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BY E-MAIL

October 25, 2016

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

Dear Ms. Walli:

**Re: Renfrew Hydro Inc. (Renfrew Hydro)
2017 Distribution Rate Application
OEB Staff Interrogatories
OEB File No. EB-2016-0166**

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

Renfrew Hydro's responses to interrogatories are due by November 14, 2016.

Yours truly,

Original Signed By

Georgette Vlahos
Advisor – Incentive Rate Setting & Accounting

Attach.

OEB Staff Interrogatories
2017 Cost of Service Rate Application
Renfrew Hydro Inc. (Renfrew Hydro)
EB-2016-0166
October 25, 2016

Exhibit 1 – Administration

1-Staff-1

Customer Engagement

Ref: Chapter 2 of the Filing Requirements, Section 2.4.3

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

Reflecting Customer Needs

Ref: Chapter 2 of the Filing Requirements

Chapter 2 of the Filing Requirements states, “Distributors should specifically discuss in the application how they informed their customers on 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). The application should discuss any feedback provided by customers and how this feedback shaped the final application”.

What forms of outreach were employed to explain how the current application serves the needs and expectations of customers? If none were employed, please explain why.

1-Staff-3

Customer Satisfaction Survey

Ref: Ex.1/Tab 3/Sch. 2

Renfrew Hydro, through a collaborative effort from Hearst Power Distribution Company Limited, Hydro Hawkesbury Inc., Hydro 2000 Inc., Cooperative Hydro Embrun, and

Ottawa River Power Corporation, developed an in-house customer satisfaction survey in order to minimize the cost of the survey.

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

1-Staff-4

Customer Satisfaction Survey & Renfrew Hydro Open House

Ref 1: Ex.1/Tab 3/Sch.2 – Customer Satisfaction Survey

Ref: Ex.1/Tab 3/Sch.5 – Meetings and Advertisements

At reference 1, Renfrew Hydro filed the results of a customer satisfaction survey. OEB staff notes that while a customer satisfaction survey is a good tool to gauge how a customer views the past performance of its utility, it is not necessarily a tool that engages customers on future plans.

- (a) Did the survey contain data comparisons to an Ontario-wide LDC benchmark?
- (b) Did the survey results help shape certain parts of Renfrew Hydro's current application? If yes, please explain what was adopted in this application as a direct result of the survey completed by customers.
- (c) Did Renfrew Hydro conduct any benchmarking to support the current cost of service application?

At reference 2, Renfrew Hydro notes that it hosted two open house/public consultation sessions to provide an opportunity for customers to learn about the company's distribution system investment plans and potential rate impacts. Renfrew Hydro also provided informative and user-friendly ads which appeared in the local paper.

- (d) Please describe any modifications Renfrew Hydro made to its application after hearing feedback from customers.

1-Staff-5**Ref: Ex.1/Tab 6/Sch.4/Page 81**

Renfrew Hydro states that it has adopted the various account changes prescribed by the OEB in relation to the USoA (APH Article 210).

- (a) Please identify the changes Renfrew Hydro is referring to and explain what the changes were for.
- (b) Please indicate when Renfrew Hydro made these changes.

1-Staff-6**Ref: Ex.1/Tab 6/Sch.14/Page 81****Ref: Chapter 2 Appendices 2-Y**

Renfrew Hydro implemented accounting policy changes on January 1, 2013. Renfrew Hydro completed Appendix 2-Y, however, the comparison of revenue requirement is between 2010 CGAAP and 2017 MIFRS. Please complete the comparison between 2017 CGAAP and 2017 MIFRS.

1-Staff-7**Previous OEB Directives****Ref: Ex.1/Tab 6/Sch. 12, page 59**

As part of its previous cost of service application, Renfrew Hydro agreed that there was room for improvement relating to its level of line losses and to also take a more proactive approach to managing its losses. Renfrew Hydro was directed by the OEB to report the findings and progress in its next cost of service application.

In the current cost of service application, Renfrew Hydro indicates that its current TLF and DLF is lower than it has been historically after implementing many of the recommendations in its 2007 study "Loss Optimization E0126". Renfrew Hydro notes that since it will be 10 years since its last study, it will undertake a new study in 2017 to look for ways to reduce losses and improve its performance.

Has Renfrew Hydro included the cost of the new study in this application? If so, please indicate where the costs have been included.

1-Staff-8
Conditions of Service
Ref: Ex.1/Tab 6/Sch. 13

Chapter 2 of the Filing Requirements now requires the identification of any charges that may be included in the conditions of service since the last rebasing in addition to stating that only rates approved by the OEB can be applied.

- (a) If applicable, please identify any rates and charges that are included in Renfrew Hydro's Conditions of Service, but do not appear on the OEB-approved tariff sheet, and provide an explanation for the nature of the costs being recovered through these rates and charges.
- (b) If applicable, please provide a schedule outlining the revenues recovered from these rates and charges from 2012 to 2014 inclusive, and the revenues forecasted for the 2015 bridge and 2016 test years.
- (c) If applicable, please explain whether, in Renfrew Hydro's view, these rates and charges should be included on Renfrew Hydro's tariff sheet of approved rates and charges.

Exhibit 2 – Rate Base

2-Staff-9
Ref: Chapter 2 Appendices – Tab 2-AB

Under the system renewal category, Renfrew Hydro has underspent when compared to its planned in each year with the exception of 2012. OEB staff has reproduced the system renewal spending below. For the 2017 test year, Renfrew Hydro is requesting a system renewal amount at the same level of 2012 actual spending.

Please provide reasoning for the underspending throughout the historical period, followed by the request for an increase to similar levels as in 2012.

	2012 Plan	2012 Actual	2013 Plan	2013 Actual	2014 Plan	2014 Actual	2015 Plan	2015 Actual	2016 Plan	2016 Actual	2017 Test
System Renewal	360,000	421,154	297,537	285,943	265,000	196,592	339,500	279,467	368,000	296,613	422,000

2-Staff-10**Ref: Chapter 2 Appendices, Tab 2-AB – Capital Expenditures**

Please confirm if any of the projects listed at the above reference were planned and prioritized based on climate change expectations. If yes, please provide supporting rationale.

2-Staff-11**Rate-Funded Activities to Defer Distribution Infrastructure**

On December 19, 2014 the OEB issued the [Conservation and Demand Management \(CDM\) Requirement Guidelines for Electricity Distributors \(EB-2014-0278\)](#) (the 2015 CDM Guidelines). Section 4.1 of the 2015 CDM Guidelines outlines the OEB's guidance in support of the Government's objective of putting conservation first in infrastructure planning. The OEB established a policy that allows electricity distributors to seek distribution rate funding for CDM programs and other initiatives for the purposes of avoiding or deferring future infrastructure projects.

- (a) Please describe if Renfrew Hydro has considered incremental conservation initiatives, over and above those established in cooperation with the IESO, in order to defer or avoid future infrastructure projects as part of its distribution system planning processes.
- (b) If the answer to (a) is yes, please describe how. If no, please explain why not.

2-Staff-12**Ref: Ex.2/ Tab 1/ Sch.4/Page 33****Ref: Ex.3/Tab 4/Sch.1/ Page 55**

Renfrew Hydro has included gains and losses on disposition of capital assets in Other Revenues from 2013 to 2017. However, in the 2017 Fixed Asset Continuity Schedule, no amounts are recorded in the disposal column. Please explain why this is the case and revise the evidence as needed.

2-Staff-13**Ref: Ex.2/Tab 4/Sch. 1 – Smart Meter Deployment and Stranded Meters**

Renfrew Hydro has documented \$558,932 in capital costs and \$83,895 in operating expenses for its deployment and operation of smart meters and related equipment for communications and data storage. Renfrew Hydro also documents that 4133 smart meters were deployed to Residential, GS < 50 kW and GS > 50 kW customers.

- (a) In its smart meter model, Renfrew Hydro documents no further capital or operating costs for smart meters after 2011. On page 60 of Exhibit 2, Renfrew Hydro states: “The costs of the post 2012 smart meters and beyond minimum functionality costs are not included in this application”. Please explain how Renfrew Hydro recovered the costs of any further capital assets (replacement smart meters for failures or for new customers, computer or communications hardware or software) and operating expenses from 2012 to 2016.
- (b) Renfrew Hydro states that it incurred no costs “beyond minimum functionality” on page 58 of Exhibit 2, but documents that it installed smart meters for 37 GS > 50 kW customers in 2011 and documents no capital costs beyond minimum functionality in section 1.6 (“Capital Costs Beyond Minimum Functionality”) on Sheet 2 of the Smart Meter Model.
- i. Please document the costs related to the installation of smart meters installed for GS > 50 kW customers separately. Please identify the cost per smart meter for GS > 50 kW customers.
 - ii. Please support these “beyond minimum functionality” costs for smart meter installations for GS > 50 kW customers in accordance with section 3.4 of [*Guideline G-2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition*](#), issued December 15, 2011.

2-Staff-14

Ref: Smart Meter Model

On sheet 8 of its filed Smart Meter Model, pertaining to Smart Meter Funding Adder revenues, Renfrew Hydro shows negative entries of (\$4,274.21) for January 2012 and (\$4.10) for August 2012. Please explain these entries.

Distribution System Plan

2-Staff-15

Distribution System Plan

Ref: Ex.2/Tab 5/Sch.1

Renfrew Hydro states it plans to invest in smart grid through a “prudent” and “judicious process” when opportunity arises.

- (a) How does the “future distribution system” incorporate Smart Grid and the Outage Management System objectives from an implementation and cost perspective?
- (b) How do individual investments today tie into the “future distribution system”? (e.g. Installing electronic devices for the development of Smart Grid)

2-Staff-16**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 3 of 83)**

Renfrew Hydro states that “the diligent maintenance of its equipment has permitted RHI to extract an extended useful working life from its assets”

- (a) What assets are considered in this pool of “extended useful working life”?
- (b) How many years of extended life are to be expected (for each type of asset) ?
- (c) Does the risk of failure increase as you are operating the asset outside of the life expectancy?
- (d) What metrics are used to measure whether the asset is in good standing condition? What threshold on these metrics would identify the asset as becoming at risk to failure?
- (e) What is the maintenance cost difference between maintaining existing assets to maintaining brand new assets?

2-Staff-17**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 3 of 83)**

The Distribution System Plan, under the heading “The Desired Distribution System” references “life-extending refurbishment”.

- (a) Can Renfrew Hydro list examples of “life-extending refurbishments” and their costs?
- (b) How many years of extended life are to be expected?

2-Staff-18**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 7 of 83)**

Renfrew Hydro conducts asset condition assessments and is centralized in the GIS system.

- (a) What are the metrics used for different types of equipment in the condition assessment?
- (b) How are visual inspections represented quantitatively for each type of asset?
- (c) How often is this information reviewed/refreshed?
- (d) What is the confidence level of the accuracy of the information?
- (e) How is the attribute data from GIS used to optimize the asset's lifecycle?
- (f) Please provide loading and planning criteria for major assets, such as, station transformer and feeders.
- (g) Are modelling tools used to simulate different distribution configurations to ensure assets are not operating above technical limits?

2-Staff-19**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 7 of 83)**

Please explain the following for the capital investment prioritization process.

- (a) What is the methodology for calculating the “investment scores” and how do they relate to value and risk?
- (b) How is risk assessed? If it’s using probability x consequence how is probability assessed?
- (c) What is the methodology in calculating “value” of an investment and is it normalized across investments?

2-Staff-20**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 8 of 83)**

Under the heading Sources of Cost Savings: “Asset condition inspections and comprehensive data collection provides a better understanding of each asset’s stage in its lifecycle which will lead to more cost effective decisions with respect to maintenance, refurbishment and replacement decisions.”

- (a) What are the metrics and thresholds used to decide between maintenance, refurbishment, and replacement from the comprehensive data collected?
- (b) How does Renfrew Hydro normalize the cost of the 3 types of possible classifications, such that they can be compared?

2-Staff-21**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 8 of 83)**

Renfrew Hydro expects distribution automation to improve outage times and customer outage costs.

- (a) What operational capabilities does the distribution automation offer to improve outage restoration times and mitigate customer outage costs?
- (b) What are the costs saved compared to the cost of distribution automation?
- (c) Are there other investments required for an effective automated distribution system?
- (d) For an effective automated distribution system, how much equipment upgrade is required on the overall system?

2-Staff-22**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 14 of 83)**

Renfrew Hydro proposes that feedback be a metric for performance measurement.

How does Renfrew Hydro propose to quantitatively measure performance based on the customer feedback on price, reliability, and hydro bill presentation?

2-Staff-23

Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 16 of 83)

Under the heading Service Reliability, Renfrew Hydro has provided figure 2 – Historical Period SAIDI trend and figure 3 – Historical Period SAIFI trend.

What are the SAIDI and SAIFI scores by station and feeder? How does this compare to neighbouring LDC SAIDI and SAIFI trending scores?

2-Staff-24

Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 17 of 83)

Under the heading Outage Causes, Renfrew Hydro provides a diagram depicting Customer Outage Hours by Cause Code.

- (a) Please provide a similar diagram for Number of Outage Incidents by Cause Code.
- (b) Please provide data for 2010 and 2012 for the diagram Customer Outage Hours by Cause Code and the diagram requested in (a)
- (c) What particular equipment was responsible for the increase in “Defective Equipment” in 2014?
 - i. How has this risk been mitigated for future years?
 - ii. Are the defects cleared up yearly? If not, how many are outstanding?

2-Staff-25

Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 23 of 83)

Under the heading Asset Management Process Overview, Renfrew Hydro states “...make better use of smart meters to quickly pinpoint the source of power outages and deploy crews.” Renfrew Hydro does not have a SCADA system.

What system does Renfrew Hydro use in conjunction with smart meters to pinpoint power outages?

2-Staff-26**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 23 of 83)**

Under the heading Asset Management Process Overview, Renfrew Hydro states “...reduce energy waste and losses by using technology to monitor and manage remote substations for loading and outages, feeder and phase balancing, voltage reduction and load management”

What technologies does Renfrew Hydro have in place or plan to have in place to manage substations?

2-Staff-27**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 26-28 of 83)**

Renfrew Hydro describes a robust Asset Management Process for asset planning in areas such as safety, system reliability, service quality, rate impact, operational efficiency, cost effectiveness, environmental effects, project interdependencies, regulatory compliance, and stakeholder’ concerns.

Are there reports on the Asset Management Process for individual projects above the materiality threshold? If so please provide.

2-Staff-28**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 29 of 83)**

Under the heading Asset Management Process Overview, Renfrew Hydro states, “The criteria below, applied to discretionary candidate capital projects, is used to convert subjective (qualitative) issues into objective (quantitative) results to aid in project to project comparisons.”

What is the quantitative scale or matrix used for each criteria in deciding its weight, such that projects can be evaluated consistently?

2-Staff-29**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 31 of 83)**

The Asset Condition Assessment (ACA) is used as an input to a variety of decision-making processes in Renfrew Hydro’s plan.

(a) Please provide the ACA for all major assets in excel (or equivalent) format.

- (b) Please provide all formulae used to normalize condition assessments for replacement prioritization.
- (c) Please provide all thresholds used to indicate asset degradation and asset replacement
- (d) Please provide the metrics/trending used, by equipment type, for failures.
- (e) Is risk considered in the ACA? If so, please provide how risk is evaluated within the ACA.

2-Staff-30

Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 47 of 83)

Under the heading Inspection and Condition Assessment of Distribution Stations, Renfrew Hydro describes the inspection and maintenance of distribution stations.

- (a) When major deficiencies are discovered at a distribution station and addressed based on risk, how is risk calculated?
- (b) Do distribution station transformers require a mid-life overhaul to maximize life expectancy? If so, what is the schedule for all 5 distribution stations?

2-Staff-31

Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 51 of 83)

Under the heading Capital Expenditure Plan - Capability to Connect New Load or Generation:

- (a) Does Renfrew Hydro consider potential projects that may not have requested a contract from the IESO, such as, the Ottawa Renewable Energy Coop expansion plan of solar projects in Renfrew County?
- (b) What remaining capacity for generation does each station have in terms of thermal and short circuit?
- (c) Is the system capable of handling reverse flow and islanding conditions?

2-Staff-32

Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 54 of 83)

Under the heading Capital Expenditure Plan – Material Capital Investment Projects:

For each overhead rebuild project, please provide the distance of line rebuild in kilometers.

2-Staff-33**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 56 of 83)**

Under the heading Capital Expenditure Plan - Capital costs – Technology based Opportunities:

Is the Smart Meter based substation monitoring at MS1 the first step to a smart grid? What are the plans for future distribution stations in terms of timelines and cost? Are there other components in the system that need to be upgraded in conjunction with these stations?

2-Staff-34**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 57-58 of 83)**

Under the heading Capital Expenditure Plan - Distribution Automation:

- (a) As switches and load interrupters approach end-of-life are they being replaced with equipment that are smart grid compatible?
- (b) Are the new reclosers installed at MS1 electronic reclosers c/w controllers? Will this be the new standard for Renfrew Hydro moving forward?

2-Staff-35**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 58 of 83)**

Under the heading Capital Expenditure Plan - Pole Replacement Program:

Will replacing 40 poles a year in the pole replacement program be enough to stay ahead of the curve for aging pole demographics?

2-Staff-36**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 58 of 83)**

Under the heading Capital Expenditure Plan - Elimination of Environmental/Health or Safety Risks:

What is the historical number of projects that have been moved to the forefront of implementation as a result of safety risk? What is the total amount in dollars?

2-Staff-37**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 58 of 83)**

Under the heading Capital Expenditure Plan - Information Technology and Services:

Without a wholesale plan on distribution automation, how does Renfrew Hydro know which assets to upgrade and which to replace like-for-like when they reach end-of-life?

2-Staff-38**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 59 of 83)**

Under the heading Capital Expenditure Plan - Prioritization and pacing of investments:

- (a) What is the percentage of non-discretionary projects to discretionary projects?
- (b) What selection criteria from the asset management system were used to evaluate system renewal projects?

2-Staff-39**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 68 of 83)**

Renfrew Hydro provides under the heading Justifying Capital Expenditures - System Access a list of actual and capital contributions by year.

Please explain what is included in the actuals and capital contribution and why the total does not match Figure 32.

2-Staff-40**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 68 of 83)**

Renfrew Hydro provides under the heading Justifying Capital Expenditures - System Renewal a list of actuals and capital contributions by year.

- (a) Please explain what is included in the actuals and capital contribution and why the totals do not match Figure 32.
- (b) The year-to-year variances in actuals are explained by a variety of projects with different costs. How did Renfrew Hydro forecast future renewals based on trending?

2-Staff-41**Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 72 of 83)**

Renfrew Hydro provides pie charts of Capital Expenditures in Figure 38.

Please explain why the pie chart for 2013 and 2014 does not match the values provided in Figure 32.

2-Staff-42

Ref: Ex.2/Tab 5/Sch.1 – Distribution System Plan (pg. 76 of 83)

Under the heading Capital Expenditure Plan - Argyle Street Feeder Rebuild:

- (a) What is the loading expected that would require 4/0 conductor for secondary conductors? This question applies to all feeder rebuild projects.
- (b) What is the approximate number of residential customers for an average section of secondary conductor?
- (c) Are most of the secondary conductors overhead or cables?

Exhibit 3 – Operating Revenue

3-Staff-43

Ref: Ex.3/Tab 1/Sch.9 – Regression Results (pg. 20 of 64)

Renfrew Hydro provides Table 3.9 Correlation/Regression Results, which show several independent variables used in the Regression Analysis.

- (a) Please show the formula for the calculation of Coefficients, Standard Error, t Stat, P-value, Lower 95%, and Upper 95% for the variables: Intercept, HDD, CDD, Number of Days in Months, Employment Stats, and Daylight Hours.
- (b) Are the values shown in kWh? If not, please provide units if any.

3-Staff-44

Ref: Ex.3/Tab 1/Sch.9 – Regression Results (pg. 23 of 64)

Renfrew Hydro provides Table 3.12 Forecast Using a Twenty Year Weather Normalization, which show HDD and CDD values for 20 years.

Please explain the discrepancy between table 3.12 and table 3.6, which appear to deal with the same information.

3-Staff-45

Ref: Ex.3/Tab 1/Sch.9 – Regression Results (pg. 24 of 64)

Renfrew Hydro provides Table 3.13 Forecast Using a Ten Year Weather Normalization and Table 3.14 Forecast Using a Twenty Year Weather Normalization, which show yearly total weather normalized forecasts.

- (a) Please explain why the yearly total for Table 3.13 does not match the sum of the months in that year.
- (b) Please explain why the HDD and CDD values on Table 3.13 match the 10 year monthly average from Table 3.6 but not the 10 year average from Table 3.12, which the name of the table implies should match.
- (c) Please explain why the HDD and CDD values on Table 3.14 match the 10 year monthly average from Table 3.6 but not the 20 year average from Table 3.12, which the name of the table implies should match.
- (d) How are the monthly Weather Normalized values calculated? From which kWh baseline does it start and how do the 5 factors, HDD, CDD, Number of Days, Employment, Daylight hours affect the final value?

3-Staff-46

Ref: Ex.3/Tab 1/Sch.12 – Regression Results (pg. 29-32 of 64)

Tables 3.17-3.21 show historical customer class usage to wholesale purchases in percentages.

- (a) Summing up residential, general service <50kW, and general service <50kW metered kWh for the earlier years (i.e. 2006) is greater than the total wholesale purchased. Please explain how that is possible.
- (b) How are historical kWh measured for street lighting and unmetered scattered load if they are not metered?
- (c) How are forecasts for street lighting and unmetered scattered load calculated?

3-Staff-47

Ref: Ex.3/Tab 2/Sch.1 – Load Forecast CDM Adjustment Work Form (pg. 35 of 64)

Table 3.23 - Load Forecast CDM Adjustment Work Form (2017), shows targeted CDM levels between the years 2011-2014.

- (a) Do the kWh's shown in the table represent actual CDM savings or another representation of CDM targets? If the latter then why do the numbers not correspond?
- (b) What do the values (90,000, 10,000, and 183,000) in the subsequent years in the kWh section represent?
- (c) Please explain why the total of all CDM kWh do not sum to the total provided.

3-Staff-48

Ref: Ex.3/Tab 3/Schedule 1 – Variance Analysis of Load Forecast (pg. 46 of 64)

Table 3.27 – GS <50kW Variance, shows number of customers forecasted and expected kWh usage.

Relative to 2015 the forecast anticipates a decline in number of customers. Yet, the forecasted kWh consumption has increased by 10%. Please provide evidence other than average historical change that the 10% increase is justified.

3-Staff-49

Ref: Ex.3/Tab 4/Sch. 3 – Proposed Specific Service Charges

Renfrew Hydro is proposing a change to the microFIT service charge. Renfrew Hydro incurs a \$10.00 monthly fee per microFIT meter point from its vendor Utilismart and would like to pass this charge onto its microFIT customers. This increase in the customer charge from \$5.40 to \$10.00 was also agreed to in St. Thomas Energy Inc.'s (EB-2014-0113) Cost of Service Application.

- (a) Please confirm if Renfrew 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?

Exhibit 4 – Operating Expenses

4-Staff-50

Ref: Chapter 2 Appendices, Tab 2-JA

The proposed OM&A costs in 2017 of \$1,549,280 represent an increase of \$508,181 or 49% over the 2010 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 Renfrew Hydro 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 Renfrew Hydro, including any analysis conducted, to optimize plans and activities from a cost perspective.

4-Staff-51

Ref: Ex.4/Tab 1/Sch.1 – Overview of Operating Expenses Operations, Maintenance and Administrative, pages 5 and 6

Renfrew Hydro notes that one of the drivers leading to its increase in operations is because rent has increased. Renfrew Hydro was required to move because it was no longer able to rent the space it had occupied since 2000, because the Landlord, Renfrew Power Generation, required more space for expansion.

Renfrew Hydro notes that after analyzing options for building versus renting, a search was performed for property and a new location was found in 2015.

Please provide any documentation with respect to a cost/benefit analysis or business case conducted for building versus renting.

4-Staff-52

Ref: Ex.4/Tab 2/Sch. 1 – Summary and Cost Drivers Table

Ref: Ex.8/Tab 1/Sch.1 - Overview of Current Rates, page 5-6

Ref: Chapter 2 Appendices, Tab 2-JB

On April 15, 2015, the OEB issued its Notice of Amendment to the Distribution System Code which mandated monthly billing for Residential and General Service < 50 kW to be implemented by December 31, 2016. Renfrew Hydro plans to change to monthly billing in December 2016, as mandated by the OEB. Renfrew Hydro notes approximately \$28,000 in 2017 in costs related to monthly billing.

- (a) Please confirm if the \$28,000 figure is the incremental cost related to switching to monthly billing.
- (b) Please provide a breakdown of the costs associated with the \$28,000.
- (c) Please quantify any offsetting costs (benefits) associated with the implementation of monthly billing.
- (d) Please describe other initiatives that Renfrew Hydro has undertaken, or intends to undertake, to manage the costs of monthly billing for all customers.

4-Staff-53

Ref: Ex.4/Tab 2/Sch. 1 – Summary and Cost Drivers Table

Ref: Chapter 2 Appendices, Tab 2-JB

For the 2011 year, please explain why the tree trimming line item is input as a negative figure.

4-Staff-54

Ref: Ex.4/Tab 2/Sch.2/Page 13

Ref: Ex.9/Tab 1/Sch.3/Page 13

In Exhibit 9, Renfrew Hydro stated that it has incurred no additional transition costs to IFRS and will not be applying for disposition of Account 1508, sub-account Deferred IFRS Transition Costs. However, in Exhibit 4, Renfrew Hydro stated that \$15k of consulting costs associated with the transition to IFRS was included in the 2010 OEB approved figures, but the consulting began in 2011. This would indicate that Account 1508, sub-account IFRS Transition Costs Variance would apply to RHI's situation, and not 1508, sub-account Deferred IFRS Transition Costs. Please complete the 2017 Chapter 2 Appendix 2-YA and update the DVA continuity schedule as appropriate. If Renfrew Hydro is not asking for disposition of the variance account, please indicate this and explain why.

4-Staff-55

Ref: Ex.4/Tab 9/Sch.1/PILS Model

In the PILS model:

- (a) The bridge year adjusted taxable income includes a regulatory debit of \$172.5K.
 - i. Please explain what this addition is for.
 - ii. If the addition relates to regulatory assets and liabilities, please remove the addition in the calculation as per the 2017 Filing Requirements.
- (b) In the historic year adjusted taxable income and the 2015 tax return, an adjustment is included for re-measurements of employee future benefits. No such adjustments were made in the bridge and test years' adjusted taxable income. Please explain why this is the case and revise the PILS model as needed.

4-Staff-56

OPEBs

Ref: Ex.4/Tab 4/Sch.1 - Employee Compensation, page 44

Renfrew Hydro filed its application in mid-June prior to the release of the 2017 filing requirements and models. New for this rate year is Tab 2-KA in the Chapter 2

Appendices which relates to Other Post-Employment Benefit (OPEB) costs. Please file a copy of the noted tab (reproduced below).

(a) Please indicate if OPEBs were recovered on a cash or accrual accounting basis for each year since Renfrew Hydro started to recover OPEBs.

(b) Please complete the table below to show how much more than the actual cash benefit payments, if any, have been recovered from ratepayers from the year Renfrew Hydro started recovering amounts for OPEBs.

OPEBs	First year of recovery to 2011	2012	2013	2014	2015	2016	Total
Amounts included in rates							
OM&A							
Capital							
Total							
Paid benefit amounts							
Net excess amount included in rates greater than amounts actually paid							

(c) Please describe what Renfrew Hydro has done with the recoveries in excess of cash benefit payments.

4-Staff-57

Ref: Ex.1/Tab 4/ Sch.1/ Attachment 6

Ref: Ex.4/Tab 4/Sch.1/Page 44 and Actuarial Report

Regarding Post Retirement benefits:

(a) Please confirm that the costs for Post-Retirement Benefits Continuation Program are included in Table 4.14 of Exhibit 4 as a part of the Health and Life Insurance line items. If not, please indicate where these costs are included in the application.

(b) In note 25 of the 2015 audited financial statements, equity is reduced by \$189k as at January 1, 2014 for employee future benefits due to the transition to IFRS. The associated footnote seems to indicate that this is due to the recognition of

unamortized actuarial gains or losses in retained earnings. In the Actuarial Report, the actuarial liability as at December 31, 2014 is valued at \$189k.

- i. Please explain why the reduction in equity due to the transition to IFRS per the financial statement would be equal to the value of the liability per the actuarial report.
- ii. Please also explain why the amount did not change given the passage of time from January 1, 2014 to December 31, 2014.
- iii. Please explain why the full \$189k is considered a plan amendment cost as at December 31, 2014 as per the actuarial report.
- iv. Please confirm that the transition to IFRS resulted in a \$189k reduction to equity as per the audited financial statements.

4-Staff-58

Ref: Ex.4/Tab 10/Sch. 2 – LRAM

Ref: RHI 2017_appl_CoS_LRAMVA_20160614, Tab “LRAMVA Calculations”

2011-2014 Final Results Report, Table 2: Adjustments to Renfrew Hydro Inc. Net Verified Results due to Variances

In the 2013 adjustment to the verified results, the adjustment applied to the actual result is not consistent with the OPA/IESO's verified amount. In Renfrew Hydro's LRAM spreadsheet, it has included an adjustment amount of 183,379.69 kWh whereas Table 2 of the OPA/IESO's verified results report shows an adjustment amount of 183,441 kWh to be included in 2013.

Please reconcile the difference in the adjustment amount applied to the 2013 result.

4-Staff-59

Ref: Ex.4/Tab 10/Sch. 2 – LRAM

Please confirm that Renfrew Hydro did not have a CDM manual adjustment applied to its previously approved load forecast as part of its 2010 Cost of Service application (EB-2009-0146).

Exhibit 5 – Cost of Capital and Capital Structure

5-Staff-60

Ref 1: Exhibit 5, Appendix 2-OA, Appendix 2-OB

Ref 2: Report of the Board on the Cost of Capital for Ontario's Regulated Utilities (EB 2009-0084)

Ref 3: OEB Cover Letter and OEB Staff Report on the Review of the Cost of Capital for Ontario's Regulated Utilities, January 14, 2016

Renfrew Hydro notes that the requested cost of long-term debt to be recovered as part of its 2017 test year revenue requirement is at a rate of 4.54%. This is also shown in Appendix 2-OA for the 2017 test year.

Appendix 2-OB documents the following actual long-term debt instruments owed by Renfrew Hydro during the 2017 test year:

Description	Lender	Affiliated/Third Party	Date	Term (Years)	Principal	Rate
Affiliated Debt from Shareholder	Corp. Town of Renfrew	Affiliated	01/01/2001	N/A (On Demand)	\$2,705,168	7.25%
Truck Loan (#31) – 2009 International	Royal Bank of Canada	Third-Party	1 8/02/2009	18	\$0.00 (Paid in Full)	3.18%
Truck Loan (#33) – 2015 Dodge	Royal Bank of Canada	Third-Party	29/12/2014	5	\$10,110.41	3.53%
Total Debt					\$2,715,278.41	4.54% Proposed

Renfrew Hydro describes its long-term debt on page 10 of Exhibit 5.

On page 11 of Exhibit 5, and with Table 5.3, Renfrew Hydro has a short description of what it terms “notional debt”, and which seems to be the basis for its proposed 4.54% long-term debt rate.

- Please describe what Renfrew Hydro means by “notional debt” and how the description on page 11 and Table 5.3 form the basis for the proposed long-term debt rate of 4.54%.
- Please describe how Renfrew Hydro's definition of and application of notional debt is consistent with: 1) Section 4.4.1 of the Report of the Board on the Cost of Capital for Ontario Regulated Utilities (EB-2009-0084).; and 2) section 3.1 of the

OEB Staff Report on the Review of the Cost of Capital for Ontario's Regulated Utilities.

- (c) OEB staff notes that the OEB's policies on long-term debt rates are applied to each debt instrument individually, taking into account the timing and the characteristics of the terms of each instrument, including whether the lender is affiliated or third party, whether the rate is variable or fixed, and the term of the loan. In this case, OEB staff notes that the two Royal Bank of Canada loans are third-party loans with fixed rates and fixed terms, and so would attract, for rate-setting purposes, their actual rates of 3.18% and 3.53%. The Promissory Note to the Town of Renfrew is affiliated debt, with a fixed rate but with no fixed term, and so would attract the OEB's current deemed long-term debt rate of 4.54% for 2016. As such, OEB staff provides the following analysis of the weighted average cost of long-term debt.

Description	Lender	Affiliated/Third Party	Date	Term (Years)	Principal	Rate	Allowed Rate per OEB Policy (for 2017)
Affiliated Debt from Shareholder	Corp. Town of Renfrew	Affiliated	01/01/2001	N/A (On Demand)	\$2,705,168	7.25%	4.54%
Truck Loan (#31) – 2009 International	Royal Bank of Canada	Third-Party	18/02/2009	18	\$0.00 (Paid in Full)	3.18%	3.18%
Truck Loan (#33) – 2015 Dodge	Royal Bank of Canada	Third-Party	29/12/2014	5	\$10,110.41	3.53%	3.53%
Total Debt					\$2,715,278.41	4.54% Proposed	4.54%

The weighted average cost of long-term debt is determined by weighting the allowed rate for each debt instrument by the principal of each instrument.

Please provide Renfrew Hydro's views on OEB staff's analysis.

- (d) Please confirm that the deemed long-term debt, should be updated along with the Return on Equity and deemed long-term debt rate at the time of the OEB's decision on Renfrew Hydro's application. In the alternative, please explain.

Exhibit 6 – Calculation of Revenue Deficiency

6-Staff-61

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, 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.

Exhibit 8 – Rate Design

8-Staff-62

Low Voltage Charges

Ref: Ex.8/Tab 1/Sch. 10, page 25, table 9.16 – Low Voltage Service Rates

At the above reference (reproduced below), the uplifted volumes listed in table “Low Voltage Charges – Allocation of LV Charged based on Transmission Connection Revenues” and the non-uplifted volumes in table “Low Voltage Charges Rate Rider Calculations” are the same. In addition, OEB staff notes that the RTSR rate for the Residential rate class seems to be incorrect (i.e. \$0.0035). OEB staff believes that the rate used should be \$0.0033 to match Renfrew Hydro’s proposed 2017 tariff of rates and charges.

Please explain these discrepancies and make any corrections, as required.

Low Voltage Charges - Allocation of LV Charges based on Transmission Connection Revenues

ALLOCATION BASED ON TRANSMISSION-CONNECTION REVENUE					
Customer Class Name		RTSR Rate	Uplifted Volumes	Revenue	% Alloc
Residential	kWh	\$0.0035	31,273,344	\$108,472	36.56%
General Service < 50 kW	kWh	\$0.0033	12,701,406	\$41,385	13.95%
General Service > 50 to 4999 kW	kW	\$1.2157	118,024	\$143,478	48.36%
Unmetered Scattered Load	kWh	\$0.0033	161,766	\$527	0.18%
Street Lighting	kW	\$0.9398	3,007	\$2,826	0.95%
TOTAL			44,257,552	\$296,688	100%

Low Voltage Charges Rate Rider Calculations

PROPOSED LOW VOLTAGE CHARGES & RATES					
Customer Class Name	% Allocation	Charges	Not Uplifted Volumes	Rate	per
Residential	36.56%	33,305	31,273,344	\$0.0011	kWh
General Service < 50 kW	13.95%	12,707	12,701,406	\$0.0010	kWh
General Service > 50 to 4999 kW	48.36%	44,053	118,024	\$0.3733	kW
Unmetered Scattered Load	0.18%	162	161,766	\$0.0010	kWh
Street Lighting	0.95%	868	3,007	\$0.2885	kW
TOTAL	100.00%	91,095	44,257,552		

8-Staff-63

Ref 1: Ex.8/Tab 1/Sch.15 – Rate Mitigation/Foregone Revenue

Ref 2: Ex.9/Tab 1/Sch.1 – Overview

Ref 3: EB-2012-0410 Board Policy: A New Distribution Rate Design for Residential Electricity Customers

Renfrew Hydro notes that in an effort to minimize rate impacts it has requested longer disposition periods for various proposed rates. The proposed disposition periods are listed below:

Description	Disposition Period
Accounts 1550,1551,1584,1586,1595	4
Accounts 1580,1588	4
Account 1589 Global Adjustment	4
Group 2 Accounts	4
Account 1576 (Depreciation)	4
Account 1568 LRAMVA	4
Stranded Meters	5
Smart Meters	4
Fixed Rate Design Transition	6

- (a) Please provide bill impact (total bill % and \$) scenarios using Appendix 2-W illustrating 1, 2 and 3 year disposition periods for the Group 1 and Group 2 DVAs, while keeping all else proposed in the application the same.

With respect to Renfrew Hydro's request for a six-year transition for the Residential Rate Design, OEB staff notes that at reference 3, the OEB states that "while the OEB wants consistency in implementation, we will consider applications for exceptions to the four-year transition in two situations:

1. If the monthly fixed charge will need to rise by more than \$4 in each year of the transition.
2. If there are other rate changes being made as a result of other OEB decisions, which together with the policy change could result in unusually large bill impacts. Examples could include the clearance of deferral and variances accounts, increases resulting from a Custom IR or a re-basing application, or increases resulting from other rate design changes."

OEB staff calculates that a four-year transition period yields a monthly fixed charge change of \$2.63.

- (b) Please provide further rationale for Renfrew Hydro's request for a six-year transition period.
- (c) Please provide a bill impact scenario with the change to fixed rates over a four-year period, keeping Renfrew Hydro's requests for longer DVA disposition periods the same.

Exhibit 9 – Deferral and Variance Accounts

9-Staff-64

Ref: Ex.9/Tab 1/ Sch.3/Page 12

Renfrew Hydro is requesting disposition of Account 1508 – Other Regulatory Assets – Other. Though the balance requested for disposition is not material, the appropriateness of the disposition of the account also needs to be considered. Please explain the nature of the account and amounts recorded in the account.

9-Staff-65

Ref: Ex.9/Tab 1/ Sch.7/Page 18

Ref: Ex.9/Tab 4/Sch.2/ Page 29

Renfrew Hydro last disposed its December 31, 2013 balances in its 2015 Annual IR (EB-2014-0110). Renfrew Hydro made an adjustment to reallocate a debit of \$227k from Account 1550 to Account 1580 in 2014 as a result of the issuance of the March 2015 Accounting Guidance. However, the adjustment pertained to 2013 and 2014 activity.

- (a) Please breakdown the \$227k into activities that pertain to 2013 and 2014.
- (b) Please explain why Renfrew Hydro is proposing to adjust the 2013 balances approved on a final basis.
- (c) Per page 29, it does not appear that Renfrew Hydro has any WMP customers, please confirm.
 - a. If Renfrew Hydro has no WMP customers, please explain whether there will be any impact to the rate rider calculations arising from the adjustment pertaining to 2013.
- (d) Please revise the DVA continuity schedule to only include the adjustment pertaining to 2014.

9-Staff-66

Ref: DVA Continuity Schedule

Renfrew Hydro proposed the rate riders for the disposition of Account 1589 Global Adjustment to be calculated based on kWh or kW depending on the class. Please revise the Global Adjustment rate riders to kWhs for all classes as per the Filing Requirements for 2017 Rate Applications. If Renfrew Hydro wishes to continue with its initial proposal, please explain why.

9-Staff-67

Ref: DVA Continuity Schedule

Renfrew Hydro proposed that the rate rider for the disposition of Account 1576 for the residential class to be based on kWh. Please revise the Account 1576 rate rider for the residential class to be based on number of customers as per the Filing Requirements for 2017 Rate Applications. If Renfrew Hydro wishes to continue with its initial proposal, please explain why.

9-Staff-68

Ref: DVA Continuity Schedule

In the DVA continuity schedule, Account 1595 (2010) principal and interest do not match to those as approved in Renfrew Hydro's 2015 Annual IR (EB-2014-0110). Specifically, the amounts in the "Board Approved Disposition during 2015" in the DVA continuity schedule of this proceeding do not agree to that in the Decision and the "Opening Amounts as of Jan-1-14" in the DVA continuity schedule of this proceeding do not agree to the "Closing Balance as of Dec-31-13" in the DVA continuity schedule of the EB-2014-0110 proceeding.

- (a) Please explain and reconcile the differences.
- (b) Renfrew Hydro is requesting disposition of interest in Account 1595 (2010) when the entire balance should have been transferred to Account 1595 (2015), following the approved disposition in the 2015 Annual IR.
 - i. Please explain why Renfrew Hydro is claiming disposition of Account 1595 (2010).
 - ii. Please indicate the amount of principal and interest that was transferred in Renfrew Hydro's general ledger from Account 1595 (2010) to Account 1595 (2015), following the approved disposition in the 2015 Annual IR.
- (c) Please revise the DVA continuity schedule as necessary.

9-Staff-69

Ref: DVA Continuity Schedule

Per the DVA continuity schedule, Renfrew Hydro is proposing disposition of Account 1595 (2013) and Account 1595 (2014). Though the balances are not material, Renfrew Hydro did not have any disposition of Group 1 accounts in its 2013 and 2014 rate applications, and therefore, should not have any amounts in the two accounts.

- (a) Please explain what these amounts requested for disposition pertain to and why they are "Principal Adjustments during 2015". .
- (b) Please revise the DVA continuity schedule as necessary.

9-Staff-70

Ref: DVA Continuity Schedule

Due to the timing of the OEB's updated DVA continuity schedule, Renfrew Hydro's schedule does not show Account 1580, sub-accounts CBR for Class A and Class B. Renfrew Hydro indicated that it does not have any Class A customers. As such, any disposition of the CBR Class B sub-account would be included in the Account 1580 control account, which is currently the case in the DVA continuity schedule Renfrew

Hydro has filed. An update of the DVA continuity schedule is not requested; however, please provide the sub-account balance for CBR Class B. Please also confirm that the sub-account has been recorded in accordance with the Accounting Guidance issued on CBR, dated July 25, 2016.