

**EXHIBIT 6:
CALCULATION OF
REVENUE DEFICIENCY
OR SUFFICIENCY**

Table of Contents

Exhibit 6: Calculation of Revenue Deficiency or Sufficiency..... 2

Revenue Requirement 2

Cost Drivers on Revenue Deficiency..... 4

APPENDIX 1 Revenue Requirement Work Form 6

Exhibit 6: Calculation of Revenue Deficiency or Sufficiency

PUC Distribution revenue deficiency is \$3,679,687. This deficiency is calculated as the difference between the 2018 Test Year Revenue Requirement of \$22,081,244 and the Forecast 2018 Test Year Revenue, based on the 2017 approved rates, at \$18,401,558. Table 6-1 on the following page provides the revenue deficiency calculations. The table also includes the determination of net utility income, statement of rate base, the utility return on rate base at existing rates and the requested rate of return on rate base in this application. Further details on these items are provided in the pdf version of the Revenue Requirement Work Form (“RRWF”) filed as part of this Exhibit 6 as Appendix 1. A live Microsoft Excel version of the RRWF has also been filed with this Application.

Revenue Requirement

PUC Distribution’s Revenue Requirement consists of the following:

- Administrative & General, Billing & Collecting Expense
- Operation & Maintenance Expense
- Depreciation Expense
- Property Taxes
- PILs
- Deemed Interest & Return on Equity

PUC Distribution’s revenue requirement is primarily received through electricity distribution rates with supplemental revenue from Board-approved specific service charges such as late payment charges and other miscellaneous charges.

1

Table 6-1 Revenue Deficiency Calculation

Description	2018 Test Existing Rates	2018 Test - Required Revenue
Revenue		
Revenue Deficiency		3,679,687
Distribution Revenue	16,011,897	16,011,897
Other Operating Revenue (Net)	2,389,661	2,389,661
Total Revenue	18,401,558	22,081,244
Costs and Expenses		
Administrative & General, Billing & Collecting	5,674,204	5,674,204
Operation & Maintenance	6,212,629	6,212,629
Donations - LEAP	24,000	24,000
Depreciation & Amortization	3,783,956	3,783,956
Property Taxes	45,000	45,000
Deemed Interest	2,389,294	2,389,294
Total Costs and Expenses	18,129,082	18,129,082
Utility Income Before Income Taxes	272,475	3,952,162
Income Taxes:		
Corporate Income Taxes	-608,688	366,429
Total Income Taxes	-608,688	366,429
Utility Net Income	881,164	3,585,733
Income Tax Expense Calculation:		
Accounting Income	272,475	3,952,162
Tax Adjustments to Accounting Income	-2,569,412	-2,569,412
Taxable Income	-2,296,937	1,382,750
Income tax expense before credits	-608,688	366,429
Credits	0	0
Income Tax Expense	-608,688	366,429
Tax Rate Reflecting Tax Credits	26.50%	26.50%
Actual Return on Rate Base:		
Rate Base	99,603,703	99,603,703
Interest Expense	2,389,294	2,389,294
Net Income	881,164	3,585,733
Total Actual Return on Rate Base	3,270,457	5,975,027
Actual Return on Rate Base	3.28%	6.00%
Required Return on Rate Base:		
Rate Base	99,603,703	99,603,703
Return Rates:		
Return on Debt (Weighted)	4.00%	4.00%
Return on Equity	9.00%	9.00%
Deemed Interest Expense	2,389,294	2,389,294
Return On Equity	3,585,733	3,585,733
Total Return	5,975,027	5,975,027
Expected Return on Rate Base	6.00%	6.00%
Revenue Deficiency After Tax	2,704,570	0
Revenue Deficiency Before Tax	3,679,687	0

2

Cost Drivers on Revenue Deficiency

Table 6-2 below outlines the contributors to the revenue deficiency by revenue requirement component. Column A lists PUC Distribution's 2013 approved amounts. Column B lists the PUC Distribution revenue at existing rates shown in Table 6-1 allocated to revenue requirement component based on the proportions in Column A. It is PUC Distribution's view that Column B estimates the revenue requirement components for revenue at existing rates based on the components assumed in existing rates. Column C lists the PUC Distribution's proposed components. Finally, Column D represents the difference between Column C and Column B which provides an estimate of the revenue requirement components for the revenue deficiency of \$3,679,687.

Table 6-2 Revenue Deficiency by Revenue Requirement Component

Service Revenue Requirement	2013 Approved (A)	2018 Revenue at Existing Rates Allocated in Proportion to 2013 Approved (B)	2018 Proposed (C)	Revenue Deficiency (D) = (C) - (B)
OM&A	9,902,946	9,671,793	11,886,833	2,215,039
LEAP	0	0	24,000	24,000
Property Tax	50,000	48,833	45,000	(\$3,833)
Depreciation	3,348,256	3,270,101	3,783,956	513,855
Return on Rate Base	5,290,883	5,167,384	5,975,027	807,643
PILs	249,265	243,447	366,429	122,982
Total	18,841,350	18,401,558	22,081,245	3,679,686
				Difference (D) = (C) - (A)
Rate Base	90,511,645		99,603,703	9,092,058

61% of the revenue deficiency of \$3,679,687 for the 2018 Test Year relates to increases to OM&A including LEAP which are explained in detail in Exhibit 4. In summary, the main contributors to the increases in OM&A are:

Increased line clearing	\$140,000
Additional MIST metering for general service customers	\$45,000
Increased OEB fees	\$60,000
Increased bad debt expense	\$150,000
Increased TOU billing expenses	\$100,000
Increased regulatory rate filing costs	\$120,000
Additional transformer PCB testing	\$80,000
Additional station maintenance to be compliant with IESO	\$200,000
Additional regulatory staff	\$100,000
Inflationary increases over 5 years	<u>\$1,240,206</u>
	<u>\$2,235,206</u>

The remaining 39% of the revenue deficiency of \$3,679,687 relates to increases in capital related items such as Depreciation (\$513,855), Return on Rate Base (\$807,643) and PILs (\$122,982).

The main contributors to these costs are:

- Increased depreciation as a result of capital expenditures since last Cost of Service (“COS”) application
- Increased rate base, therefore, increased return as a result of capital expenditures since last COS application
- Increased taxable income causing an increase in PILs payable

APPENDIX 1

Revenue Requirement Work Form



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2018 Filers



Version 7.02

Utility Name	PUC Distribution Inc.
Service Territory	Sault Ste. Marie, Ontario
Assigned EB Number	EB-2017-0071
Name and Title	Andrew Belsito, Rates and Regulatory Affairs Officer
Phone Number	705-759-3009
Email Address	andrew.belsito@ssmpuc.com

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 2018 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](#)

[9. Rev Req](#)

[10. Load Forecast](#)

[11. Cost Allocation](#)

[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 2018 Filers

Data Input ⁽¹⁾

	Initial Application ⁽²⁾		⁽⁶⁾	Per Board Decision
1 Rate Base				
Gross Fixed Assets (average)	\$108,487,326		\$ 108,487,326	\$108,487,326
Accumulated Depreciation (average)	(\$15,769,425) ⁽⁵⁾		(\$15,769,425)	(\$15,769,425)
Allowance for Working Capital:				
Controllable Expenses	\$11,955,833		\$ 11,955,833	\$11,955,833
Cost of Power	\$79,854,870		\$ 79,854,870	\$79,854,870
Working Capital Rate (%)	7.50% ⁽⁹⁾		7.50% ⁽⁹⁾	7.50% ⁽⁹⁾
2 Utility Income				
Operating Revenues:				
Distribution Revenue at Current Rates	\$16,011,897		\$16,011,897	\$16,011,897
Distribution Revenue at Proposed Rates	\$19,691,584		\$19,691,584	\$19,691,584
Other Revenue:				
Specific Service Charges	\$170,100	\$0	\$170,100	\$170,100
Late Payment Charges	\$259,000	\$0	\$259,000	\$259,000
Other Distribution Revenue	\$1,848,061	\$0	\$1,848,061	\$1,848,061
Other Income and Deductions	\$112,500	\$0	\$112,500	\$112,500
Total Revenue Offsets	\$2,389,661 ⁽⁷⁾	\$0	\$2,389,661	\$2,389,661
Operating Expenses:				
OM+A Expenses	\$11,886,833	\$ 11,886,833		\$11,886,833
Depreciation/Amortization	\$3,783,956	\$ 3,783,956		\$3,783,956
Property taxes	\$45,000	\$ 45,000		\$45,000
Other expenses	\$24,000	24000		\$24,000
3 Taxes/PILs				
Taxable Income:				
Adjustments required to arrive at taxable income	(\$2,569,412) ⁽³⁾	(\$2,569,412)		(\$2,569,412)
Utility Income Taxes and Rates:				
Income taxes (not grossed up)	\$269,325	\$269,325		\$269,325
Income taxes (grossed up)	\$366,429	\$366,429		\$366,429
Federal tax (%)	11.50%	11.50%		11.50%
Provincial tax (%)	15.00%	15.00%		15.00%
Income Tax Credits				
4 Capitalization/Cost of Capital				
Capital Structure:				
Long-term debt Capitalization Ratio (%)	56.0%	56.0%		56.0%
Short-term debt Capitalization Ratio (%)	4.0% ⁽⁸⁾	4.0% ⁽⁸⁾		4.0% ⁽⁸⁾
Common Equity Capitalization Ratio (%)	40.0%	40.0%		40.0%
Preferred Shares Capitalization Ratio (%)				
	100.0%	100.0%		100.0%
Cost of Capital				
Long-term debt Cost Rate (%)	4.12%	4.12%		4.12%
Short-term debt Cost Rate (%)	2.29%			2.29%
Common Equity Cost Rate (%)	9.00%	9.00%		9.00%
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.



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2018 Filers

Rate Base and Working Capital

Rate Base									
Line No.	Particulars		Initial Application						Per Board Decision
1	Gross Fixed Assets (average)	(2)	\$108,487,326		\$ -		\$108,487,326		\$108,487,326
2	Accumulated Depreciation (average)	(2)	(\$15,769,425)		\$ -		(\$15,769,425)		(\$15,769,425)
3	Net Fixed Assets (average)	(2)	\$92,717,901		\$ -		\$92,717,901		\$92,717,901
4	Allowance for Working Capital	(1)	\$6,885,803		\$ -		\$6,885,803		\$6,885,803
5	Total Rate Base		\$99,603,703		\$ -		\$99,603,703		\$99,603,703

(1) Allowance for Working Capital - Derivation

6	Controllable Expenses	\$11,955,833	\$ -	\$11,955,833	\$ -	\$11,955,833
7	Cost of Power	\$79,854,870	\$ -	\$79,854,870	\$ -	\$79,854,870
8	Working Capital Base	\$91,810,703	\$ -	\$91,810,703	\$ -	\$91,810,703
9	Working Capital Rate % ⁽¹⁾	7.50%	0.00%	7.50%	0.00%	7.50%
10	Working Capital Allowance	\$6,885,803	\$ -	\$6,885,803	\$ -	\$6,885,803

Notes

(1) Some Applicants may have a unique rate as a result of a lead-lag study. The default rate for 2018 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 2018 Filers

Utility Income

Line No.	Particulars	Initial Application					Per Board Decision
Operating Revenues:							
1	Distribution Revenue (at Proposed Rates)	\$19,691,584		\$ -	\$19,691,584	\$ -	\$19,691,584
2	Other Revenue ⁽¹⁾	\$2,389,661		\$ -	\$2,389,661	\$ -	\$2,389,661
3	Total Operating Revenues	\$22,081,245		\$ -	\$22,081,245	\$ -	\$22,081,245
Operating Expenses:							
4	OM+A Expenses	\$11,886,833		\$ -	\$11,886,833	\$ -	\$11,886,833
5	Depreciation/Amortization	\$3,783,956		\$ -	\$3,783,956	\$ -	\$3,783,956
6	Property taxes	\$45,000		\$ -	\$45,000	\$ -	\$45,000
7	Capital taxes	\$ -		\$ -	\$ -	\$ -	\$ -
8	Other expense	\$24,000		\$ -	\$24,000	\$ -	\$24,000
9	Subtotal (lines 4 to 8)	\$15,739,789		\$ -	\$15,739,789	\$ -	\$15,739,789
10	Deemed Interest Expense	\$2,389,294		\$ -	\$2,389,294	\$ -	\$2,389,294
11	Total Expenses (lines 9 to 10)	\$18,129,083		\$ -	\$18,129,083	\$ -	\$18,129,083
12	Utility income before income taxes	\$3,952,162		\$ -	\$3,952,162	\$ -	\$3,952,162
13	Income taxes (grossed-up)	\$366,429		\$ -	\$366,429	\$ -	\$366,429
14	Utility net income	\$3,585,733		\$ -	\$3,585,733	\$ -	\$3,585,733

Notes

Other Revenues / Revenue Offsets

(1)	Specific Service Charges	\$170,100		\$ -	\$170,100	\$ -	\$170,100
	Late Payment Charges	\$259,000		\$ -	\$259,000	\$ -	\$259,000
	Other Distribution Revenue	\$1,848,061		\$ -	\$1,848,061	\$ -	\$1,848,061
	Other Income and Deductions	\$112,500		\$ -	\$112,500	\$ -	\$112,500
	Total Revenue Offsets	\$2,389,661		\$ -	\$2,389,661	\$ -	\$2,389,661



Revenue Requirement Workform (RRWF) for 2018 Filers

Taxes/PILs

Line No.	Particulars	Application				Per Board Decision	
<u>Determination of Taxable Income</u>							
1	Utility net income before taxes	\$3,585,733		\$3,585,733		\$3,585,733	
2	Adjustments required to arrive at taxable utility income	(\$2,569,412)		(\$2,569,412)		(\$2,569,412)	
3	Taxable income	<u>\$1,016,321</u>		<u>\$1,016,321</u>		<u>\$1,016,321</u>	
<u>Calculation of Utility income Taxes</u>							
4	Income taxes	<u>\$269,325</u>		<u>\$269,325</u>		<u>\$269,325</u>	
6	Total taxes	<u>\$269,325</u>		<u>\$269,325</u>		<u>\$269,325</u>	
7	Gross-up of Income Taxes	<u>\$97,104</u>		<u>\$97,104</u>		<u>\$97,104</u>	
8	Grossed-up Income Taxes	<u>\$366,429</u>		<u>\$366,429</u>		<u>\$366,429</u>	
9	PILs / tax Allowance (Grossed-up Income taxes + Capital taxes)	<u>\$366,429</u>		<u>\$366,429</u>		<u>\$366,429</u>	
10	Other tax Credits	\$ -		\$ -		\$ -	
<u>Tax Rates</u>							
11	Federal tax (%)	11.50%		11.50%		11.50%	
12	Provincial tax (%)	15.00%		15.00%		15.00%	
13	Total tax rate (%)	<u>26.50%</u>		<u>26.50%</u>		<u>26.50%</u>	

Notes



Revenue Requirement Workform (RRWF) for 2018 Filers

Capitalization/Cost of Capital

Line No.	Particulars	Capitalization Ratio		Cost Rate		Return
		Initial Application				
		(%)		(\$)		(\$)
	Debt					
1	Long-term Debt	56.00%		\$55,778,074	4.12%	\$2,298,057
2	Short-term Debt	4.00%		\$3,984,148	2.29%	\$91,237
3	Total Debt	60.00%		\$59,762,222	4.00%	\$2,389,294
	Equity					
4	Common Equity	40.00%		\$39,841,481	9.00%	\$3,585,733
5	Preferred Shares	0.00%		\$ -	0.00%	\$ -
6	Total Equity	40.00%		\$39,841,481	9.00%	\$3,585,733
7	Total	100.00%		\$99,603,703	6.00%	\$5,975,027
		(%)		(\$)		(\$)
	Debt					
1	Long-term Debt	56.00%		\$55,778,074	4.12%	\$2,298,057
2	Short-term Debt	4.00%		\$3,984,148	2.29%	\$91,237
3	Total Debt	60.00%		\$59,762,222	4.00%	\$2,389,294
	Equity					
4	Common Equity	40.00%		\$39,841,481	9.00%	\$3,585,733
5	Preferred Shares	0.00%		\$ -	0.00%	\$ -
6	Total Equity	40.00%		\$39,841,481	9.00%	\$3,585,733
7	Total	100.00%		\$99,603,703	6.00%	\$5,975,027
		Per Board Decision				
		(%)		(\$)		(\$)
	Debt					
8	Long-term Debt	56.00%		\$55,778,074	4.12%	\$2,298,057
9	Short-term Debt	4.00%		\$3,984,148	2.29%	\$91,237
10	Total Debt	60.00%		\$59,762,222	4.00%	\$2,389,294
	Equity					
11	Common Equity	40.00%		\$39,841,481	9.00%	\$3,585,733
12	Preferred Shares	0.00%		\$ -	0.00%	\$ -
13	Total Equity	40.00%		\$39,841,481	9.00%	\$3,585,733
14	Total	100.00%		\$99,603,703	6.00%	\$5,975,027

Notes



Revenue Requirement Workform (RRWF) for 2018 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	At Current Approved Rates	At Proposed Rates
1	Revenue Deficiency from Below		\$3,679,687		\$3,679,687		\$3,679,687
2	Distribution Revenue	\$16,011,897	\$16,011,897	\$16,011,897	\$16,011,897	\$16,011,897	\$16,011,897
3	Other Operating Revenue	\$2,389,661	\$2,389,661	\$2,389,661	\$2,389,661	\$2,389,661	\$2,389,661
	Offsets - net						
4	Total Revenue	\$18,401,558	\$22,081,245	\$18,401,558	\$22,081,245	\$18,401,558	\$22,081,245
5	Operating Expenses	\$15,739,789	\$15,739,789	\$15,739,789	\$15,739,789	\$15,739,789	\$15,739,789
6	Deemed Interest Expense	\$2,389,294	\$2,389,294	\$2,389,294	\$2,389,294	\$2,389,294	\$2,389,294
8	Total Cost and Expenses	\$18,129,083	\$18,129,083	\$18,129,083	\$18,129,083	\$18,129,083	\$18,129,083
9	Utility Income Before Income Taxes	\$272,475	\$3,952,162	\$272,475	\$3,952,162	\$272,475	\$3,952,162
10	Tax Adjustments to Accounting Income per 2013 PILs model	(\$2,569,412)	(\$2,569,412)	(\$2,569,412)	(\$2,569,412)	(\$2,569,412)	(\$2,569,412)
11	Taxable Income	(\$2,296,937)	\$1,382,750	(\$2,296,937)	\$1,382,750	(\$2,296,937)	\$1,382,750
12	Income Tax Rate	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%
13	Income Tax on Taxable Income	(\$608,688)	\$366,429	(\$608,688)	\$366,429	(\$608,688)	\$366,429
14	Income Tax Credits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	Utility Net Income	\$881,163	\$3,585,733	\$881,163	\$3,585,733	\$881,163	\$3,585,733
16	Utility Rate Base	\$99,603,703	\$99,603,703	\$99,603,703	\$99,603,703	\$99,603,703	\$99,603,703
17	Deemed Equity Portion of Rate Base	\$39,841,481	\$39,841,481	\$39,841,481	\$39,841,481	\$39,841,481	\$39,841,481
18	Income/(Equity Portion of Rate Base)	2.21%	9.00%	2.21%	9.00%	2.21%	9.00%
19	Target Return - Equity on Rate Base	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
20	Deficiency/Sufficiency in Return on Equity	-6.79%	0.00%	-6.79%	0.00%	-6.79%	0.00%
21	Indicated Rate of Return	3.28%	6.00%	3.28%	6.00%	3.28%	6.00%
22	Requested Rate of Return on Rate Base	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
23	Deficiency/Sufficiency in Rate of Return	-2.72%	0.00%	-2.72%	0.00%	-2.72%	0.00%
24	Target Return on Equity	\$3,585,733	\$3,585,733	\$3,585,733	\$3,585,733	\$3,585,733	\$3,585,733
25	Revenue Deficiency/(Sufficiency)	\$2,704,570	\$ -	\$2,704,570	\$ -	\$2,704,570	\$ -
26	Gross Revenue Deficiency/(Sufficiency)	\$3,679,687 ⁽¹⁾		\$3,679,687 ⁽¹⁾		\$3,679,687 ⁽¹⁾	

Notes:

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



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2018 Filers

Revenue Requirement

Line No.	Particulars	Application		Per Board Decision	
1	OM&A Expenses	\$11,886,833	\$11,886,833	\$11,886,833	
2	Amortization/Depreciation	\$3,783,956	\$3,783,956	\$3,783,956	
3	Property Taxes	\$45,000	\$45,000	\$45,000	
5	Income Taxes (Grossed up)	\$366,429	\$366,429	\$366,429	
6	Other Expenses	\$24,000	\$24,000	\$24,000	
7	Return				
	Deemed Interest Expense	\$2,389,294	\$2,389,294	\$2,389,294	
	Return on Deemed Equity	\$3,585,733	\$3,585,733	\$3,585,733	
8	Service Revenue Requirement (before Revenues)	<u>\$22,081,245</u>	<u>\$22,081,245</u>	<u>\$22,081,245</u>	
9	Revenue Offsets	\$2,389,661	\$2,389,661	\$2,389,661	
10	Base Revenue Requirement (excluding Tranformer Owership Allowance credit adjustment)	<u>\$19,691,584</u>	<u>\$19,691,584</u>	<u>\$19,691,584</u>	
11	Distribution revenue	\$19,691,584	\$19,691,584	\$19,691,584	
12	Other revenue	\$2,389,661	\$2,389,661	\$2,389,661	
13	Total revenue	<u>\$22,081,245</u>	<u>\$22,081,245</u>	<u>\$22,081,245</u>	
14	Difference (Total Revenue Less Distribution Revenue Requirement before Revenues)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	(1)

Summary Table of Revenue Requirement and Revenue Deficiency/Sufficiency

	Application		Δ% (2)	Per Board Decision	Δ% (2)
Service Revenue Requirement	\$22,081,245	\$22,081,245	\$0	\$22,081,245	(\$1)
Grossed-Up Revenue					
Deficiency/(Sufficiency)	\$3,679,687	\$3,679,687	\$0	\$3,679,687	(\$1)
Base Revenue Requirement (to be recovered from Distribution Rates)	\$19,691,584	\$19,691,584	\$0	\$19,691,584	(\$1)
Revenue Deficiency/(Sufficiency) Associated with Base Revenue Requirement	\$3,679,687	\$3,679,687	\$0	\$3,679,687	(\$1)

Notes

(1) Line 11 - Line 8

(2) Percentage Change Relative to Initial Application



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2018 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 2-1** should be incorporated into the entries. The inputs should correspond with the summary of the Load Forecast for the Test Year in **Appendix 2-1B** and in Exhibit 3 of the application.

Appendix 2-1B 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

Customer Class		Initial Application			Per Board Decision		
Input the name of each customer class.		Customer / Connections	kWh	kW/kVA ⁽¹⁾	Customer / Connections	kWh	kW/kVA ⁽¹⁾
		Test Year average or mid-year	Annual	Annual	Test Year average or mid-year	Annual	Annual
1	Residential	29,789	296,393,596	-			
2	General Service Less than 50 kW	3,443	94,320,130	-			
3	General Service 50 to 4,999 kW	353	248,349,153	624,500			
4	Unmetered Scattered Load	23	1,176,822	-			
5	Sentinel Lighting	348	218,403	616			
6	Street Lighting	8,070	2,415,793	7,076			
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total		42,026	642,873,897	632,192		-	-

Notes:

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



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2018 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 ⁽³⁾	Costs Allocated from Previous Study ⁽¹⁾	%	Allocated Class Revenue Requirement ⁽¹⁾	%
From Sheet 10. Load Forecast				
(7A)				
1 Residential	\$ 11,580,870	61.47%	\$ 14,193,143	64.28%
2 General Service Less than 50 kW	\$ 2,673,048	14.19%	\$ 3,048,990	13.81%
3 General Service 50 to 4,999 kW	\$ 3,475,269	18.44%	\$ 4,543,021	20.57%
4 Unmetered Scattered Load	\$ 33,369	0.18%	\$ 45,677	0.21%
5 Sentinel Lighting	\$ 45,301	0.24%	\$ 46,411	0.21%
6 Street Lighting	\$ 1,033,492	5.49%	\$ 204,002	0.92%
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20				
Total	\$ 18,841,349	100.00%	\$ 22,081,244	100.00%
Service Revenue Requirement (from Sheet 9)			\$ 22,081,244.70	

- (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	\$ 9,084,381	\$ 11,172,059	\$ 11,487,469	\$ 1,567,716
2	General Service Less than 50 kW	\$ 2,640,479	\$ 3,247,287	\$ 3,247,287	\$ 323,010
3	General Service 50 to 4,999 kW	\$ 3,797,584	\$ 4,670,305	\$ 4,670,305	\$ 441,680
4	Unmetered Scattered Load	\$ 39,984	\$ 49,173	\$ 47,454	\$ 7,358
5	Sentinel Lighting	\$ 29,086	\$ 35,771	\$ 35,771	\$ 8,392
6	Street Lighting	\$ 420,382	\$ 516,990	\$ 203,298	\$ 41,505
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20					
Total		\$ 16,011,897	\$ 19,691,585	\$ 19,691,584	\$ 2,389,661

- (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:	(7C + 7E) / (7A)	(7D + 7E) / (7A)	
		2013			
		%	%	%	%
1	Residential	92.68%	89.76%	91.98%	85 - 115
2	General Service Less than 50 kW	113.44%	117.10%	117.10%	80 - 120
3	General Service 50 to 4,999 kW	119.53%	112.52%	112.52%	80 - 120
4	Unmetered Scattered Load	100.13%	123.76%	120.00%	80 - 120
5	Sentinel Lighting	83.03%	95.16%	95.16%	80 - 120
6	Street Lighting	82.33%	273.77%	120.00%	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** ⁽¹¹⁾

Name of Customer Class		Proposed Revenue-to-Cost Ratio			Policy Range
		Test Year	Price Cap IR Period		
		2018	2019	2020	
1	Residential	91.98%	91.98%	91.98%	85 - 115
2	General Service Less than 50 kW	117.10%	117.10%	117.10%	80 - 120
3	General Service 50 to 4,999 kW	112.52%	112.52%	112.52%	80 - 120
4	Unmetered Scattered Load	120.00%	120.00%	120.00%	80 - 120
5	Sentinel Lighting	95.16%	95.16%	95.16%	80 - 120
6	Street Lighting	120.00%	120.00%	120.00%	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 2018 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 2019 and 2020 Price Cap IR models, as necessary. For 2019 and 2020, 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 2018 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	29,789
kWh	296,393,596
Proposed Residential Class Specific Revenue Requirement ¹	\$ 11,487,469.00
Residential Base Rates on Current Tariff	
Monthly Fixed Charge (\$)	\$ 21.23
Distribution Volumetric Rate (\$/kWh)	\$ 0.0132

B Current Fixed/Variable Split

	Base Rates	Billing Determinants	Revenue	% of Total Revenue
Fixed	21.2	29,789	\$ 7,589,564.55	66.07%
Variable	0.013151108	296,393,596	\$ 3,897,904.08	33.93%
TOTAL	-	-	\$ 11,487,468.63	-

C Calculating Test Year Base Rates

Number of Remaining Rate Design Policy Transition Years ²	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	\$ 7,589,564.80	21.23	\$ 7,589,045.64
Variable	\$ 3,897,904.20	0.0132	\$ 3,912,395.47
TOTAL	\$ 11,487,469.00	-	\$ 11,501,441.11

	New F/V Split	Revenue @ new F/V Split	Final Adjusted Base Rates	Revenue Reconciliation @ Adjusted Rates
Fixed	77.38%	\$ 8,888,866.20	\$ 24.87	\$ 8,890,229.16
Variable	22.62%	\$ 2,598,602.80	\$ 0.0088	\$ 2,608,263.64
TOTAL	-	\$ 11,487,469.00	-	\$ 11,498,492.80

Checks ³	
Change in Fixed Rate	\$ 3.64
Difference Between Revenues @ Proposed Rates and Class Specific Revenue Requirement	\$11,023.80
	0.10%

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)

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 RRFW does not replace the rate generator model that an applicant distributor may use in support of its application. The RRFW 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.

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

² 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: $\text{MSC} \times (\text{average number of customers or connections}) \times 12 \text{ months}) / (\text{Class Allocated Revenue Requirement})$.



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2018 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.

⁽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.

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	\$ 5,975,027	6.00%	\$ 99,603,703	\$ 91,810,703	\$ 6,885,803	\$ 3,783,956	\$ 366,429	\$ 11,886,833	\$ 22,081,245	\$ 2,389,661	\$ 19,691,584	\$ 3,679,687