



Ontario  
Energy  
Board | Commission  
de l'énergie  
de l'Ontario

## BY E-MAIL AND WEB POSTING

October 31, 2019

To: All Rate-regulated Electricity Distributors and Transmitters  
All Rate-regulated Natural Gas Utilities  
Ontario Power Generation Inc.  
All Registered Intervenors in 2020 Cost-based Applications  
All Other Interested Parties

### Re: **2020 Cost of Capital Parameters**

The Ontario Energy Board (OEB) has determined the values for the Return on Equity (ROE) and the deemed Long-Term (LT) and Short-Term (ST) debt rates for use in the 2020 cost-based applications (i.e. cost of service and custom incentive rate-setting (custom IR) applications, including any applicable custom IR updates). The ROE and the LT and ST debt rates are collectively referred to as the cost of capital parameters. The updated cost of capital parameters are calculated based on the formulaic methodologies documented in the [Report of the Board on the Cost of Capital for Ontario's Regulated Utilities](#), issued December 11, 2009.

### **Cost of Capital Parameters for 2020 Rates**

For cost of service and custom IR applications with effective dates in 2020, the OEB has updated the cost of capital parameters based on: (i) the September 2019 survey from Canadian banks for the spread over the Bankers' Acceptance rate of 3-month short-term loans for R1-low or A (A-stable) commercial customers, for the ST debt rate; and (ii) data three months prior to January 1, 2020 from the Bank of Canada, *Consensus Forecasts*, and Bloomberg LP, for all other cost of capital parameters.

The OEB has determined that the updated cost of capital parameters for rate applications for rates effective in 2020 are:

<b>Cost of Capital Parameter</b>	<b>Value for Applications for rate changes in 2020</b>
ROE	8.52%
Deemed LT Debt rate	3.21%
Deemed ST Debt rate	2.75%

Detailed calculations of the cost of capital parameters are attached.

The OEB considers the cost of capital parameter values shown in the above table, and the relationships between them, to be reasonable and representative of market conditions at this time.

The OEB updates cost of capital parameters for setting rates once per year. For this reason, the cost of capital parameters above will be applicable for all cost of service and custom incentive rate-setting applications (as applicable) with rates effective in the 2020 calendar year.

The OEB monitors macroeconomic conditions and may issue updated parameters if economic conditions materially change. An applicant or intervenors can also file evidence in individual rate hearings in support of different cost of capital parameters due to the specific circumstances, but must provide strong rationale and supporting evidence for deviating from the OEB's policy.

All queries on the cost of capital parameters should be directed to the OEB's Industry Relations hotline, at 416-440-7604 or [industryrelations@oeb.ca](mailto:industryrelations@oeb.ca)

Yours truly,

*Original Signed By*

Christine E. Long  
Registrar and Board Secretary

Attachment

**Ontario Energy Board**  
**Commission de l'Énergie de l'Ontario**

**Attachment: Cost of Capital Parameter Calculations**  
**(For rate changes effective in 2020)**  
**Return on Equity and Deemed Long-term Debt Rate**

**Step 1: Analysis of Business Day Information in the Month**

Month:		September 2019				
Day		Bond Yields (%)		Bond Yield Spreads (%)		
		Government of Canada 10-yr	30-yr	A-rated Utility 30-yr	30-yr Govt over 10-yr Govt	30-yr Util over 30-yr Govt
1	1-Sep-19					
2	2-Sep-19					
3	3-Sep-19	1.13	1.40	2.94	0.27	1.54
4	4-Sep-19	1.13	1.40	2.96	0.27	1.56
5	5-Sep-19	1.26	1.53	3.06	0.27	1.53
6	6-Sep-19	1.28	1.50	3.04	0.22	1.54
7	7-Sep-19					
8	8-Sep-19					
9	9-Sep-19	1.34	1.55	3.09	0.21	1.54
10	10-Sep-19	1.43	1.62	3.15	0.19	1.53
11	11-Sep-19	1.42	1.63	3.17	0.21	1.54
12	12-Sep-19	1.45	1.67	3.20	0.22	1.53
13	13-Sep-19	1.51	1.71	3.24	0.20	1.53
14	14-Sep-19					
15	15-Sep-19					
16	16-Sep-19	1.48	1.67	3.20	0.19	1.53
17	17-Sep-19	1.45	1.63	3.15	0.18	1.52
18	18-Sep-19	1.43	1.59	3.12	0.16	1.53
19	19-Sep-19	1.43	1.58	3.09	0.15	1.51
20	20-Sep-19	1.39	1.54	3.04	0.15	1.50
21	21-Sep-19					
22	22-Sep-19					
23	23-Sep-19	1.37	1.52	3.01	0.15	1.49
24	24-Sep-19	1.30	1.48	2.96	0.18	1.48
25	25-Sep-19	1.39	1.57	3.05	0.18	1.48
26	26-Sep-19	1.36	1.54	3.02	0.18	1.48
27	27-Sep-19	1.36	1.54	3.02	0.18	1.48
28	28-Sep-19					
29	29-Sep-19					
30	30-Sep-19	1.37	1.53	3.01	0.16	1.48
31						
		1.36	1.56	3.08	0.196	1.516

Sources: Bank of Canada    Bloomberg L.P.

①

②

**Step 2: 10-Year Government of Canada Bond Yield Forecast**

Source: Consensus Forecasts	Survey Date: September 9, 2019
September 2019	3-month: 1.400    12-month: 1.600    Average: 1.500 %

**Step 3: Long Canada Bond Forecast**

10 Year Government of Canada Concensus Forecast (from Step 2)	③	1.500 %
Actual Spread of 30-year over 10-year Government of Canada Bond Yield (from Step 1)	①	0.196 %
Long Canada Bond Forecast (LCBF)	④	1.696 %

**Step 4: Return on Equity (ROE) forecast**

Initial ROE		9.75 %
Change in Long Canada Bond Yield Forecast from September 2009 LCBF (September 2019) (from Step 3)	④	1.696 %
Base LCBF		4.250 %
Difference		-2.554 %
0.5 X Difference		-1.277 %
Change in A-rated Utility Bond Yield Spread from September 2009 A-rated Utility Bond Yield Spread (September 2015) (from Step 1)	②	1.516 %
Base A-rated Utility Bond Yield Spread		1.415 %
Difference		0.101 %
0.5 X Difference		0.050 %
<b>Return on Equity based on September 2019 data</b>		<b>8.52 %</b>

**Step 5: Deemed Long-term Debt Rate Forecast**

Long Canada Bond Forecast for September 2019 (from Step 3)	④	1.696 %
A-rated Utility Bond Yield Spread September 2019 (from Step 1)	②	1.516 %
<b>Deemed Long-term Debt Rate based on September 2019 data</b>		<b>3.21 %</b>

**Ontario Energy Board  
Commission de l'Énergie de l'Ontario**

**Attachment: Cost of Capital Parameter Calculations  
(For rate changes effective in 2020)  
Deemed Short-term Debt Rate**

**Step 1:** Average Annual Spread over Bankers Acceptance

Once a year, in September, Board staff contacts prime Canadian banks to get estimates for the spread of short-term (typically 90-day) debt issuances over Bankers' Acceptance rates. Up to six estimates are provided.

A.	Average Spread over 90-day Bankers Acceptance		Date of input
Bank 1	100.0	bps	Sept. 2019
Bank 2	80.0	bps	Sept. 2019
Bank 3	100.0	bps	Sept. 2019
Bank 4	82.5	bps	Sept. 2019
Bank 5			
Bank 6			

B.	Discard high and low estimates If less than 4 estimates, take average without discarding high and low.	
Number of estimates	4	
High estimate	100.0	bps
Low estimate	80.0	bps

C.	Average annual Spread	91.250	bps	①
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**Step 3:** Deemed Short-Term Debt Rate Calculation

Calculate Deemed Short-term debt rate as sum of average annual spread (Step 1) and average 3-month Bankers' Acceptance Rate (Step 2)

Average Annual Spread	0.913 %	①
Average Bankers' Acceptance Rate	1.833 %	②
<b>Deemed Short Term Debt Rate</b>	<b>2.75 %</b>	

**Step 2:** Average 3-month Bankers' Acceptance Rate

Calculation of Average 3-month Bankers' Acceptance Rate during month of September 2019

Month:	September 2019	
Day	Bankers' Acceptance Rate (%) 3-month	
1	1-Sep-19	
2	2-Sep-19	
3	3-Sep-19	1.79 %
4	4-Sep-19	1.83 %
5	5-Sep-19	1.81 %
6	6-Sep-19	1.82 %
7	7-Sep-19	
8	8-Sep-19	
9	9-Sep-19	1.82 %
10	10-Sep-19	1.83 %
11	11-Sep-19	1.83 %
12	12-Sep-19	1.83 %
13	13-Sep-19	1.85 %
14	14-Sep-19	
15	15-Sep-19	
16	16-Sep-19	1.85 %
17	17-Sep-19	1.83 %
18	18-Sep-19	1.82 %
19	19-Sep-19	1.84 %
20	20-Sep-19	1.84 %
21	21-Sep-19	
22	22-Sep-19	
23	23-Sep-19	1.85 %
24	24-Sep-19	1.85 %
25	25-Sep-19	1.85 %
26	26-Sep-19	1.84 %
27	27-Sep-19	1.84 %
28	28-Sep-19	
29	29-Sep-19	
30	30-Sep-19	1.83 %
31		1.833 %

Source: Bank of Canada / Statistics Canada  
Series V39071

**Reference on Calculation Method:**

- Appendix D of the *Report of the Board on Cost of Capital for Ontario's Regulated Utilities*, issued December 11, 2009.