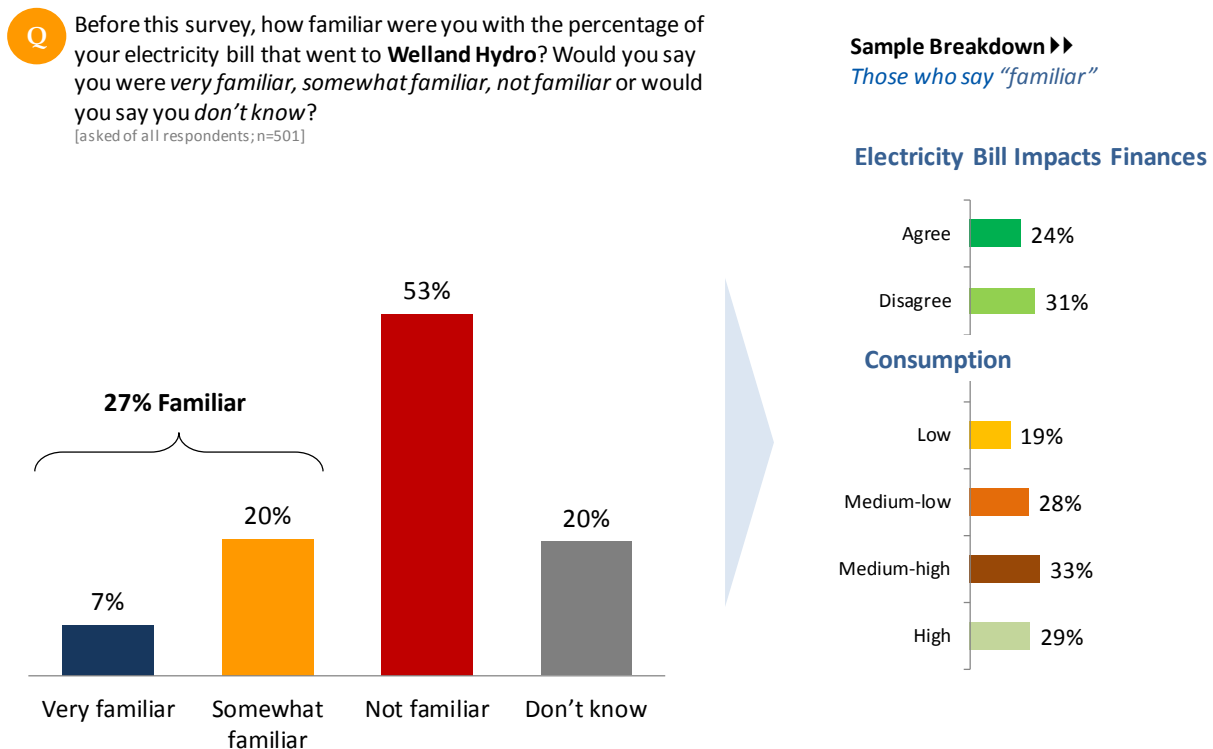
*While **Welland Hydro** is responsible for collecting payment for the entire electricity bill, they retain only about **18%** of the average residential customer's bill. This is about \$27 on an average \$150 monthly electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies."*

Familiarity with Percentage of Bill Allocated to Welland Hydro

Roughly 1-in-4 (27%) residential customers say they were familiar with the percentage of their electricity bill allocated to Welland Hydro before this survey. More than half (53%) say they were *not familiar* and 2-in-10 (20%) *don't know* how to respond.

- Low consumption users (19%) and those who financially struggle (24%) are the least likely groups to be familiar with their Welland Hydro allocation.

Figure 4: Familiarity with Percentage of Bill Allocated to Welland Hydro



Only eight of the 25 general service customers say they were familiar with the allocation towards Welland Hydro before this survey (three: *very familiar*; five: *somewhat familiar*). 12 GS customers say they were *not familiar* and the remaining five just *don't know* the answer.

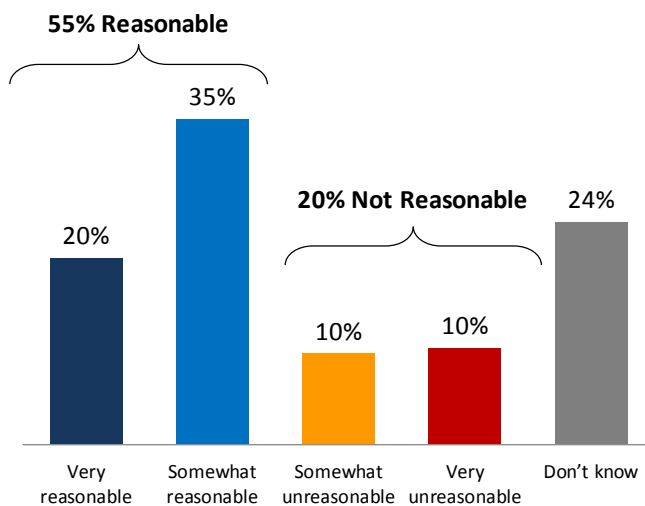
A slight majority (55%) of respondents feel that the 18% percent of their bill allocated to Welland Hydro is *reasonable*. 2-in-10 (20%) residential customers think the amount is *very reasonable* and more than a third (35%) think it's *somewhat reasonable*. Only 2-in-10 (20%) think the percentage is not reasonable while a quarter (24%) of respondents don't know the answer either way.

- Low consumption (63%) users and the financially flexible (65%) are the most likely groups to think the amount allocated to Welland Hydro is reasonable.

Figure 5: Reasonableness of Percentage of Bill Allocated to Welland Hydro

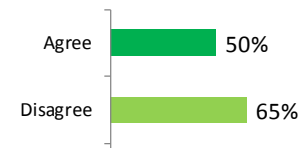
Q Do you feel that the **18%** of your total electricity bill that you pay to **Welland Hydro** for the services they provide is *very reasonable*, *somewhat reasonable*, *somewhat unreasonable*, *very unreasonable* or would you say you *don't know*?
[asked of all respondents; n=501]

Sample Breakdown ▶▶
Those who say "reasonable"

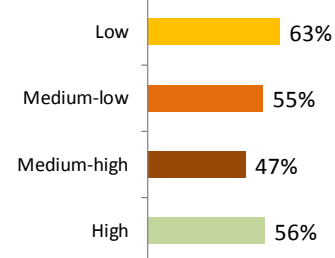


Note: 'Refused' (1%) not shown

Electricity Bill Impacts Finances



Consumption Level



17 of the 25 general service customers feel that the 12% allocated to Welland Hydro is *reasonable* (3: *very reasonable*; 14 *somewhat reasonable*) with two stating it is an *unreasonable* amount, one who feels it is *very unreasonable* and five who *don't know* enough to say.

System Reliability

The following section focuses on respondent feedback on system reliability perceptions, including: perceived frequency and duration of outages, perceived impact, and perceptions on spending to reduce frequency and length of power service interruptions.

System Reliability Summary

- A plurality of customers didn't experience any outages (36%) in the last 12 months. The rest were most likely to experience either one (19%) or two (15%) outages in the last 12 months.
- Of those impacted by a power outage, most experienced an outage of an hour or less and 29% remember it as lasting less than 15 minutes. Still, nearly 3-in-10 (29%) say they experienced an above-average length of power interruption (between 1 and 6 hours long).
- Most (62%) felt the power interruption was only a *minor inconvenience* with 22% who say it was *no inconvenience at all*. Just 16% say it was a *major convenience*.
- When it comes to satisfaction with system reliability, residential customers scored highly on all three measures:
 - 90% feel satisfied with *the reliability of electricity service as judged by the number of power outages experienced*;
 - 85% feel satisfied with *the amount of time it takes to restore power when power outages occur*;
 - And 85% feel satisfied with *the quality of power delivered as judged by the absence of voltage fluctuations that can result in the flickering or dimming of lights*.
- Half (50%) of customers feel that Welland Hydro should *spend what is needed to maintain the current number of outages*.
- And again half (49%) feel that Welland Hydro should *spend what is needed to maintain the current length of outages*.

Preamble for Power Service Interruptions

The next set of questions focus on how Welland Hydro should manage the frequency of its interruptions, prefaced by the following background information:

*“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 **Welland Hydro** customer experiences one unexpected power outage per year.”*

Frequency and Duration of Outages

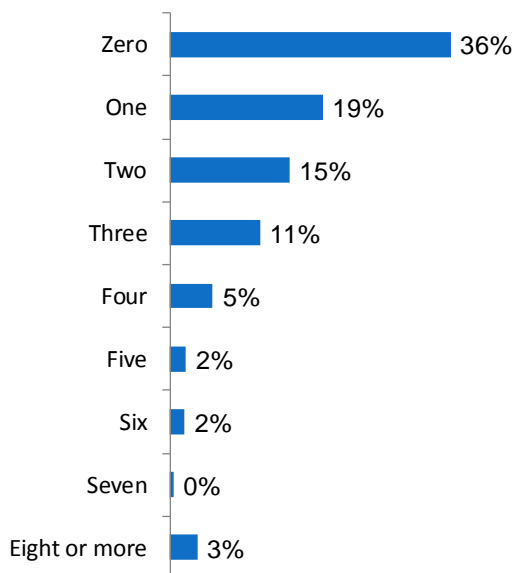
First customers were asked how many outages they had experienced in the past year; then as a follow-up to those who experienced an outage, respondents were asked how long the outage lasted.

A plurality of customers did not experience any outages (36%) in the last 12 months. Nearly 2-in-10 (19%) had experienced one outage, 15% had experienced two, 11% had experienced three, and 11% had experienced four or more.

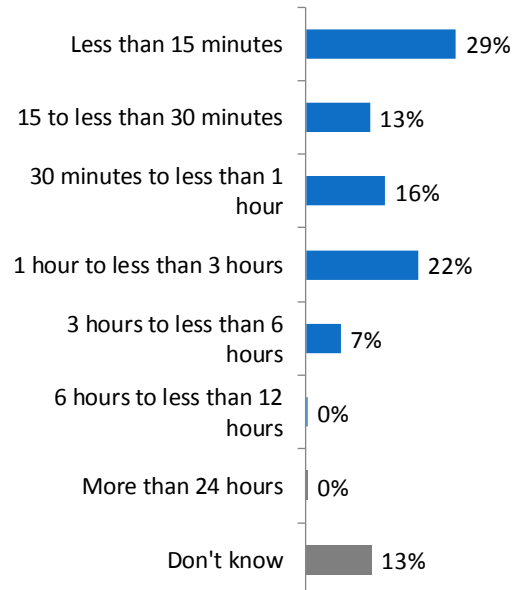
Of those who had experienced an outage, most had experienced an outage of an hour or less with 29% who said it lasted less than 15 minutes. That being said, a large minority of the sample experienced longer outages, with 29% who responded that their outages lasted between 1 and 6 hours long.

Figure 6: Frequency and Duration of Outages

Q Have you experienced any power outages - longer than one minute - in the **past 12 months**, and if so, approximately how many?
[asked of all respondents; n=501]



Q And approximately how many minutes did the **most recent power outage** last?
[asked of all respondents who experienced an outage; n=295]



Note: 'Don't know' (6%) not shown

10 of the 25 general service customers did not experience an outage. Three GS customers experienced one outage, eight customers experienced two outages and four customers experienced three or more outages.

Of those 15 that had experienced outages, 10 of those outages lasted less than an hour, four lasted between one and six hours and one couldn't remember how long the outage lasted.

Impact of Outages

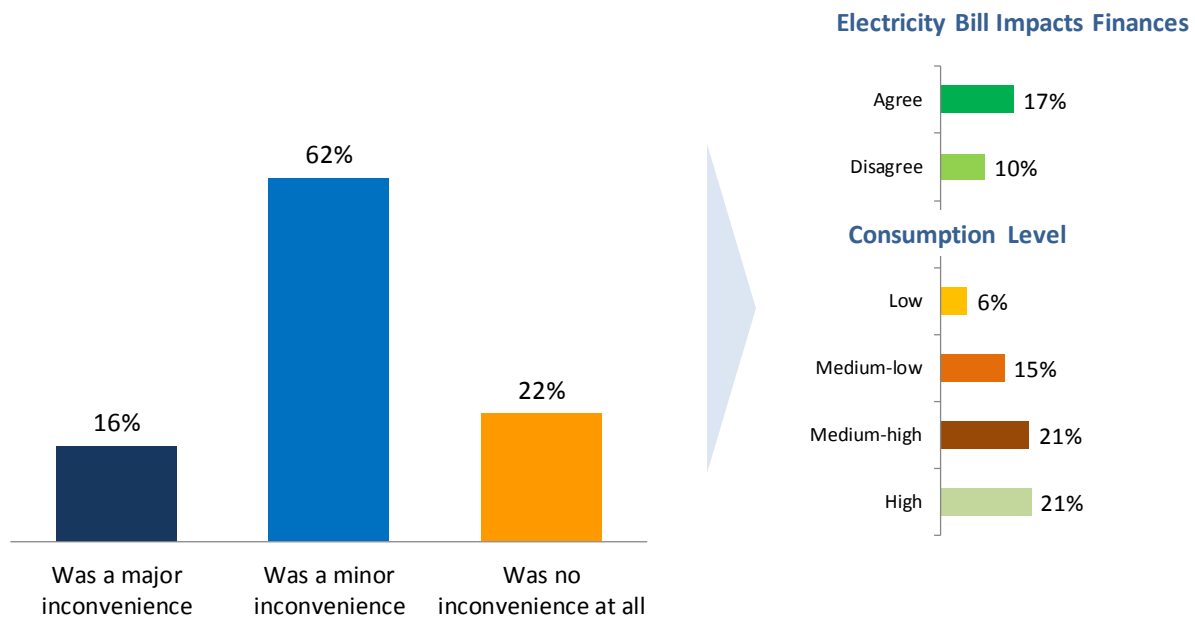
Among those residential customers who recently experienced an outage, just 16% say it was a *major inconvenience*. Almost two-thirds (62%) of residential customers feel it was only a *minor inconvenience* and 22% say it was *no inconvenience at all*.

- Higher consumption-level and financially struggling residential customers were the most likely groups to feel the outage was a *major inconvenience*.

Figure 7: Impact of Outages

Q Thinking back to the **most recent** power outage you experienced as a **Welland Hydro** customer, would you say the power outage ...
[asked of all respondents who experienced an outage; n=295]

Sample Breakdown ▶▶
Those who say "major inconvenience"



Of the 15 general service customers who experienced an outage, five say it *had a significant cost to their organization*, another five consider it only as a *minor cost* and four said it *barely had any cost to their organization, just a bit of inconvenience*. One *didn't know* enough to say.

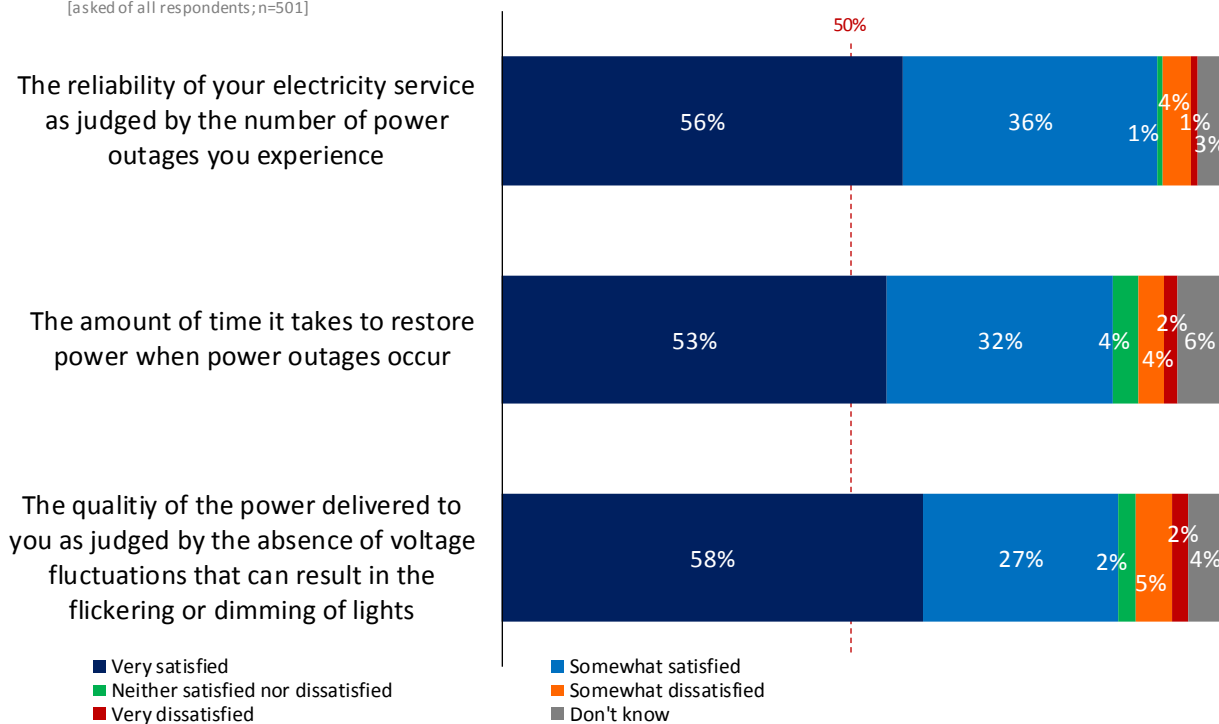
System Reliability Satisfaction

All residential customers were asked a battery of questions to help determine their satisfaction with various aspects of system reliability.

Nearly all (90%) residential customers feel satisfied with the *reliability of their electricity services based on the number of outages* they've experienced. And 85% residential customers feel satisfied with both the *length of recovery time after outages* and with the *quality of power, judged by the absence of fluctuations*, delivered to their household.

Figure 8: System Reliability Satisfaction

Q I'd now like to read you a few statements about the electrical service that you receive from **Welland Hydro**. For each of the following statements, please tell me if you are *very satisfied*, *somewhat satisfied*, *neither satisfied nor dissatisfied*, *somewhat dissatisfied*, *very dissatisfied*, or would you say you *don't know*?
[asked of all respondents; n=501]



A strong majority of the 25 general service customers are satisfied with the *reliability of their electricity service judged by the number of outages* (21/25 satisfied); with the *amount of time it takes to restore power during outages* (22/25 satisfied); and with the *quality of power delivered to them judged by the absence of fluctuations such as dimming or flickering* (17/25).

Addressing the Frequency of Power Outages

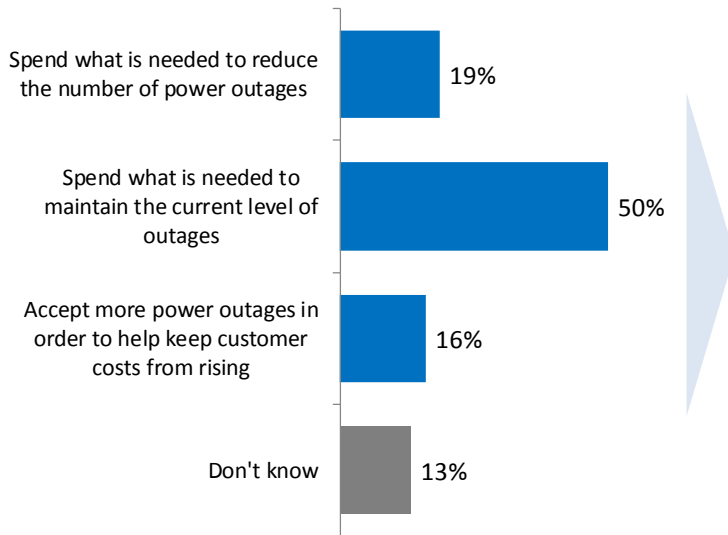
As for addressing the number of outages, half (50%) of residential customers feel that Welland Hydro should *spend what is needed to maintain the current number of outages*. 2-in-10 (19%) think Welland Hydro should *spend what is needed to reduce the number of outages* and 16% feel Welland Hydro should *accept more power outages to keep costs from rising*.

- High consumption users are the most likely group to feel that Welland Hydro should *spend what is needed to reduce the number of power outages* (24%).

Figure 9: Addressing the Frequency of Power Outages



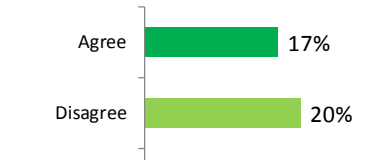
In your view, how do you think **Welland Hydro** should address the **number** of customer power outages?
[asked of all respondents; n=501]



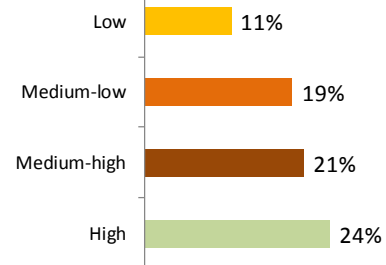
Sample Breakdown ▶▶

Those who say "spend what is needed to reduce number of outages"

Electricity Bill Impacts Finances



Consumption Level



Note: 'Refused' (1%) not shown

12 of the 25 general service customers think Welland Hydro should *spend what is needed to maintain the current level of outages*; eight feel that it should *spend what is needed to reduce the number of outages*; and one GS customer feels that Welland Hydro should *accept more power outages to keep costs from rising*. Three of the 25 GS customers *don't know* how to answer.

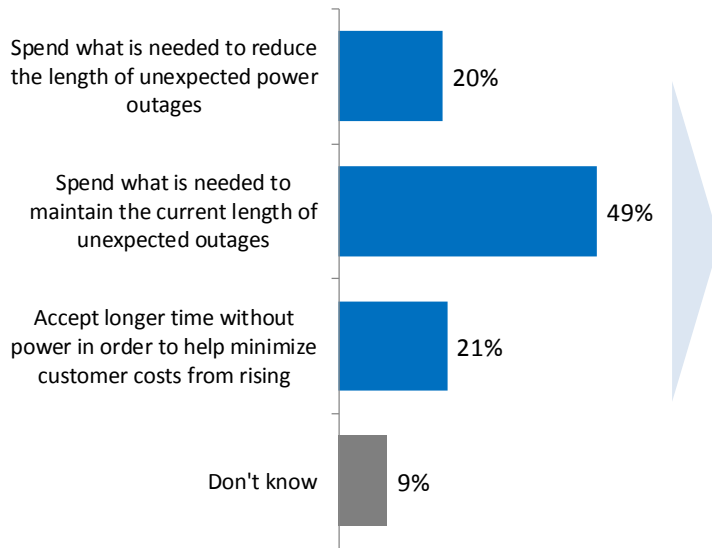
Addressing the Duration of Power Outages

Once told the average length of Welland Hydro’s outages (one hour), nearly half (49%) again feel that Welland Hydro should *spend what is needed to maintain the current length of outages*. About 2-in-10 feel either that Welland Hydro should *spend what is needed to reduce the length of outages* (20%) or *accept longer time without power to minimize costs from rising* (21%).

- There are no striking differences between customers when it comes to bill impact and consumption level.

Figure 10: Addressing the Duration of Outages

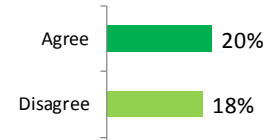
Q Overall, the average Welland Hydro customer is without power for about **one hour** per year. In your view, how do you think Welland Hydro should address the **length of time** customers are without power? Would you say ...
[asked of all respondents; n=501]



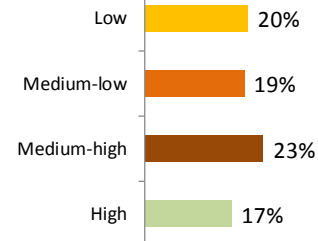
Sample Breakdown ▶▶

Those who say “spend what is needed to reduce length of outages”

Electricity Bill Impacts Finances



Consumption Level



Note: 'Refused' (1%) not shown

12 of the 25 general service customers think Welland Hydro should *spend what is needed to maintain the current length of outages*; six would like Welland Hydro to *spend what is needed to reduce the length of outages*; and four GS customers feels that Welland Hydro should *accept longer power outages to keep costs from rising*. The three remaining GS customers *don't know* enough to say one way or another (2) or *refused* to answer (1).

Customer Service, Communications and E-Billing

The next section examines feedback on customer service, communications and e-billing, including measures of satisfaction with both customer service and communications; how effectively Welland Hydro provides available information on household electricity; customer interest in e-billing; and, if customers are in fact interested, reasons for not switching to e-billing.

- A strong majority of residential customers feel satisfied with either their *customer service* (68%) or the *communications materials* received from Welland Hydro (73%).
 - Low consumption and financially secure customer groups are most likely to be satisfied in response to both customer service and communications materials.
- Again, about 3-in-4 (76%) think Welland Hydro is doing a *good job* of providing information to help manage household consumption. 13% think Welland Hydro does a *poor job* and just 4% think it does a *very poor job* of informing customers about consumption management.
 - On this particular question, there is a 10-point gap between those who struggle to pay their bills (73%: *good job*) and those who are financially secure (83%).
 - There is an 18-point gap between high consumption residential customers (64%: *good job*) and low consumption ones (82%).
- Over half (56%) of residential customers are *not interested* in changing to e-billing. 28% say they are *interested* and 15% claim to *have already signed up*.
 - Those with financial difficulties (30%) and high consumption (38%) customers are the most interested to sign up for e-billing.
- Among those who are interested in a changing to e-billing, a plurality (33%) claim to have *not heard or thought about it*, 14% say they are *happy with what they have or prefer a paper copy*, 12% *haven't found the time* and 11% *don't trust online billing*.

Preamble for Customer Service Satisfaction Section

Below is the preamble for residential customers on the customer service satisfaction question:

“Now I’d like to ask you about the customer service you have received when dealing with employees of Welland Hydro whether on the telephone, via email, in person or through online conversations including social media.”

Customer Service Satisfaction with Welland Hydro Staff

Nearly 7-in-10 (68%) residential customers feel satisfied with the customer service provided by Welland Hydro. Almost half (47%) say they are *very satisfied* (47%), 2-in-10 (21%) say they are *somewhat satisfied* and just 7% say they are either *somewhat* (3%) or *very* (4%) dissatisfied. 2-in-10 (21%) have not been in contact with Welland Hydro staff.

- Low consumption customers (74%) and those financially secure with their electricity bill (72%) are the most likely groups to feel satisfied with Welland Hydro customer service. Just 59% of high consumption customers feel satisfied with their service.

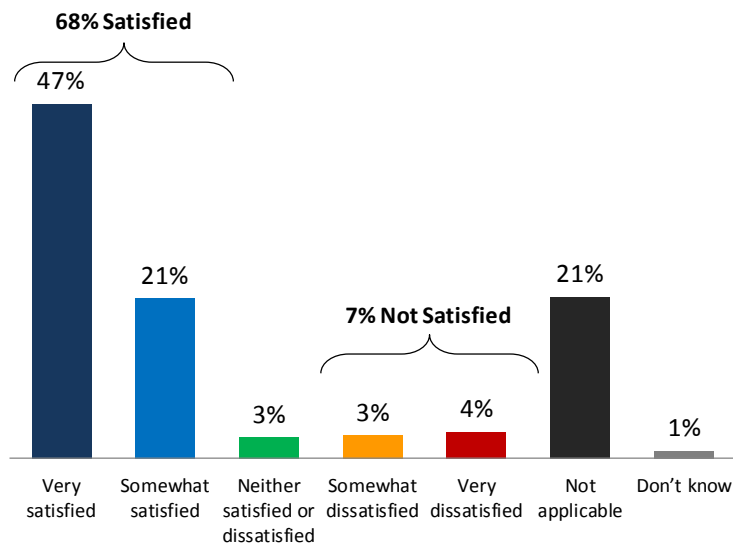
Figure 11: Customer Service Satisfaction with Welland Hydro Staff



Overall, how satisfied or dissatisfied are you with the customer service provided by Welland Hydro?

Would you say you are very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied, very dissatisfied, or would you say you don’t know. If you have not been in contact with Welland Hydro staff, just let me know.

[asked of all respondents; n=501]



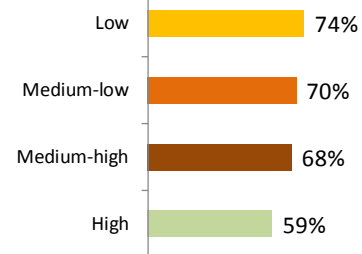
Sample Breakdown ▶▶

Those who say “satisfied”

Electricity Bill Impacts Finances



Consumption Level



21 of the 25 general service customers feel satisfied with their customer service (16: *very satisfied*; 5 *somewhat satisfied*) and just one GS customer feels *very dissatisfied*. Two have had no contact with staff and one doesn’t know how they feel about the question.

Preamble for Communications Materials Satisfaction Section

Below is the preamble for residential customers regarding communications materials:

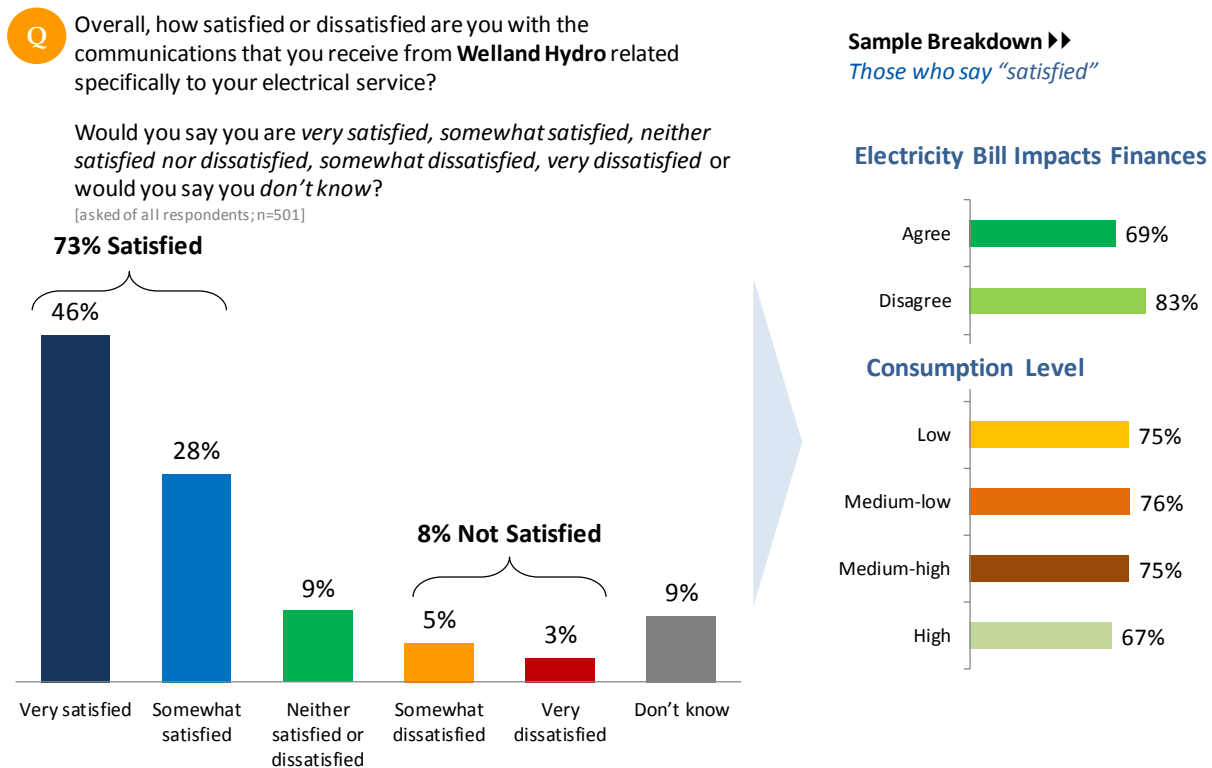
"I would now like you to think about the communications that you may receive from Welland Hydro without talking directly to an employee. This may include information found on their website, bill inserts, advertising, notices, emails, or social media sites."

Satisfaction with Welland Hydro Communications Materials

When asked about the communications materials received from Welland Hydro, nearly 3-in-4 (73%) feel satisfied with the current information. Less than half (46%) say they are *very satisfied*, less than 3-in-10 (28%) say they are *somewhat satisfied* and just 8% say they are either *somewhat* (5%) or *very* (3%) *dissatisfied*.

- Those who struggle to pay their electricity bills (69% vs. 83% *financially flexible*) and those with the highest consumption levels (67% vs. 75% low) are the least satisfied with Welland Hydro's communications materials.

Figure 12: Satisfaction with Welland Hydro Communications Materials



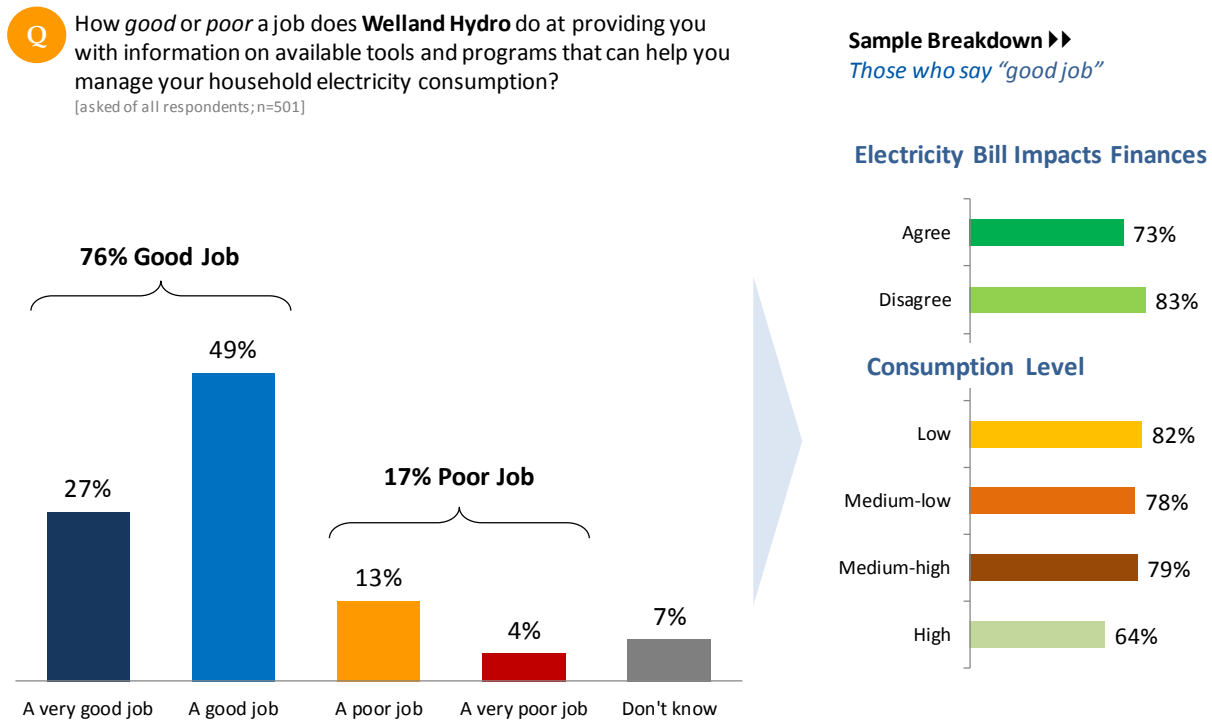
20 of the 25 general service customers feel satisfied with their communications from Welland Hydro such as bill inserts, advertising and emails (7: *very satisfied*; 13 *somewhat satisfied*) and just one GS customer feels *somewhat dissatisfied*. Two have no strong feelings either way and the remaining two *don't know* how to answer.

Information Provided for Consumption Management

Roughly the same number of residential customers think Welland Hydro does a *good job* (76%) of providing information about the available tools and programs to help manage consumption. More than 1-in-4 (27%) feel Welland Hydro does a *very good job* and about half (49%) think it does a *good job*. Less than 1-in-7 (13%) think Welland Hydro does a *poor job* of informing consumers about consumption management and just 4% think it does a *very poor job*.

- There is a 10-point perception gap on this question looking at bill impact (73%: struggles to pay electricity bill vs. 83%: financially secure) and an 18-point gap between high (64% *good job*) and low consumption customers (82%).

Figure 13: Information Provided for Consumption Management



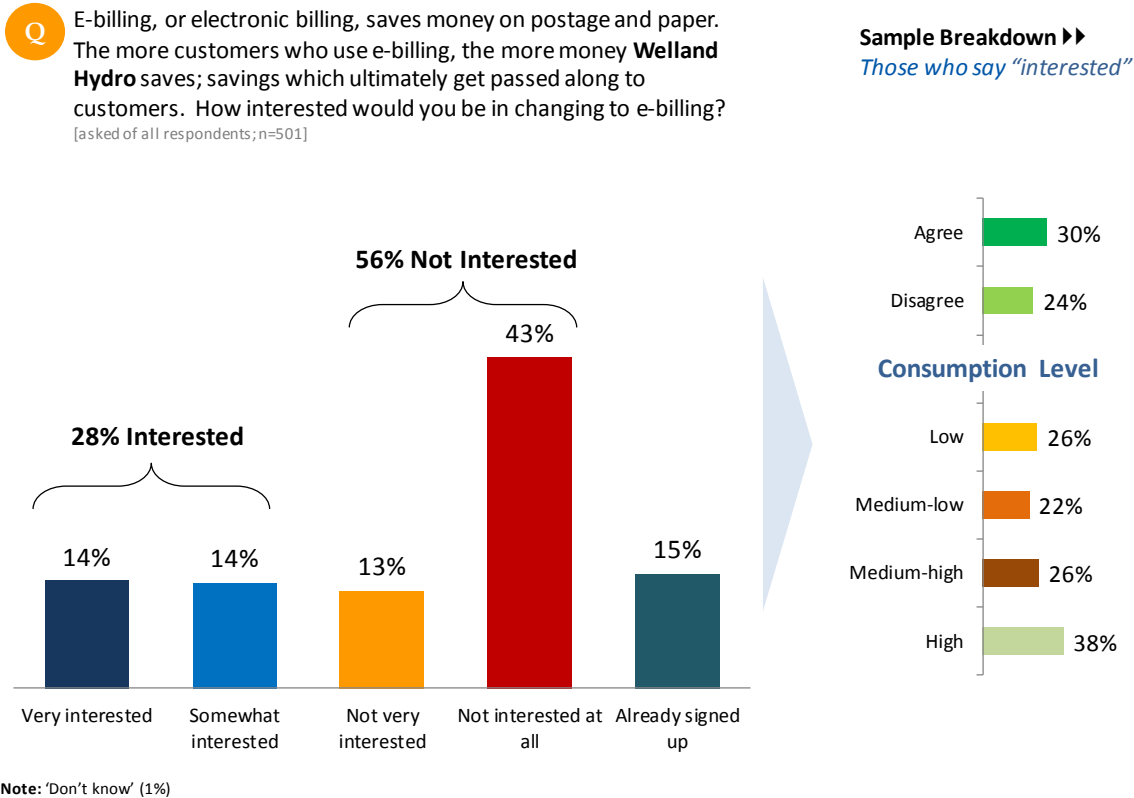
17 of the 25 general service customers feel Welland Hydro does a good job talking to its customers about consumption management (6: *very good job*; 11 *somewhat good job*) and six GS customers think it's doing a *poor* (5) or *very poor* (1) job. The remaining two customers don't know enough to answer.

Interest in E-billing

A slight majority (56%) of residential customers are not interested in changing to an e-billing format including 43% who say they are *not at all interested*. 14% say they are *very interested*, another 14% say they are *somewhat interested* and 15% say they have *already signed up* for the service.

- High consumption (38%) customers and the financially struggling group (30%) are the most interested in signing up for e-billing.

Figure 14: Interest in E-billing



8 of the 25 general service customers are *very interested* in signing up, three are *somewhat interested*, two say they are *not very interested* and nine are *not interested at all* in signing their business up for e-billing. The remaining three say they have already signed up their business for e-billing.

Switching to E-billing

Customers who felt at least somewhat interested in changing were asked a follow-up open-ended question: *and why haven't you switched to e-billing yet?*

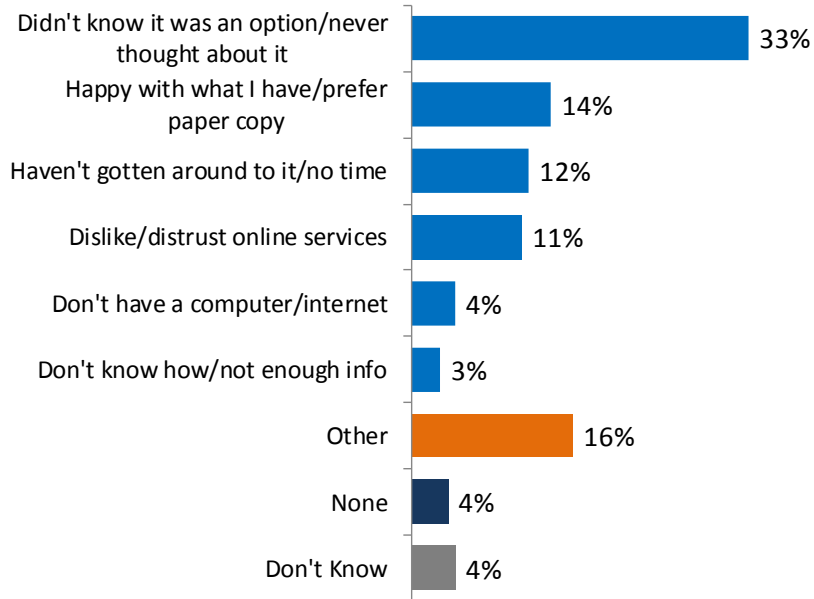
Of the 139 residential customers interested in changing to e-billing, A plurality (33%) say the reason they haven't signed up yet is they *didn't know it was an option* or had *never thought about it*. 14% say they are *happy with what they have* or *prefer a paper copy*, 12% *haven't found the time to switch* and 11% *don't trust the online billing process*.

Figure 15: Switching to E-billing



And why haven't you switched to e-billing yet?

[asked of those who are very or somewhat interested in changing to e-billing; n=139]



System Challenges & Priorities

This section examines preferences on Welland Hydro's investment plan and spending, including conservation and demand management programs.

System Challenges & Priorities Summary

Investment in Aging Infrastructure

Over half (54%) of residential customers feel that Welland Hydro *should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases their monthly electricity bill by less than a dollar over the next few years.*

Run-to-Failure and Replacing Aging Infrastructure

Two-thirds (65%) of customers would prefer to replace equipment before it breaks down over waiting for its "full value" until breakdown (26%). The financially struggling residents (32%) are much more likely to prefer run-to-failure than the financially secure (17%).

General Plant Investments

Residential customers prefer that Welland Hydro *has the equipment and tools they need to manage the system* (62%) over *making do with the equipment and tools it already has* (32%).

System Service Investments

More than 8-in-10 (82%) feel that modernizing the distribution system is important, with financially secure (88%) and low-consumption (86%) residents the most likely groups to feel Welland Hydro should invest to modernize.

Conservation and Demand Management

A majority (59%) do not currently participate in a Welland Hydro conservation program, but when prompted more than 7-in-10 (71%) say they would be willing to participate.

Preamble for System Challenges & Priorities Section

The following introduces the 'System Challenges and Priorities' section of the survey:

*"While **Welland Hydro** believes it has done its best to prolong the life of the assets that make up the distribution system, many of these assets are approaching the end of their useful life.*

*As part of its investment plan, **Welland Hydro** is proposing a significant infrastructure replacement or renewal program. The estimated cost of this system renewal program is \$8.8 million between 2017 and 2021.*

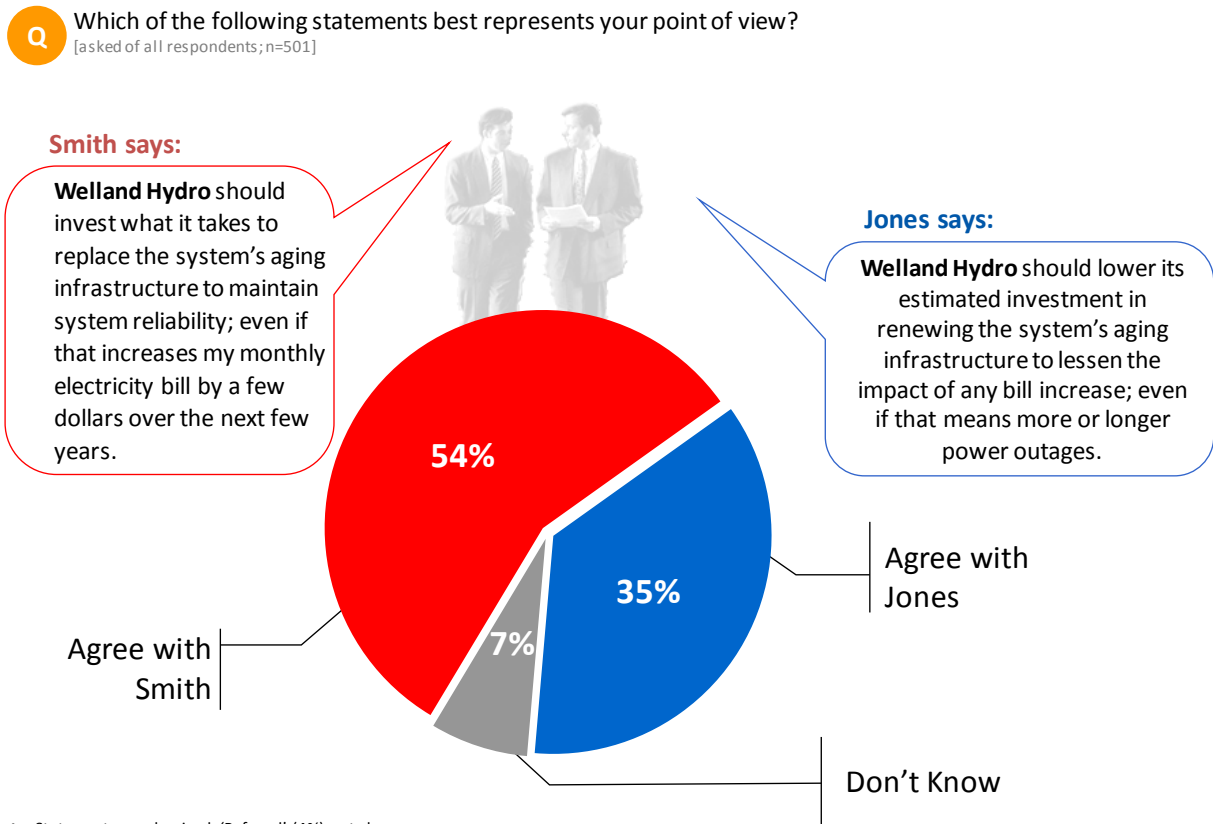
*Although this plan will allow **Welland Hydro** to make the necessary investments to maintain system reliability, **it will have an impact on customer bills.***

Investment in Aging Infrastructure

Over half (54%) of residential customers feel that Welland Hydro *should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases their monthly electricity bill by less than a dollar over the next few years.*

More than a third (35%) feel that Welland Hydro *should lower its estimated investment in renewing the system's aging infrastructure to lessen possible bill increases; even if that means more or longer power outages.*

Figure 16: Investment in Aging Infrastructure



19 of the 25 general service customers feel Welland Hydro should *invest what it takes, even if that means an increase in their business' monthly bill* while two GS customers think Welland Hydro should *lower its estimated investment to reduce bill impact, even if that means more outages*. The remaining four GS customers either *don't know* (3) or *refused to answer* (1).

Run-to-Failure Approach

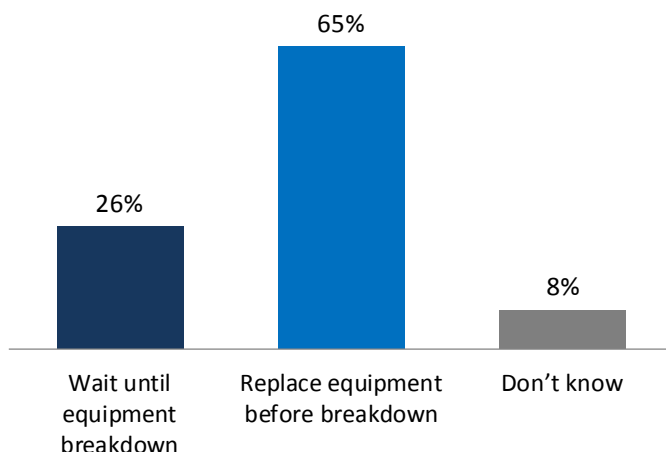
When asked to choose between waiting until equipment breaks down even if it means power outages and replacing the equipment before breakdown even if it means not getting “full value”, two-thirds (65%) of residential customers prefer the latter. Just a quarter (26%) would wait until the equipment fully breaks down and 8% don't know how to answer.

- While there is not a strong discrepancy among consumption levels, a striking 15-point gap emerges between those who are financially struggling (32%: wait until breakdown) and those who are financially secure (17%).

Figure 17: Run-to-Failure Approach

Q Thinking about the aging equipment in **Welland Hydro's** distribution system, do you feel it's best to wait until non-critical infrastructure – that is, equipment that impacts a limited number of customers – breaks down to get full value from each piece of equipment, even if it means short power outages for some customers ...

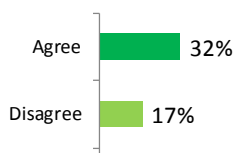
... Or do you feel the best approach is to replace the equipment before it breaks down to avoid unscheduled power outages, even if it means not getting the “full” value from each piece of equipment?
[asked of all respondents; n=501]



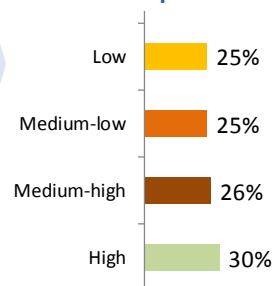
Sample Breakdown ▶▶

Those who say “Wait until equipment breakdown”

Electricity Bill Impacts Finances



Consumption Level



17 of the 25 general service customers feel Welland Hydro should *replace equipment before breakdown*, six feel that Welland Hydro should *wait until the equipment breaks down*, and the remaining two *don't know* the answer.

General Plant: Buildings, Equipment and IT

The following preamble introduces the question on general plant:

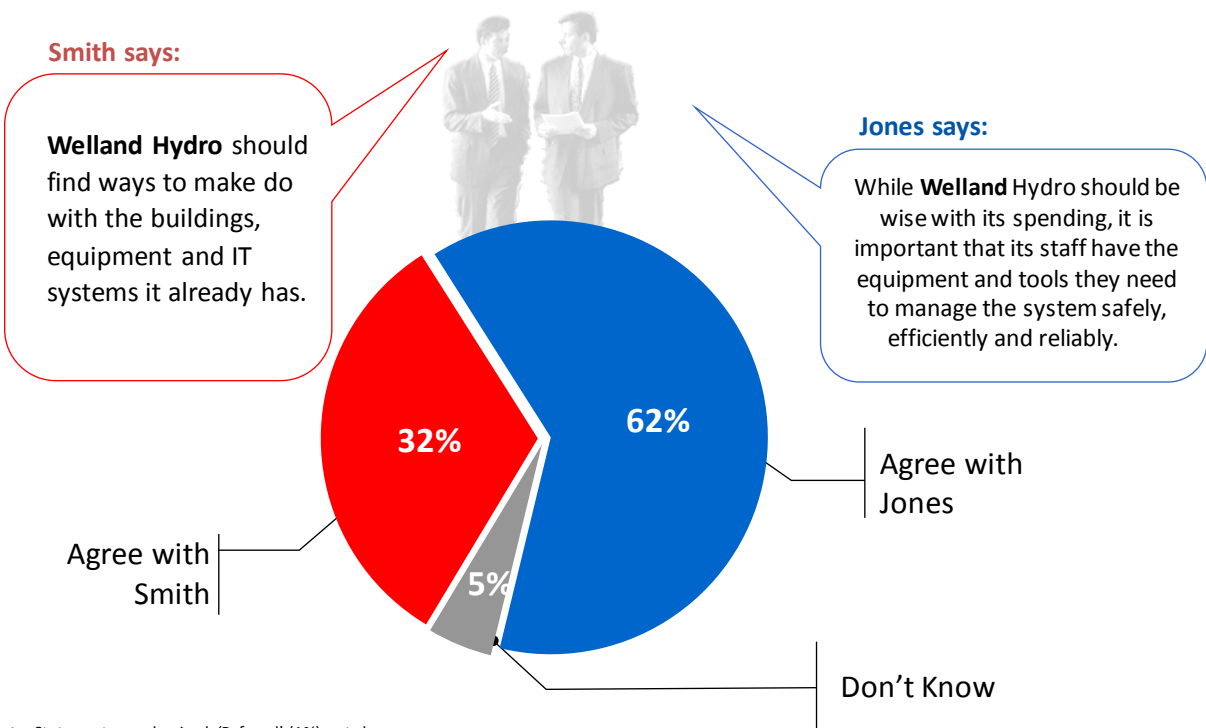
“Welland Hydro is not just the local electricity distribution system itself, but a company that operates the system. As a company, **Welland Hydro** needs buildings to house its staff, vehicles and tools to service the power lines, and IT systems to manage the electrical system and customer information.”

Residential customers were then asked to choose between two opposing statements: should Welland Hydro *find ways to make do with the buildings, equipment and IT systems it already has*, or is it more important that *staff have what they need to manage the system*?

1-in-3 (32%) residential customers feel that Welland Hydro should make do with the infrastructure it has and more than 6-in-10 (62%) feel that, *while it should be wise with its spending, it is important that its staff have the equipment and tools they need to manage the system*.

Figure 18: General Plant: Buildings, Equipment and IT

Q Again, customers have made a number of statements about this sort of investment. Which of the following statements best represents your point of view?
[asked of all respondents; n=501]



Nine of the 25 general service customers feel Welland Hydro should *find ways to make do with the buildings, equipment and IT already purchased*. 13 GS customers think that it is *important that the staff have the tools and equipment they need to manage the system safely, efficiently and reliably*; and the remaining three respondents did not know how to respond (2) or refused (1).

General Plant: Buildings, Equipment and IT

The customer was then read this statement regarding system service:

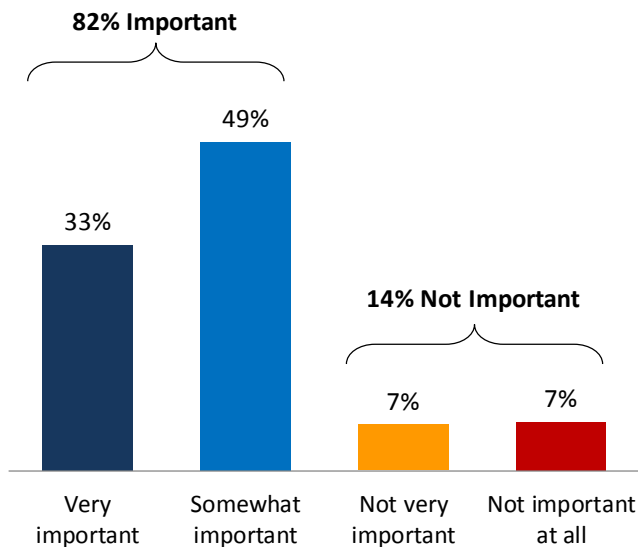
*“Modernizing the grid can allow **Welland Hydro** to improve reliability. Investments such as automated switches may allow **Welland Hydro** to quickly identify the location of outages in order to minimize the number of people impacted by outages and to restore electricity to customers more quickly than was previously possible.*

When asked how important it is for Welland Hydro to invest in modernizing the grid, more than 8-in-10 (82%) residential respondents said it was important and just 14% said it was *not very important* (7%) or *not important at all* (7%).

- Financially secure respondents (88%) and low-consumption residents (86%) are the most likely groups to feel Welland Hydro should invest now in modernizing the grid.

Figure 19: General Plant: Buildings, Equipment and IT

Q Given there are many other areas of needed investments, such as replacing aging equipment, how important do you feel it is for Welland Hydro to invest now in modernizing the grid?
[asked of all respondents; n=501]



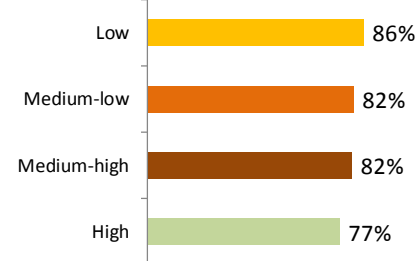
Note: 'Don't know' (3%), 'Refused' (1%) not shown

Sample Breakdown ▶▶
Those who say "important"

Electricity Bill Impacts Finances



Consumption Level



21 of the 25 general service customers feel it is important for Welland Hydro to invest in the grid (11: *very important*; 10: *somewhat important*), three feel it is *not very important* and the remaining GS respondent doesn't know enough to say.

Conservation and Demand Management Preamble

The following preamble explains conservation and demand management:

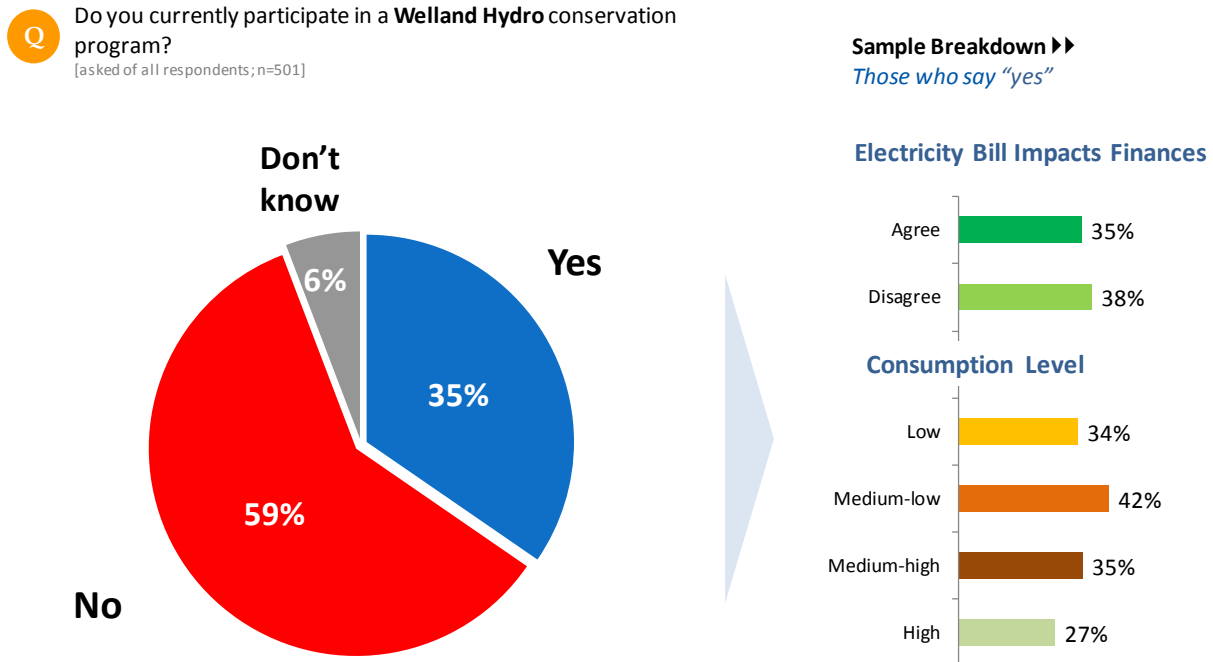
*“One of the most cost effective ways for **Welland Hydro** to reduce its required investments in the distribution system is through customer uptake of conservation programs.*

*When customers consume less electricity at peak demand times, less strain is put on the distribution system and as a result, customers save money in two ways: 1) a lower level of investment is required by **Welland Hydro** to expand and maintain the distribution system’s capacity to deliver electricity; and 2) customers may pay less when they reduce their electricity consumption.”*

Conservation and Demand Management Program Participation

The majority (59%) of residential customers do not currently participate in a Welland Hydro conservation program.

Figure 20: CDM Program Participation



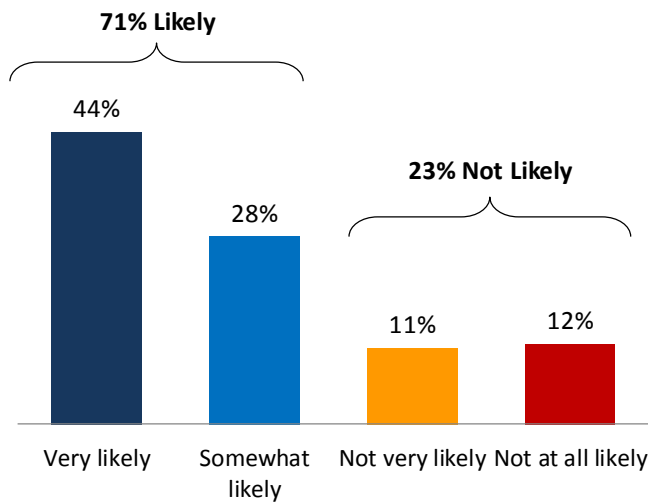
15 of the 25 general service customers do not participate in a Welland Hydro conservation program (8: Yes; 2: don't know).

Future Conservation and Demand Management Participation

More than 7-in-10 (71%) residential customers say they would be willing to participate in future Welland Hydro conservation programs that could reduce their electricity consumption. Nearly half (44%) say they are *very likely*, less than 3-in-10 (28%) say they are *somewhat likely*, 11% say they are *not very likely* and 12% say they are *not at all likely*.

Figure 21: Future CDM Participation

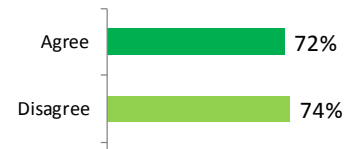
Q How likely are you to participate in future **Welland Hydro** conservation programs that could help reduce your electricity consumption? Would you say ...
[asked of all respondents; n=501]



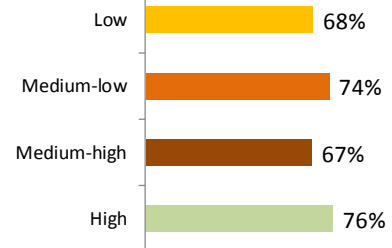
Note: 'Don't know' (4%), 'Refused' (1%) not shown

Sample Breakdown ▶▶
Those who say "likely"

Electricity Bill Impacts Finances



Consumption Level



14 of the 25 general service customers would participate in a CDM program (8: *very likely*; 6: *somewhat likely*). Three of the GS customers are *not very likely*, five are *not at all likely* and the remaining GS customers either *don't know* (2) or refused to say one way or another (1).

Assessment of Plan

In this last section, respondents were assessed on permission: do they support the rate increase or oppose it? And, in an open-ended probe, why or why not?

Acceptance of Rate Increase Summary

A strong majority (71%) of residential customers (71%) accept the rate increase. 34% think it's reasonable and support it, 38% would accept it but don't like it, and 23% think it is unreasonable and oppose it.

- Lower consumption residents (75-77% Low and Low-medium vs. 65-69% Medium-high and High) and financially "flexible" households ("Agree, impacted by bill": 66%; "Disagree, impacted by bill: 84%) are the most likely groups to give permission for a rate increase.

Opinions on Proposed Rate Increase

Residential customers explained their reasoning as follows:

- *The rate increase is reasonable and I support it:* nearly half (44%) gave unconditional permission because they thought maintenance and infrastructure was necessary for reliable service and another four-in-ten (39%) felt the increase was not too much for them to pay.
- *I don't like it, but I think the rate increase is necessary:* more than a third (35%) of those who don't like the increase, but feel it's necessary think that maintenance is needed in order to have reliable service.
- *The rate increase is unreasonable and I oppose it:* a strong plurality (42%) of those who oppose the rate feel the rate is too high already.

Financial Flexibility and Level of Acceptance

As mentioned above, financially impacted households are less likely to support a rate increase.

- Permission is given by two-thirds (66%) of financially strained households, compared to 84% of those who are more "flexible".

Preamble for Assessment of Plan Section

Before hearing the set of questions on assessing the plan, residential customers were presented with the following information:

“Welland Hydro believes that proactive renewal and consistent maintenance is needed to maintain system performance, while keeping the impact on customer bills manageable over the long-term. Between 2017 and 2021, Welland Hydro’s proposed plan will see it ...

- *spend an estimated **\$36.4 million** on on-going maintenance and the operation of the distribution system; and*
- *invest an estimated **\$12.1 million** in new equipment and infrastructure priorities that will help ensure system reliability.*

*To fund this plan, Welland Hydro is proposing the **average residential customers’ rate increase by approximately \$0.88 per month** on the distribution portion of their bill over the next five years.*

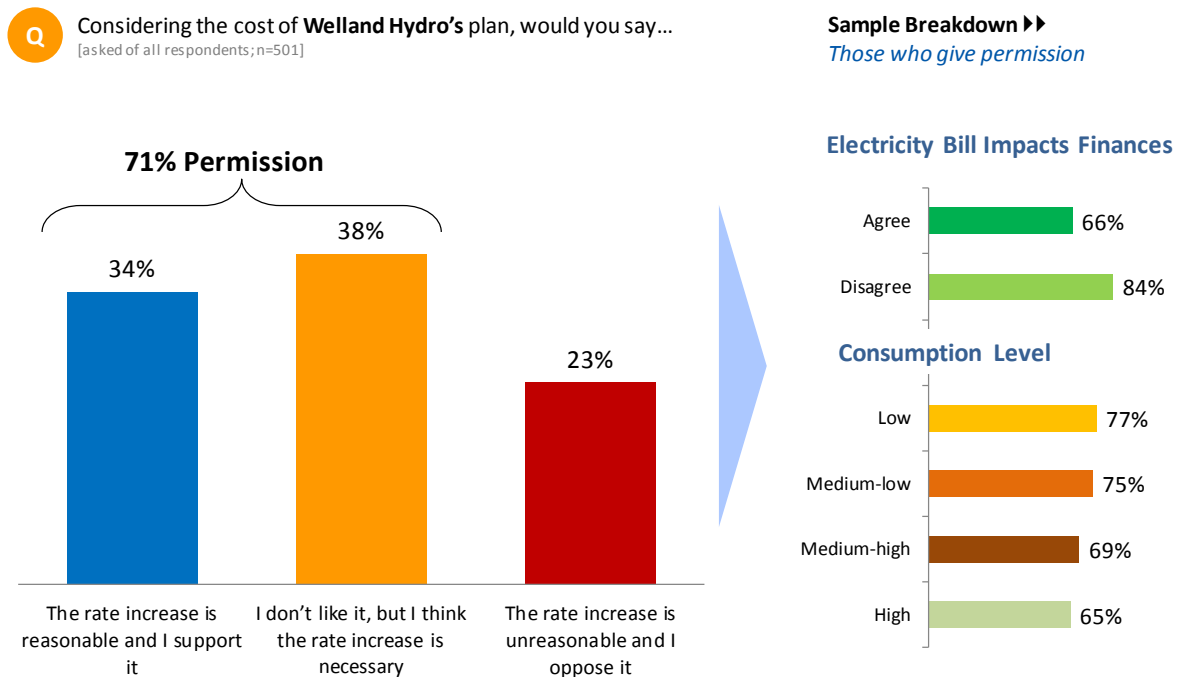
*So, in five years, by 2021, the average residential household will be paying an **estimated \$4.38** more per month on the distribution portion of its electricity bill.”*

Acceptance of Rate Increase

After hearing these cost considerations, more than 7-in-10 (71%) would give social permission for the rate increase. Overall, a third (34%) feel the rate increase is reasonable and support it; less than 4-in-10 (38%) “don’t like it, but think it’s necessary” and less than 1-in-4 (23%) oppose it.

- Those residential customers who feel impacted by their electricity bill (66%) are less likely to give permission than those who don’t feel their electricity bill is a source of financial difficulty (84%).
- Low (77%) and Medium-low (75%) consumption residents are a bit more likely to support the rate increase than higher consumption residents (Medium-high: 69%; High: 65%).

Figure 22: Acceptance of Rate Increase



Note: 'Don't know' (4%), 'Refused' (1%) not shown

Out of the 25 general service customers, 17 gave permission (6: “reasonable and support it”; 11 “don’t like it, but necessary”), 7 opposed it and one refused to answer.

Opinions on Proposed Rate Increase

The top reasons for supporting Welland Hydro's plan included:

- thought maintenance and infrastructure spending was necessary to maintain reliable service (44%); or
- felt the increase was not too much for them to pay (39%).

More than a third (35%) of those who don't like the increase, but think it's necessary feel that maintenance is "necessary for reliable service". Other reasons included that they didn't like the increase: that the rate is already high (8%); that it affects their finances and they can't afford it (8%); that they don't want to pay anymore (8%); that they are concerned about inflation (6%); and they are worried about continually rising prices (6%).

Relative cost is key among those who oppose the rate increase: more than 4-in-10 (42%) feel the rate is too high already. Roughly 1-in-7 (16%) think the "government should pay for its mistakes and that they are spending too much money" while 11% feel they just can't afford it on a fixed income.

Figure 23: Opinion on Proposed Rate Increase

And why do you say that?

[asked of all respondents with response; n=474]

Permission: Reasonable, support it	34%
Maintenance/infrastructure spending is necessary for reliable service	44%
Increase is not too much	39%
Inflation/everything goes up anyway	4%
Must invest now for the future/save money in long-run	3%
If they keep their word/if it doesn't increase more than they said	2%
Rate is high already	1%
No choice/it will increase regardless	1%
Affects my finances/can't afford it/on fixed income	1%
Government should pay for their mistakes/spending too much money	1%
Other	4%
Don't Know	1%
Sample size	n=164

PERMISSION: Don't like, but necessary	38%
Maintenance/infrastructure spending is necessary for reliable service	35%
Rate is high already	8%
Affects my finances/can't afford it/on fixed income	8%
Don't want to pay more	8%
Inflation/everything goes up anyway	6%
The price will just keep increasing	6%
Must invest now for the future/save money in long-run	5%
Increase is not too much	4%
No choice/it will increase regardless	4%
Government should pay for their mistakes/spending too much money	3%
Increase is too high	2%
It's not necessary	1%
If they keep their word/if it doesn't increase more than they said	1%
Other	8%
Don't Know	1%
Refused	1%
Sample size	n=182

NO PERMISSION: Unreasonable, oppose it	23%
Rate is high already	42%
Government should pay for their mistakes/spending too much money	16%
Affects my finances/can't afford it/on fixed income	11%
The price will just keep increasing	9%
Don't want to pay more	5%
Increase is too high	4%
It's not necessary	3%
Maintenance/infrastructure spending is necessary for reliable service	1%
No choice/it will increase regardless	1%
If they keep their word/if it doesn't increase more than they said	1%
Other	9%
Sample size	n=113

Financial Flexibility and Level of Acceptance

How does the state of a respondent’s finances affect permission for a rate increase? In other words, are customers struggling to get by less likely to give permission than those who are financially secure?

(INNOVATIVE measured this “financial flexibility” through the following customer input statement:

The cost of my electricity bill has a major impact on my finances and requires that I do without some other important priorities.

Those who agreed were considered to be “financially strained”; those that disagreed were considered “financially flexible”.)

There may in fact be a correlation between financial flexibility and permission. While a strong majority (84%) of “flexible” residential households give permission, just two-in-three (66%) of the “financially strained” households give permission. Further research is needed to test this relationship.

Figure 24: Financial Flexibility and Level of Acceptance

	Financially Strained Households	Not Financially Strained Households
The rate increase is reasonable and I support it	25%	48%
I don't like it, but I think the rate increase is necessary	41%	36%
The rate increase is unreasonable and I oppose it	29%	12%
Overall Permission	66%	84%

Note: ‘Don’t know’/‘Refused’ not shown

Out of the 22 General service customers who felt the cost of electricity impacted the bottom line of their organization, 15 gave permission while the rest opposed (6) or refused (1) to answer. Only one customer felt the company’s bottom line was not impacted by electricity (and gave permission.)

Survey Instruments

Residential Survey Instrument

A. Introduction

Introduction

Hello, my name is _____ and I'm calling from **Innovative Research Group** on behalf of **Welland Hydro**, your electricity distributor.

Innovative Research Group is a national public opinion research firm. We have been commissioned by **Welland Hydro** to help them better understand the needs and preferences of customers who are responsible for paying their household's electricity bill.

Welland 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, Welland 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.

- | | | |
|---|-----------------------------|--------------------|
| 1 | Yes | [continue] |
| 2 | No – NOT PRIMARY BILL PAYER | [go to TRANSFER-1] |
| 3 | No – BAD TIME | ARRANGE CALLBACK |
| 4 | No – HARD REFUSAL | [Terminate] |

MONIT

This call may be monitored or audio taped for quality control and evaluation purposes.

- | | |
|---|-------------------|
| 1 | PRESS TO CONTINUE |
|---|-------------------|

A2. Have I reached you at your home phone number?

- | | | |
|----|-------------------------------------|------------------|
| 1 | Yes – SPEAKING, CONTINUE | [continue to A3] |
| 2 | No – AT OFFICE or WORKPLACE | [continue to A3] |
| 3 | No – on cellular or mobile phone | [skip to CELL] |
| 99 | Refused – LOG (THANK AND TERMINATE) | [Terminate] |

CELL. Are you currently operating a car, truck or other motor vehicle?

- | | | |
|----|-------------------------------------|------------------|
| 1 | YES | ARRANGE CALLBACK |
| 2 | NO | [continue to A3] |
| 98 | Refused – LOG (THANK AND TERMINATE) | [Terminate] |

A3. Are you the person primarily responsible for paying the electricity bill in your household?

- | | | |
|----|-----------------------------|--------------------|
| 1 | Yes – I pay the bill | [continue to A4] |
| 2 | Yes – shared responsibility | [continue to A4] |
| 3 | No | [go to TRANSFER-1] |
| 98 | Don't know (DNR) | [Terminate] |

TRANSFER-1

Can I speak with the person in your household who usually pays the electricity bill?

- 1 Yes [BACK TO INTRO]
- 2 No – NOT AVAILABLE/BAD TIME [ARRANGE CALLBACK]
- 3 No – HARD REFUSAL [Terminate]
- 98 Don't know (DNR) [Terminate]

A4. And can you confirm that your household receives an electricity bill from **Welland Hydro**?

- 1 Yes [continue]
- 2 No [Terminate]
- 98 Don't know (DNR) [Terminate]

GENDER

Note gender by observation:

- 1 Male
- 2 Female

B. General Satisfaction

We need to prime respondents to start thinking about electricity and the part of the system that Welland Hydro operates.

B5. PREAMBLE-1

To begin, I'd like to ask you some questions about your electricity service.

Today we want to talk about **Welland Hydro** and the local electricity system in your community.

This is the system that takes the electricity from provincial transmission towers and brings it to your home through a network of wires, poles and other equipment that is owned and operated by **Welland Hydro**.

B6. How familiar are you with **Welland Hydro**, which operates the electricity distribution system in your community? Would you say you are *very familiar*, *somewhat familiar*, *not familiar* or would you say you *don't know*?

- 1 Very familiar
- 2 Somewhat familiar
- 3 Not familiar
- 98 Don't know
- 99 Refused (DNR)

B7. Thinking specifically about the services provided to you and your community by **Welland Hydro**, overall, how satisfied are you with the services that you receive?

Would you say you are *very satisfied*, *somewhat satisfied*, *neither satisfied nor dissatisfied*, *somewhat dissatisfied*, *very dissatisfied* or would you say you *don't know enough to say*?

- 1 Very satisfied
- 2 Somewhat satisfied
- 3 Neither satisfied or dissatisfied
- 4 Somewhat dissatisfied
- 5 Very dissatisfied
- 98 Don't know
- 99 Refused (DNR)

B8. Is there anything in particular **Welland Hydro** can do to improve its service to you? **[OPEN]**

- 98 Don't know (DNR)
- 99 Refused (DNR)

C. Bill Knowledge & Impact

I'd now like to talk with you about your electricity bill ...

- C9. While **Welland Hydro** is responsible for collecting payment for the entire electricity bill, they retain only about **18%** of the average residential customer's bill. This is about **\$27** on an average **\$150** monthly electricity bill. 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 percentage of your electricity bill that went to **Welland Hydro**? Would you say you were *very familiar*, *somewhat familiar*, *not familiar* or would you say you *don't know*?

- 1 Very familiar
- 2 Somewhat familiar
- 3 Not familiar
- 98 Don't know
- 99 Refused [DNR]

- C10. Do you feel that the **18%** of your total electricity bill that you pay to **Welland Hydro** for the services they provide is *very reasonable*, *somewhat reasonable*, *somewhat unreasonable*, *very unreasonable* or would you say you *don't know*?

- 1 Very reasonable
- 2 Somewhat reasonable
- 3 Somewhat unreasonable
- 4 Very unreasonable
- 98 Don't know
- 99 Refused [DNR]

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.

D11. **PREAMBLE-2:** 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 **Welland Hydro** customer experiences **one** unexpected power outage per year.

D12. Have you experienced any power outages - **longer than one minute - in the past 12 months**, and if so, approximately how many? **[DO NOT READ LIST]**

- | | | |
|----|-------------------|----------------------|
| 0 | No outages | [SKIP to D15] |
| 1 | 1 outage | [CONTINUE] |
| 2 | 2 outages | [CONTINUE] |
| 3 | 3 outages | [CONTINUE] |
| 4 | 4 outages | [CONTINUE] |
| 5 | 5 outages | [CONTINUE] |
| 6 | 6 outages | [CONTINUE] |
| 7 | 7 outages | [CONTINUE] |
| 8 | 8 or more outages | [CONTINUE] |
| 98 | Don't know (DNR) | [SKIP to D15] |
| 99 | Refused (DNR) | [SKIP to D15] |

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]**

- | | | |
|----|--------------------------------|--|
| 1 | Less than 15 minutes | |
| 2 | 15 to less than 30 minutes | [specify if less than 15 minutes, if stated "less than 30 minutes"] |
| 3 | 30 minutes to less than 1 hour | |
| 4 | 1 hour to less than 3 hours | |
| 5 | 3 hours to less than 6 hours | |
| 6 | 6 hours to less than 12 hours | |
| 7 | 12 to less than 24 hours | |
| 8 | More than 24 hours | |
| 98 | Don't know (DNR) | |
| 99 | Refused (DNR) | |

READ ONLY IF D12 = 1 thru 8

D14. Thinking back to the **most recent** power outage you experienced as a **Welland Hydro** customer, would you say the power outage ...

[READ LIST; ROTATE 1 and 3]

- 1 Was a major inconvenience
- 2 Was a minor inconvenience
- 3 Was no inconvenience at all
- 97 Have never experienced an outage with Welland Hydro (**DNR**)
- 98 Don't know (**DNR**)
- 99 Refused (**DNR**)

ASK ALL

I'd now like to read you a few statements about the electrical service that you receive from **Welland Hydro**.

For each of the following statements, please tell me if you are *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied, very dissatisfied*, or would you say you *don't know*?

- 1 Very satisfied
- 2 Somewhat satisfied
- 3 Neither satisfied or dissatisfied
- 4 Somewhat dissatisfied
- 5 Very dissatisfied
- 98 Don't know
- 99 Refused [**DNR**]

D15. The reliability of your electricity service – as judged by the number of power outages you experience.

D16. The amount of time it takes to restore power when power outages occur.

D17. The quality of the power delivered to you as judged by the absence of voltage fluctuations that can result in the flickering or dimming of lights.

[END BATTERY]

D18. In your view, how do you think **Welland Hydro** should address the **number** of customer power outages? Would you say ... **[READ LIST]**

[Rotate response codes 1 and 3]

- 1 Spend what is needed to **reduce** the number of unexpected power outages
- 2 Spend what is needed to **maintain** the current level of unexpected power outages
- 3 Accept **more** power outages in order to help keep customer costs from rising
- 98 Don't Know (**DNR**)
- 99 Refused (**DNR**)

D19. Overall, the average **Welland Hydro** customer is without power for about **one hour per year**.

In your view, how do you think **Welland Hydro** should address the **length of time** customers are without power? Would you say ... **[READ LIST]**

[Rotate response codes 1 and 3]

- 1 Spend what is needed to **reduce** the length of unexpected power outages
- 2 Spend what is needed to **maintain** the current length of unexpected outages
- 3 Accept **longer** time without power in order to help minimize customer costs from rising
- 98 Don't Know (**DNR**)
- 99 Refused (**DNR**)

E. Information Tools + E-billing

- E20. Now I'd like to ask you about the customer service you have received when dealing with employees of Welland Hydro whether on the telephone, via email, in person or through online conversations including social media.

Overall, how satisfied or dissatisfied are you with the customer service provided by **Welland Hydro**?

Would you say you are *very satisfied*, *somewhat satisfied*, *neither satisfied nor dissatisfied*, *somewhat dissatisfied*, *very dissatisfied*, or would you say you *don't know*. If you have not been in contact with Welland Hydro staff, just let me know.

01	Very satisfied
02	Somewhat satisfied
03	Neither satisfied or dissatisfied
04	Somewhat dissatisfied
05	Very dissatisfied
97	Not applicable - Have never been in contact with Welland Hydro staff
98	Don't know
99	Refused [DNR]

- E21. I would now like you to think about the communications that you may receive from **Welland Hydro** without talking directly to an employee. This may include information found on their website, bill inserts, advertising, notices, emails, or social media sites.

Overall, how satisfied or dissatisfied are you with the communications that you receive from **Welland Hydro** related specifically to your electrical service?

Would you say you are *very satisfied*, *somewhat satisfied*, *neither satisfied nor dissatisfied*, *somewhat dissatisfied*, *very dissatisfied* or would you say you *don't know*?

01	Very satisfied
02	Somewhat satisfied
03	Neither satisfied or dissatisfied
04	Somewhat dissatisfied
05	Very dissatisfied
98	Don't know
99	Refused [DNR]

- E22. How *good* or *poor* a job does **Welland Hydro** do at providing you with information on available tools and programs that can help you manage your household electricity consumption? Would you say ... [READ LIST]

- 1 A very good job
- 2 A good job
- 3 A poor job
- 4 A very poor job
- 98 Don't know (DNR)
- 99 Refused (DNR)

E23. E-billing, or electronic billing, saves money on postage and paper. The more customers who use e-billing, the more money Welland Hydro saves; savings which ultimately get passed along to customers. How interested would you be in changing to e-billing? Would you say...

- 1 Very interested
- 2 Somewhat interested
- 3 Not very interested
- 4 Not interested at all
- 97 Already signed up for e-billing
- 98 Don't know (DNR)
- 99 Refused (DNR)

[Ask only if E23 = 1 or 2]

And why haven't you switched to e-billing yet? **[OPEN]**

F. System Challenges & Priorities

System Renewal Question

F25. [PREAMBLE to F26] While Welland Hydro believes it has done its best to prolong the life of the assets that make up the distribution system, many of these assets are approaching the end of their useful life.

As part of its investment plan, Welland Hydro is proposing a significant infrastructure replacement or renewal program. The estimated cost of this system renewal program is **\$8.8 million** between 2017 and 2021.

Although this plan will allow Welland Hydro to make the necessary investments to maintain system reliability, **it will have an impact on customer bills.**

F26. Which of the following statements best represents your point of view?

[Read and Rotate statements 1 and 2]

Some customers have said ...

1 Welland 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.

Others have said ...

2 Welland 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.

98 Don't know (DNR)

99 Refused (DNR)

Run-to-Failure Question

F27. Thinking about the aging equipment in Welland Hydro's distribution system, do you feel it's best to wait until non-critical infrastructure – that is, equipment that impacts a limited number of customers – breaks down to get full value from each piece of equipment, even if it means short power outages for some customers ...

... Or do you feel the best approach is to replace the equipment before it breaks down to avoid unscheduled power outages, even if it means not getting the "full" value from each piece of equipment?

[DO NOT READ LIST; unless respondents need prompt]

Wait until equipment breakdown	1
Replace equipment before breakdown	2
Don't know	98

General Plant

F28. Welland Hydro is not just the local electricity distribution system itself, but a company that operates the system. As a company, Welland 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 a 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 ...

Welland Hydro should find ways to make do with the buildings, equipment and IT systems it already has. 1

Others have said ...

While Welland Hydro should be wise with its spending, it is important that its staff have the equipment and tools they need to manage the system safely, efficiently and reliably. 2

Don't know (DNR) 98

Refused (DNR) 99

System Service Questions

[PREAMBLE FOR F29] Modernizing the grid can allow **Welland Hydro** to improve reliability. Investments such as automated switches may allow **Welland Hydro** to quickly identify the location of outages in order to minimize the number of people impacted by outages and to restore electricity to customers more quickly than was previously possible.

F29. Given there are many other areas of needed investments, such as replacing aging equipment, how important do you feel it is for **Welland Hydro** to invest now in modernizing the grid? Would you say ... **[READ LIST]**:

- 1 Very important
- 2 Somewhat important
- 3 Not very important
- 4 Not important at all
- 98 Don't know (DNR)
- 99 Refused (DNR)

CDM Questions

- F30. One of the most cost effective ways for **Welland Hydro** to reduce its required investments in the distribution system is through customer uptake of conservation programs.

When customers consume less electricity at peak demand times, less strain is put on the distribution system and as a result, customers save money in two ways: 1) a lower level of investment is required by **Welland Hydro** to expand and maintain the distribution system's capacity to deliver electricity; and 2) customers pay less when they reduce their electricity consumption.

Have you ever participated in a **Welland Hydro** conservation program?

- 1 Yes
- 2 No
- 98 Don't know (DNR)
- 99 Refused (DNR)

- F31. How likely are **you** to participate in future **Welland Hydro** conservation programs that could help reduce your electricity consumption? Would you say ... **[READ LIST]**

- 1 Very likely
- 2 Somewhat likely
- 3 Not very likely
- 4 Not at all likely
- 98 Don't know (DNR)
- Refused (DNR)

G. Assessment of Plan

G32. PREAMBLE

Welland Hydro believes that proactive renewal and consistent maintenance is needed to maintain system performance, while keeping the impact on customer bills manageable over the long-term. Between 2017 and 2021, Welland Hydro's proposed plan will see it ...

- spend an estimated **\$36.4 million** on on-going maintenance and the operation of the distribution system; and
- invest an estimated **\$12.1 million** in new equipment and infrastructure priorities that will help ensure system reliability.

To fund this plan, Welland Hydro is proposing the **average residential customers' rate increase by approximately \$0.88 per month** on the distribution portion of their bill over the next five years.

So, in five years, by 2021, the average residential household will be paying an **estimated \$4.38 more per month** on the distribution portion of its electricity bill.

G33. Considering the cost of Welland Hydro's plan, would you say [READ LIST] ...

Rotate response codes "1" and "3"

- | | |
|----|---|
| 1 | The rate increase is reasonable and I support it |
| 2 | I don't like it, but I think the rate increase is necessary |
| 3 | The rate increase is unreasonable and I oppose it |
| 98 | Don't know (DNR) |
| 99 | Refused (DNR) |

Ask only if F32 = 1, 2 or 3

G34. And why do you say that? [OPEN]

- | | |
|----|------------------|
| 98 | Don't know (DNR) |
| 99 | Refused (DNR) |

H. Segmentation & Demographics

Lastly, I'd like to ask you some general questions about the electricity system in Ontario. For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

- 1 Strongly agree
- 2 Somewhat agree
- 3 Somewhat disagree
- 4 Strongly disagree
- 98 Don't know/No opinion
- 99 Refused [DNR]

[ROTATE G34 & G35]

H35. The cost of my electricity bill has a major impact on my finances and requires I do without some other important priorities.

H36. Customers are well served by the electricity system in Ontario.

[END BATTERY]

These last few questions are for statistical purposes only and we remind you again that all of your responses are completely confidential.

H37. Do you own or rent your home?

- 1 Own
- 2 Rent
- 99 Refused (DNR)

H38. How would you describe your primary residence?

Would you say you live in ... [READ LIST]

- 1 A fully-detached home
- 2 A semi-detached home
- 3 An apartment or condo building
- 99 Refused (DNR)

H39. Counting yourself, how many people live in your household? [DO NOT READ LIST]

- 1 1 person
- 2-7 Enter number of people
- 8 8 or more
- 99 Refused (DNR)

THANK and END SURVEY

These are all the questions we have for you today/tonight. Thank you very much for taking the time to complete this survey.

General service Survey Instrument

A. Introduction

Introduction

Hello, my name is _____ and I'm calling from **Innovative Research Group** on behalf of **Welland Hydro**, your electricity distributor.

Innovative Research Group is a national public opinion research firm. We have been commissioned by **Welland 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, **Welland 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 **Welland 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 preamble 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 **Welland Hydro** to help them better understand the needs and preferences of their customers.

IF INTRO = 1, read:

Welland 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, Welland 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. Just to confirm, does your organization receive an electricity bill from Welland 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 A4]
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]

A4. **READ STATEMENT TO RESPONDENT:**

While you may be a Welland Hydro residential customer, for the following questions I'd like you to answer from the perspective of the business or organization that you represent. While we are currently surveying residential customers, you have been randomly selected from a limited sample of small business and non-residential customers and it's important we understand the unique needs and preferences of this group of customers.

So again, please answer the following questions from the perspective of your business or organization's needs and preferences.

B. General Satisfaction

We need to prime respondents to start thinking about electricity and the part of the system that Welland Hydro operates.

B5. **PREAMBLE-1**

To begin, I'd like to ask you some questions about your electricity service.

Today we want to talk about **Welland Hydro** and the local electricity system in your community. This is the system that takes the electricity from provincial transmission towers and brings it to your organization through a network of wires, poles and other equipment that is owned and operated by **Welland Hydro**.

B6. How familiar are you with **Welland Hydro**, which operates the electricity distribution system in your community? Would you say you are *very familiar*, *somewhat familiar*, *not familiar* or would you say you *don't know*?

- 1 Very familiar
- 2 Somewhat familiar
- 3 Not familiar
- 98 Don't know
- 99 Refused (DNR)

B7. Thinking specifically about the services provided to your organization by **Welland Hydro**, overall, how satisfied are you with the services that you receive?

Would you say you are *very satisfied*, *somewhat satisfied*, *neither satisfied nor dissatisfied*, *somewhat dissatisfied*, *very dissatisfied* or would you say you *don't know enough to say*?

- 1 Very satisfied
- 2 Somewhat satisfied
- 3 Neither satisfied or dissatisfied
- 4 Somewhat dissatisfied
- 5 Very dissatisfied
- 98 Don't know
- 99 Refused (DNR)

B8. Is there anything in particular **Welland Hydro** can do to improve its service to you? **[OPEN]**

- 98 Don't know (DNR)
- 99 Refused (DNR)

C. Bill Knowledge & Impact

I'd now like to talk with you about your electricity bill ...

- C9. While **Welland Hydro** is responsible for collecting payment for the entire electricity bill, they retain only about **12%** of the average general service customer's bill. This is about **\$47** on an average **\$375** monthly electricity bill. 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 percentage of your organization's electricity bill that went to **Welland Hydro**? Would you say you were *very familiar*, *somewhat familiar*, *not familiar* or would you say you *don't know*?

- 1 Very familiar
- 2 Somewhat familiar
- 3 Not familiar
- 98 Don't know
- 99 Refused [DNR]

- C10. Do you feel that the **12%** of your total electricity bill that you pay to **Welland Hydro** for the services they provide is *very reasonable*, *somewhat reasonable*, *somewhat unreasonable*, *very unreasonable* or would you say you *don't know*?

- 1 Very reasonable
- 2 Somewhat reasonable
- 3 Somewhat unreasonable
- 4 Very unreasonable
- 98 Don't know
- 99 Refused [DNR]

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.

D11. **PREAMBLE-2:** 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 **Welland Hydro** customer experiences **one** unexpected power outage per year.

D12. Have you experienced any power outages - longer than one minute - in the past 12 months, and if so, approximately how many? **DO NOT READ LIST**

0	No outages	SKIP to D15
1	1 outage	[CONTINUE]
2	2 outages	[CONTINUE]
3	3 outages	[CONTINUE]
4	4 outages	[CONTINUE]
5	5 outages	[CONTINUE]
6	6 outages	[CONTINUE]
7	7 outages	[CONTINUE]
8	8 or more outages	[CONTINUE]
98	Don't know (DNR)	SKIP to D15
99	Refused (DNR)	SKIP to D15

READ ONLY IF D12 = 1 thru 8

D13. And approximately how many minutes did the most recent power outage last at your organization? **[DO NOT READ LIST; select category accordingly]**

- 1 Less than 15 minutes
- 2 15 to less than 30 minutes **[specify if less than 15 minutes, if stated "less than 30 minutes"]**
- 3 30 minutes to less than 1 hour
- 4 1 hour to less than 3 hours
- 5 3 hours to less than 6 hours
- 6 6 hours to less than 12 hours
- 7 12 to less than 24 hours
- 8 More than 24 hours
- 98 Don't know (DNR)
- 99 Refused (DNR)

READ ONLY IF D12 = 1 thru 8

D14. Thinking back to the most recent power outage you experienced at your organization as a **Welland Hydro** customer, would you say the power outage ...

[READ LIST; ROTATE 1 and 3]

- Had a significant cost to my organization 1
- Had a minor cost to my organization 2
- Had barely any cost to my organization, just a bit of inconvenience 3
- Have never experienced an outage with Welland Hydro (DNR) 97
- Don't know (DNR) 98
- Refused (DNR) 99

ASK ALL

I'd now like to read you a few statements about the electrical service that your organization receives from **Welland Hydro**.

For each of the following statements, please tell me if you are *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied, very dissatisfied*, or would you say you *don't know*?

- 1 Very satisfied
- 2 Somewhat satisfied
- 3 Neither satisfied or dissatisfied
- 4 Somewhat dissatisfied
- 5 Very dissatisfied
- 98 Don't know
- 99 Refused [DNR]

D15. The reliability of your electricity service – as judged by the number of power outages you experience.

D16. The amount of time it takes to restore power when power outages occur.

D17. The quality of the power delivered to you as judged by the absence of voltage fluctuations that can result in the flickering or dimming of lights.

[END BATTERY]

D18. In your view, how do you think **Welland Hydro** should address the **number** of customer power outages? Would you say ... **[READ LIST]**

[Rotate response codes 1 and 3]

- 1 Spend what is needed to **reduce** the number of unexpected power outages
- 2 Spend what is needed to **maintain** the current level of unexpected power outages
- 3 Accept **more** power outages in order to help keep customer costs from rising
- 98 Don't Know (DNR)
- 99 Refused (DNR)

D19. Overall, the average **Welland Hydro** customer is without power for about **one hour per year**.

In your view, how do you think **Welland Hydro** should address the **length of time** customers are without power? Would you say ... **[READ LIST]**

[Rotate response codes 1 and 3]

- 1 Spend what is needed to **reduce** the length of unexpected power outages
- 2 Spend what is needed to **maintain** the current length of unexpected outages
- 3 Accept **longer** time without power in order to help minimize customer costs from rising
- 98 Don't Know (DNR)
- 99 Refused (DNR)

E. Information Tools + E-billing

- E20. Now I'd like to ask you about the customer service you have received when dealing with employees of **Welland Hydro** whether on the telephone, via email, in person or through online conversations including social media.

Overall, how satisfied or dissatisfied are you with the customer service provided by **Welland Hydro**?

Would you say you are *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied, very dissatisfied*, or would you say you *don't know*. If you have not been in contact with Welland Hydro staff, just let me know.

01	Very satisfied
02	Somewhat satisfied
03	Neither satisfied or dissatisfied
04	Somewhat dissatisfied
05	Very dissatisfied
97	Not applicable - Have never been in contact with Welland Hydro staff
98	Don't know
99	Refused [DNR]

- E21. I would now like you to think about the communications that your **organization** may receive from **Welland Hydro** without talking directly to an employee. This may include information found on their website, bill inserts, advertising, notices, emails, or social media sites.

Overall, how satisfied or dissatisfied are you with the communications that your organization receives from **Welland Hydro** related specifically to your electrical service?

Would you say you are *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied, very dissatisfied* or would you say you *don't know*?

01	Very satisfied
02	Somewhat satisfied
03	Neither satisfied or dissatisfied
04	Somewhat dissatisfied
05	Very dissatisfied
98	Don't know
99	Refused [DNR]

E22. How *good* or *poor* a job does **Welland Hydro** do at providing your organization with information on available tools and programs that can help you manage your organization's electricity consumption? Would you say ... **[READ LIST]**

- 1 A very good job
- 2 A good job
- 3 A poor job
- 4 A very poor job
- 98 Don't know (**DNR**)
- 99 Refused (**DNR**)

E23. E-billing, or electronic billing, saves money on postage and paper. The more customers who use e-billing, the more money **Welland Hydro** saves; savings which ultimately get passed along to customers. How interested would you be in changing your **organization** to e-billing? Would you say ...

- 1 Very interested
- 2 Somewhat interested
- 3 Not very interested
- 4 Not interested at all
- 97 Already signed up for e-billing
- 98 Don't know (**DNR**)
- 99 Refused (**DNR**)

[Ask only if E23 = 1 or 2]

E24. And why haven't you switched to e-billing yet? **[OPEN]**

F. System Challenges & Priorities

System Renewal Question

F25. [PREAMBLE to F26] While Welland Hydro believes it has done its best to prolong the life of the assets that make up the distribution system, many of these assets are approaching the end of their useful life.

As part of its investment plan, Welland Hydro is proposing a significant infrastructure replacement or renewal program. The estimated cost of this system renewal program is **\$8.8 million** between 2017 and 2021.

Although this plan will allow Welland Hydro to make the necessary investments to maintain system reliability, **it will have an impact on customer bills.**

F26. Which of the following statements best represents your point of view?

[Read and Rotate statements 1 and 2]

Some customers have said ...

- 1 Welland Hydro should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my organization's monthly electricity bill by a few dollars over the next few years.

Others have said ...

- 2 Welland 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.
- 98 Don't know (DNR)
99 Refused (DNR)

Run-to-Failure Question

F27. Thinking about the aging equipment in Welland Hydro's distribution system, do you feel it's best to wait until non-critical infrastructure – that is, equipment that impacts a limited number of customers – breaks down to get full value from each piece of equipment, even if it means short power outages for some customers ...

... Or do you feel the best approach is to replace the equipment before it breaks down to avoid unscheduled power outages, even if it means not getting the "full" value from each piece of equipment?

[DO NOT READ LIST; unless respondents need prompt]

- | | |
|------------------------------------|----|
| Wait until equipment breakdown | 1 |
| Replace equipment before breakdown | 2 |
| Don't know | 98 |

General Plant

F28. Welland Hydro is not just the local electricity distribution system itself, but a company that operates the system. As a company, Welland 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 a 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 ...

Welland Hydro should find ways to make do with the buildings, equipment and IT systems it already has. 1

Others have said ...

While Welland Hydro should be wise with its spending, it is important that its staff have the equipment and tools they need to manage the system safely, efficiently and reliably. 2

Don't know (DNR) 98

Refused (DNR) 99

System Service Questions

[PREAMBLE FOR F29] Modernizing the grid can allow **Welland Hydro** to improve reliability. Investments such as automated switches may allow **Welland Hydro** to quickly identify the location of outages in order to minimize the number of people impacted by outages and to restore electricity to customers more quickly than was previously possible.

F29. Given there are many other areas of needed investments such as replacing aging equipment, how important do you feel it is for **Welland Hydro** to invest now in modernizing the grid?

Would you say ... **[READ LIST]**:

- 1 Very important
- 2 Somewhat important
- 3 Not very important
- 4 Not important at all
- 98 Don't know (DNR)
- 99 Refused (DNR)

CDM Questions

- F30. One of the most cost effective ways for **Welland Hydro** to reduce its required investments in the distribution system is through customer uptake of conservation programs.

When customers consume less electricity at peak demand times, less strain is put on the distribution system and as a result, customers save money in two ways: 1) a lower level of investment is required by **Welland Hydro** to expand and maintain the distribution system's capacity to deliver electricity; and 2) customers pay less when they reduce their electricity consumption.

Has your organization ever participated in a **Welland Hydro** conservation program?

- 1 Yes
- 2 No
- 98 Don't know (DNR)
- 99 Refused (DNR)

- F31. How likely is **your organization** to participate in future **Welland Hydro** conservation programs that could help reduce your electricity consumption? Would you say ... **[READ LIST]**

- 1 Very likely
- 2 Somewhat likely
- 3 Not very likely
- 4 Not at all likely
- 98 Don't know (DNR)
- 99 Refused (DNR)

G. Assessment of Plan

G32. PREAMBLE

Welland Hydro believes that proactive renewal and consistent maintenance is needed to maintain system performance, while keeping the impact on customer bills manageable over the long-term. Between 2017 and 2021, Welland Hydro's proposed plan will see it ...

- spend an estimated **\$36.4 million** on on-going maintenance and the operation of the distribution system; and
- invest an estimated **\$12.1 million** in new equipment and infrastructure priorities that will help ensure system reliability.

To fund this plan, Welland Hydro is proposing the **average general service customer's rates increase by approximately \$1.77 per month** on the distribution portion of their bill over the next five years.

So, in five years, by 2021, the average general service organization will be paying an **estimated \$8.87 more per month** on the distribution portion of its electricity bill.

G33. Considering the cost of Welland Hydro's plan, would you say [READ LIST] ...
Rotate response codes "1" and "3"

- | | |
|----|---|
| 1 | The rate increase is reasonable and I support it |
| 2 | I don't like it, but I think the rate increase is necessary |
| 3 | The rate increase is unreasonable and I oppose it |
| 98 | Don't know (DNR) |
| 99 | Refused (DNR) |

Ask only if F32 = 1, 2 or 3

G34. And why do you say that? [OPEN]

- | | |
|----|------------------|
| 98 | Don't know (DNR) |
| 99 | Refused (DNR) |

H. Segmentation & Demographics

Lastly, I'd like to ask you some general questions about the electricity system in Ontario.

For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

- | | |
|----|-----------------------|
| 1 | Strongly agree |
| 2 | Somewhat agree |
| 3 | Somewhat disagree |
| 4 | Strongly disagree |
| 98 | Don't know/No opinion |
| 99 | Refused [DNR] |

[ROTATE G34 & G35]

H35. 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.

H36. Customers are well served by the electricity system in Ontario.

[END BATTERY]

These last few questions are for statistical purposes only and we remind you again that all of your responses are completely confidential.

H37. Which of the following best describes the sector in which your organization operates?

- | | |
|---|----|
| Restaurant | 1 |
| Retail | 2 |
| Commercial | 3 |
| Multi-residential | 4 |
| Hospitality (i.e. catering, hotel operations) | 5 |
| Manufacturing | 6 |
| Other [Please specify: _____] | 88 |
| Don't know / Refused (DNR) | 98 |

H38. Which of the following best describes the **hours of operation** of your organization?

Would you say ... [READ LIST]

- | | |
|--|----|
| We are open 24/7 | 1 |
| We operate several shifts each day, but are not open 24/7 | 2 |
| We operate during regular business hours only | 3 |
| We operate outside of regular business hours, but do not have shifts | 4 |
| Other (please specify): _____ | 88 |
| Don't know / Refused (DNR) | 98 |

H39. And, which of the following best describes **when your organization operates** through the week? Would you say ... **[READ LIST]**

We operate on weekdays only	1
We operate on weekdays and weekends	2
Other (please specify): _____	88
Don't know / Refused (DNR)	98

H40. How many **full-time** employees work at your organization? **[record #]**

H41. Any how many **part-time** employees work at your organization? **[record #]**

THANK and END SURVEY

These are all the questions we have for you **today/tonight**. Thank you very much for taking the time to complete this survey.

Appendix

Customer Consultation Workbook



2017 Rate Application Review

Residential Customer Consultation Workbook



July 2016

Welland Hydro-Electric System Corp. (WHESC) is the local distribution company responsible for electricity distribution in the City of Welland.

With approximately 40 employees, WHESC operates and maintains a distribution system serving a population of approximately 50,600 with 22,600 residential and business customers over an 81 square kilometer area.

WHESC has been operating since 1913 and is wholly owned by the City of Welland through its holding company, the Welland Hydro-Electric Holding Corp.

Welland Hydro's Service Territory





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What's this consultation about?

The purpose of this customer consultation is to collect your feedback on WHESC's investment and spending plan for 2017 to 2021.

Welland 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 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 and maintain.

This customer consultation is designed to collect your feedback on the reliability of the electricity distribution system and the spending decisions WHESC will need to make over the next five years. Ultimately, this consultation will help WHESC ensure alignment between its operational and capital investment plans, while addressing customers needs and preferences.

As a WHESC customer, this is an opportunity for you to tell your local distribution company what you think about their plan and the cost implications this plan will have on you. This is also an opportunity for WHESC to explain to its customers the challenges in operating and maintaining the local electricity distribution system, and more importantly how WHESC intends to meet those challenges.

To participate in this review, you do not need to be an expert on electrical distribution systems.

This workbook explains key parts of the electrical distribution system, the challenges facing the system, WHESC's recent work to maintain the system, and the company's budgetary plan for 2017 to 2021.

WHESC does not expect you to make electrical engineering decisions. WHESC wants to hear about the electricity issues that matter most to you and whether or not you feel the utility's spending and investing priorities seem reasonable.

This workbook is designed to give you enough background about these issues for you to develop an informed opinion.



Consultation Process: *What's the process that Welland Hydro must follow?*

How are electricity rates determined in Ontario?

The electricity industry in Ontario is regulated by the Ontario Energy Board (OEB), which recently developed a new regulatory framework that requires electricity distributors, such as WHESC, to identify customer needs and preferences related to its rate application and distribution system plan.

WHESC is funded by the distribution rates paid by its customers. Periodically, WHESC is required to file an application with the OEB to determine the funding available to operate and maintain the distribution system. WHESC must submit evidence to justify the amount of funding it needs to safely and reliably distribute electricity to its customers.

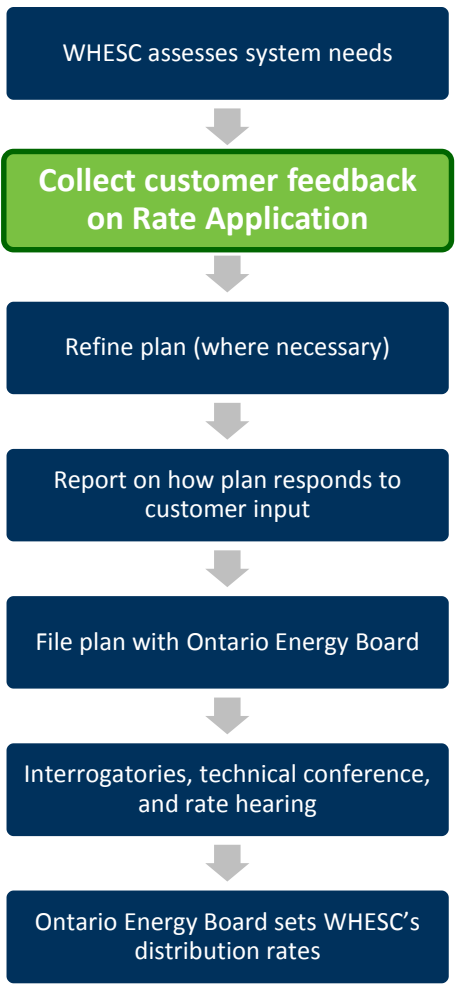
As a customer, how are my interests protected?

WHESC's rationale for a customer rate adjustment is assessed in an open and transparent public process known as a rate hearing. Any individual or group may intervene on WHESC's application to ask questions or challenge WHESC's plans and assumptions. At the end of the process, the OEB weighs the evidence and decides on the rates WHESC can charge for distribution.

Why is my feedback important?

Your feedback will inform WHESC's rate application for 2017 which in turn will form the new base rates on which annual inflation adjustments will be applied in 2018 to 2021. Customer feedback will be presented to the OEB and public intervenors (who represent various ratepayer groups) when WHESC files its rate application for 2017. As part of the rate hearing process, the OEB will be reviewing how WHESC acquired and responded to customer feedback in its planning process.

Rate Application Process



Innovative Research Group Inc. has been engaged by WHESC to collect participant feedback as an impartial third-party. Innovative Research Group will deliver the collected customer feedback to WHESC 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 WHESC should use customers' money.

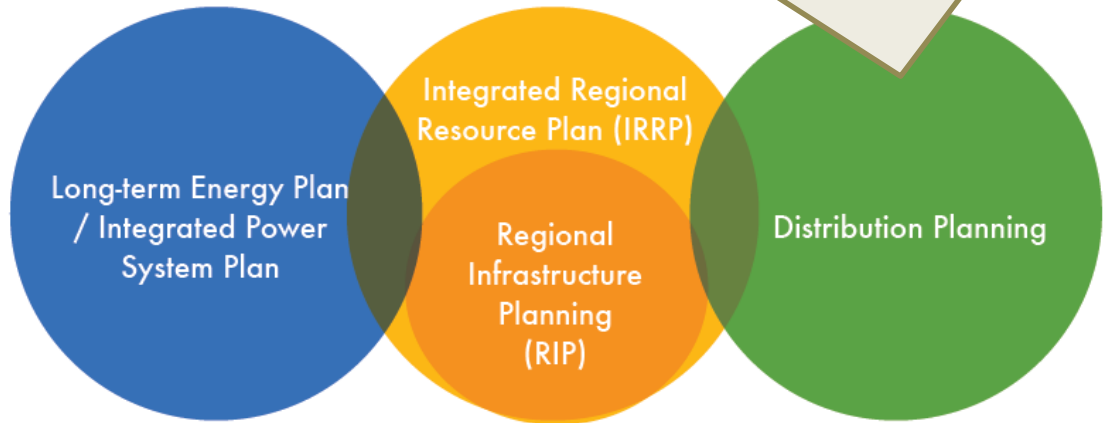
If you're interested in broader medium- and long-term electricity issues such as Ontario's Long-Term Energy Plan, regional planning, conservation planning and general energy policy in the province, there are other opportunities to provide your feedback.

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.

Regional Planning: The Independent Electricity System Operator (IESO) looks ahead to the future electricity needs of your region, and how those needs can be addressed through energy conservation programs, local generation, and sourcing electricity from outside the region.

Distribution Planning: This consultation concentrates on the short-term plan for WHESC'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 Ontario's system maintains reliability and works efficiently for the benefit of customers.

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 System 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.

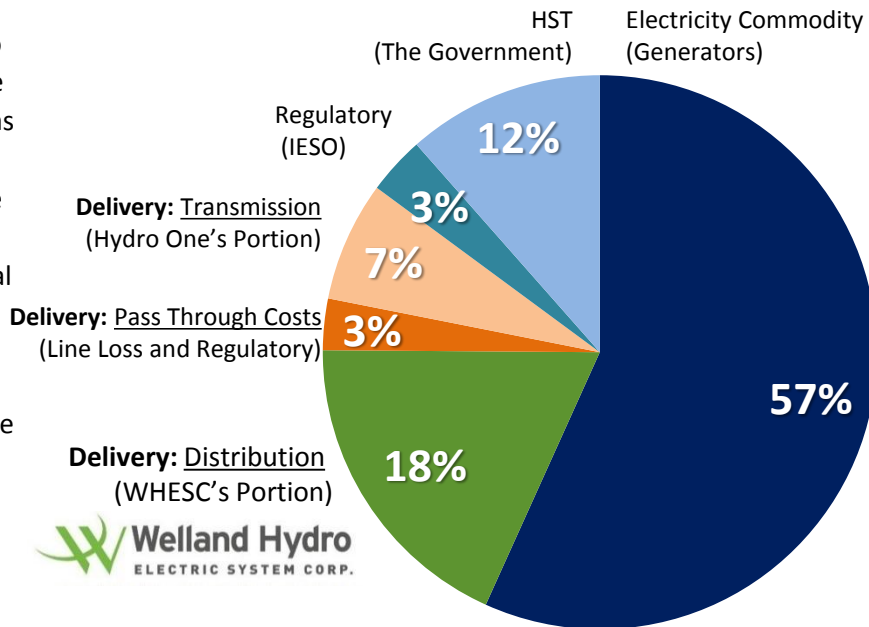


Electricity Bills: Understanding where your money goes

Your Electricity Bill: Every item and charge on your bill is mandated by the provincial government or regulated by the OEB. There are two distinct cost areas that make up the "Delivery" charge on your bill: **distribution** and **transmission**. While WHESC collects both, the transmission charge is remitted to Hydro One. The distribution charges include the portion of your bill that WHESC keeps, as well as some other "pass through" charges, most of which are remitted to the IESO. The distribution charges which WHESC keeps make up about 18% of the typical residential customer's (750 kWh per month) total electricity bill.

WHESC's distribution rates are subject to the review and approval of the OEB. The distribution fees collected from customers cover WHESC's capital investments and operating expenses.

About 18% of the average residential electricity bill goes to Welland Hydro. The rest of the bill goes to power generation companies, transmission companies, the government, and regulatory agencies.



SAMPLE RESIDENTIAL MONTHLY BILL	
Welland Hydro-Electric System Corp.	
Account Number:	000 000 000 000 0000
Meter Number:	00000000
Your Electricity Charges	
Electricity	
Off-Peak @ 8.700 ¢/kWh	41.76
Mid-Peak @ 13.200 ¢/kWh	17.82
On-Peak @ 18.000 ¢/kWh	24.30
Delivery (WHESC \$27.14)	41.94
Regulatory Charges	4.99
Debt Retirement Charge	0.00
Debt Retirement Charge exemption saved you \$X.XX	
Total Electricity Charges	\$130.81
HST	\$17.01
Total Amount	\$147.82

Current monthly distribution charges are about **\$27.14 per month or 18% of the total monthly bill** for the average WHESC residential customer who consumes 750 kWh of electricity per month.

In 2017, it is estimated that an additional **\$2.16 per month** will be required of the average residential customer to operate, maintain, and modernize WHESC's electricity distribution system.

For 2018 through 2021, it is estimated distribution rates will increase marginally to account for inflation.

By 2021, the average residential household will be paying an estimated **\$4.38 more per month** on the distribution portion of their electricity bill.

Electricity 101

How Ontario's Electricity System is Regulated

The electricity system in Ontario is regulated by the following bodies:



Ontario Ministry of Energy: The Ontario Ministry of Energy defines energy policy and sets the rules and establishes key planning priorities and mandates the role of regulatory agencies through legislation.

Ontario Energy Board: The mission of the Ontario Energy Board (OEB) is to promote a viable, sustainable and efficient energy sector that serves the public interest and assists consumers to obtain reliable energy services at a reasonable cost.

The OEB is an independent body established by legislation that sets the rules and regulations for the provincial electricity sector. One of the OEB's roles is to review the distribution plans of all electricity distributors and set the rates that they can charge customers.



Independent Electricity System Operator: The Independent Electricity System Operator (IESO) 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 grid in real-time to ensure that Ontario has the electricity it needs, when and where it's needed. The IESO receives directives from the Ministry of Energy (e.g. energy supply mix, Green Energy Act), but otherwise works at arm's-length from the government.



GENERATION



TRANSMISSION



LOCAL DISTRIBUTION

RULES + POLICY + LICENCES + RATE



INDEPENDENT ELECTRICITY SYSTEM OPERATOR



ONTARIO ENERGY BOARD

The OEB regulates Ontario's energy sector (including both the electricity and natural gas) and is responsible for consumer protection.

CONSUMER PROTECTION



RESIDENTIAL



COMMERCIAL



INDUSTRIAL

Electricity 101

Understanding Welland Hydro's Role in Ontario's Electricity System

Ontario's electricity system is owned and operated by public, private and municipal corporations across the province. It is made up of three components: **generation**, **transmission** and **distribution**.



GENERATION

Generating facilities convert various forms of energy into electric power.

EXAMPLES

Ontario Power Generation
TransCanadaEnergy Ltd
Bruce Power
Samsung Renewable



TRANSMISSION

Transmission lines (high voltage lines) connect the power produced at generating facilities to transformer stations.

EXAMPLE

Hydro One



DISTRIBUTION

Distribution lines (at medium voltages) carry electricity to homes and businesses.

EXAMPLES



- Niagara-on-the-Lake Hydro
- Niagara Peninsula Energy Inc.
- Horizon Utilities



RATEPAYERS

Electricity is consumed by local customers including homes and businesses. Customers of electricity distribution companies are often referred to as ratepayers.

Where does electricity come from?

In Ontario, approximately 70% of electricity is generated by **Ontario Power Generation (OPG)**. This provincially-owned crown corporation has **generation** stations across the province that produce electricity from hydroelectric dams, nuclear reactors, and natural gas burning power plants.

Once electricity is generated, it must be delivered to the communities across Ontario in need of power. This happens by way of high voltage **transmission stations** and interconnected lines that serve as highways for electricity. The province has more than 30,000 kilometres of transmission lines*, owned mostly by **Hydro One**.

Welland Hydro's Roles in Ontario's Electricity System

WHESC is responsible for the last step of the journey: distributing electricity to customers in the City of Welland through its **distribution system**.

Every distribution system is unique with its own history and challenges. In order to better understand WHESC's current 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.

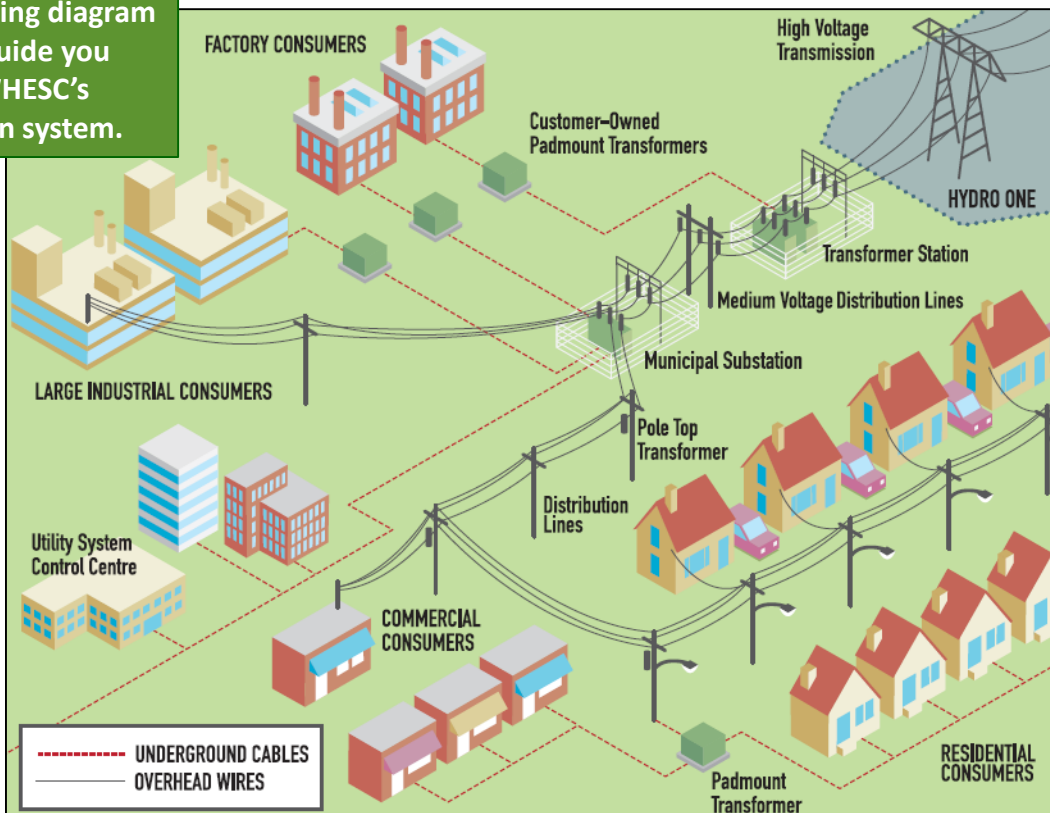
Welland Hydro's Distribution System Today

Every distribution system is unique with its own history and challenges. In order to better understand WHESC's 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.

WHESC's service territory covers 81 square kilometers of urban area. The distribution system contains approximately 209km of overhead wires, 142km of underground cables, and 2,326 distribution transformers.

The local distribution system receives high voltage electricity from one transformer station that is owned by **Hydro One**. The high voltage electricity is then reduced and connected through 27.6kV feeder circuits. These feeder circuits are used to distribute power to customers and power our 13 municipal substations. Additional transformers are located near customers, and transform the voltage one final time to levels safe to distribute to local homes and businesses.

The following diagram will help guide you through WHESC's distribution system.



High Voltage Transmission: Hydro One's high voltage transmission lines connect WHESC's distribution system to electricity generating stations across the province.

Transmission Stations: Reduce high voltage electricity from transmission lines to medium voltage which is fed into WHESC's distribution feeder system.

Municipal Substations: Reduce the 27.6kV system voltage to 4.16kV.

Overhead System: The overhead system includes the wires, poles, pole top transformers that are commonly seen across WHESC's service territory.

Underground System: The underground system includes underground cables and padmount transformers.

Note: An advantage of underground systems is that they are affected to a lesser extent by extreme weather. The disadvantage is that they are more expensive to install and maintain, and when there is a power outage, it often takes longer to locate and repair a problem compared to overhead wires.

Welland Hydro's Distribution System Today

Asset Management

Managing the Distribution System

WHESC adheres to the Ontario Energy Board's Distribution System Code that sets out good utility practices, minimum performance standards, and minimum inspection requirements for distribution equipment.

WHESC maintains and regularly updates an **asset management plan**, which is an evolving blueprint for maintaining the utility's infrastructure and other assets to deliver an agreed standard of service. The asset management plan prescribes the process for inspecting and collecting data on the health of thousands of individual pieces of infrastructure, equipment and assets that must work seamlessly together to deliver reliable electricity to customers.

Historically, maintaining and upgrading infrastructure and equipment has been achieved with only a moderate increase in customers' bills. The asset management plan takes into consideration both current and future system reliability needs as well as the cost implications of these upgrades. Despite best practices, there are several assets within WHESC's distribution system that are nearing the end of their useful life and, as such, have been identified as candidates for replacement.

Assets*	# in System	Length of Useful Life (years)	# with <10% Useful Life Remaining
Municipal Substations	13	45	4
Pole Mounted Transformers	1,690	40	532
Padmount Transformers	636	40	49
Overhead Conductor (km)	309	50	195
Underground Cable (km)	142	30	38
Poles – Wood	7,479	50	2,904

Padmount Transformer



Pole Mounted Transformer



* Asset inventory and health assessments based on estimates as of December 31, 2015.

Customer Feedback

1. Before this consultation, how familiar were you with the various parts of the electricity system, how they work together, and which services Welland Hydro is responsible for?
 - Very familiar and could explain the detail of Ontario's electricity system to others
 - Somewhat familiar, but could not explain all the details of Ontario's electricity system to others
 - Have heard of some of the terms and organizations mentioned in this workbook, but knew very little about Ontario's electricity system
 - Aside from receiving a bill from Welland Hydro, I knew nothing about Ontario's electricity system
2. Given what you have read so far, how well do you feel Ontario's electricity system has been explained to you?
 - Very well
 - Somewhat well
 - Not very well
 - Not well at all
 - Don't know
3. Generally, how satisfied are you with the service you receive from Welland Hydro?
 - Very satisfied
 - Somewhat satisfied
 - Neither satisfied nor dissatisfied
 - Somewhat dissatisfied
 - Very dissatisfied
 - Don't know
4. Is there anything in particular that Welland Hydro can do to improve its service to you?

Welland Hydro's Distribution System Today

System Reliability

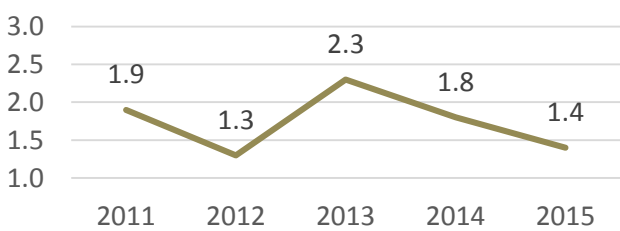
No distribution system can deliver 100% reliable electrical service. From time-to-time, customers will experience an electrical service interruption. Generally, the more reliable the system, the more expensive the system is to build, operate, and maintain. As such, WHESC faces a “balancing act” between system reliability and the cost of maintaining and operating the distribution system.

For most customers, the key test of system reliability is “do the lights stay on?” WHESC tracks both the number of power service interruptions per customer and how long those outages last. The reliability indices indicate that *adverse weather* (such as wind and ice storms) and *equipment failure* are two of the key contributors to customer outages.

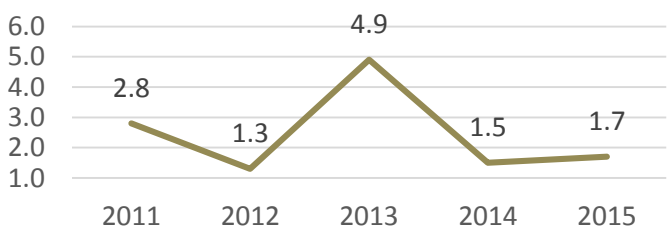
WHESC saw a significant increase in the number and length of outages in 2013 as an Ice Storm swept across Ontario. Adverse weather has historically, and continues to have, the largest impact on system reliability. As the majority of Welland Hydro's assets are overhead, standard practices such as tree trimming and vegetation management are very important in reducing the impact of wind and ice storms.

Outage statistics (shown below) help Welland Hydro to focus on specific issues that may affect reliability.

Average # Outages per Customer per Year



Length of Outages (hours) per Customer per Year



NOTE: These figures exclude outages due to loss of supply from Hydro One's transmission system.

As illustrated in the table below, WHESC's reliability statistics are relatively on par with peer utilities:

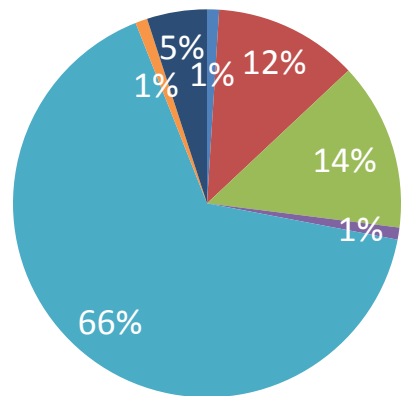
2014 Reliability Indicator	WHESC	Niagara Peninsula Power	NOTL Hydro	Horizon Utilities	Haldimand
Length of Outages (hours)	1.5	3.7	0.9	1.6	5.2
Average # Outages per Customer	1.8	1.5	1.1	1.7	2.6

Source: 2014 OEB Yearbook; Comparative Reliability Statistics

The outage analysis and system performance measures provide an overview of performance of the WHESC distribution system during 2014. It is based on the raw data provided for incidents and outages and accumulated by the control room staff. The data enhances WHESC's Asset Management Plan by identifying future maintenance and capital budget priorities to improve the reliability and performance of the distribution system.

- Unknown
- Scheduled Outage
- Equipment Failure
- Tree Contact
- Adverse Weather
- Human Element
- Foreign Interference

Cause of 2014 Outages

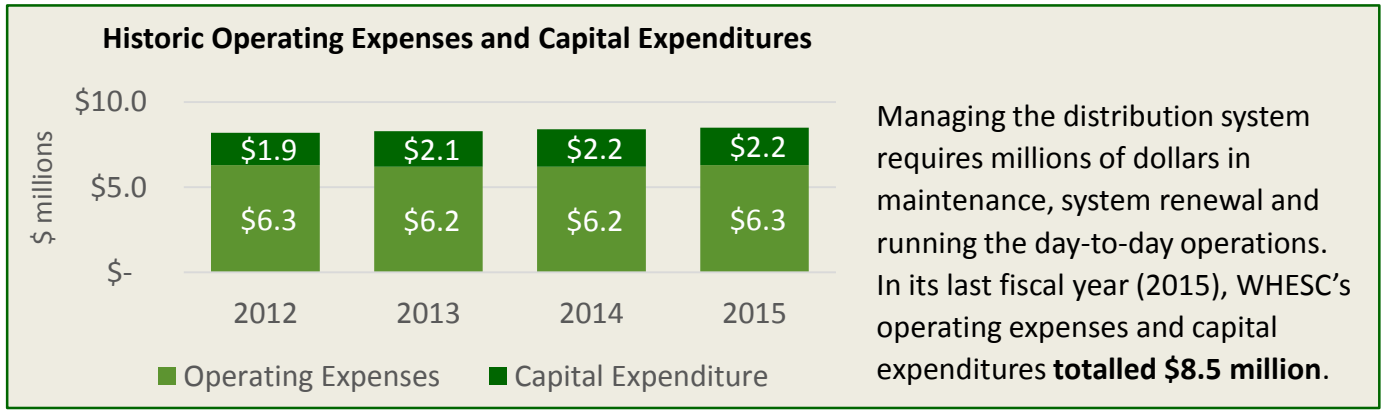


Welland Hydro's Distribution System Today

What does it cost to run WHESC's distribution system?

Like most businesses, WHESC manages its spending in two budgets – an *operating budget* and a *capital budget*.

WHESC's **operating budget** covers regularly recurring expenses such as the payroll for employees, and the maintenance of tools, equipment and assets. Its **capital budget** covers items that, when purchased, do not need to be repurchased for some time and which have lasting benefits over many years. This includes much of the equipment that is part of the distribution system, such as poles, wires, cables, transformers, major computer systems, vehicles and facilities.



How does Welland Hydro set its budgets?

Utilities are monopolies and do not operate in competitive markets like most private businesses. Consumers cannot choose who delivers power to their homes and businesses; like it or not, WHESC is the only delivery choice in Welland. Due to their monopoly market structure, utilities are highly regulated to ensure that they are offering their customers reliable services at a reasonable price.

For most businesses, net income is determined by revenue minus expenses. To increase net income, businesses need to either increase revenues or decrease expenses. However, unlike private businesses, regulated utilities take a bottom-up approach which starts with net income, plus expenses which equal their revenue requirements.

Does WHESC make a profit? Yes, a profit is built into its rate design. Like all regulated utilities in Ontario, WHESC can generate a profit based on a target set by the OEB. A portion of this profit is reinvested in the business with the remainder paid out in the form of an annual dividend to its shareholder which may be transferred to the City of Welland to fund services such as roads, parks, and other municipal programs.

Top Down Approach

Private Business
Revenue
- Cost of Goods Sold
- Operating Expenses
- Depreciation
- Interest
- Taxes
= Net Income

Bottom Up Approach

Regulated Ontario Utility
= Revenue Requirements
+ Taxes
+ Interest
+ Depreciation
- Other Revenue
+ Operating Expenses
Net Income (RoE)

Unlike typical private businesses, regulated utilities, like WHESC, set their budgets based on forecasted revenue requirements needed to operate and maintain the distribution system. The cost of providing utility services are reviewed and need to be approved by the OEB.

Customer Feedback

5. In 2015, the average Welland Hydro customer experienced one power outage (i.e. 1 minute or more). Do you recall how many outages you experienced in the past year?
- None
 - One
 - Two
 - Three
 - Four
 - More than four
 - Don't know
6. How many power outages do you feel are reasonable in a year?
- No outage is acceptable
 - One
 - Two
 - Three
 - Four
 - Five or more
 - Don't know
7. What do you feel is a reasonable duration for a power outage?
- No outage is acceptable
 - Less than 15 minutes
 - 15 to less than 30 minutes
 - 30 minutes to less than 1 hour
 - 1 hour to less than 2 hours
 - 2 hours or more
 - Don't know
8. No distribution system can deliver perfectly reliable electricity service. There is a balancing act between reliability and the cost of running the system. Please select what statement comes closest to your point of view.
- I would be willing to accept more and longer power outages if that meant there would be a decrease to my distribution rates on my electricity bill
 - I would be willing to pay a bit more on my distribution rates to maintain the current level of reliability
 - I would be willing to pay much more on my distribution rates to improve the level of reliability I currently receive from Welland Hydro
 - Don't know

Key Pressures on the Distribution System

A slowing local economy

Historically known for its steel, automotive, and textile industries, manufacturing had a big influence on shaping early Welland.

Due to its proximity to the Sir Adam Beck hydroelectric station at Niagara Falls, Welland was one of the first communities in Ontario to receive an adequate supply of electricity to support industrial growth. Some of Welland's early employers included Union Carbide, United Steel, Plymouth Cordage Company, three drop forges, a cotton mill, and the Atlas Steel Co. With an abundance of manufacturing jobs, Welland's population grew rapidly for much of the 20th century.



Courtesy of Atlas Steel, Welland, ON. (picture circa 1955)

However, by the 1990s, industrial growth in Welland began to slow. Recent years have seen the end of Welland operations for several companies, including John Deere, Henniges Automotive, and Powerblades Industries. Due to this industrial decline, the City's population growth has remained relatively flat. Between 2006 and 2011, Welland's population grew by 0.6% compared to the entire province which grew by 5.7%.

In addition to slow population growth, Welland's industrial and commercial sectors experienced 5 years of negative growth starting in 2008. As a result, electricity demand has been declining among Welland's customers: in 2006, the summer peak demand on the distribution system was 102 megawatts (MW). In July 2015, it was 74 MW.

Flat growth in the City of Welland means WHESC does not have a growing customer base among which to spread the cost of replacing aging electrical infrastructure. This reality is an important reason why WHESC makes a concerted effort to have its equipment last as long as is safely possible.

Aging electricity infrastructure

WHESC does not spend funds to replace functioning equipment simply to have more modern technologies in place. For instance, one of the vehicles in WHESC's fleet is now in its 29th year of service. WHESC undertakes repairs to its facilities, such as recent roof and parking lot repairs, instead of upgrading to newer locations.

However, like many utilities in Ontario today, aging electrical distribution infrastructure is the primary challenge facing WHESC. While WHESC is committed to extending the useful life of its assets in order to minimize the cost impact of replacing assets on its customers, there comes a time when distribution infrastructure can no longer be repaired, and must be replaced.

Some of WHESC's electricity infrastructure was built in the 1950s and 60s and is past or nearing the end of its useful life. While this electrical infrastructure has served the community well, at a certain point this equipment must be replaced.

WHESC's Asset Management Plan addresses this aging infrastructure. Assets such as poles are field tested and inspected and rated so that they can enter the WHESC decision-making process which determines which assets will get replaced first.



Key Pressures on the Distribution System

WHESC's objective is to ensure that the distribution system is able to deliver power at the quality and reliability levels desired by its customers, and to minimize the lifetime cost of running the system by balancing preventative maintenance, life-extending refurbishment, and end-of-life replacement.

However, from the day-to-day events to major storms, there are a variety of ever-present pressures on WHESC's operating and capital budget. Many of these expenditures are items over which WHESC has little or no control – such as major storms and the implementation of Smart Meters.

How does WHESC determine the appropriate amount of capital spending related to existing infrastructure?

WHESC monitors the health of its infrastructure very closely. It inspects the entire overhead distribution system annually using infrared technology to detect and proactively prevent equipment failure. In addition, WHESC inspects 100% of its distribution system assets every three years.

Has WHESC previously set aside funds for required upgrades?

The OEB does not allow utilities in Ontario (including WHESC) to create reserve funds. If reserve funds were allowed, a utility would have to charge customers a premium on their rates in order to set money aside. Under OEB regulation, a utility can only charge customers the rate required to run the distribution system at a reliability standard set by regulatory bodies.

Paying for Welland Hydro's Distribution System: *Capital Investment Drivers*

WHESC has developed a list of capital investment drivers and considers these key factors when planning capital projects.

Reliability: There are two main measures of reliability in the distribution system:

- 1) How often does the power go out?
- 2) How long does it stay out?

To achieve maintained or improved reliability, projects are developed to improve asset performance and decrease the frequency and duration of power outages.

Service Requests: As part of its Conditions of Service, WHESC 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. micro-FIT customers who have contracts to sell electricity back to the grid such as 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 builds or expansion is required. This is the fundamental infrastructure that allows new customers to be connected to the distribution system and is paid for by new customers served over time.

System Efficiency: To provide customers with the best service possible, there is always a need to improve power outage restoration capability.

Mandated Compliance: Compliance with all legal and regulatory requirements and government directives, such as compliance with the Ministry of Energy, the Ontario Energy Board, the Independent Electricity System Operator and other regulations.

Obsolescence: Asset installations that no longer align with WHESC's current operating practices or current standards. This can include those assets that:

- are no longer manufactured
- lack spare parts
- cannot be accessed
- lack the ability to have maintenance performed on them
- have operational constraints or conflicts, which can result in heightened reliability and/or safety related risks

Aging or Poorly Performing Equipment: Where there is the imminent risk of failure due to age or condition deterioration, and these potential failures will result in severe reliability impacts to customers as well as potential safety risks to crew workers or to the public, remediation through refurbishment or replacement is required.

Business Support Costs: WHESC is not just the local electricity distribution system itself, but a company that operates the system. As a company, it needs buildings to house its staff and vehicles, tools to service the power lines and IT systems to manage the system and customer information.





Paying for Welland Hydro's Distribution System: Capital Investments

What are the major issues Welland Hydro needs to address?

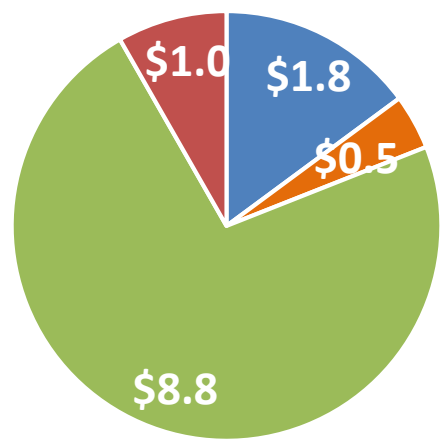
Over the years, WHESC has worked hard to keep its equipment working well beyond its expected useful life to provide maximum value for money. However, at present, the system's key capital requirements come from the need to replace these aging distribution assets.

The capital expenditure required to address system renewal, maintain system reliability and safety, and invest in other infrastructure priorities between 2017 and 2021 is estimated to be \$12.1 million.

To assist in prioritizing what needs to be replaced and by when, WHESC uses an Asset Management Plan to drive replacement decisions.

Using the information provided by the Asset Management Plan, WHESC plans for four types of capital investment costs:

2017-2021 Forecasted Capital Expenditures: \$12.1 million



- General Plant
- System Service
- System Renewal
- System Access

System Access

Definition: Non-discretionary investments that respond to customer requests for new connections or new infrastructure development. These are high priority, "must do" projects, as WHESC is mandated to connect new customers to the distribution system.

Projects Include: new subdivision and business customer connections, relocating assets based on infrastructure needs

System Renewal

Definition: These project are a mix of discretionary (planned end of life replacement) and non-discretionary (emergency replacement) investments.

Projects Include: Municipal substation upgrade, underground cable replacement, overhead wire replacement, and pole replacement.

System Service

Definition: These discretionary investments consist of projects that improve system reliability and customer service.

Projects Include: automated switches, better distribution system monitoring equipment

General Plant

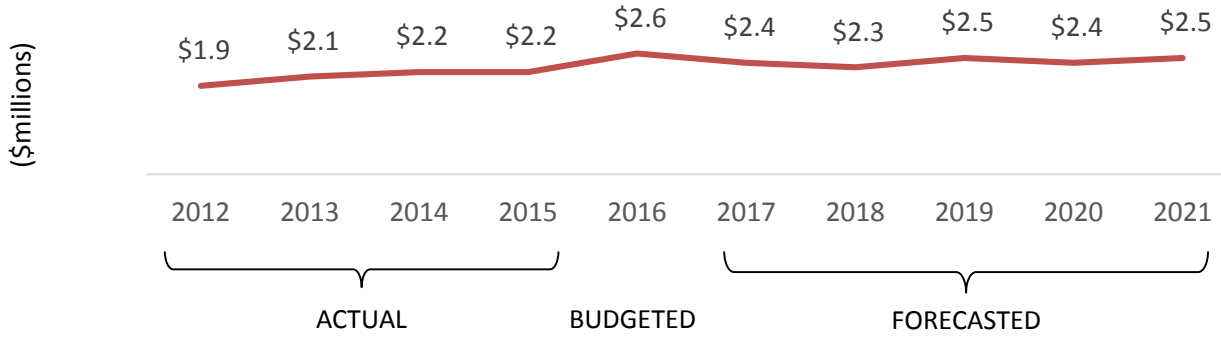
Definition: These are discretionary investments that are needed to support the distribution system: such as tools, vehicles, buildings, and information technology (IT) systems used to manage financial and customer information. They are necessary in order to operate and maintain the distribution system efficiently and service customers.

Projects Include: Financial and customer information system and vehicle replacement

Cost Drivers

Capital Investments

Historical & Forecast Capital Expenditures: 2012-2021



Proposed Investment Projects for 2017

Note the first 8 projects are non-discretionary investments required to ensure WHESC's infrastructure continues to meet safety standards.

Church Street/Niagara Street Rebuild/Conversion 4.16kV to 27.6kV (Budget: \$300,000)

The project includes the replacement of approximately 25 poles and 8 transformers, the majority of which were installed in the 1950's. Some of the poles will be replaced with taller poles allowing the installation of a 27.6kV feeder, which will improve both reliability and lower electrical system line loss.

Wellington Street – East Main to Eastdale Rebuild/Conversion 4.16kV to 27.6kV (Budget: \$250,000)

The project includes the replacement of approximately 20 poles and 8 transformers, the majority of which were installed between 1962 and 1975. All of the poles will be replaced with taller poles allowing the installation of a 27.6kV feeder. The new circuit will provide a new more efficient supply to the new Confederation School on Tanguay and the Eastdale School on Wellington Street. The new circuit will also allow for additional loads in the Wellington, Tanguay and Promenade Richelieu area to be converted over to the higher voltage system in the future, which will lower electrical system line losses and lower future substation replacement costs.

Silvan/Newleaf Phase 2 Rebuild/Conversion 2.4kV to 16kV (Budget: \$280,000)

The project will complete the second phase of the underground subdivision rebuild. Approximately 6 transformers and 875 meters of cable will be installed to replace assets originally installed in 1976. This project will improve reliability and lower electrical system line losses.

Ross Street/Kennedy Street Rebuild/Conversion 4.16kV to 27.6kV – Phase 1 (Budget: \$150,000)

The project includes the replacement of approximately 10 poles and 5 transformers, the majority of which were installed in the 1950 and 1960's. The existing primary circuits will be converted to a higher voltage, which will improve both reliability and lower electrical system line losses.

Riverview Drive Rebuild/Conversion 4.16kV to 27.6kV (Budget: \$150,000)

The project includes the installation of approximately 10 poles and 5 transformers to replace assets which were installed in the 1950's. The existing primary circuits will be converted to a higher voltage, which will improve both reliability and lower electrical system line losses.

Robert Street Rebuild/Conversion 2.4kV to 16kV (Budget: \$150,000)

Approximately 3 transformers and 600 meters of cable will be installed to replace assets originally installed in 1975. This project will improve reliability and lower electrical system line losses.

Proposed Investment Projects for 2017 (continue)

Maureen Avenue Rebuild (Budget: \$125,000)

Approximately 3 transformers and 600 meters of cable will be installed to replace assets originally installed in 1974. This project will improve reliability by re-establishing a loop feed to the transformers in this area.

MS14 Transformer/Switchgear/Primary Cabling Replacement (Budget: \$120,000)

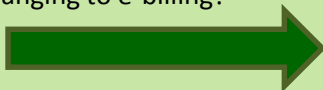
This project will replace substation assets originally manufactured in 1963. The new design will incorporate new electronic protection systems and underground high and low voltage cabling, improving reliability and eliminating the impact of outages caused by animal contacts.

Computer Software Customer On-line Forms* (Budget: \$40,000)

This project will allow customers to perform on-line self-service transactions such as initiating or finalizing accounts.

Customer Feedback

9. With regards to projects focused on replacing aging equipment in poor condition, which of the following statements best represents your point of view?
- Welland 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.
 - Welland 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
10. As a company, Welland Hydro needs vehicles and tools to service the power lines and IT systems to manage the system and customer information. Which of the following statements best represents your point of view?
- Welland Hydro should find ways to make do with the equipment and IT systems it already has.
 - While Welland Hydro should be wise with its spending, it is important that its staff have the equipment and tools they need to manage the system safely, efficiently and reliably.
 - Don't know
11. Listed above as one of the proposed 2017 capital projects is a discretionary investment in computer software customer on-line forms*. This software will give customers more control and convenience with managing their accounts online. Which of the following statements best represents your point of view?
- This is a "nice to have" project, not a "need to have" project.
 - This project should be implemented in 2017.
 - Don't know
12. E-billing, or electronic billing, saves money on postage and paper. The more customers who use e-billing, the more money Welland Hydro saves; savings which ultimately get passed along to customers. How interested would you be in changing to e-billing?
- Very interested
 - Somewhat interested
 - Not very interested
 - Not at all interested
 - Already signed up for e-billing
 - Don't know
13. Why haven't you switched to e-billing yet?
-



Operating Budget Cost Drivers

Operations, Maintenance & Administration (OM&A) Expenses

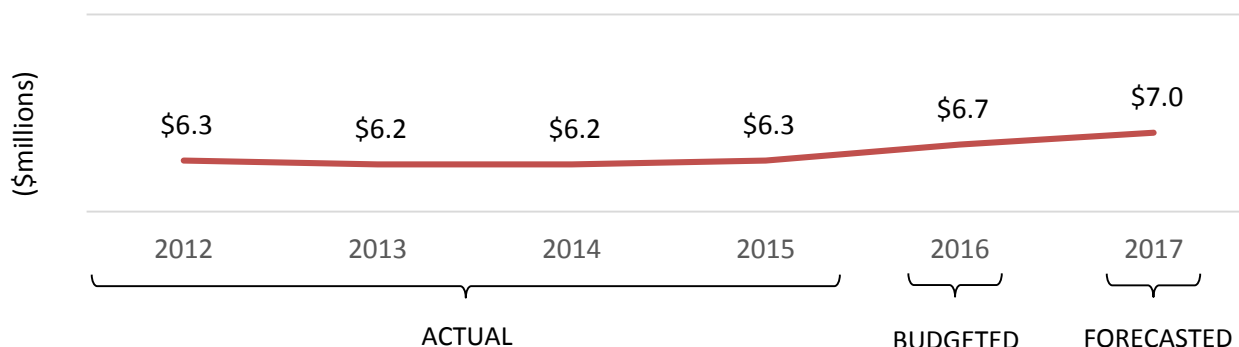
In addition to its capital budget, Welland Hydro needs to consider its operating budget which also impacts customer bills.

Cost drivers contributing to the operating budget can largely be attributed to on-going maintenance and management of the distribution system. An example of this type of cost driver is WHESC's tree trimming program, designed to lessen the impact of falling tree branches on power lines.

During the last four years, WHESC has demonstrated its ability to minimize annual cost increases by reducing its staff by 5 percent.

WHESC is continually looking for ways to improve its business processes in order to comply with the increasing responsibilities and obligations being established for local distribution companies, without negatively impacting overall costs to the customers.

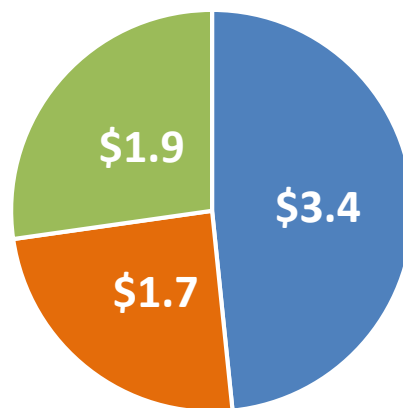
Historical & Budgeted OM&A Expenses: 2012-2017



Nevertheless, the level of OM&A is expected to increase. These increases are primarily related to the following factors:

- Increases in labour costs as WHESC hires for positions that were vacated as employees retired and have gone unfilled in recent years in order to manage costs
- Funding for staff necessary for succession planning, and in preparation for a number of pending retirements.
- Increased project staffing and related ongoing operating expenses related to the implementation of, and transition to enhanced financial, customer service and other information systems. These expenses are necessary to improve information and to provide self-serve functionality for customers.
- Customer engagement initiatives necessary to enable ongoing measurement of WHESC's customer service performance and to obtain customer input on WHESC's distribution system and other plans pursuant to OEB requirements.

2017 Forecasted OM&A Costs
(\$ millions)



- Operations & Maintenance
- Customer Service
- Administrative & General

Finding Efficiencies and Cost Savings

WHESC planning, prioritization and investment processes follow good utility practices that are executed through the Distribution System Plan. Good utility practices have inherent cost savings through sound decision making, thoughtful compromises, right timing and optimum expenditure levels.

There are several other ways in which Welland Hydro works to find efficiencies and cost savings in the system:

- **Asset Condition Inspections** and comprehensive data collection will provide a better understanding of each distribution infrastructure asset's stage in its lifecycle. This data allows us to make more informed and cost effective decisions with respect to the maintenance, refurbishment and replacement of our assets.
- **Reactive maintenance**, such as repairing a pole damaged by a storm, is exponentially more costly than proactive maintenance. Proactively maintaining and replacing our distribution infrastructure will improve service and have a beneficial impact on the cost of outages to the customer – equipment outages will be fewer and shorter in duration. A structured program will also smooth out financial rate impacts in an effort to avoid disruptive rate spikes to address the volume of distribution infrastructure reaching end-of-life.
- **Coordination of infrastructure inspection** with maintenance reduces operating costs. Contractors performing tree trimming and infra-red testing also carry out visual inspections of surrounding infrastructure. Reports detailing any abnormalities are generated, as required, for WHESC crews to follow-up and address.
- **Partnering with utilities and other organizations** will allow for cost-sharing of services such as purchasing.
 - ***GridSmartCity** is a consortium of 32 key electricity stakeholders focused on a culture of cooperation and collaboration intended to enhance the efficiency and sustainability of local distribution networks. This includes advancements in self-healing grids, electric vehicle infrastructure, conservation program implementation, renewable energy initiatives, cooperatives and community energy planning.*
 - ***Utilities Standards Forum (USF)** is a non-profit, volunteer based corporation owned by 50 Ontario electricity distributor Members that serve over 1.9 million customers. Its primary purpose is to develop and maintain system design standards. USF also offers member representatives a mechanism for collaboration and networking on other common technical challenges and regulatory requirements.*
- **The use of software** (e.g. AutoCAD Utility Design) to optimize infrastructure design will reduce overdesign and ensure that current CSA standards for non-linear pole loading and structural stability are adhered to.
- In order to optimize a distribution infrastructure asset's lifecycle we must be informed. The **improved use of Geospatial Information Systems (GIS)** will allow us to better capture and access important attribute data (i.e. nameplate data, condition of asset, inspection/maintenance history, etc.). This will aid in cost control by optimizing the asset's lifecycle.
- Reporting, GIS database management and information collected via **inspection programs are recorded electronically on mobile equipment**. This mobile network facilitates electronic transmission of information, and avoids the costly and cumbersome paper process.
- Prudent investment in **distribution automation** (e.g. remotely operated switches), as part of the Smart Grid development, will improve day to day switching operations. This will have a positive impact on improving outage restoration times, and in turn reduce the impact of outages on our customers.
- **Renewing financial, customer, and other information systems** will allow for more timely and enhanced management information to operate the business allowing for the potential of further efficiencies and productivity improvements.
- **Capital Projections:** All projects are constructed to the most current standards, such as USF and CSA, to promote safety to workers and the members of the public.

Customer Feedback

14. How well do you feel you understand the cost drivers that Welland Hydro is responding to?

- Very well
- Somewhat well
- Not very well
- Not well at all
- Don't know

15. How would you rate the job Welland Hydro is doing to manage these cost drivers?

- Very good
- Good
- Poor
- Very poor
- Don't know

16. Do any of Welland Hydro's forecasted expenses or expenditures appear unreasonable to you? If so which areas appear unreasonable and why?

17. One of the most cost effective ways for **Welland Hydro** to reduce its required investments in the distribution system is through customer uptake of conservation programs.

When customers consume less electricity at peak demand times, less strain is put on the distribution system and as a result, customers save money in two ways: 1) a lower level of investment is required by **Welland Hydro** to expand and maintain the distribution system's capacity to deliver electricity; and 2) customers may pay less when they reduce their electricity consumption.

Have you ever participated in a **Welland Hydro** conservation program?

- Yes
- No
- Don't know

18. How likely are **you** to participate in future **Welland Hydro** conservation programs that could help reduce your electricity consumption?

- Very likely
- Somewhat likely
- Not very likely
- Not at all likely
- Don't know

What Will Welland Hydro's Plan Cost Customers?

As mentioned earlier, WHESC is funded by the distribution rates paid by its customers. Every few years, WHESC is required to file a Cost of Service (COS) application with the OEB to request funding to operate and maintain the distribution system in accordance with its spending and investment plan. As part of its rate filing, WHESC must submit evidence to justify the amount of funding required to safely and reliably distribute electricity to its customers.

Rate Design

WHESC's last COS application was filed for rates effective **April 1, 2013**. During the years between COS applications, the OEB approves marginal increases to distribution rates (based on an allowance for inflation less an adjustment for expected efficiency gains). While WHESC does its best to keep its rates low, sometimes the rates charged to customers are lower than required to adequately maintain the distribution system.

This rate setting method often results in a revenue shortfall because investments made in the years between COS applications are not recognized and thus do not allow for any adjustment to address the needs of customers. As a result, when utilities apply for new distribution rates, there is often a revenue "catch-up" in the rebased rate year to rebalance revenue requirements with actual costs associated with operating and maintaining the distribution system. Like many utilities in Ontario going through the same process, WHESC estimates its rate impact will be greatest in 2017 (rebase year), and lesser in the subsequent years between 2018 and 2021.

Residential Bill Impact

In 2017, it is estimated that an additional **\$2.16 per month** will be required of the average residential customer (monthly consumption of 750 kWh) to operate, maintain, and modernize WHESC's electricity distribution system.

For 2018 through 2021, it is estimated that an additional **\$0.56 per month** each year (on average over the 4 years) will be required to cover inflationary increases required to address the needs of the distribution system.

By 2021, the average residential household will be paying an **estimated \$4.38 more per month** on the distribution portion of their electricity bill.

Estimated Typical Residential Annual Increase in Monthly Bill (5 year forecast)

	Year	Average Residential Bill *	Distribution Portion of Bill ^{††}	Incremental Rate Change (before HST)	% Change * (on total bill)
Current Rate	2016	\$147.82	\$27.14	--	--
Rebased Rate	2017	\$149.96	\$29.30	\$2.16	1.45%
Forecast for next rate period †	2018	\$150.57	\$29.84	\$0.54	0.4%
	2019	\$151.19	\$30.39	\$0.55	0.4%
	2020	\$151.82	\$30.95	\$0.56	0.4%
	2021	\$152.46	\$31.52	\$0.57	0.4%

† Please note that these are **preliminary estimates** and are subject to change. Assumes 1.85% rate of inflation (2018-2021).

†† Estimates are calculated excluding distribution pass through charges.

* Assumes all charges on the average electricity bill remain constant at 2016 levels, aside from distribution charges.

Customer Feedback

19. From what you have read here and what you may have heard elsewhere, does WHESC's investment plan seem like it is going in the right direction or the wrong direction?

- Right direction
- Wrong direction
- Don't know

20. How would you rate the job Welland Hydro is doing when it comes to planning for the future?

- Very good
- Good
- Poor
- Very poor
- Don't know

21. Considering what you know about the local distribution system, which of the following best represents your point of view?

- The proposed rate increase is reasonable and I support it
- I don't like it, but I think the proposed rate increase is necessary
- The proposed rate increase is unreasonable and I oppose it
- Don't know

22. Thinking about your answer to the previous question (question 21), why do you either support the proposed rate increase, think the proposed rate increase is necessary, oppose the proposed rate increase, or don't know?

Final Thoughts

Welland Hydro values your feedback. This is the first time the utility has conducted a review about its upcoming investment plan in this type of format.

Overall Impression: What did you think about the workbook?

Volume of Information: Did Welland Hydro provide too much information, not enough, or just the right amount?

Content Covered: Was there any content missing that you would have liked to have seen included?

Outstanding Questions: Is there anything that you would still like answered?

Suggestions for Future Consultations: How would you prefer to participate in these consultations?

Glossary

Breakers: Devices that protect the distribution system by interrupting a circuit if a higher than normal amount on power flow is detected.

Feeder Circuit: A wire or wires that connect the transformer station or municipal substation to the broader distribution system in order to deliver electricity to customers.

General Plant: Investments in things like tools, vehicles, buildings and information technology (IT) equipment that are needed to support the distribution system.

Generation Station: A facility designed to produce electric energy from another form of energy, such as fossil fuel, nuclear, hydroelectric, geothermal, solar thermal, and wind.

Geospatial Information System (GIS): A system designed to capture, store, manipulate, analyze, manage, and present all types of spatial or geographical data.

Kilovolt (kV): 1,000 volts (see “volt” below).

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.

Substation: A substation is a part of an electrical transmission (transformer or step-down station) and distribution (municipal substation) system. Substations transform voltage from high to low, or the reverse.

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.

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 wire or combination of wires insulated from one another, suitable for carrying electric current.

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-H

Welland Hydro-Electric System Corp.

2014 Annual Financial Statements

Financial statements of

**Welland Hydro-Electric
System Corp.**

December 31, 2014

Welland Hydro-Electric System Corp.

December 31, 2014

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Independent Auditor's Report

To the Board of Directors of
Welland Hydro-Electric System Corp.

We have audited the accompanying financial statements of Welland Hydro-Electric System Corp., which comprise the balance sheet as at December 31, 2014, and the statements of earnings and retained earnings and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian generally accepted accounting principles, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of Welland Hydro-Electric System Corp. as at December 31, 2014, and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Deloitte LLP

Chartered Professional Accountants, Chartered Accountants
Licensed Public Accountants
April 15, 2015

Welland Hydro-Electric System Corp.

Statement of earnings and retained earnings year ended December 31, 2014

	2014	2013
	\$	\$
Service revenue		
Energy charges	35,867,540	34,334,507
Wholesale market services	2,174,837	2,173,493
Retail transmission charges	5,069,167	5,253,439
	43,111,544	41,761,439
Distribution revenue	8,852,733	8,840,750
	51,964,277	50,602,189
Cost of power	43,111,546	41,761,439
Gross margin on service revenue	8,852,731	8,840,750
Other operating revenue	707,983	689,200
Net operating revenue	9,560,714	9,529,950
Administrative expenses		
Operating and maintenance	2,926,724	2,886,153
Billing and collection	1,680,890	1,496,261
General administration	1,620,979	1,722,775
Amortization	1,265,687	1,225,600
Total expenses	7,494,280	7,330,789
Earnings before financial expense	2,066,434	2,199,161
Interest expense	893,264	998,630
Earnings before payments in lieu of taxes	1,173,170	1,200,531
Payments in lieu of taxes	44,663	-
Net earnings	1,128,507	1,200,531
Retained earnings, beginning of year	1,369,678	869,147
Dividends	(500,000)	(700,000)
Retained earnings, end of year	1,998,185	1,369,678

The accompanying notes to the financial statements are an integral part of this financial statement.

Welland Hydro-Electric System Corp.

Balance sheet
as at December 31, 2014

	2014	2013
	\$	\$
Assets		
Current assets		
Cash and cash equivalents	1,589,031	6,424,777
Accounts receivable (Note 4)	2,355,092	2,267,445
Accounts receivable - unbilled revenue	5,673,131	5,221,841
Inventories (Note 2)	324,606	287,748
Prepaid expenses	214,433	66,449
	10,156,293	14,268,260
Due from related parties (Note 9)	118,139	91,558
Property, plant and equipment (Note 5)	27,266,339	26,338,774
Deferred PILS asset - long-term (Note 2)	1,400,285	1,817,059
	38,941,056	42,515,651
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities	5,459,802	5,335,770
Customer deposits - current portion	672,959	546,846
Liability for employee future benefits - current portion (Note 11)	107,881	155,658
Other current liabilities	202,514	468,301
Current portion of loan payable	-	3,700,000
	6,443,156	10,206,575
Long-term debt		
Note payable and loan payable (Note 10)	13,499,953	13,499,953
Other liabilities		
Employee future benefits (Note 11)	1,496,483	1,446,316
Customer deposits - long-term portion	420,055	415,288
Regulated settlement variances (Note 7)	1,499,886	1,994,503
	3,416,424	3,856,107
Commitments and contingencies (Note 14)		
Shareholder's equity		
Share capital (Note 13)	12,953,180	12,953,180
Contributed capital	630,158	630,158
Retained earnings	1,998,185	1,369,678
	15,581,523	14,953,016
	38,941,056	42,515,651

Approved by the Board

_____ Director

The accompanying notes to the financial statements are an integral part of this financial statement.

Welland Hydro-Electric System Corp.

Statement of cash flows year ended December 31, 2014

	2014	2013
	\$	\$
Operating activities		
Net earnings	1,128,507	1,200,531
Items not requiring a cash outlay		
Amortization	1,265,687	1,225,600
Gain on disposal of property, plant and equipment	(16,672)	(10,119)
Change in employee benefits future - long-term	50,167	19,816
Change in deferred PILS asset - long-term	416,774	206,413
Changes in non-cash working capital items (Note 12)	(787,198)	1,049,247
Net change in regulated settlement variances	(494,617)	(1,298,254)
	1,562,648	2,393,234
Investing activities		
Additions to property, plant and equipment	(2,199,547)	(1,959,346)
Net proceeds on disposal of property, plant and equipment	22,967	11,908
Investment Non Associated Companies (Note 6)	-	19,684
Change in due from related parties	(26,581)	37,986
	(2,203,161)	(1,889,768)
Financing activities		
Dividends paid	(500,000)	(700,000)
Decrease in short term note payable	(3,700,000)	-
Decrease in long term note payable (Note 10)	-	(225,000)
Change in customer deposits - long-term	4,767	26,128
	(4,195,233)	(898,872)
Net change in cash and cash equivalents	(4,835,746)	(395,406)
Cash and cash equivalents, beginning of year	6,424,777	6,820,183
Cash and cash equivalents, end of year	1,589,031	6,424,777
Supplemental disclosure of cash flows		
Interest paid	867,559	963,115
(Recovery) payments in lieu of income taxes	(111,380)	44,765

The accompanying notes to the financial statements are an integral part of this financial statement.

Welland Hydro-Electric System Corp.

Notes to the financial statements

December 31, 2014

1. Nature of operations

Welland Hydro-Electric System Corp. (the "Company"), is a wholly-owned subsidiary of Welland Hydro-Electric Holding Corp., and was incorporated July 1, 2000 under the Business Corporations Act (Ontario).

The Company is a regulated electricity distribution company that owns and operates the electricity infrastructure, distributing a safe, reliable delivery of electricity to homes and businesses in the City of Welland. The Company is regulated by the Ontario Energy Board ("OEB") under the authority of the Ontario Energy Board Act, 1998. The OEB is charged with the responsibility of approving or fixing rates for the transmission and distribution of electricity, and for ensuring that distribution companies fulfill their obligations to connect and service customers.

2. Significant accounting policies

The financial statements have been prepared in accordance with Canadian generally accepted accounting principles ("GAAP") and policies as set forth in the Accounting Procedures Manual issued by the OEB under the authority of the Ontario Energy Board Act, 1998.

Significant accounting policies are summarized below:

Regulation

The Company is regulated by the OEB and any power rates adjustments require OEB approval. The following accounting policies under the regulated environment differ from GAAP for companies operating under an unregulated environment:

Regulatory assets and liabilities

Regulatory assets and liabilities represent differences between amounts collected through rates (OEB approved) and actual costs incurred by the distributor. Regulatory assets and liabilities on the balance sheet at year-end consist of settlement variances on the cost of power, deferred charges, and the associated regulated interest. Account balances and current year activities are detailed in Note 7.

Regulatory assets and liabilities incurred since January 1, 2008 are subject to review by the OEB for reflection in future rates. Regulatory assets and liabilities will be reflected in the balance sheet until the manner and timing of disposition is determined by the OEB.

Contributions in aid of construction

Subdivision developers as part of their contract with the Company can request that an economic evaluation be performed based on the number of services connected in a project. The economic evaluation guidelines were created by the OEB and software was developed to calculate the net present value of expected revenue net of expected maintenance costs for the next 25 years.

This calculation is used to determine the value of the asset to be assumed by the Company and is reviewed over the first five years. Any assets assumed by the Company will be treated as post 1999 contributed capital. As at December 31, 2014, the value of such contributed capital was \$2,749,644 (2013 - \$2,670,235) and has been recorded as a reduction in property, plant and equipment.

Amortization of contributed capital is recorded at an equivalent rate to that used for amortization of the related assets.

Payments-in-lieu of income taxes

Under the Electricity Act, 1998, the Company is required to make payments-in-lieu of corporate taxes to the Ontario Electricity Financial Corporation. These payments are recorded in accordance with the rules for computing income and taxable capital and other relevant amounts contained in the Income Tax Act (Canada) and the Corporations Tax Act (Ontario) and modified by the Electricity Act, 1998, and related regulations.

Welland Hydro-Electric System Corp.

Notes to the financial statements

December 31, 2014

2. Significant accounting policies (continued)

Future income taxes

In December 2007, CPA Canada revised Handbook Sections 1100, Generally Accepted Accounting Principles, and 3465, Income Taxes, and Accounting Guideline 19 ("AcG-19"), Disclosures by Entities Subject to Rate Regulation. As a result, the Company is required to remove the temporary exemption pertaining to the application of Section 1100 to rate regulated operations, including the elimination of the opportunity to use industry practice as an acceptable basis for recognition and measurement of assets and liabilities arising from rate regulation. The amendment to Handbook Section 3465 required the recognition of future income tax assets and liabilities as well as a separate regulatory asset or liability for the amount of future income taxes expected to be included in future rates and recovered from or paid to customers. As a result of the changes to Section 3465, the Company is required to recognize future income taxes associated with its rate regulated operations using the liability method.

An analysis of the future income taxes as at December 31, 2014 identified a deferred tax asset of \$1,400,285 (2013 - \$1,817,059).

An analysis of future income taxes expected to be included in future rates and recovered from or paid to customers as at December 31, 2014 identified a regulatory liability of \$1,225,749 (2013 - \$1,532,874).

Cash and cash equivalents

Cash and cash equivalents consist of cash on-hand and balances with the bank.

Financial instruments disclosures and presentation

Welland Hydro-Electric System Corp. has adopted accounting standards comprising CPA Canada Handbook Sections 3862, Financial Instruments Disclosures; and 3863, Financial Instruments Presentation. The adoption of the standards requires an increased emphasis on disclosure about the risks associated with recognized and unrecognized financial instruments.

All financial instruments are classified into one of the following five categories: held-to-maturity investments, loans and receivables, held-for-trading, other liabilities or available-for-sale and are initially measured at fair value. All financial instruments, including derivatives, are subsequently carried at fair value on the balance sheet except for loans and receivables, held-to-maturity investments, and other financial liabilities, which are measured at amortized cost. Held-for-trading financial instruments are measured at fair value and all gains and losses are included in net earnings in the period in which they arise. Available-for-sale financial instruments are measured at fair value with revaluation gains and losses included in other comprehensive income until the instrument is derecognized or impaired.

The Company has classified its financial instruments as follows:

Cash and cash equivalents	Held-for-trading
Accounts receivable	Loans and receivables
Unbilled revenue	Loans and receivables
Due from related parties	Loans and receivables
Accounts payable	Other liabilities
Customer deposits	Other liabilities
Long-term debt	Other liabilities

Held-for-trading

Held-for-trading financial assets are financial assets typically acquired for resale prior to maturity or that are designated as held for trading. They are measured at fair value at the balance sheet date. Fair value fluctuations including interest earned, interest accrued, gains and losses realized on disposal and unrealized gains and losses are included in net earnings.

Financial liabilities designated as held-for-trading are those non-derivative financial liabilities that the Company elects to designate on initial recognition as instruments that it will measure at fair value through other interest expense. These are accounted for in the same manner as held for trading assets. The Company has not designated any non-derivative financial liabilities as held-for-trading.

Welland Hydro-Electric System Corp.

Notes to the financial statements

December 31, 2014

2. Significant accounting policies (continued)

Financial instrument disclosures and presentation (continued)

Loans and receivables

Loans and receivables are accounted for at amortized cost using the effective interest method.

Other liabilities

Other liabilities are recorded at amortized cost using the effective interest method and include all financial liabilities, other than derivative instruments.

Effective interest method

The Company uses the effective interest method to recognize interest income or expense which includes transaction costs or fees, premiums or discounts earned or incurred for financial instruments.

Financial instruments recorded at fair value on the Balance Sheet are classified using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. The fair value hierarchy has the following levels:

Level 1 - valuation based on quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 - valuation techniques based on inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

Level 3 - valuation techniques using inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The fair value hierarchy requires the use of observable market inputs whenever such inputs exist. A financial instrument is classified to the lowest level of the hierarchy for which a significant input has been considered in measuring fair value.

All fair values have been determined using Level 1 inputs, except for term deposits which have been determined using Level 2. During the year, there has been no significant transfer of amounts between Levels.

Inventories

Inventories consist primarily of construction and maintenance materials and are stated at the lower of cost and net realizable value, with cost being determined using the weighted average method. There is no fixed or variable production overhead costs assigned to inventory values.

Property, plant and equipment

Property, plant and equipment are recorded at cost. Amortization is calculated on a straight-line basis over the useful service life as follows:

Land and land rights	25 years or effective life
Buildings	40-60 years
Distribution stations	20-45 years
Poles and overhead/underground lines	50 years
Underground plant	20-50 years
Distribution	
Transformers	40 years
Distribution meters	15 years
Equipment	4-60 years

Welland Hydro-Electric System Corp.

Notes to the financial statements

December 31, 2014

2. Significant accounting policies (continued)

Asset retirement obligations

The Company recognizes the liability for an asset retirement that results from acquisition, construction, development, or through normal operations. The liability for an asset retirement is initially recorded at its fair value in the year in which it is incurred and when a reasonable estimate of fair value can be made. The corresponding cost is capitalized as part of the related asset and is amortized over the asset's useful life. In subsequent years, the liability is adjusted for changes resulting from the passage of time and revisions to either the timing or the amount of the original estimate of the undiscounted cash flows. The accretion of the liability to its fair value as a result of the passage of time is charged to earnings.

Impairment of long-lived assets

Long-lived assets are tested for recoverability whenever events or changes in circumstance indicate that their carrying amount may not be recoverable. An impairment loss is recognized when their carrying value exceeds the total undiscounted cash flows expected from their use and eventual disposition. The amount of the impairment loss is determined as the excess of the carrying value of the asset over its fair value at the date of impairment.

Customer deposits

Customer deposits are cash collections from customers to guarantee the payment of energy bills. Customer deposits include interest credited to customers' deposit accounts, with interest expense recorded to offset this amount. Deposits expected to be refunded to customers within the next fiscal year are classified as a current liability. Deposits earn interest at a rate of the Bank of Canada Prime Business rate less two percent updated quarterly and accrued monthly.

Post-employment benefits other than pension

The Company provides its current and applicable retired employees to age 65 with life insurance and medical benefits beyond those provided by the government-sponsored plans. The cost of these benefits is expensed as earned through employment service.

Use of estimates

Management is required to make estimates and assumptions that affect the reported amounts of revenue, expenses, assets, liabilities and the disclosure of contingent assets and liabilities at the financial statement date. Accounts receivable, unbilled revenue and regulatory assets are reported net of an appropriate allowance for unrecoverable amounts. Inventory is recorded net of provision for obsolescence. Certain estimates are also required as regulations, which ultimately determine the actual results, have yet to be finalized and are dependent on the completion of regulatory proceedings or decisions. The financial statements have, in management's opinion, been properly prepared using careful judgment within reasonable limits and within the framework of the accounting policies.

Revenue recognition

Revenue is recognized on the accrual basis, which includes an estimate of unbilled revenue. Service revenue 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. Any discrepancies in the revenue collected and the associated cost of power to distribute are charged to regulatory assets.

Unbilled revenue

Unbilled revenue is an estimate of customers' consumption of power from the last meter read in the year to December 31.

Welland Hydro-Electric System Corp.

Notes to the financial statements

December 31, 2014

2. Significant accounting policies (continued)

Future accounting changes

International financial reporting standards (IFRS)

In February 2008, the Canadian Accounting Standards Board (AcSB) confirmed that publicly accountable enterprises will be required to adopt IFRS in place of Canadian GAAP effective January 1, 2011. Subsequently, on September 10, 2010, the AcSB decided to permit rate-regulated entities and certain affiliates to defer their IFRS adoption date to January 1, 2012.

On March 30, 2012, the AcSB announced an additional one year deferral for qualifying entities with rate-regulated activities. A further one year deferral was announced by the AcSB in September 2012.

On February 13, 2013, the AcSB announced a decision to further extend the optional deferral to January 1, 2015. The Company has elected to defer adoption of IFRS until January 1, 2015. The revised adoption date of January 1, 2015 will require the restatement, for comparative purposes, of amounts reported by the Company for its year ended December 31, 2014, and of the opening balance sheet as at January 1, 2014.

The Company is continuing to assess the financial reporting impacts of the adoption of IFRS on its financial statements. At this time, the impact on the Company's future financial position and results of operations is not reasonably determinable or estimable. The Company does anticipate a significant increase in disclosure resulting from the adoption of IFRS and is continuing to assess the level of disclosure required.

3. Bank indebtedness

The Company has an authorized line of credit of \$2,000,000, bearing interest at prime. There is no balance outstanding at December 31, 2014 (2013 - \$Nil). The line is secured by a general security agreement representing a first floating charge over all assets whether obtained now or in the future.

The Company has a credit card facility of \$45,000, of which there is no balance outstanding at December 31, 2014 (2013 - \$Nil).

4. Accounts receivable

	2014	2013
	\$	\$
Electrical energy	2,289,870	2,265,193
Other	258,853	132,988
	<u>2,548,723</u>	<u>2,398,181</u>
Less: allowance for doubtful accounts	(193,631)	(130,736)
	<u>2,355,092</u>	<u>2,267,445</u>

The allowance for doubtful accounts reflects accounts which have been sent to a Credit Collection Agency for which the likelihood of recovery is small. These amounts are written off after one year.

Welland Hydro-Electric System Corp.

Notes to the financial statements

December 31, 2014

5. Property, plant and equipment

			2014	2013
	Cost	Accumulated amortization	Net book value	Net book value
	\$	\$	\$	\$
Land and land rights	228,982	60,912	168,070	168,711
Buildings	2,633,255	1,222,020	1,411,235	1,449,898
Distribution stations	4,494,224	2,575,463	1,918,761	2,009,752
Poles and overhead/underground lines	33,460,303	17,595,443	15,864,860	14,929,716
Distribution				
Transformers	6,583,705	3,446,976	3,136,729	2,957,082
Distribution meters	3,067,502	1,000,855	2,066,647	2,202,964
Equipment	5,471,177	2,771,140	2,700,037	2,620,651
	55,939,148	28,672,809	27,266,339	26,338,774

6. Long-term investment non-associated company

During the 2010 year, the Company acquired a 10% interest in UCS. The Company continues to maintain a 10% interest in UCS, with initial acquisition costs of \$19,684 being refunded by UCS in 2013. The purpose of UCS is to assist in the maintenance of the CIS system for the Company and its other shareholders. Payments and costs incurred on behalf of UCS are not specifically refundable.

Welland Hydro-Electric System Corp.

Notes to the financial statements

December 31, 2014

7. Regulatory settlement variances

	2014	2013
	\$	\$
Variance accounts, beginning year	(1,994,503)	(3,292,757)
Current year regulated interest expense	(25,705)	(35,515)
Current year regulated interest income	14,145	19,671
Current year deferred charges	232,239	145,490
Current year PILS in future rates	307,125	221,893
Variances - service revenue	(648,061)	(324,972)
Variances - cost of power	188,333	785,174
Variance accounts, end of year	(1,926,427)	(2,481,016)
Less distributed current year	426,543	486,513
Ending regulatory liabilities	(1,499,884)	(1,994,503)
Settlement variances and interest	(9,905)	(292,430)
Deferred charges and interest	(241,296)	(473,597)
PILS in future rates	(1,225,749)	(1,532,874)
Distributable variances and interest	(1,391,917)	(638,042)
Distributed to date	1,368,983	942,440
Ending regulatory liabilities	(1,499,884)	(1,994,503)
Interest included in the ending regulatory assets balances	(22,843)	(47,790)

Regulatory Assets consist of differences between the amounts owed to the Independent Electricity System Operator ("IESO") and the amounts billed to customers and retailers (Settlement Variances) and expenses/revenues deferred for consideration by the OEB for reflection in future rates.

In the absence of rate regulation, GAAP would require that Service Revenue or Cost of Power be adjusted for Regulated Settlement variances as incurred. Current year Regulatory Interest Expense, Regulatory Interest Income and Deferred Charges would also be reversed and reflected in the appropriate expense/income classification as incurred. In the absence of rate regulation, Service Revenue would be \$648,061 higher in 2014 (2013 - \$324,972) and Cost of Power would be \$188,333 higher in 2014 (\$785,174 in 2013). Interest income would be \$14,145 lower in 2014 (\$19,671 in 2013). Interest Expense would be \$25,705 lower in 2014 (\$35,515 in 2013). General administration expense would be \$49,902 higher in 2013. Other operating revenue would be \$143,387 lower in 2014 (\$95,588 lower in 2013). Capital expenses would be \$88,852 higher in 2014.

The current year - PILS in future years is the result of amendment to Handbook Section 3465 (See Note 2 Future Income Taxes). The OEB does not currently recognize PILS to be included in future rates as a regulatory account. As a result, this amount has been included as Other Liabilities – Long-Term for regulatory reporting.

8. Pension agreement

The Company provides a pension plan for its employees through the Ontario Municipal Employees Retirement System ("OMERS"). OMERS is a multi-employer pension plan which operates as the Ontario Municipal Employees Retirement Fund (the "Fund") and provides pensions for employees of Ontario municipalities, local boards, public utilities, and school boards. The Fund is a contributory defined benefit pension plan, which is financed by equal contributions from participating employers and employees, and by the investment earnings of the Fund. As the Company is only liable for the contributions, defined contribution accounting is used by the Company. The Company's contribution for employees' current service for the year ended December 31, 2014 was \$327,540 (2013 - \$327,164).

Welland Hydro-Electric System Corp.

Notes to the financial statements

December 31, 2014

9. Due from (to) related parties and related party transactions

The Company provides overall business and strategic planning through its Board of Directors and will negotiate on behalf of Welland Hydro Energy Services Corp. and Welland Hydro-Electric Holdings Corp. other corporate programs such as risk management. The Company maintains its liability insurance through the Municipal Electric Association Reciprocal Insurance Exchange.

Amounts due from/(to) related parties at December 31 are as follows:

	2014	2013
	\$	\$
Welland Hydro Energy Services Corp.		
Accounts receivable (payable)	1,359	3,928
Note receivable	1	1
Welland Hydro-Electric Holding Corp.	10,950	5,437
City of Welland - accounts receivable	105,829	82,192
	<u>118,139</u>	<u>91,558</u>

The following amounts were invoiced to related parties in the normal course of operations:

	2014	2013
	\$	\$
City of Welland		
Energy (at commercial rates)	1,438,933	1,291,740
Rent	23,180	22,617
Welland Hydro-Electric Holding Corp.		
Management fees	22,393	21,851
Welland Hydro Energy Services Corp.		
Management fees	2,452	2,393
Streetlight/sentinel maintenance and administration	98,805	98,396
	<u>1,585,763</u>	<u>1,436,997</u>

The Company has entered into a service level agreement with Welland Hydro Energy Services Corp. The Company is to provide services related to customer billing and collection, accounting and administration at a 7% premium above the actual costs incurred.

The following expenses were incurred in the regular course of operations:

	2014	2013
	\$	\$
Welland Hydro-Electric Holding Corp.		
Interest	8,569	6,750
City of Welland		
Property taxes and other taxes	67,892	69,084
Leases and miscellaneous	8,281	8,574
Water	4,146	4,707
Interest	843,747	843,747
	<u>932,635</u>	<u>932,862</u>

Welland Hydro-Electric System Corp.

Notes to the financial statements

December 31, 2014

10. Long-term debt

	2014	2013
	\$	\$
Note payable - City of Welland	13,499,953	13,499,953
Loan payable - Toronto-Dominion Bank	-	3,700,000
	13,499,953	17,199,953
Current portion	-	3,700,000
	13,499,953	13,499,953

The note that is due to the City of Welland bears interest at 6.25% effective May 1, 2006. It is due 12 months after official demand by the City.

The loan with the Toronto-Dominion Bank was paid in full from cash reserves in 2014.

11. Employee future benefits

The Company pays certain medical and life insurance benefits to age 65 on behalf of its retired employees. The Company recognizes these post-retirement costs in the period in which employees' services were rendered. The accrued benefit liability at December 31, 2014 of \$1,604,364 (2013 - \$1,601,974) and the expense for the year ended December 31, 2014 was determined by actuarial valuation using a discount rate of 3.8% (2013 - 3.5%).

Information regarding the defined benefit plan of the Company is as follows:

	2014	2013
	\$	\$
Total accrued benefit liability, start of year	1,601,974	1,582,158
Current service cost	29,133	47,777
Interest cost	68,580	67,417
Past service costs	2,242	2,242
Correction to benefits	17,101	-
Amortization of actuarial gain	(6,785)	38,222
Benefits paid for the period	(107,881)	(135,842)
Total accrued benefit liability, end of year	1,604,364	1,601,974
Projected accrued benefit obligation, end of year	1,660,410	1,925,686
Unamortized past service costs	(15,691)	(17,993)
Unamortized actuarial (loss) gain	(40,355)	(305,779)
Current portion	107,881	155,658
Long-term portion	1,496,483	1,446,316
	1,604,364	1,601,974

Welland Hydro-Electric System Corp.

Notes to the financial statements

December 31, 2014

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 2.00% in 2014 and thereafter.

Discount (Interest) Rate - the obligation as at January 1, 2014 of the present value of future liabilities and the expense for the year ended December 31, 2014 were determined using a discount rate of 4.5% and 3.8% respectively. This rate reflects the assumed long-term yield on high quality bonds.

Salary Levels - future general salary and wage levels were assumed to increase at 3.30% per annum for years 2014 and thereafter.

Medical Costs - medical costs were assumed to increase at 7.00% in 2014, decreasing to 4.6% by 2022.

Dental Costs - dental costs were assumed to increase at 4.6% in 2014 and thereafter.

Sensitivity Analysis - assumed health care cost trend rates have a significant effect on the amounts reported for health care plans. A one-percentage-point change in assumed health care cost trend rates have the following effects for 2014:

	Increase
	\$
Accrued benefit obligation, end of period	68,000

12. Changes in non-cash working capital items

	2014	2013
	\$	\$
Accounts receivable	(87,647)	(33,583)
Accounts receivable - unbilled revenue	(451,290)	(277,123)
Inventories	(36,858)	(5,508)
Prepaid expenses	(147,984)	45,959
Accounts payable and accrued liabilities	124,032	1,266,207
Customer deposits - current portion	126,113	(87,009)
Current portion - liability for future employee benefits	(47,777)	-
Other current liabilities	(265,787)	140,304
	(787,198)	1,049,247

13. Share capital

Authorized

Unlimited number of common shares

Issued

	2014	2013
	\$	\$
1,000 common shares	12,953,180	12,953,180

Welland Hydro-Electric System Corp.

Notes to the financial statements

December 31, 2014

14. Commitments and contingencies

Reciprocal Insurance Exchange

The Company participates with the other electrical utilities in Ontario in an agreement to exchange reciprocal contracts of indemnity through the Municipal Electrical Association Reciprocal Insurance Exchange. The Company is liable for additional assessments to the extent premiums collected and reserves established are not sufficient to cover the cost of claims and costs incurred.

Independent Electricity System Operator

As of May 1, 2002 in order for the Company to obtain the electricity it requires to distribute to its customers, the Company was required to provide security to the Independent Electricity System Operator (IESO) based on its usage. The security obtained was a letter of credit from a financial institution, which requires an interest coverage ratio of more than 1.5 and a debt capitalization ratio of less than 0.6. The letter is in the amount of \$2,538,527 and incurs interest at 0.6% annually.

Commitments

The Company has an agreement to contribute to the costs of power connections and power lines in new subdivisions built in the City of Welland. The Company will take over the ownership of the power distribution equipment in the subdivisions two years after construction is accepted. The contribution made for the construction in subdivisions in 2014 was \$30,316 (2013 - \$69,401).

15. Capital management

The Company's objectives when managing capital are:

- to maintain a flexible capital structure which optimizes the cost of capital at acceptable risk; and
- to maintain capital in a manner which balances the interests of equity and debt holders.

In the management of capital, the Company includes shareholder's equity, long-term debt and customer deposits in the definition of capital. As at December 31, 2014, the Company has \$30,174,491 (2013 - \$33,115,100) in capital.

The Company manages its capital structure and makes adjustments due to changes in economic conditions and the risk characteristics of the underlying assets. In order to maintain or adjust the capital structure, the Company may adjust the amount of dividends paid to the shareholders, issue new shares, issue new debt, and/or issue new debt to replace existing debt with different characteristics.

Capital management objectives, policies and procedures are unchanged since the preceding year.

Under the Company's borrowing agreements, the Company must satisfy certain restrictive covenants as to minimum financial ratios such as working capital ratio and debt/equity ratio, the purchase of property, plant and equipment and the payment of dividends.

During the year, the Company complied with all of these capital requirements.

16. Financial instruments and risk management

The Company, through its financial assets and liabilities has exposure to the following risks.

Fair value

The fair values of cash and cash equivalents, accounts receivable, unbilled revenue, accounts payable and accrued liabilities approximate their carrying amounts due to their short-term nature. As there is no secondary market for customer deposits, the calculation of their fair value with appropriate reliability is impractical. The fair value of due from related parties approximates their carrying value as these amounts generally represent accounts receivable issued in the normal course of business.

Welland Hydro-Electric System Corp.

Notes to the financial statements

December 31, 2014

16. Financial instruments and risk management (continued)

Fair value (continued)

The Company has a Long-Term Promissory Note Payable with the City of Welland ("the City") in the amount of \$13,499,953. The restated Promissory Note was issued to the City on October 19, 2005 with interest at 6.25% effective May 1, 2006. There is no "term length" associated with the Promissory Note but the City can demand payment twelve months after notice has been provided.

The Long-Term Promissory Note Payable with the City has been identified as a financial instrument under the "Other Financial Liabilities" category. A comparison with market prices for similar debt instruments indicates no material difference between market and carrying values.

Liquidity risk

The Company's objective is to have sufficient liquidity to meet its liabilities when due. The Company monitors its cash balance and cash flows generated from operations to meet its requirements.

Credit risk

The Company is exposed to credit risk from its customers. However, the Company has a large number of diverse customers minimizing concentration of credit risk. The Company requires customers to provide security deposits subject to OEB regulations.

17. Comparative figures

Certain comparative figures have been reclassified to conform to the current classification.

Appendix 1- I

Welland Hydro-Electric System Corp.

2015 Annual Financial Statements

Financial Statements of

Welland Hydro-Electric System Corp.

Years ended December 31, 2015 and 2014
(Expressed in thousands of dollars)

Welland Hydro-Electric System Corp.

December 31, 2015 and 2014

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Independent Auditor's Report

To the Board of Directors of
Welland Hydro-Electric System Corp.

We have audited the accompanying financial statements of Welland Hydro-Electric System Corp., which comprise the statements of financial position as at December 31, 2015, December 31, 2014 and January 1, 2014, and the statements of comprehensive income, statements of changes in equity and statements of cash flows for the years ended December 31, 2015 and December 31, 2014, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained in our audits 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 Welland Hydro-Electric System Corp. as at December 31, 2015, December 31, 2014 and January 1, 2014, and its financial performance and its cash flows for the years ended December 31, 2015 and December 31, 2014 in accordance with International Financial Reporting Standards.

Deloitte LLP.

Chartered Professional Accountants
Licensed Public Accountants
April 13, 2016

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Statements of Financial Position

December 31, 2015, December 31, 2014 and January 1, 2014

(in thousands of dollars)

	Note	December 31, 2015	December 31, 2014	January 1, 2014
Assets				
Current assets				
Cash and cash equivalents	5	\$ 2,294	\$ 1,589	\$ 6,425
Accounts receivable	6	2,060	2,355	2,267
Unbilled revenue		5,076	5,673	5,222
Materials and supplies	7	284	325	288
Prepaid expenses		220	214	66
Due from related parties	22	106	118	91
Total current assets		10,040	10,274	14,359
Non-current assets				
Property, plant and equipment, net	8	28,306	27,012	25,849
Intangible assets, net	9	368	430	490
Deferred tax assets	10	1,547	1,226	1,533
Total non-current assets		30,221	28,668	27,872
Total assets		40,261	38,942	42,231
Regulatory balances	11	967	647	1,337
Total assets and regulatory balances		\$ 41,228	\$ 39,589	\$ 43,568

See accompanying notes to the financial statements.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Statements of Financial Position

December 31, 2015, December 31, 2014 and January 1, 2014

(in thousands of dollars)

	Note	December 31, 2015	December 31, 2014	January 1, 2014
Liabilities				
Current liabilities				
Accounts payable and accrued liabilities	12	\$ 5,151	\$ 5,460	\$ 5,336
Customer deposits		1,483	1,093	962
Other liabilities		129	202	468
Long-term debt due within one year	13	-	-	3,700
Total current liabilities		6,763	6,755	10,466
Non-current liabilities				
Long-term debt	13	13,500	13,500	13,500
Post-employment benefits	14	1,583	1,601	1,498
Deferred revenue		500	88	-
Total non-current liabilities		15,583	15,189	14,998
Total liabilities		22,346	21,944	25,464
Equity				
Share capital	15	12,953	12,953	12,953
Retained earnings		3,219	2,744	2,104
Accumulated other comprehensive (loss) income		(113)	(113)	-
Total equity		16,059	15,584	15,057
Total liabilities and equity		38,405	37,528	40,521
Regulatory balances	11	2,823	2,061	3,047
Total liabilities, equity and regulatory balances		\$ 41,228	\$ 39,589	\$ 43,568

See accompanying notes to the financial statements.

On behalf of the Board:


Ross Peever
Director


Mario Falvo
Director

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Statements of Comprehensive Income
 Years ended December 31, 2015 and 2014
 (in thousands of dollars)

	Note	2015	2014
Revenue			
Sale of energy		\$ 44,335	\$ 43,333
Distribution revenue		9,270	9,321
Other	16	200	50
		53,805	52,704
Operating expenses			
Cost of power purchased		43,879	43,300
Employee salaries and benefits	17	3,663	3,557
Operating expenses	18	2,676	2,660
Depreciation and amortization		1,328	1,268
		51,546	50,785
Income from operating activities		2,259	1,919
Finance income	19	29	34
Finance costs	19	867	867
Income before income taxes		1,421	1,086
Income tax (recovery) expense	10	(152)	137
Net income for the year		1,573	949
Net movement in regulatory balances, net of tax	11	(398)	191
Net income for the year and net movement in regulatory balances		1,175	1,140
Other comprehensive income (loss)			
Items that will not be reclassified to profit or loss:			
Remeasurements of post-employment benefits	14	-	(113)
Other comprehensive income (loss) for the year		-	(113)
Total comprehensive income for the year		\$ 1,175	\$ 1,027

See accompanying notes to the financial statements.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Statements of Changes in Equity
 Years ended December 31, 2015 and 2014
 (in thousands of dollars)

	Share capital	Retained earnings	Accumulated other comprehensive (loss) income	Total
Balance at January 1, 2014	\$ 12,953	\$ 2,104	\$ -	\$ 15,057
Net Income and net movement in regulatory balances	-	1,140	-	1,140
Other comprehensive income (loss)	-	-	(113)	(113)
Dividends	-	(500)	-	(500)
Balance at December 31, 2014	12,953	2,744	(113)	15,584
Balance at January 1, 2015	\$ 12,953	\$ 2,744	\$ (113)	\$ 15,584
Net income and net movement in regulatory balances	-	1,175	-	1,175
Other comprehensive income	-	-	-	-
Dividends	-	(700)	-	(700)
Balance at December 31, 2015	\$ 12,953	\$ 3,219	\$ (113)	\$ 16,059

See accompanying notes to the financial statements.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Statements of Cash Flows
 Years ended December 31, 2015 and 2014
 (in thousands of dollars)

	2015	2014
Operating activities		
Net Income and net movement in regulatory balances	\$ 1,175	\$ 1,140
Adjustments for:		
Depreciation and amortization	1,328	1,268
Amortization of deferred revenue	(10)	(2)
Post-employment benefits	(18)	(9)
Losses (gains) on disposal of property, plant and equipment	35	(17)
Net finance costs	838	833
Income tax (recovery) expense	(152)	137
	<u>3,196</u>	<u>3,350</u>
Change in non-cash operating working capital:		
Accounts receivable	295	(92)
Due to/from related parties	12	(27)
Unbilled revenue	597	(451)
Materials and supplies	41	(37)
Prepaid expenses	(6)	(148)
Accounts payable and accrued liabilities	(543)	86
Customer deposits	390	131
Other liabilities	(73)	(266)
	<u>713</u>	<u>(804)</u>
Regulatory balances	398	(191)
Income tax paid	(100)	(150)
Income tax received	208	261
Interest paid	(866)	(876)
Interest received	29	39
Contributions received from customers	422	89
Net cash from operating activities	<u>4,000</u>	<u>1,718</u>
Investing activities		
Purchase of property, plant and equipment	(2,559)	(2,299)
Proceeds on disposal of property, plant and equipment	9	23
Purchase of intangible assets	(45)	(78)
Net cash used by investing activities	<u>(2,595)</u>	<u>(2,354)</u>
Financing activities		
Dividends paid	(700)	(500)
Repayment of long-term debt	-	(3,700)
Net cash used by financing activities	<u>(700)</u>	<u>(4,200)</u>
Change in cash and cash equivalents	705	(4,836)
Cash and cash equivalents, beginning of year	1,589	6,425
Cash and cash equivalents, end of year	<u>\$ 2,294</u>	<u>\$ 1,589</u>

See accompanying notes to the financial statements.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
Years ended December 31, 2015 and 2014
(in thousands of dollars)

1. Reporting entity

Welland Hydro-Electric System Corp. (the "Corporation") is a rate regulated, municipally owned hydro distribution company incorporated under the laws of Ontario, Canada. The Corporation is located in the City of Welland. The address of the Corporation's registered office is 950 East Main Street, Welland Ontario.

The Corporation delivers electricity and related energy services to residential and commercial customers in the City of Welland. The Corporation is wholly owned by Welland Hydro-Electric Holding Corp. and the ultimate parent company is the City of Welland.

The financial statements are for the Corporation as at and for the year ended December 31, 2015.

2. Basis of presentation

(a) Statement of compliance

The Corporation's financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS").

(b) Adoption of IFRS

These are the Corporation's first financial statements prepared in accordance with IFRS and IFRS 1 *First-time Adoption of International Financial Reporting Standards* has been applied. An explanation of how the transition to IFRS has affected the reported financial position, financial performance and cash flows of the Corporation is provided in note 25.

(c) Approval of the financial statements

The financial statements were approved by the Board of Directors on April 13, 2016.

(d) Basis of measurement

These financial statements have been prepared on the historical cost basis, unless otherwise stated.

(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.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
Years ended December 31, 2015 and 2014
(in thousands of dollars)

2. Basis of presentation (continued)

(f) Use of estimates and judgments

(i) Assumptions and estimation uncertainty

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 years affected.

Information about assumptions and estimation uncertainties that have a significant risk of resulting in material adjustment is included in the following notes:

- (i) Note 3(c) – measurement of unbilled revenue
- (ii) Note 6 – Receivables: allowance for doubtful accounts
- (iii) Notes 8, 9 – estimation of useful lives of its property, plant and equipment and intangible assets
- (iv) Note 11 – recognition and measurement of regulatory balances
- (v) Note 14 – measurement of defined benefit obligations: key actuarial assumptions
- (vi) Note 20 – recognition and measurement of provisions and contingencies
- (vii) Note 24 – Financial instruments and risk management: valuation of long-term debt

(ii) Judgements

Information about judgements made in applying accounting policies that have the most significant effects on the amounts recognized in the financial statements is included in the following notes:

- (i) Note 8 – leases: whether an arrangement contains a lease

(g) Rate regulation

The Corporation is regulated by the Ontario Energy Board (“OEB”), under the authority granted by the *Ontario Energy Board Act, 1998*. 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 electricity consumers in Ontario, and ensuring that transmission and distribution companies fulfill obligations to connect and service customers. The OEB may also prescribe license requirements and conditions of service to local distribution companies (“LDCs”), such as the Corporation, which may include, and among other things, record keeping, regulatory accounting principles, separation of accounts for distinct businesses, and filing and process requirements for rate setting purposes.

The Corporation is required to bill customers for the debt retirement charge set by the province. The Corporation may file to recover uncollected debt retirement charges from Ontario Electricity Financial Corporation (“OEF”) once each year.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
Years ended December 31, 2015 and 2014
(in thousands of dollars)

2. Basis of presentation (continued)

(g) Rate regulation (continued)

Rate setting

Distribution revenue

For the distribution revenue included in revenues, the Corporation files a "Cost of Service" ("COS") rate application with the OEB every five years where rates are determined through a review of the forecasted annual amount of operating and capital expenditures, debt and shareholder's equity required to support the Corporation's business. The Corporation estimates electricity usage and the costs to service each customer class to determine the appropriate rates to be charged to each customer class. The COS application is reviewed by the OEB and interveners and rates are approved based upon this review, including any revisions resulting from that review.

In the intervening years an Incentive Rate Mechanism application ("IRM") is filed. An IRM application results in a formulaic adjustment to distribution rates that were set under the last COS application. The previous year's rates are adjusted for the annual change in the Gross Domestic Product Implicit Price Inflation for Final Domestic Demand ("GDP IPI-FDD") net of a productivity factor and a "stretch factor" determined by the relative efficiency of an electricity distributor.

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 last filed a COS application in 2012 for rates effective May 1, 2013 to April 30, 2017. The GDP IPI-FDD for 2015 is 1.6%, the Corporation's productivity factor is 0.0% and the stretch factor is 0.15%, resulting in a net adjustment of 1.45% to the previous year's rates.

Electricity rates

The OEB sets electricity prices for low-volume consumers twice each year based on an estimate of how much it will cost to supply the province with electricity for the next year. All remaining consumers pay the market price for electricity. The Corporation is billed for the cost of the electricity that its customers use and passes this cost on to the customer at cost without a mark-up.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
Years ended December 31, 2015 and 2014
(in thousands of dollars)

3. Significant accounting policies

The accounting policies set out below have been applied consistently in all years presented in these financial statements and in preparing the opening IFRS statement of financial position at January 1, 2014 for the purpose of the transition to IFRS.

(a) Financial instruments

All financial assets are classified as loans and receivables and all financial liabilities are classified as other liabilities. These financial instruments are recognized initially at fair value plus any directly attributable transaction costs. Subsequently, they are measured at amortized cost using the effective interest method less any impairment for the financial assets as described in note 3(g). The Corporation does not enter into derivative instruments.

Hedge accounting has not been used in the preparation of these financial statements.

(b) Cash and cash equivalents

Cash equivalents include short-term investments with maturities of three months or less when purchased.

(c) Revenue recognition

Sale and distribution of electricity

Revenue from the sale and distribution of electricity is recognized as the electricity is delivered to customers on the basis of cyclical meter readings and estimated customer usage since the last meter reading date to the end of the year. Revenue includes the cost of electricity supplied, distribution, and any other regulatory charges. The related cost of power is recorded on the basis of power used.

For customer billings related to 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 has determined that it is acting as a principal for these electricity charges 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 billing stream.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
Years ended December 31, 2015 and 2014
(in thousands of dollars)

3. Significant accounting policies (continued)

(c) Revenue recognition (continued)

Other revenue

Revenue earned from the provision of services is recognized as the service is rendered.

Certain customers and developers are required to contribute towards the capital cost of construction of distribution assets in order to provide ongoing service. Cash contributions are recorded as deferred revenue. When an asset other than cash is received as a capital contribution, the asset is initially recognized at its fair value, with a corresponding amount recognized as deferred revenue. The deferred revenue, which represents the Corporation's obligation to continue to provide the customers access to the supply of electricity, is amortized to income on a straight-line basis over the useful life of the related asset.

Government grants and the related performance incentive payments under CDM programs are recognized as revenue in the year when there is reasonable assurance that the program conditions have been satisfied and the payment will be received.

(d) Materials and supplies

Materials and supplies, the majority of which is consumed by the Corporation in the provision of its services, is valued at the lower of cost and net realizable value, with cost being determined on an average cost basis, and includes expenditures incurred in acquiring the materials and supplies and other costs incurred in bringing them to their existing location and condition.

(e) Property, plant and equipment

For items of property, plant and equipment ("PP&E") used in rate-regulated activities and acquired prior to January 1, 2014 the Corporation elected to use the exemption available for assets subject to rate regulation such that the previous Canadian GAAP carrying amount became the deemed cost under IFRS established on the transition date (see note 25(a)), less accumulated depreciation. All other items of PP&E are measured at cost, or, where the item is contributed by customers, its fair value, less accumulated depreciation.

Cost includes expenditures that are directly attributable to the acquisition of the asset. The cost of self-constructed assets includes contracted services, materials and transportation costs, direct labor, overhead costs, borrowing costs 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 based upon the weighted average cost of debt incurred on the Corporation's borrowings. Qualifying assets are considered to be those that take in excess of 12 months to construct.

When parts of an item of PP&E have different useful lives, they are accounted for as separate items (major components) of PP&E.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
Years ended December 31, 2015 and 2014
(in thousands of dollars)

3. Significant accounting policies (continued)

(e) Property, plant and equipment (continued)

When items of PP&E are retired or otherwise disposed of, a gain or loss on disposal is determined by comparing the proceeds from disposal, if any, with the carrying amount of the item and is included in profit or loss.

Major spare parts and standby equipment are recognized as items of PP&E.

The cost of replacing a part of an item of PP&E 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 PP&E is written off, and the related gain or loss is included in profit or loss. The costs of the day-to-day servicing of PP&E are recognized in profit or loss as incurred.

The need to estimate the decommissioning costs at the end of the useful lives of certain assets is reviewed periodically. The Corporation has concluded it does not have any legal or constructive obligation to remove PP&E.

Depreciation is calculated to write off the cost of items of PP&E using the straight-line method over their estimated useful lives, and is generally recognized in profit or loss. Depreciation methods, useful lives, and residual values are reviewed at each reporting date and adjusted prospectively if appropriate. Land is not depreciated. Construction-in-progress assets are not depreciated until the project is complete and the asset is available for use.

The estimated useful lives are as follows:

	Years
Buildings	40-60
Distribution equipment	
Distribution stations	20-45
Poles and overhead/underground lines	50
Underground plant	20-50
Distribution transformers	40
Distribution meters	15
Other	4-60

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
Years ended December 31, 2015 and 2014
(in thousands of dollars)

3. Significant accounting policies (continued)

(f) Intangible assets

For intangible assets used in rate-regulated activities and acquired prior to January 1, 2014, the Corporation elected to use the exemption available for assets subject to rate regulation such that the previous Canadian GAAP carrying amount became the deemed cost under IFRS established on the transition date (see note 25(a)), less accumulated amortization. All other intangible assets are measured at cost.

Computer software that is acquired or developed by the Corporation after January 1, 2014, including software that is not integral to the functionality of equipment purchased which has finite useful lives, is measured at cost less accumulated amortization.

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.

Amortization is recognized in profit or loss on a straight-line basis over the estimated useful lives of intangible assets, from the date that they are available for use. Amortization methods and useful lives of all intangible assets are reviewed at each reporting date and adjusted prospectively if appropriate. The estimated useful lives are:

	Years
Computer software	5
Land rights	25

(g) Impairment

(i) Financial assets measured at amortized cost

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 is calculated as the difference between an asset's carrying amount 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. Losses are recognized in profit or loss. An impairment loss is reversed through profit or loss if the reversal can be related objectively to an event occurring after the impairment loss was recognized.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
Years ended December 31, 2015 and 2014
(in thousands of dollars)

3. Significant accounting policies (continued)

(g) Impairment (continued)

(ii) Non-financial assets

The carrying amounts of the Corporation's non-financial assets, other than materials and supplies 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" or "CGU"). The recoverable amount of an asset or CGU 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 CGU exceeds its estimated recoverable amount. Impairment losses are recognized in profit or loss.

For other assets, 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.

(h) Customer deposits

Customer deposits represent cash deposits from electricity distribution customers and retailers to guarantee the payment of energy bills. Interest is paid on customer deposits.

Deposits 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.

(i) 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.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
Years ended December 31, 2015 and 2014
(in thousands of dollars)

3. Significant accounting policies (continued)

(j) Regulatory balances

Regulatory deferral account debit balances represent costs incurred in excess of amounts billed to the customer at OEB approved rates. Regulatory deferral account credit balances represent amounts billed to the customer at OEB approved rates in excess of costs incurred by the Corporation.

Regulatory deferral account debit balances are recognized if it is probable that future billings in an amount at least equal to the deferred cost will result from inclusion of that cost in allowable costs for rate-making purposes. The offsetting amount is recognized in net movement in regulatory balances in profit or loss or OCI. When the customer is billed at rates approved by the OEB for the recovery of the deferred costs, the customer billings are recognized in revenue. The regulatory debit balance is reduced by the amount of these customer billings with the offset to net movement in regulatory balances in profit or loss or OCI.

The probability of recovery of the regulatory deferral account debit balances is assessed annually based upon the likelihood that the OEB will approve the change in rates to recover the balance. The assessment of likelihood of recovery is based upon previous decisions made by the OEB for similar circumstances, policies or guidelines issued by the OEB, etc. Any resulting impairment loss is recognized in profit or loss in the year incurred.

When the Corporation is required to refund amounts to ratepayers in the future, the Corporation recognizes a regulatory deferral account credit balance. The offsetting amount is recognized in net movement in regulatory balances in profit or loss or OCI. The amounts returned to the customers are recognized as a reduction of revenue. The credit balance is reduced by the amount of these customer repayments with the offset to net movement in regulatory balances in profit or loss or OCI.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
Years ended December 31, 2015 and 2014
(in thousands of dollars)

3. Significant accounting policies (continued)

(k) Post-employment 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.

OMERS is a defined benefit plan. However, as OMERS does not segregate its pension asset and liability information by individual employers, there is insufficient information available to enable the Corporation to directly account for the plan. Consequently, the plan has been accounted for as a defined contribution plan. The Corporation is not responsible for any other contractual obligations other than the contributions. Obligations for contributions to defined contribution pension plans are recognized as an employee benefit expense in profit or loss when they are due.

(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 obligations for these post-employment benefit plans are actuarially determined by applying the projected unit credit method and reflect management's best estimate of certain underlying assumptions. Re-measurements of the net defined benefit obligations, including actuarial gains and losses and the return on plan assets (excluding interest), are recognized immediately in other comprehensive income. When the benefits of a plan are improved, the portion of the increased benefit relating to past service by employees is recognized immediately in profit or loss.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
Years ended December 31, 2015 and 2014
(in thousands of dollars)

3. Significant accounting policies (continued)

(l) Leased assets

Leases, where the terms cause the Corporation to assume 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.

All other leases are classified as operating leases and the leased assets are not recognized on the Corporation's statement of financial position. Payments made under operating leases are recognized in profit or loss on a straight-line basis over the term of the lease.

(m) 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 dividend income.

Finance costs comprise interest expense on borrowings. Finance costs are recognized in profit or loss unless they are capitalized as part of the cost of qualifying assets.

(n) 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.

The Corporation is currently exempt from taxes under the Income Tax Act (Canada) and the Ontario Corporations Tax Act (collectively the "Tax Acts"). Under the *Electricity Act*, 1998, the Corporation makes payments in lieu of corporate taxes to the Ontario Electricity Financial Corporation ("OEFC"). These payments are calculated in accordance with the rules for computing taxable income and taxable capital and other relevant amounts contained in the Tax Acts 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 comprises the expected tax payable or receivable on the taxable income or loss 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.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
Years ended December 31, 2015 and 2014
(in thousands of dollars)

3. Significant accounting policies (continued)

(n) Income taxes (continued)

Deferred tax is recognized in respect of temporary differences between the tax basis of assets and liabilities and their carrying amounts for accounting purposes. Deferred tax assets are recognized for unused tax losses, unused tax credits and deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be used. Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, using tax rates enacted or substantively enacted, at the reporting date.

Rate regulated accounting requires the recognition of regulatory balances and related deferred tax assets and liabilities for the amount of deferred taxes expected to be refunded to or recovered from customers through future electricity distribution rates. A gross up to reflect the income tax benefits associated with reduced revenues resulting from the realization of deferred tax assets is recorded within regulatory debit balances.

4. Standards issued but not yet adopted

Future accounting changes

The Corporation is still evaluating the adoption of the following new and revised standards along with any subsequent amendments.

Revenue Recognition

In July 2015, the International Accounting Standards Board ("IASB") announced a one-year deferral of the Revenue from Contracts with Customers ("IFRS 15") effective date. IFRS 15 replaces IAS 11 Construction Contracts, IAS 18 Revenue and various interpretations and establishes principles regarding the nature, amount, timing and uncertainty of revenue arising from contracts with customers. The standard requires entities to recognize revenue for the transfer of goods or services to customers measured at the amounts an entity expects to be entitled to in exchange for those goods or services. IFRS 15 is effective for annual periods beginning on or after January 1, 2018. The Corporation is assessing the impact of IFRS 15 on its results of operations, financial position, and disclosures.

Financial Instruments

In July 2014, the IASB issued a new standard, IFRS 9 *Financial Instruments*, which will replace IAS 39 *Financial Instruments: Recognition and Measurement*. The replacement of IAS 39 is a multi-phase project with the objective of improving and simplifying the reporting for financial instruments. IFRS 9 includes revised guidance on the classification and measurement of financial instruments, including a new expected credit loss model for measuring impairment on financial assets, and new general hedge accounting requirements. IFRS 9 is effective for annual periods beginning on or after January 1, 2018 and must be applied retrospectively. The Corporation is assessing the impact of IFRS 9 on its results of operations, financial position, and disclosures.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
Years ended December 31, 2015 and 2014
(in thousands of dollars)

4. Standards issued but not yet adopted (continued)

Property, Plant, and Equipment and Intangible Assets

In May 2014, the IASB issued amendments to IAS 16, *Property, Plant and Equipment* and IAS 38 *Intangible Assets*, which are effective for years beginning on or after January 1, 2016. The amendments clarify when revenue-based depreciation methods are permitted. The Corporation does not anticipate that the application of these amendments to IAS 16 and IAS 38 will have a material impact on the consolidated financial statements.

Leases

In January 2016, IASB issued IFRS 16 to establish principles for the recognition, measurement, presentation, and disclosure of leases, with the objective of ensuring that lessees and lessors provide relevant information that faithfully represents those transactions. IFRS 16 replaces IAS 17 and it is effective for annual periods beginning on or after January 1, 2019. The Corporation is assessing the impact of IFRS 16 on its results of operations, financial positions, and disclosures.

All of the above standards or amendments relate to the measurement and disclosure of financial assets and liabilities. The extent of the impact on adoption of these standards and amendments has not yet been determined.

5. Cash and cash equivalents

	December 31, 2015	December 31, 2014	January 1, 2014
Bank balances	\$ 2,294	\$ 1,589	\$ 6,425
Cash and cash equivalents in the statements of cash flows	\$ 2,294	\$ 1,589	\$ 6,425

6. Accounts receivable

	December 31, 2015	December 31, 2014	January 1, 2014
Trade receivables	\$ 1,917	\$ 2,290	\$ 2,265
Less allowance for doubtful accounts	(125)	(198)	(135)
	\$ 1,792	\$ 2,092	\$ 2,130
Other trade receivables	3	2	7
Billable work	265	261	130
	\$ 2,060	\$ 2,355	\$ 2,267

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
 Years ended December 31, 2015 and 2014
 (in thousands of dollars)

7. Materials and supplies

Amount written down due to obsolescence in 2015 was \$23 (2014 - \$0).

8. Property, plant and equipment

	Land and buildings	Distribution equipment	Other fixed assets	Construction -in-Progress	Total
<i>Cost or deemed cost</i>					
Balance at January 1, 2015	\$ 1,642	\$ 24,009	\$ 2,431	\$ 55	\$ 28,137
Additions	19	2,242	180	118	2,559
Transfers	-	-	55	(55)	-
Disposals/retirements	-	(53)	-	-	(53)
Balance at December 31, 2015	\$ 1,661	\$ 26,198	\$ 2,666	\$ 118	\$ 30,643
<i>Accumulated depreciation</i>					
Balance at January 1, 2015	\$ (72)	\$ (849)	\$ (204)	\$ -	\$ (1,125)
Depreciation	(73)	(913)	(234)	-	(1,220)
Disposals/retirements	-	8	-	-	8
Balance at December 31, 2015	\$ (145)	\$ (1,754)	\$ (438)	\$ -	\$ (2,337)
Net Book Value at December 31, 2015	\$ 1,516	\$ 24,444	\$ 2,228	\$ 118	\$ 28,306
<i>Cost or deemed cost</i>					
Balance at January 1, 2014	\$ 1,609	\$ 22,096	\$ 2,075	\$ 69	\$ 25,849
Additions	33	1,919	292	55	2,299
Transfers	-	-	69	(69)	-
Disposals/retirements	-	(6)	(5)	-	(11)
Balance at December 31, 2014	\$ 1,642	\$ 24,009	\$ 2,431	\$ 55	\$ 28,137
<i>Accumulated depreciation</i>					
Balance at January 1, 2014	\$ -	\$ -	\$ -	\$ -	\$ -
Depreciation	(72)	(849)	(209)	-	(1,130)
Disposals/retirements	-	-	5	-	5
Balance at December 31, 2014	\$ (72)	\$ (849)	\$ (204)	\$ -	\$ (1,125)
Net Book Value at December 31, 2014	\$ 1,570	\$ 23,160	\$ 2,227	\$ 55	\$ 27,012

At December 31, 2015 all Property, plant and equipment are subject to a general security agreement.

PP&E and intangible asset purchase commitments outstanding as at December 31, 2015 was \$246 (2014 - \$0).

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
 Years ended December 31, 2015 and 2014
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9. Intangible assets

	Computer software	Land rights	Total
<i>Cost or deemed cost</i>			
Balance at January 1, 2015	\$ 558	\$ 10	\$ 568
Additions	46	-	46
Balance at December 31, 2015	\$ 604	\$ 10	\$ 614
<i>Accumulated depreciation</i>			
Balance at January 1, 2015	\$ (137)	\$ (1)	\$ (138)
Amortization	(108)	-	(108)
Balance at December 31, 2015	\$ (245)	\$ (1)	\$ (246)
Net Book Value at December 31, 2015	\$ 359	\$ 9	\$ 368
<i>Cost or deemed cost</i>			
Balance at January 1, 2014	\$ 480	\$ 10	\$ 490
Additions	78	-	78
Balance at December 31, 2014	\$ 558	\$ 10	\$ 568
<i>Accumulated amortization</i>			
Balance at January 1, 2014	\$ -	\$ -	\$ -
Amortization	(137)	(1)	(138)
Balance at December 31, 2014	\$ (137)	\$ (1)	\$ (138)
Net Book Value at December 31, 2014	\$ 421	\$ 9	\$ 430

10. Income tax expense

Current tax expense

	2015	2014
Current year	\$ 235	\$ -
Adjustment for prior years	(108)	-
	\$ 127	\$ -

Deferred tax expense

	2015	2014
Change in recognized deductible temporary differences	\$ (279)	\$ 137
Income tax expense	\$ (152)	\$ 137

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

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10. Income tax expense (continued)

Reconciliation of effective tax rate

	2015	2014
Income before taxes	\$ 1,421	\$ 1,086
Canada and Ontario statutory income tax rates	26.5%	26.5%
Expected tax provision on income at statutory rates	377	288
(Decrease) increase in income taxes resulting from:		
Changes and differences in deferred tax rate	(31)	-
Other	(498)	(151)
Income tax (recovery) expense	\$ (152)	\$ 137

Significant components of the Corporation's deferred tax balances

	2015	2014	January 1, 2014
Deferred tax assets:			
Property, plant and equipment	\$ 631	\$ 581	\$ 870
Cumulative eligible capital	345	256	275
Post-employment benefits	571	389	388
	\$ 1,547	\$ 1,226	\$ 1,533

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11. Regulatory balances

Reconciliation of the carrying amount for each class of regulatory balances

Regulatory deferral account debit balances	January 1, 2015	Additions	Recovery/ reversal	December 31, 2015	Remaining recovery/ reversal years
Group 1 deferred accounts	\$ 467	\$ 674	\$ (780)	\$ 361	-
Regulatory transition to IFRS	5	7	-	12	-
Regulatory settlement account	-	440	(214)	226	1.33
Other regulatory accounts	-	36	-	36	-
Income tax	175	-	157	332	-
	\$ 647	\$ 1,157	\$ (837)	\$ 967	

Regulatory deferral account debit balances	January 1, 2014	Additions	Recovery/ reversal	December 31, 2014	Remaining years
Group 1 deferred accounts	\$ 744	\$ (587)	\$ 310	\$ 467	-
Regulatory transition to IFRS	5	-	-	5	-
Regulatory settlement account	304	(304)	-	-	-
Other regulatory accounts	-	-	-	-	-
Income tax	284	-	(109)	175	-
	\$ 1,337	\$ (891)	\$ 201	\$ 647	

Regulatory deferral account credit balances	January 1, 2015	Additions	Recovery/ reversal	December 31, 2015	Remaining years
Group 1 deferred accounts	\$ (478)	\$ (926)	\$ 320	\$ (1,084)	-
Regulatory settlement account	(23)	23	-	-	-
Other regulatory accounts	(334)	-	142	(192)	1.33
Income tax	(1,226)	-	(321)	(1,547)	-
	\$ (2,061)	\$ (903)	\$ 141	\$ (2,823)	

Regulatory deferral account credit balances	January 1, 2014	Additions	Recovery/ reversal	December 31, 2014	Remaining years
Group 1 deferred accounts	\$ (1,036)	\$ 116	\$ 442	\$ (478)	-
Regulatory settlement account	-	(450)	427	(23)	2.33
Other regulatory accounts	(478)	-	144	(334)	2.33
Income tax	(1,533)	-	307	(1,226)	-
	\$ (3,047)	\$ (334)	\$ 1,320	\$ (2,061)	

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11. Regulatory balances (continued)

The regulatory balances are recovered or settled through rates approved by the OEB which are determined using estimates of future consumption of electricity by its customers. Future consumption is impacted by various factors including the economy and weather. The Corporation has received approval from the OEB to establish its regulatory balances.

Settlement of the Group 1 deferral accounts is done on an annual basis through application to the OEB. An application has been made to the OEB to reimburse \$476 of the Group 1 deferral accounts. Approval is pending. Once approval is received, the approved account balance is moved to the regulatory settlement account. Approval has been received from the OEB to recover the regulatory settlement account balance. The balance is to be recovered over a period of 1.33 years. The OEB requires the Corporation to estimate its income taxes when it files a COS application to set its rates. As a result, the Corporation has recognized a regulatory deferral account for the amount of deferred taxes that will ultimately be recovered from/paid back to its customers. This balance will fluctuate as the Corporation's deferred tax balance fluctuates.

Regulatory balances attract interest at OEB prescribed rates, which are based on Bankers' Acceptances three-month rate plus a spread of 25 basis points. In 2015 the rate was 1.1%.

12. Accounts payable and accrued liabilities

	2015	2014	January 1, 2014
Accounts payable – energy purchases	\$ 3,531	\$ 3,840	\$ 4,037
Debt retirement charge payable to OEFC	188	196	220
Payroll payable	218	94	131
Other	1,214	1,330	948
	\$ 5,151	\$ 5,460	\$ 5,336

13. Long-term debt

	2015	2014	January 1, 2014
Notes payable	\$ 13,500	\$ 13,500	\$ 13,500
Loan payable – Toronto-Dominion Bank	-	-	3,700
	13,500	13,500	17,200
Current portion	-	-	3,700
	\$ 13,500	\$ 13,500	\$ 13,500

The notes payable bear interest at 6.25% and are due 12 months after demand to the City of Welland.

The loan with the Toronto-Dominion Bank was paid in full from cash reserves in 2014.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

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14. Post-employment benefits

(a) OMERS pension plan

The Corporation provides a pension plan for its employees through OMERS. The plan is a multi-employer, contributory defined pension plan with equal contributions by the employer and its employees. In 2015, the Corporation made employer contributions of \$335 to OMERS (2014 - \$328), of which \$37 (2014 - \$35) has been capitalized as part of PP&E and the remaining amount of \$298 (2014 - \$293) has been recognized in profit or loss or charged to billable work. The Corporation estimates that a contribution of \$347 to OMERS will be made during the next fiscal year.

As at December 31, 2015, OMERS had approximately 461,000 members, of whom 39 are current employees of the Corporation. The most recently available OMERS annual report is for the year ended December 31, 2015, which reported that the plan was 91.8% funded (2014 - 90.8%), with an unfunded liability of \$7 billion (2014- \$7.1 billion). This unfunded liability is likely to result in future payments by participating employers and members.

(b) Post-employment benefits other than pension

The Corporation pays certain medical and life insurance benefits on behalf of some of its retired employees. The Corporation recognizes these post-employment benefits in the year in which employees' services were rendered. The Corporation is recovering its post-employment benefits in rates based on the expense and re-measurements recognized for post-employment benefit plans.

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14. Post-employment benefits (continued)

(b) Post-employment benefits other than pension (continued)

Reconciliation of the obligation		2015	2014
Defined benefit obligation, beginning of year	\$	1,601	\$ 1,498
Included in profit or loss			
Current service cost		38	33
Interest cost		59	65
		1,698	1,596
Included in OCI			
Actuarial losses arising from:			
changes in demographic & financial assumptions		-	113
Benefits paid		(115)	(108)
Defined benefit obligation, end of year	\$	1,583	\$ 1,601
Actuarial assumptions		2015	2014
General inflation		2.0%	2.0%
Discount (interest) rate		3.8%	3.8%
Salary levels		3.3%	3.3%
Medical Costs		6.7%	7.0%
Dental Costs		4.6%	4.6%

A 1% increase in the assumed inflation rates would result in the defined benefit obligation increasing by \$ 68. A 1% decrease in the assumed discount rate would result in the defined benefits obligation decreasing by \$ 61.

15. Share capital

	December 31, 2015	December 31, 2014	January 1, 2014
Authorized:			
Unlimited number of common shares			
Issued:			
1,000 common shares	\$ 12,953	\$ 12,953	\$ 12,953

Dividends

The holders of the common shares are entitled to receive dividends as declared from time to time.

The Corporation paid aggregate dividends in the year on common shares of \$700 dollars per share (2014 - \$500 dollars per share), which amount to total dividends paid in the year of \$700 (2014 - \$500).

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16. Other revenue

	2015	2014
Generation	\$ 35	\$ 36
Contributions received from customers	10	2
Performance incentive payments under CDM programs	155	12
	\$ 200	\$ 50

17. Employee salaries and benefits

	2015	2014
Salaries, wages and benefits	\$ 3,178	\$ 3,060
CPP and EI remittances	122	122
Contributions to OMERS	279	267
Post-employment benefit plans	84	108
	\$ 3,663	\$ 3,557

18. Operating expenses

	2015	2014
Operations & Maintenance	\$ 1,221	\$ 1,207
Customer Service & Billing	657	725
Administrative, Finance, & IT	775	728
Write down of material and supplies	23	-
	\$ 2,676	\$ 2,660

19. Finance income and costs

	2015	2014
Finance income		
Interest income on bank deposits	\$ 29	\$ 34
Finance costs		
Interest expense on long-term debt	844	853
Interest expense on customer deposits	7	6
Other - Intercompany	16	8
	867	867
Net finance costs recognized in profit or loss	\$ 838	\$ 833

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
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20. Commitments and contingencies

General

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.

Independent Electricity System Operator

As of May 1, 2002 in order for the Company to obtain the electricity it requires to distribute to its customers, the Company was required to provide security to the Independent Electricity System Operator (IESO) based on its usage. The security obtained was a letter of credit from a financial institution, which requires an interest coverage ratio of more than 1.5 and a debt capitalization ratio of less than 0.6. The letter is in the amount of \$2,539 and incurs interest at 0.6% annually.

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 LDCs 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, 2015, no assessments have been made.

21. Operating Leases

The Corporation is committed to lease agreements for various vehicles and equipment.

The future minimum non-cancellable annual lease payments are as follows:

	December 31, 2015	December 31, 2014	January 1, 2014
Less than one year	\$ 2	\$ -	\$ -
Between one and five years	3	13	13
More than five years	-	-	-
	<u>\$ 5</u>	<u>\$ 13</u>	<u>\$ 13</u>

During the year ended December 31, 2015 an expense of \$12 (2014 - \$13) was recognized in net income in respect of operating leases.

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22. Related party transactions

(a) Parent and ultimate controlling party

The sole shareholder of the Corporation is Welland Hydro-Electric Holding Corp., which in turn is wholly-owned by the City of Welland. The City produces consolidated financial statements that are available for public use.

(b) Outstanding balances with related parties

	December 31, 2015	December 31, 2014	January 1, 2014
Welland Hydro-Electric Holding Corp.	\$ 3	\$ 11	\$ 5
Welland Hydro Energy Services	(2)	1	4
City of Welland	105	106	82
	\$ 106	\$ 118	\$ 91

(c) Transactions with parent (Welland Hydro-Electric Holding Corp.) and affiliates

The following amounts were invoiced to parent and affiliates in the normal course of operations:

	2015	2014
Welland Hydro-Electric Holding Corp. Management fees and employee services	\$25	\$22
Welland Hydro Energy Services Corp. Management fees	3	2
Streetlight/sentinel maintenance and administration	95	99
	\$123	\$123

The following expenses were incurred with parent and affiliates in the normal course of operations:

	2015	2014
Welland Hydro-Electric Holding Corp. Management fees	\$205	\$ 199
Interest	16	8
	\$221	\$207

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Notes to Financial Statements
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22. Related party transactions (continued)

(d) Transactions with ultimate parent (the City of Welland)

The Corporation delivers electricity to the City/Town throughout the year for the electricity needs of the City/Town and its related organizations. Electricity delivery charges are at prices and under terms approved by the OEB. The Corporation also provides additional services to the City/Town, including streetlight maintenance services and sentinel lights.

The following amounts were invoiced to the City of Welland in the normal course of operations:

	2015	2014
Energy (at commercial rates)	\$1,504	\$1,439
Rent	24	23
	<u>\$1,528</u>	<u>\$1,462</u>

The following expenses were incurred with the City of Welland in the regular course of operations:

	2015	2014
Property taxes and other taxes	\$69	\$68
Leases and miscellaneous	9	8
Water	4	4
Interest	844	844
	<u>\$926</u>	<u>\$924</u>

23. 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. The compensation paid or payable is as follows:

	2015	2014
Directors' fees	\$ 62	\$ 47
Salaries and other short-term benefits	732	699
	<u>\$ 794</u>	<u>\$ 746</u>

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24. Financial instruments and risk management

Fair value disclosure

The carrying values of cash and cash equivalents, accounts receivable, unbilled revenue, due from/to related parties and accounts payable and accrued liabilities 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 Company has a Long-Term Promissory Note Payable with the City of Welland ("the City) in the amount of \$13.5 million. The restated Promissory Note was issued to the City on October 19, 2005 with interest at 6.25% effective May 1, 2006. There is no "term length" associated with the Promissory Note but the City can demand payment twelve months after notice has been provided. A comparison with market prices for similar debt instruments indicates no material difference between market and carrying values.

Financial risks

The Corporation understands the risks inherent in its business and defines them broadly as anything that could impact its ability to achieve its strategic objectives. The Corporation's exposure to a variety of risks such as credit risk, interest rate risk, and liquidity risk, as well as related mitigation strategies are discussed below.

(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 of Welland. No single customer accounts for a balance in excess of 6.9% of total accounts receivable.

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 profit or loss. Subsequent recoveries of receivables previously provisioned are credited to profit or loss. The balance of the allowance for impairment at December 31, 2015 is \$125 (2014 - \$198). An impairment loss of \$62 (2014 - \$151) was recognized during the year.

The Corporation's credit risk associated with accounts receivable is primarily related to payments from distribution customers. At December 31, 2015, approximately \$125 (2014 - \$153) is considered 60 days past due. The Corporation has over twenty two 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 and through credit insurance. As at December 31, 2015, the Corporation holds security deposits in the amount of \$846 (2014 - \$653) for electrical accounts.

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24. Financial instruments and risk management (continued)

(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. Current deemed interest rates used by the OEB to set distribution rates approximate those included in The Corporation's current distribution rates and would not have a material impact when rates are rebased.

(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 \$2.0 million credit facility and monitors cash balances daily to ensure that a sufficient level of liquidity is on hand to meet financial commitments as they become due. As at December 31, 2015, no amounts had been drawn under the Corporation's \$2.0 million credit facility.

The majority of accounts payable, as reported on the statement of financial position, are due within 15 to 30 days.

(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, 2015, shareholder's equity amounts to \$16,059 (2014 - \$15,584) and long-term debt amounts to \$13,500 (2014 - \$13,500).

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25. Explanation of transition to IFRS

As stated in note 2(b), these are the Corporation's first financial statements prepared in accordance with IFRS.

The accounting policies set out in note 3 have been applied in preparing the financial statements for the year ended December 31, 2015, the comparative information presented in these financial statements for the year ended December 31, 2014, and in the preparation of the opening IFRS Statement of Financial Position as at January 1, 2014 (the Corporation's date of transition).

In preparing its opening IFRS Statement of Financial Position, the Corporation has adjusted the amounts reported previously in the financial statements prepared in accordance with Canadian general accepted accounting principles (CGAAP). An explanation of how the transition from CGAAP to IFRS has affected the Corporation's financial position, financial performance and cash flows is set out in the following tables and the notes accompanying the tables.

Regulatory accounts

IFRS14: *Regulatory Deferral Accounts*, permits an entity to continue to account for regulatory deferral account balances in its financial statements in accordance with its previous GAAP when it adopts IFRS. An entity is permitted to apply the requirements of this standard in its first IFRS financial statements if and only if it conducts rate-regulated activities and recognized amounts that qualify as regulatory deferral account balances in its financial statements in accordance with its previous GAAP. This standard exempts an entity from applying paragraph 11 of IAS8: *Accounting policies, changes in accounting estimates and errors*, to its accounting policies for the recognition, measurement, and impairment and derecognition of regulatory deferral account balances.

IFRS 14 is effective from periods beginning on or after January 1, 2016, however, early application is permitted. The Corporation has elected to apply this Standard in its first IFRS financial statements.

Mandatory Exception

IFRS 1 states that estimates made in accordance with IFRS at the date of transition should be consistent with estimates made under previous GAAP. Accordingly, estimates previously made under CGAAP were not revised at the date of transition except where necessary to reflect changes in accounting policies.

IFRS 1 Exemptions

IFRS 1 *First-time adoption of International Financial Reporting Standards* sets out the procedures that the Corporation must follow when it adopts IFRS for the first time as the basis for preparing its financial statements. The Corporation is required to establish its IFRS accounting policies as at December 31, 2015 and, in general, apply these retrospectively to determine the IFRS opening statement of financial position as its date of transition, January 1, 2014. This standard provides a number of mandatory and optional exemptions to this general principle. These are set out below, together with a description in each case of the exemption adopted by the Corporation.

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25. Explanation of transition to IFRS (continued)

(a) Transfer of assets from customers

IFRS 1 provides an optional exemption for a first-time adopter to apply IFRIC 18 prospectively to transfers of assets from customers received on or after the date of transition. The Corporation has elected to apply the transitional provisions in IFRIC 18 Transfers of Assets from Customers. This provision states that the effective date of this standard should be July 1, 2009 or the date of transition to IFRS whichever is the later.

(b) Deemed cost

IFRS 1 provides an optional exemption for a first-time adopter with rate-regulated activities to use the carrying amount of PP&E and intangible assets as deemed cost on transition date when the carrying amount includes costs that do not qualify for capitalization in accordance with IFRS. The Corporation elected this exemption and used the carrying amount of the PP&E and intangible assets under CGAPP as deemed cost on transition date. The carrying amount used as deemed cost is \$25,849 for PP&E and \$490 for intangible assets.

If an entity applies this exemption, at the date of transition to IFRS, it shall test for impairment each item for which this exemption is used. The assets were tested for impairment at the date of transition and it was determined that the assets were not impaired.

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25. Explanation of transition to IFRS (continued)

Reconciliation of statement of financial position and statement of changes in equity

January 1, 2014	Note	CGAAP	Presentation differences	Measurement & recognition differences	IFRS
Cash and cash equivalents		6,425	-	-	6,425
Accounts receivable		2,267	-	-	2,267
Unbilled revenue		5,222	-	-	5,222
Materials and supplies		288	-	-	288
Prepaid expenses		66	-	-	66
Due from related parties		91	-	-	91
Property, plant and equipment	b	26,339	(490)	-	25,849
Intangible assets	b	-	490	-	490
Deferred tax assets	f	1,817	-	(284)	1,533
Total assets		42,515	-	(284)	42,231
Regulatory balances	f	-	1,053	284	1,337
Total assets and regulatory balances		42,515	1,053	-	43,568
Accounts payable and accrued liabilities		5,336	-	-	5,336
Customer deposits		962	-	-	962
Other liabilities		468	-	-	468
Long-term debt due within a year		3,700	-	-	3,700
Long-term debt		13,500	-	-	13,500
Post-employment benefits	e	1,602	-	(104)	1,498
Regulated settlement variances	f	1,994	(1,994)	-	-
Total liabilities		27,562	(1,994)	(104)	25,464
Share capital		12,953	-	-	12,953
Retained earnings	e	2,000	-	104	2,104
Accumulated OCI		-	-	-	-
Total liabilities and equity		40,521	-	-	40,521
Regulatory balances	f	-	3,047	-	3,047
Total liabilities, equity and regulatory balances		42,515	1,053	-	43,568

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25. Explanation of transition to IFRS (continued)

Reconciliation of statement of financial position and statement of changes in equity

December 31, 2014	Note	CGAAP	Presentation differences	Measurement & recognition differences	IFRS
Cash and cash equivalents		1,589	-	-	1,589
Accounts receivable		2,355	-	-	2,355
Unbilled revenue		5,673	-	-	5,673
Material and supplies		325	-	-	325
Prepaid expenses		214	-	-	214
Due from related parties		118	-	-	118
Property, plant and equipment	a, c	27,266	(430)	176	27,012
Intangible assets	a	-	430	-	430
Deferred tax assets	f	1,400	-	(174)	1,226
Total assets		38,940	-	2	38,942
Regulatory balances		-	473	174	647
Total assets and regulatory balances		38,940	473	176	39,589
Accounts payable and accrued liabilities		5,460	-	-	5,460
Customer deposits		1,093	-	-	1,093
Other liabilities		202	-	-	202
Long-term debt		13,500	-	-	13,500
Post-employment benefits	e	1,604	-	(3)	1,601
Deferred revenue	c	-	-	88	88
Regulated settlement variances	f	1,500	(1,500)	-	-
Total liabilities		23,359	(1,500)	85	21,944
Share capital		12,953	-	-	12,953
Retained earnings	e	2,628	-	116	2,744
Accumulated OCI (loss)	e	-	-	(113)	(113)
Total liabilities and equity		37,440	-	88	37,528
Regulatory balances	f	-	1,973	88	2,061
Total liabilities, equity and regulatory balances		38,940	473	176	39,589

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25. Explanation of transition to IFRS (continued)

Reconciliation of net income and comprehensive income for 2014

	Note	CGAAP	Presentation differences	Measurement & recognition differences	IFRS
Revenue					
Sale of energy	f	43,112	-	221	43,333
Distribution revenue	a, f	8,852	609	(140)	9,321
Other	a, c	661	(609)	(2)	50
Operating expenses					
Cost of power purchased	f	43,112	-	188	43,300
Employee salaries and benefits	e	3,569	-	(12)	3,557
Operating expenses		2,660	-	-	2,660
Depreciation and amortization	c	1,266	-	2	1,268
Finance income		48	-	(14)	34
Finance costs	f	893	-	(26)	867
Income tax expense	f	45	-	92	137
Net income for the year		1,128	-	(179)	949
Net movement in regulatory balances, net of tax	f	-	-	191	191
Net income and net movement in regulatory balances		1,128	-	12	1,140
Other comprehensive income (loss)					
Re-measurement of post- employment benefits	e	-	-	(113)	(113)
Total comprehensive income for the year		1,128	-	(101)	1,027

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25. Explanation of transition to IFRS (continued)

Notes to the reconciliations

- a. The Corporation has elected under IFRS 1 to use the carrying value of items of PP&E and intangible assets as the deemed cost at the date of transition. Therefore, there has been no change to the net PP&E and intangible assets at January 1, 2014. The effect of this transitional adjustment is a decrease to the original cost and accumulated depreciation of the affected PP&E and intangible assets by \$27,157 and \$389 respectively, the CGAAP accumulated depreciation amount, on January 1, 2014.

The Corporation also reclassified computer software and land rights from PP&E to intangible assets to comply with IFRS.

- b. IFRS requires that borrowing costs related to the construction of the qualifying assets be capitalized. The Corporation has applied IAS 23 to all qualifying assets that were in progress or commenced since January 1, 2014. No qualifying assets were identified and therefore no borrowing costs were capitalized for the year ended December 31, 2014.
- c. Under CGAAP, customer contributions were netted against the cost of PP&E and amortized to profit or loss as an offset to depreciation expense, on the same basis as the related assets. Under IFRS, customer contributions are recognized as deferred revenue, not netted against PP&E, and amortized into profit or loss over the life of the related asset.

The effect of the above is to increase deferred revenue by \$88 at December 31, 2014; to increase PP&E by \$88 at December 31, 2014 and to increase other revenue and depreciation expense by \$2 for the year ended December 31, 2014.

- d. Under CGAAP for rate regulated entities, the Corporation removed assets from the accounts at the end of their estimated useful lives. IFRS requires assets to be removed from the accounts when they have been removed from service.

There were no effects to PP&E or loss on retirement of PP&E for the year ended December 31, 2014.

- e. The Corporation adopted the IFRS Employee Benefits standard effective January 1, 2014. This revised standard requires recognition of actuarial gains and losses through other comprehensive income. This decreased post-employment benefits and increased retained earnings by \$104 at January 1, 2014 and, decreased operating expenses by \$12 and decreased post-employment benefits by \$3 at December 31, 2014.
- f. IFRS 14 permits a rate regulated entity to continue to apply its previous CGAAP accounting policies for the recognition, measurement, impairment and derecognition of regulatory balances. However, all regulatory balances and related deferred tax amounts are reclassified to a new and separate section of the consolidated statement of financial position. As well, the net income effect of all changes in regulatory balances must be segregated in a new separate section of the consolidated statement of comprehensive income. Amounts that are permitted or required to be recognized under another IFRS are excluded from the regulatory balances.

WELLAND HYDRO-ELECTRIC SYSTEM CORP.

Notes to Financial Statements
Years ended December 31, 2015 and 2014
(in thousands of dollars)

25. Explanation of transition to IFRS (continued)

The effect of the reclassification would enhance comparability of IFRS 14 compliant financial statements with those entities not applying IFRS 14. IFRS 14 also requires disclosure regarding the movements in the period, risks, and expected period of recover/amortization of individual regulatory balances.

For the Corporation, the impact of IFRS 14 at January 1, 2014 was to transfer deferred tax asset and liabilities on regulatory balances to regulatory balances, and to transfer all other regulatory debit and credit balances to separate lines below what was formerly known as total assets and total liabilities and equity, respectively. The impact of this change as at January 1, 2014 was to reduce regulated settlement variances by \$1,994, deferred tax assets by \$284 and increase regulatory debit balances by \$1,337 and regulatory credit balances by \$3,047.

As at December 31, 2014, the impact was to reduce regulated settlement variances by \$1,500, deferred tax assets by \$174 and increase regulatory debit balances by \$647 and regulatory credit balances by \$2,061. For the year ended December 31, 2014, the impact was to increase sale of energy by \$221, cost of power purchased by \$188, income tax expense of \$92, net movement in regulatory balances of \$191 and to decrease distribution revenue by \$140 and finance costs by \$26.

Explanation of material adjustments to the statement of cash flows for 2014

There are no material differences between the statement of cash flows presented under IFRS and the statement of cash flows presented under CGAAP.

Appendix 1-J
Reconciliation Financial Statements
2014 OEB versus 2014 CGAAP

Welland Hydro-Electric System Corp.
2014 BALANCE SHEET RECONCILIATION OEB VERSUS FINANCIAL STATEMENTS

Account Description	OEB Yearbook	Adjustments	CGAAP
Current Assets			
1005-Cash	935,878		935,878
1040-Other Special Deposits	653,152		653,152
Cash & cash equivalents	1,589,030	0	1,589,031
1100-Customer Accounts Receivable	2,289,870		2,289,870
1104-Accounts Receivable - Recoverable Work	256,728		256,728
1120-Accrued Utility Revenues	5,673,133		5,673,133
1130-Accumulated Provision for Uncollectable Accounts - Credit	(193,631)		(193,631)
1140-Interest and Dividends Receivable	2,124		2,124
Receivables & Unbilled Revenues	8,028,224	0	8,028,223
1330-Plant Materials and Operating Supplies	424,606	(100,000)	324,606
Inventory Total	424,606	(100,000)	324,606
1200-Accounts Receivable from Associated Companies IFRS	118,139	(118,139)	0
1210-Notes Receivable from Associated Companies IFRS	1	(1)	0
Inter-Company Receivables	118,140	(118,140)	0
1180-Prepayments	214,434		214,433
2290-Commodity Taxes	43,575	(43,575)	0
Other Current Assets	258,009	(43,575)	214,433
Total Current Assets	10,418,009	(261,715)	10,156,293
1200-Accounts Receivable from Associated Companies CGAAP Only	0	118,139	118,139
1210-Notes Receivable from Associated Companies CGAAP Only	0	1	1
Inter-Company Receivables	0	118,139	118,139
1805-Land	158,686		158,686
1806-Land Rights	70,296		70,296
1808-Buildings and Fixtures	96,568		96,568
1815-Transformer Station Equipment - Normally Primary above 50 kV	467,359		467,359
1820-Distribution Station Equipment - Normally Primary below 50 kV	4,026,865		4,026,865
1830-Poles, Towers and Fixtures	8,961,863		8,961,863
1835-Overhead Conductors and Devices	13,126,085		13,126,085
1840-Underground Conduit	1,142,895		1,142,895
1845-Underground Conductors and Devices	12,819,448		12,819,448
1850-Line Transformers	7,349,654		7,349,654
1855-Services	808,916		808,916
1860-Meters	3,067,502		3,067,502
1908-Buildings and Fixtures	2,536,687		2,536,687
1915-Office Furniture and Equipment	90,446		90,446
1920-Computer Equipment - Hardware	184,428		184,428
1925-Computer Software	887,329		887,329
1930-Transportation Equipment	1,672,983		1,672,983
1935-Stores Equipment	30,023		30,023
1940-Tools, Shop and Garage Equipment	83,043		83,043
1945-Measurement and Testing Equipment	20,450		20,450
1955-Communication Equipment	298,231		298,231
1960-Miscellaneous Equipment	315,235		315,235
1980-System Supervisory Equipment	687,996		687,996
1995-Contributions and Grants - Credit	(3,366,847)		(3,366,847)
2055-Construction Work in Progress--Electric	55,500		55,500
2075-Non-Utility Property Owned - Generation Facilities	247,506		247,506
Capital Assets in Inventory for CGAAP		100,000	100,000
Property Plant & Equipment	55,839,149	100,000	55,939,149
2105-Accumulated Amortization of Electric Utility Plant - Property, Plant and Equipment	(28,641,824)		(28,641,824)
2120-Accumulated Amortization of Electric Utility Plant - Intangibles	0		0
2180-Accumulated Depreciation of Non-Utility Property - Generation	(30,985)		(30,985)
Accumulated Depreciation	(28,672,809)	0	(28,672,809)
Net Fixed Assets	27,166,339	100,000	27,266,339
1508-Other Regulatory Assets	4,408		4,408
1531-Renewable Connection Capital Deferral Account	88,852		88,852
1532-Renewable Connection OM&A Deferral Account	0		0
1551-Smart Meter Enity Charge Variance Account	8,716		8,716
1575-IFRS-CGAAP Transitional PP&E Amounts	0		0
1586-RSVA - Connection Charges	41,104		41,104
1589-RSVA - Commodity (GA)	412,219		412,219

Account Description	OEB Yearbook	Adjustments	CGAAP
Regulatory Assets Netted Against Regulatory Liabilities for CGAAP		(555,299)	(555,299)
Regulatory Assets	555,299	(555,299)	0
1460-Other Non-Current Assets	1,400,285		1,400,285
1495-Deferred Taxes - Non-Current Assets	0		0
Other Non Current Assets	1,400,285	0	1,400,285
Total Assets	39,539,932	(598,875)	38,941,056
Current Liabilities			
2205-Accounts Payable	786,464		786,464
2208-Customer Credit Balances	172,029		172,029
2210-Customer Deposits	672,959		672,959
2220-Miscellaneous Current and Accrued Liabilities	4,753,000		4,753,000
2250-Debt Retirement Charges (DRC) Payable	0		0
2260-Current Long Term Debt	0		0
2290-Commodity Taxes for CGAAP	0	(43,576)	(43,576)
2294-Accrual for Taxes, "Payments in Lieu" of Taxes, Etc.	(100,000)		(100,000)
Accounts payable & accrued charges	6,284,452	(43,576)	6,240,876
2264-Pensions and Employee Benefits - Current Portion	107,881		107,881
2292-Payroll Deductions / Expenses Payable	94,401		94,401
Other Current Liabilities	202,282	0	202,282
Current Liabilities	6,486,734	(43,576)	6,443,156
2550-Advances from Associated Companies	13,499,953		13,499,953
Inter-company long-term debt & advances	13,499,953	0	13,499,953
1576-Accounting Changes under CGAAP	334,556		334,556
1580-RSVA - Wholesale Market Services	300,034		300,034
1584-RSVA - Network Charges	169,398		169,398
1588-RSVA - Commodity (Power)	2,512		2,512
1595-Disposition and Recovery of Regulatory Balances	22,935		22,935
Regulatory Assets Netted Against Regulatory Liabilities for CGAAP	0	(555,299)	(555,299)
2320-Other Miscellaneous Non-Current Liabilities for CGAAP	0	1,225,749	1,225,749
Regulatory liabilities	829,435	670,450	1,499,886
2320-Other Miscellaneous Non-Current Liabilities	1,225,749	(1,225,749)	0
2335-Customer Deposits	420,055		420,055
Other deferred amounts & customer deposits	1,645,804	(1,225,749)	420,055
2306-OPEB Liability	1,496,483		1,496,483
Employee future benefits	1,496,483	0	1,496,483
Total Liabilities	23,958,409	(598,875)	23,359,533
3005-Common Shares Issued	12,953,180		12,953,180
3010-Contributed Surplus	7,554,380		7,554,380
3030-Miscellaneous Paid-In Capital	630,158		630,158
3046-Balance Transferred From Income	1,128,508		1,128,508
3049-Dividends Payable-Common Shares	(6,752,500)		(6,752,500)
3055-Adjustment to Retained Earnings	67,797		67,797
3090-Accumulated Other Comprehensive Income	0		0
Shareholders' Equity	15,581,523	0	15,581,523
Total Liabilities & Shareholder's Equity	39,539,932	(598,875)	38,941,056
Balance Sheet Total	(0)	0	(0)

Welland Hydro-Electric System Corp.

2014 STATEMENT OF INCOME AND RETAINED EARNINGS OEB VERSUS FINANCIAL STATEMENTS

Account Description	OEB Yearbook	Adjustments	CGAAP
4006-Residential Energy Sales	14,847,472		14,847,472
4010-Commercial Energy Sales	0		0
4015-Industrial Energy Sales	0		0
4020-Energy Sales to Large Users	1,568,508		1,568,508
4025-Street Lighting Energy Sales	237,222		237,222
4030-Sentinel Energy Sales	72,915		72,915
4035-General Energy Sales	17,988,037		17,988,037
4050-Revenue Adjustment	(508,523)		(508,523)
4055-Energy Sales for Retailers/Others	1,454,820		1,454,820
4062-Billed - WMS	2,174,837		2,174,837
4076-Billed - Smart Meter Entity Charges	207,091		207,091
4066-Billed - NW	2,890,346		2,890,346
4068-Billed - CN	2,178,821		2,178,821
4075-Billed - LV Charges	0		0
Sales of Electricity	43,111,546	0	43,111,544
4080-Distribution Services Revenue	8,765,904		8,765,904
4086-SSS Revenue	67,604		67,604
4082-Retail Services Revenues	18,745		18,745
4084-Service Transaction Requests (STR) Revenues	479		479
Distribution Revenues	8,852,732	0	8,852,733
4210-Rent from Electric Property	153,852		153,852
4225-Late Payment Charges	74,709		74,709
4235-Miscellaneous Service Revenues	191,765		191,765
Other Operating Revenue	420,326	0	420,326
Adjust Other Operating Revenue CGAAP	0	(420,326)	(420,326)
Power and Distribution Revenue	52,384,604	(420,326)	51,964,277
4705-Power Purchased	26,530,712		26,530,712
4707-Charge - Global Adjustment	9,129,739		9,129,739
4708-WMS	2,174,837		2,174,837
4714-NW	2,890,346		2,890,346
4716-CN	2,178,821		2,178,821
4751-Smart Meter Entity Charges	207,091		207,091
4730-Rural Rate Assistance Expense	0		0
4750-LV Charges	0		0
Power Supply Expenses Total	43,111,546	0	43,111,546
Revenues from Service - Distribution	9,273,057	(420,326)	8,852,731
4305-Regulatory Debits	0		0
4310-Regulatory Credits	143,387		143,387
4355-Gain on Disposition of Utility and Other Property	16,672		16,672
4375-Revenues from Non-Utility Operations	49,517		49,517
4380-Expenses of Non-Utility Operations	(13,813)	12,373	(1,440)
4390-Miscellaneous Non-Operating Income	31,256		31,256
Miscellaneous Revenue	227,019	12,373	239,392
4405-Interest and Dividend Income	48,265		48,265
Interest Income	48,265	0	48,265
Adjust Other Operating Revenue CGAAP		420,326	420,326
Other Income	275,284	432,699	707,983
Expenses			
5005-Operation Supervision and Engineering	220,946		220,946
5010-Load Dispatching	133,449		133,449
5012-Station Buildings and Fixtures Expense	18,412		18,412
5016-Distribution Station Equipment - Operation Labour	24,278		24,278
5017-Distribution Station Equipment - Operation Supplies and Expenses	133,332		133,332
5020-Overhead Distribution Lines and Feeders - Operation Labour	154,742		154,742
5025-Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	59,067		59,067
5030-Overhead Subtransmission Feeders - Operation	0		0
5035-Overhead Distribution Transformers - Operation	2,685		2,685
5040-Underground Distribution Lines and Feeders - Operation Labour	175,201		175,201
5045-Underground Distribution Lines and Feeders - Operation Supplies and Expenses	38		38
5050-Underground Subtransmission Feeders - Operation	0		0
5055-Underground Distribution Transformers - Operation	1,094		1,094
5065-Meter Expense	203,475		203,475
5070-Customer Premises - Operation Labour	0		0
5085-Miscellaneous Distribution Expense	125,855		125,855

Account Description	OEB Yearbook	Adjustments	CGAAP
5095-Overhead Distribution Lines and Feeders - Rental Paid	22,713		22,713
Distribution Expenses - Operation	1,275,288	0	1,275,288
5105-Maintenance Supervision and Engineering	79,354		79,354
5110-Maintenance of Buildings and Fixtures - Distribution Stations	14,174		14,174
5114-Maintenance of Distribution Station Equipment	58,429		58,429
5120-Maintenance of Poles, Towers and Fixtures	155,925		155,925
5125-Maintenance of Overhead Conductors and Devices	456,724		456,724
5130-Maintenance of Overhead Services	315,857		315,857
5135-Overhead Distribution Lines and Feeders - Right of Way	235,971		235,971
5145-Maintenance of Underground Conduit	1,418		1,418
5150-Maintenance of Underground Conductors and Devices	105,330		105,330
5155-Maintenance of Underground Services	92,106		92,106
5160-Maintenance of Line Transformers	54,888		54,888
5175-Maintenance of Meters	81,261		81,261
Maintenance	1,651,436	0	1,651,436
5305-Supervision	0		0
5310-Meter Reading Expense	29,488		29,488
5315-Customer Billing	841,418		841,418
5320-Collecting	537,213		537,213
5325-Collecting - Cash Over and Short	42		42
5330-Collection Charges	0		0
5335-Bad Debt Expense	150,594		150,594
5340-Miscellaneous Customer Accounts Expenses	32,671		32,671
Billing and Collecting	1,591,426	0	1,591,427
5405-Supervision	17,180		17,180
5410-Community Relations - Sundry	11,220		11,220
5415-Energy Conservation	52,387		52,387
5420-Community Safety Program	3,453		3,453
5515-Advertising Expense	5,223		5,223
Community Relations	89,463	0	89,463
5605-Executive Salaries and Expenses	389,610		389,610
5610-Management Salaries and Expenses	454,931		454,931
5615-General Administrative Salaries and Expenses	315,202		315,202
5625-Administrative Expense Transferred-Credit	0		0
5630-Outside Services Employed	150,436		150,436
5645-Post Retirement Benefits	107,722		107,722
5655-Regulatory Expenses	60,918		60,918
5665-Miscellaneous Expenses	109,831		109,831
5680-Electrical Safety Authority Fees	10,479		10,479
Administrative	1,599,129	0	1,599,129
6205-Donations - LEAP	11,250		11,250
6205-Donations	10,600		10,600
Donations	21,850	0	21,850
Administrative & General	3,301,869	0	3,301,869
5705-Amortization Expense - Property, Plant and Equipment	1,253,314		1,253,314
5715-Amortization of Intangibles and Other Electric Plant	0		0
Amortization Expense Non Utility Assets CGAAP		12,373	12,373
Amortization Expense	1,253,314	12,373	1,265,687
6005-Interest on Long Term Debt	8,849		8,849
6030-Interest on Debt to Associated Companies	852,316		852,316
6035-Other Interest Expense	32,099		32,099
Financing	893,264	0	893,264
Total Expenses	8,375,170	12,373	8,387,544
Net Income Before Taxes	1,173,171	0	1,173,170
Piils and Income Taxes			
6105-Taxes Other Than Income Taxes	0		0
6110-Income Taxes	0		0
6115-Provision for Deferred Taxes - Income Statement	44,663		44,663
Income Taxes	44,663	0	44,663
Net Income (Loss)	1,128,508	0	1,128,507
Other Comprehensive Income			0
Other Comprehensive Loss			0
Other Comprehensive Income (Loss)	0	0	0
Comprehensive Income (Loss)	1,128,508	0	1,128,507

Appendix 1-K
Reconciliation Financial Statements
2014 CGAAP versus 2014 IFRS

Welland Hydro-Electric System Corp.
2014 BALANCE SHEET RECONCILIATION CGAAP VERSUS IFRS

Account Description	CGAAP	IFRS Post Emp	Pole Line Generation	IFRS Adjustments	IFRS
Current Assets					
1005-Cash	935,878				935,878
1040-Other Special Deposits	653,152				653,152
Cash & cash equivalents	1,589,031	0	0	0	1,589,031
1100-Customer Accounts Receivable	2,289,870				2,289,870
1104-Accounts Receivable - Recoverable Work	256,728				256,728
1120-Accrued Utility Revenues	5,673,133				5,673,133
1130-Accumulated Provision for Uncollectable Accounts - Credit	(193,631)				(193,631)
1140-Interest and Dividends Receivable	2,124				2,124
Receivables & Unbilled Revenues	8,028,223	0	0	0	8,028,223
1330-Plant Materials and Operating Supplies	324,606				324,606
Inventory Total	324,606	0	0	0	324,606
1200-Accounts Receivable from Associated Companies IFRS	0			118,139	118,139
1210-Notes Receivable from Associated Companies IFRS	0			1	1
Inter-Company Receivables	0	0	0	118,140	118,140
1180-Prepayments	214,433				214,433
2290-Commodity Taxes	0				0
Other Current Assets	214,433	0	0	0	214,433
Total Current Assets	10,156,293	0	0	118,140	10,274,433
1200-Accounts Receivable from Associated Companies CGAAP Only	118,139			(118,139)	0
1210-Notes Receivable from Associated Companies CGAAP Only	1			(1)	0
Inter-Company Receivables	118,139	0	0	(118,140)	0
1805-Land	158,686				158,686
1806-Land Rights	70,296			(70,296)	0
1808-Buildings and Fixtures	96,568			(61,228)	35,340
1815-Transformer Station Equipment - Normally Primary above 50 kV	467,359			(52,704)	414,655
1820-Distribution Station Equipment - Normally Primary below 50 kV	4,026,865			(2,431,768)	1,595,097
1830-Poles, Towers and Fixtures	8,961,863			(1,580,538)	7,381,325
1835-Overhead Conductors and Devices	13,126,085			(8,428,520)	4,697,565
1840-Underground Conduit	1,142,895			(148,489)	994,406
1845-Underground Conductors and Devices	12,819,448			(9,435,017)	3,384,431
1850-Line Transformers	7,349,654			(4,079,091)	3,270,563
1855-Services	808,916			(138,213)	670,703
1860-Meters	3,067,502			(804,255)	2,263,247
1908-Buildings and Fixtures	2,536,687			(1,088,695)	1,447,992
1915-Office Furniture and Equipment	90,446			(55,242)	35,204
1920-Computer Equipment - Hardware	184,428			(31,705)	152,723
1925-Computer Software	887,329			(887,329)	0
1930-Transportation Equipment	1,672,983			(1,062,766)	610,217
1935-Stores Equipment	30,023			(28,609)	1,414
1940-Tools, Shop and Garage Equipment	83,043			(57,876)	25,167
1945-Measurement and Testing Equipment	20,450			(14,130)	6,320
1955-Communication Equipment	298,231			(109,242)	188,989
1960-Miscellaneous Equipment	315,235			(92,679)	222,556
1980-System Supervisory Equipment	687,996			(491,482)	196,514
1995-Contributions and Grants - Credit	(3,366,847)		88,852	3,277,995	0
2055-Construction Work in Progress--Electric	55,500				55,500
2075-Non-Utility Property Owned - Generation Facilities	247,506			(18,612)	228,894
Capital Assets in Inventory for CGAAP	100,000				100,000
Property Plant & Equipment	55,939,149	0	88,852	(27,890,491)	28,137,510
2105-Accumulated Amortization of Electric Utility Plant - Property, Plant and Equipment	(28,641,824)			27,528,570	(1,113,254)
2120-Accumulated Amortization of Electric Utility Plant - Intangibles	0				0
2180-Accumulated Depreciation of Non-Utility Property - Generation	(30,985)			18,612	(12,373)
Accumulated Depreciation	(28,672,809)	0	0	27,547,182	(1,125,627)
Property Plant & Equipment Net	27,266,339	0	88,852	(343,309)	27,011,882
1806-Land Rights	0			10,025	10,025
1925-Computer Software	0			558,184	558,184
2120-Accumulated Amortization of Electric Utility Plant - Intangibles	0			(137,927)	(137,927)
Intangible Assets Net	0	0	0	430,282	430,282
1508-Other Regulatory Assets	4,408				4,408
1531-Renewable Connection Capital Deferral Account	88,852		(88,852)		0
1532-Renewable Connection OM&A Deferral Account	0		(887)	887	0
1551-Smart Meter Enity Charge Variance Account	8,716				8,716
1575-IFRS-CGAAP Transitional PP&E Amounts	0				0
1586-RSVA - Connection Charges	41,104				41,104
1589-RSVA - Commodity (GA)	412,219				412,219
Regulatory Assets Adjustment IFRS	0			180,445	180,445

Account Description	CGAAP	IFRS Post Emp	Pole Line Generation	IFRS Adjustments	IFRS
Regulatory Assets Netted Against Regulatory Liabilities for CGAAP	(555,299)			555,299	0
Regulatory Assets	0	0	(89,739)	736,631	646,892
1460-Other Non-Current Assets	1,400,285			(174,537)	1,225,748
1495-Deferred Taxes - Non-Current Assets	0				0
Other Non Current Assets	1,400,285	0	0	(174,537)	1,225,748
Total Assets	38,941,056	0	(887)	649,067	39,589,237
Current Liabilities					
2205-Accounts Payable	786,464				786,464
2208-Customer Credit Balances	172,029				172,029
2210-Customer Deposits	672,959			420,055	1,093,014
2220-Miscellaneous Current and Accrued Liabilities	4,753,000				4,753,000
2250-Debt Retirement Charges (DRC) Payable	0				0
2260-Current Long Term Debt	0				0
2290-Commodity Taxes for CGAAP	(43,576)				(43,576)
2294-Accrual for Taxes, "Payments in Lieu" of Taxes, Etc.	(100,000)				(100,000)
Accounts payable & accrued charges	6,240,876	0	0	420,055	6,660,931
2264-Pensions and Employee Benefits - Current Portion	107,881			(107,881)	0
2292-Payroll Deductions / Expenses Payable	94,401				94,401
Other Current Liabilities	202,282	0	0	(107,881)	94,401
Current Liabilities	6,443,156	0	0	312,174	6,755,332
2550-Advances from Associated Companies	13,499,953				13,499,953
Inter-company long-term debt & advances	13,499,953	0	0	0	13,499,953
1576-Accounting Changes under CGAAP	334,556				334,556
1580-RSVA - Wholesale Market Services	300,034				300,034
1584-RSVA - Network Charges	169,398				169,398
1588-RSVA - Commodity (Power)	2,512				2,512
1595-Disposition and Recovery of Regulatory Balances	22,935				22,935
Regulatory Liability Adjustment IFRS	0			5,907	5,907
Regulatory Assets Netted Against Regulatory Liabilities for CGAAP	(555,299)			555,299	0
2320-Other Miscellaneous Non-Current Liabilities for CGAAP	1,225,749				1,225,749
Regulatory liabilities	1,499,886	0	0	561,206	2,061,091
2320-Other Miscellaneous Non-Current Liabilities	0				0
Deferred Revenue	0			87,861	87,861
2335-Customer Deposits	420,055			(420,055)	0
Other deferred amounts & customer deposits	420,055	0	0	(332,194)	87,861
2306-OPEB Liability	1,496,483	(3,041)		107,881	1,601,323
Employee future benefits	1,496,483	(3,041)	0	107,881	1,601,323
Total Liabilities	23,359,533	(3,041)	0	649,067	24,005,560
3005-Common Shares Issued	12,953,180				12,953,180
3010-Contributed Surplus	7,554,380	104,549		697,955	8,356,884
3030-Miscellaneous Paid-In Capital	630,158			(630,158)	0
3046-Balance Transferred From Income	1,128,508	11,659	(887)		1,139,280
3049-Dividends Payable-Common Shares	(6,752,500)				(6,752,500)
Accumulated Other Comprehensive Income (Loss)	0	(113,167)			(113,167)
3055-Adjustment to Retained Earnings	67,797			(67,797)	0
3090-Accumulated Other Comprehensive Income	0				0
Shareholders' Equity	15,581,523	3,041	(887)	0	15,583,677
Total Liabilities & Shareholder's Equity	38,941,056	0	(887)	649,067	39,589,237
Balance Sheet Total	(0)	0	0	0	(0)

Welland Hydro-Electric System Corp.
2014 INCOME STATEMENT RECONCILIATION CGAAP VERSUS IFRS

Account Description	CGAAP	IFRS Post Emp	Pole Line Generatio	IFRS Adjustments	IFRS
4006-Residential Energy Sales	14,847,472				14,847,472
4010-Commercial Energy Sales	0				0
4015-Industrial Energy Sales	0				0
4020-Energy Sales to Large Users	1,568,508				1,568,508
4025-Street Lighting Energy Sales	237,222				237,222
4030-Sentinel Energy Sales	72,915				72,915
4035-General Energy Sales	17,988,037				17,988,037
4050-Revenue Adjustment	(508,523)				(508,523)
4055-Energy Sales for Retailers/Others	1,454,820				1,454,820
4062-Billed - WMS	2,174,837				2,174,837
4076-Billed - Smart Meter Entity Charges	207,091				207,091
4066-Billed - NW	2,890,346				2,890,346
4068-Billed - CN	2,178,821				2,178,821
4075-Billed - LV Charges	0				0
Adjustments IFRS	0			221,518	221,518
Sales of Electricity	43,111,544	0	0	221,518	43,333,064
4080-Distribution Services Revenue	8,765,904				8,765,904
4086-SSS Revenue	67,604				67,604
4082-Retail Services Revenues	18,745				18,745
4084-Service Transaction Requests (STR) Revenues	479				479
Adjustments IFRS	0			468,255	468,255
Distribution Revenues	8,852,733	0	0	468,255	9,320,987
4210-Rent from Electric Property	153,852			(153,852)	0
4225-Late Payment Charges	74,709			(74,709)	0
4235-Miscellaneous Service Revenues	191,765			(191,765)	0
Adjustments IFRS	0			49,570	49,570
Other Operating Revenue	420,326	0	0	(370,756)	49,570
Adjust Other Operating Revenue CGAAP	(420,326)			420,326	0
Power and Distribution Revenue	51,964,277	0	0	739,343	52,703,619
4705-Power Purchased	26,530,712				26,530,712
4707-Charge - Global Adjustment	9,129,739				9,129,739
4708-WMS	2,174,837				2,174,837
4714-NW	2,890,346				2,890,346
4716-CN	2,178,821				2,178,821
4751-Smart Meter Entity Charges	207,091				207,091
4730-Rural Rate Assistance Expense	0				0
4750-LV Charges	0				0
Adjustments IFRS	0			188,333	188,333
Power Supply Expenses Total	43,111,546	0	0	188,333	43,299,879
Revenues from Service - Distribution	8,852,731	0	0	551,010	9,403,740
4305-Regulatory Debits	0				0
4310-Regulatory Credits	143,387			(143,387)	0
4355-Gain on Disposition of Utility and Other Property	16,672			(16,672)	0
4375-Revenues from Non-Utility Operations	49,517			(49,517)	0
4380-Expenses of Non-Utility Operations	(1,440)			1,440	0
4390-Miscellaneous Non-Operating Income	31,256			(31,256)	0
Miscellaneous Revenue	239,392	0	0	(239,392)	0
4405-Interest and Dividend Income	48,265			(14,145)	34,120
Interest Income	48,265	0	0	(14,145)	34,120
Adjust Other Operating Revenue CGAAP	420,326			(420,326)	0
Other Income	707,983	0	0	(673,863)	34,120
Expenses					
5005-Operation Supervision and Engineering	220,946				220,946
5010-Load Dispatching	133,449				133,449
5012-Station Buildings and Fixtures Expense	18,412				18,412
5016-Distribution Station Equipment - Operation Labour	24,278				24,278
5017-Distribution Station Equipment - Operation Supplies and Expenses	133,332				133,332
5020-Overhead Distribution Lines and Feeders - Operation Labour	154,742				154,742
5025-Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	59,067				59,067
5030-Overhead Subtransmission Feeders - Operation	0				0
5035-Overhead Distribution Transformers - Operation	2,685				2,685
5040-Underground Distribution Lines and Feeders - Operation Labour	175,201				175,201
5045-Underground Distribution Lines and Feeders - Operation Supplies and Expenses	38				38
5050-Underground Subtransmission Feeders - Operation	0				0
5055-Underground Distribution Transformers - Operation	1,094				1,094
5065-Meter Expense	203,475				203,475
5070-Customer Premises - Operation Labour	0				0
5085-Miscellaneous Distribution Expense	125,855				125,855
5095-Overhead Distribution Lines and Feeders - Rental Paid	22,713				22,713
Distribution Expenses - Operation	1,275,288	0	0	0	1,275,287

Account Description	CGAAP	IFRS Post Emp	Pole Line Generatio	IFRS Adjustments	IFRS
5105-Maintenance Supervision and Engineering	79,354				79,354
5110-Maintenace of Buildings and Fixtures - Distribution Stations	14,174				14,174
5114-Maintenance of Distribution Station Equipment	58,429				58,429
5120-Maintenance of Poles, Towers and Fixtures	155,925				155,925
5125-Maintenance of Overhead Conductors and Devices	456,724				456,724
5130-Maintenance of Overhead Services	315,857				315,857
5135-Overhead Distribution Lines and Feeders - Right of Way	235,971				235,971
5145-Maintenance of Underground Conduit	1,418				1,418
5150-Maintenance of Underground Conductors and Devices	105,330				105,330
5155-Maintenance of Underground Services	92,106				92,106
5160-Maintenance of Line Transformers	54,888				54,888
5175-Maintenance of Meters	81,261				81,261
Maintenance	1,651,436	0	0	0	1,651,437
5305-Supervision	0				0
5310-Meter Reading Expense	29,488				29,488
5315-Customer Billing	841,418				841,418
5320-Collecting	537,213				537,213
5325-Collecting - Cash Over and Short	42				42
5330-Collection Charges	0				0
5335-Bad Debt Expense	150,594				150,594
5340-Miscellaneous Customer Accounts Expenses	32,671				32,671
Billing and Collecting	1,591,427	0	0	0	1,591,426
5405-Supervision	17,180				17,180
5410-Community Relations - Sundry	11,220				11,220
5415-Energy Conservation	52,387				52,387
5420-Community Safety Program	3,453				3,453
5515-Advertising Expense	5,223				5,223
Community Relations	89,463	0	0	0	89,463
5605-Executive Salaries and Expenses	389,610				389,610
5610-Management Salaries and Expenses	454,931				454,931
5615-General Administrative Salaries and Expenses	315,202				315,202
5625-Administrative Expense Transferred-Credit	0				0
5630-Outside Services Employed	150,436				150,436
5645-Post Retirement Benefits	107,722	(11,659)			96,063
5655-Regulatory Expenses	60,918				60,918
5665-Miscellaneous Expenses	109,831				109,831
5680-Electrical Safety Authority Fees	10,479				10,479
Administrative	1,599,129	(11,659)	0	0	1,587,470
6205-Donations - LEAP	11,250				11,250
6205-Donations	10,600				10,600
Donations	21,850	0	0	0	21,850
Administrative & General	3,301,869	(11,659)	0	0	3,290,209
5705-Amortization Expense - Property, Plant and Equipment	1,253,314		887	1,493	1,255,694
5715-Amortization of Intangibles and Other Electric Plant	0				0
Amortization Expense Non Utility Assets CGAAP	12,373				12,373
Amortization Expense	1,265,687	0	887	1,493	1,268,067
6005-Interest on Long Term Debt	8,849				8,849
6030-Interest on Debt to Associated Companies	852,316				852,316
6035-Other Interest Expense	32,099			(25,705)	6,394
Financing	893,264	0	0	(25,705)	867,559
Total Expenses	8,387,544	(11,659)	887	(24,212)	8,352,559
Net Income Before Taxes	1,173,170	11,659	(887)	(98,641)	1,085,299
Pils and Income Taxes					
6105-Taxes Other Than Income Taxes	0				0
6110-Income Taxes	0				0
6115-Provision for Deferred Taxes - Income Statement	44,663				44,663
Adjustment for IFRS	0			92,322	92,322
Income Taxes	44,663	0	0	92,322	136,985
Net Income (Loss)	1,128,507	11,659	(887)	(190,963)	948,314
Net movement in regulatory balances, net of tax	0	0	0	190,963	190,963
Net Income (Loss) for the year and net movement in regulatory balances	1,128,507	11,659	(887)	0	1,139,280
Other Comprehensive Income	0				0
Other Comprehensive Loss	0	(113,167)			(113,167)
Other Comprehensive Income (Loss)	0	(113,167)	0	0	(113,167)
Comprehensive Income (Loss)	1,128,507	(101,508)	(887)	0	1,026,111

Appendix 1 – L
Reconciliation Financial Statements
2015 OEB versus 2015 IFRS

Welland Hydro-Electric System Corp.
2015 BALANCE SHEET RECONCILIATION OEB VERSUS FINANCIAL STATEMENTS

Account Description	OEB Year Book	Pole Line Generation	OEB Entry Only	IFRS Adjustment	IFRS
Current Assets					
1005-Cash	829,781				829,781
1040-Other Special Deposits	1,464,425				1,464,425
Cash & cash equivalents	2,294,206	0	0	0	2,294,206
1100-Customer Accounts Receivable	1,917,258				1,917,258
1104-Accounts Receivable - Recoverable Work	265,033				265,033
1120-Accrued Utility Revenues	5,075,618				5,075,618
1130-Accumulated Provision for Uncollectable Accounts - Credit	(124,767)				(124,767)
1140-Interest and Dividends Receivable	2,557				2,557
Receivables & Unbilled	7,135,699	0	0	0	7,135,699
1330-Plant Materials and Operating Supplies	383,357			(100,000)	283,357
Inventory Total	383,357	0	0	(100,000)	283,357
1200-Accounts Receivable from Associated Companies	106,337				106,337
1210-Notes Receivable from Associated Companies	1				1
Inter-Company Receivables	106,338	0	0	0	106,338
1180-Prepayments	219,996				219,996
2290-Commodity Taxes	49,228			(49,228)	0
Other Current Assets	269,226	0	0	(49,228)	219,996
Current Assets Total	10,188,826	0	0	(149,228)	10,039,596
1805-Land	158,686				158,686
1806-Land Rights	70,296			(70,296)	0
1808-Buildings and Fixtures	96,568			(61,227)	35,341
1815-Transformer Station Equipment - Normally Primary above 50 kV	467,359			(52,703)	414,656
1820-Distribution Station Equipment - Normally Primary below 50 kV	4,164,764			(2,431,770)	1,732,995
1830-Poles, Towers and Fixtures	9,283,201	88,852		(1,275,629)	8,098,424
1835-Overhead Conductors and Devices	13,417,624			(8,428,520)	4,989,104
1840-Underground Conduit	1,318,104			(148,489)	1,169,615
1845-Underground Conductors and Devices	11,193,215			(7,290,658)	3,902,557
1850-Line Transformers	6,941,437			(3,331,723)	3,609,713
1855-Services	859,971			(138,212)	721,759
1860-Meters	3,055,726			(784,073)	2,271,653
1908-Buildings and Fixtures	2,555,397			(1,088,695)	1,466,702
1915-Office Furniture and Equipment	90,446			(55,241)	35,205
1920-Computer Equipment - Hardware	251,752			(31,705)	220,047
1925-Computer Software	897,969			(897,969)	0
1930-Transportation Equipment	1,704,481			(1,062,766)	641,715
1935-Stores Equipment	30,023			(28,609)	1,414
1940-Tools, Shop and Garage Equipment	83,043			(57,876)	25,167
1945-Measurement and Testing Equipment	20,450			(14,131)	6,319
1955-Communication Equipment	298,231			(109,242)	188,989
1960-Miscellaneous Equipment	315,235			(92,679)	222,556
1980-System Supervisory Equipment	776,733			(491,479)	285,254
1995-Contributions and Grants - Credit	(511,181)			511,181	0
2055-Construction Work in Progress--Electric	153,290			(35,490)	117,800
Capital in Inventory	0			100,000	100,000
2075-Non-Utility Property Owned - Generation Facilities	247,506			(18,612)	228,894
Property Plant & Equipment	57,940,326	88,852	0	(27,386,613)	30,642,567
2105-Accumulated Amortization of Electric Utility Plant - Property, Plant and Equipment	(29,909,231)	(2,665)		27,599,982	(2,311,914)
2120-Accumulated Amortization of Electric Utility Plant - Intangibles	0				0
2180-Accumulated Depreciation of Non-Utility Property - Generation	(43,359)			18,612	(24,747)
Accumulated Depreciation	(29,952,590)	(2,665)	0	27,618,594	(2,336,661)
Property Plant & Equipment Net	27,987,736	86,187	0	231,981	28,305,906
1806-Land Rights	0			10,025	10,025
1925-Computer Software	0			568,824	568,824
2055-Construction Work in Progress-Intangibles	0			35,490	35,490
2120-Accumulated Amortization of Electric Utility Plant - Intangibles	0			(246,233)	(246,233)
Intangible Assets Net	0	0	0	368,106	368,106
1508-Other Regulatory Assets	12,432				12,432
1531-Renewable Connection Capital Deferral Account	86,187	(86,187)			0
1532-Renewable Connection OM&A Deferral Account	9,968	(2,665)	(7,303)		0
1551-Smart Meter Enty Charge Variance Account	6,697				6,697
1568-LRAM Variance Account	34,965		(34,965)		0
1575-IFRS-CGAAP Transitional PP&E Amounts	35,287				35,287
1589-RSVA - Commodity (GA)	354,095				354,095
1595-Disposition and Recovery of Regulatory Balances	226,001				226,001
Adjustment IFRS	0			332,364	332,364
Regulatory Assets	765,632	(88,852)	(42,268)	332,364	966,876
1460-Other Non-Current Assets	1,879,443			(331,999)	1,547,444
1495-Deferred Taxes - Non-Current Assets	0				0
Other Non-Current Assets	1,879,443	0	0	(331,999)	1,547,444
Total Assets	40,821,637	(2,665)	(42,268)	451,224	41,227,928
2205-Accounts Payable	398,430				398,430
2208-Customer Credit Balances	200,072				200,072
2210-Customer Deposits	1,482,521				1,482,521
2220-Miscellaneous Current and Accrued Liabilities	4,190,388				4,190,388

Account Description	OEB Year Book	Pole Line Generation	OEB Entry Only	IFRS Adjustment	IFRS
2250-Debt Retirement Charges (DRC) Payable	187,712				187,712
2260-Current Long Term Debt	0				0
2290-Commodity Taxes	0			(49,228)	(49,228)
2294-Accrual for Taxes, "Payments in Lieu" of Taxes, Etc.	135,000				135,000
Accounts payable & accrued charges	6,594,123	0	0	(49,228)	6,544,895
2264-Pensions and Employee Benefits - Current Portion	0				0
2292-Payroll Deductions / Expenses Payable	218,104				218,104
Other Current Liabilities	218,104	0	0	0	218,104
Current Liabilities	6,812,227	0	0	(49,228)	6,762,999
2550-Advances from Associated Companies	13,499,953				13,499,953
Inter-company long-term debt & advances	13,499,953	0	0	0	13,499,953
1576-Accounting Changes under CGAAP	191,174				191,174
1580-RSVA - Wholesale Market Services	782,760				782,760
1584-RSVA - Network Charges	234,585				234,585
1586-RSVA - Connection Charges	34,530			367	34,897
1588-RSVA - Commodity (Power)	31,519				31,519
IFRS Adjustment	0			1,547,444	1,547,444
Regulatory liabilities	1,274,568	0	0	1,547,811	2,822,379
2320-Other Miscellaneous Non-Current Liabilities	1,547,444			(1,547,444)	0
Deferred Revenue IFRS	0			500,085	500,085
2335-Customer Deposits	0				0
2350-Deferred Tax - Non-Current	0				0
Other deferred amounts & customer deposits	1,547,444	0	0	(1,047,359)	500,085
2306-OPEB Liability	1,583,297				1,583,297
Employee Future Benefits	1,583,297	0	0	0	1,583,297
Total Liabilities	24,717,489	0	0	451,224	25,168,713
3005-Common Shares Issued	12,953,180				12,953,180
3010-Contributed Surplus	9,380,844	(887)			9,379,957
3030-Miscellaneous Paid-In Capital	0				0
3045-Unappropriated Retained Earnings	(113,167)				(113,167)
3046-Balance Transferred From Income	1,219,583	(1,778)	(42,268)		1,175,537
3049-Dividends Payable-Common Shares	(7,452,500)				(7,452,500)
3055-Adjustment to Retained Earnings	116,208				116,208
3090-Accumulated Other Comprehensive Income	0				0
Shareholders' Equity	16,104,148	(2,665)	(42,268)	0	16,059,215
Total Liabilities & Shareholder's Equity	40,821,637	(2,665)	(42,268)	451,224	41,227,928
Balance Sheet Total	0	0	0	(0)	0

Welland Hydro-Electric System Corp.
2015 STATEMENT OF INCOME AND RETAINED EARNINGS OEB VERSUS FINANCIAL STATEMENTS

Account Description	OEB Yearbook	Pole Line Generation	OEB Entry Only	IFRS Adjustment	IFRS
Sales of Electricity					
4006-Residential Energy Sales	16,374,956				16,374,956
4010-Commercial Energy Sales	0				0
4015-Industrial Energy Sales	0				0
4020-Energy Sales to Large Users	0				0
4025-Street Lighting Energy Sales	212,520				212,520
4030-Sentinel Energy Sales	77,677				77,677
4035-General Energy Sales	19,476,532				19,476,532
4050-Revenue Adjustment	0				0
4055-Energy Sales for Retailers/Others	644,700				644,700
4062-Billed - WMS	1,394,481				1,394,481
4076-Billed - Smart Meter Entity Charges	209,653				209,653
4066-Billed - NW	2,703,150				2,703,150
4068-Billed - CN	2,080,905				2,080,905
4075-Billed - LV Charges	0				0
Adjustment IFRS	0			1,160,815	1,160,815
Sales of Electricity	43,174,574	0	0	1,160,815	44,335,389
4080-Distribution Services Revenue	8,800,223				8,800,223
4086-SSS Revenue	68,913				68,913
4082-Retail Services Revenues	17,071				17,071
4084-Service Transaction Requests (STR) Revenues	377				377
Adjustment IFRS	0		(34,965)	417,857	382,892
Distribution Revenue	8,886,584	0	(34,965)	417,857	9,269,476
4210-Rent from Electric Property	163,602			(163,602)	0
4225-Late Payment Charges	72,853			(72,853)	0
4235-Miscellaneous Service Revenues	187,890			(187,890)	0
Adjustment IFRS	0			200,012	200,012
Other Operating Revenues	424,345	0	0	(224,333)	200,012
Power and Distribution Revenue	52,485,503	0	(34,965)	1,354,339	53,804,877
4705-Power Purchased	25,824,415				25,824,415
4707-Charge - Global Adjustment	10,961,970				10,961,970
4708-WMS	1,394,481				1,394,481
4714-NW	2,703,150				2,703,150
4716-CN	2,080,905				2,080,905
4751-Smart Meter Entity Charges	209,653				209,653
4730-Rural Rate Assistance Expense	0				0
4750-LV Charges	0				0
Adjustment IFRS	0			704,561	704,561
Power Supply Expenses Total	43,174,574	0	0	704,561	43,879,135
Revenues from Service-Distribution	9,310,929	0	(34,965)	649,778	9,925,742
4305-Regulatory Debits	0				0
4310-Regulatory Credits	143,382			(143,382)	0
4355-Gain on Disposition of Utility and Other Property	184			(184)	0
4375-Revenues from Non-Utility Operations	192,245			(192,245)	0
4380-Expenses of Non-Utility Operations	(14,210)			14,210	0
4390-Miscellaneous Non-Operating Income	27,901			(27,901)	0
Miscellaneous Revenue	349,502	0	0	(349,502)	0
4405-Interest and Dividend Income	38,381			(9,226)	29,155
Interest Income	38,381	0	0	(9,226)	29,155
Other Income	387,883	0	0	(358,728)	29,155
Expenses					
5005-Operation Supervision and Engineering	238,998				238,998
5010-Load Dispatching	150,533				150,533
5012-Station Buildings and Fixtures Expense	16,691				16,691
5016-Distribution Station Equipment - Operation Labour	16,981				16,981
5017-Distribution Station Equipment - Operation Supplies and Expenses	129,204				129,204
5020-Overhead Distribution Lines and Feeders - Operation Labour	163,804				163,804
5025-Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	44,001				44,001
5030-Overhead Subtransmission Feeders - Operation	0				0
5035-Overhead Distribution Transformers - Operation	0				0
5040-Underground Distribution Lines and Feeders - Operation Labour	210,588				210,588
5045-Underground Distribution Lines and Feeders - Operation Supplies and Expenses	0				0
5050-Underground Subtransmission Feeders - Operation	0				0
5055-Underground Distribution Transformers - Operation	5,011				5,011
5065-Meter Expense	223,098				223,098
5070-Customer Premises - Operation Labour	0				0
5085-Miscellaneous Distribution Expense	97,365				97,365
5095-Overhead Distribution Lines and Feeders - Rental Paid	23,970				23,970
Distribution Expenses - Operation Total	1,320,244	0	0	0	1,320,244
5105-Maintenance Supervision and Engineering	83,978				83,978
5110-Maintenance of Buildings and Fixtures - Distribution Stations	15,656				15,656
5114-Maintenance of Distribution Station Equipment	59,280				59,280
5120-Maintenance of Poles, Towers and Fixtures	188,644				188,644
5125-Maintenance of Overhead Conductors and Devices	475,431				475,431
5130-Maintenance of Overhead Services	322,557				322,557
5135-Overhead Distribution Lines and Feeders - Right of Way	174,760				174,760
5145-Maintenance of Underground Conduit	3,195				3,195
5150-Maintenance of Underground Conductors and Devices	187,635				187,635
5155-Maintenance of Underground Services	143,005				143,005

Account Description	OEB Yearbook	Pole Line Generation	OEB Entry Only	IFRS Adjustment	IFRS
5160-Maintenance of Line Transformers	91,509				91,509
5175-Maintenance of Meters	88,664				88,664
Distribution Expenses - Maintenance Total	1,834,314	0	0	0	1,834,314
5305-Supervision	0				0
5310-Meter Reading Expense	25,152				25,152
5315-Customer Billing	846,403		7,303		853,706
5320-Collecting	415,753				415,753
5325-Collecting - Cash Over and Short	(119)				(119)
5330-Collection Charges	0				0
5335-Bad Debt Expense	61,809				61,809
5340-Miscellaneous Customer Accounts Expenses	33,235				33,235
Billing and Collecting Total	1,382,233	0	7,303	0	1,389,536
5405-Supervision	45,165				45,165
5410-Community Relations - Sundry	7,848				7,848
5415-Energy Conservation	70,295				70,295
5420-Community Safety Program	3,928				3,928
5515-Advertising Expense	1,050				1,050
Community Relations Total	128,286	0	0	0	128,286
5605-Executive Salaries and Expenses	373,402				373,402
5610-Management Salaries and Expenses	477,066				477,066
5615-General Administrative Salaries and Expenses	371,055				371,055
5625-Administrative Expense Transferred-Credit	0				0
5630-Outside Services Employed	129,944			7,950	137,894
5645-Post Retirement Benefits	84,342				84,342
5655-Regulatory Expenses	63,752				63,752
5665-Miscellaneous Expenses	130,332				130,332
5680-Electrical Safety Authority Fees	9,968				9,968
Administrative	1,639,861	0	0	7,950	1,647,811
6205-Donations - LEAP	11,500				11,500
6205-Donations	6,831				6,831
Donations	18,331	0	0	0	18,331
Administrative & General	3,168,711	0	7,303	7,950	3,183,964
5705-Amortization Expense - Property, Plant and Equipment	1,304,209	1,778		9,603	1,315,590
5715-Amortization of Intangibles and Other Electric Plant	0				0
Amortization Expense Non Utility Assets	0			12,374	12,374
Amortization Expense Total	1,304,212	1,778	0	21,977	1,327,964
6005-Interest on Long Term Debt	0				0
6030-Interest on Debt to Associated Companies	859,215				859,215
6035-Other Interest Expense	22,827			(15,941)	6,886
Financing	882,042	0	0	(15,941)	866,101
Total Expenses	8,509,523	1,778	7,303	13,986	8,532,587
Net Income Before Taxes	1,189,289	(1,778)	(42,268)	277,064	1,422,310
PiIs and income Taxes					
6105-Taxes Other Than Income Taxes	0				0
6110-Income Taxes	127,169				127,169
6115-Provision for Deferred Taxes - Income Statement	(157,463)				(157,463)
Adjustment IFRS	0			(121,728)	(121,728)
Income Taxes	(30,294)	0	0	(121,728)	(152,022)
Net Income (Loss)	1,219,583	(1,778)	(42,268)	398,792	1,574,332
Net movement in regulatory balances, net of tax	0			(398,792)	(398,792)
Net income (Loss) for the year and net movement in regulatory balances	1,219,583	(1,778)	(42,268)	0	1,175,537
Other Comprehensive Income					0
Other Comprehensive Loss					0
Other Comprehensive Income	0	0	0	0	0
Comprehensive Income (Loss)	1,219,583	(1,778)	(42,268)	0	1,175,537