



EXHIBIT 5 – COST OF CAPITAL

2019 Cost of Service

Chapleau Public Utilities Corporation
EB-2018-0087

5.1 TABLE OF CONTENTS

1	5.1 Table of Contents	1
2	5.2 Capital Structure	3
3	5.3 OEB Appendix 2-OA Capital Structure / Cost	
4	of Capital	5
5	5.4 OEB Appendix 2-OB Cost of Debt Instruments	8
6	5.5 Cost of Capital	9
7	5.5.1 Capital Structure	9
8	5.5.2 Return on Equity	9
9	5.5.3 Weighted Average Cost of Debt	9
10	5.5.4 Long-Term Debt	10
11	5.5.5 Short-Term Debt	10
12	5.5.6 Notional Debt	11
13	Appendices	12

Table of Figures

1	Table 1 - Overview of Capital Structure.....	4
2	Table 2 - OEB Appendix 2-OA Capital Structure/Cost of Capital	5
3	Table 3 - OEB Appendix 2-OB Cost of Debt Instruments.....	8
4	Table 4 - Derivation of WACC	9

5.2 CAPITAL STRUCTURE

In this Exhibit, CPUC presents evidence regarding its capital structure, its debt financing and the calculation of its return on equity for the 2019 Test Year.

CPUC seeks to recover a weighted average cost of capital of 6.02% through rates in the 2019 Test Year. CPUC has followed the Report of the Board on Cost of Capital for Ontario's Regulated Utilities, December 11, 2009, as well as the Review of the Existing Methodology of the Cost of Capital for Ontario's Regulated Utilities, January 14, 2016, in determining the applicable cost of capital.¹

In calculating the applicable cost of capital, CPUC has used the OEB's deemed capital structure of 56% long-term debt, 4% short-term debt, and 40% equity, and the Cost of Capital parameters in the OEB's letter of November 23, 2017, for the allowed return on equity ("ROE"). CPUC is not seeking any changes in its Capital Structure from its 2012 Board Approved Structure.²

CPUC understands that the OEB will most likely update the ROE for 2019 at a later date, and therefore commits to updating its Application to reflect the OEB's updated Cost of Capital Parameters for 2019 applications and as new information is issued, to the extent that updated information is applicable to the Application.

¹ MFR – Statement that LDC adopts OEB's guidelines for cost of capital and confirms that updates will be done. Alternatively - utility specific cost of capital with supporting evidence

² MFR – Explanation for any changes in capital structure

1 CPUC's cost of capital for 2018 & 2019 has been calculated as 6.02% as shown in the table
2 below:

3 **Table 1 - Overview of Capital Structure³**

Particulars	Cost Rate
	(%)
<i>Debt</i>	
<i>Long-term Debt</i>	4.16%
<i>Short-term Debt</i>	2.29%
<i>Total Debt</i>	4.04%
<i>Equity</i>	
<i>Common Equity</i>	9.00%
<i>Preferred Shares</i>	
<i>Total Equity</i>	9.00%
<i>WACC</i>	6.02%

4 All rates above are consistent with the letter issued by the OEB on November 23, 2017. For rate-
5 making purposes, the utility used a weighted debt rate of 4.04% as a long-term debt rate. ⁴

6 Retirements of debt or preference shares and buy-back of common shares; and Short-Term
7 Debt, Long-Term Debt, preference shares as well as common share offerings do not apply to
8 CPUC as the CPUC does not issue any preference shares and common equity shares.

³ MFR – Calculation of cost for each capital component

⁴ MFR - If proposing any rate that is different from the OEB guidelines, a justification of the proposed rate(s), including key assumptions⁵ MFR – Completed Appendix 2-OA for last OEB approved and test year

5.3 OEB APPENDIX 2-OA CAPITAL STRUCTURE / COST OF CAPITAL

Appendix 2-OA below presents the capital structure for the last Board Approved and Test year.⁵

Table 2 - OEB Appendix 2-OA Capital Structure/Cost of Capital

		Year : 2019			
Particulars	Capitalization Ratio		Cost Rate	Return	
	(%)	(\$)	(%)		(\$)
Debt					
Long-term Debt	56.00%	\$980,429	4.16%		\$40,786
Short-term Debt	4.00%	\$70,031	2.29%		\$1,604
Total Debt	60.0%	\$1,050,460	4.04%		\$42,390
Equity					
Common Equity	40.00%	\$700,307	9.00%		\$63,028
Preferred Shares		\$ -			\$ -
Total Equity	40.0%	\$700,307	9.00%		\$63,028
Total	100.0%	\$1,750,767	6.02%		\$105,417
		Year : 2018			
Particulars	Capitalization Ratio		Cost Rate	Return	
	(%)	(\$)	(%)		(\$)
Debt					
Long-term Debt	56.00%	\$1,011,277	4.41%		\$44,597
Short-term Debt	4.00%	\$72,234	2.08%		\$1,502
Total Debt	60.0%	\$1,083,511	4.25%		\$46,100
Equity					
Common Equity	40.00%	\$722,340	9.12%		\$65,877
Preferred Shares		\$ -			\$ -
Total Equity	40.0%	\$722,340	9.12%		\$65,877
Total	100.0%	\$1,805,851	6.20%		\$111,977
		Year : 2017			
Particulars	Capitalization Ratio		Cost Rate	Return	
	(%)	(\$)	(%)		(\$)
Debt					
Long-term Debt	56.00%	\$896,533	4.41%		\$39,537
Short-term Debt	4.00%	\$64,038	2.08%		\$1,332
Total Debt	60.0%	\$960,571	4.25%		\$40,869
Equity					
Common Equity	40.00%	\$640,381	9.12%		\$58,403
Preferred Shares		\$ -			\$ -
Total Equity	40.0%	\$640,381	9.12%		\$58,403
Total	100.0%	\$1,600,952	6.20%		\$99,272

⁵ MFR – Completed Appendix 2-OA for last OEB approved and test year

1

Year: 2016					
	(%)	(\$)	(%)		(\$)
Debt					
Long-term Debt	56.00%	\$960,477	4.41%		\$42,357
Short-term Debt	4.00%	\$68,606	2.08%		\$1,427
Total Debt	60.0%	\$1,029,083	4.25%		\$43,784
Equity					
Common Equity	40.00%	\$686,055	9.12%		\$62,568
Preferred Shares		\$ -			\$ -
Total Equity	40.0%	\$686,055	9.12%		\$62,568
Total	100.0%	\$1,715,138	6.20%		\$106,352
Year: 2015					
	(%)	(\$)	(%)		(\$)
Debt					
Long-term Debt	56.00%	\$937,475	4.41%		\$41,343
Short-term Debt	4.00%	\$66,963	2.08%		\$1,393
Total Debt	60.0%	\$1,004,438	4.25%		\$42,735
Equity					
Common Equity	40.00%	\$669,625	9.12%		\$61,070
Preferred Shares		\$ -			\$ -
Total Equity	40.0%	\$669,625	9.12%		\$61,070
Total	100.0%	\$1,674,063	6.20%		\$103,805
Year: 2014					
Particulars	Capitalization Ratio		Cost Rate		Return
	(%)	(\$)	(%)		(\$)
Debt					
Long-term Debt	56.00%	\$965,493	4.41%		\$42,578
Short-term Debt	4.00%	\$68,964	2.08%		\$1,434
Total Debt	60.0%	\$1,034,457	4.25%		\$44,013
Equity					
Common Equity	40.00%	\$689,638	9.12%		\$62,895
Preferred Shares		\$ -			\$ -
Total Equity	40.0%	\$689,638	9.12%		\$62,895
Total	100.0%	\$1,724,095	6.20%		\$106,908
Year: 2013					
Particulars	Capitalization Ratio		Cost Rate		Return
	(%)	(\$)	(%)		(\$)
Debt					
Long-term Debt	56.00%	\$903,568	4.41%		\$39,847
Short-term Debt	4.00%	\$64,541	2.08%		\$1,342
Total Debt	60.0%	\$968,109	4.25%		\$41,190
Equity					
Common Equity	40.00%	\$645,406	9.12%		\$58,861
Preferred Shares		\$ -			\$ -
Total Equity	40.0%	\$645,406	9.12%		\$58,861
Total	100.0%	\$1,613,514	6.20%		\$100,051

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	Year: 2012		Board Approved		
Particulars	Capitalization Ratio		Cost Rate		Return
	(%)	(\$)	(%)		(\$)
Debt					
Long-term Debt	56.00%	\$772,048	4.41%		\$34,047
Short-term Debt	4.00%	(1) \$55,146	2.08%		\$1,147
Total Debt	60.0%	\$827,194	4.25%		\$35,194
Equity					
Common Equity	40.00%	\$551,463	9.12%		\$50,293
Preferred Shares		\$ -			\$ -
Total Equity	40.0%	\$551,463	9.12%		\$50,293
Total	100.0%	\$1,378,657	6.20%		\$85,488

	Year: 2012		Board Approved		
Particulars	Capitalization Ratio		Cost Rate		Return
	(%)	(\$)	(%)		(\$)
Debt					
Long-term Debt	56.00%	\$846,878	4.41%		\$37,347
Short-term Debt	4.00%	(1) \$60,491	2.08%		\$1,258
Total Debt	60.0%	\$907,370	4.25%		\$38,606
Equity					
Common Equity	40.00%	\$604,913	9.12%		\$55,168
Preferred Shares		\$ -			\$ -
Total Equity	40.0%	\$604,913	9.12%		\$55,168
Total	100.0%	\$1,512,283	6.20%		\$93,774

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5.4 OEB APPENDIX 2-OB COST OF DEBT INSTRUMENTS

CPUC used the deemed debt rate for the purpose of rate making. However, CPUC does not have any debt therefore OEB Appendix 2-OB is not required.⁶

Table 3 - OEB Appendix 2-OB Cost of Debt Instruments

Year

2019

Long Term

Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) (Note 2)	Interest (\$) (Note 1)
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	nil

⁶ MFR – Completed Appendix 2-OB for historical, bridge and test years

5.5 COST OF CAPITAL

This evidence summarizes the capital structure, method, and cost of financing CPUC's capital requirements for 2019.

5.5.1 CAPITAL STRUCTURE

The proposed rates for the cost of capital in 2018 & 2019 are presented in Section 5.4 – Table 2. The rates shown for short-term, long-term debt and return on equity are those set out in the Board's letter of November 23, 2017 Cost of Capital Parameter Updates for 2019 Cost of Service Applications.

5.5.2 RETURN ON EQUITY

CPUC has used a ROE of 9.00% for 2018 & 2019 as established by the Board for Cost of Service applications with a January 1/May 1, 2019 implementation date. CPUC recognizes that the ROE will be updated by Board guidelines and as such commits to updating the cost capital parameters as new information is made available.

5.5.3 WEIGHTED AVERAGE COST OF DEBT

CPUC proposes a weighted average cost of debt of 4.04% which is based on the calculations as set out in the table below.

Table 4 - Derivation of WACC

Particulars	Cost Rate
	(%)
<i>Debt</i>	
<i>Long-term Debt</i>	4.16%
<i>Short-term Debt</i>	2.29%
<i>Total Debt</i>	4.04%
<i>Equity</i>	
<i>Common Equity</i>	9.00%
<i>Preferred Shares</i>	
<i>Total Equity</i>	9.00%
Total WACC	6.02%

5.5.4 LONG-TERM DEBT

CPUC is not forecasting any debt in 2018 & 2019. However, it is likely that the utility will need to obtain long term debt in the near future if studies and analysis of the current substation show that it will need to be replaced. If this event occurs, the utility will seek long-term debt from either a financial institution or Infrastructure Ontario.⁷ CPUC does not have any promissory notes to present ⁸

CPUC is not forecasting any new long-term debt in the bridge and test year other than the debt explained above.⁹

5.5.5 SHORT-TERM DEBT

CPUC does not forecast that it will redeem any debt and has not issued any preference shares. Hence CPUC does not record either a profit or loss on redemption of debt and preference shares. CPUC is not forecasting any new debt in the bridge and test years.

Not-For-Profit

CPUC is a for profit entity corporation and as such all requirements related to a not-for-profit organization do not apply. ¹⁰

⁷ MFR – Explanation of debt rate for each existing debt instrument

⁸ MFR - Copies of promissory notes or other debt arrangements with affiliates

⁹ MFR – Forecast of new debt in bridge and test year - details including estimate of rate

¹⁰ MFR – Not for profit evidence N/A

5.5.6 NOTIONAL DEBT

The OEB clarified the treatment of “notional” debt (that portion of deemed debt exceeding a utility’s actual debt), where notional debt is used as the “plug” to true up actual debt to the allowed debt thickness for rate-setting purposes. Notional debt can be either positive (i.e. deemed debt is greater than actual debt) or negative (where deemed debt is less than actual debt). The profit on debt is calculated to be \$42,390 is detailed at Table below.¹¹

Actual Debt				Notional Debt			
Capitalization Ratio		Cost Rate	Return	Capitalization Ratio		Cost Rate	Return
(%)	(\$)	(%)	(\$)	(%)	(\$)	(%)	(\$)
56.00%	\$0	4.16%	\$0	56.00%	\$980,429	4.16%	\$40,786
4.00%	\$0	2.29%	\$0	4.00%	\$70,031	2.29%	\$1,604
60.0%	\$0	4.04%	\$0	40.0%	\$1,050,460	4.04%	\$42,390

¹¹ MFR - Profit or loss on redemption of debt

1 **APPENDICES**

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n/a	No debt

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