



BY EMAIL and WEB POSTING

October 20, 2022

To: All Rate-regulated Electricity Distributors and Transmitters  
All Rate-regulated Natural Gas Utilities  
Ontario Power Generation Inc.  
All Registered Intervenors in 2023 Cost-based Applications  
All Other Interested Parties

**Re: 2023 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 2023 cost-based applications as described below. The ROE and the deemed 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 (OEB Report).

**Cost of Capital Parameters for 2023 Cost-Based Rates**

For cost-based rates (cost of service and custom incentive rate-setting (custom IR)) that have an effective date commencing in 2023, the OEB has updated the cost of capital parameters based on: (i) the September 2022 survey from Canadian banks for the spread over the Bankers' Acceptance rate of short-term loans for R1-low or A (A-stable) commercial utility customers, for the ST debt rate; and (ii) data three months prior to January 1, 2023 from the Bank of Canada, Investment Industry Regulatory Organization of Canada, *Consensus Forecasts*, and Bloomberg LP, for all cost of capital parameters.

The OEB has determined that the updated cost of capital parameters for cost-based rates that have an effective date commencing in 2023 are:

<b>Cost of Capital Parameter</b>	<b>Value for Applications for rate changes in 2023</b>
ROE	9.36%
Deemed LT debt rate	4.88%
Deemed ST debt rate	4.79%

Detailed calculations of the cost of capital parameters may be referenced in the attached appendix titled “Appendix – 2023 Cost of Capital Parameter Calculations”.

The OEB updates the cost of capital parameters for setting rates once per year. The cost of capital parameters above will be applicable for cost-based rates that have an effective date commencing in 2023.

The OEB Report stated that each time a formulaic approach is used to calculate an allowed ROE, it must generate a number that meets the Fair Return Standard, as determined by the OEB using its experience and informed judgment.

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. For this reason, the OEB concludes that the numerical results from the formulaic methodologies meet the Fair Return Standard.

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 their specific circumstances, but must provide a strong rationale and supporting evidence for departing from the OEB’s policy.

Any questions relating to this letter should be directed to the OEB’s Industry Relations hotline, at 1-877-632-2727 or [industryrelations@oeb.ca](mailto:industryrelations@oeb.ca).

Yours truly,

Nancy Marconi  
Registrar

Attachment: Appendix – 2023 Cost of Capital Parameter Calculations

**Appendix – 2023 Cost of Capital Parameter Calculations**  
**Return on Equity and Deemed Long-term Debt Rate**  
(For cost-based rates that have an effective date commencing in 2023)  
October 20, 2022

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

Month:		Bond Yields (%)			Bond Yield Spreads (%)	
September 2022		Government of Canada		A-rated Utility	30-yr Govt over 10-yr Govt	30-yr Util over 30-yr Govt
Day		10-yr	30-yr	30-yr		
1	1-Sep-22	3.18	3.09	4.70	-0.09	1.61
2	2-Sep-22	3.10	3.04	4.64	-0.06	1.60
3	3-Sep-22					
4	4-Sep-22					
5	5-Sep-22					
6	6-Sep-22	3.18	3.15	4.75	-0.03	1.60
7	7-Sep-22	3.13	3.13	4.73	0.00	1.60
8	8-Sep-22	3.19	3.20	4.81	0.01	1.61
9	9-Sep-22	3.13	3.15	4.75	0.02	1.60
10	10-Sep-22					
11	11-Sep-22					
12	12-Sep-22	3.14	3.16	4.75	0.02	1.59
13	13-Sep-22	3.20	3.16	4.77	-0.04	1.61
14	14-Sep-22	3.16	3.10	4.72	-0.06	1.62
15	15-Sep-22	3.16	3.05	4.68	-0.11	1.63
16	16-Sep-22	3.14	3.06	4.71	-0.08	1.65
17	17-Sep-22					
18	18-Sep-22					
19	19-Sep-22	3.13	3.04	4.68	-0.09	1.64
20	20-Sep-22	3.10	3.02	4.67	-0.08	1.65
21	21-Sep-22	3.03	2.94	4.59	-0.09	1.65
22	22-Sep-22	3.11	3.00	4.65	-0.11	1.65
23	23-Sep-22	3.07	2.96	4.66	-0.11	1.70
24	24-Sep-22					
25	25-Sep-22					
26	26-Sep-22	3.20	3.03	4.76	-0.17	1.73
27	27-Sep-22	3.32	3.18	4.93	-0.14	1.75
28	28-Sep-22	3.08	2.97	4.71	-0.11	1.74
29	29-Sep-22	3.16	3.09	4.91	-0.07	1.82
30	30-Sep-22					
31						
		3.15	3.08	4.73	-0.070	1.653

Sources: Bank of Canada, Bloomberg L.P.

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

Source:	Consensus Forecasts	Survey Date:	September 12, 2022
		3-month	12-month
September 2022	3.300	3.300	Average
			3.300 %

**Step 3: Long Canada Bond Forecast**

10 Year Government of Canada Consensus Forecast (from Step 2)	3.300 %
Actual Spread of 30-year over 10-year Government of Canada Bond Yield (from Step 1)	-0.070 %
Long Canada Bond Forecast (LCBF)	3.231 %

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

Initial ROE	9.75 %
Change in Long Canada Bond Yield Forecast from September 2009 LCBF (September 2022) (from Step 3)	3.231 %
Base LCBF	4.250 %
Difference	-1.020 %
0.5 X Difference	-0.510 %
Change in A-rated Utility Bond Yield Spread from September 2009	
A-rated Utility Bond Yield Spread (September 2022) (from Step 1)	1.653 %
Base A-rated Utility Bond Yield Spread	1.415 %
Difference	0.238 %
0.5 X Difference	0.119 %
<b>Return on Equity based on September 2022 data</b>	<b>9.36 %</b>

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

Long Canada Bond Forecast for September 2022 (from Step 3)	3.231 %
A-rated Utility Bond Yield Spread September 2022 (from Step 1)	1.653 %
<b>Deemed Long-term Debt Rate based on September 2022 data</b>	<b>4.88 %</b>

**Appendix – 2023 Cost of Capital Parameter Calculations**  
**Deemed Short-term Debt Rate**  
(For cost-based rates that have an effective date commencing in 2023)  
October 20, 2022

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

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

A.	Average Spread over 90-day Bankers' Acceptance Rate (basis points)		Date of input
Bank 1	100.0	bps	Sept. 2022
Bank 2	80.0	bps	Sept. 2022
Bank 3	100.0	bps	Sept. 2022
Bank 4	100.0	bps	Sept. 2022
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	100.00	bps	
Low estimate	80.0	bps	

C.	Average annual Spread	100.000	bps	●
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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	1.000	%	①
Average Bankers' Acceptance Rate	3.792	%	②
<b>Deemed Short Term Debt Rate</b>	<b>4.79</b>	<b>%</b>	

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

Calculation of Average 3-month Bankers' Acceptance Rate during month of September 2022

Month:	September 2022	
Day	Bankers' Acceptance Rate (%) 3-month	
1	1-Sep-2022	3.60 %
2	2-Sep-2022	3.63 %
3	3-Sep-2022	
4	4-Sep-2022	
5	5-Sep-2022	
6	6-Sep-2022	3.69 %
7	7-Sep-2022	3.73 %
8	8-Sep-2022	3.76 %
9	9-Sep-2022	3.74 %
10	10-Sep-2022	
11	11-Sep-2022	
12	12-Sep-2022	3.75 %
13	13-Sep-2022	3.76 %
14	14-Sep-2022	3.79 %
15	15-Sep-2022	3.81 %
16	16-Sep-2022	3.80 %
17	17-Sep-2022	
18	18-Sep-2022	
19	19-Sep-2022	3.82 %
20	20-Sep-2022	3.82 %
21	21-Sep-2022	3.84 %
22	22-Sep-2022	3.82 %
23	23-Sep-2022	3.88 %
24	24-Sep-2022	
25	25-Sep-2022	
26	26-Sep-2022	3.89 %
27	27-Sep-2022	3.88 %
28	28-Sep-2022	3.90 %
29	29-Sep-2022	3.95 %
30	30-Sep-2022	
31		
		<b>3.792 %</b>
		●

Source: Investment Industry Regulatory Organization of Canada (IIROC)