



uniongas

A Spectra Energy Company

September 14, 2009

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON
M4P 1E4

Dear Ms. Walli:

**Re: EB-2009-0084 – Cost of Capital
Union Gas Presentation**

Please find attached Mr. James Vander Weide's cost of capital presentation on behalf of Union Gas.

Yours truly,

[Original signed by]

Chris Ripley
Manager, Regulatory Applications



Does the OEB's Current ROE Formula Meet the Fair Return Standard?

James H. Vander Weide, Ph.D.

Research Professor of Finance and Economics, Duke University, The Fuqua School of Business

President, Financial Strategy Associates

September 21, 2009

Does the OEB's Current ROE Formula Meet the Fair Return Standard?

- The Board's ROE formula is given by the equation

$$ROE_t = 9.35\% + 0.75 \times (LCBF_t - 5.50\%)$$

- Using the forecasted yield on long Canada bonds equal to 4.23 percent from Consensus Economics, August 10, 2009, the Board's formula produces an allowed ROE of 8.40 percent and an implied equity risk premium of 4.17 percent.

Does the OEB's Current ROE Formula Meet the Fair Return Standard?

- I have conducted six tests of whether the return provided by the current formula is a fair return, including evidence on:
 - Experienced equity risk premiums on investments in Canadian utility stocks
 - Recent allowed rates of return on equity for U.S. utilities
 - Sensitivity of the forward-looking required equity risk premium on utility stocks to changes in interest rates
 - Sensitivity of the allowed equity risk premium for U.S. utilities to changes in interest rates
 - Relative risk of returns on Canadian utility stocks compared to the Canadian market index
 - Lower ROE formula results in a period of increased risk and uncertainty in the economic and capital markets

Experienced Equity Risk Premiums on Investments in Canadian Utility Stocks

- I have examined evidence on the experienced risk premiums achieved by equity investors in two groups of Canadian utilities, the S&P/TSX Utilities Index and the BMO Capital Markets basket of Canadian utility stocks .
- The average experienced equity risk premium on an investment in Canadian utility stocks is approximately 5.5 percent.
- Since the risk premium implied by the ROE formula is only 4.17 percent, this evidence supports the conclusion that the OEB's ROE formula is not producing a fair return.

Recent Allowed Rates of Return on Equity for U.S. Utilities

- Allowed rates of return on equity and allowed equity ratios for U.S. utilities average approximately 10.4 percent and 49 percent, respectively.
- Since the OEB's ROE formula currently produces a 8.40 percent ROE on an allowed equity ratio in the range 35 percent to 40 percent, this evidence supports the conclusion that the Board's ROE formula fails to provide returns that are commensurate with returns on other investments of comparable risk.

Sensitivity of the Forward-looking Required Equity Risk Premium on Utility Stocks to Changes in Interest Rates

- The ROE adjustment formula implies that the cost of equity for Canadian utilities declines by 75 basis points for every 100-basis-point decline in the yield to maturity on long Canada bonds.
- However, my evidence supports the conclusion that the cost of equity declines by less than 50 basis points for every 100-basis-point decline in the yield to maturity on long Canada bonds.

Sensitivity of the Forward-looking Required Equity Risk Premium on Utility Stocks to Changes in Interest Rates

- From my ex ante risk premium studies, I find that the forward-looking required equity risk premium on utility stocks is in the range 7.5 percent to 8.0 percent based on data through February 2009.
- Using more recent data, the forward-looking required risk premium is in the range 7.0 percent to 7.5 percent.
- Since the risk premium implied by the OEB ROE Formula is currently 4.17 percent, this evidence supports the conclusion that the Board's ROE formula fails to provide a fair rate of return on equity.

Sensitivity of the Allowed Equity Risk Premium for U.S. Utilities to Changes in Interest Rates

- The ROE adjustment formula reduces the allowed ROE by 75 basis points when the yield to maturity on long-term government bonds declines by 100 basis points, whereas U.S. regulators typically reduce the allowed ROE by less than 50 basis points when the yield to maturity on long-term government bonds declines by 100 basis points.
- This evidence also supports the conclusion that the OEB ROE Formula fails to meet the fair return standard.

Relative Risk of Returns on Canadian Utility Stocks Compared to the Canadian Market Index

- My studies indicate that the volatility of returns on Canadian utility stocks exceeds or approximates the volatility of returns on the Canadian market index.
- Because investors demand a higher return for bearing more risk, this evidence also supports the conclusion that the equity risk premium on Canadian utility stocks is higher than the equity risk premium implied by the OEB ROE Formula.

Lower ROE Formula Results in a Period of Increased Risk and Uncertainty in the Economic and Capital Markets

- I have examined whether the Board's ROE formula produces a higher ROE in periods of higher risk such as the period of global financial crisis from early 2008 through mid-2009.
- I conclude that, contrary to a reasonable expectation, the OEB ROE Formula produced a lower ROE estimate at a time when highly uncertain economic and capital market conditions were causing capital costs to increase dramatically.

Conclusion

- The fair return standard requires that Ontario utilities be given an opportunity to earn a return on their investment in utility plant and equipment that is approximately equal to returns investors expect to receive on other investments of similar risk.
- From my studies of investor-required returns on similar risk investments, I conclude that Ontario utilities should be allowed ROEs in the range 10 percent to 11 percent on deemed equity ratios in the range 40 percent to 50 percent.
- I further conclude that Ontario utilities should be allowed to earn a return on rate base of approximately 8 percent.