

**EXHIBIT 6 – CALCULATION OF REVENUE  
DEFICIENCY OR SURPLUS**

1

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1     **REVENUE DEFICIENCY - OVERVIEW**

2     E.L.K. Energy Inc. ("E.L.K") revenue deficiency is 627,952. This deficiency is calculated as the difference  
3     between the 2017 Test Year Revenue Requirement of \$4,513,093 and the Forecast 2017 Test Year  
4     Revenue, based on the 2016 approved rates, at \$3,885,141. Table 6-1 on the following page provides the  
5     revenue deficiency calculations. The table also includes the determination of net utility income, statement  
6     of rate base, the utility return on rate base at existing rates and the requested rate of return on rate base  
7     in this application. Further details on these items are provided in the pdf version of the Revenue  
8     Requirement Work Form ("RRWF") filed as part of this Exhibit 6. A live Microsoft Excel version of the  
9     RRWF has also been filed with this Application.

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11     **Revenue Requirement:**

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13     E.L.K's Revenue Requirement consists of the following:

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- 15         - Administrative & General, Billing & Collecting Expense
- 16         - Operation & Maintenance Expense
- 17         - Depreciation Expense
- 18         - Property Taxes
- 19         - PILs
- 20         - Deemed Interest & Return on Equity

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22     E.L.K's revenue requirement is primarily received through electricity distribution rates with supplemental  
23     revenue from Board-approved specific service charges such as late payment charges and other  
24     miscellaneous charges.

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**Table 6-1 Revenue Deficiency Calculation**

Description	2017 Test Existing Rates	2017 Test - Required Revenue
<b>Revenue</b>		
Revenue Deficiency		627,952
Distribution Revenue	3,335,144	3,335,144
Other Operating Revenue (Net)	549,998	549,998
<b>Total Revenue</b>	<b>3,885,141</b>	<b>4,513,093</b>
<b>Costs and Expenses</b>		
Administrative & General, Billing & Collecting	1,967,097	1,967,097
Operation & Maintenance	1,542,300	1,542,300
Donations	100	100
Depreciation & Amortization	338,871	338,871
Property Taxes	17,410	17,410
Deemed Interest	206,171	206,171
<b>Total Costs and Expenses</b>	<b>4,071,949</b>	<b>4,071,949</b>
<b>Utility Income Before Income Taxes</b>	<b>(186,808)</b>	<b>441,144</b>
<b>Income Taxes:</b>		
Corporate Income Taxes	0	0
<b>Total Income Taxes</b>	<b>0</b>	<b>0</b>
<b>Utility Net Income</b>	<b>(186,808)</b>	<b>441,144</b>
<b>Income Tax Expense Calculation:</b>		
Accounting Income	(186,808)	441,144
Tax Adjustments to Accounting Income	(493,697)	(493,697)
<b>Taxable Income</b>	<b>(680,505)</b>	<b>(52,553)</b>
<b>Income tax expense before credits</b>	<b>0</b>	<b>0</b>
<b>Credits</b>	<b>0</b>	<b>0</b>
<b>Income Tax Expense</b>	<b>0</b>	<b>0</b>
<b>Tax Rate Reflecting Tax Credits</b>	<b>0.00%</b>	<b>0.00%</b>
<b>Actual Return on Rate Base:</b>		
Rate Base	12,000,666	12,000,666
Interest Expense	206,171	206,171
Net Income	(186,808)	441,144
<b>Total Actual Return on Rate Base</b>	<b>19,364</b>	<b>647,316</b>
<b>Actual Return on Rate Base</b>	<b>0.16%</b>	<b>5.39%</b>
<b>Required Return on Rate Base:</b>		
Rate Base	12,000,666	12,000,666
<b>Return Rates:</b>		
Return on Debt (Weighted)	2.86%	2.86%
Return on Equity	9.19%	9.19%
Deemed Interest Expense	206,171	206,171
Return On Equity	441,144	441,144
<b>Total Return</b>	<b>647,316</b>	<b>647,316</b>
<b>Expected Return on Rate Base</b>	<b>5.39%</b>	<b>5.39%</b>
<b>Revenue Deficiency After Tax</b>	<b>627,952</b>	<b>0</b>
<b>Revenue Deficiency Before Tax</b>	<b>627,952</b>	<b>0</b>

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1 **COST DRIVERS ON REVENUE DEFICIENCY**

2 Table 6-2 below outlines the contributors to the revenue deficiency by revenue requirement component.  
 3 Column A lists the 2012 approved amounts. Column B lists the 2017 revenue at existing rates shown in  
 4 Table 6-1 allocated to revenue requirement component based on the proportions in Column A. It is  
 5 E.L.K.'s view that Column B estimates the revenue requirement components for revenue at existing rates  
 6 based on the components assumed in existing rates. Column C lists the E.L.K.'s proposed components.  
 7 Finally, Column D represents the difference between Column C and Column B which provides an  
 8 estimate of the revenue requirement components for the revenue deficiency of \$627,952.

9 **Table 6-2 Revenue Deficiency by Revenue Requirement Component**

Service Revenue Requirement	2012 Approved (A)	2017 Revenue at Existing Rates Allocated in Proportion to 2012 Approved (B)	2017 Proposed (C)	Revenue Deficiency (D) = (C) - (B)
OM&A	2,448,972	2,554,197	3,509,396	955,199
LEAP	38	39	100	61
Property Tax	23,000	23,988	17,410	(\$6,578)
Depreciation	524,060	546,577	338,871	(\$207,706)
Return on Rate Base	658,613	686,911	647,316	(\$39,596)
PILs	70,403	73,428	0	(\$73,428)
Total	3,725,085	3,885,141	4,513,093	<b>627,952</b>
				Difference (D) = (C) - (A)
Rate Base	12,545,088		12,000,666	(\$544,423)

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The revenue deficiency of \$627,952 for the 2017 Test Year relates to increases to OM&A which are explained in detail in Exhibit 4. In summary, the four main contributors to the increases in OM&A are:

- The first results from E.L.K. projecting two additional operational linemen in the Test year to assist with future succession planning.
- The second relates to cost increases from 2012 in order to maintain the overhead and underground system.
- The third relates to costs in 2017 for two additional office staff members within E.L.K. E.L.K. is planning for an addition of an engineering manager to assist the operations manager as well as a financial and regulatory analyst to assist with the ever increasing regulatory requirements.
- The fourth contributor is costs incurred by E.L.K. for assistance in the preparation and support of this application.

1 As shown in Table 6-2, the increases in OM&A are offset by decreases in depreciation and PILs as well  
2 as some small decreases in property taxes and return on rate base. The decrease in depreciation results  
3 from E.L.K. transitioning to actual IFRS and the work surrounding the componentization and new useful  
4 lives which are in line with the Kinetric's report. Actual useful lives were extended resulting in a reduced  
5 depreciation expense. The lower depreciation also causes the PILs to reduce since the tax adjustment for  
6 accounting depreciation, which increases PILs, is lower. The lower return on rate base reflects a lower  
7 working capital allowance of 7.5% compared to 12% included in current rates.

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**APPENDIX 6-A:  
REVENUE REQUIREMENT WORK FORM**



Ontario Energy Board

# Revenue Requirement Workform (RRWF) for 2017 Filers



Version 7.02

Utility Name	E.L.K. Energy Inc.
Service Territory	Essex, Lakeshore, Kingsville, Cottam, Comber, Hal
Assigned EB Number	EB-2016-0066
Name and Title	Mark Danelon, Director, Finance & Regulatory Affai
Phone Number	519-776-5291 ext 204
Email Address	<a href="mailto:mdanelon@elkenegy.com">mdanelon@elkenegy.com</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

[1. Info](#)

[2. Table of Contents](#)

[3. Data Input Sheet](#)

[4. Rate Base](#)

[5. Utility Income](#)

[6. Taxes PILs](#)

[7. Cost of Capital](#)

[8. Rev Def Suff](#)

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[10. Load Forecast](#)

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[12. Residential Rate Design](#)

[13. Rate Design and Revenue Reconciliation](#)

[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)	\$25,244,220		\$ 25,244,220		\$25,244,220
Accumulated Depreciation (average)	(\$15,462,030) <sup>(5)</sup>		(\$15,462,030)		(\$15,462,030)
<b>Allowance for Working Capital:</b>					
Controllable Expenses	\$3,484,511		\$ 3,484,511		\$3,484,511
Cost of Power	\$26,095,158		\$ 26,095,158		\$26,095,158
Working Capital Rate (%)	7.50% <sup>(9)</sup>		7.50% <sup>(9)</sup>		7.50% <sup>(9)</sup>
<b>2 Utility Income</b>					
Operating Revenues:					
Distribution Revenue at Current Rates	\$3,335,144	\$0	\$3,335,144	\$0	\$3,335,144
Distribution Revenue at Proposed Rates	\$3,963,096	\$0	\$3,963,096	\$0	\$3,963,096
<b>Other Revenue:</b>					
Specific Service Charges	\$83,170	\$0	\$83,170	\$0	\$83,170
Late Payment Charges	\$114,623	\$0	\$114,623	\$0	\$114,623
Other Distribution Revenue	\$310,083	\$0	\$310,083	\$0	\$310,083
Other Income and Deductions	\$42,122	\$0	\$42,122	\$0	\$42,122
Total Revenue Offsets	\$549,998 <sup>(7)</sup>	\$0	\$549,998	\$0	\$549,998
Operating Expenses:					
OM+A Expenses	\$3,509,496	\$ 3,509,496	\$ 3,509,496	\$ 3,509,496	\$3,509,496
Depreciation/Amortization	\$338,871	\$ 338,871	\$ 338,871	\$ 338,871	\$338,871
Property taxes	\$17,410	\$ 17,410	\$ 17,410	\$ 17,410	\$17,410
Other expenses					
<b>3 Taxes/PILs</b>					
Taxable Income:					
Adjustments required to arrive at taxable income	(\$493,697) <sup>(3)</sup>		(\$493,697)		(\$493,697)
<b>Utility Income Taxes and Rates:</b>					
Income taxes (not grossed up)	\$ -				
Income taxes (grossed up)	\$ -				
Federal tax (%)					
Provincial tax (%)					
Income Tax Credits					
<b>4 Capitalization/Cost of Capital</b>					
<b>Capital Structure:</b>					
Long-term debt Capitalization Ratio (%)	56.0%	56.0%	56.0%	56.0%	56.0%
Short-term debt Capitalization Ratio (%)	4.0% <sup>(8)</sup>	4.0% <sup>(8)</sup>	4.0%	4.0%	4.0%
Common Equity Capitalization Ratio (%)	40.0%	40.0%	40.0%	40.0%	40.0%
Preferred Shares Capitalization Ratio (%)	0.0%	0.0%	0.0%	0.0%	0.0%
	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Cost of Capital</b>					
Long-term debt Cost Rate (%)	2.95%	2.95%	2.95%	2.95%	2.95%
Short-term debt Cost Rate (%)	1.65%	1.65%	1.65%	1.65%	1.65%
Common Equity Cost Rate (%)	9.19%	9.19%	9.19%	9.19%	9.19%
Preferred Shares Cost Rate (%)	0.0%	0.0%	0.0%	0.0%	0.0%

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.	Particulars	Initial Application				Per Board Decision
1	Gross Fixed Assets (average) <sup>(2)</sup>	\$25,244,220	\$ -	\$25,244,220	\$ -	\$25,244,220
2	Accumulated Depreciation (average) <sup>(2)</sup>	(\$15,462,030)	\$ -	(\$15,462,030)	\$ -	(\$15,462,030)
3	Net Fixed Assets (average) <sup>(2)</sup>	\$9,782,190	\$ -	\$9,782,190	\$ -	\$9,782,190
4	Allowance for Working Capital <sup>(1)</sup>	\$2,218,475	\$ -	\$2,218,475	\$ -	\$2,218,475
5	<b>Total Rate Base</b>	<b>\$12,000,666</b>	<b>\$ -</b>	<b>\$12,000,666</b>	<b>\$ -</b>	<b>\$12,000,666</b>

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

6	Controllable Expenses	\$3,484,511	\$ -	\$3,484,511	\$ -	\$3,484,511
7	Cost of Power	\$26,095,158	\$ -	\$26,095,158	\$ -	\$26,095,158
8	Working Capital Base	\$29,579,669	\$ -	\$29,579,669	\$ -	\$29,579,669
9	Working Capital Rate % <sup>(1)</sup>	7.50%	0.00%	7.50%	0.00%	7.50%
10	Working Capital Allowance	\$2,218,475	\$ -	\$2,218,475	\$ -	\$2,218,475

### 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)	\$3,963,096	\$ -	\$3,963,096	\$ -	\$3,963,096	
2	Other Revenue <sup>(1)</sup>	\$549,998	\$ -	\$549,998	\$ -	\$549,998	
3	<b>Total Operating Revenues</b>	<b>\$4,513,093</b>	<b>\$ -</b>	<b>\$4,513,093</b>	<b>\$ -</b>	<b>\$4,513,093</b>	
<b>Operating Expenses:</b>							
4	OM+A Expenses	\$3,509,496	\$ -	\$3,509,496	\$ -	\$3,509,496	
5	Depreciation/Amortization	\$338,871	\$ -	\$338,871	\$ -	\$338,871	
6	Property taxes	\$17,410	\$ -	\$17,410	\$ -	\$17,410	
7	Capital taxes	\$ -	\$ -	\$ -	\$ -	\$ -	
8	Other expense	\$ -	\$ -	\$ -	\$ -	\$ -	
9	<b>Subtotal (lines 4 to 8)</b>	<b>\$3,865,778</b>	<b>\$ -</b>	<b>\$3,865,778</b>	<b>\$ -</b>	<b>\$3,865,778</b>	
10	Deemed Interest Expense	\$206,171	\$ -	\$206,171	\$ -	\$206,171	
11	<b>Total Expenses (lines 9 to 10)</b>	<b>\$4,071,949</b>	<b>\$ -</b>	<b>\$4,071,949</b>	<b>\$ -</b>	<b>\$4,071,949</b>	
12	<b>Utility income before income taxes</b>	<b>\$441,144</b>	<b>\$ -</b>	<b>\$441,144</b>	<b>\$ -</b>	<b>\$441,144</b>	
13	Income taxes (grossed-up)	\$ -	\$ -	\$ -	\$ -	\$ -	
14	<b>Utility net income</b>	<b>\$441,144</b>	<b>\$ -</b>	<b>\$441,144</b>	<b>\$ -</b>	<b>\$441,144</b>	

### Notes

#### Other Revenues / Revenue Offsets

(1)	Specific Service Charges	\$83,170	\$ -	\$83,170	\$ -	\$83,170
	Late Payment Charges	\$114,623	\$ -	\$114,623	\$ -	\$114,623
	Other Distribution Revenue	\$310,083	\$ -	\$310,083	\$ -	\$310,083
	Other Income and Deductions	\$42,122	\$ -	\$42,122	\$ -	\$42,122
	<b>Total Revenue Offsets</b>	<b>\$549,998</b>	<b>\$ -</b>	<b>\$549,998</b>	<b>\$ -</b>	<b>\$549,998</b>



# Revenue Requirement Workform (RRWF) for 2017 Filers

**Taxes/PILs**

Line No.	Particulars	Application		Per Board Decision	
<u>Determination of Taxable Income</u>					
1	Utility net income before taxes	\$441,144	\$441,144	\$441,144	
2	Adjustments required to arrive at taxable utility income	(\$493,697)	(\$493,697)	(\$493,697)	
3	Taxable income	(\$52,553)	(\$52,553)	(\$52,553)	
<u>Calculation of Utility income Taxes</u>					
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	\$ -	\$ -	\$ -	
<u>Tax Rates</u>					
11	Federal tax (%)	0.00%	0.00%	0.00%	
12	Provincial tax (%)	0.00%	0.00%	0.00%	
13	Total tax rate (%)	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%	\$6,720,373	2.95%	\$198,251
2	Short-term Debt	4.00%	\$480,027	1.65%	\$7,920
3	<b>Total Debt</b>	<b>60.00%</b>	<b>\$7,200,399</b>	<b>2.86%</b>	<b>\$206,171</b>
	<b>Equity</b>				
4	Common Equity	40.00%	\$4,800,266	9.19%	\$441,144
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	<b>Total Equity</b>	<b>40.00%</b>	<b>\$4,800,266</b>	<b>9.19%</b>	<b>\$441,144</b>
7	<b>Total</b>	<b>100.00%</b>	<b>\$12,000,666</b>	<b>5.39%</b>	<b>\$647,316</b>
<b>Per Board Decision</b>					
		(%)	(\$)	(%)	(\$)
	<b>Debt</b>				
8	Long-term Debt	56.00%	\$6,720,373	2.95%	\$198,251
9	Short-term Debt	4.00%	\$480,027	1.65%	\$7,920
10	<b>Total Debt</b>	<b>60.00%</b>	<b>\$7,200,399</b>	<b>2.86%</b>	<b>\$206,171</b>
	<b>Equity</b>				
11	Common Equity	40.00%	\$4,800,266	9.19%	\$441,144
12	Preferred Shares	0.00%	\$ -	0.00%	\$ -
13	<b>Total Equity</b>	<b>40.00%</b>	<b>\$4,800,266</b>	<b>9.19%</b>	<b>\$441,144</b>
14	<b>Total</b>	<b>100.00%</b>	<b>\$12,000,666</b>	<b>5.39%</b>	<b>\$647,316</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		\$627,952		\$627,952		\$627,952
2	Distribution Revenue	\$3,335,144	\$3,335,144	\$3,335,144	\$3,335,144	\$3,335,144	\$3,335,144
3	Other Operating Revenue Offsets - net	\$549,998	\$549,998	\$549,998	\$549,998	\$549,998	\$549,998
4	<b>Total Revenue</b>	<b>\$3,885,141</b>	<b>\$4,513,093</b>	<b>\$3,885,141</b>	<b>\$4,513,093</b>	<b>\$3,885,141</b>	<b>\$4,513,093</b>
5	Operating Expenses	\$3,865,778	\$3,865,778	\$3,865,778	\$3,865,778	\$3,865,778	\$3,865,778
6	Deemed Interest Expense	\$206,171	\$206,171	\$206,171	\$206,171	\$206,171	\$206,171
8	<b>Total Cost and Expenses</b>	<b>\$4,071,949</b>	<b>\$4,071,949</b>	<b>\$4,071,949</b>	<b>\$4,071,949</b>	<b>\$4,071,949</b>	<b>\$4,071,949</b>
9	<b>Utility Income Before Income Taxes</b>	<b>(\$186,808)</b>	<b>\$441,144</b>	<b>(\$186,808)</b>	<b>\$441,144</b>	<b>(\$186,808)</b>	<b>\$441,144</b>
10	Tax Adjustments to Accounting Income per 2013 PILs model	(\$493,697)	(\$493,697)	(\$493,697)	(\$493,697)	(\$493,697)	(\$493,697)
11	<b>Taxable Income</b>	<b>(\$680,505)</b>	<b>(\$52,553)</b>	<b>(\$680,505)</b>	<b>(\$52,553)</b>	<b>(\$680,505)</b>	<b>(\$52,553)</b>
12	Income Tax Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
13	Income Tax on Taxable Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	Income Tax Credits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	<b>Utility Net Income</b>	<b>(\$186,808)</b>	<b>\$441,144</b>	<b>(\$186,808)</b>	<b>\$441,144</b>	<b>(\$186,808)</b>	<b>\$441,144</b>
16	<b>Utility Rate Base</b>	<b>\$12,000,666</b>	<b>\$12,000,666</b>	<b>\$12,000,666</b>	<b>\$12,000,666</b>	<b>\$12,000,666</b>	<b>\$12,000,666</b>
17	Deemed Equity Portion of Rate Base	\$4,800,266	\$4,800,266	\$4,800,266	\$4,800,266	\$4,800,266	\$4,800,266
18	Income/(Equity Portion of Rate Base)	-3.89%	9.19%	-3.89%	9.19%	-3.89%	9.19%
19	Target Return - Equity on Rate Base	9.19%	9.19%	9.19%	9.19%	9.19%	9.19%
20	Deficiency/Sufficiency in Return on Equity	-13.08%	0.00%	-13.08%	0.00%	-13.08%	0.00%
21	Indicated Rate of Return	0.16%	5.39%	0.16%	5.39%	0.16%	5.39%
22	Requested Rate of Return on Rate Base	5.39%	5.39%	5.39%	5.39%	5.39%	5.39%
23	Deficiency/Sufficiency in Rate of Return	-5.23%	0.00%	-5.23%	0.00%	-5.23%	0.00%
24	Target Return on Equity	\$441,144	\$441,144	\$441,144	\$441,144	\$441,144	\$441,144
25	Revenue Deficiency/(Sufficiency)	\$627,952	\$ -	\$627,952	\$ -	\$627,952	\$ -
26	<b>Gross Revenue Deficiency/(Sufficiency)</b>	<b>\$627,952 <sup>(1)</sup></b>		<b>\$627,952 <sup>(1)</sup></b>		<b>\$627,952 <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	\$3,509,496	\$3,509,496	\$3,509,496	\$3,509,496
2	Amortization/Depreciation	\$338,871	\$338,871	\$338,871	\$338,871
3	Property Taxes	\$17,410	\$17,410	\$17,410	\$17,410
5	Income Taxes (Grossed up)	\$ -	\$ -	\$ -	\$ -
6	Other Expenses	\$ -	\$ -	\$ -	\$ -
7	Return				
	Deemed Interest Expense	\$206,171	\$206,171	\$206,171	\$206,171
	Return on Deemed Equity	\$441,144	\$441,144	\$441,144	\$441,144
8	<b>Service Revenue Requirement (before Revenues)</b>	<u>\$4,513,093</u>	<u>\$4,513,093</u>	<u>\$4,513,093</u>	<u>\$4,513,093</u>
9	Revenue Offsets	\$549,998	\$549,998	\$549,998	\$549,998
10	<b>Base Revenue Requirement (excluding Transformer Ownership Allowance credit adjustment)</b>	<u>\$3,963,096</u>	<u>\$3,963,096</u>	<u>\$3,963,096</u>	<u>\$3,963,096</u>
11	Distribution revenue	\$3,963,096	\$3,963,096	\$3,963,096	\$3,963,096
12	Other revenue	\$549,998	\$549,998	\$549,998	\$549,998
13	<b>Total revenue</b>	<u>\$4,513,093</u>	<u>\$4,513,093</u>	<u>\$4,513,093</u>	<u>\$4,513,093</u>
14	<b>Difference (Total Revenue Less Distribution Revenue Requirement before Revenues)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

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</b>	\$4,513,093	\$4,513,093	\$0	\$4,513,093	(\$1)
<b>Grossed-Up Revenue</b>					
<b>Deficiency/(Sufficiency)</b>	\$627,952	\$627,952	\$0	\$627,952	(\$1)
<b>Base Revenue Requirement (to be recovered from Distribution Rates)</b>	\$3,963,096	\$3,963,096	\$0	\$3,963,096	(\$1)
<b>Revenue Deficiency/(Sufficiency) Associated with Base Revenue Requirement</b>	\$627,952	\$627,952	\$0	\$627,952	(\$1)

**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						Per Board Decision		
Customer Class		Initial Application						Per Board Decision		
Input the name of each 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>
		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	10,386	92,079,767							
2	General Service < 50 kW	1,253	29,137,274							
3	General Service > 50 kW	93	60,741,788	188,540						
4	Street Lights	2,826	2,380,054	6,476						
5	Unmetered Scattered Load	31	264,832							
6	Sentinel Lights	7	5,962	14						
7	Embedded Distributor	4	45,143,217	96,786						
8										
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18										
19										
20										
<b>Total</b>			<b>229,752,894</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>From Sheet 10. Load Forecast</i>			<i>(7A)</i>	
1 Residential	\$ 2,496,518	67.02%	\$ 2,900,631	64.27%
2 General Service < 50 kW	\$ 531,271	14.26%	\$ 709,946	15.73%
3 General Service > 50 kW	\$ 421,996	11.33%	\$ 741,970	16.44%
4 Street Lights	\$ 143,317	3.85%	\$ 88,694	1.97%
5 Unmetered Scattered Load	\$ 3,839	0.10%	\$ 5,464	0.12%
6 Sentinel Lights	\$ 470	0.01%	\$ 625	0.01%
7 Embedded Distributor	\$ 127,674	3.43%	\$ 65,764	1.46%
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20				
<b>Total</b>	<b>\$ 3,725,085</b>	<b>100.00%</b>	<b>\$ 4,513,093</b>	<b>100.00%</b>
			<b>Service Revenue Requirement (from Sheet 9)</b>	<b>\$ 4,513,093.49</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	\$ 2,232,303	\$ 2,652,608	\$ 2,652,608	\$ 359,182
2 General Service < 50 kW	\$ 382,867	\$ 454,954	\$ 564,424	\$ 82,757
3 General Service > 50 kW	\$ 487,590	\$ 579,395	\$ 584,316	\$ 92,059
4 Street Lights	\$ 113,741	\$ 135,156	\$ 98,326	\$ 8,107
5 Unmetered Scattered Load	\$ 2,888	\$ 3,431	\$ 4,435	\$ 546
6 Sentinel Lights	\$ 345	\$ 410	\$ 510	\$ 59
7 Embedded Distributor	\$ 115,410	\$ 137,140	\$ 58,476	\$ 7,288
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<b>Total</b>	\$ 3,335,144	\$ 3,963,096	\$ 3,963,096	\$ 549,998

- (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: 2012 %	(7C + 7E) / (7A) %	(7D + 7E) / (7A) %	
1 Residential	97.97%	103.83%	103.83%	85 - 115
2 General Service < 50 kW	95.04%	75.74%	91.16%	
3 General Service > 50 kW	120.00%	90.50%	91.16%	
4 Street Lights	95.04%	161.52%	120.00%	
5 Unmetered Scattered Load	95.04%	72.79%	91.16%	
6 Sentinel Lights	95.04%	75.23%	91.16%	
7 Embedded Distributor	100.00%	219.62%	100.00%	
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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	103.83%	103.83%	103.83%	85 - 115
2 General Service < 50 kW	91.16%	91.16%	91.16%	
3 General Service > 50 kW	91.16%	91.16%	91.16%	
4 Street Lights	120.00%	120.00%	120.00%	
5 Unmetered Scattered Load	91.16%	91.16%	91.16%	
6 Sentinel Lights	91.16%	91.16%	91.16%	
7 Embedded Distributor	100.00%	100.00%	100.00%	
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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'.



Ontario Energy Board

# 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	10,386
kWh	92,079,767

Proposed Residential Class Specific Revenue Requirement <sup>1</sup>	\$ 2,652,608.40
--	-----------------

Residential Base Rates on Current Tariff	
Monthly Fixed Charge (\$)	\$ 15.84
Distribution Volumetric Rate (\$/kWh)	\$ 0.0074

### B Current Fixed/Variable Split

	Base Rates	Billing Determinants	Revenue	% of Total Revenue
Fixed	15.83981758	10,386	\$ 1,974,223.88	74.43%
Variable	0.007367357	92,079,767	\$ 678,384.52	25.57%
<b>TOTAL</b>	-	-	\$ 2,652,608.40	-

### C Calculating Test Year Base Rates

Number of Remaining Rate Design Policy Transition Years <sup>2</sup>	3
--	---

	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	\$ 1,974,223.88	15.84	\$ 1,974,246.62
Variable	\$ 678,384.52	0.0074	\$ 681,390.28
<b>TOTAL</b>	\$ 2,652,608.40	-	\$ 2,655,636.89

	New F/V Split	Revenue @ new F/V Split	Final Adjusted Base Rates	Revenue Reconciliation @ Adjusted Rates
Fixed	82.95%	\$ 2,200,352.05	\$ 17.65	\$ 2,199,839.19
Variable	17.05%	\$ 452,256.35	\$ 0.0049	\$ 451,190.86
<b>TOTAL</b>	-	\$ 2,652,608.40	-	\$ 2,651,030.05

Checks <sup>3</sup>	
Change in Fixed Rate	\$ 1.81
Difference Between Revenues @ Proposed Rates and Class Specific	(\$1,578.35)
	-0.06%

### 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

## Rate Design and Revenue Reconciliation

This sheet replaces Appendix 2-V, and provides a simplified model for calculating the standard monthly and volumetric rates based on the allocated class revenues and fixed/variable split resulting from the cost allocation study and rate design and as proposed by the applicant. However, the RRWF does not replace the rate generator model that an applicant distributor may use in support of its application. The RRWF provides a demonstrative check on the derivation of the revenue requirement and on the proposed base distribution rates to recover the revenue requirement, based on summary information from a more detailed rate generator model and other models that applicants use for cost allocation, load forecasting, taxes/PILs, etc.

Stage in Process:		Initial Application				Class Allocated Revenues			Fixed / Variable Splits <sup>2</sup>		Transformer Ownership Allowance <sup>1</sup> (\$)		Distribution Rates				Revenue Reconciliation		
Customer and Load Forecast					From Sheet 11, Cost Allocation and Sheet 12, Residential Rate Design			Percentage to be entered as a fraction between 0 and 1				Monthly Service Charge		Volumetric Rate		Revenues less Transformer Ownership Allowance			
Customer Class	Volumetric Charge Determinant	Customers / Connections	kWh	kW or kVA	Total Class Revenue Requirement	Monthly Service Charge	Volumetric	Fixed	Variable	Rate	No. of decimals	Rate	No. of decimals	MSC Revenues	Volumetric revenues	Revenues less Transformer Ownership Allowance			
1 Residential	kWh	10,386	92,079,767	-	\$ 2,652,608	\$ 2,200,352	\$ 452,256	82.95%	17.05%	\$17.65	2	\$0.0049 /kWh	4	\$ 2,199,839.19	\$ 451,190,8584	\$ 2,651,030.05			
2 General Service < 50 kW	kWh	1,253	29,137,274	-	\$ 564,424	\$ 349,653	\$ 214,772	61.95%	38.05%	\$23.25		\$0.0074 /kWh		\$ 349,679.73	\$ 215,615,8240	\$ 565,295.56			
3 General Service > 50 kW	kW	93	60,741,788	188,540	\$ 584,316	\$ 248,840	\$ 335,476	42.59%	57.41%	\$224.18		\$1.8772 /kW		\$ 248,839.80	\$ 353,927,8248	\$ 584,306.82			
4 Street Lights	kW	2,826	2,380,054	6,476	\$ 98,326	\$ 34,294	\$ 64,033	34.88%	65.12%	\$1.01		\$9.8880 /kW		\$ 34,245.06	\$ 64,032,7705	\$ 98,277.83			
5 Unmetered Scattered Load	kWh	31	264,832	-	\$ 4,435	\$ 3,662	\$ 773	82.58%	17.42%	\$9.84		\$0.0029 /kWh		\$ 3,660.48	\$ 768,0140	\$ 4,428.49			
6 Sentinel Lights	kW	7	5,962	14	\$ 510	\$ 398	\$ 122	76.13%	23.87%	\$4.62		\$8.6956 /kW		\$ 388.08	\$ 121,7384	\$ 509.82			
7 Embedded Distributor	kW	4	45,143,217	96,786	\$ 58,476	\$ 58,476	\$ -	100.00%	0.00%	\$1,218.25		\$0.0000 /kW		\$ 58,476.00	\$ -	\$ 58,476.00			
8	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -			
9	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -			
10	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -			
11	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -			
12	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -			
13	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -			
14	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -			
15	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -			
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17	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -			
18	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -			
19	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -			
20	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -			
Total Transformer Ownership Allowance										\$ 18,461				Total Distribution Revenues		\$ 3,962,324.57			
												Rates recover revenue requirement		Base Revenue Requirement		\$ 3,963,095.65			
														Difference		\$ (771.08)			
														% Difference		-0.019%			

Notes:

<sup>1</sup> Transformer Ownership Allowance is entered as a positive amount, and only for those classes to which it applies.

<sup>2</sup> The Fixed/Variable split, for each customer class, drives the "rate generator" portion of this sheet of the RRWF. Only the "fixed" fraction is entered, as the sum of the "fixed" and "variable" portions must sum to 100%. For a distributor that may set the Monthly Service Charge, the "fixed" ratio is calculated as: [MSC x (average number of customers or connections) x 12 months] / (Class Allocated Revenue Requirement).

# 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	\$ 647,316	5.39%	\$ 12,000,666	\$ 29,579,669	\$ 2,218,475	\$ 338,871	\$ -	\$ 3,509,496	\$ 4,513,093	\$ 549,998	\$ 3,963,096	\$ 627,952

1