Q. Company Evidence, p. 1: What formula does the Ontario Energy Board employ to establish returns for electricity distributors under its jurisdiction?

A. The formula currently employed by the Ontario Energy Board to establish returns for electricity distributors under its jurisdiction can be found in Appendix B of EB-2009-0084 Report of the Board on the Cost of Capital for Ontario's Regulated Utilities rendered on December 11, 2009, included here as Attachment A.

APPENDIX B OEB REPORT EB-2009-0084

Appendix B: Method to Update ROE

With the release of this report, the Board is resetting and refining its formulaic approach for determining a utility's Return on Equity ("ROE") applicable to the prospective test year. The formula has been reset to address the difference between the allowed ROE arising from the application of the formula and the rate of ROE for a low risk proxy group that cannot be reconciled based on differences in risk alone. The formula has been refined to reduce the sensitivity of the approach to changes in government bond yields due to monetary and fiscal conditions that do not reflect changes in utility cost of equity.

The formula as set out in this report includes (a) a term to reflect the change in the Long Canada Bond forecast ("LCBF") and (b) a term to reflect the change in the spread between A-rated Utility bond yields over the Long Canada Bond yield.

The adjustment factor for the LCBF term is set at 0.5. The adjustment factor for the A-rated Utility bond term is set at 0.5. The methodology for calculating the Long Canada Bond forecast is the same as that set out in the Board's December 20, 2006 Report.

The base for the ROE adjustment formula is set at 9.75%. The corresponding base LCBF is 4.25% and the spread in 30-year A-rated Canadian utility bonds over the 30-year benchmark Government of Canada bond yield is 1.415%.

While there is a change in the base numbers and the adjustment formula, the general approach for calculating the updated ROE is the same as that set out in the Board's December 20, 2006 Report.

The ROE for the prospective test year (ROE_t) will be calculated by the following adjustment formula:

$$ROE_t = BaseROE + 0.5 \times (LCBF_t - BaseLCBF) + 0.5 \times (UtilBondSpread_t - BaseUtilBondSpread)$$

Where:

- $LCBF_t$ is the Long Canada Bond Forecast for the test year, and is calculated as:

$$LCBF_t = \left[\frac{{}_{10}CBF_{3,t} + {}_{10}CBF_{12,t}}{2} \right] + \left[\frac{\sum_i ({}_{30}CB_{i,t} - {}_{10}CB_{i,t})}{I} \right]$$

  Where

  - ${}_{10}CBF_{3,t}$ is the 3-month forecast of the 10-year Government of Canada bond yield as published in Consensus Forecasts three (3) months in advance of the implementation date for rates;

- $_{10}CBF_{12,t}$ is the 12-month forecast of the 10-year Government of Canada bond yield as published in Consensus Forecasts three (3) months in advance of the implementation date for rates;
- $_{30}CB_{i,t}$ is the benchmark bond yield rate for the 30-year Government of Canada bond at the close of day i of the month that is three (3) months in advance of the implementation date for rates, as published by the Bank of Canada [**Cansim Series V39056**];
- $_{10}CB_{i,t}$ is the benchmark bond yield rate for the 10-year Government of Canada bond at the close of day i of the month that is three (3) months in advance of the implementation date for rates, as published by the Bank of Canada [**Cansim Series V39055**]; and
- I is the number of business days for which Government of Canada and A-rated Utility bond yield rates are published in the month three (3) months in advance of the implementation date for rates.

- $UtilBondSpread_t$ is the average spread of 30-year A-rated Canadian Utility bond yields over 30-year Government of Canada bond yields over all business days in the month three (3) months in advance of the implementation date for rates, and is calculated as

$$UtilBondSpread_t = \frac{\sum_i ({}_{30}UtilBonds_{i,t} - {}_{30}CB_{i,t})}{I}$$

Where:

- $_{30}UtilBonds_{i,t}$ is the average 30-year A-Rated Canadian Utility bond yield rate, from Bloomberg L.P., for business day i of the month that is three (3) months in advance of the implementation date for rates [**Series C29530Y**];
- $_{30}CB_{i,t}$ is the benchmark bond yield rate for the 30-year Government of Canada bond at the close of day i of the month that is three (3) months in advance of the implementation date for rates, as published by the Bank of Canada [**Cansim Series V39056**]; and
- I is the number of business days for which Government of Canada and A-rated Utility bond yield rates are published in the month three (3) months in advance of the implementation date for rates.

As noted above, based on September 2009 data, the base ROE is set at 9.75% and the corresponding *BaseLCBF* is 4.25% and *BaseUtilBondSpread* is 1.415%. Thus the ROE adjustment formula is specified as:

$$ROE_t = 9.75\% + 0.5 \times (LCBF_t - 4.25\%) + 0.5 \times (UtilBondSpread_t - 1.415\%)$$

The ROE for any period will be rounded and expressed as a percentage with two decimal places (i.e., XX.XX%).

As for other cost of capital parameters, data will be for the month that is three months prior to the effective date for the new rates. For example, for rates effective May 1, January data will be used to calculate the updated ROE. This means is that *Consensus Forecasts* published in the month of January, and Bank of Canada and Bloomberg L.P. data for all business days during the month of January will be used to calculate the updated ROE.

The necessary data are available shortly after the end of the month, and thus poses no undue delays for rate-setting.

The use of the ROE will be in accordance with the policy described in section 4.2 of this report.