



Exhibit 6:

REVENUE DEFICIENCY OR SUFFICIENCY



Exhibit 6: Revenue Deficiency Or Sufficiency

Tab 1 (of 2): Revenue Requirement



1

OVERVIEW

2 ETPL is requesting the recovery of \$10,930,285 in overall revenue requirement for the
3 2018 Test Year. This includes \$494,448 in revenue offsets. Based upon a
4 continuation of ETPL's existing rates, ETPL has determined that the Revenue
5 Deficiency for the 2018 Test Year is \$232,254 with an average Total Bill Impact for
6 residential customers of 0.31% and -1.98% for GS<50 customers and Distribution Bill
7 Impact of 5.29% for residential and -1.79% for GS<50.

8 Erie Thames Powerlines ("ETPL") has included the following information in this
9 Exhibit, excluding energy costs (i.e. cost of power and associated costs) and revenue:

- 10 • Determination of Net Utility Income
- 11 • Statement of Rate Base
- 12 • Actual Utility Return on Rate Base
- 13 • Indicated Rate of Return
- 14 • Requested Rate of Return
- 15 • Gross Deficiency in Revenue

16 The information supports ETPL's request in this Application for an increase in its
17 Revenue Requirement while continuing to support the proposed capital and
18 operating budgets for 2018 and to service debt, pay PILs and provide the allowed
19 Return on Equity necessary to maintain safety, customer satisfaction, asset health
20 and service metrics.

21

22 The calculation of this Revenue Deficiency is discussed in detail below. ETPL has
23 completed the Revenue Requirement Work Form version 7.0 ("RRWF Model") as
24 provided by the Board on July 14, 2017. The RRWF Model has been filed in Live
25 Excel format as part of this Application and is included as Attachment 6-A to this
26 Exhibit.

27



1 In accordance with the Board's Filing Requirements, the calculation of gross Revenue
2 Deficiency/Sufficiency must isolate the delivery-related Deficiency/Sufficiency from any
3 energy-related Deficiency/Sufficiency. The above noted Revenue Deficiency
4 calculation does not include the following:

- 5 • Recovery of deferral and variance accounts, or
- 6 • Other electricity charges which include Energy Commodity, Transmission Charges
7 and Wholesale Market Service Charges.



1 **CALCULATION OF REVENUE REQUIREMENT**

2 ETPL's Revenue Requirement consists of the following:

- 3 • Operations, Maintenance and Administration ("OM&A") Expenses,
4 • Property Taxes,
5 • Depreciation/Amortization Expense,
6 • PILs, and
7 • Return on Rate Base (Deemed Interest & Return on Equity).

8 ETPL's Revenue Requirement is primarily received through electricity distribution rates
9 with Other Revenue from Board approved specific service charges such as Late
10 Payment Charges and Other Miscellaneous Charges.

11

12 These Other Revenues, as described in Exhibit 3, are treated as offsets against
13 ETPL's Service Revenue Requirement to calculate the Base Revenue Requirement
14 upon which class-specific distribution rates are calculated.

15

16 ETPL has ensured that numbers entered in the RRWF reconcile with the appropriate
17 numbers in other Exhibits of this Application.



1 **DETERMINATION OF NET UTILITY INCOME**

2 ETPL has determined that its' allowable 2018 Net Income as \$1,415,198. Table 6-1
 3 below provides the detailed Net Income calculation for the 2018 Test Year.

4
 5 **TABLE 6-1: ETPL'S 2018 TEST YEAR NET UTILITY INCOME**

<u>Particulars</u>	<u>Initial Application</u>
<u>Operating Revenues:</u>	
Distribution Revenue (at Proposed Rates)	\$10,435,837
Other Revenue	(1) \$494,448
Total Operating Revenues	<u>\$10,930,285</u>
<u>Operating Expenses:</u>	
OM+A Expenses	\$6,412,957
Depreciation/Amortization	\$1,842,780
Property taxes	\$55,636
Capital taxes	\$ -
Other expense	<u>\$ -</u>
Subtotal (lines 4 to 8)	\$8,311,373
Deemed Interest Expense	<u>\$973,205</u>
Total Expenses (lines 9 to 10)	<u>\$9,284,578</u>
Utility income before income taxes	<u><u>\$1,645,707</u></u>
Income taxes (grossed-up)	<u>\$198,681</u>
Utility net income	<u><u>\$1,447,026</u></u>

6



1

STATEMENT OF RATE BASE

2 A summary of ETPL's Rate Base for the 2018 Test Year, calculated on ETPL's
 3 deemed capital structure in accordance with the OEB Filing Requirements, is
 4 summarized in Table 6-2 below. ETPL's 2018 Proposed Rate Base is \$40,195,158.
 5 For more details on the calculation of ETPL's 2018 rate base, please see Exhibit 2.

6

7 **TABLE 6-2: ETPL'S 2018 PROPOSED RATE BASE**

Line No.	Particulars	Initial Application
1	Gross Fixed Assets (average) ⁽²⁾	\$41,001,517
2	Accumulated Depreciation (average) ⁽²⁾	(\$5,959,599)
3	Net Fixed Assets (average) ⁽²⁾	\$35,041,919
4	Allowance for Working Capital ⁽¹⁾	\$5,153,240
8 5	Total Rate Base	\$40,195,158



1

ACTUAL UTILITY RETURN ON RATE

2 The computation of ETPL's 2018 Test Year return on rate base is summarized below as
 3 Table 6-3.

4

5 **TABLE 6-3: ETPL'S 2018 RETURN ON RATE BASE**

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
Initial Application					
		(%)	(\$)	(%)	(\$)
	Debt				
1	Long-term Debt	56.00%	\$22,509,289	4.16%	\$936,386
2	Short-term Debt	4.00%	\$1,607,806	2.29%	\$36,819
3	Total Debt	60.00%	\$24,117,095	4.04%	\$973,205
	Equity				
4	Common Equity	40.00%	\$16,078,063	9.00%	\$1,447,026
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	Total Equity	40.00%	\$16,078,063	9.00%	\$1,447,026
6	7	Total	\$40,195,158	6.02%	\$2,420,231

7

8 **6.5.1 INDICATED RATE OF RETURN**

9 ETPL's 2018 Indicated Rate of Return is 6.02% as presented in Line 7 of Table 6-3
 10 and is calculated as the sum of Utility Net Income and Deemed Interest Expense
 11 divided by the Utility Rate of Return on Rate Base.

12

13 **6.5.2 REQUESTED RATE OF RETURN**

14 ETPL has determined its requested Rate of Return on Base to be \$2,420,231 or 6.02%
 15 as summarized in Table 6-3 above, in the event that there is no change to the deem
 16 interest and equity rates for 2018, as proposed in this Application.



1

REVENUE DEFICIENCY

2 ETPL has provided a detailed calculation supporting its 2018 Revenue Deficiency in
 3 Table 6-4 below. The 2018 Revenue Deficiency is \$232,254 and is shown on line 25.
 4 The Gross Revenue Deficiency of \$315,992 on Line 26 is determined by grossing up the
 5 Revenue Deficiency for PILs.

6 **TABLE 6-4: ETPL'S 2018 REVENUE DEFICIENCY CALCULATION**

Line No.	Particulars	Initial Application	
		At Current Approved Rates	At Proposed Rates
1	Revenue Deficiency from Below		\$315,992
2	Distribution Revenue	\$10,119,845	\$10,119,845
3	Other Operating Revenue Offsets - net	\$494,448	\$494,448
4	Total Revenue	\$10,614,293	\$10,930,285
5	Operating Expenses	\$8,311,373	\$8,311,373
6	Deemed Interest Expense	\$973,205	\$973,205
8	Total Cost and Expenses	\$9,284,578	\$9,284,578
9	Utility Income Before Income Taxes	\$1,329,715	\$1,645,707
10	Tax Adjustments to Accounting Income per 2013 PILs model	(\$895,966)	(\$895,966)
11	Taxable Income	\$433,748	\$749,741
12	Income Tax Rate	26.50%	26.50%
13	Income Tax on Taxable Income	\$114,943	\$198,681
14	Income Tax Credits	\$ -	\$ -
15	Utility Net Income	\$1,214,771	\$1,447,026
16	Utility Rate Base	\$40,195,158	\$40,195,158
17	Deemed Equity Portion of Rate Base	\$16,078,063	\$16,078,063
18	Income/(Equity Portion of Rate Base)	7.56%	9.00%
19	Target Return - Equity on Rate Base	9.00%	9.00%
20	Deficiency/Sufficiency in Return on Equity	-1.44%	0.00%
21	Indicated Rate of Return	5.44%	6.02%
22	Requested Rate of Return on Rate Base	6.02%	6.02%
23	Deficiency/Sufficiency in Rate of Return	-0.58%	0.00%
24	Target Return on Equity	\$1,447,026	\$1,447,026
25	Revenue Deficiency/(Sufficiency)	\$232,254	\$ -
26	Gross Revenue Deficiency/(Sufficiency)	\$315,992 ⁽¹⁾	

7



COST DRIVERS ON REVENUE DEFICIENCY

In Table 6-5 below, ETPL outlines the contributors to the 2018 Revenue Deficiency by the various Revenue Requirement components.

In Column B, ETPL has allocated the 2018 revenue calculated using 2017 Approved rates. Column C represents the Actual 2018 Test Year Revenue Requirement by component. Lastly, in Column D is the calculated variance based on the Column C minus Column B.

TABLE 6-5: REVENUE DEFICIENCY BY REVENUE REQUIREMENT COMPONENT

Description	2012 Board Approved Proxy	2018 Revenue at Existing Rates Allocated in Proportion to 2012 BAP	2018 Test Year Revenue Requirement	Variance
	A	B	C	D = C - B
Revenue Requirement:				
OM&A	\$ 5,660,594	\$ 6,043,926	\$ 6,468,593	\$ 424,667
Depreciation	\$ 2,030,082	\$ 2,167,558	\$ 1,842,780	-\$ 324,778
Income Tax	\$ 341,585	\$ 364,717	\$ 198,681	-\$ 166,036
Interest Expense	\$ 803,302	\$ 857,701	\$ 973,205	\$ 115,504
Return on Rate Base	\$ 1,147,934	\$ 1,225,671	\$ 1,447,026	\$ 221,355
Total	\$ 9,983,497	\$ 10,659,573	\$ 10,930,285	\$ 270,712
Rate Base				
Rate Base	\$ 31,467,480	\$ 31,467,480	\$ 40,195,158	\$ 8,727,678

The main drivers of the Revenue Deficiency of \$125,590 are described as follows:

- **Operating Maintenance & Administration ("OM&A") Expense Increase:** ETPL's OM&A deficiency component has increased by \$424,667 which is directionally consistent with the variance between the 2012 BA and the 2018 Test Year, as explained in Exhibit 4. This includes an increase of \$140k related to the



1 implementation of cyber security and privacy IT processes implemented as a result of
2 the Cyber Security Framework launched by the Board as part of EB-2016-0032. It also
3 includes changes to operating costs as part of the transition from CGAAP to MIFRS,
4 which results in \$307,000 costs that were previously capitalized being expensed as
5 OM&A in 2012 as detailed in Exhibit 4.

- 6 • **Depreciation Decrease:** Under normal circumstances, the growth in rate base
7 between 2012 BAP and 2018 Test Year would have driven an increase to ETPL's
8 depreciation expense. However, ETPL's depreciation deficiency component has
9 decreased by approximately \$300k, which is directionally consistent with the variance
10 between the 2012 BAP and the 2018 Test Year. This decrease in depreciation, which
11 occurs despite the increase in Rate Base, is the result of ETPL adopting IFRS-compliant
12 depreciation accounting policies. These new policies (e.g. longer useful asset lives)
13 have resulted in a decrease in what the 2018 Test Year depreciation would have
14 otherwise been under CGAAP. For additional details, please refer to Exhibit 2.
- 15 • **Payments-in-Lieu of Taxes ("PILs") Decrease:** The decrease in the PILs deficiency
16 component by approximately \$200k is consistent with decrease in accounting
17 depreciation resulting from the adoption of longer useful asset lives, as well as a
18 decrease in tax rates since ETPL's previous rebasing. For further details on PILS, please
19 refer to Exhibit 4.
- 20 • **Return on Rate Base:** The increase in Return on Rate Base deficiency component by
21 approximately \$220k is driven by an increase in Rate Base of \$8,727,000. The Net
22 Book Value of ETPL's assets increased by approximately \$8,840,000 between the 2012
23 Board-Approved and the 2018 Test Year, as shown in Exhibit 2. This increase in Return
24 on Rate has been partially offset by two factors:
 - 25 • A decrease in Working Capital Allowance resulting from the 2012 Default
26 Value of 15% being reduced to the 2018 ETPL deemed value of 7.5% and,
 - 27 • A decrease in ETPL's Weighted Average Cost of Capital ("WACC") from
28 approximately 6.20% in 2012 to 6.02% in the 2018 Test Year, based on the
29 current Board capital parameters.



Erie Thames Powerlines
Filed: 27 February, 2018
EB-2017-0038
Exhibit 6
Tab 2

Exhibit 6: Revenue Deficiency Or Sufficiency

Tab 2 (of 2): Exhibit 6 Appendices



Erie Thames Powerlines
Filed: 27 February, 2018
EB-2017-0038
Exhibit 6
Tab 2
Schedule 1
Attachment 1
Page 1 of 1

Attachment 1 (of 1):

6-A Revenue Requirement Work Form



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2018 Filers



Version 7.02

Utility Name	Erie Thames Powerlines Corporation
Service Territory	
Assigned EB Number	EB-2017-0038
Name and Title	Graig Pettit, Director - Regulatory Finance and Cus
Phone Number	519-485-1820
Email Address	gpettit@eriethamespower.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⁾			Per Board Decision
1 Rate Base				
Gross Fixed Assets (average)	\$41,001,517		\$ 41,001,517	\$41,001,517
Accumulated Depreciation (average)	(\$5,959,599) ⁽⁵⁾		(\$5,959,599)	(\$5,959,599)
Allowance for Working Capital:				
Controllable Expenses	\$6,468,593		\$ 6,468,593	\$6,468,593
Cost of Power	\$62,241,271		\$ 62,241,271	\$62,241,271
Working Capital Rate (%)	7.50% ⁽⁹⁾		7.50% ⁽⁹⁾	7.50% ⁽⁹⁾
2 Utility Income				
Operating Revenues:				
Distribution Revenue at Current Rates	\$10,119,845			
Distribution Revenue at Proposed Rates	\$10,435,837			
Other Revenue:				
Specific Service Charges	\$98,162			
Late Payment Charges	\$156,628			
Other Distribution Revenue	\$191,550			
Other Income and Deductions	\$48,107			
Total Revenue Offsets	\$494,448 ⁽⁷⁾			
Operating Expenses:				
OM+A Expenses	\$6,412,957		\$ 6,412,957	\$6,412,957
Depreciation/Amortization	\$1,842,780		\$ 1,842,780	\$1,842,780
Property taxes	\$55,636		\$ 55,636	\$55,636
Other expenses				
3 Taxes/PIs				
Taxable Income:				
Adjustments required to arrive at taxable income	(\$895,966) ⁽³⁾			
Utility Income Taxes and Rates:				
Income taxes (not grossed up)	\$146,031			
Income taxes (grossed up)	\$198,681			
Federal tax (%)	15.00%			
Provincial tax (%)	11.50%			
Income Tax Credits				
4 Capitalization/Cost of Capital				
Capital Structure:				
Long-term debt Capitalization Ratio (%)	56.0%			
Short-term debt Capitalization Ratio (%)	4.0% ⁽⁸⁾			
Common Equity Capitalization Ratio (%)	40.0%			
Preferred Shares Capitalization Ratio (%)				
	100.0%			
Cost of Capital				
Long-term debt Cost Rate (%)	4.16%			
Short-term debt Cost Rate (%)	2.29%			
Common Equity Cost Rate (%)	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.



Revenue Requirement Workform (RRWF) for 2018 Filers

Rate Base and Working Capital

Line No.	Particulars	Initial Application				Per Board Decision
1	Gross Fixed Assets (average) ⁽²⁾	\$41,001,517	\$ -	\$41,001,517	\$ -	\$41,001,517
2	Accumulated Depreciation (average) ⁽²⁾	(\$5,959,599)	\$ -	(\$5,959,599)	\$ -	(\$5,959,599)
3	Net Fixed Assets (average) ⁽²⁾	\$35,041,919	\$ -	\$35,041,919	\$ -	\$35,041,919
4	Allowance for Working Capital ⁽¹⁾	\$5,153,240	\$ -	\$5,153,240	\$ -	\$5,153,240
5	Total Rate Base	\$40,195,158	\$ -	\$40,195,158	\$ -	\$40,195,158

(1) Allowance for Working Capital - Derivation

6	Controllable Expenses	\$6,468,593	\$ -	\$6,468,593	\$ -	\$6,468,593
7	Cost of Power	\$62,241,271	\$ -	\$62,241,271	\$ -	\$62,241,271
8	Working Capital Base	\$68,709,864	\$ -	\$68,709,864	\$ -	\$68,709,864
9	Working Capital Rate % ⁽¹⁾	7.50%	0.00%	7.50%	0.00%	7.50%
10	Working Capital Allowance	\$5,153,240	\$ -	\$5,153,240	\$ -	\$5,153,240

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)	\$10,435,837	(\$10,435,837)	\$ -	\$ -
2	Other Revenue ⁽¹⁾	\$494,448	(\$494,448)	\$ -	\$ -
3	Total Operating Revenues	\$10,930,285	(\$10,930,285)	\$ -	\$ -
Operating Expenses:					
4	OM+A Expenses	\$6,412,957	\$ -	\$6,412,957	\$ -
5	Depreciation/Amortization	\$1,842,780	\$ -	\$1,842,780	\$ -
6	Property taxes	\$55,636	\$ -	\$55,636	\$ -
7	Capital taxes	\$ -	\$ -	\$ -	\$ -
8	Other expense	\$ -	\$ -	\$ -	\$ -
9	Subtotal (lines 4 to 8)	\$8,311,373	\$ -	\$8,311,373	\$ -
10	Deemed Interest Expense	\$973,205	(\$973,205)	\$ -	\$ -
11	Total Expenses (lines 9 to 10)	\$9,284,578	(\$973,205)	\$8,311,373	\$ -
12	Utility income before income taxes	\$1,645,707	(\$9,957,080)	(\$8,311,373)	\$ -
13	Income taxes (grossed-up)	\$198,681	\$ -	\$198,681	\$ -
14	Utility net income	\$1,447,026	(\$9,957,080)	(\$8,510,054)	\$ -

Notes Other Revenues / Revenue Offsets

(1)	Specific Service Charges	\$98,162		\$ -	\$ -
	Late Payment Charges	\$156,628		\$ -	\$ -
	Other Distribution Revenue	\$191,550		\$ -	\$ -
	Other Income and Deductions	\$48,107		\$ -	\$ -
	Total Revenue Offsets	\$494,448	\$ -	\$ -	\$ -



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	\$1,447,026	\$ -	\$ -
2	Adjustments required to arrive at taxable utility income	(\$895,966)	\$ -	\$ -
3	Taxable income	\$551,060	\$ -	\$ -
<u>Calculation of Utility income Taxes</u>				
4	Income taxes	\$146,031	\$146,031	\$146,031
6	Total taxes	\$146,031	\$146,031	\$146,031
7	Gross-up of Income Taxes	\$52,651	\$52,651	\$52,651
8	Grossed-up Income Taxes	\$198,681	\$198,681	\$198,681
9	PILs / tax Allowance (Grossed-up Income taxes + Capital taxes)	\$198,681	\$198,681	\$198,681
10	Other tax Credits	\$ -	\$ -	\$ -
<u>Tax Rates</u>				
11	Federal tax (%)	15.00%	15.00%	15.00%
12	Provincial tax (%)	11.50%	11.50%	11.50%
13	Total tax rate (%)	26.50%	26.50%	26.50%

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%	\$22,509,289	4.16%	\$936,386
2	Short-term Debt	4.00%	\$1,607,806	2.29%	\$36,819
3	Total Debt	60.00%	\$24,117,095	4.04%	\$973,205
	Equity				
4	Common Equity	40.00%	\$16,078,063	9.00%	\$1,447,026
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	Total Equity	40.00%	\$16,078,063	9.00%	\$1,447,026
7	Total	100.00%	\$40,195,158	6.02%	\$2,420,231
Per Board Decision					
	Debt				
1	Long-term Debt	0.00%	\$ -	0.00%	\$ -
2	Short-term Debt	0.00%	\$ -	0.00%	\$ -
3	Total Debt	0.00%	\$ -	0.00%	\$ -
	Equity				
4	Common Equity	0.00%	\$ -	0.00%	\$ -
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	Total Equity	0.00%	\$ -	0.00%	\$ -
7	Total	0.00%	\$40,195,158	0.00%	\$ -
	Debt				
8	Long-term Debt	0.00%	\$ -	4.16%	\$ -
9	Short-term Debt	0.00%	\$ -	2.29%	\$ -
10	Total Debt	0.00%	\$ -	0.00%	\$ -
	Equity				
11	Common Equity	0.00%	\$ -	9.00%	\$ -
12	Preferred Shares	0.00%	\$ -	0.00%	\$ -
13	Total Equity	0.00%	\$ -	0.00%	\$ -
14	Total	0.00%	\$40,195,158	0.00%	\$ -

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		\$315,992		(\$2,131,508)		\$11,307,990
2	Distribution Revenue	\$10,119,845	\$10,119,845	\$10,119,845	\$12,567,345	\$ -	(\$11,307,990)
3	Other Operating Revenue	\$494,448	\$494,448	\$ -	\$ -	\$ -	\$ -
	Offsets - net						
4	Total Revenue	\$10,614,293	\$10,930,285	\$10,119,845	\$10,435,837	\$ -	\$ -
5	Operating Expenses	\$8,311,373	\$8,311,373	\$8,311,373	\$8,311,373	\$8,311,373	\$8,311,373
6	Deemed Interest Expense	\$973,205	\$973,205	\$ -	\$ -	\$ -	\$ -
8	Total Cost and Expenses	\$9,284,578	\$9,284,578	\$8,311,373	\$8,311,373	\$8,311,373	\$8,311,373
9	Utility Income Before Income Taxes	\$1,329,715	\$1,645,707	\$1,808,472	\$2,124,465	(\$8,311,373)	(\$8,311,373)
10	Tax Adjustments to Accounting Income per 2013 PILs model	(\$895,966)	(\$895,966)	(\$895,966)	(\$895,966)	\$ -	\$ -
11	Taxable Income	\$433,748	\$749,741	\$912,506	\$1,228,498	(\$8,311,373)	(\$8,311,373)
12	Income Tax Rate	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%
13	Income Tax on Taxable Income	\$114,943	\$198,681	\$241,814	\$325,552	\$ -	\$ -
14	Income Tax Credits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	Utility Net Income	\$1,214,771	\$1,447,026	\$1,566,658	(\$8,510,054)	(\$8,311,373)	(\$8,510,054)
16	Utility Rate Base	\$40,195,158	\$40,195,158	\$40,195,158	\$40,195,158	\$40,195,158	\$40,195,158
17	Deemed Equity Portion of Rate Base	\$16,078,063	\$16,078,063	\$ -	\$ -	\$ -	\$ -
18	Income/(Equity Portion of Rate Base)	7.56%	9.00%	0.00%	0.00%	0.00%	0.00%
19	Target Return - Equity on Rate Base	9.00%	9.00%	0.00%	0.00%	0.00%	0.00%
20	Deficiency/Sufficiency in Return on Equity	-1.44%	0.00%	0.00%	0.00%	0.00%	0.00%
21	Indicated Rate of Return	5.44%	6.02%	3.90%	0.00%	-20.68%	0.00%
22	Requested Rate of Return on Rate Base	6.02%	6.02%	0.00%	0.00%	0.00%	0.00%
23	Deficiency/Sufficiency in Rate of Return	-0.58%	0.00%	3.90%	0.00%	-20.68%	0.00%
24	Target Return on Equity	\$1,447,026	\$1,447,026	\$ -	\$ -	\$ -	\$ -
25	Revenue Deficiency/(Sufficiency)	\$232,254	\$ -	(\$1,566,658)	\$ -	\$8,311,373	\$ -
26	Gross Revenue Deficiency/(Sufficiency)	\$315,992 ⁽¹⁾		(\$2,131,508) ⁽¹⁾		\$11,307,990 ⁽¹⁾	

Notes:

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



Revenue Requirement Workform (RRWF) for 2018 Filers

Revenue Requirement

Line No.	Particulars	Application		Per Board Decision	
1	OM&A Expenses	\$6,412,957	\$6,412,957	\$6,412,957	\$6,412,957
2	Amortization/Depreciation	\$1,842,780	\$1,842,780	\$1,842,780	\$1,842,780
3	Property Taxes	\$55,636	\$55,636	\$55,636	\$55,636
5	Income Taxes (Grossed up)	\$198,681	\$198,681	\$198,681	\$198,681
6	Other Expenses	\$ -	\$ -	\$ -	\$ -
7	Return				
	Deemed Interest Expense	\$973,205	\$ -	\$ -	\$ -
	Return on Deemed Equity	\$1,447,026	\$ -	\$ -	\$ -
8	Service Revenue Requirement (before Revenues)	<u>\$10,930,285</u>	<u>\$8,510,054</u>	<u>\$8,510,054</u>	<u>\$8,510,054</u>
9	Revenue Offsets	\$494,448	\$ -	\$ -	\$ -
10	Base Revenue Requirement (excluding Tranformer Owership Allowance credit adjustment)	<u>\$10,435,837</u>	<u>\$8,510,054</u>	<u>\$8,510,054</u>	<u>\$8,510,054</u>
11	Distribution revenue	\$10,435,837	\$ -	\$ -	\$ -
12	Other revenue	\$494,448	\$ -	\$ -	\$ -
13	Total revenue	<u>\$10,930,285</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
14	Difference (Total Revenue Less Distribution Revenue Requirement before Revenues)	<u>\$ -</u>	<u>(\$8,510,054)</u>	<u>(\$8,510,054)</u>	<u>(\$8,510,054)</u>

Summary Table of Revenue Requirement and Revenue Deficiency/Sufficiency

	Application		Δ% ⁽²⁾	Per Board Decision	Δ% ⁽²⁾
Service Revenue Requirement Grossed-Up Revenue	\$10,930,285	\$8,510,054	(\$0)	\$8,510,054	(\$1)
Deficiency/(Sufficiency)	\$315,992	(\$2,131,508)	(\$8)	\$11,307,990	(\$1)
Base Revenue Requirement (to be recovered from Distribution Rates)	\$10,435,837	\$8,510,054	(\$0)	\$8,510,054	(\$1)
Revenue Deficiency/(Sufficiency) Associated with Base Revenue Requirement	\$315,992	\$ -	(\$1)	\$ -	(\$1)

Notes

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



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-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 ⁽¹⁾	Customer / Connections	kWh	kW/kVA ⁽¹⁾	Customer / Connections	kWh	kW/kVA ⁽¹⁾
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	17,119	132,507,178	-						
2	General Service < 50 kW	2,018	48,252,843	-						
3	General Service > 50 to 999 kW	153	86,975,191	262,052						
4	General Service > 1,000 to 4,999 kW	6	74,898,209	160,936						
5	Large Use	1	96,934,403	168,201						
6	Unmetered Scattered Load	130	517,597	-						
7	Sentinel Lighting	238	221,514	574						
8	Street Lighting	6,070	1,985,669	5,449						
9	Embedded Distributor	4	16,296,711	34,856						
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
Total			458,589,315	632,069						

Notes:

⁽¹⁾ 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 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⁾	%
<i>From Sheet 10. Load Forecast</i>			<i>(7A)</i>	
1 Residential	\$ 5,636,524	62.03%	\$ 7,412,934	67.82%
2 General Service < 50 kW	\$ 1,142,520	12.57%	\$ 1,330,842	12.18%
3 General Service > 50 to 999 kW	\$ 862,571	9.49%	\$ 709,259	6.49%
4 General Service > 1,000 to 4,999 kW	\$ 526,241	5.79%	\$ 495,193	4.53%
5 Large Use	\$ 307,549	3.38%	\$ 503,118	4.60%
6 Unmetered Scattered Load	\$ 70,762	0.78%	\$ 38,524	0.35%
7 Sentinel Lighting	\$ 30,337	0.33%	\$ 60,208	0.55%
8 Street Lighting	\$ 344,523	3.79%	\$ 263,563	2.41%
9 Embedded Distributor	\$ 166,009	1.83%	\$ 116,644	1.07%
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20				
Total	\$ 9,087,035	100.00%	\$ 10,930,285	100.00%
			Service Revenue Requirement (from Sheet 9)	\$ 10,930,285.10

- (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	\$ 6,015,606	\$ 6,015,673	\$ 6,711,297	\$ 377,450
2 General Service < 50 kW	\$ 1,239,441	\$ 1,239,511	\$ 1,279,914	\$ 50,928
3 General Service > 50 to 999 kW	\$ 1,050,903	\$ 1,047,999	\$ 830,207	\$ 20,903
4 General Service > 1,000 to 4,999 kW	\$ 703,748	\$ 861,203	\$ 579,364	\$ 14,645
5 Large Use	\$ 343,787	\$ 444,708	\$ 488,187	\$ 14,729
6 Unmetered Scattered Load	\$ 64,102	\$ 64,091	\$ 45,368	\$ 861
7 Sentinel Lighting	\$ 24,961	\$ 24,932	\$ 58,698	\$ 1,510
8 Street Lighting	\$ 422,351	\$ 422,355	\$ 306,186	\$ 10,089
9 Embedded Distributor	\$ 254,948	\$ 254,949	\$ 136,614	\$ 3,332
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Total	\$ 10,119,845	\$ 10,375,420	\$ 10,435,837	\$ 494,448

- (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	107.00%	86.24%	95.63%	85 - 115
2 General Service < 50 kW	90.00%	96.96%	100.00%	80 - 120
3 General Service > 50 to 999 kW	80.00%	150.71%	120.00%	80 - 120
4 General Service > 1,000 to 4,999 kW	120.00%	176.87%	119.96%	80 - 120
5 Large Use	115.00%	91.32%	99.96%	85 - 115
6 Unmetered Scattered Load	80.00%	168.60%	120.00%	80 - 120
7 Sentinel Lighting	84.00%	43.92%	100.00%	80 - 120
8 Street Lighting	74.00%	164.08%	120.00%	80 - 120
9 Embedded Distributor	105.00%	221.43%	119.98%	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 2018	Price Cap IR Period		
		2019	2020	
1 Residential	95.63%	95.63%	95.63%	85 - 115
2 General Service < 50 kW	100.00%	100.00%	100.00%	80 - 120
3 General Service > 50 to 999 kW	120.00%	120.00%	120.00%	80 - 120
4 General Service > 1,000 to 4,999 kW	119.96%	119.96%	119.96%	80 - 120
5 Large Use	99.96%	99.96%	99.96%	85 - 115
6 Unmetered Scattered Load	120.00%	120.00%	120.00%	80 - 120
7 Sentinel Lighting	100.00%	100.00%	100.00%	80 - 120
8 Street Lighting	120.00%	120.00%	120.00%	80 - 120
9 Embedded Distributor	119.98%	119.98%	119.98%	80 - 120
10				
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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'.



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	17,119
kWh	132,507,178

Proposed Residential Class Specific Revenue Requirement ¹	\$ 6,711,296.84
--	-----------------

Residential Base Rates on Current Tariff	
Monthly Fixed Charge (\$)	\$ 23.22
Distribution Volumetric Rate (\$/kWh)	\$ 0.0094

B Current Fixed/Variable Split

	Base Rates	Billing Determinants	Revenue	% of Total Revenue
Fixed	23.22	17,119	\$ 4,770,105.26	79.29%
Variable	0.0094	132,507,178	\$ 1,245,567.47	20.71%
TOTAL	-	-	\$ 6,015,672.73	-

C Calculating Test Year Base Rates

Number of Remaining Rate Design Policy Transition Years ²	2
--	---

	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	\$ 5,321,697.80	25.91	\$ 5,322,714.35
Variable	\$ 1,389,599.04	0.0105	\$ 1,391,325.37
TOTAL	\$ 6,711,296.84	-	\$ 6,714,039.72

	New F/V Split	Revenue @ new F/V Split	Final Adjusted Base Rates	Revenue Reconciliation @ Adjusted Rates
Fixed	89.65%	\$ 6,016,497.32	\$ 29.29	\$ 6,017,070.76
Variable	10.35%	\$ 694,799.52	\$ 0.0052	\$ 689,037.33
TOTAL	-	\$ 6,711,296.84	-	\$ 6,706,108.09

Checks ³	
Change in Fixed Rate	\$ 3.38
Difference Between Revenues @ Proposed Rates and Class Specific Revenue Requirement	(\$5,188.75) -0.08%

Notes:

- ¹ 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).
- ² 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.
- ³ 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 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	\$ 2,420,231	6.02%	\$ 40,195,158	\$ 68,709,864	\$ 5,153,240	\$ 1,842,780	\$ 198,681	\$ 6,412,957	\$ 10,930,285	\$ 494,448	\$ 10,435,837	\$ 315,992