

# APPENDIX B

NOTL HYDRO 2019 REVENUE REQUIREMENT  
WORK FORM 20190110

2019 COST OF SERVICE RATE APPLICATION  
NIAGARA-ON-THE-LAKE HYDRO INC.  
EB-2018-0056



Ontario Energy Board

# Revenue Requirement Workform (RRWF) for 2019 Filers



Version 8.00

Utility Name	Niagara-on-the-Lake Hydro Inc.
Service Territory	Niagara-on-the-Lake
Assigned EB Number	EB-2018-0056
Name and Title	Jeff Klassen, VP Finance
Phone Number	905-468-4235 ext 380
Email Address	<a href="mailto:jklassen@notlhydro.com">jklassen@notlhydro.com</a>
Test Year	2019
Bridge Year	2018
Last Rebasing Year	2014

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.

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*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 2019 Filers

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**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 2019 Filers

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

	Initial Application <sup>(2)</sup>	Adjustments	Settlement Agreement <sup>(6)</sup>	Adjustments	Per Board Decision
<b>1 Rate Base</b>					
Gross Fixed Assets (average)	\$56,132,843	(\$982,156) a	\$ 55,150,687		\$55,150,687
Accumulated Depreciation (average)	(\$27,607,193) <sup>(5)</sup>	\$830,119 a	(\$26,777,075)		(\$26,777,075)
Allowance for Working Capital:					
Controllable Expenses	\$3,009,141	(\$9,421) b	\$ 2,999,720		\$2,999,720
Cost of Power	\$25,955,675	(\$59,022) c	\$ 25,896,653		\$25,896,653
Working Capital Rate (%)	7.50% <sup>(9)</sup>		7.50% <sup>(9)</sup>		7.50% <sup>(9)</sup>
<b>2 Utility Income</b>					
Operating Revenues:					
Distribution Revenue at Current Rates	\$5,494,023	(\$237)	\$5,493,786		
Distribution Revenue at Proposed Rates	\$5,544,424	\$4,263	\$5,548,687		
Other Revenue:					
Specific Service Charges	\$87,551	(\$23,697)	\$63,854		
Late Payment Charges	\$54,284	\$0	\$54,284		
Other Distribution Revenue	\$310,170	\$3,205	\$313,375		
Other Income and Deductions	\$50,934	\$0	\$50,934		
Total Revenue Offsets	\$502,939 <sup>(7)</sup>	(\$20,492)	\$482,447		
Operating Expenses:					
OM+A Expenses	\$2,974,186	(\$9,421) b	\$ 2,964,765		\$2,964,765
Depreciation/Amortization	\$1,157,365	(\$28,599) a	\$ 1,128,766		\$1,128,766
Property taxes	\$34,955	\$ -	\$ 34,955		\$34,955
Other expenses					
<b>3 Taxes/PILs</b>					
Taxable Income:					
Adjustments required to arrive at taxable income	(\$800,512) <sup>(3)</sup>		(\$831,847)		
Utility Income Taxes and Rates:					
Income taxes (not grossed up)	\$80,723		\$70,273		
Income taxes (grossed up)	\$109,828		\$95,609		
Federal tax (%)	15.00%		15.00%		
Provincial tax (%)	11.50%		11.50%		
Income Tax Credits	\$ -		\$ -		
<b>4 Capitalization/Cost of Capital</b>					
Capital Structure:					
Long-term debt Capitalization Ratio (%)	56.00%		56.0%		
Short-term debt Capitalization Ratio (%)	4.00% <sup>(8)</sup>		4.0% <sup>(8)</sup>		4.0% <sup>(8)</sup>
Common Equity Capitalization Ratio (%)	40.00%		40.0%		
Preferred Shares Capitalization Ratio (%)					
	100.0%		100.0%		
Cost of Capital					
Long-term debt Cost Rate (%)	3.71%		3.95%		
Short-term debt Cost Rate (%)	2.29%		2.82%		
Common Equity Cost Rate (%)	9.00%		8.98%		
Preferred Shares Cost Rate (%)	0.00%		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 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.

- a Updated gross fixed assets and depreciation for 2018 disposals and moved disposal of T1 transformer from 2019 test year to 2018 bridge year - Tab 14 reference 6 & 7
- b Adjustment to pole expenses \$4,363 (Tab 14 - 4), Intervenor costs \$5,000 (Tab 14 - 5) and Leap \$58 (Tab 14 - 8)
- c Updated Load Forecast to correct CDM adjustment in Tab 10 (Tab 14 - 1)



# Revenue Requirement Workform (RRWF) for 2019 Filers

## Rate Base and Working Capital

Line No.	Rate Base Particulars	Initial Application	Adjustments	Settlement Agreement	Adjustments	Per Board Decision
1	Gross Fixed Assets (average) <sup>(2)</sup>	\$56,132,843	(\$982,156) a	\$55,150,687	\$ -	\$55,150,687
2	Accumulated Depreciation (average) <sup>(2)</sup>	(\$27,607,193)	\$830,119 a	(\$26,777,075)	\$ -	(\$26,777,075)
3	Net Fixed Assets (average) <sup>(2)</sup>	\$28,525,650	(\$152,037)	\$28,373,612	\$ -	\$28,373,612
4	Allowance for Working Capital <sup>(1)</sup>	\$2,172,361	(\$5,133)	\$2,167,228	(\$2,167,228)	\$ -
5	<b>Total Rate Base</b>	<b>\$30,698,011</b>	<b>(\$157,171)</b>	<b>\$30,540,840</b>	<b>(\$2,167,228)</b>	<b>\$28,373,612</b>

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

6	Controllable Expenses	\$3,009,141	(\$9,421) b	\$2,999,720	\$ -	\$2,999,720
7	Cost of Power	\$25,955,675	(\$59,022) c	\$25,896,653	\$ -	\$25,896,653
8	Working Capital Base	\$28,964,816	(\$68,443)	\$28,896,373	\$ -	\$28,896,373
9	Working Capital Rate % <sup>(1)</sup>	7.50%	0.00%	7.50%	-7.50%	0.00%
10	Working Capital Allowance	\$2,172,361	(\$5,133)	\$2,167,228	(\$2,167,228)	\$ -

### 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.

a Updated gross fixed assets and depreciation for 2018 disposals and moved disposal of T1 transformer from 2019 test year to 2018 bridge year - Tab 14

b Adjustment to pole expenses \$4,363 (Tab 14 - 4), Intervenor costs \$5,000 (Tab 14 - 5) and Leap \$58 (Tab 14 - 8)

c Updated Load Forecast to correct CDM adjustment in Tab 10 (Tab 14 - 1)



# Revenue Requirement Workform (RRWF) for 2019 Filers

## Utility Income

Line No.	Particulars	Initial Application	Adjustments	Settlement Agreement	Adjustments	Per Board Decision
<b>Operating Revenues:</b>						
1	Distribution Revenue (at Proposed Rates)	\$5,544,424	\$4,263	\$5,548,687	\$ -	\$5,548,687
2	Other Revenue <sup>(1)</sup>	\$502,939	(\$20,492)	\$482,447	\$ -	\$482,447
3	Total Operating Revenues	\$6,047,363	(\$16,228)	\$6,031,135	\$ -	\$6,031,135
<b>Operating Expenses:</b>						
4	OM+A Expenses	\$2,974,186	(\$9,421)	\$2,964,765	\$ -	\$2,964,765
5	Depreciation/Amortization	\$1,157,365	(\$28,599)	\$1,128,766	\$ -	\$1,128,766
6	Property taxes	\$34,955	\$ -	\$34,955	\$ -	\$34,955
7	Capital taxes	\$ -	\$ -	\$ -	\$ -	\$ -
8	Other expense	\$ -	\$ -	\$ -	\$ -	\$ -
9	Subtotal (lines 4 to 8)	\$4,166,506	(\$38,020)	\$4,128,486	\$ -	\$4,128,486
10	Deemed Interest Expense	\$665,901	\$44,112	\$710,013	(\$94,533)	\$615,480
11	Total Expenses (lines 9 to 10)	\$4,832,407	\$6,092	\$4,838,499	(\$94,533)	\$4,743,966
12	<b>Utility income before income taxes</b>	<u>\$1,214,956</u>	<u>(\$22,320)</u>	<u>\$1,192,636</u>	<u>\$94,533</u>	<u>\$1,287,169</u>
13	Income taxes (grossed-up)	\$109,828	(\$14,219)	\$95,609	\$ -	\$95,609
14	<b>Utility net income</b>	<u>\$1,105,128</u>	<u>(\$8,101)</u>	<u>\$1,097,027</u>	<u>\$94,533</u>	<u>\$1,191,560</u>

### Notes

#### Other Revenues / Revenue Offsets

(1)	Specific Service Charges	\$87,551	(\$23,697)	\$63,854		\$63,854
	Late Payment Charges	\$54,284	\$ -	\$54,284		\$54,284
	Other Distribution Revenue	\$310,170	\$3,205	\$313,375		\$313,375
	Other Income and Deductions	\$50,934	\$ -	\$50,934		\$50,934
	Total Revenue Offsets	<u>\$502,939</u>	<u>(\$20,492)</u>	<u>\$482,447</u>	<u>\$ -</u>	<u>\$482,447</u>



# Revenue Requirement Workform (RRWF) for 2019 Filers

**Taxes/PILs**

Line No.	Particulars	Application	Settlement Agreement	Per Board Decision
<b><u>Determination of Taxable Income</u></b>				
1	Utility net income before taxes	\$1,105,128	\$1,097,027	\$1,021,450
2	Adjustments required to arrive at taxable utility income	(\$800,512)	(\$831,847)	(\$831,847)
3	Taxable income	<u>\$304,617</u>	<u>\$265,180</u>	<u>\$189,603</u>
<b><u>Calculation of Utility income Taxes</u></b>				
4	Income taxes	\$80,723	\$70,273	\$70,273
6	Total taxes	<u>\$80,723</u>	<u>\$70,273</u>	<u>\$70,273</u>
7	Gross-up of Income Taxes	\$29,104	\$25,336	\$25,336
8	Grossed-up Income Taxes	<u>\$109,828</u>	<u>\$95,609</u>	<u>\$95,609</u>
9	PILs / tax Allowance (Grossed-up Income taxes + Capital taxes)	<u>\$109,828</u>	<u>\$95,609</u>	<u>\$95,609</u>
10	Other tax Credits	\$ -	\$ -	\$ -
<b><u>Tax Rates</u></b>				
11	Federal tax (%)	15.00%	15.00%	15.00%
12	Provincial tax (%)	<u>11.50%</u>	<u>11.50%</u>	<u>11.50%</u>
13	Total tax rate (%)	<u>26.50%</u>	<u>26.50%</u>	<u>26.50%</u>

**Notes**

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# Revenue Requirement Workform (RRWF) for 2019 Filers

## Capitalization/Cost of Capital

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
<b>Initial Application</b>					
		(%)	(\$)	(%)	(\$)
	<b>Debt</b>				
1	Long-term Debt	56.00%	\$17,190,886	3.71%	\$637,782
2	Short-term Debt	4.00%	\$1,227,920	2.29%	\$28,119
3	<b>Total Debt</b>	<b>60.00%</b>	<b>\$18,418,806</b>	<b>3.62%</b>	<b>\$665,901</b>
	<b>Equity</b>				
4	Common Equity	40.00%	\$12,279,204	9.00%	\$1,105,128
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	<b>Total Equity</b>	<b>40.00%</b>	<b>\$12,279,204</b>	<b>9.00%</b>	<b>\$1,105,128</b>
7	<b>Total</b>	<b>100.00%</b>	<b>\$30,698,011</b>	<b>5.77%</b>	<b>\$1,771,030</b>
<b>Settlement Agreement</b>					
		(%)	(\$)	(%)	(\$)
	<b>Debt</b>				
1	Long-term Debt	56.00%	\$17,102,870	3.95%	\$675,563
2	Short-term Debt	4.00%	\$1,221,634	2.82%	\$34,450
3	<b>Total Debt</b>	<b>60.00%</b>	<b>\$18,324,504</b>	<b>3.87%</b>	<b>\$710,013</b>
	<b>Equity</b>				
4	Common Equity	40.00%	\$12,216,336	8.98%	\$1,097,027
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	<b>Total Equity</b>	<b>40.00%</b>	<b>\$12,216,336</b>	<b>8.98%</b>	<b>\$1,097,027</b>
7	<b>Total</b>	<b>100.00%</b>	<b>\$30,540,840</b>	<b>5.92%</b>	<b>\$1,807,040</b>
<b>Per Board Decision</b>					
		(%)	(\$)	(%)	(\$)
	<b>Debt</b>				
8	Long-term Debt	56.00%	\$15,889,223	3.71%	\$589,490
9	Short-term Debt	4.00%	\$1,134,944	2.29%	\$25,990
10	<b>Total Debt</b>	<b>60.00%</b>	<b>\$17,024,167</b>	<b>3.62%</b>	<b>\$615,480</b>
	<b>Equity</b>				
11	Common Equity	40.00%	\$11,349,445	9.00%	\$1,021,450
12	Preferred Shares	0.00%	\$ -	0.00%	\$ -
13	<b>Total Equity</b>	<b>40.00%</b>	<b>\$11,349,445</b>	<b>9.00%</b>	<b>\$1,021,450</b>
14	<b>Total</b>	<b>100.00%</b>	<b>\$28,373,612</b>	<b>5.77%</b>	<b>\$1,636,930</b>

### Notes



# Revenue Requirement Workform (RRWF) for 2019 Filers

## Revenue Deficiency/Sufficiency

Line No.	Particulars	Initial Application		Settlement Agreement		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		\$50,401		\$54,901		(\$142,457)
2	Distribution Revenue	\$5,494,023	\$5,494,023	\$5,493,786	\$5,493,786	\$5,493,786	\$5,691,145
3	Other Operating Revenue	\$502,939	\$502,939	\$482,447	\$482,447	\$482,447	\$482,447
	Offsets - net						
4	<b>Total Revenue</b>	<b>\$5,996,962</b>	<b>\$6,047,363</b>	<b>\$5,976,234</b>	<b>\$6,031,135</b>	<b>\$5,976,234</b>	<b>\$6,031,135</b>
5	Operating Expenses	\$4,166,506	\$4,166,506	\$4,128,486	\$4,128,486	\$4,128,486	\$4,128,486
6	Deemed Interest Expense	\$665,901	\$665,901	\$710,013	\$710,013	\$615,480	\$615,480
8	<b>Total Cost and Expenses</b>	<b>\$4,832,407</b>	<b>\$4,832,407</b>	<b>\$4,838,499</b>	<b>\$4,838,499</b>	<b>\$4,743,966</b>	<b>\$4,743,966</b>
9	<b>Utility Income Before Income Taxes</b>	<b>\$1,164,555</b>	<b>\$1,214,956</b>	<b>\$1,137,735</b>	<b>\$1,192,636</b>	<b>\$1,232,268</b>	<b>\$1,287,169</b>
10	Tax Adjustments to Accounting Income per 2013 PILs model	(\$800,512)	(\$800,512)	(\$831,847)	(\$831,847)	(\$831,847)	(\$831,847)
11	<b>Taxable Income</b>	<b>\$364,043</b>	<b>\$414,445</b>	<b>\$305,887</b>	<b>\$360,789</b>	<b>\$400,420</b>	<b>\$455,322</b>
12	Income Tax Rate	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%
13	<b>Income Tax on Taxable Income</b>	<b>\$96,471</b>	<b>\$109,828</b>	<b>\$81,060</b>	<b>\$95,609</b>	<b>\$106,111</b>	<b>\$120,660</b>
14	<b>Income Tax Credits</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
15	<b>Utility Net Income</b>	<b>\$1,068,083</b>	<b>\$1,105,128</b>	<b>\$1,056,674</b>	<b>\$1,097,027</b>	<b>\$1,126,156</b>	<b>\$1,191,560</b>
16	<b>Utility Rate Base</b>	<b>\$30,698,011</b>	<b>\$30,698,011</b>	<b>\$30,540,840</b>	<b>\$30,540,840</b>	<b>\$28,373,612</b>	<b>\$28,373,612</b>
17	Deemed Equity Portion of Rate Base	\$12,279,204	\$12,279,204	\$12,216,336	\$12,216,336	\$11,349,445	\$11,349,445
18	Income/(Equity Portion of Rate Base)	8.70%	9.00%	8.65%	8.98%	9.92%	10.50%
19	Target Return - Equity on Rate Base	9.00%	9.00%	8.98%	8.98%	9.00%	9.00%
20	Deficiency/Sufficiency in Return on Equity	-0.30%	0.00%	-0.33%	0.00%	0.92%	1.50%
21	Indicated Rate of Return	5.65%	5.77%	5.78%	5.92%	6.14%	6.37%
22	Requested Rate of Return on Rate Base	5.77%	5.77%	5.92%	5.92%	5.77%	5.77%
23	Deficiency/Sufficiency in Rate of Return	-0.12%	0.00%	-0.13%	0.00%	0.37%	0.60%
24	Target Return on Equity	\$1,105,128	\$1,105,128	\$1,097,027	\$1,097,027	\$1,021,450	\$1,021,450
25	Revenue Deficiency/(Sufficiency)	\$37,045	\$ -	\$40,353	\$ -	(\$104,706)	\$170,110
26	<b>Gross Revenue Deficiency/(Sufficiency)</b>	<b>\$50,401 <sup>(1)</sup></b>		<b>\$54,901 <sup>(1)</sup></b>		<b>(\$142,457) <sup>(1)</sup></b>	

Notes:

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



# Revenue Requirement Workform (RRWF) for 2019 Filers

## Revenue Requirement

Line No.	Particulars	Application	Settlement Agreement	Per Board Decision
1	OM&A Expenses	\$2,974,186	\$2,964,765	\$2,964,765
2	Amortization/Depreciation	\$1,157,365	\$1,128,766	\$1,128,766
3	Property Taxes	\$34,955	\$34,955	\$34,955
5	Income Taxes (Grossed up)	\$109,828	\$95,609	\$95,609
6	Other Expenses	\$ -		
7	Return			
	Deemed Interest Expense	\$665,901	\$710,013	\$615,480
	Return on Deemed Equity	\$1,105,128	\$1,097,027	\$1,021,450
8	<b>Service Revenue Requirement (before Revenues)</b>	<u>\$6,047,363</u>	<u>\$6,031,135</u>	<u>\$5,861,025</u>
9	Revenue Offsets	\$502,939	\$482,447	\$ -
10	<b>Base Revenue Requirement (excluding Tranformer Owership Allowance credit adjustment)</b>	<u>\$5,544,424</u>	<u>\$5,548,687</u>	<u>\$5,861,025</u>
11	Distribution revenue	\$5,544,424	\$5,548,687	\$5,548,687
12	Other revenue	\$502,939	\$482,447	\$482,447
13	<b>Total revenue</b>	<u>\$6,047,363</u>	<u>\$6,031,135</u>	<u>\$6,031,135</u>
14	<b>Difference (Total Revenue Less Distribution Revenue Requirement before Revenues)</b>	<u>\$ -</u> <sup>(1)</sup>	<u>\$ -</u> <sup>(1)</sup>	<u>\$170,110</u> <sup>(1)</sup>

Summary Table of Revenue Requirement and Revenue Deficiency/Sufficiency

	Application	Settlement Agreement	Δ% <sup>(2)</sup>	Per Board Decision	Δ% <sup>(2)</sup>
<b>Service Revenue Requirement</b>	\$6,047,363	\$6,031,135	(\$0)	\$5,861,025	(\$1)
<b>Grossed-Up Revenue</b>					
<b>Deficiency/(Sufficiency)</b>	\$50,401	\$54,901	\$0	(\$142,457)	(\$1)
<b>Base Revenue Requirement (to be recovered from Distribution Rates)</b>	\$5,544,424	\$5,548,687	\$0	\$5,861,025	(\$1)
<b>Revenue Deficiency/(Sufficiency) Associated with Base Revenue Requirement</b>	\$50,401	\$54,901	\$0	\$ -	(\$1)

**Notes**

- <sup>(1)</sup> Line 11 - Line 8
- <sup>(2)</sup> Percentage Change Relative to Initial Application

# Revenue Requirement Workform (RRWF) for 2019 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:		Settlement Agreement								
Customer Class		Initial Application			Settlement Agreement			Per Board Decision		
Input the name of each customer class.		Customer / Connections	kWh	kW/kVA <sup>(1)</sup>	Customer / Connections	kWh	kW/kVA <sup>(1)</sup>	Customer / Connections	kWh	kW/kVA <sup>(1)</sup>
		Test Year average or mid-year	Annual	Annual	Test Year average or mid-year	Annual	Annual	Test Year average or mid-year	Annual	Annual
1	Residential	8,152	73,998,981	-	8,152	73,898,698	-			
2	GS<50	1,338	41,877,513	-	1,342	41,865,678	-			
3	GS>50	131	82,705,771	212,896	131	82,468,049	212,284			
4	Unmetered	26	251,508	-	26	251,508	-			
5	Streetlights	2,187	886,616	2,475	2,187	886,616	2,475			
6	Large User	1	23,308,825	60,000	1	23,308,825	60,000			
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20										
<b>Total</b>			<b>223,029,214</b>	<b>275,370</b>		<b>222,679,374</b>	<b>274,758</b>		-	-

**Notes:**

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



# Revenue Requirement Workform (RRWF) for 2019 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: **Settlement Agreement**

**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>	%
<b>From Sheet 10. Load Forecast</b>				
<b>(7A)</b>				
1 Residential	\$ 2,844,235	59.94%	\$ 3,627,303	60.14%
2 GS<50	\$ 869,164	18.32%	\$ 1,154,201	19.14%
3 GS>50	\$ 691,959	14.58%	\$ 888,344	14.73%
4 Unmetered	\$ 5,907	0.12%	\$ 8,059	0.13%
5 Streetlights	\$ 333,612	7.03%	\$ 185,550	3.08%
6 Large User	\$ -		\$ 167,678	2.78%
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<b>Total</b>	<b>\$ 4,744,877</b>	<b>100.00%</b>	<b>\$ 6,031,135</b>	<b>100.00%</b>
<b>Service Revenue Requirement (from Sheet 9)</b>			<b>\$ 6,031,134.96</b>	

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

B) Calculated Class Revenues

Name of Customer Class	Load Forecast (LF) X current approved rates (7B)	LF X current approved rates X (1+d) (7C)	LF X Proposed Rates (7D)	Miscellaneous Revenues (7E)
1 Residential	\$ 2,923,268	\$ 2,952,482	\$ 2,980,917	\$ 304,688
2 GS<50	\$ 1,178,755	\$ 1,190,535	\$ 1,190,494	\$ 86,399
3 GS>50	\$ 977,428	\$ 987,196	\$ 987,196	\$ 63,359
4 Unmetered	\$ 8,350	\$ 8,433	\$ 8,433	\$ 756
5 Streetlights	\$ 281,952	\$ 284,769	\$ 224,278	\$ 16,937
6 Large User	\$ 124,034	\$ 125,273	\$ 157,369	\$ 10,309
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<b>Total</b>	<b>\$ 5,493,786</b>	<b>\$ 5,548,687</b>	<b>\$ 5,548,687</b>	<b>\$ 482,447</b>

- (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 Most Recent Year: 2014 %	Status Quo Ratios (7C + 7E) / (7A) %	Proposed Ratios (7D + 7E) / (7A) %	Policy Range %
1 Residential	90.14%	89.80%	90.58%	85 - 115
2 GS<50	120.00%	110.63%	110.63%	80 - 120
3 GS>50	120.00%	118.26%	118.26%	80 - 120
4 Unmetered	90.14%	114.02%	114.02%	80 - 120
5 Streetlights	120.00%	162.60%	130.00%	80 - 120
6 Large User	0.00%	80.86%	100.00%	85 - 115
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- (8) Previously Approved Revenue-to-Cost (R/C) Ratios - For most applicants, the most recent year would be the third year (at the latest) of the Price Cap IR period. For example, if the applicant, rebased in 2012 with further adjustments to move within the range over two years, the Most Recent Year would be 2015. However, the ratios in 2015 would be equal to those after the adjustment in 2014.
- (9) Status Quo Ratios - The OEB-issued cost allocation model provides the Status Quo Ratios on Worksheet O-1. The Status Quo means "Before Rebalancing".
- (10) Ratios shown in red are outside of the allowed range. Applies to both Tables C and D.

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

Name of Customer Class	Proposed Revenue-to-Cost Ratio			Policy Range
	Test Year 2019	Price Cap IR Period 2020	Price Cap IR Period 2021	
1 Residential	90.58%	91.09%	91.09%	85 - 115
2 GS<50	110.63%	110.63%	110.63%	80 - 120
3 GS>50	118.26%	118.26%	118.26%	80 - 120
4 Unmetered	114.02%	114.02%	114.02%	80 - 120
5 Streetlights	130.00%	120.00%	120.00%	80 - 120
6 Large User	100.00%	100.00%	100.00%	85 - 115
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(11) The applicant should complete Table D if it is applying for approval of a revenue-to-cost ratio in 2019 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 2020 and 2021 Price Cap IR models, as necessary. For 2020 and 2021, enter the planned revenue-to-cost ratios that will be "Change" or "No Change" in 2018 (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 2019 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	8,152
kWh	73,898,698

Proposed Residential Class Specific Revenue Requirement <sup>1</sup>	\$ 2,980,916.87
--	-----------------

Residential Base Rates on Current Tariff	
Monthly Fixed Charge (\$)	\$ 26.86
Distribution Volumetric Rate (\$/kWh)	\$ 0.0033

### B Current Fixed/Variable Split

	Base Rates	Billing Determinants	Revenue	% of Total Revenue
Fixed	26.86	8,152	\$ 2,627,673.51	91.51%
Variable	0.0033	73,898,698	\$ 243,865.70	8.49%
<b>TOTAL</b>	-	-	\$ 2,871,539.21	-

### C Calculating Test Year Base Rates

Number of Remaining Rate Design Policy Transition Years <sup>2</sup>	1
--	---

	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	\$ 2,727,762.26	27.88	\$ 2,727,458.58
Variable	\$ 253,154.61	0.0034	\$ 251,255.57
<b>TOTAL</b>	\$ 2,980,916.87	-	\$ 2,978,714.15

	New F/V Split	Revenue @ new F/V Split	Final Adjusted Base Rates	Revenue Reconciliation @ Adjusted Rates
Fixed	100.00%	\$ 2,980,916.87	\$ 30.47	\$ 2,980,834.40
Variable	0.00%	\$ -	\$ -	\$ -
<b>TOTAL</b>	-	\$ 2,980,916.87	-	\$ 2,980,834.40

Checks <sup>3</sup>	
Change in Fixed Rate	\$ 2.59
Difference Between Revenues @ Proposed Rates and Class Specific Revenue Requirement	(\$82.47)
	0.00%

### Notes:

- <sup>1</sup> 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).
- <sup>2</sup> 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.
- <sup>3</sup> 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 2019 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	\$ 1,771,030	5.77%	\$ 30,698,011	\$ 28,964,816	\$ 2,172,361	\$ 1,157,365	\$ 109,828	\$ 2,974,186	\$ 6,047,363	\$ 502,939	\$ 5,544,424	\$ 50,401
1	3-STAFF-36 Updated Load Forecast tab 10.1 to reflect CDM impact of 3,770,854 consistent with tab 10 Change	\$ 1,770,796	5.77%	\$ 30,693,964	\$ 28,910,864	\$ 2,168,315	\$ 1,157,365	\$ 109,775	\$ 2,974,186	\$ 6,047,077	\$ 502,939	\$ 5,544,138	\$ 53,904
		-\$ 233	0.00%	-\$ 4,046	-\$ 53,952	-\$ 4,046	\$ -	-\$ 53	\$ -	-\$ 286	\$ -	-\$ 286	\$ 3,503
2	2-STAFF-23 Updated Other Revenue for the assumption of 100 Bell Canada poles 100 x \$43.63 Change	\$ 1,770,796	5.77%	\$ 30,693,964	\$ 28,910,864	\$ 2,168,315	\$ 1,157,365	\$ 109,775	\$ 2,974,186	\$ 6,047,077	\$ 507,302	\$ 5,539,775	\$ 49,541
		\$ -	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,363	-\$ 4,363	-\$ 4,363
3	2-STAFF-46 Updated Other Revenue to reconcile Share Services mark-up in Appendix 2-N to Other Revenue Appendix 2-H Change	\$ 1,770,796	5.77%	\$ 30,693,964	\$ 28,910,864	\$ 2,168,315	\$ 1,157,365	\$ 109,775	\$ 2,974,186	\$ 6,047,077	\$ 507,793	\$ 5,539,284	\$ 49,050
		\$ -	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 491	-\$ 491	-\$ 491
4	2-STAFF-23 Updated Pole Attachment expense (account 5095) to reflect assumption of 100 Bell Canada poles 100 x \$43.63 Change	\$ 1,770,777	5.77%	\$ 30,693,637	\$ 28,906,501	\$ 2,167,988	\$ 1,157,365	\$ 109,771	\$ 2,969,823	\$ 6,042,691	\$ 507,793	\$ 5,534,898	\$ 44,664
		-\$ 19	0.00%	-\$ 327	-\$ 4,363	-\$ 327	\$ -	-\$ 4	-\$ 4,363	-\$ 4,386	\$ -	-\$ 4,386	-\$ 4,386
5	4-STAFF-47 Reduced Intervenor cost estimate from \$75,000 to \$50,000 based on 2 intervenors in this case vs. an estimate of 3 in the original submission Change	\$ 1,770,756	5.77%	\$ 30,693,262	\$ 28,901,501	\$ 2,167,613	\$ 1,157,365	\$ 109,766	\$ 2,964,823	\$ 6,037,664	\$ 507,793	\$ 5,529,872	\$ 39,638
		-\$ 22	0.00%	-\$ 375	-\$ 5,000	-\$ 375	\$ -	-\$ 5	-\$ 5,000	-\$ 5,027	\$ -	-\$ 5,027	-\$ 5,027
6	Updated Information Moved the disposal of the T1 transformer from 2019 test year to 2018 bridge year Change	\$ 1,764,473	5.77%	\$ 30,584,366	\$ 28,901,501	\$ 2,167,613	\$ 1,150,110	\$ 100,905	\$ 2,964,823	\$ 6,015,265	\$ 507,793	\$ 5,507,473	\$ 17,239
		-\$ 6,282	0.00%	-\$ 108,896	\$ -	\$ -	-\$ 7,255	-\$ 8,861	\$ -	-\$ 22,399	\$ -	-\$ 22,399	-\$ 22,399
7	2-STAFF-13 Updated Appendix 2-BA to include actual disposals year to date and forecast disposals for the remainder of the year Change	\$ 1,762,622	5.77%	\$ 30,552,276	\$ 28,901,501	\$ 2,167,613	\$ 1,146,311	\$ 99,119	\$ 2,964,823	\$ 6,007,829	\$ 507,793	\$ 5,500,037	\$ 9,803
		-\$ 1,851	0.00%	-\$ 32,090	\$ -	\$ -	-\$ 3,799	-\$ 1,786	\$ -	-\$ 7,436	\$ -	-\$ 7,436	-\$ 7,436
8	Updated Information Updated Leap amount based on revised Service Revenue Requirement Change	\$ 1,762,622	5.77%	\$ 30,552,272	\$ 28,901,444	\$ 2,167,608	\$ 1,146,311	\$ 99,119	\$ 2,964,765	\$ 6,007,771	\$ 507,793	\$ 5,499,979	\$ 9,745
		-\$ 0	0.00%	-\$ 4	-\$ 58	-\$ 4	\$ -	-\$ 0	-\$ 58	-\$ 58	\$ -	-\$ 58	-\$ 58
9	4-STAFF-49 Updated PILs model to move Building & Fixture additions from CCA class 47 (8%) to CCA class 1b (6%) Change	\$ 1,762,622	5.77%	\$ 30,552,272	\$ 28,901,444	\$ 2,167,608	\$ 1,146,311	\$ 99,553	\$ 2,964,765	\$ 6,008,205	\$ 507,793	\$ 5,500,413	\$ 10,178
		\$ -	0.00%	\$ -	\$ -	\$ -	\$ -	\$ 434	\$ -	\$ 434	\$ -	\$ 434	\$ 434
10	Settlement Proposal Update 2019 capital spend to more recent capital forecast for 2018 Change	\$ 1,761,984	5.77%	\$ 30,541,220	\$ 28,901,444	\$ 2,167,608	\$ 1,128,766	\$ 96,495	\$ 2,964,765	\$ 5,986,964	\$ 499,484	\$ 5,487,480	-\$ 2,754
		-\$ 638	0.00%	-\$ 11,051	\$ -	\$ -	-\$ 17,545	-\$ 3,058	\$ -	-\$ 21,241	-\$ 8,309	-\$ 12,932	-\$ 12,932
11	Settlement Proposal Add 2 GS<50 customers to the 2019 customer count Change	\$ 1,762,015	5.77%	\$ 30,541,761	\$ 28,908,652	\$ 2,168,149	\$ 1,128,766	\$ 96,502	\$ 2,964,765	\$ 5,987,003	\$ 499,496	\$ 5,487,507	-\$ 5,449
		\$ 31	0.00%	\$ 541	\$ 7,208	\$ 541	\$ -	\$ 7	\$ -	\$ 38	\$ 12	\$ 26	-\$ 2,696
12	Settlement Proposal Update OEB Cost of Capital Parameters to 2019 values Change	\$ 1,764,336	5.78%	\$ 30,541,761	\$ 28,908,652	\$ 2,168,149	\$ 1,128,766	\$ 95,621	\$ 2,964,765	\$ 5,988,443	\$ 499,496	\$ 5,488,947	-\$ 4,009
		\$ 2,321	0.01%	\$ -	\$ -	\$ -	\$ -	-\$ 881	\$ -	\$ 1,440	\$ -	\$ 1,440	\$ 1,440











