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EXHIBIT 5 – COST OF CAPITAL AND CAPITAL STRUCTURE

2024 Cost of Service

Tillsonburg Hydro Inc.
EB-2023-0053

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1 The purpose of this evidence is to summarize Tillsonburg Hydro Inc.'s ("THI") cost of
2 capital and capital structure as it applies to the 2024 Test Year. In accordance with the
3 OEB's Filing Requirements, this exhibit concludes with a completed versions of Appendix
4 2-OA Capital Structure, provided as Appendix A, and Appendix 2-OB-Debt Instruments,
5 provided as Appendix B. A complete excel version of the Chapter 2 Appendices is
6 provided as an attachment to this application (filename THI_2024 Filing Requirements
7 Ch 2 Appendices 20240430).

8 5.1 CAPITAL STRUCTURE

9 5.1.1 Capital Structure and Parameters

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11 THI seeks recovery of a weighted average cost of capital of 7.34% through distribution
12 rates in the 2024 Test Year. THI has followed the "Report of the Board on Cost of Capital
13 for Ontario's Regulated Utilities" (December 11, 2009), as well as the "Review of the
14 Existing Methodology of the Cost of Capital for Ontario's Regulated Utilities" (January 14,
15 2016) in determining the applicable cost of capital.

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Table 5-1: Overview of Capital Structure

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
	Debt				
1	Long-term Debt	56.00%	\$10,888,167	6.08%	\$661,531
2	Short-term Debt	4.00%	\$777,726	6.23%	\$48,452
3	Total Debt	<u>60.0%</u>	<u>\$11,665,894</u>	<u>6.09%</u>	<u>\$709,984</u>
	Equity				
4	Common Equity	40.00%	\$7,777,262	9.21%	\$716,286
5	Preferred Shares		\$ -		\$ -
6	Total Equity	<u>40.0%</u>	<u>\$7,777,262</u>	<u>9.21%</u>	<u>\$716,286</u>
7	Total	<u>100.0%</u>	<u>\$19,443,156</u>	<u>7.34%</u>	<u>\$1,426,270</u>

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18 In determining its weighted average cost of capital, THI has relied on the following:

- 1 • A deemed capital structure of 56% long-term debt, 4% short-term debt, and 40%
- 2 equity. THI does not have any preferred shares;
- 3 • The OEB’s 2024 Cost of Capital Parameters¹ for establishing short-term debt
- 4 interest and return on equity rates, at 6.23% and 9.21%, respectively; and,
- 5 • A long-term debt rate of 6.08% based a weighted average interest rate, blending
- 6 THI’s actual and existing third-party debt with notional long-term debt, wherein
- 7 notional debt is assigned the OEB’s long-term interest rate of 4.58%. Further
- 8 explanation of this calculation is provided in Section 5.2 Cost of Capital below.

9 5.1.2 Variances in Capital Structure

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11 Table 5-2 below provides a variance analysis between THI’s OEB-approved 2013 Cost

12 of Capital structure and the proposed 2024 Test Year Cost of Capital structure:

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¹ Issued October 31, 2023

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Table 5-2: Capital Structure Variance Analysis

2024 Test Year

Particulars	Capitalization Ratio		Cost Rate	Return
	(%)	(\$)	(%)	(\$)
Debt				
Long-term Debt	56.00%	\$10,888,167	6.08%	\$661,531
Short-term Debt	4.00%	\$777,726	6.23%	\$48,452
Total Debt	60.0%	\$11,665,894	6.09%	\$709,984
Equity				
Common Equity	40.00%	\$7,777,262	9.21%	\$716,286
Preferred Shares		\$ -		\$ -
Total Equity	40.0%	\$7,777,262	9.21%	\$716,286
Total	100.0%	\$19,443,156	7.34%	\$1,426,270

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2013 Board Approved

Particulars	Capitalization Ratio		Cost Rate	Return
	(%)	(\$)	(%)	(\$)
Debt				
Long-term Debt	56.00%	\$5,500,985	4.19%	\$230,491
Short-term Debt	4.00%	\$392,928	2.07%	\$8,134
Total Debt	60.0%	\$5,893,913	4.05%	\$238,625
Equity				
Common Equity	40.00%	\$3,929,275	8.98%	\$352,849
Preferred Shares		\$ -		\$ -
Total Equity	40.0%	\$3,929,275	8.98%	\$352,849
Total	100.0%	\$9,823,188	6.02%	\$591,474

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Variance: 2013 Board Approved vs. 2024 Test

Particulars	Capitalization Ratio		Cost Rate	Return
	(%)	(\$)	(%)	(\$)
Debt				
Long-term Debt	56.00%	\$5,387,182	1.89%	\$431,040
Short-term Debt	4.00%	\$384,799	4.16%	\$40,319
Total Debt	60.0%	\$5,771,981	2.04%	\$471,359
Equity				
Common Equity	40.00%	\$3,847,987	0.23%	\$363,437
Preferred Shares		\$ -		\$ -
Total Equity	40.0%	\$3,847,987	0.23%	\$363,437
Total	100.0%	\$9,619,968	1.31%	\$834,796

1 5.2 COST OF CAPITAL

2 5.2.1 Return on Equity and Cost of Debt

3 Table 5-1 above demonstrates the calculation of each capital component, by applying
4 THI's 2024 Rate Base found in Exhibit 2 to the Cost of Capital parameters described in
5 section 5.1 above.

6 As noted, the capital structure proposed is in alignment with the OEB's longstanding
7 guidance for electricity distributors in Ontario, and THI does not propose any alteration to
8 the structure of 56% long-term debt, 4% short-term debt, and 40% equity. Similarly, the
9 short-term debt and return on equity rates relied upon, 6.23% and 9.21% respectively,
10 are in accordance with the OEB's 2024 Cost of Capital Parameters.

11 The long-term debt rate proposed by THI reflects the actual interest rate applicable to
12 THI's sole third-party debt facility, blended with notional long-term debt at a rate of 4.58%.
13 The third-party facility in question has been provided by Toronto Dominion Bank ("TD")
14 since an initial drawdown in October of 2017, under a current contractual term running to
15 October, 2025. The initial loan term was a period of two years, with extension available
16 on an annual basis at the lender's discretion, which TD has continued to facilitate up to
17 and including an amendment in November of 2023 extending the facility's credit limit to
18 \$8.5 million. THI leveraged this lending facility to assist in funding capital and operational
19 needs, with an initial balance of \$500,000 in 2017 growing to \$8.0 million by the end of
20 the 2023 Bridge Year. The principal balance on the loan from January through April of the
21 2024 Test Year was \$8.0 million, and THI plans to drawdown an additional \$400,000 in
22 May of 2024. On a weighted annual basis, the average balance for the 2024 Test Year is
23 \$8,266,667.

24 The terms of the loan include an interest rate equal to TD Bank's Prime Rate less 0.65%.
25 TD' current Prime Rate is 7.20%, and thus the current interest rate applicable for this
26 facility is 6.55%. THI has no plans to secure additional credit facilities in the 2024 Test
27 Year.

28 With a total long-term debt component of rate base of \$10,888,167 relying on the OEB's
29 deemed capital structure, and actual debt of \$8,266,667 million, THI has notional long-

1 term debt of \$2,621,501. THI is requesting its notional debt attract the OEB’s long-term
 2 interest rate of 4.58%, as established in the OEB’s 2024 Cost of Capital Parameters.
 3 Weighted alongside THI’s actual long-term debt attracting a rate of 6.55%, THI is
 4 requesting approval to recover long-term debt interest at a rate of 6.08%.

5 **New Debt in Bridge and Test Years**
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7 Included in Appendix 2-OB’s 2023 \$8,000,000 Principal is \$3 Million of new debt and in
 8 2024’s Principal of \$10,888,167 is \$0.5 Million of new debt.

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10 **5.2.2 Historical Return on Equity**
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12 Table 5-3 below presents THI’s actual historical regulatory Return on Equity relative to its
 13 deemed Return on Equity from 2016 to 2022 as reported in RRR.

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Table 5-3: Historical Return on Equity

	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Actual 2021	Actual 2022
Achieved Return	5.75%	9.73%	5.10%	4.74%	2.42%	1.43%	-0.32%
Deemed Return	8.98%	8.98%	8.98%	8.98%	8.98%	8.98%	8.98%
Variance	-3.23%	0.75%	-3.88%	-4.24%	-6.56%	-7.55%	-9.30%

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16 **5.3 NOT-FOR-PROFIT CORPORATION**

17 THI is a for-profit corporation.

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APPENDIX A: Appendix 2-OA

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File Number: EB-2023-0053
Exhibit: 5
Tab: 1
Schedule: 1
Page: 10

Date: April 30, 2024

Appendix 2-OA Capital Structure and Cost of Capital

This table must be completed for the last OEB-approved year and the test year.

Test Year: 2024

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
Debt					
1	Long-term Debt	56.00%	\$10,888,167	6.08%	\$661,531
2	Short-term Debt	4.00% (1)	\$777,726	6.23%	\$48,452
3	Total Debt	60.0%	\$11,665,894	6.09%	\$709,984
Equity					
4	Common Equity	40.00%	\$7,777,262	9.21%	\$716,286
5	Preferred Shares		\$ -		\$ -
6	Total Equity	40.0%	\$7,777,262	9.21%	\$716,286
7	Total	100.0%	\$19,443,156	7.34%	\$1,426,270

Notes

(1) 4.0% unless an applicant has proposed or been approved for a different amount.

Last OEB-approved year: 2013

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
Debt					
1	Long-term Debt	56.00%	\$5,500,985	4.19%	\$230,491
2	Short-term Debt	4.00% (1)	\$392,928	2.07%	\$8,134
3	Total Debt	60.0%	\$5,893,913	4.05%	\$238,625
Equity					
4	Common Equity	40.00%	\$3,929,275	8.98%	\$352,849
5	Preferred Shares		\$ -		\$ -
6	Total Equity	40.0%	\$3,929,275	8.98%	\$352,849
7	Total	100.0%	\$9,823,188	6.02%	\$591,474

Notes

(1) 4.0% unless an applicant has proposed or been approved for a different amount.

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APPENDIX B: Appendix 2-OB

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**Appendix 2-OB
Debt Instruments**

Notes

- 1 If financing is in place only part of the year, separately calculate the pro-rated interest in the year and input in the cell.
- 2 Input actual or deemed long-term debt rate in accordance with the guidelines in *The Report of the Board on the Cost of Capital for Ontario's Regulated Utilities*, issued December 11, 2009, or with
- 3 Add more lines above row 12 if necessary.

Year 2017

Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) ²	Interest (\$) ¹	Additional Comments, if any
1	Bank Loan	TD Bank	Third-Party	Variable Rate			\$ 500,000	0.010781	\$ 5,390.26	
2								\$ -		
3								\$ -		
4								\$ -		
5								\$ -		
6								\$ -		
7								\$ -		
8								\$ -		
9								\$ -		
10								\$ -		
11								\$ -		
12								\$ -		
Total							\$ 500,000	1.08%	\$ 5,390.26	

Year 2018

Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) ²	Interest (\$) ¹	Additional Comments, if any
1	Bank Loan	TD Bank	Third-Party	Variable Rate			\$ 800,000	0.02712	\$ 21,696.04	
2								\$ -		
3								\$ -		
4								\$ -		
5								\$ -		
6								\$ -		
7								\$ -		
8								\$ -		
9								\$ -		
10								\$ -		
11								\$ -		
12								\$ -		
Total							\$ 800,000	2.71%	\$ 21,696.04	

Year 2019

Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) ²	Interest (\$) ¹	Additional Comments, if any
1	Bank Loan	TD Bank	Third-Party	Variable Rate			\$ 3,600,000	0.016966	\$ 61,077.93	
2								\$ -		
3								\$ -		
4								\$ -		
5								\$ -		
6								\$ -		
7								\$ -		
8								\$ -		
9								\$ -		
10								\$ -		
11								\$ -		
12								\$ -		
Total							\$ 3,600,000	1.70%	\$ 61,077.93	

Year 2020

Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) ²	Interest (\$) ¹	Additional Comments, if any
1	Bank Loan	TD Bank	Third-Party	Variable Rate			\$ 4,000,000	0.019382	\$ 77,529.43	
2								\$ -		
3								\$ -		
4								\$ -		
5								\$ -		
6								\$ -		
7								\$ -		
8								\$ -		
9								\$ -		
10								\$ -		
11								\$ -		
12								\$ -		
Total							\$ 4,000,000	1.94%	\$ 77,529.43	

Year 2021

Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) ²	Interest (\$) ¹	Additional Comments, if any
1	Bank Loan	TD Bank	Third-Party	Variable Rate			\$ 5,000,000	0.018078	\$ 90,391.19	
2									\$ -	
3									\$ -	
4									\$ -	
5									\$ -	
6									\$ -	
7									\$ -	
8									\$ -	
9									\$ -	
10									\$ -	
11									\$ -	
12									\$ -	
Total							\$ 5,000,000	1.81%	\$ 90,391.19	

Year 2022

Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) ²	Interest (\$) ¹	Additional Comments, if any
1	Bank Loan	TD Bank	Third-Party	Variable Rate			\$ 5,000,000	0.033664	\$ 168,321.94	
2									\$ -	
3									\$ -	
4									\$ -	
5									\$ -	
6									\$ -	
7									\$ -	
8									\$ -	
9									\$ -	
10									\$ -	
11									\$ -	
12									\$ -	
Total							\$ 5,000,000	3.37%	\$ 168,321.94	

Year 2023

Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) ²	Interest (\$) ¹	Additional Comments, if any
1	Bank Loan	TD Bank	Third-Party	Variable Rate			\$ 8,000,000	0.051754	\$ 414,030.77	
2									\$ -	
3									\$ -	
4									\$ -	
5									\$ -	
6									\$ -	
7									\$ -	
8									\$ -	
9									\$ -	
10									\$ -	
11									\$ -	
12									\$ -	
Total							\$ 8,000,000	5.18%	\$ 414,030.77	

Year 2024

Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) ²	Interest (\$) ¹	Additional Comments, if any
1	Bank Loan	TD Bank	Third-Party	Variable Rate			\$ 8,266,667	0.0655	\$ 541,466.67	
2	Notional Debt	N/A	0	0			\$ 2,621,501	0.0458	\$ 120,064.73	
3									\$ -	
4									\$ -	
5									\$ -	
6									\$ -	
7									\$ -	
8									\$ -	
9									\$ -	
10									\$ -	
11									\$ -	
12									\$ -	
Total							\$ 10,888,167	6.08%	\$ 661,531.40	