

**EXHIBIT 6:
REVENUE DEFICIENCY**

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1 **2.6 EXHIBIT 6: REVENUE DEFICIENCY**

2 **2.6.1 OVERVIEW**

3 NBHDL has included the following information in this Exhibit, excluding energy costs and energy sales (i.e.,
 4 cost of power and other associated costs):

5

- 6 • Determination of Net Utility Income
- 7 • Statement of Rate Base
- 8 • Actual Utility Return on Rate Base
- 9 • Indicated Rate of Return
- 10 • Requested Rate of Return
- 11 • Gross Deficiency in Revenue

12

13 These items are presented in Table 6-5 Revenue Deficiency Calculation. The information in this Exhibit
 14 supports NBDHL’s request in this Application for an increase in its Revenue Requirement to support the
 15 proposed operating and capital expenditures for 2021, and to service debt, and provide the allowed Return
 16 on Equity.

17

18 NBDHL’s revenue deficiency for the 2021 Test Year is \$1,770,175. This deficiency is calculated as the
 19 difference between the 2021 Test Year Revenue Requirement of \$15,685,587 and the 2021 Revenue at
 20 Existing rates which is based on the 2020 approved rates, at \$12,686,946 as shown in Table 6-1 below.

21

22

Table 6 - 1: 2021 Revenue at Existing Rates

Class	Annual kWh	Annual kW For Dx	Annualized Customers	Annualized Connections	Fixed Distribution Revenue	Variable Distribution Revenue	Dist. Rev. Including Transformer	Transformer Allowance	Dist. Rev. Excluding Transformer
Residential	201,705,111		256,224		\$7,479,179	\$ -	\$ 7,479,179	\$ -	\$ 7,479,179
GS < 50 kW	79,035,853		31,788		\$ 794,700	\$1,517,488	\$ 2,312,188	\$ -	\$ 2,312,188
GS >50 to 2999 kW	193,697,533	514,190	3,228		\$1,019,241	\$1,355,355	\$ 2,374,596	\$ 91,844	\$ 2,282,752
GS >3000 to 4999 kW	14,455,054	27,098	12		\$ 80,810	\$ 33,542	\$ 114,352	\$ 16,259	\$ 98,093
Street Lighting	2,036,369	5,690		65,088	\$ 329,345	\$ 154,509	\$ 483,854	\$ -	\$ 483,854
Sentinel Lighting	117,429	298		4,800	\$ 24,480	\$ 5,301	\$ 29,781	\$ -	\$ 29,781
UMSL	39,490			108	\$ 597	\$ 502	\$ 1,099	\$ -	\$ 1,099
Total	491,086,840	547,277	291,252	69,996	\$9,728,352	\$3,066,697	\$12,795,049	\$ 108,103	\$12,686,946

23

24 NBDHL has completed the Revenue Requirement Work Form (“RRWF”) as provided by the Board. The
 25 RRWF has been filed in live Excel format, and is also included as a PDF version in Appendix 6-A to this
 26 Exhibit.

27

1 The Revenue Deficiency Computation does not include: (i) Recovery of Deferral and Variance Accounts;
2 or (ii) Other electricity charges which include Energy Commodity, Transmission Charges, and Wholesale
3 Market Service Charges. These items are considered elsewhere in this Application and are treated either
4 as recoveries/dispositions of regulatory assets/liabilities or as energy related costs recorded in the OEB's
5 prescribed Retail Settlement Variance Accounts.
6

7 **2.6.2 REVENUE REQUIREMENT**

8 NBDHL's Revenue Requirement consists of the following:
9

- 10 - Administrative & General, Billing & Collecting Expense
- 11 - Operation & Maintenance Expense
- 12 - Depreciation Expense
- 13 - Property Taxes
- 14 - PILs
- 15 - Deemed Interest & Return on Equity

16

17 NBDHL's revenue requirement is primarily received through electricity distribution rates with supplemental
18 revenue from Board-approved specific service charges, late payment charges, and other operating income.
19

20

20 **2.6.2.1 Determination of Net Utility Income**

21 NBHDL has determined its allowable 2021 Net Income as \$2,542,949. Table 6-2 Provides the detailed
22 calculation.

1

Table 6 - 2: Net Utility Income

Details	Application
Operating Revenues:	
Distribution Revenue (Proposed Rates)	14,457,121
Other Revenue	1,228,466
Total	15,685,587
Operating Expenses:	
OM&A	8,565,938
Depreciation/Amortization	3,348,110
Property Taxes	96,944
Other	18,823
Total	12,029,815
Deemed Interest Expense	1,112,823
Total Expenses	13,142,638
PILs	-
Utility Net Income	2,542,949

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2.6.2.2 Statement of Rate Base

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8

A summary of NBHDL's Rate Base for the 2021 Test Year, calculated on NBHDL's deemed capital structure in accordance with the OEB Filing Requirements, is summarized in Table 6-3. NBHDL's 2021 Rate Base is \$76,227,486.

Table 6 - 3: Rate Base

Details	Application
Net Fixed Assets:	
Average Gross Fixed Assets	141,028,782
Average Accumulated Depreciation	(70,406,309)
Average Net Fixed Assets:	70,622,473
Allowance for Working Capital	5,605,013
Total Rate Base	76,227,486

9

10

2.6.2.3 Actual Utility Return on Rate Base

12

13

Table 6-4 summarizes NBHDL's 2021 Test Year at Existing Rates and the 2021 Test Year at Proposed Rates in order to achieve the Required Revenue.

1

Table 6 - 4: Return on Rate Base

Description	2021 Existing Rates	2021 Required Revenue
Actual Return on Rate Base		
Rate Base	76,227,486	76,227,486
Interest Expense	1,112,823	1,112,823
Net Income	772,774	2,542,949
Total Actual Return on Rate Base	1,885,597	3,655,772
Actual Return on Rate Base	2.47%	4.80%
Required Return on Rate Base		
Rate Base	76,227,486	76,227,486
Return Rates		
Return on Debt	2.43%	2.43%
Return on Equity	8.34%	8.34%
Deemed Interest Expense	1,112,823	1,112,823
Return on Equity	2,542,949	2,542,949
Total Return	3,655,772	3,655,772
Expected Return on Rate Base	4.80%	4.80%

2

3

4 **2.6.2.4 Indicated Rate of Return**

5 NBHDL's 2021 Indicated Rate of Return is 4.80% as presented in Table 6-5 and is calculated as the sum
 6 of Utility Net Income and Deemed Interest Expense divided by the Utility Rate of Return on Rate Base.

7

8 **2.6.2.5 Requested Rate of Return**

9 NBHDL has determined its requested Rate of Return on Base to be 4.80% or \$2,542,949. Table 6-4 above
 10 summarizes the computation of NBHDL's 2021 Requested Rate of Return on Rate Base of 4.80%.

11

12 As summarized in Table 6-4, in the absence of a change to distribution rates for 2021, as proposed in this
 13 Application, and assuming that the 2020 Approved rates remained unchanged, NBHDL's Return on Rate
 14 Base would be \$1,885,597 or 2.47%.

15

1 **2.6.2.6 Deficiency or Sufficiency in Revenue**

2 NBHDL has provided a detailed calculation supporting its 2021 Revenue Deficiency in Table 6-5 in this
3 Exhibit.

4

5 **2.6.2.7 Gross Deficiency or Sufficiency in Revenue**

6 As NBHDL is not expecting to be in a position to pay PILs in 2021, it has not “grossed up” its deficiency.
7 Utilizing the 2020 bridge year forecast, NBHDL expects to be in a loss carry-forward position for 2020. This
8 loss will be carried into future years to offset taxable income. NBHDL will provide an update on 2020 actuals
9 as part of the interrogatory process.

1

Table 6 - 5: Revenue Deficiency Calculation

Revenue Deficiency Determination			
Description	2020 Bridge	2021 Test Existing Rates	2021 Test - Required Revenue
Revenue			
Revenue Deficiency			1,770,175
Distribution Revenue	12,391,015	12,686,946	12,686,946
Other Operating Revenue (Net)	588,415	1,228,466	1,228,466
Total Revenue	12,979,430	13,915,412	15,685,587
Costs and Expenses			
Administrative & General, Billing & Collecting	4,470,983	4,923,849	4,923,849
Operation & Maintenance	2,981,844	3,642,089	3,642,089
Donations - LEAP	15,560	18,823	18,823
Depreciation & Amortization	3,120,296	3,348,110	3,348,110
Property Taxes	93,665	96,944	96,944
Deemed Interest	1,864,643	1,112,823	1,112,823
Total Costs and Expenses	12,546,992	13,142,638	13,142,638
Utility Income Before Income Taxes	432,438	772,774	2,542,949
Income Taxes:			
Corporate Income Taxes	0	0	0
Total Income Taxes	0	0	0
Utility Net Income	432,438	772,774	2,542,949
Income Tax Expense Calculation:			
Accounting Income	432,438	772,774	2,542,949
Tax Adjustments to Accounting Income	(2,461,781)	(2,542,949)	(2,542,949)
Taxable Income	(2,029,342)	(1,770,175)	(0)
Income tax expense before credits	(537,776)	(469,096)	(0)
Credits	0	0	0
Income Tax Expense	(537,776)	(469,097)	(0)
Tax Rate Reflecting Tax Credits	26.5%	26.5%	26.5%
Actual Return on Rate Base :			
Rate Base	75,773,859	76,227,486	76,227,486
Interest Expense	1,864,643	1,112,823	1,112,823
Net Income	432,438	772,774	2,542,949
Total Actual Return on Rate Base	2,297,081	1,885,597	3,655,772
Actual Return on Rate Base	3.03%	2.47%	4.80%
Required Return on Rate Base:			
Rate Base	75,773,859	76,227,486	76,227,486
Return Rates:			
Return on Debt (Weighted)	4.10%	2.43%	2.43%
Return on Equity	9.30%	8.34%	8.34%
Deemed Interest Expense	1,864,643	1,112,823	1,112,823
Return On Equity	2,818,788	2,542,949	2,542,949
Total Return	4,683,431	3,655,772	3,655,772
Expected Return on Rate Base	6.18%	4.80%	4.80%
Revenue Deficiency After Tax	2,386,349	1,770,175	0
Revenue Deficiency Before Tax	3,246,734	1,770,175	0

2

2.6.3 COST DRIVERS OF REVENUE DEFICIENCY

Table 6-6 below summarizes the contributors to the revenue deficiency by revenue requirement component. Column A lists the 2015 Board Approved amounts. Column B shows the 2021 revenue at existing rates shown in Table 6-1 allocated to revenue requirement component based on the proportions in Column A. It is NBDHL'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 NBDHL's proposed 2021 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 \$1,770,175

Table 6 - 6: Revenue Deficiency by Revenue Requirement Component

Service Revenue Requirement	2015 Approved (A)	2021 Revenue at Existing Rates Allocated in Proportion to 2015 Approved (B)	2021 Proposed (C)	Revenue Deficiency (D) = (C) - (B)
OM&A	\$6,429,729	\$6,899,961	\$8,565,938	\$1,665,977
Depreciation	\$2,489,076	\$2,671,113	\$3,348,110	\$676,998
Property Tax	\$69,876	\$74,987	\$96,944	\$21,957
PILs	\$202,184	\$216,971	(\$0)	(\$216,971)
Other Expenses	\$16,700	\$17,921	\$18,823	\$901
Deemed Interest Expense	\$1,497,051	\$1,606,537	\$1,112,823	(\$493,714)
Return on Deemed Equity	\$2,262,460	\$2,427,923	\$2,542,949	\$115,026
Total	\$12,967,077	\$13,915,412	\$15,685,587	\$1,770,175

The revenue deficiency of \$1,770,175 for the 2021 Test Year is principally a result of increases in the following components: (i) increased OM&A; (ii) increased depreciation; and (iii) higher return on deemed equity; partially offset by lower deemed interest expense and no taxes. These factors are further explained below:

- The cost increases in OM&A from 2015 to 2021 is \$2,136,209 which includes \$1,665,977 of OM&A in the revenue deficiency. The details associated with the \$2,136,209 are provided in Exhibit 4. Please refer to Exhibit 4, Table 4-12 - OM&A Cost Variances – 2021 Test Year Comparisons.
- Depreciation has increased as a result of the increase in net fixed assets in service. The 2015 Board Approved average net fixed assets was \$53,415,660 compared to \$70,622,472 in the 2021 Test Year (Exhibit 2, Table 2-1). Details with respect to the increases in the net fixed assets is provided in evidence in Exhibit 2.

- 1 • PILs has been reduced to zero as a result of higher net negative tax adjustments, primarily driven
2 by the use of accelerated CCA, as well as a loss carry available to offset test year taxable income.
3 Details can be found in the PILs Work Form in Exhibit 4 (Appendix 4-D).
4
5 • A higher return on deemed equity results from increase in total Rate Base of \$15,408,668 (Exhibit
6 2, Table 2-1). The increase in net fixed assets was \$17,206,812, and was partially offset by a
7 reduction in the working capital allowance of \$1,798,143. The Working Capital Allowance has
8 decreased as result of a reduction in the working capital allowance percentage from 10.31% in
9 2015 to 7.5% in 2021 based on the Board Approved working capital allowance.
10

11 **2.6.3.1 Change in Methodology**

12 NBHDL has not made any changes to methodologies to deficiency / sufficiency and on the individual cost
13 drivers contributing to it.

1 APPENDIX 6-A: REVENUE REQUIREMENT WORK FORM




Utility Name	North Bay Hydro Distribution Limited - North Bay service territory
Service Territory	
Assigned EB Number	EB-2020-0043
Name and Title	Micheal Roth - Regulatory Manager
Phone Number	705-474-8100
Email Address	mroth@northbayhydro.com
Test Year	2021
Bridge Year	2020
Last Rebasing Year	2015

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

1

 Ontario Energy Board
**Revenue Requirement Workform
(RRWF) for 2021 Filers**

- | | |
|--------------------------------------|--|
| 1. Info | 8. Rev. Def. Suff |
| 2. Table of Contents | 9. Rev. Reqt |
| 3. Data Input Sheet | 10. Load Forecast |
| 4. Rate Base | 11. Cost Allocation |
| 5. Utility Income | 12. Residential Rate Design |
| 6. Taxes PILs | 13. Rate Design and Revenue Reconciliation |
| 7. Cost of Capital | 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.*

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 Ontario Energy Board
**Revenue Requirement Workform
 (RRWF) for 2021 Filers**

Data Input ⁽¹⁾


	Initial Application ⁽²⁾			Per Board Decision
1 Rate Base				
Gross Fixed Assets (average)	\$141,028,782		\$ 141,028,782	\$141,028,782
Accumulated Depreciation (average)	(\$70,406,309) ⁽³⁾		(\$70,406,309)	(\$70,406,309)
Allowance for Working Capital:				
Controllable Expenses	\$8,681,704		\$ 8,681,704	\$8,681,704
Cost of Power	\$66,051,805		\$ 66,051,805	\$66,051,805
Working Capital Rate (%)	7.50% ⁽⁴⁾			
2 Utility Income				
Operating Revenues:				
Distribution Revenue at Current Rates	\$12,686,946			
Distribution Revenue at Proposed Rates	\$14,457,121			
Other Revenue:				
Specific Service Charges	\$111,570			
Late Payment Charges	\$150,473			
Other Distribution Revenue	\$760,311			
Other Income and Deductions	\$206,112			
Total Revenue Offsets	\$1,228,466 ⁽⁵⁾			
Operating Expenses:				
OWA Expenses	\$8,565,938		\$ 8,565,938	\$8,565,938
Depreciation/Amortization	\$3,348,110		\$ 3,348,110	\$3,348,110
Property taxes	\$96,944		\$ 96,944	\$96,944
Other expenses	\$18,823		18822.66284	\$18,823
3 Taxes/PILs				
Taxable Income:				
Adjustments required to arrive at taxable income	(\$2,542,949) ⁽⁶⁾			
Utility Income Taxes and Rates:				
Income taxes (not grossed up)	(\$0)			
Income taxes (grossed up)	(\$0)			
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% ⁽⁷⁾			
Common Equity Capitalization Ratio (%)	40.0%			
Preferred Shares Capitalization Ratio (%)	0.0%			
	100.0%			
Cost of Capital:				
Long-term debt Cost Rate (%)	2.48%			
Short-term debt Cost Rate (%)	1.75%			
Common Equity Cost Rate (%)	8.34%			
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.

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 Ontario Energy Board
**Revenue Requirement Workform
 (RRWF) for 2021 Filers**

Rate Base and Working Capital

Line No.	Particulars	Initial Application		Per Board Decision	
1	Gross Fixed Assets (average) ⁽²⁾	\$141,028,782	\$ -	\$141,028,782	\$ -
2	Accumulated Depreciation (average) ⁽²⁾	(\$70,406,309)	\$ -	(\$70,406,309)	\$ -
3	Net Fixed Assets (average) ⁽²⁾	\$70,622,473	\$ -	\$70,622,473	\$ -
4	Allowance for Working Capital ⁽¹⁾	\$5,605,013	(\$5,605,013)	\$ -	\$ -
5	Total Rate Base	\$76,227,486	(\$5,605,013)	\$70,622,473	\$ -

(1) Allowance for Working Capital - Derivation

6	Controllable Expenses	\$8,681,704	\$ -	\$8,681,704	\$ -
7	Cost of Power	\$66,051,805	\$ -	\$66,051,805	\$ -
8	Working Capital Base	\$74,733,509	\$ -	\$74,733,509	\$ -
9	Working Capital Rate % ⁽¹⁾	7.50%	-7.50%	0.00%	0.00%
10	Working Capital Allowance	\$5,605,013	(\$5,605,013)	\$ -	\$ -

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.

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 Ontario Energy Board
**Revenue Requirement Workform
 (RRWF) for 2021 Filers**

Utility Income

Line No.	Particulars	Initial Application				Per Board Decision
Operating Revenues:						
1	Distribution Revenue (at Proposed Rates)	\$14,457,121	(\$14,457,121)	\$-	\$-	\$-
2	Other Revenue ⁽¹⁾	\$1,228,466	(\$1,228,466)	\$-	\$-	\$-
3	Total Operating Revenues	\$15,685,587	(\$15,685,587)	\$-	\$-	\$-
Operating Expenses:						
4	OM+A Expenses	\$8,565,938	\$-	\$8,565,938	\$-	\$8,565,938
5	Depreciation/Amortization	\$3,348,110	\$-	\$3,348,110	\$-	\$3,348,110
6	Property taxes	\$96,944	\$-	\$96,944	\$-	\$96,944
7	Capital taxes	\$-	\$-	\$-	\$-	\$-
8	Other expense	\$18,823	\$-	\$18,823	\$-	\$18,823
9	Subtotal (lines 4 to 8)	\$12,029,815	\$-	\$12,029,815	\$-	\$12,029,815
10	Deemed Interest Expense	\$1,112,823	(\$1,112,823)	\$-	\$-	\$-
11	Total Expenses (lines 9 to 10)	\$13,142,638	(\$1,112,823)	\$12,029,815	\$-	\$12,029,815
12	Utility income before income taxes	\$2,542,949	(\$14,572,764)	(\$12,029,815)	\$-	(\$12,029,815)
13	Income taxes (grossed-up)	(\$0)	\$-	(\$0)	\$-	(\$0)
14	Utility net income	\$2,542,949	(\$14,572,764)	(\$12,029,815)	\$-	(\$12,029,815)

Notes

Other Revenues / Revenue Offsets

⁽¹⁾	Specific Service Charges	\$111,570	\$-	\$-	\$-	\$-
	Late Payment Charges	\$150,473	\$-	\$-	\$-	\$-
	Other Distribution Revenue	\$760,311	\$-	\$-	\$-	\$-
	Other Income and Deductions	\$206,112	\$-	\$-	\$-	\$-
	Total Revenue Offsets	\$1,228,466	\$-	\$-	\$-	\$-

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 Ontario Energy Board
**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	\$2,542,949	\$ -
2	Adjustments required to arrive at taxable utility income	(\$2,542,949)	\$ -
3	Taxable income	(\$0)	\$ -
<u>Calculation of Utility Income Taxes</u>			
4	Income taxes	(\$0)	(\$0)
6	Total taxes	(\$0)	(\$0)
7	Gross-up of Income Taxes	(\$0)	(\$0)
8	Grossed-up Income Taxes	(\$0)	(\$0)
9	PILs / tax Allowance (Grossed-up income taxes + Capital taxes)	(\$0)	(\$0)
10	Other tax Credits	\$ -	\$ -
<u>Tax Rates</u>			
11	Federal tax (%)	15.00%	15.00%
12	Provincial tax (%)	11.50%	11.50%
13	Total tax rate (%)	26.50%	26.50%

Notes

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 Ontario Energy Board
**Revenue Requirement Workform
 (RRWF) for 2021 Filers**

Capitalization/Cost of Capital


Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
Initial Application					
	Debt				
1	Long-term Debt	56.00%	\$42,687,392	2.48%	\$1,059,464
2	Short-term Debt	4.00%	\$3,049,099	1.75%	\$53,359
3	Total Debt	60.00%	\$45,736,492	2.43%	\$1,112,823
	Equity				
4	Common Equity	40.00%	\$30,490,994	8.34%	\$2,542,949
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	Total Equity	40.00%	\$30,490,994	8.34%	\$2,542,949
7	Total	100.00%	\$76,227,486	4.80%	\$3,655,772
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%	\$70,622,473	0.00%	\$ -

Notes



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 Ontario Energy Board
**Revenue Requirement Workform
 (RRWF) for 2021 Filers**

Revenue Deficiency/Sufficiency

Line No.	Particulars	Initial Application		Per Board Decision		Per Board Decision	
		At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates
1	Revenue Deficiency from Below		\$2,408,401		(\$894,056)		\$16,367,095
2	Distribution Revenue	\$12,686,946	\$12,048,720	\$12,686,946	\$15,351,177	\$-	(\$16,367,095)
3	Other Operating Revenue Offsets - net	\$1,228,466	\$1,228,466	\$-	\$-	\$-	\$-
4	Total Revenue	\$13,915,412	\$15,685,587	\$12,686,946	\$14,457,121	\$-	\$-
5	Operating Expenses	\$12,029,815	\$12,029,815	\$12,029,815	\$12,029,815	\$12,029,815	\$12,029,815
6	Deemed Interest Expense	\$1,112,823	\$1,112,823	\$-	\$-	\$-	\$-
8	Total Cost and Expenses	\$13,142,638	\$13,142,638	\$12,029,815	\$12,029,815	\$12,029,815	\$12,029,815
9	Utility Income Before Income Taxes	\$772,774	\$2,542,949	\$657,131	\$2,427,306	(\$12,029,815)	(\$12,029,815)
10	Tax Adjustments to Accounting Income per 2013 PILs model	(\$2,542,949)	(\$2,542,949)	(\$2,542,949)	(\$2,542,949)	\$-	\$-
11	Taxable Income	(\$1,770,175)	\$0	(\$1,885,818)	(\$115,643)	(\$12,029,815)	(\$12,029,815)
12	Income Tax Rate	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%
13	Income Tax on Taxable Income	\$-	\$0	\$-	\$-	\$-	\$-
14	Income Tax Credits	\$-	\$-	\$-	\$-	\$-	\$-
15	Utility Net Income	\$772,774	\$2,542,949	\$657,131	(\$12,029,815)	(\$12,029,815)	(\$12,029,815)
16	Utility Rate Base	\$76,227,486	\$76,227,486	\$70,622,473	\$70,622,473	\$70,622,473	\$70,622,473
17	Deemed Equity Portion of Rate Base	\$30,490,994	\$30,490,994	\$-	\$-	\$-	\$-
18	Income/(Equity Portion of Rate Base)	2.53%	8.34%	0.00%	0.00%	0.00%	0.00%
19	Target Return - Equity on Rate Base	8.34%	8.34%	0.00%	0.00%	0.00%	0.00%
20	Deficiency/Sufficiency in Return on Equity	-8.81%	0.00%	0.00%	0.00%	0.00%	0.00%
21	Indicated Rate of Return	2.47%	4.80%	0.93%	0.00%	-17.03%	0.00%
22	Requested Rate of Return on Rate Base	4.80%	4.80%	0.00%	0.00%	0.00%	0.00%
23	Deficiency/Sufficiency in Rate of Return	-2.32%	0.00%	0.93%	0.00%	-17.03%	0.00%
24	Target Return on Equity	\$2,542,949	\$2,542,949	\$-	\$-	\$-	\$-
25	Revenue Deficiency/(Sufficiency)	\$1,770,175	\$1	(\$657,131)	\$-	\$12,029,815	\$-
26	Gross Revenue Deficiency/(Sufficiency)	\$2,408,401 ⁽¹⁾	\$1	(\$894,056) ⁽¹⁾	\$-	\$16,367,095 ⁽¹⁾	\$-

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

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 Ontario Energy Board
**Revenue Requirement Workform
 (RRWF) for 2021 Filers**

Revenue Requirement

Line No.	Particulars	Application		Per Board Decision	
1	OM&A Expenses	\$8,565,938		\$8,565,938	
2	Amortization/Depreciation	\$3,348,110		\$3,348,110	
3	Property Taxes	\$96,944		\$96,944	
5	Income Taxes (Grossed up)	(\$0)		(\$0)	
6	Other Expenses	\$18,823		\$18,823	
7	Return				
	Deemed Interest Expense	\$1,112,823		\$ -	
	Return on Deemed Equity	\$2,542,949		\$ -	
8	Service Revenue Requirement (before Revenues)	\$15,685,587		\$12,029,815	
9	Revenue Offsets	\$1,228,466		\$ -	
10	Base Revenue Requirement (excluding Transformer Ownership Allowance credit adjustment)	\$14,457,121		\$12,029,815	
11	Distribution revenue	\$14,457,121		\$ -	
12	Other revenue	\$1,228,466		\$ -	
13	Total revenue	\$15,685,587		\$ -	
14	Difference (Total Revenue Less Distribution Revenue Requirement before Revenues)	\$1	⁽¹⁾	(\$12,029,815)	⁽¹⁾

Summary Table of Revenue Requirement and Revenue Deficiency/Sufficiency

	Application		Δ% ⁽²⁾	Per Board Decision	Δ% (2)
Service Revenue Requirement	\$15,685,587	\$12,029,815	(\$0)	\$12,029,815	(\$1)
Grossed-Up Revenue Deficiency/(Sufficiency)	\$2,408,401	(\$894,056)	(\$1)	\$16,367,095	(\$1)
Base Revenue Requirement (to be recovered from Distribution Rates)	\$14,457,121	\$12,029,815	(\$0)	\$12,029,815	(\$1)
Revenue Deficiency/(Sufficiency) Associated with Base Revenue Requirement	\$1,770,175	\$ -	(\$1)	\$ -	(\$1)

Notes

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

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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 24 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			Customer / Connections			Per Board Decision		
	Input the name of each customer class	Customer / Connections Test Year average or mid-year	kWh Annual	kWkVA ⁽¹⁾ Annual	Customer / Connections Test Year average or mid-year	kWh Annual	kWkVA ⁽¹⁾ Annual	Customer / Connections Test Year average or mid-year	kWh Annual	kWkVA ⁽¹⁾ Annual
1	Residential	21,352	201,705,111							
2	GS<50	2,649	79,835,853							
3	GS>50	269	193,897,533	514,190						
4	GS>2000<0000	1	14,405,054	27,098						
5	Street Lighting	5,424	2,036,368	5,690						
6	Seminal Lights	408	117,458	286						
7	UNSL	9	39,490							
8										
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	Total		491,066,839	547,276						

Notes:

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

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 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 ⁽²⁾	Costs Allocated from Previous Study ⁽¹⁾	%	Allocated Class Revenue Requirement ⁽³⁾	%
<i>From Sheet 10, Load Forecast (7A)</i>				
1 Residential	\$ 7,551,988	58.24%	\$ 9,707,908	61.89%
2 GS<50	\$ 2,223,515	17.15%	\$ 2,716,667	17.32%
3 GS>50	\$ 2,623,792	20.23%	\$ 2,947,558	18.79%
4 GS>2000<5000	\$ 108,091	0.83%	\$ 121,265	0.77%
5 Street Lighting	\$ 415,943	3.21%	\$ 147,193	0.94%
6 Sentinel Lights	\$ 43,097	0.33%	\$ 43,983	0.28%
7 UMMSL	\$ 751	0.01%	\$ 1,013	0.01%
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20				
Total	\$ 12,967,077	100.00%	\$ 15,685,587	100.00%
			Service Revenue Requirement (from Sheet 9)	
			\$ 15,685,586.64	

- (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	\$ 7,479,179	\$ 8,522,728	\$ 8,839,633	\$ 763,862
2 GS<50	\$ 2,312,188	\$ 2,634,802	\$ 2,634,802	\$ 187,925
3 GS>50	\$ 2,282,752	\$ 2,601,258	\$ 2,683,554	\$ 232,301
4 GS>2000<5000	\$ 98,093	\$ 111,780	\$ 111,780	\$ 10,372
5 Street Lighting	\$ 493,854	\$ 551,365	\$ 147,909	\$ 28,722
6 Sentinel Lights	\$ 29,781	\$ 33,936	\$ 30,348	\$ 6,162
7 UMMSL	\$ 1,099	\$ 1,252	\$ 1,095	\$ 121
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19				
20				
Total	\$ 12,686,946	\$ 14,457,121	\$ 14,457,121	\$ 1,228,466

- (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.

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C) Rebalancing Revenue-to-Cost Ratios

Name of Customer Class	Previously Approved Ratios	Status Quo Ratios	Proposed Ratios	Policy Range
	Most Recent Year: 2016 %	(7C + 7E) / (7A) %	(7D + 7E) / (7A) %	
1 Residential	100.37%	95.68%	98.92%	85 - 115
2 GS<50	110.23%	103.90%	103.90%	80 - 120
3 GS>50	86.83%	96.13%	98.92%	80 - 120
4 GS>2000<5000	98.11%	100.73%	100.73%	80 - 120
5 Street Lighting	120.00%	134.10%	120.00%	80 - 120
6 Sentinel Lights	111.77%	89.89%	98.92%	80 - 120
7 JM&SL	120.00%	135.49%	120.00%	80 - 120
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- (8) Previously Approved Revenue-to-Cost (R/C) Ratios - For most applicants, the most recent year would be the third year (at the latest) of the Price Cap IR period. For example, if the applicant, rebased in 2012 with further adjustments to move within the range over two years, the Most Recent Year would be 2015. However, the ratios in 2015 would be equal to those after the adjustment in 2014.
- (9) Status Quo Ratios - The OEB-issued cost allocation model provides the Status Quo Ratios on Worksheet D-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 2021	Price Cap IR Period		
		2022	2023	
1 Residential	98.92%	98.92%	98.92%	85 - 115
2 GS<50	103.90%	103.90%	103.90%	80 - 120
3 GS>50	98.92%	98.92%	98.92%	80 - 120
4 GS>2000<5000	100.73%	100.73%	100.73%	80 - 120
5 Street Lighting	120.00%	120.00%	120.00%	80 - 120
6 Sentinel Lights	98.62%	98.62%	98.62%	80 - 120
7 JM&SL	120.00%	120.00%	120.00%	80 - 120
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- (11) The applicant should complete Table D if it is applying for approval of a revenue-to-cost ratio in 2021 that is outside of the OEB's policy range for any customer class. Table D will allow 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 "Charged" or "No Change" in 2019 (in the current Revenue/Cost Ratio Adjustment Worksheet, Worksheet C.1, Decision - Cost Revenue Adjustment, column c), and enter TBC for class(es) that will be entered as "Rebalance".

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Ontario Energy Board
**Revenue Requirement Workform
 (RRWF) for 2021 Filers**

Rate Design and Revenue Reconciliation

This sheet explains Figures 2-9, and contains a simplified model for calculating the standard monthly and volumetric rates based on the allocated class revenues and volumetric collection from the cost allocation sheet and rate design and as prepared for the application. However, the RRWF does not replace the rate schedule required for an applicant to file in support of its application. The RRWF provides a reference also check of the derivation of the revenue requirement and the proposed base distribution rates to record the revenue requirement, based on summary information from the cost allocation sheet and rate design, but does not include the application, base forecasting, base plan, etc.

Eligible Revenue		Cost Allocation		Class Allocated Revenues			Fixed - Variable Splits ¹			Distribution Rates			Revenue Reconciliation		
Customer and Load Forecast				From Sheet 15, Cost Allocation and Sheet 15, Residential Rate Design			Percentages to be entered on a fraction between 0 and 1			Monthly Service Charge			Revenue Reconciliation		
Customer Class	Volumetric Charge Definition	Customer Connections	MM	MM or kWh	Total Class Revenue Requirement	Monthly Service Charge	Volumetric	Fixed	Variable	Transformer Ownership Allowance ² Rate	No. of Meters	Volumetric Rate	RESC Revenues	Volumetric Revenues	Distribution Revenues less Transformer Ownership
From Sheet 16, Load Forecast															
1 Residential	MM	21,352	238,165,111	-	\$ 4,839,833	\$ 9,339,833	\$ -	100.0%	0.0%	\$14.08	7	\$103.08	\$ 8,858,728.03	\$ -	\$ 8,858,728.03
2 DS-MS	MM	2,849	79,825,953	-	\$ 2,834,812	\$ 599,362	\$ 1,728,270	32.3%	67.7%	\$26.40	4	\$102.78	\$ 80,540.12	\$ 1,728,270.00	\$ 2,834,812.00
3 DS-MS	MM	269	139,855,533	\$14,100	\$ 2,696,654	\$ 1,981,198	\$ 1,465,290	44.9%	55.1%	\$71.70	1	\$103.07	\$ 1,935,748.07	\$ -	\$ 2,834,812.00
4 DS-MS-MSD	MM	1	14,855,054	27,000	\$ 111,700	\$ 82,205	\$ 18,295	73.8%	26.2%	\$ 87.70	1	\$122.08	\$ 10,246.30	\$ 25,851,626.00	\$ 111,700.00
5 Street Lighting	MM	5,024	227,539	5,000	\$ 147,600	\$ 198,077	\$ 47,222	33.7%	66.3%	\$1.00	1	\$10.00	\$ 60,246.00	\$ 22,231,450.00	\$ 145,177.00
6 Central Light	MM	400	117,428	200	\$ 36,340	\$ 39,522	\$ 5,337	92.3%	7.7%	\$5.07	1	\$22.02	\$ 3,536.00	\$ 5,025,718.00	\$ 30,351.72
7 Other	MM	3	50,000	-	\$ 1,000	\$ 900	\$ 200	90.0%	10.0%	\$5.00	1	\$10.00	\$ 200.00	\$ 500,000.00	\$ 200,000.00
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17															
18															
19															
20															
Total Transformer Ownership Allowance												\$ 1,414,141.91			
Total Revenue Requirement												\$ 17,457,121.92			
Difference												\$ 222,878.00			

Notes:
¹ Transformer Ownership Allowance is entered on applicable annual and only for those classes to which it applies.
² The "Fixed" variable split, for each customer class, shows the "rate generator" portion of the sheet of the RRWF. Only the "Fixed" fraction is entered, as the sum of the "Fixed" and "Variable" portions must equal 100%. For a distributor that uses the Monthly Service Charge, the "Fixed" ratio is calculated as: (MSC) / (Average number of customers or connections x 12 months) / (Class Allocation Revenue Requirement).

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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 edition 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.
 (*) Short reference to evidence material (interrogatory response, undertaking, exhibit number, Board Decision, Code, Guideline, Report of the Board, etc.)
 (**) Short description of change, issue, etc.

Summary of Proposed Changes

Reference ^(*)	Item / Description ^(**)	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/P/L ^(*)	OMSA	Service Revenue Requirement	Other Revenue	Base Revenue Requirement	Grossed up Revenue Deficiency / Sufficiency
1	Original Application	\$ 3,655,772	4.89%	\$ 78,227,499	\$ 74,732,504	\$ 5,865,913	\$ 3,349,110	\$ 0	\$ 9,505,939	\$ 15,005,507	\$ 1,228,408	\$ 14,457,121	\$ 2,408,401
2	Change												
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4	Change												
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