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## 6.2 CALCULATION OF REVENUE REQUIREMENT

### 6.2.1 DETERMINATION OF NET UTILITY INCOME

CWH's current rates are based on Board approved rates effective May 1, 2017, through an IRM proceeding EB-2016-0062. 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 section 3.1.2 of Exhibit 3 and replicated below. Other revenues are presented in section 3.4 of Exhibit 3, shows distribution revenues at Bridge and Test Year volumes.

Table 1 below shows distribution revenues at proposed 2018 volumes.

**Table 1: Distribution Revenues at Current Rates – 2018 Volumes**

#### 2017 Rates at 2018 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	\$0.0074	kWh	44,716,576	\$330,902.66			\$0.00	\$330,902.66
General Service < 50 kW	\$0.0192	kWh	20,596,746	\$395,457.53			\$0.00	\$395,457.53
General Service 50 to 2999 kW	\$3.7113	kW	160,292	\$594,892.98	-0.60	91184	-\$54,710.28	\$540,182.70
General Service 3000-4999 kW	\$2.9277	kW	43,538	\$127,465.84	-0.60	42794	-\$25,676.26	\$101,789.58
Unmetered Scattered Load	\$0.0109	kWh	548,560	\$5,979.30			\$0.00	\$5,979.30
Sentinel Lighting	\$12.5207	kW	106	\$1,330.36			\$0.00	\$1,330.36
Street Lighting	\$9.3109	kW	1,536	\$14,297.58			\$0.00	\$14,297.58
<b>Total Variable Revenue</b>			66,067,354	\$1,470,326.25		133977.57	-\$80,386.54	\$1,389,939.71

#### 2017 Rates at 2018 Load

Customer Class Name	Test Year Projected Revenue from Existing Fixed Charges							
	Fixed Rate	Customers (Connections)	Fixed Charge Revenue	Variable Revenue	TOTAL	% Fixed Revenue	% Variable Revenue	% Total Revenue
Residential	\$21.0200	6,107	\$1,540,433.29	\$330,902.66	\$1,871,335.95	82.32%	17.68%	57.73%
General Service < 50 kW	\$18.4400	758	\$167,762.02	\$395,457.53	\$563,219.55	29.79%	70.21%	17.38%
General Service 50 to 2999 kW	\$170.1900	45	\$92,685.88	\$540,182.70	\$632,868.58	14.65%	85.35%	19.52%
General Service 3000-4999 kW	\$685.8600	1	\$8,230.32	\$101,789.58	\$110,019.90	7.48%	92.52%	3.39%
Unmetered Scattered Load	\$6.9200	13	\$1,079.52	\$5,979.30	\$7,058.82	15.29%	84.71%	0.22%
Sentinel Lighting	\$4.7300	29	\$1,618.82	\$1,330.36	\$2,949.18	54.89%	45.11%	0.09%
Street Lighting	\$1.9300	1,716	\$39,750.14	\$14,297.58	\$54,047.72	73.55%	26.45%	1.67%
<b>Total Fixed Revenue</b>		8,669	\$1,851,559.99	\$1,389,939.71	\$3,241,499.71			

## 6.2.2 PROPOSED REVENUE REQUIREMENT

CWH'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 the deemed return (profit).

The proposed Base Revenue Requirement of \$3,707,317, which represents the revenue to be recovered from base distribution rates, is equal to the total Service Revenue Requirement of \$3,999,717 less Revenue Offsets of \$292,400 derived from other revenue sources.

Table 2 below presents CWH's proposed 2018 Revenue Requirement.

**Table 2: Test Year Revenue Requirement**

<b>Particular</b>	<b>2018</b>
OM&A Expenses	\$2,404,300
Depreciation Expense	\$590,700
Property Taxes	\$19,200
Total Distribution Expenses	\$3,014,200
Regulated Return On Capital	\$985,517
Grossed up PILs	\$0
<b>Service Revenue Requirement</b>	<b>\$3,999,717</b>
Less: Revenue Offsets	-\$292,400
<b>Base Revenue Requirement</b>	<b>\$3,707,317</b>

1 **6.2.3 STATEMENT OF RATE BASE**

2 **Table 3 - Statement of Rate Base**

Debt				Return
Long-term Debt	56.0%	\$9,658,070	3.81%	\$367,676
Short-term Debt	4.0%	\$689,862	1.76%	\$12,142
Total Debt	60.0%	\$10,347,933	3.67%	\$379,818
Equity				
Common Equity	40.0%	\$6,898,622	8.78%	\$605,699
Preferred Shares		\$ -		\$ -
Total Equity	40.0%	\$6,898,622	8.78%	\$605,699
Total	100.0%	\$17,246,554	5.71%	\$985,517

3

4 **6.2.4 ACTUAL UTILITY RETURN ON RATE BASE**

5 **Table 4 - Return on Rate Base**

Return	
Deemed Interest Expense	\$379,818
Return on Deemed Equity	\$605,699
Total	\$985,517

6

7 **6.2.5 REQUESTED AND INDICATED RATE OF RETURN**

8 The requested rate of return is 8.78% as per the OEB prescribed Cost of Capital Parameters.

9 Details of the calculation can be found at 6.2 of this exhibit.

1 **6.2.6 UTILITY INCOME AT PROPOSED REVENUE REQUIREMENT**

2 **Table 5: Utility Income under proposed Revenue Requirement**

Particulars	2018
<b>Operating Revenues:</b>	
Distribution Revenue (at Proposed Rates)	\$3,707,317
Other Revenue	\$292,400
Total Operating Revenues	\$3,999,717
<b>Operating Expenses:</b>	
OM+A Expenses	\$2,404,300
Depreciation/Amortization	\$590,700
Property taxes	\$19,200
Capital taxes	\$ -
Other expense	\$ -
Total Operating Expenses	\$3,014,200
Deemed Interest Expense	\$379,818
Total Expenses (lines 9 to 10)	\$3,394,018
<b>Utility income before income taxes</b>	<b>\$605,699</b>
Income taxes (grossed-up)	\$0
<b>Utility net income</b>	<b>\$605,699</b>

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1 **6.2.7 REVENUE REQUIREMENT TREND**

2 Table 6 below presents CWH’s Revenue Requirement trend starting from the 2013 Board  
 3 Approved all the way to the 2018 proposed Revenue Requirement.

4 **Table 6: Trend in Revenue Requirement**

Particular	Last Board Approved	2013	2014	2015	2016	2017	2018
OM&A Expenses	\$2,022,105	\$2,041,514	\$2,046,360	\$2,074,268	\$2,138,832	\$2,297,500	\$2,404,300
Depreciation Expense	\$508,619	\$614,297	\$547,856	\$543,003	\$548,179	\$585,500	\$590,700
Property Taxes	\$36,400	\$14,849	\$14,454	\$14,643	\$19,795	\$17,300	\$19,200
Total Distribution Expenses	\$2,567,124	\$2,670,661	\$2,608,669	\$2,631,914	\$2,706,806	\$2,900,300	\$3,014,200
Regulated Return On Capital	\$706,130	\$705,922	\$807,678	\$906,871	\$1,005,733	\$1,080,310	\$985,517
Grossed up PILs	\$3,445	\$41,249	-\$80,861	-\$63,532	-\$12,765	\$0	\$0
Service Revenue Requirement	\$3,276,699	\$3,417,831	\$3,335,487	\$3,475,253	\$3,699,774	\$3,980,610	\$3,999,717
Less: Revenue Offsets	-\$251,700	-\$309,555	-\$357,828	-\$428,343	-\$294,951	-\$339,700	-\$292,400
Base Revenue Requirement	\$3,024,999	\$3,108,276	\$2,977,659	\$3,046,910	\$3,404,823	\$3,640,910	\$3,707,317

5

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**Table 7 - Variance Analysis of Revenue Requirement**

Particular	Last Board Approved	2013	2014	2015	2016	2017	2018
OM&A Expenses	\$2,022,105	\$2,041,514	\$2,046,360	\$2,074,268	\$2,138,832	\$2,297,500	\$2,404,300
Year over year change (\$)		\$ 19,409	\$ 4,846	\$ 27,909	\$ 64,563	\$ 158,668	\$ 106,800
Year over year change (%)		0.96%	0.24%	1.36%	3.11%	7.42%	4.65%
Depreciation Expense	\$ 508,619	\$ 614,297	\$ 547,856	\$ 543,003	\$ 548,179	\$ 585,500	\$ 590,700
Year over year change (\$)		\$ 105,678	-\$ 66,441	-\$ 4,853	\$ 5,176	\$ 37,321	\$ 5,200
Year over year change (%)		20.78%	-10.82%	-0.89%	0.95%	6.81%	0.89%
Property Taxes	\$ 36,400	\$ 14,849	\$ 14,454	\$ 14,643	\$ 19,795	\$ 17,300	\$ 19,200
Year over year change (\$)		-\$ 21,551	-\$ 396	\$ 189	\$ 5,153	-\$ 2,495	\$ 1,900
Year over year change (%)		-59.20%	-2.66%	1.31%	35.19%	-12.60%	10.98%
Total Distribution Expenses	\$2,567,124	\$2,670,661	\$2,608,669	\$2,631,914	\$2,706,806	\$2,900,300	\$3,014,200
Year over year change (\$)		\$ 103,537	-\$ 61,991	\$ 23,245	\$ 74,892	\$ 193,494	\$ 113,900
Year over year change (%)		4.03%	-2.32%	0.89%	2.85%	7.15%	3.93%
Regulated Return On Capital	\$ 706,130	\$ 705,922	\$ 807,678	\$ 906,871	\$1,005,733	\$1,080,310	\$ 985,517
Year over year change (\$)		-\$ 208	\$ 101,757	\$ 99,192	\$ 98,862	\$ 74,577	-\$ 94,793
Year over year change (%)		-0.03%	14.41%	12.28%	10.90%	7.42%	-8.77%
Grossed up PILs	\$ 3,445	\$ 41,249	-\$ 80,861	-\$ 63,532	-\$ 12,765	\$ -	\$ -
Year over year change (\$)		\$ 37,804	-\$ 122,110	\$ 17,329	\$ 50,767	\$ 12,765	\$ -
Year over year change (%)		1097.36%	-296.03%	-21.43%	-79.91%	-100.00%	#DIV/0!
<b>Service Revenue Requirement</b>	\$3,276,699	\$3,417,831	\$3,335,487	\$3,475,253	\$3,699,774	\$3,980,610	\$3,999,717
Year over year change (\$)		\$ 141,132	-\$ 82,345	\$ 139,766	\$ 224,521	\$ 280,836	\$ 19,107
Year over year change (%)		4.31%	-2.41%	4.19%	6.46%	7.59%	0.48%
Less: Revenue Offsets	-\$ 251,700	-\$ 309,555	-\$ 357,828	-\$ 428,343	-\$ 294,951	-\$ 339,700	-\$ 292,400
Year over year change (\$)		-\$ 57,855	-\$ 48,273	-\$ 70,515	\$ 133,392	-\$ 44,749	\$ 47,300
Year over year change (%)		22.99%	15.59%	19.71%	-31.14%	15.17%	-13.92%
<b>Base Revenue Requirement</b>	\$3,024,999	\$3,108,276	\$2,977,659	\$3,046,910	\$3,404,823	\$3,640,910	\$3,707,317
Year over year change (\$)		\$ 83,277	-\$ 130,618	\$ 69,251	\$ 357,913	\$ 236,087	\$ 66,407
Year over year change (%)		2.75%	-4.20%	2.33%	11.75%	6.93%	1.82%

2

3 ***Important Year-Over-Year Changes***

4 The variances in the year-over-year OM&A expenses are explained in detail at Exhibit 4, which  
5 directly impact the change in revenue requirement.

6 CWH shows an increase in capital spending each year from 2013 to 2016 in order to upgrade all  
7 six of its distribution stations. Further details and descriptions of spending on the distribution  
8 stations can be found in Exhibit 2, and further within CWH's DSP. This year over year increase in  
9 capital spending significantly increased the rate base.

10 In CWH's 2013 CoS, approval was given to transfer the assets in account 1555-Smart Meter  
11 Capital and Recovery Offset Variance Account to the appropriate capital accounts. In some



1 cases, the assets were purchased and being depreciated as early as 2009. When the amounts  
2 were transferred to the capital accounts in 2013, accumulated depreciation needed to be  
3 brought to its true value and therefore appears higher than normal in 2013 due to these  
4 adjustments.

5 In 2014, CWH had an increase in the regulated return on capital of \$102K. The same cost rates  
6 were used in the calculation of the Regulated Return on Capital for 2013 and 2014. Therefore  
7 the increase is strictly due to an increase in capital spending, mainly due to the distribution  
8 station, further details on the station can be seen in the DSP in Exhibit 2.

9 The Grossed up PILs in 2013 Cost of Service was forecasted at \$3,445 with a reduction to zero  
10 (\$0.00) in 2018. The actual grossed up PILs amount between 2013-2016 shows this amount  
11 swung between a debit of \$41,249 to a credit of \$12,765 in 2016. When the Tax Consultant  
12 (KPMG) prepares the corporate tax returns, KPMG is taking advantage of Loss Carried Forward  
13 and CCA deductions to bring the tax amount back to zero. The majority of the loss carried  
14 forward is represented by non-capital losses for 2012-2013. Further information regarding PILs  
15 can be found in Exhibit 4.

16 In 2015 revenue offsets were \$71K higher than 2014. In 2015 CWH received a one-time CDM  
17 bonus of \$70k which was posted to 4375-Revenues from Non Rate-Regulated Utility Operations:  
18 Sub-account CDM. This on its own accounted for the increase in 2015, and as a result, the  
19 revenue offset saw a decrease the following year. The CDM one-time bonus was a large reason  
20 for the decrease in 2016 when compared to 2015. In 2016 revenue offsets were \$133k lower  
21 than 2015. Further details on the reasons for the increases/reductions year over year can be  
22 found in Section 3.4.1 of Exhibit 3 under Table 50 – Variance analysis of other operating  
23 revenues 2015-2016.

24 In 2018, the return on capital reflects a decrease of \$93K, or 8.6% from the prior year. The major  
25 contributor is the reduced working capital allowance, down from 2013 approved amount of  
26 13%, to 7.5% for 2018, in accordance with the letter issued by the OEB on June 3, 2015.

27

1

**Table 8: Variance Analysis of Revenue Requirement and Rate Base**

Particular	2013	2018	Diff
Long Term Debt	4.14%	3.81%	-0.33%
Short Term Debt	2.07%	1.76%	-0.31%
Return on Equity	8.98%	8.78%	-0.20%
Weighted Debt Rate	4.00%	3.67%	-0.33%
<b>Regulated Rate of Return</b>	<b>5.99%</b>	<b>5.71%</b>	<b>-0.28%</b>
Controllable Expenses	\$2,054,705	\$2,423,500	\$368,795
Power Supply Expense	\$15,992,047	\$20,053,083	\$4,061,036
Total Eligible Distribution Expenses	\$18,046,752	\$22,476,583	\$4,429,831
Working Capital Allowance Rate	13.00%	7.50%	-5.50%
<b>Total Working Capital Allowance ("WCA")</b>	<b>\$2,346,078</b>	<b>\$1,685,744</b>	<b>-\$660,334</b>
Fixed Asset Opening Bal Bridge Year	\$8,768,155	\$15,470,260	\$6,702,105
Fixed Asset Opening Bal Test Year	\$10,097,111	\$15,651,360	\$5,554,249
Average Fixed Asset	\$9,432,633	\$15,560,810	\$6,128,177
Working Capital Allowance	\$2,346,078	\$1,685,744	-\$660,334
<b>Rate Base</b>	<b>\$11,778,711</b>	<b>\$17,246,554</b>	<b>\$5,467,843</b>
Regulated Rate of Return	5.99%	5.71%	-0.28%
<b>Regulated Return on Capital</b>	<b>\$705,922</b>	<b>\$985,517</b>	<b>\$279,595</b>
Deemed Interest Expense	\$282,830	\$379,818	\$96,987
Deemed Return on Equity	\$423,091	\$605,699	\$182,608
OM&A	\$2,058,505	\$2,423,500	\$364,995
Depreciation Expense	\$508,619	\$590,700	\$82,081
PILs	\$3,445	\$0	-\$3,445
Revenue Offset	-\$251,700	-\$292,400	-\$40,700
<b>Revenue Requirement</b>	<b>\$3,024,791</b>	<b>\$3,707,317</b>	<b>\$682,526</b>

2

3 **Variiances – 2013 Board Approved to 2018 Test Year**

4 **Working Capital Allowance**

5 As can be seen from the table above, the Working Capital Allowance ("WCA") has decreased  
 6 \$660K from the 2013 Board Approved amount. The main cause is the decrease in the Working  
 7 Capital Allowance rate, down from 13% in 2013 to 7.5% for 2018, in accordance with the letter  
 8 issued by the OEB on June 03, 2015. The allowance decreased despite the fact that OM&A

1 expenses increased \$369K, as explained in Exhibit 9, and Power Supply Expenses increased  
2 \$4.0M.

### 3 **Rate Base**

4 The Rate Base for 2018 reflects an increase of \$5.47M. The main factor contributing to the  
5 change in the rate base is completing extensive upgrades to six distribution stations. Details on  
6 the station upgrades can be found in the DSP in Appendix B of Exhibit 2.

### 7 **Revenue Requirement**

8 The proposed base revenue requirement of \$3,707,317 for the test year is \$683K or 23% higher  
9 than the 2013 Cost of Service approved Base Revenue Requirement. The major contributors are  
10 the increase in the OM&A (Controllable) expenses of \$369K and the increase in the Regulated  
11 Return on Capital of \$280K due to the \$5.4M net increase, over 2013 approved CoS, in rate base,  
12 discussed in Exhibit 2. With regards to the increase in OM&A expenses, more details are  
13 provided in Exhibit 4. Depreciation has increased (\$82K) in the Test Year due to a large amount  
14 of capital investment in the six (6) distribution stations. The increase in depreciation expense for  
15 the stations alone is \$58K from 2018 compared to 2013 Approved. The other major increase in  
16 depreciation expense is \$20K in Poles, Towers & Fixtures. The details on the increase in Poles,  
17 Towers & Fixtures can also be found in the DSP and in Exhibit 2.

## 6.3 REVENUE DEFICIENCY OR SURPLUS

### 6.3.1 CALCULATION OF REVENUE DEFICIENCY OR SURPLUS

CWH's net revenue deficiency under the proposed rates is \$605,699 using the Service Revenue Requirement or \$3,999,717 using the Base Revenue Requirement (as shown in Table 9 below). This deficiency is calculated as the difference between the 2018 Test Year Revenue Requirement and the Forecast Test Year Revenue Requirement at CWH's 2017 approved distribution rates.

**Table 9: Summary Table of Revenue Requirement and Revenue Deficiency/Sufficiency**

	Application
Service Revenue Requirement	\$3,999,717
Grossed-Up Revenue Deficiency/(Sufficiency)	\$465,817
Base Revenue Requirement (to be recovered from Distribution Rates)	\$3,707,317
Revenue Deficiency/(Sufficiency) Associated with Base Revenue Requirement	\$465,817

The Revenue Deficiency sheet presented below is an excerpt from the Revenue Requirement Work Form, Sheet 8. Rev\_Def\_Suff. The drivers of the revenue deficiency are detailed in section 6.3.2 below.

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**Table 10: Revenue Deficiency (RRWF)<sup>1</sup>**

Particulars	At Current Approved Rates	At Proposed Rates
Revenue Deficiency from Below		\$465,817
Distribution Revenue	\$3,241,500	\$3,241,500
Other Operating Revenue Offsets - net	\$292,400	\$292,400
<b>Total Revenue</b>	<b>\$3,533,900</b>	<b>\$3,999,717</b>
Operating Expenses	\$3,014,200	\$3,014,200
Deemed Interest Expense	\$379,818	\$379,818
<b>Total Cost and Expenses</b>	<b>\$3,394,018</b>	<b>\$3,394,018</b>
<b>Utility Income Before Income Taxes</b>	<b>\$139,882</b>	<b>\$605,699</b>
Tax Adjustments to Accounting Income per 2013 PILs model	(\$605,699)	(\$605,699)
<b>Taxable Income</b>	<b>(\$465,817)</b>	<b>\$ -</b>
Income Tax Rate	0.00%	0.00%
<b>Income Tax on Taxable Income</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Income Tax Credits</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Utility Net Income</b>	<b>\$139,882</b>	<b>\$605,699</b>
<b>Utility Rate Base</b>	<b>\$17,246,554</b>	<b>\$17,246,554</b>
Deemed Equity Portion of Rate Base	\$6,898,622	\$6,898,622
Income/(Equity Portion of Rate Base)	2.03%	8.78%
Target Return - Equity on Rate Base	8.78%	8.78%
Deficiency/Sufficiency in Return on Equity	-6.75%	0.00%
Indicated Rate of Return	3.01%	5.71%
Requested Rate of Return on Rate Base	5.71%	5.71%
Deficiency/Sufficiency in Rate of Return	-2.70%	0.00%
Target Return on Equity	\$605,699	\$605,699
Revenue Deficiency/(Sufficiency)	\$465,817	\$ -
<b>Gross Revenue Deficiency/(Sufficiency)</b>	<b>\$465,817</b>	<b>(1)</b>

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<sup>1</sup> MFR - Calculation of delivery-related Revenue Deficiency/Sufficiency (excluding cost of power and associated costs): net utility income, rate base, actual return on rate base, indicated rate of return, requested rate of return, deficiency/sufficiency, gross deficiency/sufficiency. Deficiency/sufficiency must also be net of other costs (e.g. LV costs, RSVAs, smart meter and other DVA balances).

### 6.3.2 CAUSES OF REVENUE DEFICIENCY OR SURPLUS

CWH's existing rates are based on the Board-approved rates in 2013 following a cost of service rate application, and adjustments to its base distribution rates in 2013-2017 under the Board's third Generation Incentive Regulation Mechanism.

As shown in Table 10 in the previous section, the Revenue Deficiency is determined to be \$604,668. The deficiency is for the most part due to the increase in the Rate Base, Depreciation Expenses, and OM&A.<sup>2</sup>

The proposed rate base for 2018 is \$17,246,554, \$5.4M higher than the 2013 Board-approved amount, an increase of 46.2%. Based on a 5.71% overall cost of capital, the increase in the rate base drives an increase to the revenue requirement. The factors contributing to the change in the rate base are discussed in detail at Exhibit 2 but for the most part, are due to investments in the distribution system, specifically distribution stations to follow the Asset Management Plan within our 2013 CoS, which is provided within our DSP in Exhibit 2 of this filing.

The increased expense for Operations, Maintenance, and Administration (OM&A) is another reason for the revenue deficiency. Projected OM&A for 2018 is \$368,795 higher than the 2013 Board-approved amount, which represents an increase of 17.9%. The cost drivers underlying this increase are explained in Exhibit 4.

The major contributors of the deficiency, in a table comparing the specifics from 2013 Board Approved to 2018 Test Year, are presented following the contributors below.

- The increase in OM&A of \$382,195 from \$2,022,105 in 2013 Board Approved to \$2,404,300 in 2018 all of which are explained in detail throughout Exhibit 4.
- An increase in Average Net Fixed Assets of \$ 6,128,177 from \$9,432,633 in 2013 Board approved to \$15,560,810 in 2018 all of which are explained at Exhibit 2 and in the DSP.

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<sup>2</sup> MFR - Summary of drivers for test year deficiency/sufficiency, how much each driver contributes; references in application evidence mapped to drivers

- 1 • A decrease Working Capital of \$685,226 from \$2,346,078 in 2013 Board approved to  
2 \$1,660,852 in 2018.
- 3 • A decrease in the Weighted Average Cost of Capital from 5.99% of 2013 Board  
4 approved to 5.71% in 2018 which is explained at Exhibit 5.
- 5 • An increase in Depreciation Expenses of \$82,081 from \$508,619 in the 2013 Board  
6 approved to \$590,700 in 2018 which is detailed in Exhibit 4.

### 7 6.3.3 IMPACT OF IMPLEMENTATION OF MIFRS ON REVENUE DEFICIENCY OR 8 SURPLUS

9 In CWH's last CoS Application completed in 2013, CWH received approval from the Board for  
10 the change in accounting policy for an update in CWH's useful lives. No further changes have  
11 occurred that would result in a change in revenue deficiency or sufficiency.

12 CWH's OM&A has not been impacted by the policy which states that burdens which are longer  
13 eligible for capitalization should be removed from rate base and included as an operating  
14 expense since the utility has never capitalized administrative burdens on capital projects.<sup>3</sup>

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<sup>3</sup> MFR -Impacts of any changes in methodologies to deficiency/sufficiency

1 **APPENDICES**

2

Appendix A	<b>PDF of RRWF<sup>4 5</sup></b>
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3

4

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<sup>4</sup> MFR - RRWF - in PDF and Excel. Revenue requirement, def/sufficiency, data entered in RRWF must correspond with other exhibits  
<sup>5</sup> MFR - If the enhanced RRWF cannot reflect a distributor's proposed rates accurately, the distributor must file its rate generator model



## **Appendix A**

### **PDF of RRWF**



Ontario Energy Board

# Revenue Requirement Workform (RRWF) for 2017 Filers



Version 7.00

Utility Name	Centre Wellington Hydro Ltd.
Service Territory	Town of Fergus/Village of Elora
Assigned EB Number	EB-2017-0032
Name and Title	Florence Thiessen, Vice President Finance & Regula
Phone Number	519 843-2900 Ext. 225
Email Address	<a href="mailto:thiessen@cwhydro.ca">thiessen@cwhydro.ca</a>

The RRWF has been enhanced commencing with 2017 rate applications to provide estimated base distribution rates. The enhanced RRWF is not intended to replace a utility's formal rate generator model which should continue to be the source of the proposed rates as well as the final ones at the conclusion of the proceeding. The load forecasting addition made to this model is intended to be demonstrative only and does not replace the information filed in the utility's application. In an effort to minimize the incremental work required from utilities, the cost allocation and rate design additions to this model do in fact replace former appendices that were required to be filed as part of the cost of service (Chapter 2) filing requirements.

***This Workbook Model is protected by copyright and is being made available to you solely for the purpose of filing your application. You may use and copy this model for that purpose, and provide a copy of this model to any person that is advising or assisting you in that regard. Except as indicated above, any copying, reproduction, publication, sale, adaptation, translation, modification, reverse engineering or other use or dissemination of this model without the express written consent of the Ontario Energy Board is prohibited. If you provide a copy of this model to a person that is advising or assisting you in preparing the application or reviewing your draft rate order, you must ensure that the person understands and agrees to the restrictions noted above.***

***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 2017 Filers

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[3. Data Input Sheet](#)

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[14. 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 format.***



# Revenue Requirement Workform (RRWF) for 2017 Filers

Data Input <sup>(1)</sup>

	Initial Application <sup>(2)</sup>					Per Board Decision
<b>1 Rate Base</b>						
Gross Fixed Assets (average)	\$27,430,788			\$ 27,430,788		\$27,430,788
Accumulated Depreciation (average)	(\$11,869,977) <sup>(5)</sup>			(\$11,869,977)		(\$11,869,977)
<b>Allowance for Working Capital:</b>						
Controllable Expenses	\$2,423,500			\$ 2,423,500		\$2,423,500
Cost of Power	\$20,053,083			\$ 20,053,083		\$20,053,083
Working Capital Rate (%)	7.50% <sup>(9)</sup>				<sup>(9)</sup>	<sup>(9)</sup>
<b>2 Utility Income</b>						
<b>Operating Revenues:</b>						
Distribution Revenue at Current Rates	\$3,241,500					
Distribution Revenue at Proposed Rates	\$3,707,317					
<b>Other Revenue:</b>						
Specific Service Charges	\$124,600					
Late Payment Charges	\$14,300					
Other Distribution Revenue	\$105,700					
Other Income and Deductions	\$47,800					
Total Revenue Offsets	\$292,400 <sup>(7)</sup>					
<b>Operating Expenses:</b>						
OM+A Expenses	\$2,404,300			\$ 2,404,300		\$2,404,300
Depreciation/Amortization	\$590,700			\$ 590,700		\$590,700
Property taxes	\$19,200			\$ 19,200		\$19,200
Other expenses						
<b>3 Taxes/PILs</b>						
<b>Taxable Income:</b>						
Adjustments required to arrive at taxable income	(\$605,699) <sup>(3)</sup>					
<b>Utility Income Taxes and Rates:</b>						
Income taxes (not grossed up)	\$ -					
Income taxes (grossed up)	\$ -					
Federal tax (%)	0.00%					
Provincial tax (%)	0.00%					
Income Tax Credits						
<b>4 Capitalization/Cost of Capital</b>						
<b>Capital Structure:</b>						
Long-term debt Capitalization Ratio (%)	56.0%					
Short-term debt Capitalization Ratio (%)	4.0% <sup>(8)</sup>				<sup>(8)</sup>	<sup>(9)</sup>
Common Equity Capitalization Ratio (%)	40.0%					
Preferred Shares Capitalization Ratio (%)						
	100.0%					
<b>Cost of Capital</b>						
Long-term debt Cost Rate (%)	3.81%					
Short-term debt Cost Rate (%)	1.76%					
Common Equity Cost Rate (%)	8.78%					
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, a WCA factor based on lead-lag study, with supporting rationale could be provided.



# Revenue Requirement Workform (RRWF) for 2017 Filers

## Rate Base and Working Capital

Line No.	Rate Base				Per Board Decision			
	Particulars	Initial Application						Decision
1	Gross Fixed Assets (average) <sup>(2)</sup>	\$27,430,788	\$ -	\$27,430,788	\$ -	\$27,430,788	\$ -	\$27,430,788
2	Accumulated Depreciation (average) <sup>(2)</sup>	(\$11,869,977)	\$ -	(\$11,869,977)	\$ -	(\$11,869,977)	\$ -	(\$11,869,977)
3	Net Fixed Assets (average) <sup>(2)</sup>	\$15,560,810	\$ -	\$15,560,810	\$ -	\$15,560,810	\$ -	\$15,560,810
4	Allowance for Working Capital <sup>(1)</sup>	\$1,685,744	(\$1,685,744)	\$ -	\$ -	\$ -	\$ -	\$ -
5	<b>Total Rate Base</b>	<b>\$17,246,554</b>	<b>(\$1,685,744)</b>	<b>\$15,560,810</b>	<b>\$ -</b>	<b>\$15,560,810</b>	<b>\$ -</b>	<b>\$15,560,810</b>

### (1) Allowance for Working Capital - Derivation

6	Controllable Expenses	\$2,423,500	\$ -	\$2,423,500	\$ -	\$2,423,500	\$ -	\$2,423,500
7	Cost of Power	\$20,053,083	\$ -	\$20,053,083	\$ -	\$20,053,083	\$ -	\$20,053,083
8	Working Capital Base	\$22,476,583	\$ -	\$22,476,583	\$ -	\$22,476,583	\$ -	\$22,476,583
9	Working Capital Rate % <sup>(1)</sup>	7.50%	-7.50%	0.00%	0.00%	0.00%	0.00%	0.00%
10	Working Capital Allowance	\$1,685,744	(\$1,685,744)	\$ -	\$ -	\$ -	\$ -	\$ -

#### Notes

(1) Some Applicants may have a unique rate as a result of a lead-lag study. The default rate for 2017 cost of service applications is 7.5%, per the letter issued by the Board on June 3, 2015.

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



# Revenue Requirement Workform (RRWF) for 2017 Filers

## Utility Income

Line No.	Particulars	Initial Application				Per Board Decision
<b>Operating Revenues:</b>						
1	Distribution Revenue (at Proposed Rates)	\$3,707,317	(\$3,707,317)	\$ -	\$ -	\$ -
2	Other Revenue <sup>(1)</sup>	\$292,400	(\$292,400)	\$ -	\$ -	\$ -
3	Total Operating Revenues	\$3,999,717	(\$3,999,717)	\$ -	\$ -	\$ -
<b>Operating Expenses:</b>						
4	OM+A Expenses	\$2,404,300	\$ -	\$2,404,300	\$ -	\$2,404,300
5	Depreciation/Amortization	\$590,700	\$ -	\$590,700	\$ -	\$590,700
6	Property taxes	\$19,200	\$ -	\$19,200	\$ -	\$19,200
7	Capital taxes	\$ -	\$ -	\$ -	\$ -	\$ -
8	Other expense	\$ -	\$ -	\$ -	\$ -	\$ -
9	Subtotal (lines 4 to 8)	\$3,014,200	\$ -	\$3,014,200	\$ -	\$3,014,200
10	Deemed Interest Expense	\$379,818	(\$379,818)	\$ -	\$ -	\$ -
11	Total Expenses (lines 9 to 10)	\$3,394,018	(\$379,818)	\$3,014,200	\$ -	\$3,014,200
12	Utility income before income taxes	\$605,699	(\$3,619,899)	(\$3,014,200)	\$ -	(\$3,014,200)
13	Income taxes (grossed-up)	\$ -	\$ -	\$ -	\$ -	\$ -
14	Utility net income	\$605,699	(\$3,619,899)	(\$3,014,200)	\$ -	(\$3,014,200)

Notes

**Other Revenues / Revenue Offsets**

<sup>(1)</sup>	Specific Service Charges	\$124,600	\$ -	\$ -	\$ -
	Late Payment Charges	\$14,300	\$ -	\$ -	\$ -
	Other Distribution Revenue	\$105,700	\$ -	\$ -	\$ -
	Other Income and Deductions	\$47,800	\$ -	\$ -	\$ -
	Total Revenue Offsets	\$292,400	\$ -	\$ -	\$ -



# Revenue Requirement Workform (RRWF) for 2017 Filers

**Taxes/PILs**

Line No.	Particulars	Application		Per Board Decision	
<b><u>Determination of Taxable Income</u></b>					
1	Utility net income before taxes	\$605,699	\$ -	\$ -	\$ -
2	Adjustments required to arrive at taxable utility income	(\$605,699)	\$ -	\$ -	\$ -
3	Taxable income	\$ -	\$ -	\$ -	\$ -
<b><u>Calculation of Utility Income Taxes</u></b>					
4	Income taxes	\$ -	\$ -	\$ -	\$ -
6	Total taxes	\$ -	\$ -	\$ -	\$ -
7	Gross-up of Income Taxes	\$ -	\$ -	\$ -	\$ -
8	Grossed-up Income Taxes	\$ -	\$ -	\$ -	\$ -
9	PILs / tax Allowance (Grossed-up Income taxes + Capital taxes)	\$ -	\$ -	\$ -	\$ -
10	Other tax Credits	\$ -	\$ -	\$ -	\$ -
<b><u>Tax Rates</u></b>					
11	Federal tax (%)	0.00%	0.00%	0.00%	0.00%
12	Provincial tax (%)	0.00%	0.00%	0.00%	0.00%
13	Total tax rate (%)	0.00%	0.00%	0.00%	0.00%

**Notes**



# Revenue Requirement Workform (RRWF) for 2017 Filers

## Capitalization/Cost of Capital

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
<b>Initial Application</b>					
	<b>Debt</b>				
1	Long-term Debt	56.00%	\$9,658,070	3.81%	\$367,676
2	Short-term Debt	4.00%	\$689,862	1.76%	\$12,142
3	<b>Total Debt</b>	<b>60.00%</b>	<b>\$10,347,933</b>	<b>3.67%</b>	<b>\$379,818</b>
	<b>Equity</b>				
4	Common Equity	40.00%	\$6,898,622	8.78%	\$605,699
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	<b>Total Equity</b>	<b>40.00%</b>	<b>\$6,898,622</b>	<b>8.78%</b>	<b>\$605,699</b>
7	<b>Total</b>	<b>100.00%</b>	<b>\$17,246,554</b>	<b>5.71%</b>	<b>\$985,517</b>
<b>Per Board Decision</b>					
	<b>Debt</b>				
1	Long-term Debt	0.00%	\$ -	0.00%	\$ -
2	Short-term Debt	0.00%	\$ -	0.00%	\$ -
3	<b>Total Debt</b>	<b>0.00%</b>	<b>\$ -</b>	<b>0.00%</b>	<b>\$ -</b>
	<b>Equity</b>				
4	Common Equity	0.00%	\$ -	0.00%	\$ -
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	<b>Total Equity</b>	<b>0.00%</b>	<b>\$ -</b>	<b>0.00%</b>	<b>\$ -</b>
7	<b>Total</b>	<b>0.00%</b>	<b>\$15,560,810</b>	<b>0.00%</b>	<b>\$ -</b>
	<b>Debt</b>				
8	Long-term Debt	0.00%	\$ -	3.81%	\$ -
9	Short-term Debt	0.00%	\$ -	1.76%	\$ -
10	<b>Total Debt</b>	<b>0.00%</b>	<b>\$ -</b>	<b>0.00%</b>	<b>\$ -</b>
	<b>Equity</b>				
11	Common Equity	0.00%	\$ -	8.78%	\$ -
12	Preferred Shares	0.00%	\$ -	0.00%	\$ -
13	<b>Total Equity</b>	<b>0.00%</b>	<b>\$ -</b>	<b>0.00%</b>	<b>\$ -</b>
14	<b>Total</b>	<b>0.00%</b>	<b>\$15,560,810</b>	<b>0.00%</b>	<b>\$ -</b>

**Notes**





# Revenue Requirement Workform (RRWF) for 2017 Filers

## Revenue Deficiency/Sufficiency

Line No.	Particulars	Initial Application		Per Board Decision		Per Board Decision	
		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		\$465,817		(\$227,300)		\$3,014,200
2	Distribution Revenue	\$3,241,500	\$3,241,500	\$3,241,500	\$3,934,617	\$ -	(\$3,014,200)
3	Other Operating Revenue Offsets - net	\$292,400	\$292,400	\$ -	\$ -	\$ -	\$ -
4	<b>Total Revenue</b>	<b>\$3,533,900</b>	<b>\$3,999,717</b>	<b>\$3,241,500</b>	<b>\$3,707,317</b>	<b>\$ -</b>	<b>\$ -</b>
5	Operating Expenses	\$3,014,200	\$3,014,200	\$3,014,200	\$3,014,200	\$3,014,200	\$3,014,200
6	Deemed Interest Expense	\$379,818	\$379,818	\$ -	\$ -	\$ -	\$ -
8	<b>Total Cost and Expenses</b>	<b>\$3,394,018</b>	<b>\$3,394,018</b>	<b>\$3,014,200</b>	<b>\$3,014,200</b>	<b>\$3,014,200</b>	<b>\$3,014,200</b>
9	<b>Utility Income Before Income Taxes</b>	\$139,882	\$605,699	\$227,300	\$693,117	(\$3,014,200)	(\$3,014,200)
10	Tax Adjustments to Accounting Income per 2013 PILs model	(\$605,699)	(\$605,699)	(\$605,699)	(\$605,699)	\$ -	\$ -
11	<b>Taxable Income</b>	<b>(\$465,817)</b>	<b>\$ -</b>	<b>(\$378,399)</b>	<b>\$87,418</b>	<b>(\$3,014,200)</b>	<b>(\$3,014,200)</b>
12	Income Tax Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
13	<b>Income Tax on Taxable Income</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
14	<b>Income Tax Credits</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
15	<b>Utility Net Income</b>	<b>\$139,882</b>	<b>\$605,699</b>	<b>\$227,300</b>	<b>(\$3,014,200)</b>	<b>(\$3,014,200)</b>	<b>(\$3,014,200)</b>
16	<b>Utility Rate Base</b>	\$17,246,554	\$17,246,554	\$15,560,810	\$15,560,810	\$15,560,810	\$15,560,810
17	Deemed Equity Portion of Rate Base	\$6,898,622	\$6,898,622	\$ -	\$ -	\$ -	\$ -
18	Income/(Equity Portion of Rate Base)	2.03%	8.78%	0.00%	0.00%	0.00%	0.00%
19	Target Return - Equity on Rate Base	8.78%	8.78%	0.00%	0.00%	0.00%	0.00%
20	Deficiency/Sufficiency in Return on Equity	-6.75%	0.00%	0.00%	0.00%	0.00%	0.00%
21	Indicated Rate of Return	3.01%	5.71%	1.46%	0.00%	-19.37%	0.00%
22	Requested Rate of Return on Rate Base	5.71%	5.71%	0.00%	0.00%	0.00%	0.00%
23	Deficiency/Sufficiency in Rate of Return	-2.70%	0.00%	1.46%	0.00%	-19.37%	0.00%
24	Target Return on Equity	\$605,699	\$605,699	\$ -	\$ -	\$ -	\$ -
25	Revenue Deficiency/(Sufficiency)	\$465,817	\$ -	(\$227,300)	\$ -	\$3,014,200	\$ -
26	<b>Gross Revenue Deficiency/(Sufficiency)</b>	<b>\$465,817 <sup>(1)</sup></b>		<b>(\$227,300) <sup>(1)</sup></b>		<b>\$3,014,200 <sup>(1)</sup></b>	

**Notes:**

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



# Revenue Requirement Workform (RRWF) for 2017 Filers

## Revenue Requirement

Line No.	Particulars	Application		Per Board Decision	
1	OM&A Expenses	\$2,404,300		\$2,404,300	
2	Amortization/Depreciation	\$590,700		\$590,700	
3	Property Taxes	\$19,200		\$19,200	
5	Income Taxes (Grossed up)	\$ -		\$ -	
6	Other Expenses	\$ -		\$ -	
7	Return				
	Deemed Interest Expense	\$379,818		\$ -	
	Return on Deemed Equity	\$605,699		\$ -	
8	<b>Service Revenue Requirement (before Revenues)</b>	<u>\$3,999,717</u>		<u>\$3,014,200</u>	
9	Revenue Offsets	\$292,400		\$ -	
10	<b>Base Revenue Requirement (excluding Transformer Owership Allowance credit adjustment)</b>	<u>\$3,707,317</u>		<u>\$3,014,200</u>	
11	Distribution revenue	\$3,707,317		\$ -	
12	Other revenue	\$292,400		\$ -	
13	<b>Total revenue</b>	<u>\$3,999,717</u>		<u>\$ -</u>	
14	<b>Difference (Total Revenue Less Distribution Revenue Requirement before Revenues)</b>	<u>\$ -</u>	( <sup>(1)</sup> )	<u>(\$3,014,200)</u>	( <sup>(1)</sup> )

Summary Table of Revenue Requirement and Revenue Deficiency/Sufficiency

	Application		Δ% <sup>(2)</sup>	Per Board Decision	Δ% <sup>(2)</sup>
<b>Service Revenue Requirement Grossed-Up Revenue Deficiency/(Sufficiency)</b>	\$3,999,717	\$3,014,200	<b>(\$0)</b>	\$3,014,200	<b>(\$1)</b>
	\$465,817	(\$227,300)	<b>(\$1)</b>	\$3,014,200	<b>(\$1)</b>
<b>Base Revenue Requirement (to be recovered from Distribution Rates) Revenue Deficiency/(Sufficiency) Associated with Base Revenue Requirement</b>	\$3,707,317	\$3,014,200	<b>(\$0)</b>	\$3,014,200	<b>(\$1)</b>
	\$465,817	\$ -	<b>(\$1)</b>	\$ -	<b>(\$1)</b>

**Notes**

- (1) Line 11 - Line 8
- (2) Percentage Change Relative to Initial Application



# Revenue Requirement Workform (RRWF) for 2017 Filers

## Load Forecast Summary

This spreadsheet provides a summary of the customer and load forecast on which the test year revenue requirement is derived. The amounts serve as the denominators for deriving the rates to recover the test year revenue requirement for purposes of this RRWF.

The information to be input is inclusive of any adjustments to kWh and kW to reflect the impacts of CDM programs up to and including CDM programs planned to be executed in the test year. i.e., the load forecast adjustments determined in **Appendix 2-I** should be incorporated into the entries. The inputs should correspond with the summary of the Load Forecast for the Test Year in **Appendix 2-IB** and in Exhibit 3 of the application.

**Appendix 2-IB** is still required to be filled out, as it also provides a year-over-year variance analysis of demand growth and trends from historical actuals to the Bridge and Test Year forecasts.

Stage in Process:		Initial Application			Initial Application			Per Board Decision		
Customer Class		Customer / Connections	kWh	kW/kVA <sup>(1)</sup>	Customer / Connections	kWh	kW/kVA <sup>(1)</sup>	Customer / Connections	kWh	kW/kVA <sup>(1)</sup>
Input the name of each customer class.		Test Year average or mid-year	Annual	Annual	Test Year average or mid-year	Annual	Annual	Test Year average or mid-year	Annual	Annual
1	Residential	6,107	44,716,576	-						
2	General Service < 50 kW	758	20,596,746	-						
3	General Service 50 to 2999 kW	45	59,273,907	160,292						
4	General Service 3000-4999 kW	1	18,632,513	43,538						
5	Unmetered Scattered Load	13	548,560	-						
6	Sentinel Lighting	29	38,252	106						
7	Street Lighting	1,716	558,906	1,536						
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
<b>Total</b>			<b>144,365,460</b>	<b>205,472</b>						

**Notes:**

<sup>(1)</sup> Input kW or kVA for those customer classes for which billing is based on demand (kW or kVA) versus energy consumption (kWh)



# Revenue Requirement Workform (RRWF) for 2017 Filers

## Cost Allocation and Rate Design

This spreadsheet replaces **Appendix 2-P** and provides a summary of the results from the Cost Allocation spreadsheet, and is used in the determination of the class revenue requirement and, hence, ultimately, the determination of rates from customers in all classes to recover the revenue requirement.

Stage in Application Process: *Initial Application*

### A) Allocated Costs

Name of Customer Class <sup>(3)</sup>	Costs Allocated from Previous Study <sup>(1)</sup>	%	Allocated Class Revenue Requirement <sup>(1)</sup> <i>(7A)</i>	%
<i>From Sheet 10. Load Forecast</i>				
1 Residential	\$ 1,440,293	61.47%	\$ 2,167,575	54.19%
2 General Service < 50 kW	\$ 385,103	16.44%	\$ 679,010	16.98%
3 General Service 50 to 2999 kW	\$ 421,859	18.00%	\$ 814,444	20.36%
4 General Service 3000-4999 kW	\$ 52,982	2.26%	\$ 228,984	5.73%
5 Unmetered Scattered Load	\$ 4,342	0.19%	\$ 9,644	0.24%
6 Sentinel Lighting	\$ 2,229	0.10%	\$ 5,171	0.13%
7 Street Lighting	\$ 36,271	1.55%	\$ 94,889	2.37%
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
<b>Total</b>	<b>\$ 2,343,079</b>	<b>100.00%</b>	<b>\$ 3,999,717</b>	<b>100.00%</b>
<b>Allocated revenue requirement does not match Base Revenue Requirement from Sheet 9. Check data.</b>			<b>\$ 3,707,316.83</b>	

- (1) Class Allocated Revenue Requirement, from Sheet O-1, Revenue to Cost || RR, row 40, from the Cost Allocation Study in this application. This excludes costs in deferral and variance accounts. For Embedded Distributors, Account 4750 - Low Voltage (LV) Costs are also excluded.
- (2) Host Distributors - Provide information on any embedded distributor(s) as a separate class, if applicable. If embedded distributors are billed in a General Service class, include the allocated costs and revenues of the embedded distributor(s) in the applicable class, and also complete Appendix 2-Q.
- (3) Customer Classes - If these differ from those in place in the previous cost allocation study, modify the customer classes to match the proposal in the current application as closely as possible.

**B) Calculated Class Revenues**

Name of Customer Class	Load Forecast (LF) X current approved rates (7B)	LF X current approved rates X (1+d) (7C)	LF X Proposed Rates (7D)	Miscellaneous Revenues (7E)
1 Residential	\$ 1,871,336	\$ 2,140,255	\$ 2,091,907	\$ 164,228
2 General Service < 50 kW	\$ 563,220	\$ 644,157	\$ 643,586	\$ 55,526
3 General Service 50 to 2999 kW	\$ 632,869	\$ 723,814	\$ 724,272	\$ 48,118
4 General Service 3000-4999 kW	\$ 110,020	\$ 125,830	\$ 169,967	\$ 13,446
5 Unmetered Scattered Load	\$ 7,059	\$ 8,073	\$ 8,063	\$ 675
6 Sentinel Lighting	\$ 2,949	\$ 3,373	\$ 3,681	\$ 455
7 Street Lighting	\$ 54,048	\$ 61,815	\$ 65,841	\$ 9,951
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<b>Total</b>	\$ 3,241,501	\$ 3,707,317	\$ 3,707,317	\$ 292,400

- (4) In columns 7B to 7D, LF means Load Forecast of Annual Billing Quantities (i.e., customers or connections, as applicable X 12 months, and kWh, kW or kVA as applicable. Revenue quantities should be net of the Transformer Ownership Allowance for applicable customer classes. Exclude revenues from rate adders and rate riders.
- (5) Columns 7C and 7D - Column Total should equal the Base Revenue Requirement for each.
- (6) Column 7C - The OEB-issued cost allocation model calculates "1+d" on worksheet O-1, cell C22. "d" is defined as Revenue Deficiency/Revenue at Current Rates.
- (7) Column 7E - If using the OEB-issued cost allocation model, enter Miscellaneous Revenues as it appears on worksheet O-1, row 19,

C) **Rebalancing Revenue-to-Cost Ratios**

Name of Customer Class	Previously Approved Ratios	Status Quo Ratios	Proposed Ratios	Policy Range
	Most Recent Year: 2013	(7C + 7E) / (7A)	(7D + 7E) / (7A)	
	%	%	%	%
1 Residential	9965.00%	106.32%	104.09%	85 - 115
2 General Service < 50 kW	9905.00%	103.04%	102.96%	85 - 115
3 General Service 50 to 2999 kW	9975.00%	94.78%	94.84%	80 - 120
4 General Service 3000-4999 kW	9969.00%	60.82%	80.10%	80 - 120
5 Unmetered Scattered Load	12000.00%	90.72%	90.61%	80 - 120
6 Sentinel Lighting	12000.00%	74.04%	80.00%	80 - 120
7 Street Lighting	12000.00%	75.63%	79.87%	80 - 120
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- (8) Previously Approved Revenue-to-Cost (R/C) Ratios - For most applicants, the most recent year would be the third year (at the latest) of the Price Cap IR period. For example, if the applicant, rebased in 2012 with further adjustments to move within the range over two years, the Most Recent Year would be 2015. However, the ratios in 2015 would be equal to those after the adjustment in 2014.
- (9) Status Quo Ratios - The OEB-issued cost allocation model provides the Status Quo Ratios on Worksheet O-1. The Status Quo means "Before Rebalancing".
- (10) Ratios shown in red are outside of the allowed range. Applies to both Tables C and D.

(D) Proposed Revenue-to-Cost Ratios <sup>(11)</sup>

Name of Customer Class	Proposed Revenue-to-Cost Ratio			Policy Range
	Test Year 2017	2018	Price Cap IR Period 2019	
1 Residential	104.09%	104.09%	104.09%	85 - 115
2 General Service < 50 kW	102.96%	102.96%	102.96%	85 - 115
3 General Service 50 to 2999 kW	94.84%	94.84%	94.84%	80 - 120
4 General Service 3000-4999 kW	80.10%	80.10%	80.10%	80 - 120
5 Unmetered Scattered Load	90.61%	90.61%	90.61%	80 - 120
6 Sentinel Lighting	80.00%	80.00%	80.00%	80 - 120
7 Street Lighting	79.87%	79.87%	79.87%	80 - 120
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(11) The applicant should complete Table D if it is applying for approval of a revenue-to-cost ratio in 2017 that is outside of the OEB's policy range for any customer class. Table D will show that the distributor is likely to enter into the 2018 and 2019 Price Cap IR models, as necessary. For 2018 and 2019, enter the planned revenue-to-cost ratios that will be "Change" or "No Change" in 2017 (in the current Revenue/Cost Ratio Adjustment Workform, Worksheet C1.1 'Decision - Cost Revenue Adjustment, column d), and enter TBD for class(es) that will be entered as 'Rebalance'.



# Revenue Requirement Workform (RRWF) for 2017 Filers

## New Rate Design Policy For Residential Customers

Please complete the following tables.

### A Data Inputs (from Sheet 10. Load Forecast)

Test Year Billing Determinants for Residential Class	
Customers	6,107
kWh	44,716,576

Proposed Residential Class Specific Revenue Requirement <sup>1</sup>	\$ 2,091,907.13
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Residential Base Rates on Current Tariff	
Monthly Fixed Charge (\$)	21.02
Distribution Volumetric Rate (\$/kWh)	0.0074

### B Current Fixed/Variable Split

	Base Rates	Billing Determinants	Revenue	% of Total Revenue
Fixed	21.02	6,107	\$ 1,540,433.29	82.32%
Variable	0.0074	44,716,576	\$ 330,902.66	17.68%
<b>TOTAL</b>	-	-	\$ 1,871,335.95	-

### C Calculating Test Year Base Rates

Number of Remaining Rate Design Policy Transition Years <sup>2</sup>	2
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	Test Year Revenue @ Current F/V Split	Test Year Base Rates @ Current F/V Split	Reconciliation - Test Year Base Rates @ Current F/V Split
Fixed	\$ 1,722,001.54	23.5	\$ 1,722,178.03
Variable	\$ 369,905.60	0.0083	\$ 371,147.58
<b>TOTAL</b>	\$ 2,091,907.13	-	\$ 2,093,325.61

	New F/V Split	Revenue @ new F/V Split	Final Adjusted Base Rates	Revenue Reconciliation @ Adjusted Rates
Fixed	91.16%	\$ 1,906,954.34	26.02	\$ 1,906,854.14
Variable	8.84%	\$ 184,952.80	0.0041	\$ 183,337.96
<b>TOTAL</b>	-	\$ 2,091,907.13	-	\$ 2,090,192.10

Checks <sup>3</sup>	
Change in Fixed Rate	\$ 2.52
Difference Between Revenues @ Proposed Rates and Class Specific	(\$1,715.03)
	-0.08%

#### Notes:

- The final residential class specific revenue requirement, excluding allocated Miscellaneous Revenues, as shown on Sheet 11. Cost Allocation, should be used (i.e. the revenue requirement after any proposed adjustments to R/C ratios).
- The distributor should enter the number of years remaining before the transition to fully fixed rates is completed. A distributor transitioning to fully fixed rates over a four year period and began the transition in 2016 would input the number "3" into cell D40. A distributor transitioning over a five-year period would input the number "4". Where the change in the residential rate design will result in the fixed charge increasing by more than \$4/year, a distributor may propose an additional transition year.
- Change in fixed rate due to rate design policy should be less than \$4. The difference between the proposed class revenue requirement and the revenue at calculated base rates should be minimal (i.e. should be reasonably considered as a rounding error)





# Revenue Requirement Workform (RRWF) for 2017 Filers

### Tracking Form

The first row shown, labelled "Original Application", summarizes key statistics based on the data inputs into the RRWF. After the original application filing, the applicant provides key changes in capital and operating expenses, load forecasts, cost of capital, etc., as revised through the processing of the application. This could be due to revisions or responses to interrogatories. 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.

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

<sup>(2)</sup> Short description of change. issue. etc.

### Summary of Proposed Changes

Reference <sup>(1)</sup>	Item / Description <sup>(2)</sup>	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	\$ 985,517	5.71%	\$ 17,246,554	\$ 22,476,583	\$ 1,685,744	\$ 590,700	\$ -	\$ 2,404,300	\$ 3,999,717	\$ 292,400	\$ 3,707,317	\$ 465,817

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