



## EXHIBIT 5 – COST OF CAPITAL

2020 Cost of Service

Hydro 2000 Inc.  
EB-2019-0041

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## 5.2 CAPITAL STRUCTURE

In this Exhibit, Hydro 2000 presents evidence regarding its capital structure, its debt financing and the calculation of its return on equity for the 2020 Test Year.

Hydro 2000 seeks to recover a weighted average cost of capital of 5.32% through rates in the 2020 Test Year. Hydro 2000 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.<sup>1</sup>

In calculating the applicable cost of capital, Hydro 2000 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 October 31, 2019, for the allowed return on equity ("ROE"). Hydro 2000 is not seeking any changes in its Capital Structure from its 2012 Board Approved Structure.<sup>2</sup>

Hydro 2000's cost of capital for 2020 has been calculated as 5.32% as shown in the table below:

**Table 1 - Overview of Capital Structure<sup>3</sup>**

<b>Particulars</b>	<b>Cost Rate</b>
	(%)
<i>Debt</i>	
<i>Long-term Debt</i>	3.21%
<i>Short-term Debt</i>	2.75%
<i>Total Debt</i>	3.18%
<i>Equity</i>	
<i>Common Equity</i>	8.52%
<i>Preferred Shares</i>	
<i>Total Equity</i>	8.52%
<i>WACC</i>	5.32%

<sup>1</sup> 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

<sup>2</sup> MFR – Explanation for any changes in capital structure

<sup>3</sup> MFR – Calculation of cost for each capital component

- 1 All rates above are consistent with the letter issued by the OEB on October 31, 2019. For rate-
- 2 making purposes, the utility used a weighted debt rate of 5.32% as a long-term debt rate. <sup>4</sup>
- 3 Retirements of debt or preference shares and buy-back of common shares; and Short-Term
- 4 Debt, Long-Term Debt, preference shares as well as common share offerings do not apply to
- 5 Hydro 2000 as the Hydro 2000 does not issue any preference shares and common equity shares.

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<sup>4</sup> MFR - If proposing any rate that is different from the OEB guidelines, a justification of the proposed rate(s), including key assumptions

### 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.<sup>5</sup>

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

Year: **2020**

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
	<b>Debt</b>				
1	Long-term Debt	56.00%	\$575,152	3.21%	\$18,462
2	Short-term Debt	4.00% (1)	\$41,082	2.75%	\$1,130
3	<b>Total Debt</b>	60.0%	\$616,235	3.18%	\$19,592
	<b>Equity</b>				
4	Common Equity	40.00%	\$410,823	8.52%	\$35,002
5	Preferred Shares		\$ -		\$ -
6	<b>Total Equity</b>	40.0%	\$410,823	8.52%	\$35,002
7	<b>Total</b>	100.0%	\$1,027,058	5.32%	\$54,594

Year: **2019**

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
	<b>Debt</b>				
1	Long-term Debt	56.00%	\$664,332	5.32%	\$35,342
2	Short-term Debt	4.00% (1)	\$47,452	2.08%	\$987
3	<b>Total Debt</b>	60.0%	\$711,785	5.10%	\$36,329
	<b>Equity</b>				
4	Common Equity	40.00%	\$474,523	9.12%	\$43,277
5	Preferred Shares		\$ -		\$ -
6	<b>Total Equity</b>	40.0%	\$474,523	9.12%	\$43,277
7	<b>Total</b>	100.0%	\$1,186,308	6.71%	\$79,606

<sup>5</sup> MFR – Completed Appendix 2-OA for last OEB approved and test year

Year: **2018**

		(%)		(\$)	(%)		(\$)
	<b>Debt</b>						
1	Long-term Debt	56.00%		\$633,722	5.32%		\$33,714
2	Short-term Debt	4.00%	(1)	\$45,266	2.08%		\$942
3	<b>Total Debt</b>	60.0%		\$678,988	5.10%		\$34,656
	<b>Equity</b>						
4	Common Equity	40.00%		\$452,658	9.12%		\$41,282
5	Preferred Shares			\$ -			\$ -
6	<b>Total Equity</b>	40.0%		\$452,658	9.12%		\$41,282
7	<b>Total</b>	100.0%		\$893,395	6.71%		\$75,938

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Year: **2017**

		(%)		(\$)	(%)		(\$)
	<b>Debt</b>						
1	Long-term Debt	56.00%		\$633,922	5.32%		\$33,725
2	Short-term Debt	4.00%	(1)	\$45,280	2.08%		\$942
3	<b>Total Debt</b>	60.0%		\$679,202	5.10%		\$34,666
	<b>Equity</b>						
4	Common Equity	40.00%		\$452,801	9.12%		\$41,295
5	Preferred Shares			\$ -			\$ -
6	<b>Total Equity</b>	40.0%		\$452,801	9.12%		\$41,295
7	<b>Total</b>	100.0%		\$1,062,782	6.71%		\$75,962

2

Year: **2016**

		(%)		(\$)	(%)		(\$)
	<b>Debt</b>						
1	Long-term Debt	56.00%		\$633,922	5.32%		\$33,725
2	Short-term Debt	4.00%	(1)	\$45,280	2.08%		\$942
3	<b>Total Debt</b>	60.0%		\$679,202	5.10%		\$34,666
	<b>Equity</b>						
4	Common Equity	40.00%		\$452,801	9.12%		\$41,295
5	Preferred Shares			\$ -			\$ -
6	<b>Total Equity</b>	40.0%		\$452,801	9.12%		\$41,295
7	<b>Total</b>	100.0%		\$1,132,004	6.71%		\$75,962

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Year: **2015**

		(%)		(\$)	(%)		(\$)
	<b>Debt</b>						
1	Long-term Debt	56.00%		\$542,165	5.32%		\$28,843
2	Short-term Debt	4.00%	(1)	\$38,726	2.08%		\$806
3	<b>Total Debt</b>	60.0%		\$580,891	5.10%		\$29,649
	<b>Equity</b>						
4	Common Equity	40.00%		\$387,261	9.12%		\$35,318
5	Preferred Shares			\$ -			\$ -
6	<b>Total Equity</b>	40.0%		\$387,261	9.12%		\$35,318
7	<b>Total</b>	100.0%		\$968,152	6.71%		\$64,967

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3



1

Year: **2014**

		(%)		(\$)	(%)		(\$)
	<b>Debt</b>						
1	Long-term Debt	56.00%		\$504,945	5.32%		\$26,863
2	Short-term Debt	4.00%	(1)	\$36,068	2.08%		\$750
3	<b>Total Debt</b>	60.0%		<b>\$541,013</b>	5.10%		<b>\$27,613</b>
	<b>Equity</b>						
4	Common Equity	40.00%		\$360,675	9.12%		\$32,894
5	Preferred Shares			\$ -			\$ -
6	<b>Total Equity</b>	40.0%		<b>\$360,675</b>	9.12%		<b>\$32,894</b>
7	<b>Total</b>	100.0%		<b>\$901,688</b>	6.71%		<b>\$60,507</b>

2

Year: **2013**

Line No.	Particulars	Capitalization Ratio		Cost Rate		Return	
		(%)	(\$)	(%)		(\$)	
	<b>Debt</b>						
1	Long-term Debt	56.00%		\$456,961	5.32%		\$24,310
2	Short-term Debt	4.00%	(1)	\$32,640	2.08%		\$679
3	<b>Total Debt</b>	60.0%		<b>\$489,601</b>	5.10%		<b>\$24,989</b>
	<b>Equity</b>						
4	Common Equity	40.00%		\$326,401	9.12%		\$29,768
5	Preferred Shares			\$ -			\$ -
6	<b>Total Equity</b>	40.0%		<b>\$326,401</b>	9.12%		<b>\$29,768</b>
7	<b>Total</b>	100.0%		<b>\$816,002</b>	6.71%		<b>\$54,757</b>

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Year: **2012**

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
	<b>Debt</b>				
1	Long-term Debt	56.00%	\$498,325	5.32%	\$26,511
2	Short-term Debt	4.00% (1)	\$35,595	2.08%	\$740
3	<b>Total Debt</b>	60.0%	\$533,920	5.10%	\$27,251
	<b>Equity</b>				
4	Common Equity	40.00%	\$355,946	9.12%	\$32,462
5	Preferred Shares		\$ -		\$ -
6	<b>Total Equity</b>	40.0%	\$355,946	9.12%	\$32,462
7	<b>Total</b>	100.0%	\$889,866	6.71%	\$59,714

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Year: **2012** Board Approved

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
	<b>Debt</b>				
1	Long-term Debt	56.00%	\$545,133	5.32%	\$29,001
2	Short-term Debt	4.00% (1)	\$38,938	2.08%	\$810
3	<b>Total Debt</b>	60.0%	\$584,071	5.10%	\$29,811
	<b>Equity</b>				
4	Common Equity	40.00%	\$389,381	9.12%	\$35,512
5	Preferred Shares		\$ -		\$ -
6	<b>Total Equity</b>	40.0%	\$389,381	9.12%	\$35,512
7	<b>Total</b>	100.0%	\$973,451	6.71%	\$65,322

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## 5.4 OEB APPENDIX 2-OB COST OF DEBT INSTRUMENTS

Hydro 2000 used the deemed debt rate for the purpose of rate making. However, Hydro 2000 does not have any long-term debt therefore OEB Appendix 2-OB is not required.<sup>6</sup>

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

		Year		Long Term				
		2020						
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

<sup>6</sup> 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 Hydro 2000's capital requirements for 2020.

### 5.5.1 CAPITAL STRUCTURE

The proposed rates for the cost of capital in [Bridge Year] & 2020 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 October 31, 2019 Cost of Capital Parameter Updates for 2020 Cost of Service Applications.

### 5.5.2 RETURN ON EQUITY

Hydro 2000 has used a ROE of 8.52% for 2020 as established by the Board for Cost of Service applications with a January 1 and May 1, 2020 implementation date.

### 5.5.3 WEIGHTED AVERAGE COST OF DEBT

Hydro 2000 proposes a weighted average cost of debt of 5.32% which is based on the calculations as set out in the table below.

**Table 4 - Derivation of WACC**

<b>Particulars</b>	<b>Cost Rate</b>
	(%)
<i>Debt</i>	
<i>Long-term Debt</i>	3.21%
<i>Short-term Debt</i>	2.75%
<i>Total Debt</i>	3.18%
<i>Equity</i>	
<i>Common Equity</i>	8.52%
<i>Preferred Shares</i>	
<i>Total Equity</i>	8.52%
<i>WACC</i>	5.32%

#### 5.5.4 LONG-TERM DEBT

Hydro 2000 is not forecasting any debt in 2020. However, should circumstances change in the near future, the utility would make every effort to obtain a loan from its shareholder, financial institution or Infrastructure Ontario at a rate that is in line with the current cost of capital parameters.<sup>7</sup> Hydro 2000 does not have any promissory notes to present.<sup>8</sup>

Hydro 2000 is not forecasting any new long-term debt in the bridge and test year other than the debt explained above.<sup>9</sup>

#### 5.5.5 SHORT-TERM DEBT

Hydro 2000 has used a short-term debt rate of 2.75% for 2020 as established by the Board for 2020 Cost of Service applications.

#### **Preferred Shares**

Hydro 2000 does not forecast that it will redeem any debt and has not issued any preference shares. Hence Hydro 2000 does not record either a profit or loss on redemption of debt and preference shares. Hydro 2000 is not forecasting any new debt in the bridge and test years.

#### **Not-For-Profit**

Hydro 2000 is a for profit entity corporation and as such all requirements related to a not-for-profit organization do not apply.<sup>10</sup>

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<sup>7</sup> MFR – Explanation of debt rate for each existing debt instrument

<sup>8</sup> MFR - Copies of promissory notes or other debt arrangements with affiliates

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

<sup>10</sup> 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 \$0 is detailed at Table below.<sup>11</sup>

Actual Debt				Notional Debt			
Capitalization Ratio		Cost Rate	Return	Capitalization Ratio		Cost Rate	Return
(%)	(\$)	(%)	(\$)	(%)	(\$)	(%)	(\$)
50.00%	\$0	0.00%	\$0	50.00%	\$0	0.00%	\$0
0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0

<sup>11</sup> MFR - Profit or loss on redemption of debt

1 **APPENDICES**

2

n/a	The Utility carries not debt instruments

3