Renfrew Hydro Inc.

Exhibit 6

EB-2016-0166 - 2017 Cost of Service

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Calculation of Revenue Requirement

2 Ex.6/Tab 1/Sch.1 - Determination of Net Utility Income

- 3 RHI's current rates are based on Board approved rates effective May 1, 2015 through an IRM
- 4 proceeding (EB-2014-0110). Existing revenues based on existing Board approved rates, which
- 5 are used in calculating utility income, are comprised of distribution revenue and exclude pass-
- 6 thru charges such as LV Charges and Transmission Charges.
- 7 Details on existing and projected distribution revenue at existing rates are presented in Exhibit
- 8 3, Tab 1, and replicated below. Other revenues are presented in Ex.3/Tab 4. Table 6.1 below
- 9 shows distribution revenues with current rates and proposed 2017 volumes.

Table 6.1: Distribution Revenues at Current Rates – 2017 Volumes

2010 Rates at 2017 Load

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		Test Year Projected Revenue from Existing Variable Charges							
Customer Class Name	Variable Distribution Rate	per	Test Year Volume	Gross Variable Revenue	Transform. Allowance Rate	Transform. Allowance kW's	Transform. Allowance \$'s	Net Variable Revenue	
Residential	\$0.0145	kWh	28929066	\$419,471.46			\$0.00	\$419,471.46	
General Service < 50 kW	\$0.0137	kWh	11749297	\$160,965.37			\$0.00	\$160,965.37	
General Service > 50 to 4999 kW	\$2.5331	kW	118024	\$298,966.59	-0.60	69011	-\$41,406.60	\$257,559.99	
Unmetered Scattered Load	\$0.0099	kWh	149640	\$1,481.43			\$0.00	\$1,481.43	
Street Lighting	\$7.2483	kW	3007	\$21,798.10			\$0.00	\$21,798.10	
Total Variable Revenue			40,949,034	\$902,682.95	-0.6	69011	-\$41,406.60	\$861,276.35	

2010 Rates at 2017 Load

		Test Year Projected Revenue from Proposed Fixed Charges								
Customer Class Name	Fixed Rate	Customers (Connections)	Fixed Charge Revenue	Variable Revenue	TOTAL	% Fixed Revenue	% Variable Revenue	% Total Revenue		
Residential	\$13.9700	3,835	\$642,897.32	\$419,471.46	\$1,062,368.78	60.52%	39.48%	57.17%		
General Service < 50 kW	\$31.2500	414	\$155,115.41	\$160,965.37	\$316,080.78	49.07%	50.93%	17.01%		
General Service > 50 to 4999 kW	\$189.2700	61	\$138,545.64	\$257,559.99	\$396,105.63	34.98%	65.02%	21.32%		
Unmetered Scattered Load	\$43.6300	34	\$17,919.97	\$1,481.43	\$19,401.40	92.36%	7.64%	1.04%		
Street Lighting	\$2.9500	1,199	\$42,455.50	\$21,798.10	\$64,253.60	66.07%	33.93%	3.46%		
Total Fixed Revenue		5,543	\$996,933.85	\$861,276.35	\$1,858,210.19	•				

- 12 Ex.6/Tab 1/Sch.2 at the next section provide details and derivation of the revenue requirement
- 13 and its particulars.

1 Ex.6/Tab 1/Sch.2 - Proposed Revenue Requirement

- 2 RHI's revenue requirement represents the amount of money that a utility must receive from its
- 3 customers to cover its costs, operating expenses, taxes, interest paid on debts owed to
- 4 investors and, if applicable, a deemed return (profit).
- 5 The proposed Base Revenue Requirement, representing the revenue to be recovered from
- 6 base distribution rates, is equal to the total Service Revenue Requirement, less Revenue
- 7 Offsets derived from other revenue sources. Table 6.2 below presents RHI's proposed 2017
- 8 Revenue Requirement.

Table 6.2: Test Year Revenue Requirement

Particular	Test Year
OM&A Expenses	\$1,549,280
Depreciation Expenses	\$247,981
Property Taxes	\$0
Total Distribution Expenses	\$1,797,261
Regulated Return On Capital	\$435,760
Grossed up PILs	\$23,047
Service Revenue Requirement	\$2,256,068
Less: Revenue Offsets	-\$107,550
Base Revenue Requirement	\$2,148,518

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Ex.6/Tab 1/Sch.3 - Statement of Rate Base

Table 6.3: Statement of Rate Base

Particulars	Test Year 2017			
Test Year Net Fixed Asset Opening Balance	\$15,495,709			
Average Accumulated Depreciation	(\$9,556,595)			
Average Balance		\$5,939,114		
Allowance for Working Capital		\$994,882		
•		•		
Total Rate Base		\$6,933,995		

Allowance for Working Capital - Derivation

Particulars	Test Year 2017			
Controllable Expenses	\$1,549,280			
Cost of Power/Power Supply Expense	\$11,715,807			
Working Capital Base	\$13,265,087			
Working Capital Rate %	7.5%			
Working Capital Allowance	\$994,882			

5 Ex.6/Tab 1/Sch.4 - Actual Utility Return on Rate Base

Table 6.4: Return on Rate Base

Return	
Deemed Interest Expense	\$180,866
Return on Deemed Equity	\$254,894
Total	\$435,760

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1 Ex.6/Tab 1/Sch.5 - Requested and Indicated Rate of Return

- 2 The requested rate of return is 6.28% as per the OEB prescribed Cost of Capital Parameters.
- 3 The Indicated Rate of Return is calculated as 6.28%. Details of the calculation can be found at
- 4 Tab 2 of this exhibit in Table 6.7 Calculation of Revenue Deficiency or Surplus.

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6 Ex.6/Tab 1/Sch.6 - Utility Income at Proposed Revenue Requirement

7 Table 6.5: Utility Income under proposed Revenue Requirement

	2017 Test Year
Operating Revenues:	
Distribution Revenue (at Proposed	\$2,148,518
Rates)	
Other Revenue	\$107,550
Total Operating Revenues	\$2,256,068
Operating Expenses:	
OM+A Expenses	\$1,549,280
Depreciation/Amortization	\$247,981
Property taxes	\$ -
Capital taxes	\$ -
Other expense	\$ -
Subtotal (lines 4 to 8)	\$1,797,261
Deemed Interest Expense	\$180,866
Total Expenses (lines 9 to 10)	\$1,978,127
Utility income before income taxes	\$277,941

Income taxes (grossed-up)	\$23,047
Hailian nating and	#054.004
Utility net income	\$254,894

Ex.6/Tab 1/Sch.7 - Revenue Requirement Trend

- 2 Table 6.6 below presents RHI's Revenue Requirement trend starting from the 2010 Board
- 3 Approved all the way to the 2017 proposed Revenue Requirement. A variance analysis is
- 4 provided on the next page.

Table 6.6: Trend in Revenue Requirement

	CGAAP	CGAAP	CGAAP	CGAAP	NEWGAAP	NEWGAAP	MIFRS	MIFRS	MIFRS
Particular	Last Board Approved	2010	2011	2012	2013	2014	2015	2016	2017
OM&A Expenses	\$1,149,829	\$1,041,099	\$1,143,713	\$1,202,039	\$1,254,896	\$1,240,159	\$1,330,158	\$1,427,921	\$1,549,280
Depreciation Expense	\$389,051	\$397,490	\$396,465	\$386,227	\$190,417	\$210,850	\$224,774	\$241,142	\$247,981
Property Taxes	-\$14,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Distribution Expenses	\$1,524,380	\$1,438,590	\$1,540,178	\$1,588,266	\$1,445,313	\$1,451,009	\$1,554,933	\$1,669,063	\$1,797,261
Regulated Return On Capital	\$436,201	\$423,551	\$432,732	\$441,891	\$458,864	\$472,415	\$499,364	\$497,050	\$435,760
Grossed up PILs	\$57,156	\$6,960	\$32,633	\$27,994	\$19,911	\$41,574	\$16,113	\$2,425	\$23,047
Service Revenue Requirement	\$2,017,737	\$1,869,101	\$2,005,543	\$2,058,150	\$1,924,088	\$1,964,998	\$2,070,409	\$2,168,538	\$2,256,068
Less: Revenue Offsets	-\$139,777	-\$143,166	-\$160,446	-\$152,737	\$48,347	\$32,353	-\$15,994	-\$6,315	-\$107,550
Base Revenue Requirement	\$1,877,960	\$1,725,935	\$1,845,097	\$1,905,414	\$1,972,436	\$1,997,351	\$2,054,415	\$2,162,223	\$2,148,518

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Table 6.7: Variance Analysis of Revenue Requirement

										Variance over last CoS
	CGAAP	CGAAP	CGAAP	CGAAP	NEWGAAP	NEWGAAP	MIFRS	MIFRS	MIFRS	MIFRS
Particular	Last Board Approved	2010	2011	2012	2013	2014	2015	2016	2017	2017
OM&A Expenses	1,149,829	1,041,099	1,143,713	1,202,039	1,254,896	1,240,159	1,330,158	1,427,921	1,549,280	
Year over year change (\$)		-108,730	102,613	58,326	52,857	-14,736	89,999	97,763	121,359	399,451
Year over year change (%)		-9.46%	9.86%	5.10%	4.40%	-1.17%	7.26%	7.35%	8.50%	34.74%
Depreciation Expense	389,051	397,490	396,465	386,227	190,417	210,850	224,774	241,142	247,981	
Year over year change (\$)		8,439	-1,025	-10,238	-195,810	20,432	13,925	16,368	6,839	-141,070
Year over year change (%)		2.17%	-0.26%	-2.58%	-50.70%	10.73%	6.60%	7.28%	2.84%	-36.26%
Property Taxes	-14,500	0	0	0	0	0	0	0	0	0
Year over year change (\$)		14,500	0	0	0	0	0	0	0	-100.00%
Year over year change (%)		-100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Total Distribution Expenses	1,524,380	1,438,590	1,540,178	1,588,266	1,445,313	1,451,009	1,554,933	1,669,063	1,797,261	
Year over year change (\$)		-85,790	101,588	48,088	-142,953	5,696	103,924	114,131	128,198	272,881
Year over year change (%)		-5.63%	7.06%	3.12%	-9.00%	0.39%	7.16%	7.34%	7.68%	17.90%
Regulated Return On Capital	436,201	423,551	432,732	441,891	458,864	472,415	499,364	497,050	435,760	
Year over year change (\$)		-12,650	9,181	9,158	16,973	13,551	26,949	-2,313	-61,290	-441
Year over year change (%)		-2.90%	2.17%	2.12%	3.84%	2.95%	5.70%	-0.46%	-12.33%	-0.10%
Grossed up PILs	57,156	6,960	32,633	27,994	19,911	41,574	16,113	2,425	23,047	
Year over year change (\$)		-50,196	25,673	-4,639	-8,083	21,663	-25,461	-13,688	20,622	-34,109
Year over year change (%)		-87.82%	368.86%	-14.22%	-28.87%	108.80%	-61.24%	-84.95%	850.49%	-59.68%
Service Revenue Requirement	2,017,737	1,869,101	2,005,543	2,058,150	1,924,088	1,964,998	2,070,409	2,168,538	2,256,068	
Year over year change (\$)		-148,636	136,442	52,607	-134,062	40,910	105,412	98,129	87,530	238,331
Year over year change (%)		-7.37%	7.30%	2.62%	-6.51%	2.13%	5.36%	4.74%	4.04%	11.81%
Less: Revenue Offsets	-139,777	-143,166	-160,446	-152,737	48,347	32,353	-15,994	-6,315	-107,550	
Year over year change (\$)		-3,389	-17,280	7,709	201,084	-15,994	-48,347	9,679	-101,235	32,227
Year over year change (%)		2.42%	12.07%	-4.80%	-131.65%	-33.08%	-149.44%	-60.52%	1603.09%	-23.06%
Base Revenue Requirement	1,877,960	1,725,935	1,845,097	1,905,414	1,972,436	1,997,351	2,054,415	2,162,223	2,148,518	
Year over year change (\$)		-152,025	119,162	60,317	67,022	24,915	57,064	107,808	-13,705	270,558
Year over year change (%)		-8.10%	6.90%	3.27%	3.52%	1.26%	2.86%	5.25%	-0.63%	14.41%

2

1 <u>Important Year-Over-Year Changes</u>

- 2 The variances in the year-over-year OM&A expenses are explained in detail at Exhibit 4, which
- 3 directly impact the change in revenue requirement.
- 4 In 2013 the depreciation reduced by \$195K due to the Regulatory accounting policy change,
- 5 extending the useful lives of various asset categories. This was balanced by the decrease in
- 6 Revenue offsets in the same year caused by the inclusion of the Regulatory Debit to account for
- 7 the difference in depreciation expense. This was done in an effort to keep the revenue
- 8 requirement consistent until the utility is approved for new rates with reduced depreciation
- 9 expenses. This also explains the change in revenue offsets for the 2017 Test year, when the
- 10 Regulatory debit is removed, and the revenue requirement reflects the new reduced
- depreciation expense based on the extended useful lives of certain assets.
- 12 In 2014 Pils increased by \$21K, or 108% because RHI is no longer eligible for the Small
- 13 Business Deduction because of the corporate tax requirement to combine associated company
- taxable capital to determine eligibility. RHI is associated to Renfrew Power Generation Inc.
- through common ownership by the Town of Renfrew.
- 16 In 2017 the return on capital reflects a decrease of \$61K, or 12% from the prior year. The major
- 17 contributor is the reduced working capital allowance, down from 2010 approved amount of 15%,
- to 7.5% for 2017, in accordance with the letter issued by the OEB on June 03, 2015.

Table 6.8: Variance Analysis of Revenue Requirement and Rate Base

	CGAAP	NEWGAAP	
Particular	2010	2017	Diff
Long Term Debt	5.76%	4.54%	-1.22%
Short Term Debt	2.07%	1.65%	-0.42%
Return on Equity	9.85%	9.19%	-0.66%
Weighted Debt Rate	5.51%	4.35%	-1.17%
Regulated Rate of Return	7.25%	6.28%	-0.96%
Controllable Expenses	\$1,149,829	\$1,549,280	\$399,451
Power Supply Expense	\$8,674,639	\$11,715,807	\$3,041,168
Total Eligible Distribution Expenses	\$9,824,468	\$13,265,087	\$3,440,619
Working Capital Allowance Rate	15.00%	7.50%	-7.50%
Total Working Capital Allowance ("WCA")	\$1,473,670	\$994,882	-\$478,789
Average Fixed Assets	\$12,436,805	\$15,495,709	\$3,058,904
Average Accumulated Depreciation	-\$7,893,818	-\$9,556,595	-\$1,662,777
Average Net Fixed Asset	\$4,542,987	\$5,939,114	\$1,396,127
Working Capital Allowance	\$1,473,670	\$994,882	-\$478,789
Rate Base	\$6,016,657	\$6,933,995	\$917,338
Regulated Rate of Return	7.25%	6.28%	-0.96%
Regulated Return on Capital	\$436,111	\$435,760	-\$351
Deemed Interest Expense	\$199,055	\$180,866	-\$18,189
Deemed Return on Equity	\$237,056	\$254,894	\$17,837
OM&A	\$1,149,829	\$1,549,280	\$399,451
Depreciation Expense	\$389,051	\$247,981	-\$141,070
PILs	\$57,156	\$23,047	-\$34,109
Revenue Offset	-\$139,777	-\$107,550	\$32,227
Revenue Requirement	\$1,877,960	\$2,148,518	\$270,558

Variances – 2010 Board Approved to 2017 Test Year

2 Working Capital Allowance

- 3 As can be seen from the table above, the Working Capital Allowance ("WCA") has decreased
- 4 \$478K from the 2010 Board Approved amount. The main cause is the decrease in the Working
- 5 Capital Allowance rate, down from 15% in 2010 to 7.5% for 2017, in accordance with the letter
- 6 issued by the OEB on June 03, 2015. The allowance decreased despite the fact that OM&A
- 7 expenses increased \$399K, as explained in Exhibit 4, and Power Supply Expenses increased
- 8 \$3M.

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9 Rate Base

- The Rate Base for 2017 reflects an increase of \$917K. The factors contributing to the change in
- the rate base are discussed in detail in Exhibit 2 which include increased investments in the
- distribution system to follow the distribution system plan. The Smart Meters Capital additions
- were also added into the 2017 year.

14 Revenue Requirement

- 15 The proposed revenue requirement of \$2,148,518 for the test year is \$270K or 14% higher than
- 16 the 2010 Cost of Service approved Revenue Requirement. The major contributor is the increase
- in the OM&A expenses (+\$399K). Cost drivers affecting the increase include labour rate
- 18 increases, new smart meter operational expenses, increased billing expenses with the change
- to a monthly billing cycle, a move to a new location with increased rental costs, and increased
- 20 regulatory expenses. More details are provided in Exhibit 4. Depreciation has decreased (-
- \$141K) in the Test Year due to the Regulatory accounting policy change, extending the useful
- 22 lives of various asset categories.

Revenue Deficiency or Surplus

2 Ex.6/Tab 2/Sch.1 - Calculation of Revenue Deficiency or Surplus

- 3 RHI's net revenue deficiency under the proposed rates is \$290,308. This deficiency is
- 4 calculated as the difference between the 2017 Test Year Revenue Requirement and the 2017
- 5 revenue at the existing rates as shown in Table 6.1 plus the forecasted other operating revenue.
- 6 The Revenue Deficiency sheet presented at the next page is an excerpt from the Revenue
- 7 Requirement Work Form. The drivers of the revenue deficiency are detailed in the section
- 8 following the table.

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Table 6.9: Revenue Deficiency (RRWF)

D. C. L.	At Current Approved	At Proposed
Particulars	Rates	Rates
Revenue Deficiency from Below		\$290,308
Distribution Revenue	\$1,858,210	\$1,858,210
Other Operating Revenue Offsets - net	\$107,550	\$107,550
Total Revenue	\$1,965,760	\$2,256,068
Operating Expenses	\$1,797,261	\$1,797,261
Deemed Interest Expense	\$180,866	\$180,866
Total Cost and Expenses	\$1,978,127	\$1,978,127
Total Cost and Expenses	Ψ1,970,127	ψ1,970,127
Utility Income Before Income Taxes	(\$12,367)	\$277,941
Tax Adjustments to Accounting Income per	(\$124,293)	(\$124,293)
2013 PILs model		
Taxable Income	(\$136,660)	\$153,648
Income Toy Date	45.000/	45.000/
Income Tax Rate Income Tax on Taxable Income	15.00% (\$20,499)	15.00% \$23,047
Income Tax Ori Taxable Income Income Tax Credits	(\$20,499)	\$23,047
Utility Net Income	\$8,132	\$254,894
Othity Net Income	\$0,132	\$254,694
Utility Rate Base	\$6,933,995	\$6,933,995
Deemed Equity Portion of Rate Base	\$2,773,598	\$2,773,598
Income/(Equity Portion of Rate Base)	0.29%	9.19%
Target Return - Equity on Rate Base	9.19%	9.19%
Deficiency/Sufficiency in Return on Equity	-8.90%	0.00%
Indicated Rate of Return	2.73%	6.28%
Requested Rate of Return on Rate Base	6.28%	6.28%
Deficiency/Sufficiency in Rate of Return	-3.56%	0.00%
Target Return on Equity	\$254,894	\$254,894
Revenue Deficiency/(Sufficiency)	\$246,762	\$ -
Gross Revenue Deficiency/(Sufficiency)	\$290,308	

1 Ex.6/Tab 2/Sch.2 - Causes of Revenue Deficiency or Surplus

- 2 RHI's existing rates are based on the Board-approved rates in 2010 following a cost of service
- rate application, and adjustments to its base distribution rates in 2011-2015 under the Board's
- 4 third Generation Incentive Regulation Mechanism.
- 5 As shown in Table of Revenue Deficiency at the previous section, the Revenue Deficiency is
- 6 determined to be \$290,308. The deficiency is due to the increase in the rate base and OM&A.
- 7 As reflected in Table 6.8, the proposed rate base for 2017 is \$917K higher than the 2010 Board-
- 8 approved amount, an increase of 14%. Based on a 6.28% overall cost of capital, the increase in
- 9 the rate base drives an increase to the revenue requirement. Changes in the Average Net Fixed
- Assets also drive the change in rate base. The Average Net Fixed Assets increased \$1,396,127
- 11 from \$4,542,987 in 2010 Board approved to \$5,939,114 in 2017. There are three main causes
- for the increase: additional investments in the distribution system to follow the distribution
- 13 system plan; the inclusion of the smart meters in 2017; and the reduced depreciation caused by
- extending the useful lives of certain asset categories. Additional details on capital investments
- 15 can be found at Exhibit 2.
- 16 The increased expense for Operations, Maintenance and Administration (OM&A) is another
- 17 reason for the revenue deficiency. Projected OM&A for 2017 is 1,549,280 which is \$399,451
- higher than the 2010 Board-approved amount, which represents an increase of 34.74%. The
- 19 cost drivers underlying this increase are explained in Exhibit 4.

Filed: June 14 2016

1 Ex.6/Tab 2/Sch.3 - Impact of implementation of MIFRS on Revenue Deficiency or

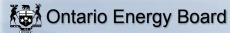
2 Surplus

- 3 The adoption of newly prescribed accounting policies had had a marginal impact on the
- 4 allocation of the revenue requirement and determination of the rate base. The extension of the
- 5 typical useful lives of RHI's assets has caused the depreciation expense to decrease resulting in
- 6 an increase in the value of the net fixed asset of the utility and ultimately an increase to the
- 7 utility's rate base.
- 8 RHI's OM&A has not been impacted by the policy which states that overheads which are no
- 9 longer eligible for capitalization must be removed from rate base and included as an operating
- 10 expense since the utility has never capitalized administrative overheads on capital projects.

Renfrew Hydro Inc. EB-2016-0166 Exhibit 6 – Revenue Deficiency/Deficiency Filed: June 14 2016

Appendix A

Revenue Requirement Work Form



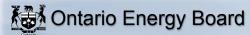


Version 6.00

Utility Name	
Service Territory	
Assigned EB Number	
Name and Title	
Phone Number	
Email Address	

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While this model has been provided in Excel format and is required to be filed with the applications, the onus remains on the applicant to ensure the accuracy of the data and the results.



1. Info 6. Taxes PILs

2. Table of Contents 7. Cost_of_Capital

3. Data_Input_Sheet 8. Rev_Def_Suff

4. Rate_Base 9. Rev_Reqt

5. Utility Income 10. Tracking Sheet

Notes:

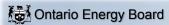
(1) Pale green cells represent inputs

(2) Pale green boxes at the bottom of each page are for additional notes

(3) Pale yellow cells represent drop-down lists

(4) Please note that this model uses MACROS. Before starting, please ensure that macros have been enabled.

(5) Completed versions of the Revenue Requirement Work Form are required to be filed in working Microsoft Excel



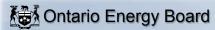
Data Input (1)

Rate Base Gross Field Assets (average) S15,495,709			Initial Application	(2)			(6)	Per Board Decision	
Gross Fixed Assets (average)	1	Rate Base							
Cost of Power S11,715,807		Gross Fixed Assets (average) Accumulated Depreciation (average)		(5)	\$., ,		,	
Cost of Power (Norting Capital Rate (%) 7.50% (9) 7.50%			\$1.549.280		\$	1.549.280		\$1.549.280	
2									
Operating Revenue at Current Rates Distribution Revenue at Current Rates S1,858,210 Distribution Revenue at Proposed Rates S2,148,518 Other Revenue: Specific Service Charges \$18,500 Late Payment Charges \$20,000 Other Distribution Revenue \$56,350 Other Income and Deductions \$12,700 Total Revenue Offsets \$107,550 (7) Total Revenue Offsets \$107,550 (7) Operating Expenses: OH+A Expenses S1,549,280 S1,549,280 S247,981 Property taxes Other expenses Other expe		Working Capital Rate (%)	7.50%	(9)		7.50%	(9)	7.50%	(9)
Distribution Revenue at Proposed Rates S2,148,518	2								
Specific Service Charges \$18,500 \$20,000 \$20,000 \$20,000 \$31,270 \$31,549,280 \$1,549,280 \$1,549,280 \$247,981 \$2		Distribution Revenue at Proposed Rates							
Late Payment Charges \$20,000 Other Distribution Revenue \$56,350 Other Income and Deductions \$12,700			\$18.500						
Total Revenue Offsets									
Total Revenue Offsets \$107,550 (7) Operating Expenses: OM+A Expenses \$1,549,280 S 1,549,280 S 247,981 S 247,981 Property taxes Other expenses 3 Taxes/PILs Taxable Income: (\$124,293) Adjustments required to arrive at taxable income Utility Income Taxes and Rates: Income taxes (not grossed up) Income taxes (grossed up) Income taxes (grossed up) Income Tax Credits 4 Capitalization/Cost of Capital Capital Structure: Long-term debt Capitalization Ratio (%) Short-term debt Capitalization Ratio (%) Prefered Shares Capitalization Ratio (%) Short-term debt Cost Rate (%) Short-ter									
Operating Expenses: OM+A Expenses S1,549,280 S 1,549,280 S 247,981		Other Income and Deductions	\$12,700						
OM-A Expenses S1,549,280 S 1,549,280 S 247,981		Total Revenue Offsets	\$107,550	(7)					
OM-A Expenses S1,549,280 S 1,549,280 S 247,981		Operating Expenses:							
Property taxes			\$1,549,280			1,549,280		\$1,549,280	
Taxes/PLs Taxable Income: Adjustments required to arrive at taxable income Utility Income Taxes and Rates: Income taxes (not grossed up) Income taxes (grossed up) Income taxes (grossed up) Federal tax (%) Income Tax Credits 4 Capitalization/Cost of Capital Capital Structure: Long-term debt Capitalization Ratio (%) Short-term debt Capitalization Ratio (%) Common Equity Capitalization Ratio (%) Prefered Shares Capitalization Ratio (%) Frefered Shares Capitalization Ratio (%) One of Capital Long-term debt Cost Rate (%) Frefered Shares Capitalization Ratio (%) Short-term debt Cost Rate (%) Frefered Shares Capitalization Ratio (%) Frefered Shares			\$247,981		\$	247,981		\$247,981	
Taxable Income: Adjustments required to arrive at taxable income Utility Income Taxes and Rates: Income taxes (not grossed up) Income taxes (grossed up) Income taxes (grossed up) Federal tax (%) Provincial tax (%) Income Tax Credits 4. Capitalization/Cost of Capital Capital Structure: Long-term debt Capitalization Ratio (%) Short-term debt Capitalization Ratio (%) Prefered Shares Capitalization Ratio (%) Prefered Shares Capitalization Ratio (%) Foot of Capital Long-term debt Cost Rate (%) Short-term debt Cos									
Taxable Income: Adjustments required to arrive at taxable income Utility Income Taxes and Rates: Income taxes (not grossed up) Income taxes (grossed up) Income taxes (grossed up) Income taxes (grossed up) Income Tax Credits 4 Capitalization/Cost of Capital Capital Structure: Long-term debt Capitalization Ratio (%) Short-term debt Capitalization Ratio (%) Prefered Shares Capitalization Ratio (%) Prefered Shares Capitalization Ratio (%) Prefered Shares Capitalization Ratio (%) Short-term debt Cost Rate (%)		Other expenses							
Adjustments required to arrive at taxable income Utility Income Taxes and Rates: Income taxes (grossed up) Income taxes (grossed up) Federal tax (%) Provincial tax (%) Income Tax Credits 4 Capitalization/Cost of Capital Capital Structure: Long-term debt Capitalization Ratio (%) Short-term debt Capitalization Ratio (%) Prefered Shares Capitalization Ratio (%) Prefered Shares Capitalization Ratio (%) Short-term debt Cost Rate (%)	3								
Adjustments required to arrive at taxable income Utility Income Taxes and Rates: Income taxes (not grossed up) Income taxes (grossed up) S23,047 Federal tax (%) Provincial tax (%) Income Tax Credits 4 Capitalization/Cost of Capital Capital Structure: Long-term debt Capitalization Ratio (%) Short-term debt Capitalization Ratio (%) Prefered Shares Capitalization Ratio (%) Prefered Shares Capitalization Ratio (%) Short-term debt Cost Rate (%)		Taxable Income:	(6404.000)	(2)					
Utility Income Taxes and Rates: Income taxes (not grossed up) \$19,590 Income taxes (grossed up) \$23,047 Federal tax (%) \$10.50% Provincial tax (%) 4.50% Income Tax Credits		Adjustments required to arrive at taxable income	(\$124,293)	(3)					
Income taxes (not grossed up) Income taxes (grossed up) Federal tax (%) Provincial tax (%) Income Tax Credits 4									
Federal tax (%)		Income taxes (not grossed up)							
Provincial tax (%) Income Tax Credits 4									
Income Tax Credits 4									
4 Capitalization/Cost of Capital Capital Structure: Long-term debt Capitalization Ratio (%) Short-term debt Capitalization Ratio (%) Prefered Shares Capitalization Ratio (%) Prefered Shares Capitalization Ratio (%) Short-term debt Cost Rate (%) Short-term debt Cost Rate (%) Short-term debt Cost Rate (%) Common Equity Cost Rate (%) Short-term debt Cost Rate (%)			4.50%						
Capital Structure: Long-term debt Capitalization Ratio (%) 56.0% Short-term debt Capitalization Ratio (%) 4.0% Common Equity Capitalization Ratio (%) 40.0% Prefered Shares Capitalization Ratio (%) 100.0% Cost of Capital Long-term debt Cost Rate (%) 4.54% Short-term debt Cost Rate (%) 1.65% Common Equity Cost Rate (%) 9.19% Common Equity Cost Rate (%) 9.19% Cost of Capital 1.65% Common Equity Cost Rate (%) 9.19% Cost of Capital 1.65% Cost of Capital 1.65									
Long-term debt Capitalization Ratio (%) Short-term debt Capitalization Ratio (%) Common Equity Capitalization Ratio (%) Prefered Shares Capitalization Ratio (%) 100.0% Cost of Capital Long-term debt Cost Rate (%) Short-term debt Cost Rate (%) Common Equity Cost Rate (%) Short-term debt Cost Rate (%)	4								
Short-term debt Capitalization Ratio (%)			56.0%						
Common Equity Capitalization Ratio (%) 40.0% 100.0% 100.0%				(8)			(8)		(8)
100.0% 100.0% 100.0% 100.0% 100.0			40.0%						
Cost of Capital Long-term debt Cost Rate (%) 4.54% Short-term debt Cost Rate (%) 1.65% Common Equity Cost Rate (%) 9.19%		Prefered Shares Capitalization Ratio (%)							
Long-term debt Cost Rate (%) 4.54% Short-term debt Cost Rate (%) 1.65% Common Equity Cost Rate (%) 9.19%			100.0%						
Long-term debt Cost Rate (%) 4.54% Short-term debt Cost Rate (%) 1.65% Common Equity Cost Rate (%) 9.19%		Cost of Capital							
Common Equity Cost Rate (%) 9.19%			4.54%						
		Short-term debt Cost Rate (%)							
			9.19%						
Prefered Shares Cost Rate (%)		Pretered Shares Cost Rate (%)							

Notes:

General Data inputs are required on Sheets 3. Data from Sheet 3 will automatically complete calculations on sheets 4 through 9 (Rate Base through Revenue Requirement). Sheets 4 through 9 do not require any inputs except for notes that the Applicant may wish to enter to support the results. Pale green cells are available on sheets 4 through 9 to enter both footnotes beside key cells and the related text for the notes at the bottom of each sheet.

- (1) All inputs are in dollars (\$) except where inputs are individually identified as percentages (%) Data in column E is for Application as originally filed. For updated revenue requirement as a result of interrogatory responses, technical or settlement conferences, etc., use
- colimn M and Adjustments in column I
- Net of addbacks and deductions to arrive at taxable income.
- (4) (5)
- Average of Gross Fixed Assets at beginning and end of the Test Year
 Average of Accumulated Depreciation at the beginning and end of the Test Year. Enter as a negative amount.
- Select option from drop-down list by clicking on cell M10. This column allows for the application update reflecting the end of discovery or Argument-in-Chief. Also, the outcome of any Settlement Process can be reflected.
- Input total revenue offsets for deriving the base revenue requirement from the service revenue requirement
- 4.0% unless an Applicant has proposed or been approved for another amount.
- The default Working Capital Allowance factor is 7.5% (of Cost of Power plus controllable expenses), per the letter issued by the Board on June 3, 2015. Alternatively, WCA factor based on lead-lag study or approved WCA factor for another distributor, with supporting rationale



Rate Base and Working Capital

Rate Base

Line No.	Particulars	_	Initial Application		_			Per Board Decision
1 2	Gross Fixed Assets (average) Accumulated Depreciation (average)	(3) (3)	\$15,495,709 (\$9,556,595)	\$ - \$ -		\$15,495,709 (\$9,556,595)	\$ - \$ -	\$15,495,709 (\$9,556,595)
3	Net Fixed Assets (average)	(3)	\$5,939,114	\$ -		\$5,939,114	\$ -	\$5,939,114
4	Allowance for Working Capital	_(1)	\$994,882	\$ -	_	\$994,882	<u> </u>	\$994,882
5	Total Rate Base	_	\$6,933,995	\$-	_	\$6,933,995	<u> \$ -</u>	\$6,933,995

(1) Allowance for Working Capital - Derivation

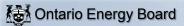
Controllable Expenses		\$1,549,280	\$ -	\$1,549,280	\$ -	\$1,549,280
Cost of Power		\$11,715,807	\$ -	\$11,715,807	\$ -	\$11,715,807
Working Capital Base		\$13,265,087	\$ -	\$13,265,087	\$ -	\$13,265,087
Working Capital Rate %	(2)	7.50%	0.00%	7.50%	0.00%	7.50%
Working Capital Allowance		\$994,882	\$ -	\$994,882	\$ -	\$994,882

Notes (2)

9 10

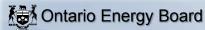
Some Applicants may have a unique rate as a result of a lead-lag study. The default rate for 2016 cost of service applications is 7.5%, per the letter issued by the Board on June 3, 2015. Alternatively, a utility could conduct and file its own lead-lag study.

Average of opening and closing balances for the year.



Utility Income

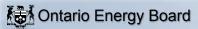
Line No.	Particulars	Initial Application				Per Board Decision
	Operating Revenues:		_	_	_	
1	Distribution Revenue (at Proposed Rates)	\$2,148,518	(\$2,148,518)	\$ -	\$ -	\$ -
2	Other Revenue	(1) \$107,550	(\$107,550)	\$ -	<u> </u>	\$ -
3	Total Operating Revenues	\$2,256,068	(\$2,256,068)	\$ -	\$ -	\$ -
	Operating Expenses:					
4	OM+A Expenses	\$1,549,280	\$ -	\$1,549,280	\$ -	\$1,549,280
5	Depreciation/Amortization	\$247,981	\$ -	\$247,981	\$ -	\$247,981
6	Property taxes	\$ -	\$ -		\$ -	
7	Capital taxes	\$ -	\$ -	\$ -	\$ -	\$ -
8	Other expense	<u> </u>	\$ -		\$ -	
9	Subtotal (lines 4 to 8)	\$1,797,261	\$ -	\$1,797,261	\$ -	\$1,797,261
10	Deemed Interest Expense	\$180,866	(\$180,866)	\$-	<u> </u>	<u> </u>
11	Total Expenses (lines 9 to 10)	\$1,978,127	(\$180,866)	\$1,797,261	<u> </u>	\$1,797,261
12	Utility income before income					
	taxes	\$277,941	(\$2,075,202)	(\$1,797,261)	<u> \$ -</u>	(\$1,797,261)
13	Income taxes (grossed-up)	\$23,047	\$ -	\$23,047	\$ -	\$23,047
14	Utility net income	\$254,894	(\$2,075,202)	(\$1,820,308)	<u> </u>	(\$1,820,308)
Notes	Other Revenues / Reve	enue Offsets				
(1)	Specific Service Charges	\$18,500		\$ -		\$ -
(-)	Late Payment Charges	\$20,000		\$ -		\$ -
	Other Distribution Revenue	\$56,350		\$ -		\$ -
	Other Income and Deductions			\$ -		\$ -
	Total Revenue Offsets	\$107,550	\$ -	\$ -	\$ -	\$ -



Taxes/PILs

Line No.	Particulars	Application		Per Board Decision
	Determination of Taxable Income			
1	Utility net income before taxes	\$254,894	\$ -	\$ -
2	Adjustments required to arrive at taxable utility income	(\$124,293)	\$ -	(\$124,293)
3	Taxable income	\$130,600	<u> </u>	(\$124,293)
	Calculation of Utility income Taxes			
4	Income taxes	\$19,590	\$19,590	\$19,590
6	Total taxes	\$19,590	\$19,590	\$19,590
7	Gross-up of Income Taxes	\$3,457	\$3,457	\$3,457
8	Grossed-up Income Taxes	\$23,047	\$23,047	\$23,047
9	PILs / tax Allowance (Grossed-up Income taxes + Capital taxes)	\$23,047	\$23,047	\$23,047
10	Other tax Credits	\$ -	\$ -	\$ -
	Tax Rates			
11 12 13	Federal tax (%) Provincial tax (%) Total tax rate (%)	10.50% 4.50% 15.00%	10.50% 4.50% 15.00%	10.50% 4.50% 15.00%

Notes

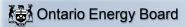


Capitalization/Cost of Capital

Line Particulars		Capitalizat	ion Ratio	Cost Rate	Return
		Initial App	olication		
		(%)	(\$)	(%)	(\$)
1	Debt Long-term Debt	56.00%	\$3,883,037	4.54%	\$176,290
2	Short-term Debt	4.00%	\$277,360	1.65%	\$4,576
3	Total Debt	60.00%	\$4,160,397	4.35%	\$180,866
	Equity				
4	Common Equity	40.00%	\$2,773,598	9.19%	\$254,894
5 6	Preferred Shares Total Equity	0.00% 40.00%	\$ - \$2,773,598	9.19%	\$ - \$254,894
7	Total	100.00%	\$6,933,995	6.28%	\$435,760
					
	Debt	(%)	(\$)	(%)	(\$)
1	Debt Long-term Debt	0.00%	\$ -	0.00%	\$ -
2	Short-term Debt	0.00%	\$ -	0.00%	\$ -
3	Total Debt	0.00%	\$ -	0.00%	\$ -
	Equity	0.000/		0.000/	
4 5	Common Equity Preferred Shares	0.00% 0.00%	\$ - \$ -	0.00% 0.00%	\$ - \$ -
6	Total Equity	0.00%	\$ - \$ -	0.00%	\$ -
7	Total	0.00%	\$6,933,995	0.00%	<u> </u>
		Per Board	Decision		
		(%)	(\$)	(%)	(\$)
	Debt	(70)	(Ψ)	(70)	(Ψ)
8	Long-term Debt	0.00%	\$ -	4.54%	\$ -
9	Short-term Debt	0.00%	\$ -	1.65%	\$ -
10	Total Debt	0.00%	\$ -	0.00%	\$ -
11	Equity Common Equity	0.00%	\$ -	9.19%	\$ -
12	Preferred Shares	0.00%	\$ - \$ -	0.00%	\$ - \$ -
13	Total Equity	0.00%	\$ -	0.00%	\$ -
14	Total	0.00%	\$6,933,995	0.00%	\$ -

Notes (1)

Data in column E is for Application as originally filed. For updated revenue requirement as a result of interrogatory responses, technical or settlement conferences, etc., use colimn M and Adjustments in column I



Revenue Deficiency/Sufficiency

		Initial Appli	cation			Per Board D	Decision
Line No.	Particulars	At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates
1	Revenue Deficiency from Below		\$290.308		(\$82,883)		\$1,797,261
2	Distribution Revenue Other Operating Revenue	\$1,858,210 \$107,550	\$1,858,210 \$107,550	\$1,858,210 \$ -	\$2,231,401 \$ -	\$ - \$ -	(\$1,797,261) \$ -
4	Offsets - net Total Revenue	\$1,965,760	\$2,256,068	\$1,858,210	\$2,148,518	\$ -	\$ -
5 6	Operating Expenses Deemed Interest Expense	\$1,797,261 \$180,866	\$1,797,261 \$180,866	\$1,797,261 \$-	\$1,797,261 \$ -	\$1,797,261 \$-	\$1,797,261 \$ -
8	Total Cost and Expenses	\$1,978,127	\$1,978,127	\$1,797,261	\$1,797,261	\$1,797,261	\$1,797,261
9	Utility Income Before Income Taxes	(\$12,367)	\$277,941	\$60,949	\$351,257	(\$1,797,261)	(\$1,797,261)
10	Tax Adjustments to Accounting Income per 2013 PILs model	(\$124,293)	(\$124,293)	(\$124,293)	(\$124,293)	\$ -	\$ -
11	Taxable Income	(\$136,660)	\$153,648	(\$63,344)	\$226,964	(\$1,797,261)	(\$1,797,261)
12 13	Income Tax Rate	15.00% (\$20,499)	15.00% \$23,047	15.00% (\$9,502)	15.00% \$34,045	15.00% (\$269,589)	15.00% (\$269,589)
14	Income Tax on Taxable Income Income Tax Credits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	Utility Net Income	\$8,132	\$254,894	\$70,451	(\$1,820,308)	(\$1,527,672)	(\$1,820,308)
16	Utility Rate Base	\$6,933,995	\$6,933,995	\$6,933,995	\$6,933,995	\$6,933,995	\$6,933,995
17	Deemed Equity Portion of Rate Base	\$2,773,598	\$2,773,598	\$ -	\$ -	\$ -	\$ -
18	Income/(Equity Portion of Rate Base)	0.29%	9.19%	0.00%	0.00%	0.00%	0.00%
19	Target Return - Equity on Rate Base	9.19%	9.19%	0.00%	0.00%	0.00%	0.00%
20	Deficiency/Sufficiency in Return on Equity	-8.90%	0.00%	0.00%	0.00%	0.00%	0.00%
21 22	Indicated Rate of Return Requested Rate of Return on Rate Base	2.73% 6.28%	6.28% 6.28%	1.02% 0.00%	0.00% 0.00%	-22.03% 0.00%	0.00% 0.00%
23	Deficiency/Sufficiency in Rate of Return	-3.56%	0.00%	1.02%	0.00%	-22.03%	0.00%
24 25	Target Return on Equity Revenue Deficiency/(Sufficiency)	\$254,894 \$246,762	\$254,894 \$ -	\$ - (\$70,451)	\$ - \$ -	\$ - \$1,527,672	\$ - \$ -

Notes:

Gross Revenue

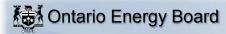
Deficiency/(Sufficiency)

Revenue Deficiency/Sufficiency divided by (1 - Tax Rate)

\$290,308 (1)

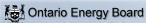
(\$82,883) (1)

\$1,797,261 **(1)**



Revenue Requirement

Line No.	Particulars	Application				Per Board Decision
1 2 3	OM&A Expenses Amortization/Depreciation Property Taxes	\$1,549,280 \$247,981 \$ -		\$1,549,280 \$247,981		\$1,549,280 \$247,981
5 6 7	Income Taxes (Grossed up) Other Expenses Return	\$23,047 \$ -		\$23,047		\$23,047
	Deemed Interest Expense Return on Deemed Equity	\$180,866 \$254,894		\$ - \$ -		\$ - \$ -
8	Service Revenue Requirement (before Revenues)	\$2,256,068		\$1,820,308		\$1,820,308
9 10	Revenue Offsets Base Revenue Requirement (excluding Tranformer Owership Allowance credit adjustment)	\$107,550 \$2,148,518		\$ - \$1,820,308		\$ - \$1,820,308
11 12	Distribution revenue Other revenue	\$2,148,518 \$107,550		\$ - \$ -		\$ - \$ -
13	Total revenue	\$2,256,068		\$ -		\$ -
14	Difference (Total Revenue Less Distribution Revenue Requirement before Revenues)	\$-	(1)	(\$1,820,308)	(1)	<u>(\$1,820,308)</u> (1)
Notes (1)	Line 11 - Line 8					



Tracking Form

The last row shown is the most current estimate of the cost of service data reflecting the original application and any updates provided by the applicant distributor (for updated evidence, responses to interrogatories, undertakings, etc.)
Please ensure a Reference (Column B) and/or Item Description (Column C) is entered. Please note that unused rows will automatically be hidden and the PRINT AREA set when the PRINT BUTTON on Sheet 1 is activated.

(1) Short reference to evidence material (interrogatory response, undertaking, exhibit number, Board Decision, Code, Guideline, Report of the Board, etc.)

(2) Short description of change, issue, etc.

60 Tracking Rows have been provided below. If you require more, please contact Industry Relations @ IndustryRelations@ontarioenergyboard.ca.

Summary of Proposed Changes

Ī			Cost of	Capital	Rate Base	Rate Base and Capital Expenditures			Operating Expenses			Revenue Requirement		
	Reference ⁽¹⁾	Item / Description ⁽²⁾	Regulated Return on Capital	Regulated Rate of Return	Rate Base	Working Capital	Working Capital Allowance (\$)		Taxes/PILs	OM&A	Service Revenue Requirement	Other Revenues		
I		Original Application	\$ 435,760	6.28%	\$ 6,933,995	\$ 13,265,087	\$ 994,882	\$ 247,981	\$ 23,047	\$ 1,549,280	\$ 2,256,068	\$ 107,550	\$ 2,148,518	\$ 290,308
- 1														