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Ontario

BY E-MAIL

February 27, 2017

Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: Welland Hydro-Electric System Corp. (Welland Hydro)
2017 Distribution Rate Application
OEB Staff Interrogatories
OEB File No. EB-2016-0110

In accordance with Procedural Order No. 1, please find attached OEB staff's interrogatories in the above noted proceeding. Welland Hydro and all intervenors have been copied on this filing.

Welland Hydro's responses to interrogatories are due by March 15, 2017.

Yours truly,

Original Signed By

Georgette Vlahos
Advisor – Incentive Rate-setting & Accounting

Attach.

OEB Staff Interrogatories
2017 Cost of Service Rate Application
Welland Hydro-Electric System Corp. (Welland Hydro)
EB-2016-0110
February 27, 2017

Exhibit 1 – Administration

1-Staff-1
Customer Engagement
Ref: Chapter 2 of the Filing Requirements, Section 2.1.6

Chapter 2 of the Filing Requirements states, "The RRFE Report contemplates enhanced engagement between distributors and their customers to provide better alignment between distributor operational plans and customer needs and expectations." (Emphasis added)

Please describe the differences between customer engagement conducted in preparation for the current application and previous customer engagement.

1-Staff-2
Ref: Responses to Letters of Comment

Following publication of the Notice of Application, the OEB received one letter of comment. Section 2.1.6 of the Filing Requirements states that distributors will be expected to file with the OEB their response to the matters raised within any letters of comment sent to the OEB related to the distributor's application. If the applicant has not received a copy of the letters, they may be accessed from the public record for this proceeding.

Please file a response to any matters raised in the letters of comment referenced above. Going forward, please ensure that responses are filed to any subsequent matters that may be raised in any further letters filed in this proceeding. All responses must be filed before the argument (submission) phase of this proceeding.

1-Staff-3
Customer Consultation
Ref: Ex.1/Section 2.1.6

Welland Hydro commissioned INNOVATIVE to help design, collect feedback and document its consultation processes as part of the developments of its 2017 cost of

service application. Welland Hydro notes that the summary provided by INNOVATIVE includes feedback from 16 customers who participated in the **qualitative** stage of the consultation. In addition, feedback from another 501 residential customers and 25 low-volume general services (GS<50 kW) who responded to the **quantitative** stage where INNOVATIVE documented the incidence of *needs* and *preferences* across the customer population.

(a) Does Welland Hydro find the response rates acceptable as a basis for measuring customer satisfaction? If so, why?
(b) How much weight did Welland Hydro give to the identified customer preferences in setting priorities for investment?
(c) What steps does Welland Hydro intend to undertake to improve customer views of Welland Hydro's performance. In your response, please address actions taken for commercial customers as well as other customers.

1-Staff-4
Customer Consultations
Ref: Ex.1/Section 2.1.6, Pages 64-65

At the above reference, Welland Hydro notes that with respect to one project relating to customer service options with a total cost of $40,000, less than half of survey respondents felt that this should be implemented in 2017 with the majority saying it would be "nice to have" versus "need to have". In addition, in a 2016 customer survey, 70% of customers surveyed indicated they are not willing to pay for services for specific items related to "increased self-service options on the website."

Welland Hydro opted to leave this project in the 2017 test year noting that given ongoing changes some flexibility is required to finance these changes. However, Welland Hydro has noted its customer's feedback and will consider its investments diligently within this area of capital spending.

(a) Has Welland Hydro adjusted its planned spending within this area of capital spending for the forecast period taking into account the feedback provided by its customers? If so, what adjustments were made?
(b) Was this project the sole discrete project mentioned to customers in Welland Hydro's customer engagement process regarding its DSP?
(c) If the answer to (b) is yes, please explain why. If the answer to (b) is no, please provide further examples of discrete projects Welland Hydro sought out specific feedback.

1-Staff-5
Ref: Ex.1, Page 22
Ref: Ex. 4, Page 12

At the above references Welland Hydro discusses its focus on succession planning since its 2013 cost of service application.

If available, please file Welland Hydro's succession plan and/or related documents.

1-Staff-6
Ref: Ex.1, Page 38, Table 1-3 Service Revenue Requirement

OEB staff notes that the table referenced above shows proposed OM&A for the 2017 test year of $6,987,007. OEB staff notes that the proposed OM&A noted in other sections of the application show a total amount of $6,999,907.

Please confirm if the number listed in Table 1-3 was in error. If not, please explain the discrepancy.

1-Staff-7
Customer Consultation – 2017 Rate Application Review
Ref: Ex.1, Page 57

Welland Hydro notes that incentives were provided to those customers who participated in the General Service and Residential consultation groups as recognition of their time commitment.

Please describe the incentives that were offered to customers for participating in the consultation groups.

1-Staff-8
Ref: Ex.1, Page 61

At the above reference, Welland Hydro discusses overall take-aways from key account customers interviewed by INNOVATIVE with respect to the consultation process and the job Welland Hydro has done in communicating its proposed Distribution System Plan. While most key account customers understood the need for a rate increase and support the plan, one industrial customer expressed concern and opposed the increase.

Please identify if any follow-up occurred between Welland Hydro and this industrial customer to address the concern(s).

1-Staff-9
Customer Engagement Session – Town Hall Meeting August 25, 2015
Ref: Ex.1, Pages 65-66

Welland Hydro held a customer engagement session (town hall meeting) in August 2015 where 150 customers were contacted, and 13 actually attended. Numerous items were discussed including payment preferences, bill presentment etc.

(a) Please explain the criteria used to select the 150 customers contacted or was this done at random.
(b) Has Welland Hydro adjusted its planned spending for the forecast period taking into account the feedback provided by its customers?
(c) Does Welland Hydro find the attendance rates acceptable as a basis for measuring customer wants? If so, why?
(d) How much weight did Welland Hydro give to the identified customer preferences in setting priorities for investment?

1-Staff-10
Customer Satisfaction Survey Results
Ref: Ex. 1, Page 71

At the above reference, Welland Hydro discusses certain topics included in its 2015 customer satisfaction survey related to operating and capital expenditures. Customers were surveyed on questions relating to: "run to failure" versus "proactively replacing equipment", and their level of confidence in Welland Hydro's judgment on prioritizing and making decisions on these investments. Additional questions relating to customers' willingness to pay more for items such as increased tree trimming, extended office hours, education on conservation and public safety, and outage management systems. Customers were surveyed on how much more per month they would be willing to pay for items that they considered to be a direct benefit to themselves.

(a) Please provide a summary of customers feedback related to specific capital expenditure projects.
(b) Were any of these results incorporated into the filing of this cost of service application by increasing certain spending in areas of capital expenditures?

1-Staff-11
Ref: Exhibit 1, Page 84
Ref: Exhibit 1, Appendix 1-L, 2015 Reconciliation to Financial Statements

On page 84, it states that the IFRS Adjustment column items are related to financial presentation and are offsetting. In the 2015 reconciliation to the financial statements, there is a net adjustment to PP&E of $232k and intangibles of $368k.

(a) Please explain what the net adjustments to PP&E and intangibles are for. Please also explain how the net adjustment of $232k and $368k to PP&E and intangibles are offsetting.
(b) Please explain why intangible assets under the IFRS column are reclassified so that it is $0 under OEB Year Book column.

Exhibit 2 – Rate Base

2-Staff-12
Ref: Ex.2, Page 5, Table 2-1 – Summary of Rate Base

Welland Hydro's rate base for the 2017 test year is forecast to increase by approximately 7% from the 2013 OEB-approved amount.

(a) In its annual capital planning and implementation for the years 2013 to 2016, did Welland Hydro take into account the cumulative impact its capital expenditures would have on rate base, rates and customer impact in 2017? If so how? Please describe.
(b) How did this inform the pacing of investments identified in the Distribution System Plan for 2017 forward?

2-Staff-13
Cost of Power Calculations
Ref: Table 2.23 Cost of Power Calculation, Page 37

Please update the Cost of Power calculation with the updated Rural and Remote Rate Protection rate for 2017 of $0.0021/kWh.

2-Staff-14
Ref: Ex.2, Page 47, Table 2-26A-Table 2-26D – Capital Projects

Welland Hydro has provided a list of 2017 capital projects. The total Test Year 2017 capital expenditure for all projects is $2,413,986.

(a) Do all of the projects, and related capital expenditures that are listed in Tables 2-26A-D, continue to be expected to be placed into service in 2017 and to be added to the 2017 Rate Base?
(b) If some of the projects that are listed are not expected to be in-service in 2017 and as a result will not be added to the 2017 Rate Base, please identify all such projects, the associated capital expenditure and the expected in-service date.
(c) Please provide year-to-date actuals for capital projects in the same format as Tab 2-AA of the chapter 2 appendices and the net book value of fixed assets (i.e. Tab 2-BA Fixed Asset Continuity Schedule).

2-Staff-15
Ref: Ex.2, Page 40
Ref: Chapter 2 Appendices, Tab 2-AB – Capital Expenditures

	2012	2013	2014	2015	2016 Bridge	2017 Test
System Access	$225,766	$ 85,482	$111,353	$94,079	$147,000	$204,501
System Renewal	$ 1,233,301	$ 1,504,700	$1,710,305	$1,773,585	$1,683,000	$1,834,485
System Service	$ 8,300	$4,047	$55,500	$33,237	-	$110,000
General Plant	$ 417,631	$517,076	$322,389	$281,463	$801,800	$265,000
Total	$1,884,998	$2,111,305	$2,199,547	$2,182,364	$2,631,800	$2,413,986

As seen in the table above, total capital expenditures for the past 5 years have increased. Furthermore, Welland Hydro's planned capital expenditures for overhead line renewal is approximately $750,000 and underground line renewal is approximately $705,000 in the 2017 test year. Line renewal spending will continue through the forecast period.

(a) Please describe and quantify where possible the benefits that the applicant's customers will realize from this overhead and underground line renewal investment.
(b) Please describe the alternative capital investments that were assessed and rejected in favour of the proposed capital investment.

2-Staff-16
Ref: Ex.2, Section 2.2.2.8 Service Quality and Reliability Performance, Table 2-30 – Service Quality and Reliability Performance, Page 64

As indicated in the table at the above reference, appointment scheduling has decreased since 2013. Please outline what Welland Hydro is doing to ensure that the trend does not bring the metric below 90%.

Distribution System Plan

2-Staff-17
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.1 Distribution System Plan Overview, Page 13

General plant expenditures account for just over 10% of capital expenditures for 2017. The 2017 test year marks the start of a program to improve building facilities and grounds with repaving the service center parking lot. This project will be phased in over two years.

Given the one-time nature of this expenditure, did Welland Hydro consider only allocating the two year costs over the 5 year IRM period? If not, please explain why.

2-Staff-18
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.1 Distribution System Plan Overview, Page 13

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."

(a) Are voltage conversions the primary driver of any of the asset replacements grouped in the System Renewal category, or does this refer to voltage conversions implemented only after all or most of the affected assets have already been identified as requiring replacement due to deteriorated condition?
(b) Have these "savings in customer's power and power related billings" attributable to past conversion projects been separately identified in Welland Hydro's O&M cost accounts?

2-Staff-19
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.1 Distribution System Plan Overview, Page 13

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."

Has Welland Hydro achieved O&M cost savings by implementing automated or remote sectionalizing capabilities? Please provide details.

2-Staff-20
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.1a Key Elements of the DSP, Page 14

System Service
"System Service investments include new assets or upgrades to systems, impacting system reliability. These projects are driven by required upgrades to support systems including Supervisory Control and Data Acquisition ("SCADA"). Additional projects include systems that support SCADA. The communication system upgrades, scheduled for the Test Year, will provide continued support to the SCADA system and drive cost efficiency. Future projects include protection and control upgrades at Municipal Substations."

(a) Does Welland Hydro minimize investments in substations that are scheduled for elimination due to voltage upgrade projects?
    i. Please identify which municipal substations (if any) are planned for elimination during the period 2017-2021 to accommodate voltage upgrades.
    ii. Are substation maintenance costs reduced as a result of eliminating municipal substations?

2-Staff-21
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.1b Sources of Cost Savings, Page 15

(a) Please identify the actual or anticipated savings associated with each of the listed items in each year over the forecast period. Please explain the methodology Welland Hydro used to derive the savings estimates.
(b) For the assets being replaced, please quantify the percentage of O&M costs expended in 2016 that were dedicated to the replaced asset, as a percentage of O&M costs expended upon that asset class in 2016.

2-Staff-22
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.1f Aspects Contingent on the Outcome of Ongoing Activities, Page 18

Welland Hydro notes that "There are no known activities determined by Regional Planning process to be completed in the Test Year or forecast period and WHESC has no Long Term Load Transfer customers to transfer to adjacent utilities to meet an OEB directive."

(a) Has Welland Hydro actively sought input from the Municipal or Regional governments regarding their plans for roadway alterations?
(b) What proportion of Welland Hydro's annual System Access expenditures are typically driven by roadway moves?
(c) Would Welland Hydro be better able to optimize renewal expenditures by coordinating those investments with planned roadway moves?

2-Staff-23
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.2a.1 Customer Consultations, Page 20

<u>City of Welland Corporate Calls for Commercial Customers</u>
"WHESC is part of the City of Welland team which meets with individual commercial customers (12-16) once each year from 2014 to 2016. These meetings were initiated by the office of the Welland Economic Development Commission and also include the Chamber of Commerce. Customers identified issues with respect to momentary outages, power equality, e-billing, global adjustment classes, electricity usage, and CDM. All of the concerns were addressed in follow-up meetings with customers. These meetings provide an opportunity for customers to share their future plans such as expansion and for WHESC to include in Distribution System Planning if required. An example of actions taken by WHESC as a result of these meetings was the early construction of the Humberstone/Townline tunnel distribution feeder in 2015 to support economic development."

(a) Were the identified concerns addressed by providing explanations, or by initiating capital or operating investments related to this filing (other than the power quality complaint tracking metric identified in this section)?
(b) If none of the above, how were they addressed? Please provide details.

2-Staff-24
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.3a.7 DSP Implementation Progress, Page 30

Actual vs. Planned Annual Spend

The intent of this metric is to measure Welland Hydro's overall planning quality with respect to its overall budget. Welland Hydro targets +/- 10% spending each year relative to the total budgeted amount.

(a) Would this target be achieved if the overall planned amount is spent, even if not all planned projects are executed or if individual projects run significantly over budget?
(b) Does Welland Hydro track its ratios of actual vs. planned expenditures on an individual project basis?
(c) Would this provide a more meaningful measure of project efficiency?

2-Staff-25
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.3a.8 Cost Control, Page 30

Total Cost per Customer

Total cost per customer is calculated as the sum of capital and operating, maintenance, and administration ("OM&A") costs divided by the total number of customers. Welland Hydro targets a 2.5% yearly increase in this measure.

Please explain why this target is set higher than expected CPI.

2-Staff-25
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.3a.8 Cost Control, Page 30

Total Cost per km of Line

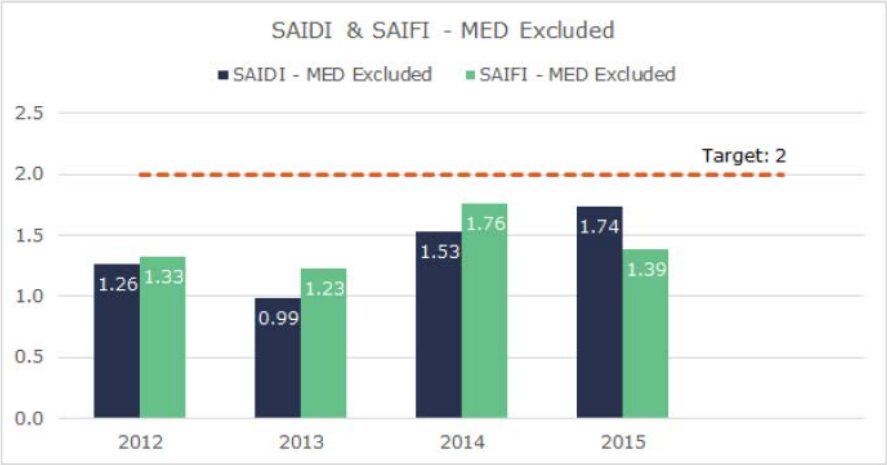
"This measure divides the total cost (sum of capital and OM&A) by the total primary circuit kilometres maintained WHESC. WHESC targets a 2.5% yearly increase in this measure."

(a) Please explain why this measure is higher than CPI.

(b) Should not Welland Hydro's OM&A efficiency improve as its systems are modernized?

2-Staff-26
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.3b.6 System Reliability, Page 40

Figure 5-12: Historical SAIDI and SAIFI performance – MED excluded

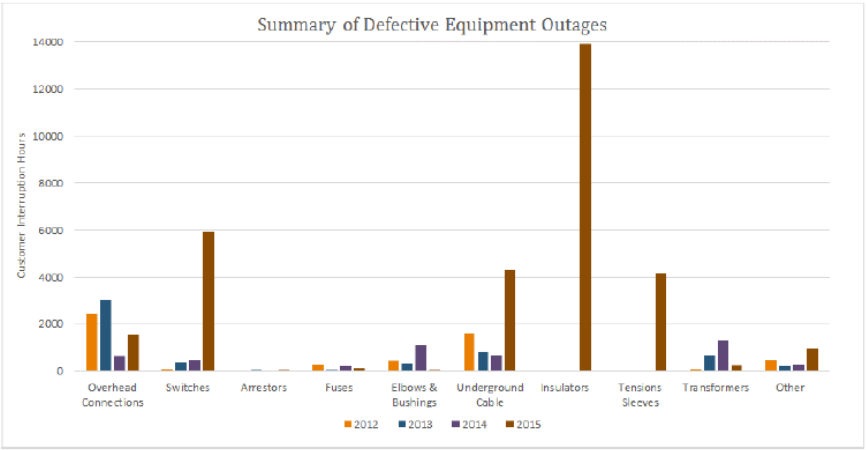


(a) Why are SAIDI and SAIFI increasing after excluding major event days?

(b) Should Welland Hydro be targeting ongoing improvement in these metrics after excluding MED's and Loss of Supply, since that portion of the metric is more subject to Welland Hydro's direct control?

2-Staff-27
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.3b.6 System Reliability, Page 43

Figure 5-18: Summary of defective equipment outages



(a) Explain the reasons behind the exceptionally high impact of insulator failures in 2015.
(b) What action is Welland Hydro taking to avoid similar outcomes in future years?

2-Staff-28
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.3b.8 Cost Control, Page 44

Total Cost per Customer

Results for 2015 at $493 per customer represents a 2.1% increase over 2014 results, below the 2.5% target. 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 2012 results, shows a 2.3% increase over three years, corresponding to a 0.8% increase per year.

Figure 5-19: Total cost per customer over the historical period

How do these results map into the bill increases shown on Page 36 under 5.2.3b.3 Customer Bill Impacts?

2-Staff-29
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.3b.9 CDM Program Achievement, Page 45

"Whole Home Residential and small Business Lighting Programs will be launched by the IESO to enhance savings in 2016 and 2017. Furthermore, WHESC has a large streetlight conversion project that began in 2015 and is scheduled for completion in 2016 and completion of this project will have a significant impact on the savings achieved in 2016."

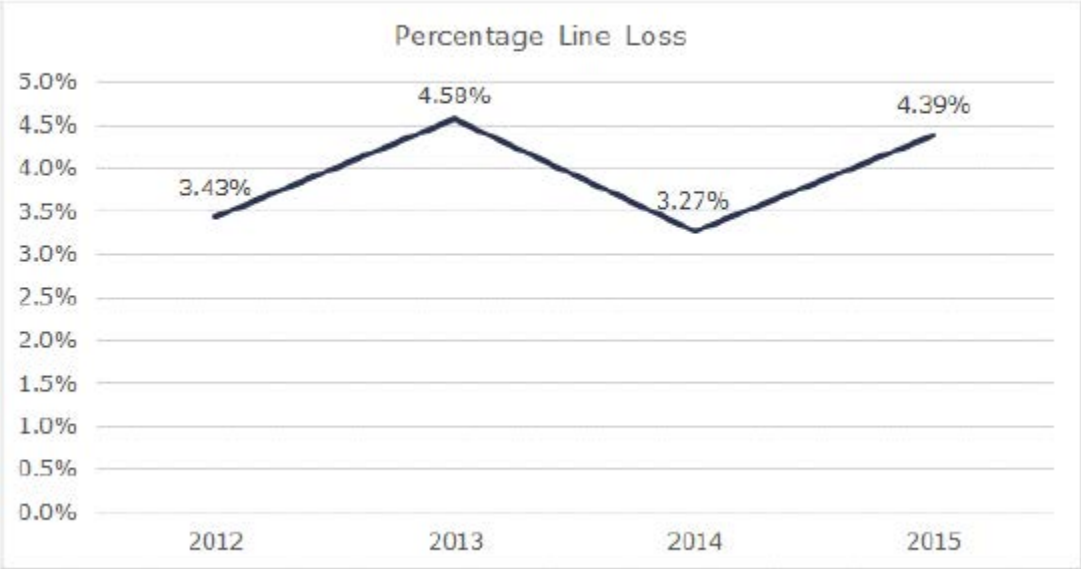
(a) What are the capital costs of implementing this program?

(b) Have those costs been separately identified in Welland Hydro's 2015 & 2016 capital expenditures tables?
(c) Have the resulting O&M savings been separately identified in the Test Year O&M costs?

2-Staff-30
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.2.3c.11 Distribution Losses, Page 47

As shown in Figure 5-24, the percentage line loss fluctuates between years due to factors outside of Welland Hydro's control, such as ambient temperature. The percentage line loss was 4.39% in 2015, which is higher than 2014, but lower than the previous three-year high of 4.58%.

Figure 5-24: Historical percentage line loss



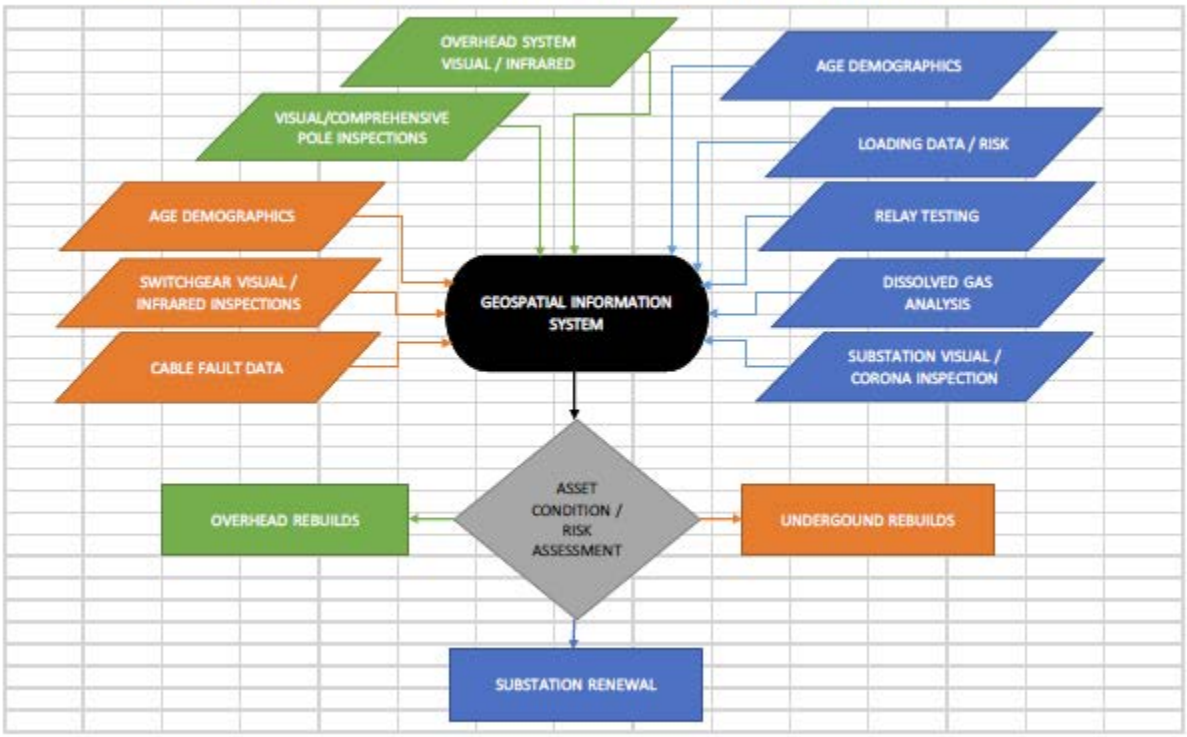
(a) Inter-annual line losses appear to be very volatile. Is this variability caused solely by differences in ambient temperatures?
    i. If yes, please explain the mechanisms that link ambient temperatures to such volatile loss results.
    ii. If no, please identify the other factors that impact annual losses.
(b) Given Welland Hydro's ongoing capital investments in efficiency initiatives such as voltage conversions, why are line losses not generally trending downward over this period? Please provide details.

2-Staff-31
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.3.1b Asset Management Process, Page 54

Welland Hydro does not have a formal Asset Condition Assessment process at this time. Welland Hydro plans to incorporate a USF developed program and standards when available. The results of the system inspections and assessments have been combined with both historical performance and age assessments to provide the tools to make prudent decisions on prioritization for the replacement of assets. Both data analytics and graphical analytics are tools that have been utilized to demonstrate a clear and consistent approach to assessing and scheduling for the replacement of assets.

Welland Hydro's asset management process, including inputs and outputs used to identify and select investments has been illustrated in the flowchart in Figure 5-27 and is described in further detail below. For information on project prioritization and pacing, see Section 5.4.2c – Project Prioritization.

Figure 5-27: Inputs/outputs of the asset management process used to identify and select projects



(a) Please provide examples of Welland Hydro's use of both the data analytics and graphical analytics tools referenced in this excerpt, and provide links to planned Test Year capital expenditures.
(b) When does Welland Hydro plan to implement a formal Asset Management Process?
(c) Please explain in detail the activities and decisions that take place in the grey diamond entitled "Asset Condition/Risk Assessment" in Figure 5-27?

2-Staff-32
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.3.1b Asset Management Process, Page 55

Municipal Substations
Substations are scheduled to be replaced based on age demographics, performance data, annual test results, and criticality. More specifically, the following data are analyzed and used in the asset replacement decision making process:"

(a) Does Welland Hydro ever replace municipal substation transformers solely based upon demographics?
(b) Does Welland Hydro always validate municipal substation transformer condition before replacing?

2-Staff-33
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.3.1b Asset Management Process, Page 56

"Poles are replaced during overhead rebuilds, as well as WHESC's pole replacement program. Although the number of poles replaced per year depends on the capital program being executed and the results of the pole assessments, WHESC tries to balance its approach, using a planned and paced process, to the total number of poles replaced on an annual basis."

(a) Does Welland Hydro ever replace poles solely due to demographics?
(b) Does Welland Hydro ever replace poles on specific feeders ahead of expected retirement to coordinate with complete pole replacement programs on those feeders driven by condition assessments or voltage upgrades?
(c) Does Welland Hydro conduct business cases to validate economics before implementing full rebuilds of feeders that still have significant numbers of good condition poles?

2-Staff-34
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.3.1b Asset Management Process, Page 60

Welland Hydro notes that it "…has invested money and will continue to invest money in a prudent manner to keep the facility operational without unnecessary cost increases to its customers."

Are details of the building investments included in the capital plans filed as part of this application?

2-Staff-35
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.3.1b Asset Management Process, Page 60

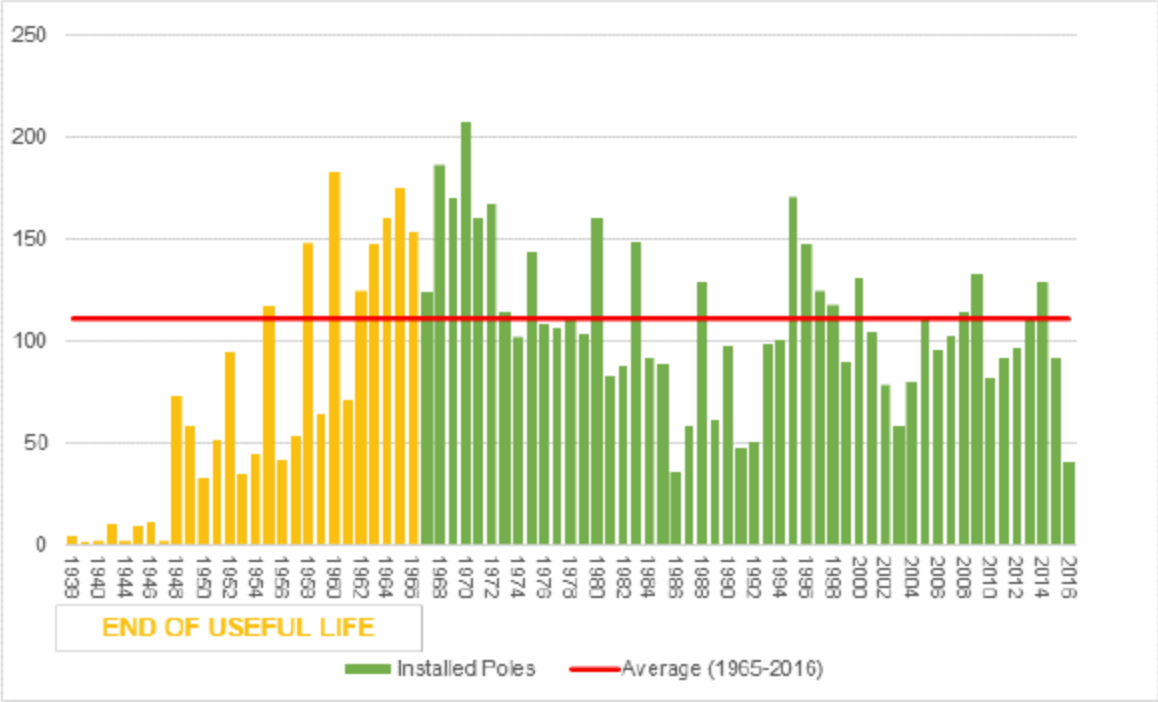
"SCADA communication continues to be an operating cost consideration. Currently, WHESC uses a combination phone lines, wireless radio systems and cellular devices to communicate to in field devices. Projects are underway to test additional wireless systems and data concentrators with the intention of reducing the amount of communication lines and systems."

What are the annual operating costs associated with the communication systems referenced in this paragraph?

2-Staff-36
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.3.2c.2 Poles, Page 66

Welland Hydro owns approximately 8,000 wood poles. Poles are fully depreciated after 50 years but can last many years longer depending on many factors including material, treatment and environmental conditions. Figure 5-32 below illustrates the number of poles currently in service, the quantity for each year, and the average age of poles currently in service.

Figure 5-32: In-service dates of wood poles



(a) From the graph above, it seems as though the average age is not indicated. What is the average age of the wood poles currently in service?

(b) Are all wood poles in Welland Hydro's system of the same species?

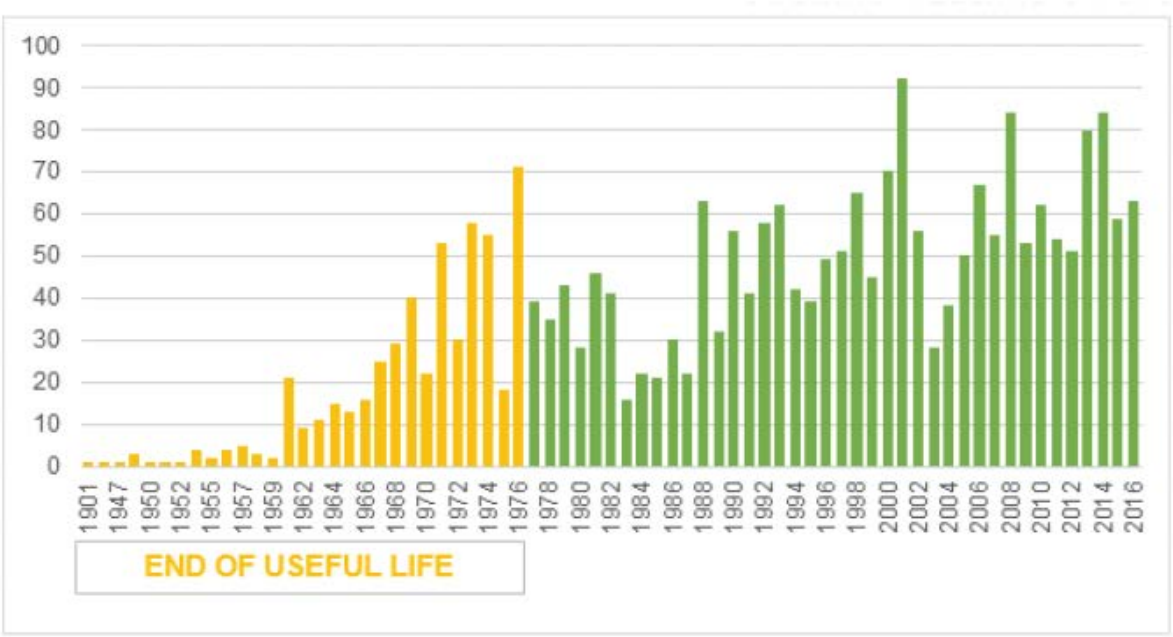
i. If not, does Welland Hydro apply the same 50-year useful life assumption for all species?

(c) Considering the total count of poles identified as being significantly beyond "end of useful life", is that categorization appropriate for all the poles so identified?

2-Staff-37
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.3.2c.3 Distribution Transformers, Page 67

Welland Hydro owns approximately 2,300 distribution transformers ranging in size from 5 to 1500 kVA. Transformers are fully depreciated after 40 years but are replaced immediately on failure or typically if they have any deficiencies that introduce risk. Figure 5-33 illustrates the number of transformers in service and the quantity installed each year.

Figure 5-33: In-service dates of distribution transformers



(a) What sorts of “deficiencies introduce risk”, as referenced above?

i. How is the risk quantified?

ii. Who ultimately decides if the risk due to a specific deficiency is high enough to justify transformer replacement, and what criteria are applied in making that decision?

(b) Considering the total count of distribution transformers identified as being significantly beyond "end of useful life", is that categorization appropriate for all the transformers so identified?

2-Staff-38

Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.3.3b Asset Life Cycle Risk Management, Page 74

“The assessment of risk begins with the inspection of assets. Assets are inspected and inspection data is loaded into the GIS. Inspection data, data from other analysis and asset performance data are used to estimate the probability of failure. The determination of the probability is determined solely on the use of historical data and experience (i.e. at this time, there is no formal process to derive a health index and associate a probability of failure).”

(a) Please confirm that the described process is primarily based upon the exercise of judgment by experienced personnel.

(b) Does the existing process review past decisions to confirm that the decisions were appropriate decisions, which then informs and improves the assessment process?

2-Staff-39
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.3.3b Asset Life Cycle Risk Management, Page 75

Overhead Systems

As introduced in Section 5.3.1b – Asset Management Process, Welland Hydro selects and prioritizes investments into overhead systems based on the system voltage level, reliability (configuration and worker access), voltage conversion potential, connection of new customers, pole condition, and customer criticality.

Table 5-18 Selection and prioritization of overhead rebuild projects based on risk analyses

Project Number	Location	Job Description	Voltage	Score	Reliability	Score	Efficiency	Score	New Customer	Score	Reliability	Score	Safety , Reliab. Environment	Score	Customers CI/IR	Score	Total	Budget	Year
			RRFE	1-5	Op. Eff. Loop	0-5	Fin. Perf. Converted	0-5	Cust. Focus Connection	0-5	Op. Eff. Worker Access	0-5	Public Policy Pole Condition	0-10	Cust. Focus Criticality	0-5	Points		
1	Niagara/Church/Aqueduct	27.6kV Extension	27.6kV & 4.16kV	5	Yes	5	1000	5	No	0	Good	0	Poor	5	High	4	24	$750,000.00	2016/ 2017
2	Wellington Street	4.16kV Line Rebuild/27.6kV Extension	27.6kV & 4.16kV	5	Yes	5	500	3	School	5	Good	0	Fair	3	Medium	3	24	$338,000.00	2016/ 2017
3	Riverview Drive	2.4kV Rebuild & Conversion	2.4kV	4	No	0	400	3	No	0	Poor Access	3	Decayed	10	Low	0	20	$150,000.00	2017
4	Bradley Ave/Robert Street	27.6kV Conversion	27.6kV & 4.16kV	5	No	0	150	1	No	0	Feed to Robert	5	Poor	9	Low	0	20	$49,485.00	2017
5	Ross & Kennedy	16kV Extension	16kV	3	No	1	150	1	No	0	Good	0	Poor	10	Low	1	16	$250,000.00	2017/ 2018
6	Ontario Road - Corridor to Wellington	27.6kV & 4.16kV Rebuild	27.6kV & 4.16 kV	5	Existing	3	215	1	No	0	Good	0	Fair/Poor	3	High	4	16	$300,000.00	2018
7	Lincoln Street - Coventry to Scholfield	27.6kV Rebuild and Tower Removals	27.6kV & 4.16 kV	5	No	5	475	3	No	0	Good	0	Fair	3	Medium	3	19	$440,000.00	2019
8	Duncan - Hagar to East Main	27.6kV Extension	27.6kV & 4.16kV	5	No	2	800	4	No	0	Good	0	Poor	5	Low	2	18	$620,000.00	2019/ 2020
9	Denistoun Ave - Hooker to River	27.6kV Rebuild	27.6kV & 4.16kV	5	Existing	3	600	3	No	0	Good	0	Fair/Poor	3	Low	1	15	$250,000.00	2020
10	Myrtle Avenue	4.16kV Line Rebuild/27.6kV Extension	27.6kV & 4.16kV	5	Yes	5	150	1	No	0	Good	0	Fair/Poor	5	Low	1	17	$165,000.00	2020
11	Dorothy Street - Riverside to Ross	16kV Conversion	16kV	3	No	0	150	1	No	0	Fair - Trees	3	Poor	8	Low	0	15	$100,000.00	2020
12	Clare Avenue - Fitch to Erin	4.16kV Line Rebuild/27.6kV Extension	27.6kV & 4.16kV	5	Future	3	237	1	No	0	Good	0	Fair	3	Low	1	13	$100,000.00	2020
13	Hellems Ave/Park Street	27.6kV Overhead Extension	27.6kV & 4.16kV	5	Yes	3	180	1	No	0	Fair - Trees	3	Fair/Poor	5	Low	0	17	$310,000.00	2021
14	King Street - Lincoln to Regent	27.6kV Overhead Extension	27.6kV & 4.16kV	5	Duplicate	3	750	4	No	0	Good	0	Fair/Poor	3	Medium	3	18	$300,000.00	2021
15	Classic/Lewis	2.4kV Rebuild/Conversion	16kV	4	No	0	750	4	No	0	Good	0	Poor	10	Low	0	18	$350,000.00	2021
16	Rusholme Road - Ridge Road to CNR Tracks	27.6kV Rebuild	27.6kV	5	No	0	0	0	No	0	Good	0	Fair/Poor	3	High	4	12	$150,000.00	2021

(a) Can Welland Hydro provide the set of projects that did not make the list?
(b) Please explain the column headings used in this table and show the parameters and calculations used to assign the numeric scores for each column.
(c) How long has Welland Hydro used this prioritization system? How often does Welland Hydro review the process, and score weightings?
(d) Does the existing process review past decisions to confirm that the decisions were appropriate decisions, and which then informs and improves the assessment process presented in the table above?

2-Staff-40

Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.3.3b Asset Life Cycle Risk Management, Page 76

Table 5-19: Selection and prioritization of underground rebuild projects based on risk analyses

Project #	Subdivision	Street	Install Date	Cable Faults	Circuit	Length (m)	KVA	Convert/ Re-Build	Cable Age Points	Cable Faults Points	R-B/C Points	Total Points	Budget	Year
1	Seaway Park Subdivision	Robert St	1975	2	8F1	165.67	150.0	Convert	1	6	6	13	$150,000	2017
1	Seaway Park Subdivision	Robert St	1975	0	8F1	168.12	150.0	Convert	1	0	6	7		
1	Seaway Park Subdivision	Robert St	1975	0	8F1	175.62	150.0	Convert	1	0	6	7		
1	Seaway Park Subdivision	Robert St	1975	0	8F1	186.24	150.0	Convert	1	0	6	7		
2	Bridlewood Subdivision - EXT 1	Silvan Dr	1976	2	10F3	65.65	525.0	Convert	1	6	6	13	$490,000	2016 - 2017
2	Bridlewood Subdivision - EXT 1	Silvan Dr	1976	1	10F3	74.75	525.0	Convert	1	3	6	10		
2	Bridlewood Subdivision - EXT 1	Silvan Dr	1976	0	10F3	36.19	525.0	Convert	1	0	6	7		
2	Bridlewood Subdivision - EXT 1	Silvan Dr	1976	0	10F3	57.07	525.0	Convert	1	0	6	7		
2	Bridlewood Subdivision - EXT 1	Silvan Dr	1976	0	10F3	64.47	525.0	Convert	1	0	6	7		
2	Bridlewood Subdivision - EXT 1	Silvan Dr	1976	0	10F3	69.05	525.0	Convert	1	0	6	7		
2	Bridlewood Subdivision - EXT 1	Silvan Dr	1976	0	10F3	70.74	525.0	Convert	1	0	6	7		
2	Bridlewood Subdivision - EXT 1	Silvan Dr	1976	0	10F3	70.79	525.0	Convert	1	0	6	7		
2	Bridlewood Subdivision - EXT 1	Silvan Dr	1976	0	10F3	70.83	525.0	Convert	1	0	6	7		
2	Bridlewood Subdivision - EXT 1	Silvan Dr	1976	0	10F3	71.48	525.0	Convert	1	0	6	7		
2	Bridlewood Subdivision - EXT 1	Silvan Dr	1976	0	10F3	74.79	525.0	Convert	1	0	6	7		
2	Bridlewood Subdivision - EXT 1	Silvan Dr	1976	0	10F3	99.05	525.0	Convert	1	0	6	7		
2	Woodfield Acres Subdivision	Cummington Pl	1976	0	10F3	45.81	187.5	Convert	1	0	6	7		
2	Woodfield Acres Subdivision	Cummington Pl	1976	1	10F3	130.2	187.5	Convert	1	3	6	10		
2	Woodfield Acres Subdivision	Leaside Dr/Meadowvale	1976	0	10F3	89.79	187.5	Convert	1	0	6	7		
2	Woodfield Acres Subdivision	Leaside	1976	0	10F3	178.47	187.5	Convert	1	0	6	7		
2	Woodfield Acres Subdivision	Meadowvale Pl	1976	0	10F3	36.69	187.5	Convert	1	0	6	7		
2	Woodfield Acres Subdivision	Leaside Dr	1976	0	10F3	90.82	75.0	Convert	1	0	6	7		
2	Woodfield Acres Subdivision	Leaside Dr	1976	0	10F3	100.55	75.0	Convert	1	0	6	7		
2	Woodfield Acres Subdivision	Leaside Dr	1976	0	10F3	167.53	75.0	Convert	1	0	6	7		
2	Woodfield Acres Subdivision	Leaside Dr	1976	1	9F1	148.48	250.0	Convert	1	3	6	10		
2	Woodfield Acres Subdivision	Leaside Dr/McCrae	1976	1	9F1	232.34	250.0	Convert	1	3	6	10		
2	Woodfield Acres Subdivision	McCrae Dr/Newleaf Cres	1976	1	9F1	169.66	250.0	Convert	1	3	6	10		
2	Woodfield Acres Subdivision	Newleaf Cres	1976	1	9F1	41.63	250.0	Convert	1	3	6	10		
2	Woodfield Acres Subdivision	McCrae Dr	1976	0	9F1	55.03	250.0	Convert	1	0	6	7		
2	Woodfield Acres Subdivision	Newleaf Cres	1976	0	9F1	60.38	250.0	Convert	1	0	6	7		
2	Woodfield Acres Subdivision	Newleaf Cres	1976	0	9F1	79.09	250.0	Convert	1	0	6	7		
2	Woodfield Acres Subdivision	Newleaf Cres	1976	0	9F1	133.55	250.0	Convert	1	0	6	7		
6	Glen Park Estates - EXT 1	Maureen Ave	1974	0	7F1	101.26	125.0	Re-Build	3	6	0	9	$125,000	2017
6	Glen Park Estates - EXT 1	Maureen Ave	1974	0	7F1	112.94	125.0	Re-Build	3	6	0	9		
6	Glen Park Estates - EXT 1	Maureen Ave	1974	0	7F1	183.23	125.0	Re-Build	3	6	0	9		
6	Glen Park Estates - EXT 1	Maureen Ave	1971	1	7F1	183.23	125.0	Re-Build	3	6	0	9		

Please explain the column headings used in this table and show the parameters and calculations used to assign the numeric scores for each column.

2-Staff-41

Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.4.1c.2 System Renewal, Page 80

"The most current cable replacement ranking is organized first by the cables in service from 1969 to 1976. Cables are organized by subdivision name and grouped with other stages of subdivisions that makes the most sense for achieving cost savings during asset replacement."

How are the described cost savings measured? Please provide examples.

2-Staff-42
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.4.1g Expected System Development over the Planning Horizon, Page 83

Smart Grid Development

"Welland Hydro will continue to invest in smart meters over the forecast period."

(a) Why is Welland Hydro going to continue to invest in smart meters?
    i. What is the ultimate goal of these investments?
(b) Do all smart meter technologies provide identical functionality?
    i. If not, how did Welland Hydro determine the appropriate meter functionality to implement?
    ii. Are the smart meters that will be installed in the forecast period functionally identical to the smart meters already installed in Welland Hydro's system?

2-Staff-43
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.4.2b Non-Distribution System Alternatives, Page 87

"WHESC does not have a formal process of determining the effects of CDM and REG projects on the load forecast. The IESO's current Conservation First Framework focuses on energy conservation and does not consider the particulars of peak shaving, while REG is intermittent and cannot be relied on to trim peak demand without the use of energy storage. Since system capacity and operational constraints are usually determined by peak conditions, CDM and REG in their present regulatory states would have little effect. WHESC makes assumptions, based on historical information, on the potential for these programs to mitigate future costs related to increased capacity requirements. A more formal process will be considered in the future during the next wave of Regional Planning. However, a formal process at this time is not seen as necessary, due to slow growth and available Transformer Station capacity."

Has Welland Hydro considered the potential impact of higher levels of penetration of electric vehicles on its distribution system over the forecast period?

2-Staff-44
Ref: Appendix 2-A – Distribution System Plan 2017 Test Year – Section 5.4.2d.3 Random Telephone Survey, Page 94

"System Challenges and Priorities

- 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.
- 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%)."

(a) Please describe the apparent misalignment in customer expectations demonstrated in the excerpted reference: 2/3 of residential customers prefer to replace equipment before it breaks down, yet only 54% feel that Welland Hydro should invest what it take to replace the system's aging infrastructure?
(b) Did Welland Hydro discuss the apparent contradiction in these answers with customers?
(c) Did Welland Hydro explain the incremental costs and rate impacts of preventative asset replacements?

2-Staff-45
Regulatory Charges
Ref: Ex.2, Page 35

At the above reference, Welland Hydro lists the 2017 regulatory charges as follows:

- Wholesale Market Service Rate (WMSR): $0.36/kWh
- Rural Rate Protection Charge (RRRP): $0.13/kWh
- Ontario Electricity Support Program Charge (OESP): $0.11/kWh

(a) Please confirm that the rates listed above are a typographical error and read: $0.0036/kWh, $0.0013/kWh and $0.0011/kWh, respectively.

OEB staff notes that the OEB has determined[1] that the RRRP charge for 2017 shall be $0.0021 per kWh. The WMS rate used by rate-regulated distributors to bill their Class A customers shall continue to be $0.0032 per kWh. For Class B customers a CBR component of $0.0004 per kWh is added to the WMS rate for a total of $0.0036 per kWh. The OESP on-bill rate assistance credits to low income electricity customers remain unchanged; in addition, the OESP charge will remain the same at $0.0011 per kWh[2].

[1] Decision and Rate Order, EB-2016-0362, December 15, 2016
[2] Decision and Rate Order, EB-2016-0376, December 21, 2016

(b) As part of its response to interrogatory 6-Staff-58, please update Welland Hydro's regulatory charges and proposed Tariff of Rates and Charges to include the following:

Wholesale Market Service Rate - Not including CBR	$/kWh	0.0032
Capacity Based Recovery (CBR) – Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0021
Ontario Electricity Support Program Charge (OESP)	$/kWh	0.0011

If unable to separate the WMSR and CBR riders due to limitations with the model, please ensure that the total of $0.0036/kWh is entered under one heading for bill impact purposes.

Exhibit 3 – Operating Revenue

3-Staff-46
Ref: Section 2.3.3 Other Revenue, Table 3-37, Page 32

USoA #	USoA Description	2013 COS	2013 Actual	2014 Actual	2015 Actual[2]	Actual Year[2]	Bridge Year[2]	Test Year
		2013	2013	2014	2015	2015	2016	2017
	Reporting Basis	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
4235	Account Status Fees	$ 2,143	$ 976	$ 1,113	$ 1,078	$ 1,078	$ 1,096	$ 1,096
4235	NSF Charges	$ 4,253	$ 4,485	$ 4,200	$ 3,768	$ 3,768	$ 3,984	$ 3,984
4235	Occupancy Related	$ 95,564	$ 100,770	$ 105,746	$ 102,780	$ 102,780	$ 104,263	$ 104,263
4235	Disconnect/Reconnect	$ 19,622	$ 56,260	$ 54,828	$ 50,047	$ 50,047	$ 52,438	$ 52,438
4235	Markup Work Orders	$ 34,193	$ 23,474	$ 25,878	$ 30,217	$ 30,217	$ 28,048	$ 28,048
4235	**Total Specific Service Charges**	**$ 155,775**	**$ 185,965**	**$ 191,765**	**$ 187,890**	**$ 187,890**	**$ 189,829**	**$ 189,829**
4225	**Late Payment Charges**	**$ 71,971**	**$ 63,356**	**$ 74,709**	**$ 72,853**	**$ 72,853**	**$ 73,781**	**$ 73,781**
4082	Retail Services Revenues	$ 20,515	$ 20,155	$ 18,745	$ 17,071	$ 17,071	$ 10,339	$ 10,339
4084	Service Trans Revenues	$ 789	$ 498	$ 479	$ 377	$ 377	$ 377	$ 377
4086	SSA Administration	$ 61,575	$ 63,829	$ 64,764	$ 65,515	$ 65,515	$ 66,156	$ 66,774
4086	SSA Administration-Microfits	$ 1,425	$ 1,876	$ 2,840	$ 3,398	$ 3,398	$ 4,536	$ 10,800
4210	Rent from Property-Poles	$ 129,990	$ 130,448	$ 130,672	$ 139,958	$ 139,958	$ 139,958	$ 139,958
4210	Rent from Property-Buildings	$ 22,679	$ 22,617	$ 23,180	$ 23,644	$ 23,644	$ 24,117	$ 24,599
	Other Operating Revenue	**$ 236,973**	**$ 239,423**	**$ 240,680**	**$ 249,963**	**$ 249,963**	**$ 245,483**	**$ 252,847**
4305	Regulatory Credits	$ -	$ 95,589	$ 143,387	$ 143,382	$ 143,382	$ 143,382	$ -
4355	Gain/(Loss) Sale of Assets	$ 7,911	$ 10,119	$ 16,672	$ 184	$ 184	$ 8,428	$ 8,428
4355	Gain/(Loss) Early Retired Assets	$ -	$ -	$ -	$ -	$ -	$ -	-$ 29,320
4390	Scrap Metal Sales	$ 16,570	$ 33,853	$ 26,543	$ 23,992	$ 23,992	$ 25,268	$ 25,268
4390	Miscellaneous	$ 9,657	$ 4,277	$ 4,713	$ 3,909	$ 3,909	$ 4,311	$ 4,311
4405	Interest Income	$ 76,143	$ 102,840	$ 48,265	$ 38,381	$ 38,381	$ 9,811	$ 4,906
	Other Income or Deductions	**$ 110,281**	**$ 246,678**	**$ 239,580**	**$ 209,848**	**$ 209,848**	**$ 191,200**	**$ 13,593**
Specific Service Charges		**$ 155,775**	**$ 185,965**	**$ 191,765**	**$ 187,890**	**$ 187,890**	**$ 189,829**	**$ 189,829**
Late Payment Charges		**$ 71,971**	**$ 63,356**	**$ 74,709**	**$ 72,853**	**$ 72,853**	**$ 73,781**	**$ 73,781**
Other Operating Revenues		**$ 236,973**	**$ 239,423**	**$ 240,680**	**$ 249,963**	**$ 249,963**	**$ 245,483**	**$ 252,847**
Other Income or Deductions		**$ 110,281**	**$ 246,678**	**$ 239,580**	**$ 209,848**	**$ 209,848**	**$ 191,200**	**$ 13,593**
Total		**$ 575,000**	**$ 735,422**	**$ 746,734**	**$ 720,554**	**$ 720,554**	**$ 700,293**	**$ 530,050**

(a) Please explain why interest forecast for 2016 and 2017 is significantly lower than in prior years.

(b) What was the 2016 actual interest amount?

3-Staff-47
Ref 1: Ex. 7, Page 8
Ref 2: Ex. 3, Page 14, Table 3-10 – Historical Annual Usage per Customer

At reference 1, Welland Hydro notes that it is proposing to eliminate its Large Use rate class since there are no longer any customers in that class since 2014. At reference 2, Welland Hydro shows historical annual usage for its Large User rate class for 2015 of 277,079 kWh.

Please explain this usage given Welland Hydro's statement that the Large User rate class had zero customers as of January 1, 2015.

Exhibit 4 – Operating Expenses

4-Staff-48
Ref: Chapter 2 Appendices, Tab 2-JA

The proposed OM&A costs in 2017 of $6,999,907 represent an increase of $806,447 or 13% over the 2013 actual OM&A.

(a) Please identify any customer engagement relating specifically to the increase in OM&A that supports the increases proposed in this application.
(b) Further, how has the Applicant communicated these benefits to its customers, and how did customers respond? Please provide some examples, including any customer feedback. If no communications took place, please explain why not.
(c) Please identify what, if any, improvements in services and outcomes the applicant's customers will experience in 2017 and during the subsequent IRM term as a result of increasing the provision for OM&A at the rate indicated.
(d) Please identify any initiatives considered and/or undertaken by Welland Hydro, including any analysis conducted, to optimize plans and activities from a cost perspective.
(e) What improvements did Welland Hydro experience with specific programs up to 2016, and what new productivity and/or efficiency improvement programs are planned? What are the planned savings?

4-Staff-49
Ref: Ex.4, Page 11, Table 4-4 – Cost Drivers Table

Welland Hydro's bad debt expense shows a jump of $53k in the 2016 column of Welland Hydro's OM&A drivers cost table. The 2017 test year shows a slight increase of $2,300.

Please explain the cause of the large increase in Bad Debt Expense in 2016, and why it is anticipated to decrease in 2017.

4-Staff-50
Compensation Benchmarking – Unionized Positions
Ref 1: Ex.4, Page 27
Ref 2: Ex.4, Page 28

At reference 1, Welland Hydro discusses its compensation system for unionized positions. Welland Hydro discusses the objectives and outcomes when the 2015 contract negotiations took place.

At reference 2, Welland Hydro discusses its compensation system for management positions. Welland Hydro notes that it benchmarks the salaried compensation outcomes with LDCs of a similar size in Ontario. Welland Hydro also participates in the annual compensation survey performed by MEARIE.

(a) Please state whether or not Welland Hydro has ever had any formal studies of its compensation system conducted for unionized positions, either by or for the applicant. If yes, please provide such studies. If no, please explain why not.
(b) Please explain the nature of the questions in the MEARIE survey and how compensation is benchmarked based on the results.
(c) Did Welland Hydro conduct any benchmarking other than the above to support the current cost of service application?

4-Staff-51
Ref: Ex.4, Page 26
Ref: Chapter 2 Appendices, Tab 2-K

At the above references, FTE and Employee Costs are provided for the period from 2013 to 2017. In the two-year period 2015 to 2017 (forecasted), Total Management Compensation is shown as increasing from $1,566,055 to $1,888,792 (before OPEBs and unusual items), an increase of 21%, while Total Non-Management Compensation in the same period increased from $2,672,111 to $2,854,237, an increase of 7%.

Please explain this differential.

4-Staff-52
Ref: Exhibit 4, Pages 35-37 and Appendix 4-B Actuarial Valuations
Ref: Exhibit 2, Appendix 1-I, Annual Financial Statements

With regards to post-retirement benefits:

(a) Welland Hydro has used the cash basis for post-retirement benefits expense in the application. It will adopt the methodology that the OEB determines to be appropriate at the conclusion of the OPEBs consultation (EB-2015-0040).
    i. If the OEB determines OPEBs are to be accounted for on a forecasted accrual basis during Welland Hydro's IR term, is Welland Hydro proposing to adopt the change during the IR term?
    ii. If yes, how will Welland Hydro adopt the change?
    iii. Why is Welland Hydro proposing to use the cash basis and not consistently use the accrual basis when the difference between the forecasted 2017 cash and accrual is not material?

(b) In the 2015 financial statements, Note 25 shows an IFRS transition adjustment to reduce the post-employment benefit obligation by $104k. In Appendix 4-B, the chart in the cover letter shows a reduction in the obligation by $157k.
    i. Please reconcile the post-employment benefit reduction of $104k in the 2015 financial statements and the $157k in the actuarial valuation.
    ii. The $157k reduction in the actuarial valuation is composed of a reduction to the Accrued Benefit Obligation of $51k, a recognition of unrecognized past service costs of $18k and a recognition of actuarial loss of $88k. However, on page 7 of the actuarial report, the $88k is shown as an actuarial gain of $88k. Please clarify whether the amount is a gain or loss and if it increases or decreases the post-retirement obligation as at January 1, 2014.
    iii. Please also explain how the recognition of the unrecognized past service costs of $18k reduces the post-retirement obligation, instead of increasing the obligation.

4-Staff-53
Ref: Tab "4. 2011-14 LRAM" of LRAMVA Work Form, Tables 7 to 10

As noted in the LRAMVA workform, adjustments should be applied to the same program year it relates to. For example, adjustments to 2011 results should be shown as part of the calculation of 2011 lost revenues.

Please confirm how the savings adjustments were applied to the verified results

4-Staff-54
LRAMVA

OEB staff notes that if the OEB approves a distributor's account balances on a final basis, any adjustments made to prior years by the IESO are not recoverable.

Is Welland Hydro expecting any retroactive adjustments from the IESO to its savings?

4-Staff-55
Ref: Tab "6. Persistence Rates" in Welland's LRAMVA Work Form
Tabs 1-4 of "Welland_2017_2011-2014 CDM Results with Persistence No DR_20161028"

(a) Please discuss how the persistence values in Table 12 of the LRAMVA Work Form were derived from the initiative persistence savings in file, "Welland_2017_2011-2014 CDM Results with Persistence No DR_20161028." Please provide any supporting evidence provided to Welland Hydro from the IESO (preferably in excel format). An excerpt of Table 12 is provided for reference below.

Table 12 of LRAMVA Workform:

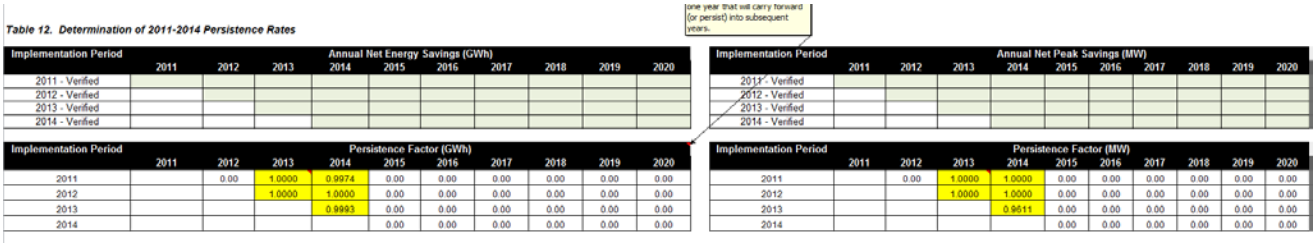


Table 12. Determination of 2011-2014 Persistence Rates

Implementation Period	Annual Net Energy Savings (GWh)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
2011 - Verified										
2012 - Verified										
2013 - Verified										
2014 - Verified										

Implementation Period	Annual Net Peak Savings (MW)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
2011 - Verified										
2012 - Verified										
2013 - Verified										
2014 - Verified										

Implementation Period	Persistence Factor (GWh)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
2011		0.00	1.0000	0.9974	0.00	0.00	0.00	0.00	0.00	0.00
2012			1.0000	1.0000	0.00	0.00	0.00	0.00	0.00	0.00
2013				0.9993	0.00	0.00	0.00	0.00	0.00	0.00
2014					0.00	0.00	0.00	0.00	0.00	0.00

Implementation Period	Persistence Factor (MW)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
2011		0.00	1.0000	1.0000	0.00	0.00	0.00	0.00	0.00	0.00
2012			1.0000	1.0000	0.00	0.00	0.00	0.00	0.00	0.00
2013				0.9611	0.00	0.00	0.00	0.00	0.00	0.00
2014					0.00	0.00	0.00	0.00	0.00	0.00

(b) In the 2011, 2012 and 2013 LRAM Work Forms (Tab 4. 2011-14 LRAM), OEB staff notes that a "persistence adjustment" was made to savings (i.e., cells I 76, I 155, and I 235 of Tab 4). Please show and explain how this adjustment was calculated and why it is applied to the persistence results. Please indicate if the IESO supported this adjustment and provide any supporting documentation if available.

4-Staff-56
Ref: Tab "4. 2011-14 LRAM" in Welland's LRAMVA Work Form Welland 2014 CDM Annual Report, Table 5a (Verified Results)

(a) Please confirm whether or not the initiative level savings input into the 2011, 2012, 2013 and 2014 LRAMVA Work Forms take into account any initiative level adjustments that were verified by the IESO/OPA. If they do, please confirm that

the initiative level adjustments were provided to Welland Hydro by the IESO and submit the initiative level adjustments in excel format with this response.

(b) Please reconcile the business retrofit savings included in the LRAMVA Work Form in 2011, 2012, 2013 and 2014, as the savings amounts submitted by Welland Hydro vary with the IESO verified amounts significantly.

(c) Please update the allocation of business retrofit savings to both the GS<50 kW and GS>50 kW classes for the 2011, 2012, 2013 and 2014 years, as currently, each rate class has an allocation of 100%. In doing so, please ensure that the business retrofit savings are entered in accordance with the IESO verified results.

(d) OEB staff has identified additional savings from other business and industrial programs that are not captured in the 2011, 2012, 2013 and 2014 LRAMVA Work Forms. Please discuss why all savings provided by the IESO have not been included in the LRAMVA Work Form. In the event that Welland Hydro did not input the final CDM results from the IESO correctly, please update the LRAMVA work form.

(e) Please file a copy of the revised LRAMVA work form with the changes noted above.

Exhibit 5 – Cost of Capital and Capital Structure

5-Staff-57
Ref: OEB Letter - Cost of Capital Parameter Updates for 2017 Cost of Service and Custom Incentive Rate-setting Applications, October 27, 2016

On October 27, 2016, the OEB issued its updated cost of capital parameters for 2017 rate applications. The updated parameters are as follows:

Cost of Capital Parameter	Value for Applications for rate changes in 2017
ROE	8.78%
Deemed LT Debt Rate	3.72%
Deemed ST Debt Rate	1.76%

Please update all applicable models for the updated cost of capital parameters in accordance with IR 6-Staff-58.

Exhibit 6 – Calculation of Revenue Deficiency

6-Staff-58

Upon completing all interrogatories from OEB staff and intervenors, please provide an updated RRWF in working Microsoft Excel format with any corrections or adjustments that the Applicant wishes to make to the amounts in the populated version of the RRWF filed in the initial applications. Entries for changes and adjustments should be included in the middle column on sheet 3 Data_Input_Sheet. Please include documentation of the corrections and adjustments, such as a reference to an interrogatory response or an explanatory note. Such notes should be documented on Sheet 10 Tracking Sheet, and may also be included on other sheets in the RRWF to assist understanding of changes.

Also upon completing all interrogatories from OEB staff and intervenors please provide any updates to the following Microsoft Excel documents in working format:

- PILS spreadsheet
- any Appendix 2 changes (e.g. cost allocation, rate design, and bill impacts, and so on as required)
- EDDVAR spreadsheet, and the updated cost allocation model (as per the interrogatory below) reflecting the revised revenue requirement in the updated RRWF
- LRAM Workform

Exhibit 7 – Cost Allocation

7-Staff-59
Weighting Factors
Ref: Ex.7, Pages 3-4

As instructed by the OEB, Welland Hydro has used LDC specific weighting factors.

(a) Was a cost study conducted to determine the weighting factors for services and billing and collecting? Please describe how the weighting factors determined.

(b) With respect to the General Service>50kW rate classes, what was the methodology used to determine the weighting factors?

(c) With respect to the Street Lighting and Sentinel Load classes, Welland Hydro notes that, for the most part, its subsidiary (Welland Hydro Electric Holding Corp. which is 100% owned by the City of Welland) performs streetlight and sentinel light maintenance on behalf of Welland Hydro. Please explain why a weighting

factor of zero was not used. If any changes are necessary, please make the necessary corrections.

7-Staff-60
Ref: Ex. 7, Table 7-7 Revenue to Cost Ratios, Page 7

Rate Class	2013 Board Approved	2017 Updated Cost Allocation Study	2017 Proposed Ratios	2018 & 2019 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%

Please explain why the revenue-to-cost ratio for the street lighting rate class has increased significantly as indicated by the 2017 cost allocation study.

7-Staff-61
Proposed microFIT Rate
Ref: Ex. 7, Page 8

Welland Hydro notes that the monthly charge from Welland Hydro's service provider to supply hourly generation data for the IESO monthly invoice is $10.00 per month. Welland Hydro is proposing to increase the microFIT charge from $5.40 to $11.25. The calculation is shown below:

Monthly Service Provider Costs	$10.00
Standard Supply Service – Administration Charge	$0.25
Postage/Cheque and Banking	$1.00
Total	**$11.25**

(a) Please confirm if Welland Hydro has provided for this increase in revenue in its 2017 revenue offsets. If not, please make the applicable corrections.
(b) How many customers would be impacted by this change?
(c) How much revenue would the change in the microFIT rate equate to on an annual basis?

OEB staff notes that an increase in the microFIT rate to $10.00 has been approved by the OEB in some recent cost of service proceedings, however other applicants have not included the additional $1.25 for Standard Supply Service and Postage.

(d) Please provide supporting rationale for including this additional charge.

7-Staff-62
Elimination of Large Use Rate Class
Ref 1: Ex. 7, Page 8
Ref 2: Ex. 2. Distribution System Plan, Page 5

At reference 1, Welland Hydro notes that it is proposing to eliminate its Large Use rate class since there are no longer any customers in that class since 2014. At reference 2, Welland Hydro notes that recently, General Electric announced a major investment of $165 million U.S. in a state of the art "brilliant" manufacturing facility in the City of Welland which is scheduled for completion in 2018.

(a) Please confirm that the new General Electric facility will not be a Large Use customer.
(b) If the answer to (a) is no, please explain Welland Hydro's proposal to eliminate its Large Use rate class.
(c) Please provide the dollar impact of the loss of Welland Hydro's Large Use customer.
(d) Please confirm that Welland Hydro does not anticipate any Large Use customers to enter in its service territory for the forecast period.

Exhibit 8 – Rate Design

8-Staff-63
Interval v. Non-Interval RTSR
Ref: Ex.8, Section 2.8.3, Page 8

Welland Hydro has completed the RTSR Workform with the view of eliminating the interval versus non-interval classifications in the GS>50kW rate class in preparation with the OEB directive to eliminate all non-interval meters before 2019.

(a) Please confirm that Welland Hydro is referring to the May 21, 2014 Notice of Amendment to a Code regarding revisions to the Distribution System Code to require a distributor to install an interval meter (i.e., a "MIST meter") on any installation that is forecast by the distributor to have a monthly average peak demand during a calendar year of over 50 kW.
(b) What is the status of Welland Hydro's installation of MIST meters?

(c) Please confirm that Welland Hydro is installing MIST meters for all new customers in the GS>50kW rate classification.
(d) Please confirm that Welland Hydro currently does not have any non-interval metered customers in its GS>50 rate class.
(e) If the answer to (d) is no, please explain how Welland Hydro plans to charge these customers come May 1, 2017.

8-Staff-64
Specific Service Charges
Ref: Ex.8, Section 2.8.6, Page 9

Welland Hydro proposes two new Specific Service Charges. Currently, Welland Hydro hand delivers a final disconnection notice and provides the customer with the option of making a payment to avoid disconnection. Currently, there is no charge for this service. Welland Hydro notes that these charges are in effect at many LDCs in Ontario.

Specific Service	Unit	Charge
Collection of account charge – no disconnection – during regular hours	$	30.00
Collection of account charge – no disconnection – after regular hours	$	165.00

(a) Has Welland Hydro notified its customers of the proposed new charges?
    i. If not, please explain why.
(b) Have the anticipated dollars for the 2017 test year associated with these two new charges been included in Welland Hydro's proposed other revenue? If not, please make the necessary updates.

Exhibit 9 – Deferral and Variance Accounts

9-Staff-65
Ref: Exhibit 9, Page 6, DVA Continuity Schedule

Account 1595 (2013) has not been requested for disposition in this application. Welland Hydro indicated that the related DVA rate riders were to be disposed over a two year period, from May 2013 to April 2015 and the stranded meter rate rider was to be disposed over a four year period, from May 2013 to April 2017. Welland Hydro proposes to bring forward any residual amounts for disposition in its 2019 IRM rate application. Per July 2012 APH FAQ# 10, "Account 1555 should be used for purposes of both the disposition and the recovery of stranded meter costs (i.e., the disposition of approved costs should not be transferred to the sub-accounts of Account 1595)". Therefore,

(a) Please revise the DVA continuity schedule to separate out transactions relating to stranded meters in Account 1555, sub-account Stranded Meter Costs.
(b) Please also revise the DVA continuity schedule to reflect Account 1595 (2013) excluding any stranded meter transactions.
    i. Please indicate if Welland Hydro is requesting Account 1595 (2013) for disposition in this application. If not, please explain why not.

9-Staff-66
Ref: Exhibit 9, Page 13, Table 9-5

Table 9-5, 2013 includes ($45k). From Welland Hydro's 2013 settlement agreement, Welland Hydro disposed of $46k for IFRS costs recorded in Account 1508 as at December 31, 2011. Please confirm that Welland Hydro had not included any further IFRS costs that qualified to be recorded in this sub-account in its 2013 revenue requirement. If this is not the case, please revise Table 9-5 to remove these particular costs that Welland Hydro would have previously received recovery for.

9-Staff-67
Ref: Exhibit 9, Page 16

Welland Hydro indicated that it does not follow Article 490 of the APH and does not track variances in Account 1518 RCVA Retail and Account 1548 RCVA STR as it believes the variances would not be material.

(a) Would Welland Hydro be able to provide estimates of the variances in the above noted accounts? If yes, please provide the amount.
(b) Is Welland Hydro requesting the OEB's approval not to track variances in these accounts going forward?

9-Staff-68
Ref: Exhibit 9, Page 18

In allocating Account 1589, 2015 billed Non-RPP kWh was used for Residential and GS<50kW customer classes. For the GS>50kW and Sentinel Light customer Classes, Welland Hydro used the ratio of Non-RPP to RPP 2015 billed kWh applied to the 2017 forecasted kWh. For the 2017 forecast, please explain why there is a mixture of approaches used (i.e. 2015 billed kWh used for Residential and GS<50kW and 2017 forecast kWh used for GS>50kW and Sentinel Light customer classes).

9-Staff-69
Ref: Exhibit 9, Page 25, DVA Continuity Schedule
Welland Hydro submits the IESO true up for RPP claims on a quarterly basis.

(a) Please confirm that the IESO true up has not been included in the 2015 year end balances.

(b) Please indicate the IESO true up amounts for September to December 2015. Please also indicate what the Account 1588 and Account 1589 balances would be if the true up was included in the year-end balance.