

Renfrew Hydro Inc.

Exhibit 6

EB-2016-0166 - 2017 Cost of Service

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Calculation of Revenue Requirement

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

RHI's current rates are based on Board approved rates effective May 1, 2015 through an IRM proceeding (EB-2014-0110). Existing revenues based on existing Board approved rates, which are used in calculating utility income, are comprised of distribution revenue and exclude pass-thru charges such as LV Charges and Transmission Charges.

Details on existing and projected distribution revenue at existing rates are presented in Exhibit 3, Tab 1, and replicated below. Other revenues are presented in Ex.3/Tab 4. Table 6.1 below 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

Customer Class Name	Test Year Projected Revenue from Existing Variable Charges							
	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

Customer Class Name	Test Year Projected Revenue from Proposed Fixed Charges							
	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			

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

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

RHI's revenue requirement represents the amount of money that a utility must receive from its customers to cover its costs, operating expenses, taxes, interest paid on debts owed to investors and, if applicable, a deemed return (profit).

The proposed Base Revenue Requirement, representing the revenue to be recovered from base distribution rates, is equal to the total Service Revenue Requirement, less Revenue Offsets derived from other revenue sources. Table 6.2 below presents RHI's proposed 2017 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

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

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

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

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

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

Table 6.5: Utility Income under proposed Revenue Requirement

	2017 Test Year
<u>Operating Revenues:</u>	
Distribution Revenue (at Proposed Rates)	\$2,148,518
Other Revenue	\$107,550
Total Operating Revenues	\$2,256,068
<u>Operating Expenses:</u>	
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
Utility net income	\$254,894

1 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.

5 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
Particular	CGAAP Last Board Approved	CGAAP 2010	CGAAP 2011	CGAAP 2012	NEWGAAP 2013	NEWGAAP 2014	MIFRS 2015	MIFRS 2016	MIFRS 2017	MIFRS 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%

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1 **Important Year-Over-Year Changes**

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
11 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
14 taxable capital to determine eligibility. RHI is associated to Renfrew Power Generation Inc.
15 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%,
18 to 7.5% for 2017, in accordance with the letter issued by the OEB on June 03, 2015.

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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

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Variances – 2010 Board Approved to 2017 Test Year

Working Capital Allowance

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

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.

Revenue Requirement

The proposed revenue requirement of \$2,148,518 for the test year is \$270K or 14% higher than 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 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 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 lives of various asset categories.

Revenue Deficiency or Surplus

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

RHI's net revenue deficiency under the proposed rates is \$290,308. This deficiency is calculated as the difference between the 2017 Test Year Revenue Requirement and the 2017 revenue at the existing rates as shown in Table 6.1 plus the forecasted other operating revenue.

The Revenue Deficiency sheet presented at the next page is an excerpt from the Revenue Requirement Work Form. The drivers of the revenue deficiency are detailed in the section following the table.

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Table 6.9: Revenue Deficiency (RRWF)

Particulars	At Current Approved Rates	At Proposed 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
Utility Income Before Income Taxes	(\$12,367)	\$277,941
Tax Adjustments to Accounting Income per 2013 PILs model	(\$124,293)	(\$124,293)
Taxable Income	(\$136,660)	\$153,648
Income Tax Rate	15.00%	15.00%
Income Tax on Taxable Income	(\$20,499)	\$23,047
Income Tax Credits	\$ -	\$ -
Utility Net Income	\$8,132	\$254,894
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	

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

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 third Generation Incentive Regulation Mechanism.

As shown in Table of Revenue Deficiency at the previous section, the Revenue Deficiency is determined to be \$290,308. The deficiency is due to the increase in the rate base and OM&A.

As reflected in Table 6.8, the proposed rate base for 2017 is \$917K higher than the 2010 Board-approved amount, an increase of 14%. Based on a 6.28% overall cost of capital, the increase in 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 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 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 can be found at Exhibit 2.

The increased expense for Operations, Maintenance and Administration (OM&A) is another 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 cost drivers underlying this increase are explained in Exhibit 4.

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

The adoption of newly prescribed accounting policies had had a marginal impact on the allocation of the revenue requirement and determination of the rate base. The extension of the typical useful lives of RHI's assets has caused the depreciation expense to decrease resulting in an increase in the value of the net fixed asset of the utility and ultimately an increase to the utility's rate base.

RHI's OM&A has not been impacted by the policy which states that overheads which are no longer eligible for capitalization must be removed from rate base and included as an operating expense since the utility has never capitalized administrative overheads on capital projects.

Appendix A

Revenue Requirement Work Form



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2016 Filers



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.



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2016 Filers

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[4. Rate_Base](#)

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[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***



Revenue Requirement Workform (RRWF) for 2016 Filers

Data Input ⁽¹⁾

	Initial Application	(2)	(6)	Per Board Decision
1 Rate Base				
Gross Fixed Assets (average)	\$15,495,709		\$ 15,495,709	\$15,495,709
Accumulated Depreciation (average)	(\$9,556,595)	(5)	(\$9,556,595)	(\$9,556,595)
Allowance for Working Capital:				
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 Rate (%)	7.50%	(9)	7.50%	7.50% (9)
2 Utility Income				
Operating Revenues:				
Distribution Revenue at Current Rates	\$1,858,210			
Distribution Revenue at Proposed Rates	\$2,148,518			
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)		
Operating Expenses:				
OM+A Expenses	\$1,549,280		\$ 1,549,280	\$1,549,280
Depreciation/Amortization	\$247,981		\$ 247,981	\$247,981
Property taxes				
Other expenses				
3 Taxes/PILs				
Taxable Income:				
Adjustments required to arrive at taxable income	(\$124,293)	(3)		
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				
4 Capitalization/Cost of Capital				
Capital Structure:				
Long-term debt Capitalization Ratio (%)	56.0%			
Short-term debt Capitalization Ratio (%)	4.0%	(8)	(8)	(8)
Common Equity Capitalization Ratio (%)	40.0%			
Preferred 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%			
Preferred 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 (%)
- (2) 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 column M and Adjustments in column I
- (3) Net of addbacks and deductions to arrive at taxable income.
- (4) Average of Gross Fixed Assets at beginning and end of the Test Year
- (5) Average of Accumulated Depreciation at the beginning and end of the Test Year. Enter as a negative amount.
- (6) 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.
- (7) Input total revenue offsets for deriving the base revenue requirement from the service revenue requirement
- (8) 4.0% unless an Applicant has proposed or been approved for another amount.
- (9) 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.



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2016 Filers

Rate Base and Working Capital

Rate Base										
Line No.	Particulars		Initial Application						Per Board Decision	
1	Gross Fixed Assets (average)	(3)	\$15,495,709		\$ -		\$15,495,709		\$ -	\$15,495,709
2	Accumulated Depreciation (average)	(3)	(\$9,556,595)		\$ -		(\$9,556,595)		\$ -	(\$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		\$ -	\$994,882
5	Total Rate Base		\$6,933,995		\$ -		\$6,933,995		\$ -	\$6,933,995

(1) Allowance for Working Capital - Derivation

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

Notes

(2) 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.

(3) Average of opening and closing balances for the year.



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2016 Filers

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)	\$ -	\$ -	\$ -	
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	\$ -	\$ -	\$ -	\$ -	\$ -	
9	Subtotal (lines 4 to 8)	\$1,797,261	\$ -	\$1,797,261	\$ -	\$1,797,261	
10	Deemed Interest Expense	\$180,866	(\$180,866)	\$ -	\$ -	\$ -	
11	Total Expenses (lines 9 to 10)	\$1,978,127	(\$180,866)	\$1,797,261	\$ -	\$1,797,261	
12	Utility income before income taxes	\$277,941	(\$2,075,202)	(\$1,797,261)	\$ -	(\$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)	\$ -	(\$1,820,308)	

Notes

Other Revenues / Revenue Offsets

(1)	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	\$ -	\$ -	\$ -	\$ -



Revenue Requirement Workform (RRWF) for 2016 Filers

Taxes/PILs

Line No.	Particulars	Application				Per Board Decision	
<u>Determination of Taxable Income</u>							
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		\$ -		(\$124,293)	
<u>Calculation of Utility income Taxes</u>							
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	\$ -		\$ -		\$ -	
<u>Tax Rates</u>							
11	Federal tax (%)	10.50%		10.50%		10.50%	
12	Provincial tax (%)	4.50%		4.50%		4.50%	
13	Total tax rate (%)	15.00%		15.00%		15.00%	

Notes



Revenue Requirement Workform (RRWF) for 2016 Filers

Capitalization/Cost of Capital

Line No.	Particulars	Capitalization Ratio			Cost Rate		Return	
		Initial Application						
		(%)		(\$)	(%)			(\$)
	Debt							
1	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	Preferred Shares	0.00%		\$ -	0.00%			\$ -
6	Total Equity	40.00%		\$2,773,598	9.19%			\$254,894
7	Total	100.00%		\$6,933,995	6.28%			\$435,760
		Per Board Decision						
		(%)		(\$)	(%)			(\$)
	Debt							
1	Long-term Debt	0.00%		\$ -	0.00%			\$ -
2	Short-term Debt	0.00%		\$ -	0.00%			\$ -
3	Total Debt	0.00%		\$ -	0.00%			\$ -
	Equity							
4	Common Equity	0.00%		\$ -	0.00%			\$ -
5	Preferred Shares	0.00%		\$ -	0.00%			\$ -
6	Total Equity	0.00%		\$ -	0.00%			\$ -
7	Total	0.00%		\$6,933,995	0.00%			\$ -
		(%)		(\$)	(%)			(\$)
	Debt							
8	Long-term Debt	0.00%		\$ -	4.54%			\$ -
9	Short-term Debt	0.00%		\$ -	1.65%			\$ -
10	Total Debt	0.00%		\$ -	0.00%			\$ -
	Equity							
11	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 column M and Adjustments in column I



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2016 Filers

Revenue Deficiency/Sufficiency

Line No.	Particulars	Initial Application		Per Board Decision	
		At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates
1	Revenue Deficiency from Below		\$290,308		(\$82,883)
2	Distribution Revenue	\$1,858,210	\$1,858,210	\$1,858,210	\$2,231,401
3	Other Operating Revenue	\$107,550	\$107,550	\$ -	\$ -
	Offsets - net				
4	Total Revenue	\$1,965,760	\$2,256,068	\$1,858,210	\$2,148,518
5	Operating Expenses	\$1,797,261	\$1,797,261	\$1,797,261	\$1,797,261
6	Deemed Interest Expense	\$180,866	\$180,866	\$ -	\$ -
8	Total Cost and Expenses	\$1,978,127	\$1,978,127	\$1,797,261	\$1,797,261
9	Utility Income Before Income Taxes	(\$12,367)	\$277,941	\$60,949	\$351,257
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
12	Income Tax Rate	15.00%	15.00%	15.00%	15.00%
13	Income Tax on Taxable Income	(\$20,499)	\$23,047	(\$9,502)	\$34,045
14	Income Tax Credits	\$ -	\$ -	\$ -	\$ -
15	Utility Net Income	\$8,132	\$254,894	\$70,451	(\$1,820,308)
16	Utility Rate Base	\$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%
19	Target Return - Equity on Rate Base	9.19%	9.19%	0.00%	0.00%
20	Deficiency/Sufficiency in Return on Equity	-8.90%	0.00%	0.00%	0.00%
21	Indicated Rate of Return	2.73%	6.28%	1.02%	0.00%
22	Requested Rate of Return on Rate Base	6.28%	6.28%	0.00%	0.00%
23	Deficiency/Sufficiency in Rate of Return	-3.56%	0.00%	1.02%	0.00%
24	Target Return on Equity	\$254,894	\$254,894	\$ -	\$ -
25	Revenue Deficiency/(Sufficiency)	\$246,762	\$ -	(\$70,451)	\$ -
26	Gross Revenue Deficiency/(Sufficiency)	\$290,308 (1)		(\$82,883) (1)	

Notes:

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



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2016 Filers

Revenue Requirement

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

Notes

(1) Line 11 - Line 8



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2016 Filers

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

Reference ⁽¹⁾	Item / Description ⁽²⁾	Cost of Capital		Rate Base and Capital Expenditures			Operating Expenses			Revenue Requirement			
		Regulated Return on Capital	Regulated Rate of Return	Rate Base	Working Capital	Working Capital Allowance (\$)	Amortization / Depreciation	Taxes/PILs	OM&A	Service Revenue Requirement	Other Revenues	Base Revenue Requirement	Grossed up Revenue Deficiency / Sufficiency
	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