

EXHIBIT 5:  
COST OF CAPITAL AND CAPITAL STRUCTURE  
EB-2016-0056

1

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1   2.5.1 Capital Structure

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3   The purpose of this Exhibit is to summarize the method and cost of financing capital requirements  
4   for the 2017 Test Year.

5   Atikokan Hydro (“Atikokan”) followed the Report of the Board on Cost of Capital for Ontario’s  
6   Regulated Utilities (the “Cost of Capital Report”) dated December 11, 2009, to determine its  
7   capital structure and relied on the Board’s letter titled Cost of Capital Parameter Updates for 2016  
8   Applications dated October 15, 2015 for the cost of capital parameters.

9   These OEB determined Cost of Capital parameters are as follows:

10	ROE	9.19%
11	Deemed LT Debt rate	4.54%
12	Deemed ST Debt rate	1.65%

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14   Atikokan acknowledges these Cost of Capital parameters are subject to change upon release of  
15   the Cost of Capital Parameters for 2017 Applications.

16   Atikokan has prepared this application with a deemed capital structure of 56% Long Term Debt,  
17   4% Short Term Debt and 40% Equity to comply with the Cost of Capital Report.

18   Overall, Atikokan is requesting a deemed interest expense of \$65,654 and a deemed return on  
19   equity of \$125,726 for a total regulated return on capital of \$191,380 for its 2017 Test Year.

20   See Attachment A for 2017 rate base calculation supporting and consistent with OEB Appendix  
21   2-OA. OEB Appendix 2-OA is listed in Attachment B, shows Capital Structure and Cost of Capital  
22   for the last Board-approved year (2012) and the test year 2017.

23   Per Filing Requirements, material changes in capital structures are to be disclosed.

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## 2.5.2 Cost of Capital (Return on Equity and Cost of Debt)

### Return on Equity

Atikokan is requesting a return on equity (“ROE”) for the 2017 Test year of 9.19% in accordance with the Cost of Capital Parameter Updates for 2016 Cost of Service Applications issued by the OEB on October 15, 2015. Atikokan understands that the ROE is subject to change. Atikokan’s use of an ROE of 9.19% assumes it will be revised to the ROE that is adopted by the OEB once the 2017 Cost of Capital parameters are issued by the Board.

### Cost of Debt

#### Long Term Debt

Atikokan is requesting a return on Long Term Debt for the 2017 test Year of 4.54%. This is consistent with the Board’s current published Cost of Capital parameters.

Atikokan is currently paying rates of prime plus 1.0% (3.7%) and prime plus 1.25% (3.95%) on two existing Long Term Loans negotiated with TD Canada Trust Bank valued at \$99,074.13 and \$146,266.27 respectively. Atikokan has a loan with Atikokan Enercom Inc, valued at \$342,000. The loan with Atikokan Enercom Inc. currently has an interest rate of prime minus 1.0% (1.7%) and for purposes of this application it is assumed the interest is the same; 1.7%. These loan balances are principal only and are valued as of December 31, 2016. The terms and conditions of each of these debt instruments are provided in Appendix C.

Atikokan has projected to borrow in the 2017 Test Year for purchases to replace transportation equipment. Atikokan has prorated the 2017 financing to reflect the anticipated timing of placement of debt. Due to the lag time of the purchasing process (research, director approval, financing and consignment details), Atikokan does not expect to incur additional debt until the later end of the 2017 Test Year. With this additional debt, Atikokan’s calculated weighted average cost of capital is 3.31%. The following table 5-1 shows the weight average debt rate mentioned of 3.31% for the 2017 Test Year.

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**Table 5-1: 2017 Weighted Average Cost of Capital**

Row	Description	Lender	Year		Start Date	Term (years)	Principal (\$)	Rate (%)	Interest (\$)	
			Affiliated or Third-Party Debt?	2017 Fixed or Variable-Rate?						
1	Smart Meters/Capital Investment	Atikokan Enercom Inc	Affiliated	Variable Rate	7-Apr-09		\$ 342,000	1.70%	\$ 5,814.00	
2	International Cab, Chassis	TD Canada Trust	Third-Party	Variable Rate	1-Dec-09	10	\$ 56,614	3.7%	\$ 2,094.71	
3	Garage	TD Canada Trust	Third-Party	Variable Rate	1-Dec-09	15	\$ 131,004	3.95%	\$ 5,174.64	
4	International Cab, Chassis	TD Canada Trust	Third-Party	Variable Rate	1-Dec-17	10	\$ 300,000	4.54%	\$ 13,620.00	
5	Service Vehicle	TD Canada Trust	Third-Party	Variable Rate	1-Dec-17	5	\$ 60,000	4.54%	\$ 2,724.00	
6	<b>Total 2017 Long Debt Term</b>							<b>\$ 889,617</b>	<b>3.31%</b>	<b>\$ 29,427.35</b>

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3 Included in Appendix D is Atikokan's Debt Instruments for historical years 2012 through 2015,  
 4 2016 Bridge Year and 2017 Test Year; consistent with OEB Appendix 2-OB.

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### 6 Short Term Debt

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8 Atikokan is requesting a return on Short Term Debt for the 2017 Test year of 1.65% in accordance  
 9 with the Cost of Capital Parameter Updates for 2016 Cost of Service Applications issued by the  
 10 OEB on October 15, 2015. Atikokan understands the OEB will be finalizing the return on short  
 11 term debt for 2017 rates based on market interest rate information. Atikokan's use of the return  
 12 on Short Term Debt of 1.65% assumes a revised Short Term Debt rate will be adopted by the  
 13 OEB in early 2017.

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### 15 Common Equity

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17 Atikokan's equity structure includes 12,779 Class A Common Shares valued at \$1,277,900.

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### 19 Preference Shares

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21 The Town of Atikokan, Atikokan Hydro's shareholder, converted \$1,262,063 of debt to equity  
 22 November of 2013. This debt to equity conversion changed Atikokan's high Debt-equity ratio to  
 23 an acceptable and viable ratio as deemed by the Board's Cost of Capital Report. In consideration  
 24 of the debt conversion, Atikokan approved the issuance and conversion of the Debt to Shares by  
 25 way of Resolution of the Directors and approval by the shareholder, Town of Atikokan. A  
 26 subscription of \$1,262,063 Class D Preferred Shares eliminated the indebtedness owing by  
 27 Atikokan Hydro Inc. to the Town of Atikokan. The resolutions from both the Atikokan directors

1 and Town of Atikokan Council, resolving to accept the transfer of debt to equity with the issuance  
 2 of shares are attached in Appendix E.

3 **2.5.3 Not-for-Profit Corporations**

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 5 This filing requirement is not applicable as Atikokan is a for profit corporation.

7 **APPENDIX A: Rate Base Calculation**

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<b>Rate Base and Working Capital Allowance</b>		
	<b>2017 Test Year (MIFRS)</b>	
Opening Balance Gross Fixed Assets	6,441,645	
Ending Balance Gross Fixed Assets	6,947,717	
Average Balance Gross Fixed Assets		\$ 6,694,681
Opening Balance Accumulated Amortization	3,619,157	
Closing Balance Accumulated Amortization	3,676,042	
Average Balance Accumulated Amortization		\$ 3,647,600
<b>Allowance For Working Capital 7.5%</b>		<b>\$ 373,114</b>
<b>Total Rate Base</b>		<b>\$ 3,420,196</b>

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<b>Working Capital Calculation</b>	
	<b>2017 Test Year (MIFRS)</b>
Operations	376,877
Maintenance	120,741
Billing and Collecting	184,336
Administrative and General Expenses	415,442
Taxes other than Income Taxes (Property Tax)	20,007
<b>Total Eligible Distribution Expenses</b>	<b>1,117,403</b>
Cost of Power	3,857,454
<b>Total Expenses for Working Capital</b>	<b>4,974,857</b>
Working Capital Factor	7.5%
<b>Total Working Capital Allowance</b>	<b>\$373,114</b>

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1 APPENDIX B: Capital Structure; OEB Appendix 2-OA  
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## Appendix 2-OA Capital Structure and Cost of Capital

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

Year: 2012

Line No.	Particulars	Capitalization Ratio		Cost Rate		Return	
		(%)	(\$)	(%)	(\$)		
	<b>Debt</b>						
1	Long-term Debt	56.00%	\$1,567,720	2.08%	\$32,609		
2	Short-term Debt	4.00% (1)	\$111,980	4.22%	\$4,726		
3	<b>Total Debt</b>	<b>60.0%</b>	<b>\$1,679,700</b>	<b>2.22%</b>	<b>\$37,334</b>		
	<b>Equity</b>						
4	Common Equity	40.00%	\$1,119,800	9.12%	\$102,126		
5	Preferred Shares		\$ -		\$ -		
6	<b>Total Equity</b>	<b>40.0%</b>	<b>\$1,119,800</b>	<b>9.12%</b>	<b>\$102,126</b>		
7	<b>Total</b>	<b>100.0%</b>	<b>\$2,799,500</b>	<b>4.981600%</b>	<b>\$139,460</b>		

**Notes**

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

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## Appendix 2-OA Capital Structure and Cost of Capital

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

Year: 2017 Test Year

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)		
	<b>Debt</b>				
1	Long-term Debt	56.00%	\$1,915,310	3.31%	\$63,397
2	Short-term Debt	4.00% (1)	\$136,808	1.65%	\$2,257
3	<b>Total Debt</b>	<b>60.0%</b>	<b>\$2,052,118</b>	<b>3.20%</b>	<b>\$65,654</b>
	<b>Equity</b>				
4	Common Equity	20.00% (2)	\$684,039	9.19%	\$62,863
5	Preferred Shares	20.00% (2)	\$684,039	9.19%	\$62,863
6	<b>Total Equity</b>	<b>40.0%</b>	<b>\$1,368,078</b>	<b>9.19%</b>	<b>\$125,726</b>
7	<b>Total</b>	<b>100.0%</b>	<b>\$3,420,196</b>	<b>5.60%</b>	<b>\$191,380</b>

**Notes**

(1)

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

(2)

Assumed 20% each for common equity and preferred shares, equals board 40% Cost of Capital Structure

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Year 2013

Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) <sup>2</sup>	Interest (\$) <sup>1</sup>	Additional Comments, if any
1	Fund Capital Investment Smart Meters	Atikokan Enercom Inc	Affiliated	Variable Rate	7-Apr-09		\$ 400,000	2.00%	\$ 8,000.00	1st principal pmt Dec 2013
2	International Cab, Chassis	TD Canada Trust	Third-Party	Variable Rate	1-Dec-09	10	\$ 226,455	4.00%	\$ 9,058.22	
3	Garage, Building	TD Canada Trust	Third-Party	Variable Rate	1-Dec-09	15	\$ 192,054	4.25%	\$ 8,162.31	
4	Incorporation of Atikokan Hydro Inc	Township of Atikokan	Affiliated	Fixed Rate	01-Nov-01	60	\$ 1,262,063	5.0%	\$ -	No payments made during 2013; (none since Aug 2012) Converted Debt/Equity November 2013.
5									\$ -	
6									\$ -	
7									\$ -	
8									\$ -	
9									\$ -	
10									\$ -	
11									\$ -	
12									\$ -	
Total							\$ 2,080,573	0.0121219	\$ 25,220.53	

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Year 2014

Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) <sup>2</sup>	Interest (\$) <sup>1</sup>	Additional Comments, if any
1	Fund Capital Investment Smart Meters	Atikokan Enercom Inc	Affiliated	Variable Rate	7-Apr-09		\$ 395,000	2.00%	\$ 8,833.21	
2	Capital Investment	Atikokan Enercom Inc	Affiliated	Variable Rate	27-May-14	9	\$ 129,000	2.00%	\$ 1,548.33	
3	International Cab, Chassis	TD Canada Trust	Third-Party	Variable Rate	1-Dec-09	10	\$ 183,995	4.35%	\$ 8,003.78	
4	Garage, Building	TD Canada Trust	Third-Party	Variable Rate	1-Dec-09	15	\$ 176,792	4.10%	\$ 7,248.46	
5									\$ -	
6									\$ -	
7									\$ -	
8									\$ -	
9									\$ -	
10									\$ -	
11									\$ -	
12									\$ -	
Total							\$ 884,787	0.0289717	\$ 25,633.78	

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Year 2015

Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) <sup>2</sup>	Interest (\$) <sup>1</sup>	Additional Comments, if any
1	Smart Meters/Capital Investment	Atikokan Enercom Inc	Affiliated	Variable Rate	7-Apr-09		\$ 462,000	1.70%	\$ 7,854.00	7824.91
2	International Cab, Chassis	TD Canada Trust	Third-Party	Variable Rate	1-Dec-09	10	\$ 141,535	4.2%	\$ 5,944.45	
3	Garage	TD Canada Trust	Third-Party	Variable Rate	1-Dec-09	15	\$ 161,529	3.95%	\$ 6,380.39	
4									\$ -	
5									\$ -	
6									\$ -	
7									\$ -	
8									\$ -	
9									\$ -	
10									\$ -	
11									\$ -	
12									\$ -	
Total							\$ 765,064	0.0263754	\$ 20,178.85	

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Year 2016

Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) <sup>2</sup>	Interest (\$) <sup>1</sup>	Additional Comments, if any
1	Smart Meters/Capital Investment	Atikokan Enercom Inc	Affiliated	Variable Rate	7-Apr-09		\$ 402,000	1.70%	\$ 6,834.00	
2	International Cab, Chassis	TD Canada Trust	Third-Party	Variable Rate	1-Dec-09	10	\$ 99,074	3.7%	\$ 3,665.74	
3	Garage	TD Canada Trust	Third-Party	Variable Rate	1-Dec-09	15	\$ 146,266	3.95%	\$ 5,777.52	
4									\$ -	
5									\$ -	
6									\$ -	
7									\$ -	
8									\$ -	
9									\$ -	
10									\$ -	
11									\$ -	
12									\$ -	
Total							\$ 647,340	0.0251448	\$ 16,277.26	

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Year 2017

Row	Description	Lender	Affiliated or Third-Party Debt?	Fixed or Variable-Rate?	Start Date	Term (years)	Principal (\$)	Rate (%) <sup>2</sup>	Interest (\$) <sup>1</sup>	Additional Comments, if any
1	Smart Meters/Capital Investment	Atikokan Enercom Inc	Affiliated	Variable Rate	7-Apr-09		\$ 342,000	1.70%	\$ 5,814.00	
2	International Cab, Chassis	TD Canada Trust	Third-Party	Variable Rate	1-Dec-09	10	\$ 56,614	3.70%	\$ 2,094.71	Ending Dec 2017
3	Garage	TD Canada Trust	Third-Party	Variable Rate	1-Dec-09	15	\$ 131,004	3.95%	\$ 5,174.64	
4	International Cab, Chassis	TD Canada Trust	Third-Party	Variable Rate	1-Dec-17	10	\$ 300,000	4.54%	\$ 13,620.00	
5	Service Vehicle	TD Canada Trust	Third-Party	Variable Rate	1-Dec-17	5	\$ 60,000	4.54%	\$ 2,724.00	
6									\$ -	
7									\$ -	
8									\$ -	
9									\$ -	
10									\$ -	
11									\$ -	
12									\$ -	
	<b>Total</b>						\$ 889,617	0.0330787	\$ 29,427.35	

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APPENDIX E: Preference Shares

Resolutions from both the Atikokan directors and Town of Atikokan Council, resolving to accept the transfer of debt to equity with the issuance of shares, (as explained on Page 3 of this Exhibit) are following this page.

**ATIKOKAN HYDRO INC.**

Nov 7 2013

**MOVED BY:**

**SECONDED BY:** *Michael*

**RESOLVED:** *Anna Brown*

**Be it resolved that, Atikokan Hydro Inc complete the process for allotment and issuance of shares to convert the shareholder debt to equity.**

**RESOLUTION NO.** 809 **CARRIED BY** *H. Rodney*

# THE CORPORATION OF THE TOWN OF ATIKOKAN

## COUNCIL RESOLUTION

Date: 12 Nov 2013

Moved by: Marlene Davidson

Seconded by: Guy Lube

WHEREAS Atikokan Hydro Inc. is indebted to the Corporation of the Town of Atikokan in the amount of \$1,262,063.00 (the "Debt");

WHEREAS Atikokan Hydro Inc. and the Corporation of the Town of Atikokan have agreed to convert the Debt to Shares;

WHEREAS Atikokan Hydro Inc. will issue to the Corporation of the the Town of Atikokan 1,262,063 Class D Preferred Shares in the capital of Atikokan Hydro Inc.;

WHEREAS Atikokan Hydro Inc. will amend its share capital to allow for the issuance of Class D Preferred Shares and as sole shareholder of Atikokan Hydro Inc., the Corporation of the Town of Atikokan approves (1) the amendment to the Articles of Incorporation of Atikokan Hydro Inc. ("Articles of Amendment") and (2) approves the execution of the Shareholder Approval, Subscription for Shares and Resolution authorizing the amendment of share capital.

NOW THEREFORE BE IT RESOLVED that the shareholder approves the conversion of the Debt to equity as described above, and without limitation is hereby authorized to sign the "Amendment of Share Capital" the "Subscription" and the "Shareholder Approval" to Atikokan Hydro Inc., attached as Schedule "A".

RECORDED VOTE	COUNCIL MEMBER			
	YEA	NAY	CARRIED	DEFEATED
DAVIDSON, Marlene				
DICKSON, Bud				
DUHAMEL, Jerry				
GOSSELIN, Bob				
LAMBKIN, Marj				
MAKARENKO, Mary				
BROWN, Dennis				

RESOLUTION NO 319/13

CARRIED BY Marlene Davidson