Ontario Energy Board

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#### BY E-MAIL AND WEB POSTING

November 20, 2014

To: All Licensed Electricity Distributors and Transmitters

All Gas Distributors

Ontario Power Generation Inc.

All Registered Intervenors in 2015 Cost of Service and Custom Incentive

Rate-setting Applications

#### Re: Cost of Capital Parameter Updates for 2015 Applications

The Ontario Energy Board (the "Board") 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 2015 applications. 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* (the "Cost of Capital Report"), issued December 11, 2009.

## **Cost of Capital Parameters for 2015 Rates**

For rates with effective dates in 2015, the Board has updated the Cost of Capital parameters based on: (i) the September 2014 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 Short-Term debt rate; and (ii) data three months prior to January 1, 2015 from the Bank of Canada, Consensus Forecasts, and Bloomberg LP, for all Cost of Capital parameters.

The Board has determined that the updated Cost of Capital parameters for 2015 rate applications for rates effective in 2015 are:

Cost of Capital Parameter	Value for 2015 Applications for rate changes in 2015
ROE	9.30%
Deemed LT Debt rate	4.77%
Deemed ST Debt rate	2.16%

Detailed calculations of the Cost of Capital parameters are attached.

The Board 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.

As documented in the Report of the Board on Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors (EB-2010-0379) issued November 21, 2013, the Board now updates Cost of Capital parameters for setting rates only once per year. For this reason, the Cost of Capital parameters above will be applicable for all cost of service and custom IR applications (as applicable) with rates effective in the 2015 calendar year.

The Board 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 Board's policy.

All queries on the Cost of Capital parameters should be directed to the Board's Industry Relations hotline, at 416 440-7604 or industry relations @ontarioenergyboard.ca.

Yours truly,

Original Signed By

Kirsten Walli Board Secretary

Attachment

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

## **Attachment: Cost of Capital Parameter Calculations**

(For rate changes effective in 2015)

**Cost of Capital Parameter Calculations** Return on Equity and Deemed Long-term Debt Rate

Step 1: Analysis of Business Day Information in the Month

Month: September 2014 Bond Yields (%) Bond Yield Spreads (%) Government of A-rated 30-yr Govt 30-yr Util Canada Utility over 10-yr over 30-yr 30-yr 30-yr Govt Govt Day 10-yr 1-Sep-14 2.64 0.55 2-Sep-14 2.09 4.04 1.40 2.63 4.03 0.54 1.40 3-Sep-14 2.09 4-Sep-14 4.06 0.54 1.40 2.12 2.66 5 5-Sep-14 1.39 2.11 2.67 4.06 0.56 6-Sep-14 7 7-Sep-14 8-Sep-14 2.14 2.68 4.07 0.54 1.39 9-Sep-14 2.70 0.53 1.39 2.17 4.09 10-Sep-14 0.52 1.39 10 2.20 2.72 4.11 11 11-Sep-14 2.20 2.72 4.11 0.52 1.39 12 12-Sep-14 2.76 1.39 2.24 4.15 0.52 13-Sep-14 13 14 14-Sep-14 0.53 15-Sep-14 2.23 4.15 1.39 2.76 15 16 16-Sep-14 2.24 2.77 4.16 0.53 1.39 17 17-Sep-14 2.26 2.79 4.18 0.53 1.39 18-Sep-14 2.28 2.79 4.18 0.51 1.39 19-Sep-14 2.25 2.76 0.51 1.38 19 4.14 20-Sep-14 20 21 21-Sep-14 22 22-Sep-14 2.22 2.74 4.11 0.52 1.37 23 23-Sep-14 2.72 4.09 0.55 1.37 2.17 0.53 1.37 24 24-Sep-14 2.20 2.73 4.10 25 25-Sep-14 2.15 2.68 4.05 0.53 1.37 26 26-Sep-14 1.38 2.16 2.68 4.06 0.52 27 27-Sep-14 28 28-Sep-14 29-Sep-14 4.04 0.52 2.13 2.65 1.39 30 30-Sep-14 2.15 2.67 4.06 0.52 1.39 31 0.530 4.10 1.386 2.18 2.71 Sources: Bank of Canada Bloomberg L.P. Deemed Long-term Debt Rate based on September 2014 data

Step 2: 10-Year Government of Canada Bond Yield Forecast				
Source: Consensus P Forecasts	ublication Date:	September-08	-14	
	3-month	12-month Av	/erage	
September 2014	2.500	3.200 🗿	2.850 %	
Step 3: Long Canada Bond F	orecast			
10 Year Government of Canad Step 2)	da Concensus Foreca	ast (from 3	2.850 %	
Actual Spread of 30-year over 10-year Government of Canada 0 0.530 % Bond Yield (from Step 1)				
Long Canada Bond Forecast	(LCBF)	4	3.380 %	
Step 4: Return on Equity (ROI	E) forecast			
Initial ROE			9.75 %	
Change in Long Canada Bond LCBF (September 20 Base LCBF Difference 0.5 X Diffe	114) (from Step (	September 2009  3.380 % 4.250 % -0.870 %	-0.435 %	
Change in A-rated Utility Bond Yield Spread from September 2009 A-rated Utility Bond Yield Spread  (September 2014) (from Step 1) Base A-rated Utility Bond Yield  Spread  1.415 %				
Difference 0.5 X Diffe	rence	-0.029 %	-0.015 %	
Return on Equity based on September 2014 data 9.30 %				
Step 5: Deemed Long-term Debt Rate Forecast				
Long Canada Bond Forecast 3)	for September 2014	(from Step 4	3.380 %	
A-rated Utility Bond Yield Spre 1)	ead September 2014	(from Step 2	1.386 %	

4.77 %

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

#### **Attachment: Cost of Capital Parameter Calculations**

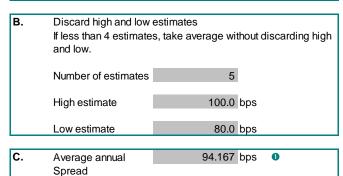
(For rate changes effective in 2015)

## Cost of Capital Parameter Calculations 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., 2014
	Bank 2	100.0	bps	Sept., 2014
	Bank 3	82.5	bps	Sept., 2014
	Bank 4	80.0	bps	Sept., 2014
	Bank 5	100.0	bps	Sept., 2014
	Bank 6			



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	0.942 % ①
Average Bankers' Acceptance Rate	1.214 % ②
Deemed Short Term Debt Rate	2.16 %

Step 2: Average 3-month Bankers' Acceptance Rate

Calculation of Average 3-month Bankers' Acceptance Rate during month of September 2014

Month	:	September 2014
		Bankers' Acceptance Rate (%)
	Day	3-month
1	1-Sep-14	Bank holiday %
2	2-Sep-14	1.21 %
3	3-Sep-14	1.21 %
4	4-Sep-14	1.21 %
5	5-Sep-14	1.21 %
6	6-Sep-14	
7	7-Sep-14	
8	8-Sep-14	1.21 %
9	9-Sep-14	1.21 %
10	10-Sep-14	1.22 %
11	11-Sep-14	1.22 %
12	12-Sep-14	1.22 %
13	13-Sep-14	
14	14-Sep-14	
15	15-Sep-14	1.22 %
16	16-Sep-14	1.22 %
17	17-Sep-14	1.22 %
18	18-Sep-14	1.22 %
19	19-Sep-14	1.21 %
20	20-Sep-14	
21	21-Sep-14	4.04.0/
22	22-Sep-14	1.21 %
23 24	23-Sep-14	1.21 % 1.21 %
24 25	24-Sep-14	1.21 %
25 26	25-Sep-14 26-Sep-14	1.21 %
20 27	27-Sep-14	1.21 /0
21 28	•	
26 29	28-Sep-14 29-Sep-14	1.22 %
30	30-Sep-14	1.22 %
31	50-5 <del>6</del> p-14	1.22 /0
31		1.214 %
		1.214 %
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.