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- 3 August 24, 2023
- 4 Ontario Energy Board
- 5 P.O. Box 2319
- 6 2300 Yonge Street, 27th Floor
- 7 Toronto ON M4P 1E4
- 8 Attn: Nancy Marconi, Registrar
- 9 Re: EB-2023-0049
- 10 Dear Sirs:
- 11 In accordance with Procedural Order No. 1, enclosed please find Renfrew Hydro Inc.'s responses to
- interrogatories as part of our Cost of Service rate application for rates effective January 1, 2024. A full
- copy has also been uploaded electronically and distributed to all intervenors. With exception of OEB
- staff question 1 and 2, all interrogatories have been answered and the model updates and list of
- changes will follow by August 28, 2023.
- 16 Yours Truly,

17 Lance Jefferies

- 18 President
- 19 c.c Bill Harper, Vulnerable Energy Consumers Coalition
- 20 Mark Garner, Vulnerable Energy Consumers Coalition

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Renfrew Hydro Inc.

2024 Cost of Service Application

EB - 2023 - 0049

Rate Application Interrogatories Responses

Rates Effective: January 1, 2024

Date Filed: August 24, 2023

Renfrew Hydro Inc.

499 O'Brien Road, Unit B

Renfrew, Ontario

K7V 3Z3

1 Table of Contents

	I.	ADMINISTRATION (EXHIBIT 1)		7
2 3 4 5 6 7 8 9	II.	1.0-VECC-1 1.0-VECC-2 1.0-VECC-3 1.0-VECC-4 1.0-VECC-5 1-Staff-1 1-Staff-2 1-Staff-3 1-Staff-4 RATE BASE (EXHIBIT 2)	7 8 9 10 11 12 13 14	17
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27		2.0-VECC -6 2.0-VECC -7 2.0-VECC -8 2.0-VECC -9 2.0-VECC -10 2.0-VECC -11 2.0-VECC -12 2-Staff-5 2-Staff-6 2-Staff-7 2-Staff-8 2-Staff-9 2-Staff-10 2-Staff-11 2-Staff-12 2-Staff-13 5.4.2.3 2023 – 2028 Planned vs Historical Expenditures	17 18 19 20 21 22 23 24 25 26 28 29 30 31 32 33	33
28		5.4.2.4 System O&M Costs		36
29 30		5.4.3 JUSTIFYING CAPITAL EXPENDITURES 5.4.3.1 Overview	37	37
31 32		5.4.3.2 Historical and Planned Allocation to OEB Investment Categories 38		
33	III.	2-Staff-14 Fixed Assets OPERATING REVENUE (EXHIBIT 3)	42	43
34 35 36 37 38 39 40		3.0-VECC -13 3.0-VECC -14 3.0-VECC -15 3.0-VECC -16 3.0-VECC -17 3.0-VECC -18 3-Staff-15	43 44 46 47 48 49 50	

1 2 3 4 5 6 7 8	IV.	3-Staff-16 3-Staff-17 3-Staff-18 3-Staff-19 3-Staff-20 3-Staff-21 3-Staff-22 3-Staff-23 OPERATING COSTS (EXHIBIT 4)	51 52 53 54 55 56 57 59
9 10 11 12 13 14 15 16 17	V.	4.0 -VECC -19 4.0 -VECC -20 4.0 -VECC -21 4.0 -VECC -22 4.0 -VECC -23 4.0 -VECC -24 4.0 -VECC -25 4-Staff-24 4-Staff-25 COST OF CAPITAL AND RATE OF RETURN (EXHIBIT 5)	60 61 62 63 64 65 66 67 68
18 19 20	VI.	5.0-VECC-26 5.0-VECC-27 5.0-VECC-28 CALCULATION OF REVENUE DEFICIENCY/SURPLUS (EXHIBIT 6)	69 71 73
21 22 23 24	VII.	6.0-VECC-29 6.0-VECC-30 6-Staff-26 6-Staff-27 COST ALLOCATION (EXHIBIT 7)	74 76 77 78
25 26 27 28 29 30 31 32 33 34 35	VIII.	7.0-VECC-31 7.0-VECC-32 7.0-VECC-33 7.0-VECC-34 7.0-VECC-35 7.0-VECC-36 7.0-VECC-37 7.0-VECC-37 7.0-VECC-38 7.0-VECC-39 7-Staff-28 7-Staff-29 RATE DESIGN (EXHIBIT 8)	80 82 83 84 85 86 88 89 90 91
36 37 38 39		8.0-VECC-40 8.0-VECC-41 8.0-VECC-42 8.0-VECC-43	100 101 102 103

1 2 3 4 5 6		8.0-VECC-44 8-Staff-30 8-Staff-31 RTSR 8-Staff-32 8-Staff-33 8-Staff-34	104 105 106 107 108 109
	IX.	DEFERRAL AND VARIANCE ACCOUNTS	
		(EXHIBIT 9)	
7		9.0 -VECC -45	110
8		9-Staff-35	111
9		9-Staff-36	113
10		9-Staff-37	114
11		9-Staff-38	116
	X.	Exhibit A – 2022 Scorecard	118
	Λ.	Exhibit A = 2022 Scorecard	110

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ONTARIO ENERGY BOARD

2	IN THE MATTER OF the Ontario energy Board Act, 1998,
3	S.O. 1998, c.15, Schedule B;
4	AND IN THE MATTER OF an Application by Donfrond Hydro Inc. (DIII) for
4	AND IN THE MATTER OF an Application by Renfrew Hydro Inc. (RHI) for
5	an Order or Orders approving or fixing just and reasonable rates and other
6	service charges for the distribution of electricity as of January 1, 2024
7	

ADMINISTRATION (EXHIBIT 1)

23 1.0-VECC-1

4 Reference: Exhibit 1, page 43

"The Town of Renfrew has recently (December 2022) decided to change Renfrew Hydro's Board composition from three to five Directors. The Shareholder is working on revising By-Law(s) to accommodate this change in structure and update the existing governance practices. These changes are scheduled to become effective at Renfrew Hydro's Annual General Meeting which will take place at the end of June 2023."

a) What is the incremental annual cost to Renfrew of adding two more Directors.

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RHI Response:

- The incremental annual cost for adding two additional Directors is approximately
- \$10,000. The annual stipend for a Director is presently \$4260.08 combined with an
- additional \$100 per meeting. Note that, due to this change occurring after the 2024
- budget approval, the additional half year impact of \$5,000 has not been included in
- OM&A in the 2023 Bridge year forecast (Term commences after AGM in June) nor has
- the full year impact of \$10,000 been included in the 2024 Test year forecast.

1	1.0-VECC-2
2	
3	Reference: Exhibit 1, page 63/Schedule 12 Attachment C page 2 of 40
4	
5 6	a) The Scorecard referenced in the evidence (linked to web site) does not include 2022 results. Please provide an updated scorecard which includes that year's results.
7	
8	RHI Response:
9	
0	2022 Scorecard attached as Exhibit A

1	1.0-VECC-3
2	
3	Reference: Exhibit 1, pages 64-
4 5 6 7	"The PEG analysis is an instrument that measures utilities' cost efficiencies. Renfrew Hydro's results have been trending in a positive way for the past several years and our goal is to continue improving and Renfrew Hydro Inc. move from our present "Stretch Factor Cohort" of three (3) to 1 a more efficient two (2)."
9 10 11	a) The Summary of Cost Benchmarking Results shown at page 66 show no improvement in the Stretch Factor Cohort between 2020 and 2025 please clarify how Renfrew is working toward moving to Cohort #2.
13	RHI Response:
14	
15 16 17 18 19 20	The model predicts that RHI will remain in cohort three (3) during the 2020 to 2025 period. That said, the Summary of Cost Benchmarking Results as shown in the PEG Forecasting Model shows that Renfrew Hydro's percentage difference "cost performance" is trending from -2.5% to -9.43% throughout this period. In addition, our three-year averages are moving from -4.7% to -7.95%. Our goal is to continue this trend and once we reach the -10% we will move into cohort two (2).

1.0-VECC-4

Reference: Exhibit 1, page 67

Billing OM&A Per Customer

2017	2018	2019	2020	2021	Avg.
65.00	68.01	72.16	71.82	79.42	71.28

- a) What are the reasons for the increase in billing OM&A per customer between the years 2017 and 2021.
- b) Was the "bump" increase in 2021 related to the outsourcing of billing to Erie Thames Powerline due to the temporary vacancy of the Billing Supervisor in that year?

RHI Response:

a) Billing OM&A increases year on year have averaged 4.5% from 2017 to 2022 (update: 2022 per customer rate was \$80.71). Multiple factors are causing this increase. The increase in 2018 is mostly due to the hiring of our current billing supervisor as the previous employee voluntarily left the business. 2018 required contracting out of the function for a few months in the transition and the new supervisor required extensive training in their new position. Increases from 2019 through to 2022 primarily relate to increased costs allocated from UCS group for support. During this period, a member of the group left due to an amalgamation, increasing the costs allocated amongst the remaining members. Also, billing system hosting was moved from ITM to ERTH and fees associated with the transfer occurred in 2021.

b) As noted in a) the driver in 2021 for the increase in costs was moving from ITM to ERTH hosting services and the transition costs. The temporary vacancy of the Billing Supervisor occurred in 2022 and RHI had stable per customer costs from 2021 to 2022 of \$80.71 or a modest 1.6% increase.

Overall, as a small utility RHI relies on subcontractor services to fulfill most the requirements of the industry and RHI has seen increased costs due to mandatory billing changes and their implementation.

1	1.0-VECC-5	
2		
3	Reference:	Exhibit 1, Appendix E- 2023 Customer Satisfaction Survey,
4		
5	What was the cost of	of the ADVANIS survey?
6	RHI Response:	
7	ADVANIS survey co	osts for the 2023 survey were \$8,152.
8		

1	1-Staff-1
2	
3	Updated Revenue Requirement Work Form (RRWF) and Models
4	
5	Upon completing all interrogatories from OEB staff and intervenors, please provide an
6	updated RRWF in working Microsoft Excel format with any corrections or adjustments
7	that the Applicant wishes to make to the amounts in the populated version of the RRWF
8	filed in the initial applications. Entries for changes and adjustments should be included
9	in the middle column on sheet 3 Data_Input_Sheet. Sheets 10 (Load Forecast), 11
10	(Cost Allocation), and 13 (Rate Design) should be updated, as necessary. Please
11	include documentation of the corrections and adjustments, such as a reference to an
12	interrogatory response or an explanatory note. Such notes should be documented on
13	Sheet 14 Tracking Sheet and may also be included on other sheets in the RRWF to
14	assist understanding of changes.
15	
16	The OEB issued the 2024 inflation factor for electricity distributors to be 4.8% on June
17 18	29, 2023, which should be updated on the Tariff and Bill Impact Model, Tab 3.

In addition, please file an updated set of models that reflects the interrogatory

responses. Please ensure the models used are the latest available models on the OEB's

21 2024 Electricity Distributor Rate Applications webpage.

RHI Response:

25 Models to be updated and loaded to RESS by Aug 28th, 2023. 26

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1	1-Staff-2
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3	OEB Model Updates/Amendments
4	Ref: Chapter 2 Filing Requirements, page 3
5	
6	Question(s):
7	
8	As required in the Chapter 2 Filing Requirements, please provide a summary of any
9	updates or amendments to an OEB model to accommodate Renfrew Hydro Inc.'s
10	(Renfrew Hydro) circumstance, if applicable.
11	
12	List of updates to accompany on August 28 th , 2023.
13	

1 1-Staff-3

3 Green Button

- 4 Ref: Exhibit 1, Appendix G Shareholder & Public Presentation
- 5 Preamble:

Distributors are required to implement Green Button by November 1, 2023. The OEB has approved the establishment of a generic deferral account for rate regulated distributors to record the incremental costs directly attributable to the implementation of the Green Button initiative. In Appendix G, Renfrew Hydro included Green Button Compliance amongst its 2023 priorities.

Question(s):

- (a) Please describe Renfrew Hydro's progress towards Green Button implementation.
- (b) Please clarify if Renfrew Hydro has recorded any incremental costs directly attributable to the implementation of the Green Button initiative in the generic deferral account.
 - (c) Please confirm whether Renfrew Hydro has proposed any capital or OM&A costs associated with the implementation of the Green Button initiative for the 2023 bridge year and the 2024 test year.

RHI responses:

- a) Renfrew Hydro (RHI) has been working diligently towards ensuring a smooth implementation of Green Button consistent with Ontario Regulation 633/2. We are managing the implementation of a third-party solution (external vendor ERTH Corporation) internally, collaborating with CHEC members, focusing on sector efficiency and customer choice. RHI was Green Button Download My Data (DMD) and Green Button Connect My Data (CMD) certified May 18, 2023. Currently, we are conducting extensive user acceptance testing and are currently on track for our scheduled go-live date of November 01, 2023. Overall project completion is at 57.1%.
- b) To date, RHI has recorded \$29,229.68 in Green Button costs, inclusive of Carry charges, in the generic deferral account.
- c) Capital Costs of implementation (software) are inclusive of b) above. OM&A costs associated with maintenance of Green Button include \$2,400 of annual maintenance fees in the Test Year.

1	1-Staff-4
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3	Strategic Alliance
4 5	Ref: Exhibit 1, page 76 Ref: Exhibit 2, Appendix DSP, page 23 (78 of pdf) Ref: Exhibit 3, page 45
6 7	Preamble:
8 9 10 11	Renfrew Hydro states it is entered into a Strategic Alliance/Services Agreement with Hydro Ottawa which provides access to Hydro Ottawa's vast array of professional expertise, equipment, and service offerings.
12 13 14	Question(s):
15 16 17	 a) Please describe the substation engineering work Hydro Ottawa performed through the competitive bid process, shown in Exhibit 4, Table 4.19.
18 19 20	b) Please describe the procurement method used to retain Hydro Ottawa Limited to assist in this application with the Station Engineering Report and DSP Review.
21 22 23 24	c) Please provide the business case, cost analysis, or other similar documents used to evaluate the cost effectiveness of entering into the strategic alliance versus other procurement options.
25	d) Please provide a copy of the Strategic Alliance/Services Agreement.
26 27 28 29 30	e) If there is no written copy of the agreement in d), please provide: i. The name of the legal entity that Renfrew Hydro has entered into the Strategic Alliance/Services Agreement with, and ii. Details of the agreement.
31	RHI Responses:
32 33 34 35	a) Hydro Ottawa performed more than just substation engineering services throughout 2017 to 2022. The following is a summary of the services provided each year by Hydro Ottawa:
36 37 38	2017- Meter reverifications- Infrared and oil testing of our station transformers.

1		2018 - Trades & Management Training
2		- Work Protection Code
3		- Regulation 22/04
4		- Aerial Hydraulics
5		- Stringing Proficiency
6		- Time Management
7		- Communication for Results
8		2018 - Station Recloser Replacement & Transformer Testing (at 2 Stations)
9		2019 - CDM Program
10		- Engineered and Designed our Stations Protection & Control Settings for
11		our 3 stations with feeder reclosers.
12		2020 - Replaced a cracked bushing and implemented P&C settings at one
13		station.
14 15		2021 – Assistance with Customer Engagement Communications & Survey for Rate Application
16		2021 - Renfrew Hydro purchased a 75kVA pad mount transformer from Hydro
17		Ottawa
18		2022
19		- Implemented P&C settings at 2 stations
20		- Electrical testing of one Station Transformer
21		
22 23 24 25 26	b)	As per our Strategic Alliance agreement, Renfrew Hydro is provided with an estimate from Hydro Ottawa for any works being considered. These estimates are compared with other service providers as per our normal procurement policies and practices.
27 28 29 30 31 32	c)	As previously indicated, up front estimates are compared with other available service providers. The agreement essentially provides RHI with an accelerated method to receive and evaluate procured services. Efficiencies are achieved by having all the contractual terms and conditions pre-negotiated and agreed to in advance.
33 34 35 36	d)	A copy has been provided and can be found in Appendix B of our responses. Please note that all quoted pricing has been removed to protect and maintain the integrity of our competitive bidding and procurement practices.
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1 RATE BASE (EXHIBIT 2)

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3	2.0-VECC -6
4	
5	Reference: Exhibit 2, Appendix 2-2, Distribution System Plan, (DSP) page 107 of
6	176
7	"Renfrew Hydro leases its main operational building and has divested all its previously owned
8	administration and garage facilities."
9 10	a) When were the buildings referred to above divested and what were the net gain (loss) on these buildings/lands?
11	
12	RHI Response:
13	a) The buildings were divested in 2018 with a net gain of \$24,847 recorded in that
14	year.
15	

1 2.0-VECC -7

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Reference: Exhibit 2, DSP

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a) Please explain how the \$30,000 in new subdivision costs in 2024 has been calculated and how much of that cost is expected to be recovered in capital contributions.

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RHI Response:

a) The \$30,000 estimate is based on the proposed sub division's initial plans and electrical servicing requirements coupled with our previous experience and previous economic evaluations. Renfrew Hydro will be conducting final economic evaluations once all plans are finalized. We anticipate and have budgeted that \$20,000 of these costs will be recovered in capital contributions.

2.0-VECC -8

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Reference: Exhibit 2, DSP pages 107, 166-

Figure 5.3.3.2-D: Renfrew Hydro Vehicles

Year	Make	Description	Fuel Type	Age (Years)
1986	GMC	Radial Boom Derrick	Diesel	37
2000	Freightliner	Double Bucket	Diesel	23
2009	International	Radial Boom Derrick	Diesel	14
2009	Ford	Utility Dump	Diesel	14
2017	Chevrolet	½ Ton Pick Up	Gasoline	6
2018	Freightliner	Single Bucket	Diesel	5
2021	Chevrolet	¾ Ton Pick Up	Gasoline	2

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"The forecasted total of \$1,440K in capital additions during 2023. Expenditures were made in the Transportation equipment category of \$585K for a new double bucket truck to replace a 23-year-old double bucket truck."

- a) Is RHI still expecting to take delivery of the new double bucket truck and dispose of the old one in 2023?
 - b) Please indicate whether the vehicle has been ordered, the current expected delivery date and (if ordered) the actual price paid for the vehicle.
- The current expected delivery date is the end of September 2023. The total price of the vehicle is \$579,082.41. The entire actual price quote can be found on page 350 of exhibit 2 and is labelled Appendix 2.2 B.
 - c) Has the Utility Dump Truck expected to be replaced in 2024 been ordered? If yes please provide the final cost and delivery date.

RHI Responses:

a) Yes, on both fronts. We recently (August 3, 2023) received confirmation from Altec, that our new bucket truck has arrived at the Canadian Milton Ontario facility for final fit up and inspection.

222324

b) The current expected delivery date is the end of September 2023. The total price of the vehicle is \$579,082.41. The entire actual price quote can be found on page 350 of exhibit 2 and is labelled Appendix 2.2 – B.

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c) The Utility Dump Truck (UDT) has not been ordered or procured. Please note that Renfrew Hydro is contemplating purchasing a used UDT vehicle if a suitable one can be found as current new vehicles are exceeding \$110,000.

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2.0-VECC -9

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Reference: Exhibit 2, Appendix 2-AA / DSP page 151 of 176

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- a) Using Appendix 2-AA please provide an update showing the 2023 amounts incurred to date (or the last reporting period) and, if required any changes to 2024 due to adjustments needed to the 2023 budgeted projects. Specifically address the status of the following 2023 projects:
- 9 I. Hunters Gate Phase 5;
 - II. 785 O'Brien Road (Starbucks);
- 11 III. Mat-Te-Way Pole Line Extension;
- 12 IV. MS-1 Feeder Breaker Replacement;
- 13 V. Raglan St. S Pole Replacement.
 - b) Please confirm (or correct that the Mat-Te-Way Pole Line Extension shown in Appendix 2-AA is the same project described as in the DSP as the "Arena Expansion Project"

RHI Responses:

A)RHI provides the following comments on all five referenced projects:

- 1. Recently the developer for Hunters Gate has postponed all "phase 5" construction activities in 2023. We are anticipating that this phase of the subdivision may recommence construction in 2024 or 2025 and as such these recoverable costs should occur then. The overall impact to our 2024 budget is minimal as this delay will have a cascading effect on the construction of future phases of the subdivision.
- 2. The proposed commercial development at 785 O'Brien Rd has been cancelled and this property has been put up for sale. This project cancellation will have no impact on our 2024 budget.
- 3. The Ma-Te-Way pole line extension project has been recently completed for a total of \$132,351.94 which all was recoverable.
- 4. The MS 1 Breaker replacement is scheduled for 2024 and we do not anticipate any costs on this project in 2023.
- 5. Raglan St S. Pole Line Extension is scheduled to be executed in 2024 and we will not incur any costs on this project in 2023.

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2.0-VECC -10 1

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Reference: Exhibit 2, Appendix 2AA, DSP page 155, Table 5.4.3.4, page 161

Table 5.4.3.4 - B: System Renewal Investments (2023-2028)

System Renewal	2023	2024	2025	2026	2027	2028
B1: Replace/Rebuild Overhead Assets	250,000	245,000	310,000	260,000	295,000	310,000
B2: Replace/Rebuild Underground Assets	0	20,000	0	40,000	0	0
B3: Station Upgrades	0	160,000	0	0	0	0
B4: Transformer Replacements	0	0	30,000	0	30,000	30,000
B5: Reactive Replacements	50,000	50,000	90,000	90,000	90,000	90,000
System Renewal Total	300,000	475,000	430,000	390,000	415,000	430,000

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- a) Please confirm (or correct) that the \$50,000 shown in the table above for the years 2023 and 2024 are the same as that included in 92 of Appendix 2-AA and described as "Individual projects <10,000.
- b) Please explain how the reactive budget is estimated.

RHI Responses:

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- a) Renfrew Hydro confirms that the \$50,000 shown in the table referenced above are the same as line 92 of Appendix 2-AA
- b) The reactive budget is estimated based on actual and recent pole failure experiences. The number of woodpecker damaged poles have been increasing over the past five years. Renfrew Hydro has been using a protective wrap on replacement poles to prevent further damages. RHI is considering and will be conducting a cost benefit analysis of using composite poles as replacements in critical (multi-circuited) locations. Renfrew Hydro is predicting an increase in both occurrences and costs associated with reactive pole replacements, and as such have increased budgets accordingly throughout 2025 to 2028.

1 2.0-VECC -11 2 Reference: Exhibit 2, DSP, page 163 3 4 a) Is Renfrew Hydro proposing to include the \$150,000 identified as "MS-4 & 5 5 Engineering Design and Civil Works" in the 2023 rate base calculation? 6 7 8 b) If yes, please explain how these investments meet the "used or useful" criteria in 2023 9 (i.e., as opposed to being included as work in progress). 10 11

- 12 RHI Response:
- a) No, we are not as they will not be utilized in a useful manner in 2023.

1	2.0-VECC -12
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3	Reference: Exhibit 2, page 21 & DSP, pages 164-
4	
5 6	a) With respect to the "C2 SCADA" project, is it Renfrew's plan to seek incremental funding (i.e., ICM) at some later date for this project?
7	
8	RHI Response:
9	
10 11 12 13 14	We do not believe that we will require a future ICM. Renfrew Hydro is planning on having another utility that presently owns and operates a SCADA system host ours. We have been in talks with several utilities that provide this service. We do, however, anticipate setting up and owning our local communication infrastructure including RTU's and Monitoring PCs.

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3 Interruptions by Outage Type

4 Ref: Exhibit 2, DSP page 42 (pdf page 97)

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Question(s):

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a) Please provide information on types of equipment failures that led to the Defective Equipment outages in Table 5.2.3.4-D.

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RHI Response:

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a) Please find below a table that shows the number and various types of defective equipment that caused outages from 2017 to 2022.

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RHI Defective Equipment Summary

Defective Equipment	2017	2018	2019	2020	2021	2022	Totals
Cut Out		1		2	3	2	8
Pad Mount Transformer						1	1
Overhead Transformer	1	1				2	4
Overhead Conductor		1	1		1		3
Fuse					1		1
Station Breaker		1					1
Connectors	1		1	1	1		4
Hot Line Clamp		1	1	1			3
Insulator				1			1
Meter					1		1
Annual Totals	2	5	3	5	7	5	27

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- 3 Capital Projects
- 4 Ref: Chapter 2 Appendix 2-AA

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6 Question(s):

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- a) In general, please explain what efforts were made or can be made to reduce the test year spend to the 2024-2028 annual average levels or balance the 2024 2028 spend levels by deferring select 2024 expenditures to the 2025 2027 period. Alternatively, please explain why the higher-than-average spend in 2024 is necessary.
- 13 RHI Response:
 - a) The replacement of our 1953 feeder breakers at MS -1 is the primary reason for a higher than average spend in 2024. We have attempted to balance our spending and capital works throughout the period. Renfrew Hydro anticipates that some of our identified projects in our DSP may bridge calendar years and get delayed due to our limited resources and the constant reprioritization of projects due to the most up to date asset condition assessments.

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- 3 Capital Expenditures
- 4 Ref 1: Chapter 2, Appendix DSP, page 130 (pdf page 185)
- 5 Ref 2: Chapter 2, Appendix DSP, page 136 (pdf page 191)

6 7

Preamble:

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- 9 Table 5.4.2.2-A in the DSP shows the reprioritized capital plans for 2020 and 2021.
- 10 Table 1 below shows the original budget, revised budget and actual capital
- expenditures for 2020 and 2021.

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In this application, Renfrew Hydro described variances between the revised and actual budgets.

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Table 1: Capital Expenditures (\$000)

· ····· — · · · · · · · · · · · · · · ·										
Investment	2020	2020	2020	2021	2021	2021				
Category	Original	Revised	Actual	Original	Revised	Actual				
System Access	10	44	81	10	64	32				
System Renewal	385	347.5	361.9	350	303	345				
System Service	5	75	39.8	10	85	27				
General Plant	10.5	143	67.4	20	143	77				
Total	410.5	610.5	560.1	390	595	482				

17

Question(s):

181920

a) For 2020 and 2021, please explain what was achieved through increased actual expenditures from the original budgets, by investment category.

21 22

- 23 RHI Response:
- In 2020 our revised budget allowed us to achieve the following which were not part of the original budget:
- 26 General Plant
- We upgraded our smart meter collector software from Energy Axis to Connexco Netsense allowing us to read the next generation of smart meters.
 - Rebuilt damaged pole bunks in our pole yard to address an employee safety

1	concern.
2	System Service
3 4	 Established and implemented new P&C settings and replaced a replaced a cracked bushing at MS-2
5	System Access
6 7	 We became MIST compliant with our meters and replaced and tested several meters as part of our reverification program.
8	
9 10	In 2021 the revised budget allowed Renfrew Hydro to achieve the following which were not part of the original budget:
11	General Plant
12	Replaced an aged (2007) pickup truck.
13	Replaced our main onsite server.
14	System Access
15	Completed the bulk of our meter reverification program
16	System Service
17	Replaced all instrument wiring and cracked PT at MS – 4

Established and implemented new P&C settings and at MS-1 & Ms-2

18

1 2-Staff-8

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- 3 2022 Actual vs Planned
- 4 Ref: Exhibit 2, DSP page 138 (pdf page 193)

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6 Preamble:

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The table on page 138 of the DSP shows that System Service expenditures in 2022 were planned at \$135k and actual expenditures were \$0.

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11 Question(s):

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- a) What projects were scheduled for 2022 and not constructed? Please explain why the projects were not executed and if and how they have been included in the forecasts in the DSP.
- 16 RHI Response:
- a) Our two station enhancement projects which both involve the removal of existing 17 fused feeder protection combined with the installation of feeder reclosers were 18 19 scheduled for but not constructed in 2022. These are both multi year projects. We had ordered the reclosers and stands for both our MS-4 and MS-5 station projects 20 with an original anticipated delivery date in the spring of 2022. The supplier 21 experienced manufacturing delays and as such these products were not shipped to 22 23 us until early in 2023. Yes, the DSP includes both of these projects under the System Service projects. 24

- 1 2-Staff-9
- 2 Regulatory Costs
- 3 Ref 1: Exhibit 4, page 1
- 4 Ref 2: Exhibit 2, page 49

56 Preamble:

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In Exhibit 4, Renfrew Hydro states that OM&A was higher by \$34k in 2020, partly "due to Measurement Canada reverification of Smart meters primarily purchased in 2010 and 2011."

10 11 12

In Exhibit 2, Renfrew Hydro states the designated service life for smart meters is 15 years.

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15 Question(s):

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- a) How many smart meters failed reverification in 2020, 2021 and 2022?
- b) What has Renfrew Hydro budgeted for yearly volume and cost of failed smart metersin the forecast period?
- c) When will Renfrew Hydro need to start mass replacements of its smart meter inventory?
- 22 RHI Response:
- a) The following table represents the number of smart meters that were inspected,
 verified, and rejected.

	Inspected	Verified	Rejected
2020	476	3759	46
2021	228	222	6
2022	0	0	0
2023	33	33	0
	737	4014	52

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- b) Renfrew Hydro has budgeted an average of \$48,000 a year for meters (new, failure replacements and a gradual/annual replacement of all its smart meters. Renfrew Hydro averages around 87 failed meters a year with the average cost of replacement at approximately \$200. That equates to a budget of \$17,400 year for failed meters.
- c) Renfrew Hydro is beginning a phased and controlled mass meter replacement beginning in 2024.

1	2-Staff-10
2	
3	Asset Condition Replacement
4	Ref 1: Exhibit 2, DSP page 81 (pdf page 136)
5	Ref 2: Chapter 2 Appendices, Tab App2.2AA_Capital Projects
6 7 8 9 10 11	Preamble: Table 5.3.1.3-C: Distribution System Assets Replacement Quantities outlines recommended replacement qualities "based on the inspection and testing results and past experiences." Appendix 2-AA Capital Projects Table lists the projects planned for the forecast years 2024 through 2028.
14	Question(s):
15 16 17 18 19 20 21	 a) Please confirm that the capital projects planned for the forecast years include the recommended asset replacements in Table 5.3.1.3-C, or outline what asset replacements recommended in Table 5.3.1.3-C are not planned for in the forecast period, why this is the case, and any risk mitigation taken because the assets are not being replaced.
22	RHI Response:
23 24	Renfrew Hydro confirms that the capital project plans planned for the forecast years include the recommended asset replacements in Table 5.3.1.3-C.

2-Staff-11 1 2 **Replace/Rebuild Underground Assets** 3 4 Ref 1: Exhibit 2, DSP page 157 (pdf page 212) 5 Preamble: 6 7 Renfrew Hydro is planning to replace a PILC cable at MS 1 in 2024 and rubber insulated 8 9 cable in 2026. 10 Question(s): 11 12 a) What criteria led to the development of these projects? 13 b) What type of cable is being installed as part of these projects? 14 c) How much PILC and rubber insulated cables remain in use in the system? 15 16 The PILC cable at MS-1 is the only remaining lead cable in our distribution system. 17 Renfrew Hydro staff do not possess the tools, training, or PPE to work on this cable, 18 whose sheath is deemed as a designated substance. The cable is more than 70 years 19 20 old and if emergency repairs were required, we would have to seek assistance from outside our organization to remedy any issues. 21 In the case of the rubber insulated cable, it is 45 years old at this location and the pad 22 mounted transformer that it feeds is set on a on grade floating slab with no spare ducts. 23 The existing duct is only 3 inches which does not allow us to presently replace it with 24 our existing spare cable on hand for emergency replacements. In addition, the cable 25 26 insulation rating although adequate at 5kV it is difficult to procure terminations and splice kits for this style and vintage of cable and it is also well below our present 27 standard of 15kV insulation. 28 In both instances Renfrew Hydro will install XLPE cable which is consistent with the rest 29 of our distribution system. 30 Upon completion of these projects there will be no PILC remaining in our system. There 31 remains a few short radial pole dips of rubber insulated cable remaining.

1	2-Staff-12
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3	Substation Switchgear
4	Ref: Exhibit 2, DSP page 95 (pdf page 150)
5	
6	Preamble:
7	
8	Substation MS 1 Main Breaker was replaced in 2018 and has a condition assessment
9 10	value of good. Feeder breakers and their associated condition assessment are listed for stations MS 2 through MS 5.
11	
12	Question(s):
13	
14	a) Please provide information for the main breakers of substations MS 2 through MS 5,
15	in the same format as Table 5.3.2.3-E: Summary of Substation Switchgear Health.
16	
17	RHI Response:
18 19	There are no main breakers located at our substations MS -2 through MS-5. Secondary bus and transformer protection is provided by high side (44kV) fusing at these locations

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- **3 Planned vs. Historical Expenditures**
- 4 Ref: Exhibit 2, DSP page 139 -148 (pdf page 194-203)

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6 Preamble:

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Renfrew Hydro has performed an analysis on expenditures that include 2017-2022 in the historic years and 2023-2028 in the forecast years.

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11 Question(s):

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a) Please redo the analysis with the historic period 2017-2023 and the forecast years 2024-2028.

14 15

- 16 Renfrew Hydro's Response:
- a) Please find below the new analysis reflecting 2017 2023 as historic and 2024-2028
- 18 as forecasted.
- 19 5.4.2.3 2023 2028 Planned vs Historical Expenditures
- The following tables provide a summary of each of the four OEB categories, with an
- 21 accompanying explanation comparing the actual to forecasted investment amounts.

22

23 System Access

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Table 5.4.2.3 - A: System Access: 2017-2028 Expenditures

System Access		Hist	orical	Amoun	Forecasted Investments (\$'000s)							
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Expenditures	19	120	97	81	199	69	275	135	160	165	180	185
Contributed	-10	-32	-49	0	-167	-44	-205	-90	-110	-110	-125	-135
Capital												
Net Totals	9	88	48	81	32	25	70	45	50	55	55	50

The gross capital expenditure historical average from 2017 to 2023 for System Access was \$123,000. The gross capital expenditure six-year forecast average from 2024 to 2028 for System Access is \$165,000. The Town of Renfrew is anticipating some modest growth during this DSP period, as previously presented, and thus the forecasted increases to this category. Renfrew Hydro is also forecasting an increase in capital contributions during this period, and the net average capital expenditures remain very close \$50,429 (historical) vs \$51,000 (forecasted) mitigating the overall impacts on existing customers.

System Renewal

Table 5.4.2.3 -B: System Renewal: 2017-2028 Expenditures

System Renewal	Historical Amounts (\$'000s)								Forecasted Investments (\$'000s)				
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Expenditures	473	398	272	372	345	521	300	475	430	390	415	430	

The capital expenditure historical average from 2017 to 2023 for System Renewal is \$383,000. The capital expenditure five-year forecast average from 2024 to 2028 for System Renewal is \$431,250. Renfrew Hydro is continuing with a robust renewal program based on their asset condition assessments and overall asset management strategy. Substantial increases in material costs are causing the overall spending in this category to be higher than historical averages.

System Service

Table 5.4.2.3 -C: System Service: 2017-2028 Expenditures

System Service	Historical Amounts (\$'000s)								Forecasted Investments (\$'000s)					
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
Expenditures	0	117	363	40	85	135	155	185	185	150	145	125		

The capital expenditure historical average from 2017 to 2023 for System Service is \$127.857. The net capital expenditure five-year forecast average from 2024 to 2028 for System Service is \$158,000. Renfrew Hydro needs to increase their average yearly spending in this area in order to modernize its grid and acquire an ability to better monitor and control its distribution system.

1 General Plant

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Table 5.4.2.3 -D: General Plant: 2017-2028 Expenditures

Table 3.4.2.3 -D. General Flant. 2017-2020 Expenditures													
General Plant	Historical Amounts (\$'000s)							Forecasted Investments (\$'000s)					
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Expenditures	66	350	23	67	77	23	710	125	135	85	85	110	

4

- 5 The capital expenditure historical average from 2017 to 2023 for General Plant is
- \$188,000. The capital expenditure five-year forecast average from 2024 to 2028 for
- 7 General Plant is \$108,000. Renfrew Hydro is projecting a lower spend in this area
- 8 primarily because there are no larger vehicles (bucket trucks) anticipated to be
- 9 purchased during the next five years.
- 10 DSP Summary of Capital Investments

11

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- 12 Renfrew Hydro's listing of capital projects by group can be found in the submitted excel
- spreadsheet: RHI's 2024 Filing Requirements Chapter 2 Appendices under Tab 2-
- 14 AA Capital Projects. The DSP includes several individual or multi-year investment
- programs spread across all four-investment categories. Many of these investment
- programs consist of several different individual capital projects. The number of
- 17 significant investment programs per category are as follows:
- System Access (4):
 - Customer Connections
- o Road Authority
- o Municipal Stations
- o Metering
- System Renewal (5):
 - Replace/Rebuild Overhead Assets
- o Replace/Rebuild Underground Assets
- o Station Upgrades

1	0	Transformer Replacements
2	0	Reactive Replacements
3	• Syste	em Service (4):
4	0	MS – 4, MS – 5 Substation Reclosers
5	0	SCADA System (Feeder Monitoring)
6 7	0	Miscellaneous Small Enhancement Projects (FCIs, Switches, Back-Up Battery Supplies)
8	0	44 kV Line Extension
9	• Gene	ral Plant (5):
10	0	Vehicles
11	0	Software
12	0	IT Equipment
13	0	Leasehold Improvements
14	0	Line Tools & Equipment
15 16 17 18	of the projects	on 5.4.3 for a detailed explanation of the various investments and a listing that make up the investments. DSP Appendix DSP- D includes business rojects in excess of the materiality threshold.
19 20	5.4.2.4 System	O&M Costs
21 22 23	Table 5.4.2.4- planning horiz	A details the system O&M costs for the historical period and DSP con. Table 5.4.2.4-A: System O&M Costs
24		

O&M		Historical Amounts (\$'000s)								Forecasted Investments (\$'000s)					
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028			
Expenditures	393	467	423	453	443	427	543	639	654	670	686	702			

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The trade-offs between capital investments and O&M costs were considered

throughout the entire DSP and is discussed further in section 5.3.3.2, under "Impact of

System Renewal on Maintenance". The primary reason for the forecasted increase in

System O&M is the result of restructuring Renfrew Hydro's workforce to include an 1 electrical engineer/technician. This position is necessary to increase Renfrew Hydro's 2 3 capabilities in planning, analysis and asset management. Renfrew Hydro's plan to install a SCADA system will allow RHI to optimize their system configurations to 4 reduce line losses, adopt more DERs and monitor and manage the growth in electric 5 vehicle chargers. That being said, with this necessary new stream of data, RHI must 6 increase their engineering and data analysis capabilities to be able to properly 7 leverage these necessary investments. There will be little impact to Renfrew Hydro's 8 9 overall costs as most of this position's cost is being reallocated from administration expenses and salaries. That being said, the distribution system year over year O&M 10 increases throughout the 2024-2028 forecast period average 5.4 %. Overall, the 11 expectation is that the capital investment impact on O&M costs will be relatively 12 minimal. Investments in system renewal that are designed to replace functionally 13 obsolete, deteriorated and end-of-life assets will contribute to a slight reduction in 14 required maintenance. This is generally offset by the installation of increasing volumes 15 of new assets through expansions and additions. A more detailed explanation of 16 OM&A costs can be found in Exhibit 4. 17

5.4.3 JUSTIFYING CAPITAL EXPENDITURES

19 5.4.3.1 Overview

Renfrew Hydro's capital expenditure plan is the result of the elements described fully in this DSP. It is guided by corporate strategy, customer engagement and regulatory requirements and echoes the four themes identified earlier. Renfrew Hydro will, over the 2024-2028 planning period, make capital investments in each of the four investment categories, as detailed in Table 5.4.3.1-A, and shown in Figure 5.4.3.1-B.

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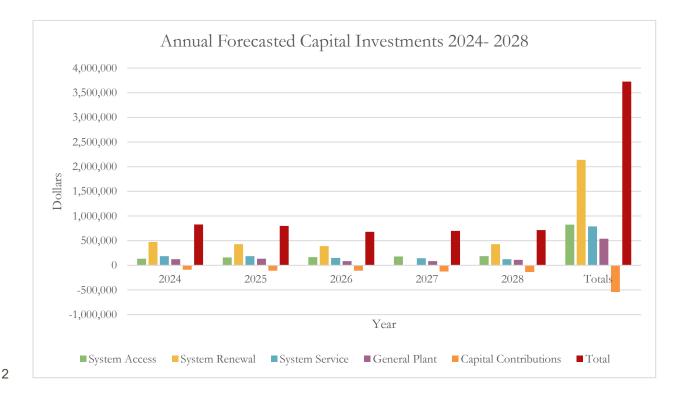
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Table 5.4.3.1 - A: Summary of Forecasted Capital Investments 2024-2028

Investment Category	2024	2025	2026	2027	2028	Totals
System Access	135,000	160,000	165,000	180,000	185,000	825,000
System Renewal	475,000	430,000	390,000	415,00	430,000	2,140,000
System Service	185,000	185,000	150,000	145,000	125,000	790,000
General Plant	125,000	135,000	85,000	85,000	110,000	540,000
Capital Contributions	-90,000	-110,000	-110,000	-125,000	-135,000	-570,000
Total	830,000	800,000	680,000	700,000	715,000	3,725,000

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5.4.3.2 Historical and Planned Allocation to OEB Investment Categories

Over the five-year planning period of Renfrew Hydro's DSP System Renewal investments remain the largest of the four investment categories. System Service investments are increasing to introduce improvements to Renfrew Hydro's public safety levels through the introduction of ground fault detection and the introduction of other technologies (reclosers & SCADA) that are in common use across most other Ontario electrical utilities. These expenditures will enhance Renfrew Hydro's ability to monitor, control and operate their distribution system. Refer to Figure 5.4.3.2-A.

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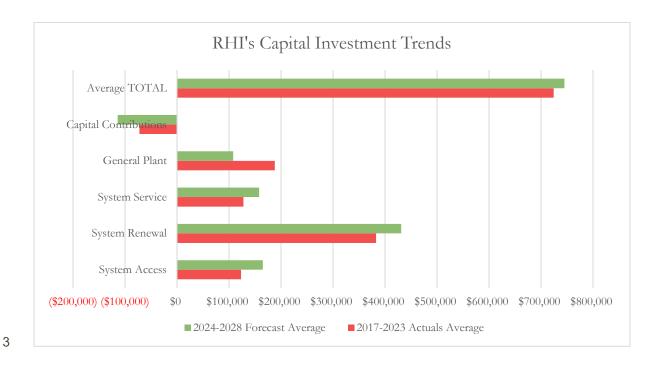
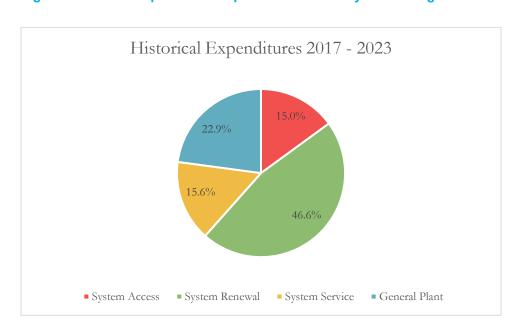
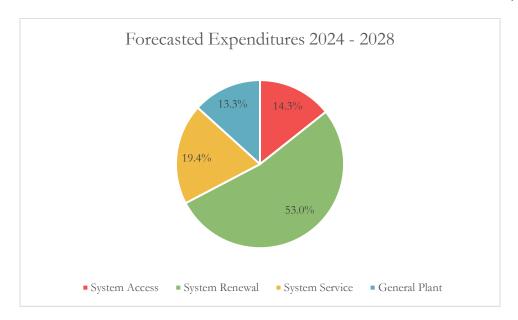


Figure 5.4.3.2-B depicts a snapshot of the percentages of Renfrew Hydro's capital plan for the historical period (2017-2023) and for the DSP period (2024-2028) for each of the investment categories.

Figure 5.4.3.2-B: Proportion of Capital Investments by OEB Categories – Historical and Forecast





- 2 For each of the investment categories, the explanation for the change in investments
- 3 levels from historical proportions and over the DSP period is provided below.
- 4 System Access

- 5 The system access planned percentage spend has decreased slightly from a historic
- spend percentage of 15.0% to a forecasted 14.3%. System access investments are by
- 7 in large a result of drivers beyond Renfrew Hydro's control, however there is some
- 8 indication that system access activity may increase during this DSP period. Renfrew
- 9 Hydro is projecting an increase in gross expenditures to an average of \$165,000 which
- represents a \$42,000 increase to historical averages. This increase will be mitigated by
- the offsetting increase in capital contributions. This average increase is reflective of the
- requirements of external agencies such as developers, road authorities and other
- infrastructure projects occurring in Renfrew Hydro's service territory.
- 14 System Renewal
- 15 The system renewal planned percentage has increased by 6.4% (53% vs 46.6%) of the
- total planned spend compared to the historical actual spend. Spending in this category
- is forecasted to increase by an average of \$48,250 per year when compared to
- historical actuals. This increase is an indication of the condition of Renfrew Hydro's
- assets as is evidenced by the outputs of the ACA and the required investments needed
- 20 to sustain the assets.
- 21 System Service
- 22 The system service percentage has increased by 3.8% (19.4% vs 15.6%) of the total
- 23 planned spend compared to the historical actual spend. It has increased by an average
- of \$ 30,143 per year. This change in average spend is required to enhance Renfrew
- 25 Hydro's distribution grid's safety levels and introduce technologies that are in common
- use across most other utilities. These expenditures will enhance Renfrew Hydro's ability
- 27 to monitor, control and operate their distribution system.

1 General Plant

- 2 The general plant planned percentage has decreased by 9.6% (13.3% vs 22.9%) of the
- 3 total planned spend compared to the historical actual spend. This decrease can
- 4 primarily be attributed to the purchase of two larger bucket trucks that occurred in the
- 5 historical period. Renfrew Hydro is planning to decrease its annual general plant
- spending by an average of \$108,000 in the 2024 2028 forecasted period.

2-Staff-14 Fixed Assets 1

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- Ref 1: Chapter 2 Appendix 2-BA, Year 2022, Cells A305:N342 3
- 4 Ref 2: Exhibit 1, Appendix M, 2022 Audited Financial Statements, Notes to the Financial
- 5 Statements, #7 Property, Plant and Equipment and intangible Assets

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Preamble:

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OEB staff noted the Net Book Value in Reference 1 deviates from what was reported in Ref 2. Table 2 below presents a summary of the variances that is compiled by OEB staff.

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	Table 2		
Year 2022	Fixed Assets Ref 1 (Excluding Deferred Revenue)	PP&E and Intangible Assets Ref 2	Variance
Buildings, Transmissions and	\$10,837,398	\$10,837,399	\$(1)
Distribution Systems, Trucks, Tools,			
Equipment, Computer Software and			
Easement, Leasehold Improvements,			
and Right of Use Asset			
Construction Work in Progress	\$176,780	\$316,730	\$(139,950)
Accumulated Amortization	\$(2,914,657)	\$(2,914,657)	-
Net Book value	\$8,099,521	\$8,239,472	\$139,951

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Question(s):

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- a) Please confirm the accuracy of the Table 2 compiled by OEB staff above or update the table as applicable.
- b) Please provide a reconciliation of the fixed assets reported in Appendix 2-BA and the PP&E and intangible assets on the 2022 Audited Financial Statements.

RHI Responses:

- a) The table compiled by OEB is accurate.
- b) The \$139,950 difference is the temporary move from our inventory of RHI's major spare parts to include in Work in Progress and therefore capital for Financial statements purposes. No depreciation costs as the assets have not been put into use.

1 OPERATING REVENUE (EXHIBIT 3)

2 3.0-VECC -13

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4 Reference: Exhibit 3, page 3

Load Forecast Model, Customer Growth-Tab 4

6 **Preamble:** The Application states:

"We have one ongoing (in progress) new subdivision in our distribution service area and there has been consideration for two (2) other potential developments; however, nothing has yet been confirmed. RHI is predicting a similar pattern of growth to what we have experienced over the past several years."

- 11 a) Since 2017 what has been the annual increase in customer count for the Residential and GS<50 classes due to new subdivisions as opposed to infill up to and including 2022?
- b) For the referenced new subdivision, what is the forecast increase in customer count (Residential and GS<50) in each of 2023 and 2024?

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RHI Responses:

- a) Hunters Gate subdivision commenced in 2003 and has seen 176 new residential connections up to 2023, or 8.8 units per year over the 20 years. The subdivision is Residential units only. In the past 10 years, RHI has averaged 16 new Residential connections per year. Therefore, the subdivision represents 9 new connections with an additional 7 infill connections within the Town.
- b) RHI expects similar growth from the past 20 years to continue at approximately 17 new Residential connections per year. GS<50 growth using the geomean is expected at 2 connections per year. RHI does note that the geomean may overestimate this figure as 19 connections moved from the GS>50 to GS<50 in 2019 and this is causing a skewed higher geomean. The geomean for GS>50 actually predicts a decline of 3 connections for 2024 which RHI has ignored and customer count has remained at 2022 level.

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Reference: Exhibit 3, page 7 and pages 8-9

Load Forecast Model, Customer Growth-Tab 4

5 **Preamble:** The Application states:

6 "Renfrew Hydro did not adjust the growth numbers for residential in our bridge (2023) and test (2024) years." (pages 8-9)

- 8 "Renfrew Hydro did not adjust the growth numbers for our General Service < 50kW in both our 9 bridge (2023) and test (2024) years." (page 9)
- a) Please provide a schedule that sets out the actual customer count for each class based on the most recent month for which actual data is available and indicate the month concerned. In the same schedule please provide the 2022 customer count, by class, for the same month.
- b) Despite the statement of pages 8-9, it is noted that in Tab 4 the 2023 and 2024
 forecast customer counts for the Residential and GS<50 customer classes have
 been adjusted from those calculated using the historic geomean. Please reconcile.
- i. If the forecasts have been adjusted from the results based on the geomean, please explain the basis for the adjustments.
- c) Please explain why the 2023 and 2024 Streetlight customer/connection count is held constant at the 2022 level when a new subdivision is being put in place and the number of Residential customers is increasing.

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RHI Responses:

a) Please see below for comparable July 2023 vs July 2022 Customer counts.

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Customer Counts - July 2023 vs July 2022								
	2023 2022 Chang							
Residential	3,892	3,875	17					
GS < 50	456	456	-					
GS > 50	42	42	-					
Total	4,390	4,373	17					

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b) RHI's intended meaning of stating "Renfrew Hydro did not adjust" was that RHI's expected growth rate agrees with the geomean growth rate. The only difference is RHI used end of year customer number and not average as the load forecast model uses in its prediction. The geomean predicts a 17 Residential customer growth rate for 2023 and 2024 and RHI used this number except based on end of 2022 customer number of 3888.

c) Hunter's gate phase 4, which is currently being built, had it's infrastructure put in place in 2018, with an additional 6 connections in 2020. This phase is not expected to be completed until 2025 as 24 units are in various stages of completion. Phase 5 and 6 have recently been approved but are not likely to commence until after Phase 4 is complete, meaning new connections would not be added until 2025 or 2026.

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- Reference: Exhibit 3, pages 4-5 and 11
 - Load Forecast Model, Tabs 6 & 6.1
- 5 **Preamble:** The Application states (page 11):
- 6 "The overall system total consumption has remained relatively flat as shown in Figure 3.11 below.
- 7 There were some minor variances year over year and the Covid pandemic impacted consumption
- 8 in both 2020 and 2021."
 - a) Did RHI undertake any analysis (e.g., testing regression models that included a Covid variable in the relevant months) to determine whether COVID-19 had an impact on power purchases in 2020 through 2022?
 - i. If yes, please indicate what analysis was undertaken and provide the results.
 - ii. If not, why not, given the statement on page 11?

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RHI Response:

a) RHI did not undertake any analysis concerning the impacts of Covid on energy purchases. RHI believes it is rather intuitive that Covid did affect consumption as restrictions prevented full operation of businesses and work from home initiatives transfer consumption from business to residential. A quick analysis shows RHI load for the residential class for the 3 years prior to 2020 to average 29.4M kWh. 2020 and 2021 increase to an average of 31.4M kWh or a 6.8% increase with only a 0.9% increase in connections.

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2022 realized a decline from 2020/2021 average back to a more normal level but still 1M kWh more than the 3-year pre-pandemic average in Residential consumption and can be explained with work from home becoming the new normal.

272829

In the GS<50 class, the 2022 load is almost identical to the average for the 2013-2021 period.

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GS>50 is where the most load was lost during the pandemic as large businesses had a flux of employees working from home, restricted operations and closures and 2022 saw a return to more normal consumption, yet still low as portions of employee's remain working from home.

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RHI did not procure analysis from outside sources in order to keep costs as low as possible.

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1 3.0-VECC -16

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Reference: Exhibit 3, page 4 Load Forecast Model, Tab 6

- a) Do the Monthly Purchased Power values used in Tab 6 (column C) include purchases from microFit and other embedded generators as well as any load transfers?
- b) If not, please re-do the Load Forecast Model including purchases from embedded generators and load transfers in the Purchased Power values used.

9

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RHI response:

11 12 13 a) Yes, All monthly power purchase values include all embedded generation. From time to time, Hydro One wheels power through our system to service the Town of Cobden. Only Renfrew Hydro's load is recorded in RHI's purchases as the meters are netted out and only RHI customer consumption is recorded.

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Reference: Exhibit 3, page 6

- a) It is noted that the coefficient for "Daylight Hours" is not statistically significant. Why was this variable included in the regression model used to forecast power purchases?
- 6 b) Please re-do the load forecast, excluding "Daylight Hours" from the regression model.

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RHI Response:

- a) For consistency purposes, RHI attempted to use the same variables as used in its 2017 Cost of Service application. Employment stats, which were used in the 2017 application were no longer available.
- b) RHI ran the load forecast excluding Daylight hours and has attached version "RHI_2024_Wholesale_Load_Forecast v# no Daylight hours." Tab 6.WS Regression Analysis no DH shows the new regression analysis which when compared to the original regression analysis shows a change of less than .1%

Reference: Exhibit 3, page 8 Load Forecast Model, Tab 7

a) It is noted that for the Residential and GS<50 classes (i.e., the weather sensitive classes) the volume forecasts for 2024 are based on each class's percentage of 2022 power purchases. Please provide a schedule that compares the actual HDD and CDD values for 2022 with the weather normal values used for purposes of forecasting 2024 power purchases.

b) Based on a comparison of the actual 2022 HDD and CDD values with the weather normal values would one expect that forecasts using percentages based on 2022 actual sales would over or under state 2024 usage for each class on a weather normal basis?

RHI Responses:

a) Please see table below.

	2022 Wholesale Purchases kWh	2022 HDD	2022 CDD	2022 Weather Normalized	2024 HDD	2022 CDD	2024 Weather Normalized	2024 vs. 2022 HDD	2024 vs. 2022 CDD
January	9,189,014.80	1015.70	0.00		862.74	0.00		-152.96	
February	7,949,161.34	722.80	0.00	7,727,231	745.21	0.00	7,831,522	22.41	0.00
March	8,021,381.75	610.70	0.00	7,899,385	647.33	0.00	8,011,170	36.63	0.00
April	6,795,597.58	363.60	0.00	7,015,248	376.11	0.13	7,055,419	12.51	0.13
May	6,859,526.00	115.20	25.90	6,835,905	151.02	18.15	6,827,812	35.82	-7.75
June	6,997,619.02	30.90	28.70	6,473,424	37.89	47.62	6,781,308	6.99	18.92
July	7,706,954.05	0.50	92.90	7,512,601	4.80	108.08	7,755,590	4.30	15.18
August	7,668,844.62	5.00	84.20	7,373,542	11.15	84.13	7,391,206	6.15	-0.07
September	6,630,881.30	107.10	11.90	6,394,114	90.43	25.31	6,546,430	-16.67	13.41
October	6,832,597.74	278.80	0.00	6,867,676	280.36	0.55	6,880,711	1.56	0.55
November	7,293,332.38	426.70	1.10	7,149,489	497.26	0.12	7,350,020	70.56	-0.98
December	8,072,934.23	650.20	0.00	7,962,936	701.00	0.00	8,117,974	50.80	0.00
		Average	Average	Total	Average	Average	Total	Average	Average
		360.60	20.39	88,301,618	367.11	23.67	89,172,384	6.51	3.28

b) 2022 HDD and CDD values are lower than the 10-year average HDD and CDD values used for the 2024 wholesale load forecast. As the percentage of class sales is estimated prior to weather adjustments (Tab 7. Weather Sensitive Class), using the 2022 pre-weather adjusted percentage would result in a higher estimated 2024 load than if the 2022 unadjusted weather was closer to the 10-year average.

1 3-Staff-15

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- 3 Load Forecast
- 4 Ref 1: Exhibit 3, Customer and Load Forecast, page 4
- 5 Ref 2: Load forecast model, Tab 3

6 7

Preamble:

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9 Renfrew Hydro has used monthly total system purchased energy data from 2013-2022 in 10 preparing its load forecast. Tab 3 at reference 2 contains monthly kWh by rate class till 11 December 2022.

12

13 Question(s):

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(a) Please provide consumption (kWh) and demand (kW) by rate class for the most recent months available in 2023.

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- RHI Response:
 - a) Please see table below, also updated in in revised Wholesale Load forecast model.

		Residential General Service < 50 kW U		Unmetered S	Inmetered Scattered Load General Service > 50 kW - 4999 kW			Streetlighting					
		Unad	justed	Unad	justed	Unadjusted			Unadjusted		Unadjusted		
			Customer		Customer		Customer			Customer			Customer
		kWh	Connections	kWh	Connections	kWh	Connections	kWh	kW	Connections	kWh	kW	Connections
Year	Montth												
2023	January	3,020,792	3,901	1,080,394	455	22,756	37	3,921,246	8,751	42	41,190	90	1,197
2023	February	2,824,320	3,898	1,024,582	454	22,756	37	3,585,744	8,751	42	37,353	90	1,197
2023	March	2,718,093	3,893	1,054,959	455	22,705	37	3,701,745	8,133	42	33,746	90	1,197
2023	April	2,227,665	3,896	875,618	454	22,517	37	3,412,412	8,795	42	28,009	90	1,197
2023	May	2,100,536	3,894	859,081	456	22,517	37	3,170,858	8,511	42	25,186	90	1,197
2023	June	2,381,857	3,910	912,926	456	22,517	37	3,396,829	8,476	42	22,228	90	1,197

1	3-Staff-16
2 3 4	Customer Forecast
5	Ref 1: Exhibit 3, Customer and Load Forecast, page 8
6	Ref 2: Load Forecast model, Tab 4
7 8 9	Preamble:
10 11 12 13	Renfrew Hydro stated, "All of Renfrew Hydro's customer/connection counts for all customer classes are calculated using year end actual numbers."
14	Question(s):
15 16 17 18 19	a) In the load forecast excel file, customer counts for all rate classes are based on yearly average. Please confirm the approach used by Renfrew Hydro. Also, confirm the basis for the adjusted customer numbers used in the forecast period.
20	RHI Response:
21	a) RHI used 2022 year end numbers to project 2023 and 2024 customer numbers.
22	This inflated the forecast for Residential by approx. 10 customers in 2023 and
23	2024 forecasted numbers for Residential but is likely to occur as the last stage of
24	the Phase 4 of Hunter's gate subdivision is 1 single family home and 4 multi-unit
25	structures which depending on completion may advance the number of
26	connections.
27	

- 1 3-Staff-17
- **2 Customer Forecast**
- 3 Ref 1: Exhibit 3, Customer and Load Forecast, page 7
- 5 Preamble:

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- Renfrew Hydro has used historical customer/connection usage from 2013 to 2022 to
- 8 forecast future usage.
- 10 Question(s):
- 12 a) Please provide customer numbers for all rate classes for the most recent historical
- months available for 2023.
- 15 RHI Response:
- a) Customer numbers/connections are inclusive in 3-Staff-15 above

- 1 3-Staff-18
- 2 Regression Model
- 3 Ref 1: Exhibit 3, Customer and Load Forecast, page 4
- 4 Ref 2: Load forecast excel file, Tab 6. WS Regression Analysis

56 Preamble:

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Renfrew Hydro has used average daylight hours as one of the independent variables in the regression model to predict wholesale purchases.

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11 Question(s):

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- a) The regression output in the excel file on Tab 6 shows that daylight hours has an insignificant t statistic of 1.193. Please comment on why Renfrew Hydro has retained this variable in its analysis.
- 16 RHI Response:
 - a) As per 3.0-VECC-17 a), RHI attempted, for consistency purposes in rate applications, to use the same variables.

1 3-Staff-19

- 2 **Demand Forecast**
- 3 Ref 1: Exhibit 3, Customer and Load Forecast, page 11

5 Preamble:

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To normalize and forecast kW for those classes that are bill based on kW (demand) billing determinants, the relationship between billed kW and kWh is used. The average ratio used in 2022 was utilized to forecast kW for all future years.

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Question(s):

a) Please comment on the suitability of using a 5-year average ratio instead of the 2022 ratio to forecast kW in 2024.

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RHI Response:

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a) The 5 year average would result in a factor of .00234 and reduce the kW calculation to 102,902 kW. While this may provide a more average amount, RHI is expecting the Ma-te-way expansion and infill of Resident's in the Lepine development to increase the demand by approximately 2,000 kW per annum as the current consumption for the arena is 1,850 kW and the arena is adding a second ice surface as well as some small businesses in the complex.

2223

- 1 3-Staff-20
- **2** Electric Vehicles
- 3 Ref 1: Exhibit 3, Customer and Load Forecast, page 3, Table 3.1

5 Preamble:

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Table 3.1 at the above reference states that Growth in Electric Vehicles had a minimal influence on Renfrew Hydro's load forecast.

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Question(s):

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a) Has Renfrew Hydro developed a load forecast specifically for Electric Vehicle and other Distributed Energy Resources? If yes, please provide the forecast.

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RHI response:

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a) RHI has not developed a load forecast specifically for EV or DER's. RHI believes the uptake in these initiatives may affect RHI's rate application in its next rate setting cycle but EV adoption has been minimal with maybe 8-10 vehicles in the area.

2021

- 1 3-Staff-21
- 2 Load Forecast
- 3 Ref 1: Exhibit 3, Customer and Load Forecast, page 12

5 Preamble:

Renfrew Hydro states that the largest energy usage increase will occur in our GS > 50 kW class due to two ongoing expansion projects within this class.

Question(s):

a) Has Renfrew Hydro accounted for the impact of these expansion projects in the test year?

RHI response:

a) The 2 projects, 1 expansion project and 1 project with expanded usage expected, have been factored into the RHI load forecast. Lepine development has stopped any more expansion as a residential apartment complex. Original plans were for 6 buildings on the complex but has halted at 3 buildings with occupancy below 50%. Usage is expected to increase as the buildings increase the occupancy, however, common area's are already being used and the usage would be only that of individual 1 and 2 bedroom units. To date, the average for this complex has increase by approx. 10,000 kWh per month over previous year. The Ma-Te-Way expansion is doubling in size and current usage for the single ice surface, dressing rooms and hall were 1,850 kW per annum in demand and usage just over 700,000 kWh per annum. RHI did factor these into the load forecast with additional load of 600,000 kWh and 2,430 kW in demand.

Of note, RHI does have some risk in that 4 GS<50 businesses plan to move into the expanded arena and may reduce RHI's GS<50 class customer number and usage.

- 1 3-Staff-22
- 2 Rate Class Energy Consumption
- 3 Ref 1: Load Forecast Model, sheet 7. Weather Sensitive Class
- 4 Ref 2: Load Forecast Model, sheet 8. KW and Non-Weather Sensitive

6 Preamble:

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- 8 In the first reference a ratio of rate class energy use to wholesale purchases is
- 9 calculated for 2022, and that ratio is used to estimate normalized energy usage for 2023
- and 2024. In the second reference, energy consumption per customer is calculated for
- 2022, and that energy use per customer is used to estimate rate class energy usage for
- 12 2023 and 2024.

13

- OEB staff notes that in years with extreme weather, rate classes with weather sensitive
- loads would normally be expected to require more energy, while rate classes without
- weather sensitive loads would not. Therefore, the proportion of wholesale purchases
- 17 required by a rate class would normally be weather dependent.

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19 Question(s):

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- a) For the weather sensitive rate classes, why does Renfrew Hydro propose to use a single historic year to estimate rate class energy requirements relative to wholesale purchases?
- b) Please explain how the approach used normalizes for differences in weather
 sensitivity between rate classes.
- c) For the non-weather sensitive rate classes, why does Renfrew Hydro propose to use a single historic year to estimate energy use per customer?

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RHI Response:

a) RHI used the single historic year to estimate energy use per customer as noted previously, the 2 covid restricted years, have changed patterns. 2020 and 2021 in the residential class showed an uptick in ratio of purchases while 2022 reduced as more people returned to work. Overall, in both the weather sensitive classes, the 5 year average and 2022 single year are not significantly different. Single year for Residential at 34.43% and 5 year average is 34.30%. Single year for GS<50 at 12.79% is comparable to the 5 year average of 12.91%.

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Considering work from home seems to be a continuing option the difference is not significant and takes into consideration the most current economic conditions.

4 5 6 b) Weather Normalization of the Load forecast occurred prior to the ratio % being applied.

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c) For the non-weather sensitive class using the single year is more appropriate due to changes over 2018-2020 in customer numbers for the GS>50 and known expansion. For Streetlighting the major change of refitting the lights to LED changes the historic numbers significantly.

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3-Staff-23 1 2 **Subdivision Growth** 3 Ref 1: Exhibit 3, Customer and Load Forecast, page 3 4 Preamble: 5 Renfrew Hydro stated, 6 "The growth rate in Renfrew remains slow and has remained consistent throughout the 7 past several years. We have one ongoing (in progress) new subdivision in our 8 distribution service area and there has been consideration for two (2) other potential 9 developments; however, nothing has yet been confirmed." 10 11 Question(s): 12 13 a) What is the estimated impact on customer counts of the new subdivision and when is 14 it expected to be in-service? 15 16 RHI Response: 17 a) Sub-division growth is slow and as stated previously have added approximately 9 18 new connections per year over the last 20 years. The Renfrew area has little 19 resources to grow unless an outside developer (such as Lepine and their 20 development) enters the market. Phase 4 of Hunter's gate (24 units to go) 21 should be completed in 2024 or 2025. 22 23

OPERATING COSTS (EXHIBIT 4)

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4.0 -VECC -19

4 Reference: Exhibit 4, page 11

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a) The Board approved 2017 maintenance budget was \$171k. RHI subsequently spent less than this amount in every subsequent year. The Utility is seeking to spend less than this in 2024 (\$155k). Please explain this trend and how the Utility can safely and reliability operate with this lower amount.

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b) Is the lower trend in maintenance spending offset or compensated by higher spending trend in operations (\$282k vs \$482k 2017 as compared to 2024)? If so explain how.

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RHI Responses:

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a) The main driver in reduced spend in the Maintenance category is reduced costs for vegetation management as RHI has moved this activity primarily to a subcontractor who provides favorable hourly rates to even their own normal rates during their busy season as they look to retain their staff during a time when they would need to lay-off their staff. These rates are also significantly less than that of a Line Maintainer. The contractor performs this service for RHI from January to March.

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b) The increased spending in operations relates to the hiring of an Engineering Technician as a succession plan for the current Operations Manager. This position was created to both expand the knowledge in this discipline and provide backup for the Operations Manager as they are fully able to retire in 2026. Overall headcount remains the same as 1 Customer Service representative voluntarily left RHI in 2020 and was replaced with the current Director of Finance, whose position was created to add financial expertise to the Cost of Service application and succession plan for the retirement of the current President with the position of Director of Finance being removed after succession to President.

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2 Reference:	Exhibit 4
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a) What is the Community Relations budget generally spent on?

6 7 b) Please provide the spending on customer surveys separately from what is expected to be spent on the Community Safety Program in 2024.

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9 RHI responses:

a) Community relations budget generally is spent on the bi-annual Customer Satisfaction survey or Customer Safety survey required by the OEB. As per 1.0-VECC-5 this amounts to typically \$8-9,000 of the spend annually. The remaining costs in this category typically relates to information inserts circulated with our Billing, for instance Ontario electricity makeup or customer choice initiatives (TOU, Tiered, ULO)

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b) As per a), spend is \$9,000 for surveys and balance for information circulars.

1 4.0 -VECC -21

2 Reference: Exhibit 4, Appendix 2-JC

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4 a) How is the bad debt expense of \$24,000 in 2024 estimated?

- 6 RHI Response:
- 7 a) Bad Debt expense was calculated using an average of 2018, 2019 and 2022
- 8 actuals. (\$26,754, \$24,595 and \$19,171 respectively or an average of \$23,507). RHI
- 9 did not include 2020 or 2021 in its calculation as RHI applied for and received additional
- funds through the Covid Energy Assistance Program and the low value of Bad Debts in
- 2020 and 2021 are after receiving \$59,810 in funding from this program, which no
- 12 longer exists.

Reference: Exhibit 4, Appendix 2-JC

a) Please explain why there are no amounts for property insurance (account 5635) or rent (account 5670) after 2018.

b) If these reductions are due to changes in how RHI pays for its office and garage space please provide clarification as to any of other changes to capital and OM&A related to facilities that have changed since 2017.

RHI Responses:

- a) As per 2.0-VECC-6, RHI divested of its property in 2018 and no longer has property insurance except for substations which insurance for the stations is expensed in Operations. As explained in Exhibit 4, page 6, IFRS 16 came into effect on January 1, 2019, requiring RHI to change its accounting of its office and garage space lease to a right of use asset, reducing OM&A in both Operations and General Administration, but also increasing Depreciation and Interest costs the same amount.
- b) There is no change to how RHI pays for its Office and Garage space. The IFRS 16 lease change has moved the costs out of OM&A and into depreciation and interest.

Reference: Exhibit 4, page 33

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a) If RHI is a member of the EDA please provide the annual membership fees for each year 2017 through 2024 (forecast).

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b) Please provide the CHEC membership fees for the years 2017 -2024 (forecast).

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RHI Responses:

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a) & b) Please see chart below, of note RHI was not a member of EDA for 2018 or 2019.

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Year	EDA	CHEC		
2017	\$ 9,100	\$	13,253	
2018	\$ _	\$	13,330	
2019	\$ -	\$	13,367	
2020	\$ 9,700	\$	13,408	
2021	\$ 9,800	\$	12,123	
2022	\$ 9,800	\$	13,528	
2023	\$ 10,300	\$	13,590	
2024	\$ 10,558	\$	13,930	

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Reference: Exhibit 4, page 47

One Time Cost of Service Application Costs

Consultant Costs	\$116,000.00
Legal	\$35,000.00
Public Notice	\$1,000.00
Interrogatories	\$25,000.00
Settlement/Oral hearing	\$25,000.00
Reply submission	\$5,000.00
Intervenor costs	\$30,000.00
Rate Order	\$3,000.00
Total Cost of Service Filing costs	\$240,000.00

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a) Please provide an update to the above table adding a column to show the amounts spent to date on each of the categories.

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RHI Response:

a) Please see chart below:

Consultant Costs	\$116,000.00	\$86,663
Legal	\$35,000.00	\$8,000
Public Notice	\$1,000.00	
Interrogatories	\$25,000.00	
Settlement/Oral hearing	\$25,000.00	
Reply submission	\$5,000.00	
Intervenor costs	\$30,000.00	
Rate Order	\$3,000.00	
Miscellaneous		\$3,638
Total Cost of Service Filing costs	\$240,000.00	\$98,301

Reference: Exhibit 4, page 41, Appendix 2-K

a) Please provide a list of positions and number of FTEs in each position i) in 2017; ii) currently (i.e., 2023) and iii) as proposed for 2024.

RHI Response:

a) Please see table below with FTE count totals. The Director of Finance position was created in 2020 for succession planning for the Presidents role and this position will be removed at the end of 2023. The unionized Crew Leader position was replaced with an Operations Manager position in 2021. One Customer Service Rep position was eliminated in 2020. A new engineering Technician position was created and staffed in 2023. RHI's overall headcount will remain at a total of ten (10) FTE's. During 2023 there is a temporary headcount increase of one to eleven allowing for some overlap and knowledge transfer prior to the Presidents retirement. RHI has absorbed the cost of additional headcount in the 2023 Bridge year.

Position	2017	2023	2024
President	1	1	1
Director of Finance	0	1	0
Operations Manager	0	1	1
Senior Business Manager	1	1	1
Billing Supervisor	1	1	1
Customer Service Rep 1	1	1	1
Customer Service Rep 2	1	0	0
Engineering Technician	0	1	1
Crew Leader	1	0	0
Working foreman	1	1	1
Power Line Maintainer 1	1	1	1
Power Line Maintainer 2	1	1	1
Power Line Maintainer 3	1	1	1
Count totals	10	11	10

- 1 4-Staff-24
- **2** Low Income Energy Assistance Programs (LEAP)
- 3 Ref 1: Exhibit 4, Page 50
- 4 Ref 2: Filing Requirements for Electricity Distribution Rate Applications 2023 Edition for
- 5 2024 Rate Applications, Chapter 2, Cost of Service, December 15, 2022, page 34
- 67 Preamble:

- 9 Renfrew Hydro has calculated LEAP funding as 0.12% of the revenue requirement of
- \$2.5M to be \$3,038. OEB staff notes that the revenue requirement used in this
- calculation is the base revenue requirement. OEB staff notes that per the second
- reference, the service revenue requirement is the value to be used in the calculation.
- 13 14 Question(s):

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a) Please calculate the LEAP funding using the service revenue requirement.

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RHI Response:

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a) RHI agrees and the LEAP funding should be \$3,260.53, prior to any adjustments made through the interrogatory process.

- 1 4-Staff-25
- 2 Meters Maintenance
- 3 Ref 1: Exhibit 4, page 28

45 Preamble:

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7 Renfrew Hydro describes the "metering" department in this section. Question(s):

- a) Please clarify what activities Renfrew Hydro staff or contractors perform in the "metering" department, that is, "installation, testing and commissioning of new meters" and "ongoing operation of existing meters", investigation of potential theft and emergency response to customer trouble calls.
- b) Please explain what "System Operations" is at Renfrew Hydro.
 - c) How does Renfrew Hydro currently use real time meter data?

RHI Response:

- a) Renfrew Hydro staff install all our meters and ancillary metering equipment such as PT's and CT's and collectors. Large industrial and commercial metering installations are verified (tested and field audited) by a third-party metering service provider. Renfrew Hydro staff investigate all metering issues such as non reporting, substantial shifts in consumption, and they respond to all meter and service entrance damages. Renfrew Hydro staff conduct all on premise activities to facilitate Measurement Canada's mandatory meter reverification processes and programs. RGI meters are tested and verified by a third-party Measurement Canada accredited meter shop.
- b) System Operations is the ongoing configuration and subsequent up to date pin board mapping of the condition and state of Renfrew Hydro's distribution system. Renfrew Hydro has a fully tied/looped 4 kV distribution system that allows substations and sections of lines to be taken out of service for maintenance purposes without any power interruptions to customers.
- c) Renfrew Hydro accesses real time metering data through a software called Metersense. This platform intelligently interprets the smart meter data collected in the meter data management (MDM) system including interval readings, register readings, meter-related problems, outage information, data quality information, and more. RHI uses this data to help manage its distribution system such as determining loading on specific assets such as transformers or conductors.

1 COST OF CAPITAL AND RATE OF RETURN (EXHIBIT 5)

5.0-VECC-26

3 Reference: Exhibit 5, page 12

- a) Renfrew Hydro is significantly under leveraged having actual debt of only \$3,485,182 as compared to the total long-term debt capital structure of \$5,286,831. Please explain the reasons for the significant divergence from the rate making capital structure.
- b) Two of the four cost of debt instruments are related to the purchase of vehicles. Why does RHI believe that vehicle loan rates are representative of the long-term debt that would normally be used for financing longer life electricity distribution assets? Specifically, what steps has RHI taken to understand the potential cost (interest) of debt used for vehicles as compared that available by lenders for the purpose of supporting the capital expenditures in the Distribution System Plan presented in this proceeding?

RHI Responses:

a) RHI has been reluctant to borrow additional funds due to the disparity between the actual annual interest charge of over \$196,000 and the 2017 Cost of Service application set recoverable interest of \$143,963, RHI successfully obtained approval from its Shareholder in the 2020 year to effectively reduce the interest charge to match that of the OEB allowable long Term debt rate adjusted during Cost-of-Service applications, staggered over 2021-2023 RHI has largely been able to avoid additional borrowing by managing investments in its system and was fortunate to have no major events requiring large capital investments.

 b) As discussed in a) RHI attempted to avoid additional borrowings as its actual interest obligations exceeded the allowable interest recovery. In 2017 it was decided to replace a single bucket truck which was well past its useful life. Vehicle loans are more readily available as they are tied to a tangible asset and RHI has matched up the amortization of the loan with assets useful life. RHI, due to its size, has limited means in which to borrow. In discussions with Infrastructure Ontario ((IO) recently, IO commented that for RHI to borrow, the process would likely take 3-5 Months and there would be no guarantee that the Shareholder of RHI would not be required to do the borrowing on RHI's behalf and RHI would need to pay the Town of Renfrew and flow through to IO. The Town of Renfrew currently has extended their burrowing due to the Ma-te-Way activity center expansion and are reluctant to take on further debt and their ability to borrow in the future. On top of their own project,

the Town also co-signed the expansion for Renfrew Power Generation Thomas Low generator for a significant loan. In relation to the 2023 Vehicle loan, RHI is replacing a 2001 Double bucket truck and explored financing through the equipment manufacturer, which stated an interest rate higher than that of Royal bank and a set rate for the full 10-year loan. RBC has been more flexible and provided quotes based on a 10-year amortization, but a set interest rate for 1-5 years with renegotiated rates after the first set interest rate period. RHI is likely to set the interest rate for 3-4 years as this is the lowest of the rates, with also an expectation that interest rates will decline at a later date.

5.0-VECC-27

2 Reference: Exhibit 5, page 12

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- a) Please recalculate the weighted cost of debt as calculated using Appendix 2-OB but which weights the notional debt of \$1,801,649 (i.e., \$5,286,831 \$3,485,182) under the following two scenarios:
- 7 i. Notional debt at a cost rate of 4.88%
- 8 ii. Notional debt at a cost rate of 3.88%
- 9 b) For each of i) and ii) please calculate the revenue requirement impact of the change.

10 RHI Response:

a) Please find below weighted average cost of debt under the 2 scenarios.

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WAC of 5.02% with Notional debt at a cost rate of 4.88%

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Description	Principal (\$)		Rate (%) (Note 2)	Interest (\$) (Note 1)	
Affiliated Debt - from Shareholder	\$	2,705,168	4.88%	\$	132,012.22
Truck Loan - 2018 Freightliner	\$	152,630	4.54%	\$	6,929.40
Capital Lease - Right of Use	\$	82,034	3.88%	\$	3,182.92
Truck Loan - 2023 Freightliner	\$	545,350	6.50%	\$	35,447.74
Notional debt	\$	1,801,649	4.88%	\$	87,920.47
	\$	5,286,831	5.02%	\$	265,492.75

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WAC of 5.02% with Notional debt at a cost rate of 4.88%

Description	Principal (\$)		Rate (%) (Note 2)		
Affiliated Debt - from Shareholder	\$	2,705,168	4.88%	\$	132,012.22
Truck Loan - 2018 Freightliner	\$	152,630	4.54%	\$	6,929.40
Capital Lease - Right of Use	\$	82,034	3.88%	\$	3,182.92
Truck Loan - 2023 Freightliner	\$	545,350	6.50%	\$	35,447.74
Notional debt	\$	1,801,649	3.88%	\$	69,903.98
					·
	\$	5,286,831	4.68%	\$	247,476.26

b) i) Revenue requirement impact would be \$Nil as even though WAC is above the current deemed interest rate, RHI has requested the deemed interest rate in its application of 4.88%.

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ii) Revenue requirement impact would be a decrease by \$10,521 as WAC is below the current e interest rate of 4.88%.

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1 5.0-VECC-28

2 Reference: Exhibit 5, Appendix D

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- a) Is 119871 Canada Inc. (Capital Lease Debt #3) an affiliate or related company toRenfrew Hydro?
- 6 RHI Response:
- a) 119871 Canada Inc. is not an affiliate or related company to RHI.

1 CALCULATION OF REVENUE DEFICIENCY/SURPLUS (EXHIBIT 6)

2 6.0-VECC-29

- 3 Reference: Exhibit 6, page 29
- 4 a) For each of the USOAs set out in Appendix 2-H, please explain how RHI forecasted the 2023 and 2024 amounts.
- b) Please provide a schedule that sets out, for each of the USOAs set out in Appendix
 2-H, the 2023 year-to-date values and the values for 2022 for the same months.
- 8 c) In which account are the revenues from the microFIT service charge recorded?
- 9 RHI Responses:
- a) Rational for forecasted amounts are as per below:
- 11 USOA 4082 Removed retail service variance on expenses and increased 2024
- based on 3.7% 2023 inflationary charge, to be adjusted to 4.8% as IRM now
- issued.
- 14 USOA 4084 Immaterial
- 15 USOA 4086 Estimate on prior activity, with small incremental increases for new
- 16 services
- 17 USOA 4210 Base 2017 rate of \$22.35 from 2017 COS application with 1,879
- attachments. 2024 based \$36.05 with 2,496 attachments adding the charge
- requested for Town of Renfrew streetlight pole attachments. To be increased to
- \$37.78 per pole for 2024 as the new approved rate has now been issued.
- 21 USOA 4225 Average of last 5 years (2018 to 2022) and added \$50.
- 22 USOA 4235 Average of 4 years (2017 to 2020) with marginal increase. 2021
- and 2022 were high due to one off customer installations as the local hospital
- had their owned transformer malfunction in 2022 and Lepine Developments
- 25 noted elsewhere in this application required temporary services for the
- development of their property in 2021.
- 27 USOA 4245 Ties to Capital contributions. Previous years RHI received
- 28 Government grants related to the hiring of Co-op students for 4 month terms.
- This was ignored due to the increased costs as well and no Co-op student
- 30 budgeted for 2024.
- 31 USOA 4325 Average of 2019-2021, increased for material costs increases that
- 32 have occurred recently.
- USOA 4355 2023 estimate based on disposal of Double bucket Truck.
- 34 USOA 4362 Tied to App.2-BA disposals of smart Meters expected and their net
- 35 book values.
- 36 USOA 4375/4380 Netted together with 2022 as the base year. Revenues

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relate to Street lighting maintenance and with the conversion to LED's expected to be reduced to a low level of maintenance.

USOA 4390 – Estimate based on sale of scrap material. Reduced due to previous years amounts relate to the LED upgrade for streetlights and material scrapped during the upgrade. Also, materials retained as much as possible due to shortages and costs increasing significantly.

USOA 4405 – Estimate based on interest rates expected to reduce, also mostly offset by interest costs. June 2023 value is \$18,626, inclusive of variance accounts but interest costs related to Variance accounts amounted to \$12,102 at June 30 as well.

b) Please see chart below with June YTD 2022 and June YTD 2023 added. Please note for 4210, only Cogeco has been billed for pole rental charges YTD and Bell is charged annually at the end of each year.

USoA#	USoA Description	2021 Actual ²	20)22 Actual	В	Bridge Year		Test Year	June			June
		2021		2022		2023		2024		2022		2023
	Reporting Basis											
4082	Retail Services Revenues	-\$ 4,996	-\$	4,725	-\$	8,360	-\$	8,407	-\$	2,348	-\$	2,604
4084	Service Transaction Requests (STR) R	-\$ 17	-\$	27	\$	-	\$	-	-\$	13	-\$	7
4086	SSS Administration Revenue	-\$ 12,885	-\$	12,964	-\$	13,125	-\$	13,490	-\$	6,470	-\$	6,500
4210	Rent from Electric Property	-\$ 41,996	-\$	41,996	-\$	41,996	-\$	89,981	-\$	9,789	-\$	9,789
4225	Late Payment Charges	-\$ 16,548	-\$	17,169	-\$	19,588	-\$	19,588	-\$	10,162	-\$	10,279
4235	Miscellaneous Service Revenues	-\$ 67,178	-\$	62,231	-\$	37,412	-\$	37,849	-\$	34,284	-\$	24,199
4245	Government and Other Assistance Dire	-\$ 29,970	-\$	25,843	-\$	11,541	-\$	14,853	-\$	20,610	-\$	6,602
4305	Regulatory Debits	\$ -	\$	-	\$	-	\$	-				
4325	Revenues from Merchandise	-\$ 128	-\$	926	-\$	4,440	-\$	4,440	-\$	926	-\$	25
4330	Costs and Expenses of Merchandising	\$ -	\$	-	\$	-	\$	-			\$	-
4355	Gain on Disposition of Utility and Othe	-\$ 6,531	\$	-	-\$	20,000	\$	-			\$	-
4362	Loss from Retirement of Utility and Ot	\$ 34,470	\$	3,630	\$	3,798	\$	2,800			\$	-
4375	Revenues from Non Rate-Regulated U	-\$ 74,124	-\$	28,352	-\$	3,200	-\$	3,200	-\$	9,027	-\$	10,328
4380	Expenses of Non Rate-Regulated Utilit	\$ 65,784	\$	24,386	\$	-	\$	-	\$	8,247	\$	8,975
4390	Miscellaneous Non-Operating Income	-\$ 3,161	-\$	1,653	-\$	1,500	-\$	1,500	-\$	1,653	-\$	3,085
4405	Interest and Dividend Income	-\$ 4,340	-\$	19,899	-\$	13,800	-\$	13,800	-\$	2,599	-\$	18,626
M' II	Our in Brown	Φ 07.470	Φ.	00.004	Φ.	07.440	Φ.	07.040	•	04.004	_	04.400
	ous Service Revenues	- , -		,	-\$,	_	37,849	_	34,284		24,199
	ent Charges	-\$ 16,548			-\$	-,	_	19,588	_	10,162		10,279
	ating Revenues	-\$ 89,864	-\$,	-\$	-,-	_	126,732	_		_	25,503
Other Incon	ne or Deductions	\$ 11,969	-\$	22,814	-\$,		20,140	-\$	5,957	-\$	23,089
Total		-\$ 161,621	-\$	187,768	-\$	172,164	-\$	204,309	-\$	89,633	-\$	83,070

c) microFIT charges are recorded in 4235.

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6.0-VECC-30

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2 Reference: Exhibit 6, page 37

3 **Preamble:** The Application states:

"Other Distribution revenues are expected to increase by \$51,718. Primarily, this comes from resetting of pole attachment fees from the previous Cost-of-service at \$22.35 per year to the latest rate of \$36.05. RHI has also informed the Town of Renfrew that commencing 2024 they will also be receiving pole attachment charges for their street lights at this same rate."

- a) Please provide a schedule that sets out the calculation of the pole rental revenues for 2022, 2023 and 2024, showing the number of poles and the rate used for each year. For 2024 please indicate the number of streetlight poles for which the Town of Renfrew will be paying a rental charge?
- b) Does the \$36.05 represent the 2023 charge or the anticipated charge for 2024 after
 adjusting for the OEB's 2024 inflation factor (4.8% per the OEB's letter of June 29,
 2023)?
 - If based on the 2023 charge, please update the forecast 2024 Other Distribution Revenue to incorporate the 2024 inflationary adjustment to the pole rental charge.
 - c) Has RHI received any feedback from the Town of Renfrew regarding its proposal to apply the pole attachment charge to the Town's street lights? If yes, what was it?

RHI Responses:

a) and

b) Please see below table, budgeted amount is 2023 before inflation factor.

		2022	2023	2024
Attachments				
- Communications		1,879	1,879	1,879
Street lights				617
Total attachments		1,879	1,879	2,496
Charge	\$	22.35	\$ 22.35	\$ 36.05
Rental Revenue	\$	41,996	\$ 41,996	\$ 89,981
Charge Adj IRM 4.8	%			\$ 37.78
Rental Revenue adj.				\$ 94,299
Difference				\$ 4,318

c) President of RHI discussed with CAO of Town to explain charge with no objections noted in a verbal exchange.

- 1 6-Staff-26
- 2 PILS
- 3 Ref: PILS model, Tab B4
- 4 Preamble:

OEB staff has reproduced Table 3 based on the information provided in the Reference.

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Table	3
	2023 Bridge Year
Loss Carry Forward Generated	\$677,937
Other Adjustments	\$(96,571)
Balance available for use post Bridge Year	\$581,366

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Question(s):

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a) Please explain the nature of the \$96K adjustment in the 2023 Bridge year and why Renfrew has applied this adjustment to reduce the tax loss carry-forward to the test year.

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RHI Response:

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a) The \$96K reduction in the loss carry-forward is to recover PILs tax paid in the 2022 year. As per Schedule 1 on the 2022 corporate tax return, RHI's taxable income was \$96,571.

- 1 6-Staff-27
- 2 PILS
- 3 Ref 1: Ex.6/Page 19
- 4 Ref 2: Filing Requirements For Electricity Distribution Rate Applications 2023 Edition for 2024
- 5 Rate Applications, December 15, 2022
- 7 Preamble:

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9 Renfrew Hydro notes that "RHI has overridden tax rates in the OEB model, Appendix D, 10 to reflect true tax rates paid by RHI due to CRA associated company rules and RHI's 11 relationship with Renfrew Power".

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13 Appendix D is the pdf version of the PILs workform.

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Section 2.6.2 of the Filing Requirements states that distributors are to use the standalone principle when determining Payment in Lieu of Taxes (PILs).

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Question(s):

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- a) Please specify which cell(s) has/have been overridden by Renfrew in the PILs model (what was the original rate in the model and what is the new rate in the model) and what is the impact by overriding the rate in the model.
- b) Please further expand on the reason provided ("due to CRA associated company rules") for the overriding.
- c) Please confirm whether Renfrew's view is that the stand-alone principle as referenced in the Filing Requirements, should not apply for tax sharing purposes. If so, please explain.
- d) Please explain why Renfrew Hydro believes that the application of the small business deduction should be based on the gross book value of capital assets of both Renfrew Hydro and Renfrew Power Generation rather than Renfrew Hydro's own book value.
- e) Please provide the calculation for the 12.2% small business deduction rate.

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RHI Responses:

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38 39 a) The specific cells overridden are Cells E13 and E14 on both the tabs B0 PILs, Tax Provision Bridge and T0 PILs, Tax Provision Test. The original rate in the model was for Ontario tax of 3.2% in cells E13 and Federal tax of 9%, cell E14. For 2023, the impact is Nil as RHI is projecting a loss. For 2024, the impact is \$13,623 in increased tax and \$21,110 in grossed up tax.

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b) CRA associated company rules provide that 2 or more entities are associated if

owned by the same individual or entity. This association is applicable to taxable capital, sharing the small business tax rate to a maximum taxable income of \$500K per year as well as sharing capital gains exemptions and/or other tax incentives. As shown in RHI 2022 Corporate tax return and in the HO PILs, Tax Provision Hist tab of the PILs model, RHI's taxable income was \$96,571 and tax was calculated as \$25,591 or a tax rate of 26.5% on the actual return. RHI's net payable of \$21,317 was due to Corporate minimum tax paid during the 2018 tax year being refunded to RHI on the 2022 tax return

c) Renfrew's viewpoint is that the stand-alone principle should not apply as, as stated in b), RHI's real tax rate is 26.5% and applying a different rate puts RHI in a negative position as RHI does pay this rate. RHI also believes the Customers of RHI receive benefits due to this association with Renfrew Power Generation (RPG) as outlined of page 23-24 of Exhibit 6.

d) RHI provided table 6.13, pg 23 of Exhibit 6 showing the Taxable Capital as filed by external Auditors of RHI.

e) As shown in a) for 2024, the impact is \$13,623 in increased tax and \$21,110 in grossed up tax using 26.5% tax vs using that of 12.2%.

Of note, RHI will not be updating the PILs tax model to the latest version as the designated immediate expensing property deduction (DIEP) is in the 2024 test year, it should be in the 2023 Bridge year as CRA started this in 2021 and it ends for assets purchased and in use prior to January 1, 2024. This ultimately is the cause for the large tax loss carry-forward referred to in 6-Staff-26.

COST ALLOCATION (EXHIBIT 7)

7.0-VECC-31

3 Reference: Exhibit 7, page 4

4 **Preamble:** The Application states:

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"On Sheet I4, Break-out of Assets, RHI updated the allocation of the accounts based on 2024 values."

a) Please provide a schedule that compares the asset breakout for USOA 1830, 1835, 1840 and 1845 as used in the last COS Application with that used in the current Application. Please explain any changes of more than five percentage points.

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RHI response:

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a) Please see below schedule

USOA	2024	2017	Change %
1830	2,959,576	1,577,735	87.6%
1835	1,897,201	1,590,333	19.3%
1840	42,017	50,434	-16.7%
1845	324,485	360,478	-10.0%

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USoA 1830 "Poles, Towers and Fixtures" – From 2017 to 2022, RHI has replaced 197 poles or an average of 28 poles per year. RHI's pole count is 1,792 as of the end of 2022. Using a 45-year amortization on poles as approved through the Kinectrics study, RHI should be replacing just short of 40 poles per year. As of the end of 2022, RHI has 432 poles which are past their useful lives and still in service. RHI's focus has been to upgrade its poles to enable a full loop of the 44kV system while replacing those in unserviceable condition. While an 87.6% increase is significant, RHI believes it is necessary and is falling behind in rejuvenation of its poles.

- USoA 1835 "Overhead conductors and Devices" In relation to poles, due to the useful lives of Conductors being 60 years per the Kinectrics report, most conductor is
- transferred during pole replacements. Devices are inspected and replaced as needed.
- 28 USoA 1840 Underground conduit. Underground conduit has reduced by 16.7% over
- the 7 year span. There has only been 1 major install of underground conduit in the
- 30 period and this relates to phase 4 of Hunter's gate subdivision. Additions are also

- typically offset with capital contributions from the developer for underground conduit as
- 2 this type of installation is more costly than overhead construction.
- 3 USoA 1845 Underground Conductors and devices Same statement as per USOA
- 4 1840.

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2 Ref	erence:	Exhibit	7,	page	6
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- a) Were the Billing and Collecting weighting factors by customer class based on management judgement or on an analysis of each customer class's requirement of the various components of the Billing and Collecting costs?
 - i. If based on an analysis, please provide a copy.

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RHI response:

a) Weighting factors were based on management judgement and various costs incurred within the overall billing system as outlined in Exhibit 7 page 6.

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7.0-VECC-33

Reference: Cost Allocation Model, Tabs 16.2, 17.1 and 17.2

RRWF, Load Forecast Tab

Load Forecast Model, Tab 4 – Customer Growth

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- a) The Load Forecast Model, the RRWF and Tab I6.2 of the Cost Allocation Model all show the 2024 GS<50 Customer count as 458. However, in Tabs I7.1 and I7.2 the number of GS<50 Meters and Meter Reads are shown as 460 and 465 respectively. Please reconcile.
- b) The Load Forecast Model, the RRWF and Tab I6.2 of the Cost Allocation Model all show the 2024 Residential Customer count as 3,922. However, in Tabs I7.1 and I7.2 the number of Residential Meters and Meter Reads are shown as 3,902. Please reconcile.
 - c) The Load Forecast Model, the RRWF and Tab I6.2 of the Cost Allocation Model all show the 2024 GS>50 Customer count as 42. However, in Tabs I7.1 and I7.2 the number of GS>50 Meters and Meter Reads are shown as 50 and 45 respectively. Please reconcile.

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RHI response:

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a) VECC has reviewed the cost allocation model uploaded to RESS on May 24, 2023 and not the updated model uploaded on June 27, 2023. The updated model has Tab I6.2 of 458, I7.1 of 460 and I7.2 of 458.

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b) Same as a) updated version has I6.2 of 3,922, I7.1 of 3,942 and I7.2 of 3,922.

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All differences in I7.1 are due to meters being pulled but in useable condition for

c) Same as a) updated version has I6.2 of 42, I7.1 of 50 and I7.2 of 42.

purposes of testing through Measurement Canada or for some other means. RHI does not remove a meter from its amortization due to temporary removal

29 from its meter base.

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7.0-VECC-34

2 Reference: Cost Allocation Model, Tabs 16.1, 16.2 and 18

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a) Tab I6.1 shows that for the GS>50 class 57,878 kW of the forecast 104,523 kW billing demand receives the transformer ownership discount. However, I6.2 shows that all GS>50 customer use RHI transformers and secondary facilities. Similarly, in Tab I8 the PNCP4, LTNCP4 and SNCP4 values are all the same – again indicating that all GS>50 customers use RHI transformers and secondary. Please reconcile.

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RHI Response:

a) RHI prepare the Tab I8 in the same manner as prepared in its 2017 cost allocation model as no reduction was made in LTNCP or SNCP values. RHI has prepared a revised load profile model to remove the demand of customers with owned transformer and hence secondary and has calculated the results of this change. If adjusted in the cost allocation model the following changes would occur for costs amongst the rate classes.

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Residential – increase of \$28,928 in total expense.

GS<50 – increase of \$11,602 in total expense.

GS>50 – decrease of \$40,735 in total expense.

SL – increase of \$120 in total expense.

USL - increase of \$85 in total expense.

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1 7.0-VECC-35

- 2 Reference: Exhibit 7, page 7
- 3 **Preamble:** The Application states:
- 4 "RHI is currently working with Metersense in order to update and correct some data for its
- 5 Residential and GS<50 customers as approximately 30% of GS<50 data is currently being
- 6 reported as Residential load in Metersense. RHI has adjusted this data to agree to RHI's billing
- 7 statistic totals by keeping the hourly load profile of GS<50 customers consistent with the 70%
- 8 appropriately classified GS<50 customers, while removing the same data, on an hourly basis,
- 9 from the Residential load."
 - a) What analysis has RHI undertaken to confirm that the GS<50 customers currently included in the Residential class have an overall load profile equivalent to that of the GS<50 customers that are currently reported in the GS<50 data?
 - RHI response:

a) No analysis has been prepared. Billing supervisor has been in contact with Metersense and programming changes are underway but it is unknown when updates will be available and ready for testing for accuracy.

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7.0-VECC-36

Reference: Exhibit 7, page 7

Load Profile Excel File – 2022 Data for Cost Allocation

- a) In the Load Profile excel file the Residential and GS<50 classes are treated as weather sensitive whereas the GS>50 class is not. Has RHI undertaken any analysis to confirm that the GS>50 class load is not weather sensitive?
- b) Please confirm that, for the Residential and GS<50 classes, the basis for the percentage of load that is weather sensitive in each month is based on the load forecast model developed for wholesale purchases which includes usage by the "non-weather sensitive" customer classes.
 - i. If confirmed, why are these percentages appropriate given they include the loads for customer classes that are not considered to be weather sensitive?
- c) Per the Load Profile excel file (Columns K & P in Tabs 3a and 3b), please confirm that for any given day, the same adjustment factor for the difference between the actual HDD/CDD versus the weather normal HDD/CDD is applied to each hour of the day (e.g., for January 1, 2022 the same HDD adjustment factor of 0.82 was used for all hours of the day).
 - i. If confirmed, please indicate what analysis RHI has undertaken to confirm that this is a reasonable assumption.
- d) Per the Load Profile excel file (Columns I & N in Tabs 3a and 3b), please confirm for each month the same HDD and CDD adjustment factors were used for each of the Residential and GS<50 rate classes (e.g., for January 2018 the HDD adjustment factor used was 32% for all customer classes).
 - If confirmed, please indicate what analysis RHI has undertaken to confirm that the Residential and GS<50 classes both that the same degree of weather sensitivity.
- e) Please confirm that, for the Residential and GS<50 classes, the weather normal load in each hour is determined by adjusting the weather sensitive portion of the hourly load by the ratio of the average (i.e., weather normal) HDD/CDD value for that day to the actual HDD/CDD value for that
 - i. Please confirm that the value of the ratio will be "1.0" (such that there will be no adjustment) when the actual HDD/CDD value is zero.
 - ii. Please confirm that such results occur even if there is a difference between the actual HDD/CDD value and the weather normal HDD/CDD value which would suggest that an "adjustment" should be made.
 - iii. Please confirm that this situation arises in the data set used by RHI
 - iv. Please confirm that by using "ratio" to determine the weather adjustment, the per degree day adjustment depends on the actual HDD/CDD value for the day/month and will vary accordingly.

RHI Responses:

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a) RHI has not conducted analysis to be able conclude the GS>50 class is or is not weather sensitive.

b) Yes, the percent variance between the predicted purchases with and without degree days on table "1. Load Forecast output" is used to calculate the weather related hourly data. RHI has only been able to obtain 1 years data as the changes being made in Metersense have yet to take effect.

c) Yes, each hour of the day is adjusted the same. RHI has not prepared analysis as hourly HDD and CDD temperatures are not available.

d) Yes, the same factor was used for HDD and CDD for both Residential and GS<50 classes. RHI has not performed analysis to confirm both classes have the same degree of weather sensitivity.

e) Yes, the Residential and GS<50 classes perform the steps to determine by adjusting the weather sensitive portion of the hourly load by the ratio of the average (i.e., weather normal) HDD/CDD value for that day to the actual HDD/CDD value for that day.

i) Yes, changing the values to 1 does mean no adjustment will be made.

ii) No, this does not happen although rounding may occur.iii) No, the does not happen although rounding may occur.

iv) Yes, the value does depend on the value for the day/month and will vary accordingly.

1 7.0 – VECC –37

Reference: Exhibit 7, pages 7-8

a) Please provide a revised version of RHI's 2024 Cost Allocation Model where HONI's 2004 load profiles are used to determine the demand allocators in Tab I8.

RHI response:

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a) As stated on page 7 of Exhibit 7, the OEB current filing requirements require Distributors to have updated load profiles and not rely on HONI's 2004 profiles. Since RHI is through a full Cost of Service cycle since the letter dated June 12, 2015 it would be against OEB direction to use HONI's 2004 load profile.

- 1 7.0 VECC -38
- 2 Reference: Exhibit 7, pages 7-8
- 3 **Preamble:** The Application states:
- 4 "RHI, with the assistance of Hydro Ottawa staff, have adjusted the formula in column E of HDD
- 5 and CDD sorted tabs in the forecast model to normalize very small and/or very large
- 6 discrepancies in HDD and CDD observations based on the 10-year average. The new formula
- 7 eliminates the large adjustments for days when the temperature is very close to the baseline of
- 8 18 degrees. The results created co-incident peak and non-coincident peak which are typical of
- 9 RHI's loads, prior to adjustments for weather. Without these adjustments, certain days created
- 10 factors exceeding 10 and skewed results showing, in some cases, Residential and GS<50 load
- 11 being greater than GS > 50 load."

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- a) With reference to the 2022 data set used by RHI, please illustrate the "problem" that the new formula is meant to address.
- b) Please explain how the revised formula addresses this problem and how RHI determined which to which hours the adjusted formula should apply.

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RHI response:

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a) RHI has attached the original file without formula adjustment. Entitled "Renfrew Load Profile ... No formula change". The problem the formula fixes is that if the most current warmest or coolest day has a significantly lower value than the average it creates a large factor. The formula adjusts it to a maximum of 3 times the most current day if the average is above 1. If it is below 1, it sets it at 1. Please see "2b. HDD Sorted + 10yr Avg" line 148 and 149 to see large 10 year averages values. In the non formula adjusted sheet, CP and NCP tab the values presented for 1 NCP (Line 8784) sum to over 23,000 kW, when RHI has peaked less than 18,000 kW for the last 5 years.

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b) RHI has applied the formula to all data in column E of both the CDD and HDD sorted tab in the filed version with the application.

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- 1 7.0-VECC-39
- 2 Reference: Exhibit 7, page 14
- 3 **Preamble:** The Application sets out the following proposed changes to the R/C ratios:

Table 7.9: Proposed Allocation

Revenue to Cost Ratio Allocation

Customer Class Name	Calculated	Proposed	Variance
	R/C Ratio	R/C Ratio	
Residential	102.27%	100.00%	0.02
General Service < 50 kW	122.02%	113.93%	0.08
General Service > 50 to 4999 kW	81.12%	90.93%	-0.10
Unmetered Scattered Load	107.48%	107.95%	-0.00
Street Lighting	101.29%	107.73%	-0.06

Target Range									
Floor	Celiling								
0.85	1.15								
0.80	1.20								
0.80	1.20								
0.80	1.20								
0.80	1.20								

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- a) Please explain more fully why it is appropriate to move the R/C ratios for USL and Street Lighting further away from 100%.
- b) Please explain more fully why it is appropriate to reduce the GS>50 ratio below the 120% ceiling set by the OEB.
 - c) Please explain more fully why it is appropriate to reduce the Residential R/C ratio from 102.27% to 100.0%.

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- RHI response:
- a) All R/C ratio's were adjusted will Bill impacts in mind. USL customers have enjoyed years without variable rate increases due to rates being so low, since no adjustment is made to the variable rate unless an IRM rate of 3% or more was issued. IRM's rates from 2017 to 2021 were below this threshold. Street lighting was adjusted due to major changes performed by the Town to save funds on
 - energy purchases with LED lighting installed and major reduction to energy consumption and reduced variable charges. These adjustments have been communicated to both the USL and SL customers with no reply received.
 - b) Ratio adjusted down to reflect that current charges are above provincial averages.
 - c) Ratio adjusted to ensure Residential customers do not pay more than the costs associated with that rate class.

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Overall, ratio's were adjusted to maintain a consistent % increase across all rate groups and address rates that are over or under rate relative to the provincial averages on definable rate classes, ie Residential, GS<50, streetlights and UMSL.

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Revenue to cost ratio Ref 1: Exhibit 7, page 14

Preamble:

The revenue-to-cost ratio for the residential rate class is within the target ranges before adjustment. The General Service < 50kW class has been adjusted downwards to move it within the OEB's target ranges. The General Service >50 kW has subsequently been adjusted upwards as it was under-recovering revenues in comparison to its allocated costs.

Question(s):

- a) Please provide the bill impacts for all rate classes at the status quo ratios before the proposed rebalancing.
- b) Please provide a scenario on what revenue to cost ratios for the both General Service classes would result from not adjusting the residential class revenue-to- cost ratio and please provide the subsequent bill impacts for all rate classes.

RHI response:

a) Status quo ratio's would result in the following bill impacts, changing only fixed and variable rates versus the original filing.

DATE OF FOCE (VALLOODIC)		Sub-Total								Total			
RATE CLASSES / CATEGORIES (eg: Residential TOU, Residential Retailer)	Units	A			В			C				Total Bill	
leg. Residendal 100, Residendal Retailer)			\$	%		\$	%		\$	%		\$	%
RESIDENTIAL SERVICE CLASSIFICATION - RPP	kwh	\$	2.21	7.9%	\$	5.28	14.9%	\$	6.88	15.1%	\$	6.93	5.7%
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION - RPP	kwh	\$	5.46	7.8%	\$	12.86	14.5%	\$	16.50	14.5%	\$	16.61	5.3%
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION - Non-RPP (Other)	kw	\$	(75.39)	-7.8%	\$	521.74	67.7%	\$	697.96	41.1%	\$	691.88	5.4%
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION - Non-RPP (Other)	kwh	\$	2.04	8.4%	\$	5.88	21.1%	\$	6.97	19.8%	\$	7.03	7.1%
STREET LIGHTING SERVICE CLASSIFICATION - Non-RPP (Other)	kw	\$	287.01	9.7%	\$	509.68	17.7%	\$	565.74	17.7%	\$	602.55	7.8%
RESIDENTIAL SERVICE CLASSIFICATION - Non-RPP (Retailer)	kwh	\$	2.21	7.9%	\$	6.96	21.2%	\$	8.56	19.9%	\$	8.63	7.0%
RESIDENTIAL SERVICE CLASSIFICATION - RPP	kwh	\$	2.25	8.0%	\$	3.50	11.2%	\$	4.15	11.7%	\$	4.19	6.3%
RESIDENTIAL SERVICE CLASSIFICATION - Non-RPP (Retailer)	kwh	\$	2.25	8.0%	\$	4.18	13.9%	\$	4.83	14.1%	\$	4.88	7.3%
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION - Non-RPP (Retail	kwh	\$	5.46	7.8%	\$	17.35	21.2%	\$	20.99	19.7%	\$	21.16	6.6%

| Customer Class: | RESIDENTIAL SERVICE CLASSIFICATION | RPP | Non-RPP: | RPP | Consumption | 750 | kWh | | kW | | Current Loss Factor | 1.0810 | Proposed/Approved Loss Factor | 1.0714 | | Current Loss Factor | 1.0714 | Current Loss Factor | 1.0714

	Current (EB-Approve	d		Proposed	d	Im	pact
	Rate	Volume	Charge	Rate	Volume	Charge		
	(\$)		(\$)	(\$)		(\$)	\$ Change	% Change
Monthly Service Charge	\$ 27.93	1	\$ 27.93	\$ 32.28	1	\$ 32.28	\$ 4.35	15.57%
Distribution Volumetric Rate	-	750	\$ -	\$ -	750	\$ -	\$ -	
Fixed Rate Riders	-	1	\$ -	\$ (2.07)	1	\$ (2.07)	\$ (2.07)	
Volumetric Rate Riders	\$ 0.000	750	\$ 0.08	\$ -	750	\$ -	\$ (0.08)	-100.00%
Sub-Total A (excluding pass through)			\$ 28.01			\$ 30.21	\$ 2.21	7.87%
Line Losses on Cost of Power	\$ 0.093	61	\$ 5.69	\$ 0.0937	54	\$ 5.02	\$ (0.67)	-11.85%
Total Deferral/Variance Account Rate	\$ (0.000)	750	\$ (0.15)	\$ 0.0019	750	\$ 1.43	\$ 1.58	-1050.00%
Riders	\$ (0.0002	.) 750	\$ (0.15)	\$ 0.0019	150	ψ 1.43	φ 1.50	-1030.0076
CBR Class B Rate Riders	\$ (0.0002	750	\$ (0.15)	\$ -	750	\$ -	\$ 0.15	-100.00%
GA Rate Riders	-	750	\$ -	\$ -	750	\$ -	\$ -	
Low Voltage Service Charge	\$ 0.0022	750	\$ 1.65	\$ 0.0050	750	\$ 3.75	\$ 2.10	127.27%
Smart Meter Entity Charge (if applicable)	\$ 0.42		\$ 0.42	\$ 0.42	1	\$ 0.42	s -	0.00%
	3 0.44	' '	\$ 0.42	\$ 0.42	'	\$ 0.42	φ -	0.0076
Additional Fixed Rate Riders	-	1	\$ -	\$ -	1	\$ -	\$ -	
Additional Volumetric Rate Riders		750	\$ -	\$ (0.0001)	750	\$ (0.08)	\$ (0.08)	
Sub-Total B - Distribution (includes			\$ 35.47			\$ 40.75	\$ 5.28	14.89%
Sub-Total A)			\$ 35.47			\$ 40.75	\$ 5.26	14.09%
RTSR - Network	\$ 0.0078	811	\$ 6.32	\$ 0.0087	804	\$ 6.99	\$ 0.67	10.55%
RTSR - Connection and/or Line and	\$ 0.0048	811	\$ 3.89	\$ 0.0060	804	\$ 4.82	\$ 0.93	23.89%
Transformation Connection	0.0040	011	ÿ 5.03	\$ 0.0000	004	Ψ 4.02	Ψ 0.55	23.0370
Sub-Total C - Delivery (including Sub-			\$ 45.68			\$ 52.56	\$ 6.88	15.06%
Total B)			40.00			Ψ 02.00	Ψ 0.00	10.007
Wholesale Market Service Charge	\$ 0.004	811	\$ 3.65	\$ 0.0045	804	\$ 3.62	\$ (0.03)	-0.89%
(WMSC)	1*	0	0.00	V 0.0010		¥ 0.02	(0.00)	0.0070
Rural and Remote Rate Protection	\$ 0.000	811	\$ 0.57	\$ 0.0007	804	\$ 0.56	\$ (0.01)	-0.89%
(RRRP)	1				004	'	, , ,	
Standard Supply Service Charge	\$ 0.25		\$ 0.25	\$ 0.25	1	\$ 0.25	'	0.00%
TOU - Off Peak	\$ 0.0740		\$ 34.97	\$ 0.0740	473		\$ -	0.00%
TOU - Mid Peak	\$ 0.1020		\$ 13.77	\$ 0.1020	135		\$ -	0.00%
TOU - On Peak	\$ 0.1510	143	\$ 21.52	\$ 0.1510	143	\$ 21.52	\$ -	0.00%
Total Bill on TOU (before Taxes)			\$ 120.40			\$ 127.24		5.68%
HST	139	6	\$ 15.65	13%		\$ 16.54	\$ 0.89	5.68%
Ontario Electricity Rebate	11.79	6	\$ (14.09)	11.7%		\$ (14.89)		
Total Bill on TOU			\$ 121.96			\$ 128.89	\$ 6.93	5.68%

| Customer Class | RPP / Non-RPP: | RPP | Consumption | 2,000 | kW | kW | Current Loss Factor | 1.0810 | Proposed/Approved Loss Factor | 1.0714 | Current L

	Current O	EB-Approve	d		Proposed	I	Impact		
	Rate	Volume	Charge	Rate	Volume	Charge			
	(\$)		(\$)	(\$)		(\$)	\$ Change	% Change	
Monthly Service Charge	\$ 35.17	1	\$ 35.17	\$ 40.65	1	\$ 40.65	\$ 5.48	15.58%	
Distribution Volumetric Rate	\$ 0.0173	2000	\$ 34.60	\$ 0.0200	2000	\$ 40.00	\$ 5.40	15.61%	
Fixed Rate Riders	-	1	\$ -	\$ 0.18	1	\$ 0.18	\$ 0.18		
Volumetric Rate Riders	-	2000	\$ -	\$ (0.0028)	2000				
Sub-Total A (excluding pass through)			\$ 69.77				\$ 5.46	7.83%	
Line Losses on Cost of Power	\$ 0.0937	162	\$ 15.17	\$ 0.0937	143	\$ 13.38	\$ (1.80)	-11.85%	
Total Deferral/Variance Account Rate	\$ (0.0001)	2,000	\$ (0.20)	\$ 0.0018	2,000	\$ 3.60	\$ 3.80	-1900.00%	
Riders	(0.5551)		` '			0.00	'		
CBR Class B Rate Riders	\$ (0.0002)			\$ -	2,000	\$ -	\$ 0.40	-100.00%	
GA Rate Riders	-	2,000		\$ -	2,000	\$ -	\$ -		
Low Voltage Service Charge	\$ 0.0020	2,000	\$ 4.00	\$ 0.0046	2,000	\$ 9.20	\$ 5.20	130.00%	
Smart Meter Entity Charge (if applicable)	\$ 0.42	1	\$ 0.42	\$ 0.42	1	\$ 0.42	s -	0.00%	
	0.42		ψ 0.42	0.42		0.42	-	0.0070	
Additional Fixed Rate Riders	-	1	\$ -	\$ -		\$ -	\$ -		
Additional Volumetric Rate Riders		2,000	\$ -	\$ (0.0001)	2,000	\$ (0.20)	\$ (0.20)		
Sub-Total B - Distribution (includes			\$ 88.76			\$ 101.63	\$ 12.86	14.49%	
Sub-Total A)									
RTSR - Network	\$ 0.0070	2,162	\$ 15.13	\$ 0.0078	2,143	\$ 16.71	\$ 1.58	10.44%	
RTSR - Connection and/or Line and	s 0.0044	2,162	\$ 9.51	\$ 0.0054	2,143	\$ 11.57	\$ 2.06	21.64%	
Transformation Connection	* 0.0011	2,102	v 0.01	V 0.000	2,1-10	¥	ψ 2.00	21.0170	
Sub-Total C - Delivery (including Sub-			\$ 113.41			\$ 129.91	\$ 16.50	14.55%	
Total B)									
Wholesale Market Service Charge	\$ 0.0045	2,162	\$ 9.73	\$ 0.0045	2,143	\$ 9.64	\$ (0.09)	-0.89%	
(WMSC)	,	1	,		,		(,		
Rural and Remote Rate Protection	\$ 0.0007	2,162	\$ 1.51	\$ 0.0007	2,143	\$ 1.50	\$ (0.01)	-0.89%	
(RRRP)	[]						' '		
Standard Supply Service Charge	\$ 0.25	1	\$ 0.25	\$ 0.25		\$ 0.25		0.00%	
TOU - Off Peak	\$ 0.0740	1,260				\$ 93.24		0.00%	
TOU - Mid Peak	\$ 0.1020	360	\$ 36.72		360	\$ 36.72		0.00%	
TOU - On Peak	\$ 0.1510	380	\$ 57.38	\$ 0.1510	380	\$ 57.38	\$ -	0.00%	
Total Bill on TOU (before Taxes)			\$ 312.24			\$ 328.64		5.25%	
HST	13%		\$ 40.59	13%		\$ 42.72		5.25%	
Ontario Electricity Rebate	11.7%		\$ (36.53)	11.7%		\$ (38.45)			
Total Bill on TOU			\$ 316.30			\$ 332.92	\$ 16.61	5.25%	

Customer Class: GENERAL SERVICE 50 to 4,999 kW SERVICE CLAS

RPP / Non-RPP: Non-RPP (Other)

Consumption 85,244 kWh

Demand 203 kW

Current Loss Factor Proposed/Approved Loss Factor 1.0810 1.0714

	Current	EB-Approve	d		Proposed	i	Impact		
	Rate	Volume	Charge	Rate	Volume	Charge			
	(\$)		(\$)	(\$)		(\$)	\$ Change	% Change	
Monthly Service Charge	\$ 223.2		\$ 223.20	\$ 257.96	1	\$ 257.96		15.57%	
Distribution Volumetric Rate	\$ 3.376	203	\$ 685.47		203			14.04%	
Fixed Rate Riders	\$ -	1	\$ -	\$ 2.17	1	\$ 2.17	\$ 2.17		
Volumetric Rate Riders	\$ 0.288	203		\$ (0.7392)	203	\$ (150.06)	\$ (208.58)	-356.40%	
Sub-Total A (excluding pass through)			\$ 967.20			\$ 891.81	\$ (75.39)	-7.79%	
Line Losses on Cost of Power	\$ -	-	\$ -	\$ -	-	\$ -	\$ -		
Total Deferral/Variance Account Rate	\$ (0.033	203	\$ (6.84)	\$ 1.0299	203	\$ 209.07	\$ 215.91	-3156.08%	
Riders	1	1	, ,			,	Ψ 210.51		
CBR Class B Rate Riders	\$ (0.057)				203		\$ 11.61	-100.00%	
GA Rate Riders	\$ (0.003							-58.97%	
Low Voltage Service Charge	\$ 0.758	203	\$ 154.02	\$ 1.6627	203	\$ 337.53	\$ 183.51	119.15%	
Smart Meter Entity Charge (if applicable)	s -	1	\$ -	s -	1	s -	\$ -		
Additional Fixed Rate Riders	s -	1	s -	s -	1	s -	s -		
Additional Volumetric Rate Riders	•	203		\$ (0.0491)		\$ (9.97)	\$ (9.97)		
Sub-Total B - Distribution (includes		200		(0.0.0.1)	200		, , ,		
Sub-Total A)			\$ 770.31			\$ 1,292.05	\$ 521.74	67.73%	
RTSR - Network	\$ 2.894	203	\$ 587.54	\$ 3.2124	203	\$ 652.12	\$ 64.57	10.99%	
RTSR - Connection and/or Line and	\$ 1.679	203	\$ 340.98	\$ 2,2297	203	\$ 452.63	\$ 111.65	32.74%	
Transformation Connection	1.079	203	φ 540.30	\$ 2.2251	203	Ψ 432.03	ψ 111.03	32.7470	
Sub-Total C - Delivery (including Sub-			\$ 1,698.83			\$ 2,396,79	\$ 697.96	41.08%	
Total B)			• .,000.00			·,	* 0000	41.00%	
Wholesale Market Service Charge	\$ 0.004	92,149	\$ 414.67	\$ 0.0045	91,330	\$ 410.99	\$ (3.68)	-0.89%	
(WMSC)							' '		
Rural and Remote Rate Protection	\$ 0.000	92,149	\$ 64.50	\$ 0.0007	91,330	\$ 63.93	\$ (0.57)	-0.89%	
(RRRP)								0.000/	
Standard Supply Service Charge	\$ 0.29 \$ 0.099		\$ 0.25	\$ 0.25	1	\$ 0.25		0.00%	
Average IESO Wholesale Market Price	\$ 0.099	92,149	\$ 9,168.80	\$ 0.0995	91,330	\$ 9,087.38	\$ (81.43)	-0.89%	
Total Bill on Average IESO Wholesale Market Price			\$ 11,347.05			\$ 11,959.34	\$ 612.28	5.40%	
HST	139	6	\$ 1,475.12	13%	[\$ 1,554.71		5.40%	
Ontario Electricity Rebate	11.79		\$ 1,473.12	11.7%		\$ 1,554.71	ΙΨ 79.00	3.4070	
Total Bill on Average IESO Wholesale Market Price	11.7		\$ 12.822.17	11.770		\$ 13,514.05	\$ 691.88	5.40%	
. o.a. o Average 1200 vinolesale Market File			¥ 12,022.17			7 10,014.03	\$ 001.00	0.40 /	

Customer Class: UNMETERED SCATT
RPP / Non-RPP: Non-RPP (Other)
Consumption 596 kWh kW Demand

-1.0810 1.0714 Current Loss Factor Proposed/Approved Loss Factor

	Cur	rent OE	B-Approve	d				Proposed	ı		Impact		pact
	Rate		Volume		Charge		Rate	Volume		Charge			
	(\$)				(\$)		(\$)			(\$)	\$	Change	% Change
Monthly Service Charge	\$	23.44	1	\$	23.44	\$	27.09	1	\$	27.09	\$	3.65	15.579
Distribution Volumetric Rate	\$	0.0017	596	\$	1.01	\$	0.0020	596	\$	1.19	\$	0.18	17.65
Fixed Rate Riders	\$	-	1	\$	-	\$	0.06	1	\$	0.06	\$	0.06	
Volumetric Rate Riders	\$ (0.0001)	596	\$	(0.06)	\$	(0.0032)	596	\$	(1.91)	\$	(1.85)	3100.009
Sub-Total A (excluding pass through)	·			\$	24.39				\$	26.43	\$	2.04	8.37
Line Losses on Cost of Power	\$	0.0995	48	\$	4.80	\$	0.0995	43	\$	4.23	\$	(0.57)	-11.85
Total Deferral/Variance Account Rate	s (0.0001)	596		(0.06)		0.0024	596	\$	1.43		1.49	-2500.00
Riders	,	0.0001)	390	φ	(0.00)	ş	0.0024	590	Þ	1.43	Φ	1.49	-2300.00
CBR Class B Rate Riders	\$ (0.0002)	596	\$	(0.12)	\$	-	596	\$	-	\$	0.12	-100.00
GA Rate Riders	\$ (0.0039)	596	\$	(2.32)	\$	(0.0016)	596	\$	(0.95)	\$	1.37	-58.97
Low Voltage Service Charge	\$	0.0020	596	\$	1.19	\$	0.0045	596	\$	2.68	\$	1.49	125.00
Smart Meter Entity Charge (if applicable)				\$		s		1	\$		\$		
	•	-	1	э	-	Þ	-	1	Þ	-	э	-	
Additional Fixed Rate Riders	\$	-	1	\$	-	\$	-	1	\$	-	\$	-	
Additional Volumetric Rate Riders			596	\$	-	\$	(0.0001)	596	\$	(0.06)	\$	(0.06)	
Sub-Total B - Distribution (includes				\$	27.89				\$	33.77	\$	5.88	21.09
Sub-Total A)					21.09				ð		P		
RTSR - Network	\$	0.0070	644	\$	4.51	\$	0.0078	639	\$	4.98	\$	0.47	10.449
RTSR - Connection and/or Line and	s	0.0044	644	e	2.83	s	0.0054	639	\$	3.45	e	0.61	21.64
Transformation Connection	•	0.0044	044	9	2.00	*	0.0034	033	Ψ	5.45	Ψ	0.01	21.04
Sub-Total C - Delivery (including Sub-				s	35.23				\$	42.20	\$	6.97	19.77
Total B)				9	33.23				Ψ	42.20	Ψ	0.51	13.77
Wholesale Market Service Charge	s	0.0045	644	e	2.90	s	0.0045	639	\$	2.87	\$	(0.03)	-0.89
(WMSC)	,	0.0043	044	Ψ	2.50	*	0.0045	033	Ψ	2.07	Ψ	(0.03)	-0.03
Rural and Remote Rate Protection	s	0.0007	644	e	0.45	s	0.0007	639	\$	0.45	e	(0.00)	-0.89
(RRRP)	,	0.0007	044	Ψ	0.45	*	0.0007	033	Ψ	0.43	Ψ	(0.00)	
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$	-	0.00
Average IESO Wholesale Market Price	\$	0.0995	596	\$	59.30	\$	0.0995	596	\$	59.30	\$	-	0.00
Total Bill on Average IESO Wholesale Market Price				\$	98.13			·	\$	105.07	\$	6.94	7.07
HST		13%		\$	12.76		13%		\$	13.66	\$	0.90	7.07
Ontario Electricity Rebate		11.7%		\$	(11.48)		11.7%		\$	(12.29)			
Total Bill on Average IESO Wholesale Market Price				\$	99.41				\$	106.44	\$	7.03	7.07

	Current O	EB-Approve	d		Proposed	I	Im	pact
	Rate	Volume	Charge	Rate	Volume	Charge		•
	(\$)		(\$)	(\$)		(\$)	\$ Change	% Change
Monthly Service Charge	\$ 2.20	1197	\$ 2,633.40	\$ 2.54	1197	\$ 3,040.38	\$ 406.98	15.45%
Distribution Volumetric Rate	\$ 4.6520	90	\$ 418.68	\$ 5.3780	90	\$ 484.02	\$ 65.34	15.61%
Fixed Rate Riders	\$ -	1	\$ -	\$ 0.01	1	\$ 0.01	\$ 0.01	
Volumetric Rate Riders	\$ (0.9054	90	\$ (81.49)	\$ (2.9645)	90	\$ (266.81)	\$ (185.32)	227.42%
Sub-Total A (excluding pass through)			\$ 2,970.59			\$ 3,257.61	\$ 287.01	9.66%
Line Losses on Cost of Power	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	
Total Deferral/Variance Account Rate	\$ (0.0869	90	\$ (7.82)	\$ 0.8837	90	\$ 79.53	\$ 87.35	-1116.92%
Riders	\$ (0.0009	90	\$ (7.02)	\$ 0.0037	90	\$ 19.55	\$ 67.33	-1110.92%
CBR Class B Rate Riders	\$ (0.0536	90	\$ (4.82)	\$ -	90	\$ -	\$ 4.82	-100.00%
GA Rate Riders	\$ (0.0039	32,340	\$ (126.13)	\$ (0.0016)	32,340	\$ (51.74)	\$ 74.38	-58.97%
Low Voltage Service Charge	\$ 0.5865	90	\$ 52.79	\$ 1.2558	90	\$ 113.02	\$ 60.24	114.12%
Smart Meter Entity Charge (if applicable)			•					
	-	'	\$ -	• -	1	\$ -	\$ -	
Additional Fixed Rate Riders	\$ -	1	\$ -	\$ -	1	\$ -	\$ -	
Additional Volumetric Rate Riders		90	\$ -	\$ (0.0459)	90	\$ (4.13)	\$ (4.13)	
Sub-Total B - Distribution (includes			\$ 2.884.61			\$ 3,394,29	\$ 509.68	17.67%
Sub-Total A)			\$ 2,884.61			\$ 3,394.29	\$ 509.68	17.67%
RTSR - Network	\$ 2.1828	90	\$ 196.45	\$ 2.4227	90	\$ 218.04	\$ 21.59	10.99%
RTSR - Connection and/or Line and	\$ 1,2986	90	\$ 116.87	\$ 1,6816	90	\$ 151.34	\$ 34.47	29.49%
Transformation Connection	3 1.2900	90	\$ 110.07	\$ 1.0010	90	\$ 151.34	φ 34.47	29.49%
Sub-Total C - Delivery (including Sub-			\$ 3,197,93			\$ 3,763,67	\$ 565.74	17.69%
Total B)			\$ 3,197.93			\$ 3,763.67	\$ 505.74	17.05%
Wholesale Market Service Charge	\$ 0.0045	34,960	\$ 157.32	\$ 0.0045	34.649	\$ 155.92	\$ (1.40)	-0.89%
(WMSC)	3 0.0045	34,900	\$ 137.32	\$ 0.0045	34,049	\$ 155.52	\$ (1.40)	-0.09%
Rural and Remote Rate Protection	\$ 0.0007	34,960	\$ 24.47	\$ 0.0007	34.649	\$ 24.25	\$ (0.22)	-0.89%
(RRRP)	0.0007	34,900	\$ 24.47	\$ 0.0007	34,049	\$ 24.25	Φ (0.22)	-0.09%
Standard Supply Service Charge	\$ 0.25	1	\$ 0.25	\$ 0.25	1	\$ 0.25	\$ -	0.00%
Average IESO Wholesale Market Price	\$ 0.0995	34,960	\$ 3,478.47	\$ 0.0995	34,649	\$ 3,447.58	\$ (30.89)	-0.89%
Total Bill on Average IESO Wholesale Market Price			\$ 6,858.45			\$ 7,391.68	\$ 533.23	7.77%
HST	13%	1	\$ 891.60	13%	,	\$ 960.92	\$ 69.32	7.77%
Ontario Electricity Rebate	11.7%		\$ -	11.7%	1	\$ -		
Total Bill on Average IESO Wholesale Market Price			\$ 7,750.05			\$ 8,352.60	\$ 602.55	7.77%

Current OEB-Approved Proposed Impact Rate Charge Rate Volun Charge (\$) (\$) (\$) (\$) % Change Monthly Service Charge 27.93 27.93 \$ 32.28 32.28 \$ 4.35 Distribution Volumetric Rate 750 \$ 750 (2.07) Fixed Rate Riders (2.07) (2.07) Volumetric Rate Riders 0.0001 750 0.08 750 (ก กล -100.00% Sub-Total A (excluding pass through) **7.87%** -11.85% 28.01 30.21 \$ 2.21 \$ 61 0.0995 54 Line Losses on Cost of Powe 0.0995 6.04 5.33 (0.72)(0.0002) 750 (0.15) \$ 0.0019 750 1.43 1.58 -1050.00% Riders CBR Class B Rate Riders GA Rate Riders Low Voltage Service Charge (0.0002) (0.0039) 750 750 750 (0.15) \$ (2.93) \$ 1.65 \$ 750 750 750 0.15 1.73 -100.00% -58.97% 127.27% \$ \$ \$ 0.0022 3.75 2.10 0.0050 Smart Meter Entity Charge (if applicable) \$ 0.42 0.42 0.42 0.00% Additional Fixed Rate Riders \$ Additional Volumetric Rate Riders

Sub-Total B - Distribution (includes 750 (0.0001) 750 (0.08) (0.08) 32.89 39.86 \$ 6.96 21.17% Sub-Total A) 0.0078 10.55% 811 6.32 \$ 0.0087 804 6.99 \$ 0.67 RTSR - Network RTSR - Connection and/or Line and 0.0048 811 3.89 0.0060 804 4.82 \$ 0.93 23.89% Transformation Connection

Sub-Total C - Delivery (including Sub-\$ 19.86% 43.11 51.67 8 56 Total B) Wholesale Market Service Charge 3.65 \$ (0.03) -0.89% \$ 0.0045 811 0.0045 804 3.62 (WMSC) Rural and Remote Rate Protection 0.0007 811 0.57 0.0007 0.56 \$ (0.01) -0.89% 804 (RRRP) Standard Supply Service Charge Non-RPP Retailer Avg. Price 0.0995 750 74.63 0.0995 750 74.63 0.00% **130.47** \$ 16.96 \$ **8.52** 1.11 Total Bill on Non-RPP Avg. Price 121.95 6.99% Ontario Electricity Rebate 11.7% (14.27) 11.7% (15.27) Total Bill on Non-RPP Avg. Price 8.63 6.99%

Rate	Current OEB-Approved				Proposed						Impact		
		Volume	Charg	е		Rate	Volume		Charge				
(\$)			(\$)			(\$)			(\$)	\$ C	hange	% Change	
\$	27.93	1	\$	27.93	\$	32.28	1	\$	32.28	\$	4.35	15.579	
\$	-	305	\$	-	\$	-	305	\$	-	\$	-		
\$	-	1	\$	-	\$	(2.07)	1	\$	(2.07)	\$	(2.07)		
\$	0.0001	305	\$	0.03	\$	-	305	\$	-	\$	(0.03)	-100.00%	
			\$	27.96				\$	30.21	\$	2.25	8.05	
\$	0.0937	25	\$	2.31	\$	0.0937	22	\$	2.04	\$	(0.27)	-11.85%	
	(0.0002)	205	•	(0.06)		0.0040	205	•	0.50		0.64	-1050.009	
•	(0.0002)	303	ý.	(0.00)	ð	0.0019	305	Þ	0.56	φ	0.04	-1000.007	
\$	(0.0002)	305	\$	(0.06)	\$	-	305	\$	-	\$	0.06	-100.00%	
\$	-	305	\$	-	\$	-	305	\$	-	\$	-		
\$	0.0022	305	\$	0.67	\$	0.0050	305	\$	1.53	\$	0.85	127.279	
	0.42	4	•	0.42		0.42	4	•	0.42			0.009	
•	0.42	'	ý.	0.42	ð	0.42		Þ	0.42	φ	-	0.007	
\$	-	1	\$	-	\$	-	1	\$	-	\$	-		
		305	\$	-	\$	(0.0001)	305	\$	(0.03)	\$	(0.03)		
			•	24 24				•	24.74		2 50	11.209	
			•	31.24				P	34.74	P	3.50	11.20	
\$	0.0078	330	\$	2.57	\$	0.0087	327	\$	2.84	\$	0.27	10.55%	
	0.0048	330	e	1 59		0.0060	327	e	1 06	e e	0.38	23.89%	
a de la companya de l	0.0040	330	9	1.50	*	0.0000	321	9	1.50	Ψ	0.30	25.097	
			e	35.40				¢	30 EE	e e	4 15	11.729	
			9	33.40				9	39.33	۳	4.13	11.72	
•	0.0045	330	•	1 48		0.0045	327	•	1 47	¢	(0.01)	-0.89%	
1*	0.0040	000	•	1.40	•	0.0040	021	•	1.47	"	(0.01)	-0.037	
•	0.0007	330	•	0.23		0.0007	327	•	0.23	¢	(0.00)	-0.89%	
1*		000	•		•		021			l .	(0.00)		
\$		1	\$		\$		1				-	0.009	
\$			\$								-	0.009	
\$			\$								-	0.009	
\$	0.1510	58	\$	8.75	\$	0.1510	58	\$	8.75	\$	-	0.009	
			\$	65.93				\$			4.13	6.27	
	13%		\$	8.57		13%		\$			0.54	6.27	
	11.7%		\$	(7.71)		11.7%		\$	(8.20)	\$	(0.48)		
			\$	66.79				\$	70.98	\$	4.19	6.27	
	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 27.93 \$ - \$ 0.0001 \$ 0.0937 \$ (0.0002) \$ (0.0002) \$ - \$ 0.0022 \$ 0.42 \$ - \$ 0.0028 \$ 0.0045 \$ 0.0045 \$ 0.0046 \$ 0.0046 \$ 0.0046 \$ 0.0046	\$ 27.93 1 1 305 \$ - 305 \$ (0.0002) 305 \$ (0.0002) 305 \$ (0.0002) 305 \$ - 305 \$ 0.0022 305 \$ 0.0022 305 \$ 0.0022 305 \$ 0.0028 \$ 0.0048 \$ 0.0048 \$ 0.0048 \$ 0.0048 \$ 0.0048 \$ 0.0049	\$ 27.93	\$ 27.93 1 \$ 27.93 5 5 65.93 5 5 65.93 5 5 65.93 5 5 65.93 5 5 65.93 5 5 65.93 5 5 65.93 5 5 65.93 5 5 65.93 5 5 65.93 5 5 65.93 65.93	\$ 27.93	\$ 27.93 1 \$ 27.93 \$ 32.28 \$ 3.05 \$ - \$ \$ - \$ \$ (2.07) \$ 0.0001 305 \$ 0.03 \$ - \$ \$ (2.07) \$ 0.0001 305 \$ 0.03 \$ - \$ \$ (2.07) \$ 0.0001 305 \$ 0.03 \$ - \$ (2.07) \$ 0.0002 305 \$ (0.06) \$ 0.0019 \$ (0.0002) 305 \$ (0.06) \$ 0.0019 \$ (0.0002) 305 \$ (0.06) \$ - \$ - \$ - \$ (0.0002) \$ 0.002 305 \$ (0.06) \$ - \$ - \$ - \$ 0.002 \$ 0.67 \$ 0.0050 \$ 0.67 \$ 0.0050 \$ 0.67 \$ 0.0050 \$ 0.67 \$ 0.0050 \$ 0.67 \$ 0.0050 \$ 0.002 \$ 0.55 \$ - \$ (0.0001) \$ 0.0019 \$ 0.	\$ 27.93	\$ 27.93	\$ 27.93	\$ 27.93	\$ 27.93	

	Current C	EB-Approve	d		Proposed	d	Impact		
	Rate	Volume	Charge	Rate	Volume	Charge			
	(\$)		(\$)	(\$)		(\$)	\$ Change	% Change	
Monthly Service Charge	\$ 27.93		\$ 27.93	\$ 32.28	1	\$ 32.28	\$ 4.35	15.57%	
Distribution Volumetric Rate	-	305	\$ -	\$ -	305		\$ -		
Fixed Rate Riders	-	1	\$ -	\$ (2.07	1	\$ (2.07)	\$ (2.07)	,	
Volumetric Rate Riders	\$ 0.0001	305		\$ -	305		\$ (0.03)		
Sub-Total A (excluding pass through)			\$ 27.96			\$ 30.21			
Line Losses on Cost of Power	\$ 0.0995	25	\$ 2.46	\$ 0.0995	22	\$ 2.17	\$ (0.29)	-11.85%	
Total Deferral/Variance Account Rate	\$ (0.0002	305	\$ (0.06	\$ 0.0019	305	\$ 0.58	\$ 0.64	-1050.00%	
Riders	(0.0002		, , , , , ,	1		i i	'		
CBR Class B Rate Riders	\$ (0.0002				305		\$ 0.06		
GA Rate Riders	\$ (0.0039					\$ (0.49)			
Low Voltage Service Charge	\$ 0.0022	305	\$ 0.67	\$ 0.0050	305	\$ 1.53	\$ 0.85	127.27%	
Smart Meter Entity Charge (if applicable)	\$ 0.42	1 1	\$ 0.42	\$ 0.42	1	\$ 0.42	s -	0.00%	
	0.42			0.42		0.42	Ψ -	0.0070	
Additional Fixed Rate Riders	-	1		\$ -	1	\$ -	\$ -		
Additional Volumetric Rate Riders		305	\$ -	\$ (0.0001	305	\$ (0.03)	\$ (0.03)	/	
Sub-Total B - Distribution (includes			\$ 30.20			\$ 34.38	\$ 4.18	13.86%	
Sub-Total A)			•			,	, ,		
RTSR - Network	\$ 0.0078	330	\$ 2.57	\$ 0.0087	327	\$ 2.84	\$ 0.27	10.55%	
RTSR - Connection and/or Line and	s 0.0048	330	\$ 1.58	s 0.0060	327	\$ 1.96	\$ 0.38	23.89%	
Transformation Connection	0.0040	550	ψ 1.50	Ψ 0.0000	021	1.50	Ψ 0.00	20.0070	
Sub-Total C - Delivery (including Sub-			\$ 34.35			\$ 39.19	\$ 4.83	14.07%	
Total B)			V 01.00			V 00.10	*	1-1.67 /0	
Wholesale Market Service Charge	s 0.0045	330	\$ 1.48	\$ 0.0045	327	\$ 1.47	\$ (0.01)	-0.89%	
(WMSC)	1	000	1.10	V 0.0010	02.		(0.01)	0.0070	
Rural and Remote Rate Protection	s 0.0007	330	\$ 0.23	\$ 0.0007	327	\$ 0.23	\$ (0.00)	-0.89%	
(RRRP)	0.0001	000	0.20	v 0.000.	02.	V 0.20	ψ (0.00)	0.0070	
Standard Supply Service Charge									
Non-RPP Retailer Avg. Price	\$ 0.0995	305	\$ 30.35	\$ 0.0995	305	\$ 30.35	\$ -	0.00%	
Total Bill on Non-RPP Avg. Price	1	1	\$ 66.41			\$ 71.23			
HST	13%		\$ 8.63	13%		\$ 9.26		7.26%	
Ontario Electricity Rebate	11.7%	· [\$ (7.77	11.7%		\$ (8.33)			
Total Bill on Non-RPP Avg. Price			\$ 67.28			\$ 72.16	\$ 4.88	7.26%	

Customer Class:	GENERAL SER	RVICE LESS THAN 50 KW SERVICE CLASSIFICATION
RPP / Non-RPP:	Non-RPP (Reta	ailer)
Consumption	2,000	kWh
Demand	-	kW
Current Loss Factor	1.0810	
Proposed/Approved Loss Factor	1.0714	

		Current OEB-Approved						Proposed	ı		Impact		
		Rate	Volume		Charge		Rate	Volume		Charge			
		(\$)			(\$)		(\$)			(\$)		Change	% Change
Monthly Service Charge	\$	35.17	1	\$	35.17	\$	40.65	1	\$	40.65	\$	5.48	15.58%
Distribution Volumetric Rate	\$	0.0173	2000	\$	34.60	\$	0.0200	2000	\$	40.00	\$	5.40	15.61%
Fixed Rate Riders	\$	-	1	\$	-	\$	0.18	1	\$	0.18	\$	0.18	
Volumetric Rate Riders	\$	-	2000	\$	-	\$	(0.0028)	2000	\$	(5.60)	\$	(5.60)	
Sub-Total A (excluding pass through)				\$	69.77				\$	75.23	\$	5.46	7.83%
Line Losses on Cost of Power	\$	0.0995	162	\$	16.12	\$	0.0995	143	\$	14.21	\$	(1.91)	-11.85%
Total Deferral/Variance Account Rate		(0.0001)	2,000		(0.20)	s	0.0018	2,000		3.60	\$	3.80	-1900.00%
Riders	*	(0.0001)	2,000	a .	(0.20)	ð	0.0018	2,000	φ	3.60	φ	3.00	-1900.0076
CBR Class B Rate Riders	\$	(0.0002)	2,000	\$	(0.40)	\$	-	2,000	\$	-	\$	0.40	-100.00%
GA Rate Riders	\$	(0.0039)	2,000	\$	(7.80)	\$	(0.0016)	2,000	\$	(3.20)	\$	4.60	-58.97%
Low Voltage Service Charge	\$	0.0020	2,000	\$	4.00	\$	0.0046	2,000	\$	9.20	\$	5.20	130.00%
Smart Meter Entity Charge (if applicable)	_	0.40	۱ ،	s	0.40	s	0.42		s	0.42	_		0.00%
	•	0.42	'	э	0.42	Þ	0.42	1	Þ	0.42	э	-	0.00%
Additional Fixed Rate Riders	\$	-	1	\$	_	\$	-	1	\$	-	\$	-	
Additional Volumetric Rate Riders			2,000	\$	-	\$	(0.0001)	2,000	\$	(0.20)	\$	(0.20)	
Sub-Total B - Distribution (includes				s	81.91				s	99.26		17.35	21.18%
Sub-Total A)				Þ	81.91				Þ	99.26) Þ	17.35	21.18%
RTSR - Network	\$	0.0070	2,162	\$	15.13	\$	0.0078	2,143	\$	16.71	\$	1.58	10.44%
RTSR - Connection and/or Line and	s	0.0044	2,162		9.51		0.0054	2,143		11.57	\$	2.06	21.64%
Transformation Connection	•	0.0044	2,102	э	9.51	\$	0.0054	2,143	Þ	11.57	э	2.00	21.04%
Sub-Total C - Delivery (including Sub-				s	106.56				\$	127.54	s	20.99	19.70%
Total B)				Þ	106.56				Þ	127.54	Þ	20.99	19.70%
Wholesale Market Service Charge	s	0.0045	2,162		9.73	s	0.0045	2,143		9.64	6	(0.09)	-0.89%
(WMSC)	*	0.0045	2,102	à	9.73	ð	0.0045	2,143	φ	3.04	φ	(0.09)	-0.09%
Rural and Remote Rate Protection	s	0.0007	2,162		1.51	s	0.0007	2,143		1.50		(0.01)	-0.89%
(RRRP)	*	0.0007	2,102	à	1.51	ð	0.0007	2,143	φ	1.50	φ	(0.01)	-0.09%
Standard Supply Service Charge													
Non-RPP Retailer Avg. Price	\$	0.0995	2,000	\$	199.00	\$	0.0995	2,000	\$	199.00	\$	-	0.00%
Total Bill on Non-RPP Avg. Price				\$	316.80				\$	337.69	\$	20.89	6.59%
HST		13%	ĺ	\$	41.18		13%		\$	43.90	\$	2.72	6.59%
Ontario Electricity Rebate		11.7%	ĺ	\$	(37.07)		11.7%		\$	(39.51)	l .		
Total Bill on Non-RPP Avg. Price				\$	320.92				\$	342.08	\$	21.16	6.59%
•													

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b) A scenario in not adjusting the R/C ratio for Residential Customers or Street Lighting and USML and only adjusting those of GS is presented below by reducing revenue requirement from GS<50 by \$7,960 and adding to GS>50 to align classes within policy range. Residential, SL and UMSL would be as per a) above and GS<50 and GS>50 bill impacts are presented below under this scenario.

Name of Customer Class	Previously Approved Ratios	Status Quo Ratios	Proposed Ratios	Policy Range
	Most Recent Year:	(7C + 7E) / (7A)	(7D + 7E) / (7A)	
	2017			
	º/ ₀	%	%	%
Residential	95.63%	102.27%	102.27%	85 - 115
GS <50	120.07%	122.02%	120.00%	80 - 120
GS>50-Regular	97.30%	81.12%	82.33%	80 - 120
Unmetered Scattered Load	120.00%	107.48%	107.48%	80 - 120
Street Lighting	120.00%	101.29%	101.29%	80 - 120

Customer Class: RPP / Non-RPP:

2,000 kWh Consumptio Demand Current Loss Factor Proposed/Approved Loss Factor 1.0810 1.0714

		Current OEB-Approved						Proposed	i		Impact		
		Rate	Volume		Charge		Rate	Volume		Charge			
		(\$)			(\$)		(\$)			(\$)		Change	% Change
Monthly Service Charge	\$	35.17		\$	35.17	\$	39.94		\$	39.94		4.77	13.56%
Distribution Volumetric Rate	\$	0.0173	2000	\$	34.60	\$	0.0196	2000	\$	39.20		4.60	13.29%
Fixed Rate Riders	\$	-	1	\$	-	\$	0.18	1	\$	0.18		0.18	
Volumetric Rate Riders	\$	-	2000	\$	-	\$	(0.0028)	2000	\$	(5.60)		(5.60)	
Sub-Total A (excluding pass through)				\$	69.77				\$	73.72		3.95	5.66%
Line Losses on Cost of Power	\$	0.0937	162	\$	15.17	\$	0.0937	143	\$	13.38	\$	(1.80)	-11.85%
Total Deferral/Variance Account Rate	s	(0.0001)	2,000	e	(0.20)		0.0018	2,000	e	3.60	æ	3.80	-1900.00%
Riders	*	(0.0001)	2,000	φ	(0.20)	*	0.0010	2,000	Ψ	3.00	Ψ	3.00	-1300.0070
CBR Class B Rate Riders	\$	(0.0002)	2,000	\$	(0.40)	\$	-	2,000	\$	-	\$	0.40	-100.00%
GA Rate Riders	\$	-	2,000	\$	-	\$	-	2,000	\$	-	\$	-	
Low Voltage Service Charge	\$	0.0020	2,000	\$	4.00	\$	0.0046	2,000	\$	9.20	\$	5.20	130.00%
Smart Meter Entity Charge (if applicable)		0.42		s	0.42	s	0.42		\$	0.42			0.00%
	•	0.42	'	Þ	0.42	Þ	0.42	1	Þ	0.42	э	-	0.00%
Additional Fixed Rate Riders	\$	-	1	\$	-	\$	-	1	\$	-	\$	-	
Additional Volumetric Rate Riders			2,000	\$	-	\$	(0.0001)	2,000	\$	(0.20)	\$	(0.20)	
Sub-Total B - Distribution (includes				s	88.76				s	100.12		11.35	12.79%
Sub-Total A)				Þ	88.76				Þ	100.12	Þ	11.35	12.79%
RTSR - Network	\$	0.0070	2,162	\$	15.13	\$	0.0078	2,143	\$	16.71	\$	1.58	10.44%
RTSR - Connection and/or Line and	s	0.0044	2,162		9.51	s	0.0054	2,143		11.57	\$	2.06	21.64%
Transformation Connection	٩	0.0044	2, 102	a a	9.51	P	0.0054	2,143	φ	11.57	Φ	2.00	21.0470
Sub-Total C - Delivery (including Sub-				\$	113.41				\$	128.40		14.99	13.22%
Total B)				ş	113.41				Ψ	120.40	Ψ	14.33	13.22/0
Wholesale Market Service Charge	s	0.0045	2,162	e	9.73	s	0.0045	2,143	e	9.64	æ	(0.09)	-0.89%
(WMSC)	*	0.0043	2,102	φ	3.73	*	0.0045	2,143	Ψ	3.04	Ψ	(0.03)	-0.0370
Rural and Remote Rate Protection	s	0.0007	2,162	e	1.51	\$	0.0007	2,143	e	1.50	æ	(0.01)	-0.89%
(RRRP)	*	0.0007	2,102	φ	1.51	*	0.0007	2,143	Ψ	1.50	Ψ	(0.01)	-0.0370
Standard Supply Service Charge	\$	0.25	1	\$		\$	0.25		\$	0.25		-	0.00%
TOU - Off Peak	\$	0.0740		\$	93.24	\$	0.0740	1,260	\$	93.24		-	0.00%
TOU - Mid Peak	\$	0.1020		\$	36.72	\$	0.1020	360	\$	36.72	\$	-	0.00%
TOU - On Peak	\$	0.1510	380	\$	57.38	\$	0.1510	380	\$	57.38	\$	-	0.00%
Total Bill on TOU (before Taxes)				\$	312.24				\$	327.13	\$	14.89	4.77%
HST		13%		\$	40.59		13%		\$	42.53	\$	1.94	4.77%
Ontario Electricity Rebate		11.7%		\$	(36.53)		11.7%		\$	(38.27)	\$	(1.74)	
Total Bill on TOU				\$	316.30				\$	331.39	\$	15.08	4.77%

Customer Class: GENERAL SERVICE 50 to 4,999 kW SERVICE CLAS

RPP / Non-RPP: Non-RPP (Other)

Consumption 85,244 kWh

Demand 203 kW

irrent Loss Factor 1.0810

roved Loss Factor 1.0714 Current Loss Factor Proposed/Approved Loss Factor

		Current Of	B-Approve	d			Proposed	i	Impact		
	Rate (\$)		Volume	Charge (\$)		Rate (\$)	Volume	Charge (\$)	\$ Change	% Change	
Monthly Service Charge	\$	223.20	1	\$ 223.2	20 \$		1	\$ 262.09		17.42%	
Distribution Volumetric Rate	\$	3.3767	203	\$ 685.4	7 \$	3.9071	203	\$ 793.14	\$ 107.67	15.71%	
Fixed Rate Riders	\$	-	1	\$ -	\$	2.17	1	\$ 2.17	\$ 2.17		
Volumetric Rate Riders	\$	0.2883	203	\$ 58.5	2 \$	(0.7392)	203	\$ (150.06)) \$ (208.58	-356.40%	
Sub-Total A (excluding pass through)				\$ 967.2	20			\$ 907.34	\$ (59.85	-6.19%	
Line Losses on Cost of Power	\$	-	-	\$ -	\$	-	-	\$ -	\$ -		
Total Deferral/Variance Account Rate Riders	\$	(0.0337)	203	\$ (6.8	\$4) \$	1.0299	203	\$ 209.07	\$ 215.91	-3156.08%	
CBR Class B Rate Riders	\$	(0.0572)	203	\$ (11.6	(1)	-	203	\$ -	\$ 11.61	-100.00%	
GA Rate Riders	\$	(0.0039)	85,244	\$ (332.4	(5)	(0.0016)	85,244	\$ (136.39)) \$ 196.06	-58.97%	
Low Voltage Service Charge	\$	0.7587	203	\$ 154.0	2 \$	1.6627	203	\$ 337.53	\$ 183.51	119.15%	
Smart Meter Entity Charge (if applicable)	\$	-	1	\$ -	\$	-	1	\$ -	\$ -		
Additional Fixed Rate Riders	\$	-	1	\$ -	\$	-	1	\$ -	\$ -		
Additional Volumetric Rate Riders			203	\$ -	\$	(0.0491)	203	\$ (9.97) \$ (9.97)	
Sub-Total B - Distribution (includes				\$ 770.3	11			\$ 1,307.58	\$ 537.28	69.75%	
Sub-Total A)								*	ļ ·		
RTSR - Network	\$	2.8943	203	\$ 587.5	54 \$	3.2124	203	\$ 652.12	\$ 64.57	10.99%	
RTSR - Connection and/or Line and Transformation Connection	\$	1.6797	203	\$ 340.9	8 \$	2.2297	203	\$ 452.63	\$ 111.65	32.74%	
Sub-Total C - Delivery (including Sub- Total B)				\$ 1,698.8	3			\$ 2,412.33	\$ 713.50	42.00%	
Wholesale Market Service Charge (WMSC)	\$	0.0045	92,149	\$ 414.6	57 \$	0.0045	91,330	\$ 410.99	\$ (3.68	-0.89%	
Rural and Remote Rate Protection (RRRP)	\$	0.0007	92,149	\$ 64.5	50 \$	0.0007	91,330	\$ 63.93	\$ (0.57	-0.89%	
Standard Supply Service Charge	\$	0.25	1	\$ 0.2	5 \$	0.25	1	\$ 0.25	\$ -	0.00%	
Average IESO Wholesale Market Price	\$	0.0995	92,149	\$ 9,168.8	80 \$	0.0995	91,330	\$ 9,087.38	\$ (81.43	-0.89%	
Total Bill on Average IESO Wholesale Market Price				\$ 11,347.0	15			\$ 11,974.88	\$ 627.82	5.53%	
HST		13%		\$ 1,475.	2	13%		\$ 1,556.73	\$ 81.62	5.53%	
Ontario Electricity Rebate		11.7%		\$ -		11.7%		\$ -			
Total Bill on Average IESO Wholesale Market Price				\$ 12,822.1	7			\$ 13,531.61	\$ 709.44	5.53%	
-											

	Current OEB-Approved					Proposed						Impact		
	Rate		Volume	Charge			Rate	Volume		Charge				
	(\$)			(\$)			(\$)			(\$)		Change	% Change	
Monthly Service Charge		35.17	1			\$	39.94		\$	39.94		4.77	13.56%	
Distribution Volumetric Rate	\$ 0	0.0173	2000		.60	\$	0.0196	2000		39.20		4.60	13.29%	
Fixed Rate Riders	\$	-	1	\$	-	\$	0.18	1	\$	0.18		0.18		
Volumetric Rate Riders	\$	-	2000		-	\$	(0.0028)	2000		(5.60)		(5.60)		
Sub-Total A (excluding pass through)					.77				\$	73.72		3.95	5.66%	
Line Losses on Cost of Power	\$ 0	0.0995	162	\$ 16	.12	\$	0.0995	143	\$	14.21	\$	(1.91)	-11.85%	
Total Deferral/Variance Account Rate	\$ (0	0.0001)	2,000	s ((.20)	\$	0.0018	2,000	\$	3.60	s	3.80	-1900.00%	
Riders	1			,	- 1		0.00.0	•	"	0.00	Ι΄.			
CBR Class B Rate Riders		0.0002)	2,000		.40)		-	2,000		-	\$	0.40	-100.00%	
GA Rate Riders		0.0039)	2,000		.80)		(0.0016)	2,000		(3.20)		4.60	-58.97%	
Low Voltage Service Charge	\$ 0	0.0020	2,000	\$ 4	.00	\$	0.0046	2,000	\$	9.20	\$	5.20	130.00%	
Smart Meter Entity Charge (if applicable)	s	0.42	1	\$ 0	.42	\$	0.42	1	s	0.42	s		0.00%	
	ľ	٠ـ					0.12		i .	0	Ι΄.		0.0070	
Additional Fixed Rate Riders	\$	-	1	\$	-	\$	-		\$	-	\$	-		
Additional Volumetric Rate Riders			2,000	\$	-	\$	(0.0001)	2,000	\$	(0.20)	\$	(0.20)		
Sub-Total B - Distribution (includes				\$ 81	.91				s	97.75	s	15.84	19.34%	
Sub-Total A)									*		<u>'</u>			
RTSR - Network	\$ 0	0.0070	2,162	\$ 15	.13	\$	0.0078	2,143	\$	16.71	\$	1.58	10.44%	
RTSR - Connection and/or Line and	s o	0.0044	2,162	s	.51	\$	0.0054	2,143	\$	11.57	s	2.06	21.64%	
Transformation Connection	, and a second		2, 102	•	.0.	<u> </u>	0.000	2,1-10	*		Ť	2.00	21.0170	
Sub-Total C - Delivery (including Sub-				\$ 106	56				s	126.03	s	19.48	18.28%	
Total B)				•					*	.20.00	*	.00	10.2070	
Wholesale Market Service Charge	s o	0.0045	2,162	s	.73	\$	0.0045	2.143	\$	9.64	s	(0.09)	-0.89%	
(WMSC)	ľ		2, 102	•		•	0.0010	_,	Υ	0.01	ľ	(0.00)	0.0070	
Rural and Remote Rate Protection	s o	0.0007	2,162	s	.51	\$	0.0007	2,143	\$	1.50	s	(0.01)	-0.89%	
(RRRP)	•		2, 102	•	.0.	_	0.000.	_,	Υ		ľ	(0.01)	0.0070	
Standard Supply Service Charge														
Non-RPP Retailer Avg. Price	\$ 0	0.0995	2,000	\$ 199	.00	\$	0.0995	2,000	\$	199.00	\$	-	0.00%	
Total Bill on Non-RPP Avg. Price				\$ 316					\$	336.18		19.38	6.12%	
HST		13%			.18		13%		\$	43.70		2.52	6.12%	
Ontario Electricity Rebate		11.7%		\$ (37	.07)		11.7%		\$	(39.33)				
Total Bill on Non-RPP Avg. Price				\$ 320	.92				\$	340.55	\$	19.63	6.12%	

- 1 7-Staff-29
- 2 Load Profiles
- 3 Ref 1: Exhibit 7, page 7
- 4 Ref 2: Load Profile for Cost Allocation excel file

56 Preamble:

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The method of determining the proportion of system load that is HDD and CDD related energy use in each month is described leveraging the load forecast output. The Load forecast output includes coefficients for HDD and CDD. The average temperature for each ranked day in 2022 is compared to the historic average temperature for the ranked day, and a ratio is used in determining the adjustment.

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Question(s):

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- a) How does the methodology address the potential for differences in weather sensitivity between the rate classes?
- b) Has Renfrew Hydro looked for options to use HDD and CDD more directly to look at heating and cooling related load on a daily, rather than monthly basis? Please describe what was reviewed, and why the proposed methodology was ultimately chosen.
- c) Does Renfrew Hydro have hourly demand data for any other recent year apart from 2022?

232425

RHI Response:

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a) The Methodology does not factor weather sensitivity between classes and assumes Residential and GS<50 classes have the same sensitivity to weather.

29 30 31 b) The proposed methodology was used to average the month and rank each day within a month as the hottest or coolest regardless of the actual date. This method averages out the month as no individual day from year to year has the same characteristics.

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c) RHI does not have data from another year as we are working with Metersense to correct classifications for Residential and GS<50. RHI could produce GS>50 data from its Utilismart platform.

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1 RATE DESIGN (EXHIBIT 8)

2 8.0-VECC-40

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3 Reference: Exhibit 8, page 4

4 **Preamble:** The Application contains the following two tables:

Table 8.2: Proposed Fixed/Variable Proportion

	Proposed Rates at Current Fixed to Variable Split								
Customer Class Name	Rate	Fixed %	Variable %						
Residential	\$31.51	100.00%	0.00%						
General Service < 50 kW	\$37.80	49.01%	50.99%						
General Service > 50 to 4999 kW	\$291.56	26.12%	73.88%						
Unmetered Scattered Load	\$27.22	95.86%	4.14%						
Street Lighting	\$2.74	86.33%	13.67%						

Table 8.3: Minimum and Maximum Fixed Charge as per Cost Allocation Model

	Cost Allocation - Minimum Fixed Rate (b)								
Customer Class Name	Rate	Fixed %	Variable %						
Residential	\$9.40	29.84%	70.16%						
General Service < 50 kW	\$18.34	48.52%	51.48%						
General Service > 50 to 4999 kW	\$30.89	10.59%	89.41%						
Unmetered Scattered Load	\$11.47	42.13%	57.87%						
Street Lighting	\$0.81	29.57%	70.43%						

Cost Allocation - Maximun Fixed Rate (b)					
Rate	Rate Fixed % Variable %				
\$21.73	68.97%	31.03%			
\$35.90	94.95%	5.05%			
\$87.86	30.13%	69.87%			
\$22.10	81.17%	18.83%			
\$3.34	122.06%	-22.06%			

- a) Please explain how for the GS<50 class a fixed charge percentage of 49.01% yields a monthly service charge of \$37.80 (Table 8.2) while a fixed charge percentage of 94.95% yields a monthly service charge of \$35.90 (Table 8.3).
- b) Please explain how for the GS>50 class a fixed charge percentage of 26.12% yields a monthly service charge of \$291.56 (Table 8.2) while a fixed charge percentage of 30.13% yields a monthly service charge of \$87.86 (Table 8.3).
- RHI response:
 - a) and b) A formulaic error is in both the minimum and maximum fixed rate charts and has been corrected below.

Cost Allocation Results - Minimum and Maximum MSC

	Cost Allocation - Minimum Fixed Rate (b)				
Customer Class Name	Rate	Fixed %	Variable %		
Residential	\$9.40	29.84%	70.16%		
General Service < 50 kW	\$18.34	23.78%	76.22%		
General Service > 50 to 4999 kW	\$30.89	2.77%	97.23%		
Unmetered Scattered Load	\$11.47	40.36%	59.64%		
Street Lighting	\$0.81	25.52%	74.48%		

Cost Allocation - Maximun Fixed Rate (b)				
Rate	Variable %			
\$21.73	68.97%	31.03%		
\$35.90	46.53%	53.47%		
\$87.86	7.87%	92.13%		
\$22.10	77.77%	22.23%		
\$3.34	105.36%	-5.36%		

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2 Reference: Exhibit 8, page 53 RTSR Model, Tabs 3 and 5

a) Please confirm that both the customer class usage data in Tab 3 and the billed data in Tab 5 are based on 2022 actuals. If not confirmed, please provide as revised RTSR Model where the same year's data is used in both Tabs.

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RHI Response:

a) Tab 3 values were pre-populated using 2021 data in which RHI was not able to update due to macro's within the spreadsheet. 2022 data has now been updated through the RRR and are inclusive in the OEB models updated in June 2023. Tab 5 values are confirmed as 2022 data. A revised RTSR model will be provided on August 28 with other updated models.

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1 8.0-VECC-42

2 Reference: Exhibit 8, page 7

Preamble: The Application states: "The following chart shows the Retail Service Charges currently in effect and RHI is seeking approval of the annual Incentive rate mechanism inflationary rate to be determined at a later date by the OEB. As a placeholder, RHI has entered

inflationary rate to be determined at a later date by the OEB. As a placeholder, RHI has entered the 2023 IRM rate of 3.7%."

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a) Please update the 2024 Retail Service Charges using the 4.8% inflationary factor per the OEB's letter of June 29, 2023.

10 RHI response:

a) RHI to provide updated Retail service charges in bill impact model and update Other income as per 6.0 VECC-29

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2	Reference:	Exhibit 8, page 10	
3			

a) Please update the proposed 2024 Pole Attachment Rate using the 4.8% inflationary factor per the OEB's letter of June 29, 2023.

RHI response:

a) RHI to provide updated pole attachment charges in bill impact model and update Other income as per 6.0 VECC-29

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PAGE **103** OF **119**

8.0-VECC-44

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2	Reference: Exhibit 8, page 14 Load Forecast Model, Tab 6
3	a) For the years 2018, 2019, 2020 and 2022 the annual A(2) values in Table 8.12
4	match the sum of the monthly purchases in the Load Forecast Model (Tab 6,
5	Column C) for that year. However, for 2021 the two values do not match. Please
6	reconcile.
7	
8	RHI Response:
9	
10	a) Both table a(2) in table 8.12 and Tab 6, Column C both have 87,772,181 kWh in
11	wholesale purchases.

1	8-Staff-30
2	Low Voltage Expense
3	Ref 1: Exhibit 8, page 11
4 5	Preamble:
6 7 8	The 2023 and 2024 estimates of total LV expense were determined based on 2022 actual plus the average annual increases from 2020 to 2022 (\$31,000).
9	Question(s):
11 12 13	 a) Please provide the low voltage expense that would result if Hydro One rates excluding rate riders were applied to a 5-year average of 2018-2022 volumes.
14	RHI Response:
15 16	a) RHI's low voltage costs using Hydro One's rate for 2023 of \$1.5442/kW, excluding rate riders, on the average load of 163,476 kW per year from 2018-2022 would be \$252,439 plus service, meter and standard supply charges of \$44,713 for a

total of \$297,152. 2024 rates have yet to be established.

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1	8-Staff-31 RTSR
2	Ref 1: RTSR Workform
3 4	Preamble:
5 6 7 8	The RTSR model is populated with 2023 UTRs and Hydro One Sub-Transmission rates. UTRs and Hydro One's 2023 Sub-Transmission rates were approved December 8, 2022.
9	Question(s):
11 12 13	a) What year's data are used for the customer class billing kWh and kW in Tab 3 of the RTSR Workform?
14 15	RHI Response:
16 17 18	 a) kWh and kW were prepopulated with 2021 data. RHI will submit updated data for 2022 in the RTSR form from the latest model provided by the OEB in June which included 2022 RRR data.

- 1 8-Staff-32
- 2 Fixed and Variable Proportion Ref 1: Exhibit 8, page 4
- 3 Ref 2: Cost Allocation Model, sheet O2. Fixed Charge | Floor | Ceiling
- 4 Preamble:

The fixed charge is proposed to increase to \$37.80 in the GS < 50 kW rate class and \$291.56 in the GS > 50 kW rate class. Both are above the minimum system with peak load carrying capability (PLCC) from the cost allocation model (commonly referred to as the ceiling).

Question(s):

- a) Please provide the variable charge that would result if the fixed charge were maintained at the existing charge.
- b) Please explain why Renfrew Hydro is proposing to increase fixed charges for rate classes where the existing charges are above the ceiling.

RHI response:

a) At current fixed charge rates, GS<50 kWh rate would be \$0.0199/kWh and GS>50 kW rate would need to change to \$4.6316/kW.

b) RHI is proposing an increase to fixed charges in order to avoid reliance on

variable charges. As a small utility which has employed 10 employee's for the last decade, it could be argued some costs which are excluded fixed costs in the cost allocation model are actually fixed costs. It is an allocation model attempting to normalize ratios across all utilities, but circumstances are different for each utility. Adjusted to the suggested values in a) would put the revenue requirement overall at 27% reliant on variable revenues from the current 25%. Also, RHI is reluctant to increase reliance on variable revenue as it has been receiving less revenue from its 2017 load forecast due to a drop in Load of approximately 16-17% in the GS>50 class and only once over-achieving the 2017 load forecast in the GS<50 class (this calculates to \$66K in reduced revenue in 2022 vs 2017 load forecast at 2022 rates). RHI does not control business efforts undertaken to

reduce load and consumption while RHI costs remain mostly fixed.

1 8-Staff-33

2 Loss Factors

3 Ref 1: Exhibit 8, page 14

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Preamble:

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Renfrew Hydro stated "Energy associated with distributed generation embedded within Renfrew Hydro's service territory is included in the determination of the loss adjustment factors. A comparison of existing and proposed loss factors is provided in Table 8.13." OEB staff notes that Table 8.13 is not in the application.

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Question(s):

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a) Please provide Table 8.13.

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RHI Response:

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a) Please find table below.

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Customer Class Name	Current	Proposed Loss Factor
Residential	1.081	1.071
General Service < 50 kW	1.081	1.071
General Service > 50 to 4999 kW	1.081	1.071
Unmetered Scattered Load	1.081	1.071
Street Lighting	1.081	1.071

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RTSR 2 3 Ref 1: Exhibit 8, page 5 4 Preamble: 5 6 7 Renfrew Hydro stated, "RHI had calculated its Network and Connection rates in its working capital allowance 8 based on historic 2022 rates with a modest 2% increase in rates and adjusted for loss 9 factor. RHI has elected to not adjust the amount calculated in its Cost of Power to the 10 Forecast Wholesale Costs above from the RTSR model and below in the forecasted 11 RTSR revenue (Cost of Power Purposes), as the total effect would be approximately 12 \$116,333 increase to working capital." 13 14 Question(s): 15 16 a) Please confirm that Renfrew Hydro will be updating to the most recent available 17 rates to calculate its network and connection rates in its working capital allowance. 18 19 20 RHI Response: 21 a) RHI has updated its cost of power calculation to reflect updated RTSR rates as 22 proposed in the RTSR model. 23 24

8-Staff-34

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1 DEFERRAL AND VARIANCE ACCOUNTS (EXHIBIT 9)

2	9.0 –VECC -45
3	Reference: Exhibit 9, page Letter of October 14, 2015
4 5 6	 a) Please the disposition period sought for i) Group 1 Accounts and ii) Group 2 accounts.
7	RHI Response:
8	a) Group 1 accounts are requested to be disposed over 1 year, Group 2 account over 2 years.
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12	

- 1 9-Staff-35
- 2 **DVA**
- 3 Ref 1: Ex.9/Page 7
- 4 Ref 2: Filing Requirements For Electricity Distribution Rate Applications 2023 Edition for 2024
- 5 Rate Applications, December 15, 2022

67 Preamble:

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9 Renfrew Hydro is requesting the disposition of two accounts: Account 1508 – Pole 10 Attachment Revenue Variance (credit balance of \$189,108) and Account 1508 – 11 Customer Choice Initiative Costs (debit balance of \$5,373).

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Section 2.9.1.7 of the Filing Requirements states that distributors are to provide a table showing the calculation of the account balance, showing at a minimum, the annual balance broken down customer type, if applicable and:

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- the number of poles used in the calculation.
- the pole attachment charge incorporated in rates.
- the updated charge.

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Question(s):

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- a) Please provide the information as noted in the Filing Requirement to support the Account 1508 – Pole Attachment Revenue variance balances requested in this application for disposition.
- b) Please explain the amounts recorded in the Account 1508 Customer Choice Initiative Costs.

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RHI Response:

a) Please find below table:

	# of		Updated	rate		
Year	Poles	2017 rate	rate	change	DVA	Interest
2018	1879	22.35	28.09	5.74	3,595.15	9.83
2019	1879	22.35	43.63	21.28	39,985.12	652.45
2020	1879	22.35	44.50	22.15	41,619.85	607.80
2021	1879	22.35	44.50	22.15	41,619.85	594.37
2022	1879	22.35	34.76	12.41	23,318.39	2,714.01
2023	1879	22.35	36.05	13.70	25,742.30	8,648.94
					175,880.66	13,227.40

b)	b) Customer choice costs relate to a 1 time software upgrade of \$5,000 to									
		choice is our billi	ing system.	The remain	ing amount i	s carrying				
	charges.									

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1	9-Staff-36
2	DVA
3	Ref: Exhibit 9, pages 7 & 9
4 5 6 7 8 9 10 11 12 13 14 15 16 17	Preamble: Renfrew Hydro is requesting the disposition of Account 1576 – Accounting Changes Under CGAAP Balance + Return Component (credit balance of \$77,771). As noted in Table 9.4 of Reference, Renfrew Hydro proposes to discontinue Account 1576. Question(s): a) Please confirm that the amount requested is a residual remaining after it was previously disposed of in the 2017 application. b) If not confirmed, please explain the nature of the account and amounts recorded in the account given the balance of this account is material and thus the appropriateness of the disposition of the account must also be considered.
19	RHI Response:
20 21	a) RHI confirms the amount requested is a residual remaining from the 2017 application.
22	

- 1 9-Staff-37
- 2 **DVA**
- 3 Ref 1: Exhibit 9, pages 9 & 18
- 4 Ref 2: 2024 DVA Continuity Schedule, Tab 2b
- 5 Ref 3: Regulatory Treatment of Impacts Arising from the COVID-19 Emergency, EB-2022-0133,
- 6 June 17, 2021

7 8

Preamble:

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Renfrew Hydro is requesting the disposition of Account 1509 – Impacts arising from the COVID-19 Emergency. The total costs recorded in the account amount to \$17,248, with a deduction of \$12,234 from the Federal government wage subsidy. This deduction leads to a net debt balance of \$5,074, accompanied by the associated interest of \$456.

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As noted in Table 9.4 of Reference 1, Renfrew Hydro proposes to continue account 1509.

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On page 18 of Reference1, Renfrew Hydro notes that it proposes the discontinuation of the sub-account. In Reference 2, it appears that the 2021 transaction amounts were related to the Federal government wage subsidy, and no transactions were incurred in 2022.

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Question(s):

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- a) Please confirm whether Renfrew Hydro proposes discontinuation of Account 1509.
 - If not confirmed, please explain why Renfrew Hydro is proposing that the account continue after rebasing. Per page 38 of Reference 3, Account 1509 will remain effective until the utility's subsequent rebasing application.
- b) Page 26 of Reference 3 states that the onus will be on the utility to demonstrate that these savings have been identified and that all reasonable avenues of cost reduction have been explored and prudently acted upon. Please discuss how Renfrew Hydro has assessed and identified savings applicable to Account 1509.
- c) Page 24 of Reference 3 states that the OEB will apply the criteria of causation, prudence and materiality to amounts in Account 1509. Furthermore, page 25 of Reference 3 indicates that materiality will be calculated based on the annual total of the amounts recorded in the Account, net of any offsetting cost savings recorded. Please explain why Renfrew Hydro believes it should recover the immaterial amount of \$5,470.

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RHI Response:

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- a) RHI does not propose discontinuing Account 1509. The sub-account for Covid 19 will be discontinued as we do not expect further activity related to the variant related to 2020-21 activity. Account 1509 in general will continue as the implementation of ULO rates are now being added to a 1509 sub-account. To date \$1,428 has been added in 2023.
- b) Relative to Covid-19 RHI prudently acted upon reducing the costs associated by applying for assistance related to wage subsidy to reduce the overall burden on customers. RHI also absorbed other costs which were not allocated to the Covid variance account. Examples include, but are not limited to:
 - Purchase of VOIP phones to enable office staff to work from home if experiencing Covid symptoms.
 - Dispatch of operating staff in separate vehicles to avoid contact with each other and the associated increase fuel and maintenance costs.
- c) RHI believes it should recover this immaterial amount as without the efforts of RHI obtaining wage subsidy relief, the amount requested would have been material and RHI is expecting to recover less than 1/3 of the costs related to this event from its customers.

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- 1 9-Staff-38
- 2 PILS

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- 3 Ref 1: Exhibit 9, Pages 9, 14 & 15
- 4 Ref 2: Chapter 2 Filing Requirements for Electricity Distribution Rate Applications
 - 2023 Edition for 2024 Rate Applications, Section 2.6.2.1

67 Preamble:

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- i. Pages 14 and 15 of Reference 1 indicated that Renfrew Hydro is requesting
 disposition of the Account 1592, PILs, Tax Variances, and Sub-Account CCA
 Changes balance.
- 12 ii. On page 9 of Reference 1, Renfrew Hydro has indicated that it intends to continue using Account 1592 if needed.
- 14 iii. Per Reference 2, OEB suggested applicants may propose a mechanism to smooth
 15 the tax impacts over the five-year IRM term given there may be timing differences
 16 that could lead to volatility in tax deductions over the rate-setting term. The OEB will
 17 assess an applicant's smoothing proposal on a case-by-case basis. If the OEB
 18 approves the smoothing proposal, the distributor's use of (or access to) Account
 19 1592, to record the impacts of the specific CCA changes contemplated in the
 20 smoothing proposal, will no longer be applicable.

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Question(s):

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- a) Please confirm if Renfrew Hydro plans to record subsequent changes including the expected phase-out of accelerated CCA beginning in 2024 in Account 1592, PILs and Tax Variances, Sub-Account CCA Change
- b) Please explain if Renfrew Hydro has considered smoothing out the tax impacts over the five-year IRM term for the CCA changes. If not, why not?
- c) Please provide a proposed tax smoothing method.

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RHI response:

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- a) RHI plans to record subsequent changes including the expected phase-out of accelerated CCA in Account 1592, Pils and Tax Variances, Sub-account CCA change during the IRM period.
- b) RHI has not considered a smoothing proposal because based on its planned spending and the current proposed phase out of accelerated CCA the difference that RHI expects to be captured in Account 1592 should relatively small.
- c) RHI has not developed a smoothing proposal based on its reliance on account 1592, however we roughly estimate that the impact of smoothing based on the current phase out proposal and RHI's proposed capital plan would be an

1	increase in the 2024 tax provision of less than \$2,000 based on RHI's proposed
2	2024 PILS calculation.
3	

Exhibit A – 2022 Scorecard

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Scorecard - Renfrew Hydro Inc.

										Target		
Performance Outcomes	Performance Categories	Measures			2018	2019	2020	2021	2022	Trend	Industry	Distributor
Customer Focus	Service Quality	New Residential/Small Business Services Connected on Time			100.00%	100.00%	100.00%	100.00%	100.00%	-	90.00%	
Services are provided in a		Scheduled Appointments Met On Time			95.63%	100.00%	99.48%	100.00%	100.00%	0	90.00%	
manner that responds to identified customer		Telephone Calls Answered On Time			98.59%	98.78%	98.26%	97.76%	95.52%	0	65.00%	
preferences.		First Contact Resolution			99.82%	99.89%	99.91%	99.97%	100%			
	Customer Satisfaction	Billing Accuracy			99.82%	99.95%	99.90%	99.35%	99.98%	0	98.00%	
		Customer Satisfaction S	Survey Resul	ts	86.2%	86.2%	86%	86%	85%			
Operational Effectiveness		Level of Public Awareness			85.40%	82.30%	82.30%	85.30%	85.30%			
	Safety	Level of Compliance with Ontario Regulation 22/04			С	С	С	С	С			С
Continuous improvement in		Serious Electrical	Number o	f General Public Incidents	0	0	0	0	0			0
productivity and cost		Incident Index	Rate per 1	10, 100, 1000 km of line	0.000	0.000	0.000	0.000	0.000			0.000
performance is achieved; and distributors deliver on system reliability and quality	System Reliability	Average Number of Hou Interrupted ²	overage Number of Hours that Power to a Customer is 1.77 0.46 0.58 0.38 0.38					0.32	O		0.73	
objectives.		Average Number of Times that Power to a Customer is Interrupted ²			0.82	0.23	0.38	0.16	0.15	O		0.35
	Asset Management	Distribution System Plan	n Implementa	ation Progress	33%	45.8%	58.3%	62.5%	62.5%			
	Cost Control	Efficiency Assessment			3	3	3	3	3			
		Total Cost per Customer ³			\$618	\$607	\$603	\$621	\$640			
		Total Cost per Km of Line 3			\$32,922	\$32,412	\$32,337	\$33,455	\$34,622			
Public Policy Responsiveness Distributors deliver on obligations mandated by	Connection of Renewable Generation	Renewable Generation Completed On Time		mpact Assessments								
government (e.g., in legislation and in regulatory requirements imposed further to Ministerial directives to the Board).	Generation	New Micro-embedded C	ew Micro-embedded Generation Facilities Connected On Time		100.00%						90.00%	
Financial Performance	Financial Ratios	Liquidity: Current Ratio (Current Assets/Current Liabilities)		1.32	1.09	1.11	1.24	1.10				
Financial viability is maintained; and savings from operational		Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio			0.80	0.74	0.71	0.69	0.65			
effectiveness are sustainable.		Profitability: Regulatory Deemed (included in rates) Return on Equity Achieved		Deemed (included in rates)	8.78%	8.78%	8.78%	8.78%	8.78%			
				10.81%	8.90%	7.81%	5.28%	8.49%				
. Compliance with Ontario Regulation 2	2/04 assessed: Compliant (C); Needs Im	provement (NI); or Non-Comp	liant (NC).				<u>l</u>	_egend:	5-year trend			

- 2. An upward arrow indicates decreasing reliability while downward indicates improving reliability.
- 3. A benchmarking analysis determines the total cost figures from the distributor's reported information.
- 4. Value displayed for 2021 reflects data from the first quarter, as the filing requirement was subsequently removed from the Reporting and Record-keeping Requirements (RRR).

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Exhibit B – RHI and HOL Service Agreement

SERVICES AGREEMENT

This Services Agreement (the "Agreement") dated as of February 12, 2021 (the "Effective Date")
BETWEEN:

RENFREW HYDRO INC. ("Renfrew Hydro")

OF THE FIRST PART

and

HYDRO OTTAWA LIMITED ("HOL")

OF THE SECOND PART

(hereinafter collectively called the "Parties")

WHEREAS

Renfrew Hydro is interested in having HOL provide services beyond the conservation and demand management services ("CDMS") and station maintenance work ("SMW") which it currently provides to Renfrew Hydro.

Given the emergency preparedness and assistance given to other customers during recent years' ice storms, and HOL's current provision of SMW and CDMS to Renfrew Hydro, HOL is prepared to provide those services described in Schedule "A" – Statement of Work.

NOW THEREFORE IN CONSIDERATION OF the mutual covenants, terms and conditions herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby irrevocably acknowledged, the Parties hereto agree as follows:

1. Supersession

This Agreement supersedes the letter agreement between the Parties dated January 22, 2015 and any preprinted terms or conditions.

2. Services

HOL agrees to provide, perform and/or deliver to Renfrew Hydro the services described in Schedule "A" – Statement of Work and any other services which the Parties mutually agree to and sign off on during the Term, (collectively, the "Services"), at the rates set out in Schedule "B" - Fees, in accordance with the terms and conditions set out herein.

3. Exchange of Information

HOL will provide Renfrew Hydro with information reasonably required by Renfrew Hydro to assess the capacity of HOL to provide the Services, the nature and quality of such Services and the projected cost(s) of having HOL provide such Services. Renfrew Hydro will provide HOL with such information as HOL reasonably requires to assess the feasibility of providing such Services, including the resources needed to provide such Services. If Renfrew Hydro and HOL reach an agreement for the provision of such Services, Renfrew Hydro will provide HOL with access to all information and records necessary to provide such Services.

4. Costs for Services

4.1 The charges for Services under this Agreement will be as set out in Schedule "B" – Fees and shall include:

- (a) the cost of materials, supplies, equipment, temporary services and facilities including transportation and maintenance thereof, which are consumed in the performance of the Services;
- (b) the cost of all tools, machinery and equipment used in the performance of the Services, whether rented from or provided by HOL or others, including installation, minor repairs and replacements, dismantling, removal, disposal, transportation and delivery cost thereof;
- (c) the amounts of all contracts or written agreements with subcontractors and suppliers;
- (d) the cost of quality assurance such as independent inspection, testing and commissioning services;
- (e) charges levied by authorities having jurisdiction with respect to the Services; and
- (f) all sales taxes (excluding income taxes) and duties for which HOL is liable in relation to the performance of the Services.
- **4.2** HOL will submit invoices for all applicable charges in respect of the Services performed under a purchase order on a monthly basis. Renfrew Hydro shall pay each invoice within thirty (30) days following the date on which the invoice is received by Renfrew Hydro.

5. <u>Term and Continuation of Services, and Termination</u>

- **5.1** The Parties intend that the provision of Services under this Agreement will take place for a period of up to three (3) years (the "**Term**"). Subject to subsection 5.2, no later than sixty (60) days prior to the end of the Term the Parties will assess their mutual interest in entering into a further agreement for services. If there is such mutual interest, the Parties will use their respective reasonable best efforts to negotiate, agree upon and enter into such further agreement.
- **5.2** Services will be provided on an annual basis and will automatically renew annually in each of the first two (2) years of the Term, provided however that either HOL or Renfrew Hydro may terminate the Agreement at any time during the Term on at least ninety (90) days' prior written notice of the intention to so terminate.
- **5.3** This Agreement may also be terminated by HOL or Renfrew Hydro if either of them is advised by written notice from an electricity regulator (the "**Regulator**") having jurisdiction that the subject Services may not be provided or received. In that case, the date of termination will be the date determined by the Regulator as the date by which the subject Services are to cease.
- **5.4** Notwithstanding the foregoing provisions in this Section 5, this Agreement may be terminated by either HOL or Renfrew Hydro on five (5) days' written notice in the event of a breach of this Agreement by the other Party where such breach has not been remedied within fifteen (15) days (the "Remedy Period") or if such breach cannot be reasonably remedied with the Remedy Period but is capable of being remedied and the Party in breach fails to commence to remedy such breach within the Remedy Period or thereafter fails to proceed diligently to remedy such breach.

6.0 Warranty

6.1 HOL will reperform to the reasonable satisfaction of Renfrew Hydro and at HOL's sole expense, any installation which is or becomes defective, in the reasonable opinion of Renfrew Hydro, as a result of faulty or inefficient design, materials or workmanship or the willful or negligent act or omission on the part of HOL or any third party for whom HOL is responsible at law, for a period of one (1) year following the expiry or earlier termination of this Agreement.

7. Workers' Compensation, Occupational Health and Safety and Environmental

7.1 HOL shall provide workers' compensation coverage for all persons employed to perform the Services. HOL shall provide proof of this coverage to Renfrew Hydro before commencing any applicable Services.

- **7.2** HOL shall perform applicable Services in strict conformance with the Ontario Health and Safety Act and Regulations (collectively, the "OHSA") in connection with the provision of the Services under this Agreement, and shall be responsible for initiating, maintaining and supervising all safety precautions in connection with the performance of applicable Services, including Covid19 protocols for construction/work sites (the "Work Sites"). If Renfrew Hydro or any of its employees, officers, managers, agents, contractors, directors, shareholders, affiliates, successors or permitted assigns (collectively in this Section 7, the "Indemnities") is made a party to any proceeding arising as a result of a violation by HOL or any subcontractors of the OHSA, HOL agrees, notwithstanding any other provision of this Agreement, to indemnify and safe harmless the Indemnities from any and all charges, fines, penalties, and costs that may be incurred or paid by the Indemnities as a result of such violation.
- **7.3** HOL shall give the required notices and comply with the laws, rules, regulations or codes which are or become in force during the performance of applicable Services and which relate to such Services and health and construction safety.
- **7.4** Without the prior written consent of Renfrew Hydro, HOL shall not bring on to any Work Sites any toxic or hazardous substances. HOL shall indemnify, defend and hold harmless the Indemnities from and against any and all claims resulting from bodily injury, including death, and damages to property of any person, corporation or other entity that arises from the use by HOL, or any person for whom the HOL is responsible, of any toxic or hazardous substances on any Work Site. For certainty "toxic and hazardous substances" means those substances so classified under applicable laws in force at the time the substance is brought to any Work Site.

8. HOL Insurance

HOL shall secure and keep in force, at no expense to Renfrew Hydro, such liability insurance, including comprehensive general liability insurance, contractual liability coverage, completed operations coverage, broad form property damage endorsement with coverage not less than \$5,000,000.00 per occurrence, as shall be reasonably required by and in form satisfactory to Renfrew Hydro, and with Renfrew Hydro named as additional insured. A certificate of such insurance shall be delivered to Renfrew Hydro prior to the date that Services first commence. HOL shall also furnish Renfrew Hydro with certificates of each and every renewal of insurance during the Term, within ten (10) business days of any such renewal.

9. Mutual Indemnities

Each Party agrees to indemnify and hold harmless the other Party, and its respective directors, shareholders, affiliates, officers, agents, employees, contractors and permitted assigns against any and all demands, claims, losses, damages, liabilities, penalties, punitive damages, expenses, reasonable legal fees and costs of any kind or amount whatsoever, which result from or arise out of any act or omission of the indemnifying party, its respective directors, shareholders, affiliates, officers, agents, employees, contractors, permitted assigns and persons for whom a Party is responsible in law, that occurs in connection with this Agreement, including, without limitation, a Party's breach of this Agreement. This indemnification will survive the termination of this Agreement.

10. Confidentiality

The Parties will treat all Confidential Information (as that term is defined in the Mutual Confidentiality Agreement dated as of November 1, 2019 between Hydro Ottawa Holding Inc. and Renfrew Hydro and any extensions and amendments thereof (the "MCA") in accordance with the MCA.

11. <u>Disputes</u>

11.1 The Parties agree that they will use commercially reasonable efforts to resolve any dispute by negotiation that arises relating to the validity, construction, meaning, performance or effect of this Agreement or the rights and liabilities of the Parties, or any other matter arising out of or connected with this Agreement (each, a "Dispute"), promptly and in an amicable manner. Upon the written request of either Party, the Parties shall meet for the purpose of endeavouring to resolve a Dispute. The Parties shall meet as soon as is reasonably possible after a Dispute arises, giving due regard to the

nature and impact of the issue under consideration, but no later than ten (10) Business Days after a Party has received a request by the other Party to do so. In the event that the Parties cannot resolve a Dispute within fifteen (15) business days following their meeting then, upon the mutual agreement of the Parties, the Dispute may be referred to arbitration in accordance with the *Arbitration Act* (Ontario).

- **11.2** The arbitration will be held in Ottawa, Ontario, or any other location selected by mutual agreement of the Parties.
- **11.3** All such arbitrations shall be carried out by a single arbitrator if the Parties can agree upon one, or by a panel of three (3) arbitrators, one of which is to be chosen by each Party and the third of which is to be chosen by the two (2) arbitrators so appointed.
- **11.4** The arbitrator(s) shall not have the power to award any damages in excess of the limits set forth in or excluded under the limitations of liability provided in this Agreement.
- **11.5** The decision of the arbitrator(s) shall be in writing, stating the reasons for the award, shall be final and binding on the Parties, and no appeal shall be taken from any determination unless the determination contains an error of law which results in a determination that is patently unreasonable.
- **11.6** In the event that the Parties cannot resolve a Dispute within the above allotted time period, and either of the Parties declines to proceed to arbitration, then each Party shall be free to pursue such other remedies as may be available to it at law or in equity. Nothing in this section shall prevent either Party from applying for or obtaining any interim, interlocutory or preliminary injunctive or declaratory relief or from bringing any claim for contribution or indemnity in the same court in which a suit against the Party is brought by any third party.
- **11.7** Any attempt to resolve a Dispute by negotiation or arbitration will be conducted on a confidential basis.

12. <u>Limitation of Liability</u>

The Parties agree that, with the exception of liability for breach of contract, including without limitation, breach of confidentiality obligations and liability for indemnification obligations, neither Party shall be liable for any indirect, special, incidental or consequential damages (collectively, the "Incidental Damages") in connection with or arising out of the performance or non-performance of this Agreement however caused, except where such Incidental Damages were reasonably foreseeable, including, without limitation, any business or economic loss. HOL's maximum liability to Renfrew Hydro will be for an aggregate amount that will not exceed the amount of insurance required to be carried by HOL in accordance with Section 8.

13. Notices

Any notice required to be given shall be in writing and shall be delivered by hand to the Party for which the notice is intended or sent by electronic mail, prepaid registered mail or prepaid courier directed to such party at the address indicated below, or to such other address as any party may stipulate by notice to the other. Any notice delivered by hand or prepaid mail or courier shall be deemed to be received on the date of actual delivery thereof. Any notice delivered by electronic mail shall be deemed to be received on the next day following the date the electronic mail was sent.

Hydro Ottawa Limited

Mailing Address: P.O. Box 8700, Ottawa, Ontario K1G 3S4 Courier Address: 2711 Hunt Club Road, Ottawa, Ontario K1G 5Z9

Attention: Shaun Logue, General Counsel

Renfrew Hydro

Address: 499 O'Brien Road, Unit B

Renfrew, ON K7V 3Z3

Attention: D. Lance Jefferies, President

14. Relationship of the Parties

The relationship of HOL and Renfrew Hydro established by this Agreement is that of independent contractors. Neither HOL nor any of its personnel is engaged as an employee, servant or agent of Renfrew Hydro.

15. Subcontracting

In any subcontract, HOL shall, unless Renfrew Hydro otherwise consents in writing, ensure that the subcontractor is bound by the terms and conditions of this Agreement, including, without limitation, the terms and conditions set forth in Section 7.

16. Assignment

This Agreement may not be assigned or transferred by either Party without the prior written consent of the other Party. Notwithstanding the foregoing, either Party may assign this Agreement to an affiliate without obtaining the other Party's consent.

17. Entire Agreement

The terms and conditions set forth in this Agreement constitute the entire agreement between the Parties and supersedes all prior related quotations, purchase orders, correspondence or communications whether written or oral between the Parties. There are no conditions, representations or warranties, either express or implied, relating to the matters covered by this Agreement other than those set out in this Agreement. This Agreement may not be amended or modified unless such amendment or modification is in writing and signed by both Parties.

18. Force Majeure

18.1 Neither Party shall be liable in damages or have the right to terminate this Agreement for any delay or default (except Renfrew Hydro's obligation to pay) in performing hereunder if such delay or default is caused by conditions beyond its control including, but not limited to, acts of God, acts of civil or military authority, embargo, wars, insurrections, explosion, fires, floods or unusually severe weather, disruptions resulting from labour disputes, governmental or regulatory action, pandemic, epidemic, quarantine and/or any other cause beyond the control of the party whose performance is affected (each, a "Force Majeure Event"). Notwithstanding the foregoing, the following are specifically not excused as Force Majeure Events: (a) late performance by or on behalf of a Party caused by a shortage of supervisors or labour, inefficiencies or similar occurrences, unless caused by the Force Majeure Event; (b) late delivery of equipment or materials. unless caused by the Force Majeure Event; (c) lack of finances; or (d) weather conditions that are typical of Renfrew and the areas in which any Services are performed.

18.2 The Parties shall take all commercially reasonable efforts to minimize the effects of a Force Majeure Event. Notwithstanding the foregoing, if a Force Majeure Event continues for thirty (30) days or more, either Party may terminate this Agreement upon written notice at any time before such performance resumes. In such case, the Parties agree that neither will make a claim against the other for damages, costs, expected profits or any other loss arising out of the termination or the event that gave rise to the Force Majeure Event.

18.3 In the event of termination due to a Force Majeure Event, Renfrew Hydro shall pay HOL all fees

and charges accrued to date of termination and HOL shall invoice for Services completed on or before the date of termination and any work-in-progress.

19. Invalidity

Each of the provisions contained in this Agreement is distinct and severable and a declaration of invalidity or unenforceability of any such provision or part thereof by a court of competent jurisdiction will not affect the validity or enforceability of any other provision hereof.

20. Further Assurances

HOL and Renfrew Hydro agree to execute such further assurances as may reasonably be required to give effect to any provision of this Agreement.

21. <u>Time of Essence</u>

Time is of the essence of this Agreement.

22. Counterparts

This Agreement may be executed by the Parties in separate counterparts, each of which will be deemed to constitute an original, all of which together will constitute one and the same agreement.

23. Survival

Any terms which by their very nature are intended to survive the termination of this Agreement, shall continue in full force and effect after termination, which terms shall include, but not be limited to Sections 6, 7, 8, 9, 10, 12 and 15.

24. Successor and Assigns

All of the covenants and agreements contained in this Agreement shall be binding upon the Parties and their respective successors and permitted assigns and shall enure to the benefit of and be binding upon the Parties and their respective successors and permitted assigns pursuant to the terms and conditions of this Agreement.

25. Gender and Number

In this Agreement, unless the context otherwise requires, words importing the singular include the plural and vice versa and words importing gender include all genders.

26. Governing Law

This Agreement will be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein.

27. Key Party Contacts

For the purposes of the relationship between Renfrew Hydro and HOL in respect of this Agreement, the key Party contacts are:

D. Lance Jefferies President, Renfrew Hydro Inc. Geoff Simpson Chief Financial Officer, HOL

Guillaume Paradis Chief Electricity Distribution Officer, HOL Lyne Parent-Garvey Chief Human Resources Officer, HOL

Julie Lupinacci Chief Customer Officer, HOL

Andrew Willis Director, Enterprise Applications, HOL

Key contacts as listed must be the original contact for any subject Service, until or unless these contacts

delegate to others for specific requests and provide prior written notice of such delegation to the other Party.

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2021-02-25

IN WITNESS WHEREOF Renfrew Hydro has executed this Agreement as of the _____day of February, 2021.

RENEREWOHYDROJINC.

BV: Steve Head

Name:

Title: Director of Finance

By: D. Lance Jefferies

Name: 8 Earte 2009 4 Feries

Title: President

We have authority to bind the Corporation.

2021-02-16

IN WITNESS WHEREOF HOL has executed this Agreement as of the ____day of February, 2021.

HYDRODQTTAWALIMITED

By: Groff Simpson

Name: George Stapson

Title: Chief Financial Officer

Bryce Conrad

Name: Bry EE B C 571 at 13...

Title: President and Chief Executive Officer

We have authority to bind the Corporation.

Schedule "A" - Statement of Work

The Services will encompass the following three (3) general categories:

(a) Category 1: Ad Hoc Services

(i) the provision of routine operating services and/or advisory assistance as determined by Renfrew Hydro;

(b) Category 2: Audits or Reviews

(i) the provision of operational audits or reviews as requested by Renfrew Hydro;

(c) Category 3: Special Projects

(i) the performance of special projects such as, but not limited to, rate application and follow-on services arising from operational audits or reviews;

Schedule "B" - Fees

- a) Fees for Services provided directly by HOL will be determined by and subject to the direct cost of the Services provided. A reasonable upfront estimate of time and materials will be provided in advance (when and where possible). All reactive, short notice and emergency response situations will not require estimates.
- b) Hourly Rates charged for Services provided by HOL staff will be standard Work for Others (WFO) rates.

For 2021 such rates are:

Labour WFO - Overtime WFO -

- c) Equipment charges (including charges for the use of trucks) will be at the current hourly standard rates. These rates will be updated on an annual basis.
- d) Charges for Services of third party suppliers used by HOL in providing Services will be based on the actual costs charged by the supplier to HOL, without further markup.
- e) Fees and charges will be subject to annual adjustment based on inflation and any increased services required to be provided to meet regulatory requirements.