

**FAIR RETURN AND CAPITAL STRUCTURE FOR HYDRO  
QUEBEC TRANSPORTATION AND DISTRIBUTION**

**EVIDENCE OF**

**Laurence D. Booth**

**BEFORE THE**

**Régie de L'Énergie**

**R-3842-2013**

**October 15, 2013**

**TABLE OF CONTENTS**

**TABLE OF CONTENTS**

**EXECUTIVE SUMMARY**

**I: INTRODUCTION.....**

**II: FINANCIAL AND ECONOMIC OUTLOOK.....**

**III RISK PREMIUM ESTIMATES OF THE FAIR ROE.....**

**IV DCF ESTIMATES OF THE FAIR ROE.....**

**V: ROE ADJUSTMENT MODEL.....**

**VI: US COMPARABLES.....**

  

**APPENDIX A: PROFESSOR BOOTH'S CURRICULUM VITAE**

**APPENDIX B: MARKET RISK PREMIUM ESTIMATES**

**APPENDIX C: RELATIVE RISK FOR A BENCHMARK UTILITY**

**APPENDIX D: DCF ESTIMATES**

**APPENDIX E: BUSINESS RISK AND CAPITAL STRUCTURE**

## EXECUTIVE SUMMARY

- 1) I accept HQ's assessment that the appropriate common equity ratios for HQT and HQD should be 30% and 35% respectively. These are my standard recommendations for transmission and distribution utilities respectively.
- 2) The Canadian economy has stalled somewhat compared to what was expected last year as fiscal drag continues to weaken the US recovery and Canadian exports. The Bank of Canada has now put off a return to full employment until mid-2015 rather than 2014. However despite this weakness the Bank of Canada expects the real growth rate to pick up in both the US and Canada in 2015 and my best estimate for the average long Canada yield in 2014 is 3.60%, up from 3.0% estimated for 2013.
- 3) The actions of the US Federal Reserve in implementing Operation Twist and its commitment to keeping the Federal Funds rate at 0-0.25% brought down global interest rates. This led to a precipitous drop in long Canada bond yields so corporate spreads over government bond yields remain high at 166 bps. This is mainly due to unusually low government bond yields, since all the standard stress indicators show normal capital market conditions. Furthermore Canadian utilities have started to issue 40 and in some cases 50 year bonds at extremely low interest rates.
- 4) I have been recommending a credit spread adjustment of 50% of the change in the credit spread from the normal spread of 100bps to my ROE recommendations. This adds 30 bps to simple CAPM estimates, but should even out over the business cycle. I regard this as simply converting the simple CAPM into a Conditional CAPM as required by theory (CCAPM).
- 5) However, the corporate credit spread adjustment does not adjust for the overall drop in bond yields since July 2011. This is due to the fact that Canada is one of a very small number of AAA rated countries and is seen as a safe haven. As indicated by the behaviour of the spread of preferred share yields over Canada bonds much of the lower long Canada yield is due to foreign and institutional purchasers. However, since Governor Bernanke indicated the off ramp for quantitative easing in May 2013 this "Operation Twist" effect has moderated. I now add only 0.35% to my CAPM estimates due to Operation Twist.
- 6) For 2014 I recommend an ROE of 7.50% for a benchmark utility. This recommendation includes a 0.30% adjustment for credit spreads and 0.35% for Operation Twist. For 2015 and later years I recommend an ROE adjustment mechanism that adjusts for 75% of the change in the forecast long Canada bond yield and 50% of the change in the credit spread, subject to a minimum long Canada bond yield forecast of 3.95%. Alternatively I would recommend a fixed ROE for the indefinite future of 8.25%. This is 0.75% below what the "old" NEB ROE formula would generate for an equilibrium long Canada bond yield forecast of about 5.0%.
- 7) If the Régie does adopt a formula ROE then I recommend that it base the parameters on the same Bloomberg Utility and Cansim series (for the long Canada yield) that it adopted in its Gazifère decision.(D 2010-147)