

COST OF CAPITAL SUMMARY

1. The evidence, in the following tables 1 through 3, shows a summary of Enbridge's cost of capital for each of the 2017 Board Approved (EB-2016-0215), the 2018 placeholder (EB-2012-0459), and the 2018 Updated Forecast.

TABLE 1  
COST OF CAPITAL SUMMARY

Line No.	EB-2016-0215 - 2017 Approved (excluding CIS)				
	Principal (\$Millions)	Component %	Cost Rate %	Return %	Return (\$Millions)
1. Long-term debt	3,739.6	62.28%	4.83%	3.008%	180.6
2. Short-term debt	3.2	0.05%	1.23%	0.001%	0.0
3. Preferred shares	100.0	1.67%	2.24%	0.037%	2.2
4. Common Equity	2,161.6	36.00%	8.78%	3.161%	189.8
5. Total	<u>6,004.4</u>	<u>100.00%</u>		<u>6.207%</u>	<u>372.7</u>

TABLE 2  
COST OF CAPITAL SUMMARY

Line No.	EB-2012-0459 - 2018 Placeholder (excluding CIS)				
	Principal (\$Millions)	Component %	Cost Rate %	Return %	Return (\$Millions)
1. Long-term debt	3,734.3	60.76%	5.39%	3.275%	201.3
2. Short-term debt	98.9	1.61%	4.30%	0.069%	4.3
3. Preferred shares	100.0	1.63%	4.64%	0.076%	4.6
4. Common Equity	2,212.4	36.00%	10.27%	3.697%	227.2
5. Total	<u>6,145.6</u>	<u>100.00%</u>		<u>7.117%</u>	<u>437.4</u>

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TABLE 3  
COST OF CAPITAL SUMMARY

Line No.	2018 Updated Forecast (excluding CIS)				
	Principal (\$Millions)	Component %	Cost Rate %	Return %	Return (\$Millions)
1. Long-term debt	3,858.2	61.84%	4.71%	2.913%	181.7
2. Short-term debt	34.8	0.56%	1.60%	0.009%	0.6
3. Preferred shares	100.0	1.60%	2.72%	0.044%	2.7
4. Common Equity	2,246.1	36.00%	8.84%	3.182%	198.6
5. Total	6,239.1	100.00%		6.148%	383.6

- As reflected in Table 3 versus Table 2 above, the 2018 Updated Forecast capital structure has been updated in accordance with the Board's EB-2012-0459 Decision and Rate Order requiring the return on equity to be re-set each year using the Board approved parameters, and that the cost of debt be updated annually using the most current information, including information on actual amounts and rates associated with debt issued in the prior year.
- Details of the 2018 Updated Forecast financing costs, including forecast debt issuances and cost rates, are included in Exhibit E1, Tab 3, Schedule 1. Evidence with respect to the updated 2018 return on equity included within the 2018 updated allowed revenue and revenue deficiency calculation is found in evidence at Exhibit E1, Tab 2, Schedule 1.
- Further details of each of the elements of the 2018 updated forecast capital structure, and the determination of the overall cost of capital and resulting deficiency in earnings are found at Exhibits E2, Tab 1, Schedules 1 through 5.

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RETURN ON EQUITY CALCULATION FOR 2018

1. In its EB-2012-0459 Decision with Reasons issued July 17, 2014, the Board determined that “the Cost of Capital will be re-set each year using the Board’s established approach” (p.10). The Board further concluded that “the allowed ROE for purposes of calculating the ESM should be the ROE used to determine the allowed revenue requirement” (p.14) and that “[T]he preferred approach is to update the return on equity each year during the annual rate adjustment proceeding using the Board-approved parameters. The Board publishes these figures in November which should provide Enbridge with adequate time to incorporate them into the final rates” (p.55).
2. The Company is unable to provide the forecast at this time using the prescribed calculation, but will update this evidence when the Board issues its Cost of Capital Parameter Updates for 2018 Applications in November of this year. For purposes of deriving estimated rate impacts for the 2018 application, the Company has applied the value of 8.84%, which is based on the July 2017 inputs being applied to the Board’s established approach to calculating ROE.

2018 COST OF DEBT

1. As set out in the EB-2012-0459 Decision and Rate Order (pages 2 and 3), Enbridge's cost of debt is to be updated each year from 2015 to 2018 using the most current information available, including information about the actual amounts and rates associated with any debt issued in the prior year.
  
2. Enbridge's forecast cost of debt for 2018 is set out within Table 1, and explained below.

TABLE 1  
COST OF DEBT SUMMARY

Line No.	2018 Updated Forecast (excluding CIS)				
	Principal (\$Millions)	Component %	Cost Rate %	Return %	Return (\$Millions)
1. Long-term debt	3,858.2	61.84%	4.71%	2.913%	181.7
2. Short-term debt	34.8	0.56%	1.60%	0.009%	0.6
3. Preferred shares	100.0	1.60%	2.72%	0.044%	2.7
4. Total	<u>3,993.0</u>	<u>64.00%</u>		<u>2.966%</u>	<u>185.0</u>

3. As required by the Board's EB-2012-0459 Decision and Rate Order, Enbridge has updated its cost of debt by taking account of its forecast 2018 rate base for ratemaking purposes, its actual level and cost of debt, which has been updated to include actual debt issuances through 2016, and to also include the impact of updated forecast 2017 and 2018 debt issuances.
  
4. The terms of Enbridge's updated forecast 2017 long term debt issuances, as shown

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in Table 2 below, has changed modestly as compared to the forecast within EB-2016-0215. While the amount of the debt issuances remains as forecast in the 2017 Rate Adjustment proceeding, the planned issuance timing has been deferred from August to November. The effective cost rates for the debt issuances are now forecast to be lower than was indicated in the 2017 Rate Adjustment proceeding (current forecast of 2.95% and 3.82%, as compared to the 3.25% and 4.02% forecast within EB-2016-0215).

TABLE 2

Item No.	Amount (\$MM)	Issue Date	Term (Yrs)	Canada Yield	Corporate Spread	Coupon	Amortized Issue Costs	Effective Cost
1	150	November 2017	10	1.90%	1.00%	2.90%	0.05%	2.95%
2	150	November 2017	30	2.40%	1.40%	3.80%	0.02%	3.82%

- For 2018, Enbridge plans to issue \$300 million of debt, the details of which can be found in Table 3 below. The issuances will fund growth in rate base.

TABLE 3

Item No.	Amount (\$MM)	Issue Date	Term (Yrs)	Canada Yield	Corporate Spread	Coupon	Amortized Issue Costs	Effective Cost
1	150	August 2018	10	2.30%	1.05%	3.35%	0.05%	3.402%
2	150	August 2018	30	2.70%	1.45%	4.15%	0.02%	4.171%

- Details of all elements of Enbridge's term debt forecast for the 2018 Updated Forecast, are set out within Exhibit E2, Tab 1, Schedule 2.
- The calculation of the average cost rate for Enbridge's term debt, which equates to 4.71%, is set out at Exhibit E2, Tab 1, Schedule 1, page 2.

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There are no preferred share issuances planned for 2018. Enbridge continues to have \$100 million of preference shares, with a 2018 cost rate of 2.72%.

8. As explained in Exhibit B1, Tab 1, Schedule 1, Enbridge's rate base for ratemaking purposes for 2018, exclusive of CIS (which has a different cost of capital, in accordance with the EB-2011-0226 Settlement Agreement) is \$6,239.1 million. Under Enbridge's capital structure, which includes a 64% weighting of debt and preferred shares, this means that Enbridge's level of debt for ratemaking purposes in 2018 is \$3,993.0 million.
  
9. In total, Enbridge's cost of debt (exclusive of CIS / CC) to be included in 2018 Allowed Revenue is \$185.0 million.

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COST OF CAPITAL  
2018 UPDATED FORECAST

Line No.	Col. 1	Col. 2	Col. 3	Col. 4
	Principal Excl. CC/CIS	Component	Cost Rate	Return Component
	(\$Millions)	%	%	%
1. Long and Medium-Term Debt	3,858.2	61.84	4.71	2.913
2. Short-Term Debt	<u>34.8</u>	<u>0.56</u>	1.60	<u>0.009</u>
3.	3,893.0	62.40		2.922
4. Preference Shares	100.0	1.60	2.72	0.044
5. Common Equity	<u>2,246.1</u>	<u>36.00</u>	8.84	<u>3.182</u>
6.	<u>6,239.1</u>	<u>100.00</u>		<u>6.148</u>
7. Rate Base	(\$Millions)			6,239.1
8. Utility Income	(\$Millions)			323.7
9. Indicated Rate of Return				5.188
10. Deficiency in Rate of Return				(0.960)
11. Net Deficiency	(\$Millions)			(59.9)
12. Gross Deficiency	(\$Millions)	(excl. CC/CIS)		(81.5)
13. Customer Care/CIS Deficiency	(\$Millions)	(\$131.1 vs \$126.6)		(4.5)
14. Total Gross Revenue Deficiency	(\$Millions)			(86.0)
15. Revenue at Existing Rates	(\$Millions)			2,896.2
16. Allowed Revenue	(\$Millions)			2,982.2
17. Gross Revenue Deficiency	(\$Millions)			(86.0)

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CALCULATION OF COST RATES  
 FOR CAPITAL STRUCTURE COMPONENTS  
2018 UPDATED FORECAST

Line No.	Col. 1	Col. 2	Col. 3
	Average of Monthly Averages		Carrying Cost
	(\$Millions)		(\$Millions)
<u>Long and Medium-Term Debt</u>			
1.	Debt Summary	3,888.1	183.0
2.	Unamortized Finance Costs	(29.9)	-
3.	(Profit)/Loss on Redemption	-	-
4.		<u>3,858.2</u>	<u>183.0</u>
5.	Calculated Cost Rate	<u>4.71%</u>	
<u>Short-Term Debt</u>			
6.	Calculated Cost Rate	<u>1.60%</u>	
<u>Preference Shares</u>			
7.	Preference Share Summary	100.0	2.7
8.	Unamortized Finance Costs	-	-
9.	(Profit)/Loss on Redemption	-	-
10.		<u>100.0</u>	<u>2.7</u>
11.	Calculated Cost Rate	<u>2.72%</u>	
<u>Common Equity</u>			
12.	Board Formula ROE	<u>8.84%</u>	

Witness: R. Small



SUMMARY STATEMENT OF PRINCIPAL  
 AND CARRYING COST OF  
 TERM DEBT  
2018 UPDATED FORECAST

Line No.	Coupon Rate	Maturity Date	Col. 1	Col. 2	Col. 3
			Average of Monthly Averages Principal	Effective Cost Rate	Carrying Cost
			(\$Millions)		(\$Millions)
Medium Term Notes					
1.	8.85%	October 2, 2025	20.0	8.970%	1.8
2.	7.60%	October 29, 2026	100.0	8.086%	8.1
3.	6.65%	November 3, 2027	100.0	6.711%	6.7
4.	6.10%	May 19, 2028	100.0	6.161%	6.2
5.	6.05%	July 5, 2023	100.0	6.383%	6.4
6.	6.90%	November 15, 2032	150.0	6.950%	10.4
7.	6.16%	December 16, 2033	150.0	6.180%	9.3
8.	5.21%	February 25, 2036	300.0	5.183%	15.5
9.	4.77%	December 17, 2021	175.0	5.310%	9.3
10.	4.04%	November 23, 2020	200.0	5.209%	10.4
11.	4.95%	November 22, 2050	200.0	4.990%	10.0
12.	4.95%	November 22, 2050	100.0	4.731%	4.7
13.	4.04%	November 23, 2020	200.0	2.801%	5.6
14.	4.50%	November 23, 2043	200.0	4.198%	8.4
15.	3.15%	August 22, 2024	215.0	3.241%	7.0
16.	4.00%	August 22, 2044	215.0	3.889%	8.4
17.	4.00%	August 22, 2044	170.0	4.436%	7.5
18.	3.31%	September 11, 2025	400.0	3.619%	14.5
19.	2.50%	August 5, 2026	300.0	3.423%	10.3
20.	2.90%	November 1, 2027	150.0	2.952%	4.4
21.	3.80%	November 1, 2047	150.0	3.821%	5.7
22.	3.35%	August 15, 2028	56.3	3.402%	1.9
23.	4.15%	August 15, 2048	56.3	4.171%	2.3
24.			<u>3,807.6</u>		<u>174.8</u>
Long-Term Debentures					
25.	9.85%	December 2, 2024	<u>85.0</u>	9.910%	<u>8.4</u>
26.			<u>85.0</u>		<u>8.4</u>
27.	Removal of separately treated CIS 64% assumed debt of 2018 \$7.0M rate base value		<u>(4.5)</u>	5.350%	<u>(0.2)</u>
28.	Total Term Debt		<u><u>3,888.1</u></u>		<u><u>183.0</u></u>

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UNAMORTIZED DEBT DISCOUNT AND EXPENSE  
AVERAGE OF MONTHLY AVERAGES  
2018 UPDATED FORECAST

Line No.		Col. 1 Unamortized Debt Discount and Expense
		(\$Millions)
1.	January 1	31.3
2.	January 31	31.0
3.	February	30.7
4.	March	30.3
5.	April	30.0
6.	May	29.6
7.	June	29.3
8.	July	29.0
9.	August	30.3
10.	September	30.0
11.	October	29.6
12.	November	29.3
13.	December	28.9
14.	Average of Monthly Averages	<u>29.9</u>

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PREFERENCE SHARES  
 SUMMARY STATEMENT OF PRINCIPAL  
 AND CARRYING COST  
2018 UPDATED FORECAST

Line No.	Coupon Rate	Maturity Date	Col. 1 Average of Monthly Averages Principal (\$Millions)	Col. 2 Effective Cost Rate	Col. 3 Carrying Cost (\$Millions)
1.	N/A	Group 3 Series D	<u>100.0</u>	2.72%	<u>2.7</u>
2.	Total		<u><u>100.0</u></u>		<u><u>2.7</u></u>

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UNAMORTIZED PREFERENCE SHARE ISSUE EXPENSE  
AVERAGE OF MONTHLY AVERAGES  
2018 UPDATED FORECAST

Line No.		Col. 1 Unamortized Issue Expense
		(\$Millions)
1.	January 1	-
2.	January 31	-
3.	February	-
4.	March	-
5.	April	-
6.	May	-
7.	June	-
8.	July	-
9.	August	-
10.	September	-
11.	October	-
12.	November	-
13.	December	-
14.	Average of Monthly Averages	<u>-</u>

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