



## **EXHIBIT 6**

# **REVENUE REQUIREMENT INCLUDING CAPITAL & OM&A**

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## **LIST OF ATTACHMENTS**

**ATTACHMENT 6-1**      Revenue Requirement Workform

## **EXHIBIT 6: REVENUE REQUIREMENT INCLUDING CAPITAL & OM&A**

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

Waterloo North Hydro Inc. ("WNH") has included the following information in this Exhibit, excluding energy costs (i.e. Cost of Power and associated costs) and revenues:

- Determination of Net Utility Income
- Statement of Rate Base
- Actual Utility Return on Rate Base
- Indicated Rate of Return
- Requested Rate of Return
- Deficiency or Sufficiency in Revenue
- Gross Deficiency or Sufficiency in Revenue

The information in this Exhibit supports WNH's request in this Application for an increase in its Revenue Requirement to support the proposed capital and operating budgets for 2021 to service debt, to pay deemed PILs and to return the allowed Return on Equity.

WNH has determined that the Revenue Deficiency for the 2021 Test Year is \$2,624,364.

The calculations on which this determination is based are set out below. The Revenue Deficiency calculation does not include the following:

- Recovery of Deferral and Variance Accounts

- Other electricity charges which include Energy Commodity, Transmission Charges and Wholesale Market Service Charges

These items are considered elsewhere in this Application and are treated either as recoveries of regulatory assets or regulatory liabilities on the Balance Sheet, or as energy related costs recorded in the OEB-prescribed Retail Settlement Variance Accounts.

## **Revenue Requirement**

WNH's Revenue Requirement consists of the following:

- Operations, Maintenance and Administration (OM&A) Expense
- Property Taxes
- Depreciation/Amortization Expense
- PILs
- Return on Rate Base (Deemed Interest & Return on Equity)

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

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

WNH has included the OEB's Revenue Requirement Work Form ("RRWF") as Attachment 6-1 of this Exhibit as a PDF document and has also included an Excel version.

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

## Determination of Net Utility Income

WNH has determined its allowable 2021 Net Income as \$8,338,878. Table 6-1 provides the detailed Net Income calculation for the 2021 Test Year.

**Table 6-1 – Determination of Net Utility Net Income**

Details	Initial Application
<b><i>Operating Revenues:</i></b>	
Distribution Revenue (at Proposed Rates)	39,298,087
Other Revenue	2,250,668
Total Operating Revenues	41,548,755
<b><i>Operating Expenses:</i></b>	
OM&A Expenses	15,777,057
Depreciation/Amortization	11,100,527
Property taxes	471,620
Capital taxes	-
Other expense	-
Total Operating Expenses	27,349,204
Deemed Interest Expense	4,971,349
Total Expenses	32,320,553
<b>Utility income before income taxes</b>	9,228,202
PILs (grossed-up)	889,324
<b>Utility Net Income</b>	<b>8,338,878</b>

## Statement of Rate Base

A summary of WNH's Rate Base for the 2021 Test Year, calculated on WNH's deemed capital structure in accordance with the OEB Filing Requirements, is summarized in Table 6-2. WNH's 2021 Rate Base is \$244,685,394.

**Table 6-2 – Rate Base**

Rate Base	
Details	Initial Application
<b>Net Fixed Assets</b>	
Gross Fixed Assets (average)	421,683,876
Accumulated Depreciation (average)	(193,127,987)
<b>Net Fixed Assets (average)</b>	<b>228,555,889</b>
Allowance for Working Capital	16,129,505
<b>Total Rate Base</b>	<b>244,685,394</b>
<b>Allowance for Working Capital - Derivation</b>	
Controllable Expenses	15,524,190
Cost of Power	199,535,876
Working Capital Base	215,060,066
Working Capital Rate %	7.5%
<b>Working Capital Allowance</b>	<b>16,129,505</b>

## Actual Utility Return on Rate Base

Table 6-3 summarizes the computation of WNH's 2021 Test Year at Existing Rates and the 2021 Test Year at Proposed Rates in order to achieve the Required Revenue.

**Table 6-3 Return on Rate Base**

Description	2021 Test Existing Rates	2021 Test Required Revenue
<b><i>Actual Return on Rate Base</i></b>		
Rate Base	244,685,394	244,685,394
Interest Expense	4,971,349	4,971,349
Net Income	6,409,971	8,338,878
<b>Total Actual Return on Rate Base</b>	<b>11,381,320</b>	<b>13,310,227</b>
<b>Actual Return on Rate Base</b>	<b>4.65%</b>	<b>5.44%</b>
<b><i>Required Return on Rate Base</i></b>		
Rate Base	244,685,394	244,685,394
<i>Return Rates:</i>		
Return on Debt (Weighted)	3.39%	3.39%
Return on Equity	8.52%	8.52%
Deemed Interest Expense	4,971,349	4,971,349
Return on Equity	8,338,878	8,338,878
<b>Total Return</b>	<b>13,310,227</b>	<b>13,310,227</b>
<b>Expected Return on Rate Base</b>	<b>5.44%</b>	<b>5.44%</b>



**Indicated Rate of Return**

WNNH's 2021 Indicated Rate of Return is 5.44% as presented in Table 6-4 and is calculated as the sum of Utility Net Income and Deemed Interest Expense divided by the Utility Rate of Return on Rate Base.

**Requested Rate of Return**

WNNH has determined its requested Rate of Return on Base to be 5.44% or \$8,338,878.

Table 6-3 above summarizes the computation of WNNH's 2021 Requested Rate of Return on Rate Base of 5.44%.

As summarized in Table 6-3, in the absence of a change to distribution rates for 2021, as proposed in this Application, and assuming that the 2020 Approved rates remained unchanged, WNNH's Return on Rate Base would be \$11,381,320 or 4.65%.

**Deficiency or Sufficiency in Revenue**

WNNH has provided a detailed calculation supporting its 2021 Revenue Deficiency in Table 6-4 in this Exhibit.

**Gross Deficiency or Sufficiency in Revenue**

WNNH has provided a detailed calculation supporting its 2021 Revenue Deficiency in Table 6-4. The Gross Revenue Deficiency is calculated at \$2,624,364. Table 6-4 provides the Revenue Deficiency calculation for the 2021 Test Year at Proposed Rates, which balances the Revenue Deficiency, Net Income and Total Return on Rate Base.

1

**Table 6-4 Revenue Deficiency Determination**

Line No.	Particulars	Initial Application	
		At Current Approved Rates	At Proposed Rates
1	Revenue Deficiency from Below		2,624,364
2	Distribution Revenue	36,673,723	36,673,723
3	Other Operating Revenue Offsets - net	2,250,668	2,250,668
4	Total Revenue	38,924,391	41,548,755
5	Operating Expenses	27,349,204	27,349,204
6	Deemed Interest Expense	4,971,349	4,971,349
8	Total Cost and Expenses	32,320,553	32,320,553
9	Utility Income Before Income Taxes	6,603,838	9,228,202
10	Tax Adjustments to Accounting Income per 2021 PILs model	(5,676,173)	(5,676,173)
11	Taxable Income	927,665	3,552,029
12	Income Tax Rate	26.50%	26.50%
13	Income Tax on Taxable Income	245,831	941,288
14	Income Tax Credits	(51,964)	(51,964)
15	Utility Net Income	6,409,971	8,338,878
16	Utility Rate Base	244,685,394	244,685,394
17	Deemed Equity Portion of Rate Base	97,874,158	97,874,158
18	Income/(Equity Portion of Rate Base)	6.55%	8.52%
19	Target Return - Equity on Rate Base	8.52%	8.52%
20	Deficiency/Sufficiency in Return on Equity	-1.97%	0.00%
21	Indicated Rate of Return	4.65%	5.44%
22	Requested Rate of Return on Rate Base	5.44%	5.44%
23	Deficiency/Sufficiency in Rate of Return	-0.79%	0.00%
24	Target Return on Equity	8,338,878	8,338,878
25	Revenue Deficiency/(Sufficiency)	1,928,907	0
26	<b>Gross Revenue Deficiency/(Sufficiency)</b>	<b>2,624,364</b>	

## Cost Drivers on Revenue Deficiency

Table 6-5 below outlines the contributors to the Revenue Deficiency by Revenue Requirement component. Column A lists the 2016 Approved amounts. Column B lists the 2021 Revenue at Existing Rates shown in Table 6-4 allocated to Revenue Requirement component based on the proportions in Column A. It is WNH'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 2021 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 \$2,624,364.

**Table 6-5 Revenue Deficiency by Revenue Requirement Component**

Description	2016 Approved (A)	2021 Revenue at Existing Rates Allocated in Proportion to 2016 Approved (B)	2021 Proposed ( C )	Revenue Deficiency ( D = C - B )
OM&A	13,117,334	14,596,327	15,729,057	1,132,730
LEAP	42,000	46,736	48,000	1,264
Property Tax	489,734	544,952	471,620	(73,332)
Depreciation	8,077,849	8,988,634	11,100,527	2,111,893
Return on Rate Base	7,670,276	8,535,107	8,338,878	(196,229)
PILs	685,358	762,633	889,324	126,691
Deemed Interest	4,897,773	5,450,002	4,971,349	(478,653)
<b>Total</b>	<b>34,980,324</b>	<b>38,924,391</b>	<b>41,548,755</b>	<b>2,624,364</b>

Description	2016 Approved (A)		2021 Proposed ( C )	Difference ( C - A )
Rate Base	208,658,217		244,685,394	36,027,177

1 There are two main contributors to the revenue deficiency of \$2,624,364 for the 2021 Test  
2 Year:

- 3
- 4 • The main contributor is the increase in Depreciation as detailed in Exhibit 4. The  
5 2016 Board Approved average net fixed assets was \$194,362,699 compared to  
6 \$228,555,889 in the 2021 Test Year (Table 2-1). Details with respect to the  
7 increases in the net fixed assets are provided as evidence in Exhibit 2.
- 8 • The second contributor is the increase in OM&A as detailed in Exhibit 4. Please  
9 refer to Exhibit 4, Table 4-5 – Overall Cost Trends for 2021 Test Year OM&A  
10 Expenditures and the supporting explanation for the increase of \$2,599,609 in  
11 OM&A inclusive of LEAP and property taxes since 2016 Board Approved balances.
- 12

13 WNH anticipates a PILs non-capital loss of \$417,529 to be carried forward into 2021 from  
14 2020. This amount has been spread over 5 years to align with the next scheduled Cost  
15 of Service Application. The resulting decrease to PILs in the test year is \$83,506. This is  
16 consistent with the submitted PILs workform.

## 17

### 18 **Change in Methodology**

19

20 WNH has not made any changes to methodologies to deficiency / sufficiency.

## 21

### 22 **2.6.1 REVENUE REQUIREMENT WORK FORM**

23

24 The RRWF (Revenue Requirement Work Form) has been included in this exhibit as  
25 Attachment 6-1 Waterloo\_Rev\_Reqt\_Workform\_2021\_COS\_20200630.



## **ATTACHMENT 6-1**

# **REVENUE REQUIREMENT WORKFORM**



Ontario Energy Board

# Revenue Requirement Workform (RRWF) for 2021 Filers



Version 1.00

Utility Name	Waterloo North Hydro Inc.
Service Territory	
Assigned EB Number	EB-2020-0059
Name and Title	Albert P. Singh, VP Finance & CFO
Phone Number	519-888-5542
Email Address	<a href="mailto:asingh@wnhydro.com">asingh@wnhydro.com</a>
Test Year	<a href="#">2021</a>
Bridge Year	<a href="#">2020</a>
Last Rebasing Year	<a href="#">2016</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*



Ontario Energy Board

# Revenue Requirement Workform (RRWF) for 2021 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 Reqt](#)

[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 2021 Filers

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

	Initial Application	(2)	(6)	Per Board Decision
<b>1 Rate Base</b>				
Gross Fixed Assets (average)	\$421,683,875		\$ 421,683,875	\$421,683,875
Accumulated Depreciation (average)	(\$193,127,986)	(5)	(\$193,127,986)	(\$193,127,986)
<b>Allowance for Working Capital:</b>				
Controllable Expenses	\$15,524,190		\$ 15,524,190	\$15,524,190
Cost of Power	\$199,535,876		\$ 199,535,876	\$199,535,876
Working Capital Rate (%)	7.50%	(9)	(9)	(9)
<b>2 Utility Income</b>				
Operating Revenues:				
Distribution Revenue at Current Rates	\$36,673,723			
Distribution Revenue at Proposed Rates	\$39,298,087			
<b>Other Revenue:</b>				
Specific Service Charges	\$382,269			
Late Payment Charges	\$144,453			
Other Distribution Revenue	\$1,557,944			
Other Income and Deductions	\$166,002			
Total Revenue Offsets	\$2,250,668	(7)		
<b>Operating Expenses:</b>				
OM+A Expenses	\$15,777,057		\$ 15,777,057	\$15,777,057
Depreciation/Amortization	\$11,100,527		\$ 11,100,527	\$11,100,527
Property taxes	\$471,620		\$ 471,620	\$471,620
Other expenses				
<b>3 Taxes/PILs</b>				
Taxable Income:				
Adjustments required to arrive at taxable income	(\$5,676,173)	(3)		
<b>Utility Income Taxes and Rates:</b>				
Income taxes (not grossed up)	\$653,653			
Income taxes (grossed up)	\$889,324			
Federal tax (%)	15.00%			
Provincial tax (%)	11.50%			
Income Tax Credits	(\$51,964)			
<b>4 Capitalization/Cost of Capital</b>				
<b>Capital Structure:</b>				
Long-term debt Capitalization Ratio (%)	56.0%			
Short-term debt Capitalization Ratio (%)	4.0%	(8)	(8)	(8)
Common Equity Capitalization Ratio (%)	40.0%			
Preferred Shares Capitalization Ratio (%)	0.0%			
	100.0%			
<b>Cost of Capital</b>				
Long-term debt Cost Rate (%)	3.43%			
Short-term debt Cost Rate (%)	2.75%			
Common Equity Cost Rate (%)	8.52%			
Preferred Shares Cost Rate (%)	0.00%			

## 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 M12. 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 2021 Filers

## Rate Base and Working Capital

Rate Base										
Line No.	Particulars		Initial Application						Per Board Decision	
1	Gross Fixed Assets (average) <sup>(2)</sup>		\$421,683,875		\$ -		\$421,683,875		\$ -	\$421,683,875
2	Accumulated Depreciation (average) <sup>(2)</sup>		(\$193,127,986)		\$ -		(\$193,127,986)		\$ -	(\$193,127,986)
3	Net Fixed Assets (average) <sup>(2)</sup>		\$228,555,889		\$ -		\$228,555,889		\$ -	\$228,555,889
4	Allowance for Working Capital <sup>(1)</sup>		\$16,129,505	(\$16,129,505)		\$ -		\$ -		\$ -
5	Total Rate Base		\$244,685,394	(\$16,129,505)		\$228,555,889		\$ -		\$228,555,889

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

6	Controllable Expenses	\$15,524,190	\$ -	\$15,524,190	\$ -	\$15,524,190
7	Cost of Power	\$199,535,876	\$ -	\$199,535,876	\$ -	\$199,535,876
8	Working Capital Base	\$215,060,066	\$ -	\$215,060,066	\$ -	\$215,060,066
9	Working Capital Rate % <sup>(1)</sup>	7.50%	-7.50%	0.00%	0.00%	0.00%
10	Working Capital Allowance	\$16,129,505	(\$16,129,505)	\$ -	\$ -	\$ -

### Notes

(1) Some Applicants may have a unique rate as a result of a lead-lag study. The default rate for 2021 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.



Ontario Energy Board

# Revenue Requirement Workform (RRWF) for 2021 Filers

## Utility Income

Line No.	Particulars	Initial Application						Per Board Decision
<b>Operating Revenues:</b>								
1	Distribution Revenue (at Proposed Rates)	\$39,298,087		(\$39,298,087)		\$ -	\$ -	\$ -
2	Other Revenue <sup>(1)</sup>	\$2,250,668		(\$2,250,668)		\$ -	\$ -	\$ -
3	Total Operating Revenues	\$41,548,755		(\$41,548,755)		\$ -	\$ -	\$ -
<b>Operating Expenses:</b>								
4	OM+A Expenses	\$15,777,057		\$ -		\$15,777,057	\$ -	\$15,777,057
5	Depreciation/Amortization	\$11,100,527		\$ -		\$11,100,527	\$ -	\$11,100,527
6	Property taxes	\$471,620		\$ -		\$471,620	\$ -	\$471,620
7	Capital taxes	\$ -		\$ -		\$ -	\$ -	\$ -
8	Other expense	\$ -		\$ -		\$ -	\$ -	\$ -
9	Subtotal (lines 4 to 8)	\$27,349,204		\$ -		\$27,349,204	\$ -	\$27,349,204
10	Deemed Interest Expense	\$4,971,349		(\$4,971,349)		\$ -	\$ -	\$ -
11	Total Expenses (lines 9 to 10)	\$32,320,553		(\$4,971,349)		\$27,349,204	\$ -	\$27,349,204
12	Utility income before income taxes	\$9,228,202		(\$36,577,406)		(\$27,349,204)	\$ -	(\$27,349,204)
13	Income taxes (grossed-up)	\$889,324		\$ -		\$889,324	\$ -	\$889,324
14	Utility net income	\$8,338,878		(\$36,577,406)		(\$28,238,528)	\$ -	(\$28,238,528)

## Notes

### Other Revenues / Revenue Offsets

<sup>(1)</sup>	Specific Service Charges	\$382,269		\$ -		\$ -
	Late Payment Charges	\$144,453		\$ -		\$ -
	Other Distribution Revenue	\$1,557,944		\$ -		\$ -
	Other Income and Deductions	\$166,002		\$ -		\$ -
	Total Revenue Offsets	\$2,250,668		\$ -		\$ -



# Revenue Requirement Workform (RRWF) for 2021 Filers

## Taxes/PILs

Line No.	Particulars	Application				Per Board Decision	
<u>Determination of Taxable Income</u>							
1	Utility net income before taxes	\$8,338,878		\$ -		\$ -	
2	Adjustments required to arrive at taxable utility income	(\$5,676,173)		\$ -		\$ -	
3	Taxable income	<u>\$2,662,705</u>		<u>\$ -</u>		<u>\$ -</u>	
<u>Calculation of Utility income Taxes</u>							
4	Income taxes	\$653,653		\$653,653		\$653,653	
6	Total taxes	<u>\$653,653</u>		<u>\$653,653</u>		<u>\$653,653</u>	
7	Gross-up of Income Taxes	<u>\$235,671</u>		<u>\$235,671</u>		<u>\$235,671</u>	
8	Grossed-up Income Taxes	<u>\$889,324</u>		<u>\$889,324</u>		<u>\$889,324</u>	
9	PILs / tax Allowance (Grossed-up Income taxes + Capital taxes)	<u>\$889,324</u>		<u>\$889,324</u>		<u>\$889,324</u>	
10	Other tax Credits	(\$51,964)		(\$51,964)		(\$51,964)	
<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 2021 Filers

## Capitalization/Cost of Capital

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		Initial Application			
		(%)	(\$)	(%)	(\$)
	<b>Debt</b>				
1	Long-term Debt	56.00%	\$137,023,821	3.43%	\$4,702,195
2	Short-term Debt	4.00%	\$9,787,416	2.75%	\$269,154
3	<b>Total Debt</b>	60.00%	\$146,811,236	3.39%	\$4,971,349
	<b>Equity</b>				
4	Common Equity	40.00%	\$97,874,158	8.52%	\$8,338,878
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	<b>Total Equity</b>	40.00%	\$97,874,158	8.52%	\$8,338,878
7	<b>Total</b>	100.00%	\$244,685,394	5.44%	\$13,310,227
		(%)	(\$)	(%)	(\$)
	<b>Debt</b>				
1	Long-term Debt	0.00%	\$ -	0.00%	\$ -
2	Short-term Debt	0.00%	\$ -	0.00%	\$ -
3	<b>Total Debt</b>	0.00%	\$ -	0.00%	\$ -
	<b>Equity</b>				
4	Common Equity	0.00%	\$ -	0.00%	\$ -
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	<b>Total Equity</b>	0.00%	\$ -	0.00%	\$ -
7	<b>Total</b>	0.00%	\$228,555,889	0.00%	\$ -
		Per Board Decision			
		(%)	(\$)	(%)	(\$)
	<b>Debt</b>				
8	Long-term Debt	0.00%	\$ -	3.43%	\$ -
9	Short-term Debt	0.00%	\$ -	2.75%	\$ -
10	<b>Total Debt</b>	0.00%	\$ -	0.00%	\$ -
	<b>Equity</b>				
11	Common Equity	0.00%	\$ -	8.52%	\$ -
12	Preferred Shares	0.00%	\$ -	0.00%	\$ -
13	<b>Total Equity</b>	0.00%	\$ -	0.00%	\$ -
14	<b>Total</b>	0.00%	\$228,555,889	0.00%	\$ -

### Notes



# Revenue Requirement Workform (RRWF) for 2021 Filers

## Revenue Deficiency/Sufficiency

Line No.	Particulars	Initial Application		Per Board Decision	
		At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates
1	Revenue Deficiency from Below		\$2,624,364		(\$11,441,730)
2	Distribution Revenue	\$36,673,723	\$36,673,723	\$36,673,723	\$50,739,817
3	Other Operating Revenue	\$2,250,668	\$2,250,668	\$ -	\$ -
	Offsets - net				
4	<b>Total Revenue</b>	<b>\$38,924,391</b>	<b>\$41,548,755</b>	<b>\$36,673,723</b>	<b>\$39,298,087</b>
5	Operating Expenses	\$27,349,204	\$27,349,204	\$27,349,204	\$27,349,204
6	Deemed Interest Expense	\$4,971,349	\$4,971,349	\$ -	\$ -
8	<b>Total Cost and Expenses</b>	<b>\$32,320,553</b>	<b>\$32,320,553</b>	<b>\$27,349,204</b>	<b>\$27,349,204</b>
9	<b>Utility Income Before Income Taxes</b>	<b>\$6,603,838</b>	<b>\$9,228,202</b>	<b>\$9,324,519</b>	<b>\$11,948,883</b>
10	Tax Adjustments to Accounting Income per 2013 PILs model	(\$5,676,173)	(\$5,676,173)	(\$5,676,173)	(\$5,676,173)
11	<b>Taxable Income</b>	<b>\$927,665</b>	<b>\$3,552,029</b>	<b>\$3,648,346</b>	<b>\$6,272,710</b>
12	Income Tax Rate	26.50%	26.50%	26.50%	26.50%
13	<b>Income Tax on Taxable Income</b>	<b>\$245,831</b>	<b>\$941,288</b>	<b>\$966,812</b>	<b>\$1,662,268</b>
14	<b>Income Tax Credits</b>	<b>(\$51,964)</b>	<b>(\$51,964)</b>	<b>(\$51,964)</b>	<b>(\$51,964)</b>
15	<b>Utility Net Income</b>	<b>\$6,409,971</b>	<b>\$8,338,878</b>	<b>\$8,409,671</b>	<b>(\$28,238,528)</b>
16	<b>Utility Rate Base</b>	<b>\$244,685,394</b>	<b>\$244,685,394</b>	<b>\$228,555,889</b>	<b>\$228,555,889</b>
17	Deemed Equity Portion of Rate Base	\$97,874,158	\$97,874,158	\$ -	\$ -
18	Income/(Equity Portion of Rate Base)	6.55%	8.52%	0.00%	0.00%
19	Target Return - Equity on Rate Base	8.52%	8.52%	0.00%	0.00%
20	Deficiency/Sufficiency in Return on Equity	-1.97%	0.00%	0.00%	0.00%
21	Indicated Rate of Return	4.65%	5.44%	3.68%	0.00%
22	Requested Rate of Return on Rate Base	5.44%	5.44%	0.00%	0.00%
23	Deficiency/Sufficiency in Rate of Return	-0.79%	0.00%	3.68%	0.00%
24	Target Return on Equity	\$8,338,878	\$8,338,878	\$ -	\$ -
25	Revenue Deficiency/(Sufficiency)	\$1,928,907	\$0	(\$8,409,671)	\$ -
26	<b>Gross Revenue Deficiency/(Sufficiency)</b>	<b>\$2,624,364 <sup>(1)</sup></b>		<b>(\$11,441,730) <sup>(1)</sup></b>	<b>\$37,209,801 <sup>(1)</sup></b>

## Notes:

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



# Revenue Requirement Workform (RRWF) for 2021 Filers

## Revenue Requirement

Line No.	Particulars	Application				Per Board Decision	
1	OM&A Expenses	\$15,777,057		\$15,777,057		\$15,777,057	
2	Amortization/Depreciation	\$11,100,527		\$11,100,527		\$11,100,527	
3	Property Taxes	\$471,620		\$471,620		\$471,620	
5	Income Taxes (Grossed up)	\$889,324		\$889,324		\$889,324	
6	Other Expenses	\$ -					
7	Return						
	Deemed Interest Expense	\$4,971,349		\$ -		\$ -	
	Return on Deemed Equity	\$8,338,878		\$ -		\$ -	
8	<b>Service Revenue Requirement (before Revenues)</b>	<u>\$41,548,755</u>		<u>\$28,238,528</u>		<u>\$28,238,528</u>	
9	Revenue Offsets	\$2,250,668		\$ -		\$ -	
10	<b>Base Revenue Requirement (excluding Transformer Ownership Allowance credit adjustment)</b>	<u>\$39,298,087</u>		<u>\$28,238,528</u>		<u>\$28,238,528</u>	
11	Distribution revenue	\$39,298,087		\$ -		\$ -	
12	Other revenue	\$2,250,668		\$ -		\$ -	
13	<b>Total revenue</b>	<u>\$41,548,755</u>		<u>\$ -</u>		<u>\$ -</u>	
14	<b>Difference (Total Revenue Less Distribution Revenue Requirement before Revenues)</b>	<u>\$0</u>	<sup>(1)</sup>	<u>(\$28,238,528)</u>	<sup>(1)</sup>	<u>(\$28,238,528)</u>	<sup>(1)</sup>

## Summary Table of Revenue Requirement and Revenue Deficiency/Sufficiency

	Application		Δ% <sup>(2)</sup>	Per Board Decision	Δ% <sup>(2)</sup>
<b>Service Revenue Requirement</b>	\$41,548,755	\$28,238,528	(\$0)	\$28,238,528	(\$1)
<b>Grossed-Up Revenue</b>					
<b>Deficiency/(Sufficiency)</b>	\$2,624,364	(\$11,441,730)	(\$5)	\$37,209,801	(\$1)
<b>Base Revenue Requirement (to be recovered from Distribution Rates)</b>	\$39,298,087	\$28,238,528	(\$0)	\$28,238,528	(\$1)
<b>Revenue Deficiency/(Sufficiency) Associated with Base Revenue Requirement</b>	\$2,624,364	\$ -	(\$1)	\$ -	(\$1)

### Notes

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



Ontario Energy Board

# Revenue Requirement Workform (RRWF) for 2021 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

Customer Class		Initial Application			Per Board Decision		
Input the name of each customer class.		Customer / Connections Test Year average or mid-year	kWh Annual	kW/kVA <sup>(1)</sup> Annual	Customer / Connections Test Year average or mid-year	kWh Annual	kW/kVA <sup>(1)</sup> Annual
1	Residential	51,719	395,056,934				
2	GS <50	5,989	195,573,807				
3	GS >50-Regular	774	697,140,723	1,764,636			
4	Large Use >5MW	1	95,699,867	169,287			
5	Street Light	15,005	3,347,727	9,302			
6	Unmetered Scattered Load	540	2,947,114				
7	Embedded Distributor	1	41,857,714	103,033			
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total			1,431,623,886	2,046,258		-	-

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)



Ontario Energy Board

# Revenue Requirement Workform (RRWF) for 2021 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>	%
From Sheet 10. Load Forecast				
(7A)				
1 Residential	\$ 18,260,988	52.20%	\$ 22,709,871	54.66%
2 GS <50	\$ 5,261,206	15.04%	\$ 6,433,333	15.48%
3 GS >50-Regular	\$ 10,167,367	29.07%	\$ 11,010,096	26.50%
4 Large Use >5MW	\$ 937,129	2.68%	\$ 1,050,402	2.53%
5 Street Light	\$ 254,785	0.73%	\$ 222,226	0.53%
6 Unmetered Scattered Load	\$ 97,398	0.28%	\$ 120,662	0.29%
7 Embedded Distributor	\$ 1,450	0.00%	\$ 2,165	0.01%
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
<b>Total</b>	<b>\$ 34,980,323</b>	<b>100.00%</b>	<b>\$ 41,548,755</b>	<b>100.00%</b>
Service Revenue Requirement (from Sheet 9)			<b>\$ 41,548,754.82</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	LF X current	LF X Proposed Rates	Miscellaneous
		current approved	approved rates X		Revenues
		rates	(1+d)		
		(7B)	(7C)	(7D)	(7E)
1	Residential	\$ 19,891,127	\$ 21,314,531	\$ 21,315,456	\$ 1,444,376
2	GS <50	\$ 5,650,852	\$ 6,055,226	\$ 6,055,336	\$ 322,027
3	GS >50-Regular	\$ 10,054,729	\$ 10,774,244	\$ 10,774,523	\$ 422,745
4	Large Use >5MW	\$ 806,266	\$ 863,962	\$ 863,967	\$ 40,429
5	Street Light	\$ 155,034	\$ 166,128	\$ 166,118	\$ 14,241
6	Unmetered Scattered Load	\$ 113,541	\$ 121,666	\$ 120,471	\$ 6,783
7	Embedded Distributor	\$ 2,174	\$ 2,330	\$ 2,216	\$ 67
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
	<b>Total</b>	\$ 36,673,723	\$ 39,298,087	\$ 39,298,087	\$ 2,250,668

- (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)	
		2016			
		%	%	%	%
1	Residential	102.98%	100.22%	100.22%	85 - 115
2	GS <50	102.48%	99.13%	99.13%	80 - 120
3	GS >50-Regular	94.49%	101.70%	101.70%	80 - 120
4	Large Use >5MW	85.00%	86.10%	86.10%	85 - 115
5	Street Light	102.98%	81.16%	81.16%	80 - 120
6	Unmetered Scattered Load	120.00%	106.45%	105.46%	80 - 120
7	Embedded Distributor	100.00%	110.72%	105.45%	80 - 120
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

- (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	Test Year	Proposed Revenue-to-Cost Ratio		Policy Range
		2021	2022	Price Cap IR Period 2023	
1	Residential	100.22%	100.22%	100.22%	85 - 115
2	GS <50	99.13%	99.13%	99.13%	80 - 120
3	GS >50-Regular	101.70%	101.70%	101.70%	80 - 120
4	Large Use >5MW	86.10%	86.10%	86.10%	85 - 115
5	Street Light	81.16%	81.16%	81.16%	80 - 120
6	Unmetered Scattered Load	105.46%	105.46%	105.46%	80 - 120
7	Embedded Distributor	105.45%	105.45%	105.45%	80 - 120
8					
9					
10					
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12					
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19					
20					

(11) The applicant should complete Table D if it is applying for approval of a revenue-to-cost ratio in 2021 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 2022 and 2023 Price Cap IR models, as necessary. For 2022 and 2023, enter the planned revenue-to-cost ratios that will be "Change" or "No Change" in 2019 (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'.

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

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

Rates recover revenue requirement

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



Ontario Energy Board

# Revenue Requirement Workform (RRWF) for 2021 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	\$ 13,310,227	5.44%	\$ 244,685,394	\$ 215,060,066	\$ 16,129,505	\$ 11,100,527	\$ 889,324	\$ 15,777,057	\$ 41,548,755	\$ 2,250,668	\$ 39,298,087	\$ 2,624,364