

**Q. Evidence of Ms. McShane Appendix B**

(a) Ms. McShane discusses problems with the use of the long Canada bond rate as the risk free rate, please indicate whether the same criticism is at work for the long Treasury yield in the US with the added proviso that it is issued by the only reserve currency in the world. If not why not.

(b) Please discuss how she has adjusted for a) above in her US estimates?

(c) Please estimate the betas for the Canadian utility sample against the US market index (S&P500) both with and without adjustments for the C\$:US\$ exchange rate and compare them with those on page 54.

(d) Please confirm that the sector weights in market index depend on the state of the stock market and how frequently the indexes are rebalanced.

(e) Please indicate whether Ms. McShane has published any asset pricing tests in any academic journal and whether in her judgement the results in Table B-3 reflect the methodology used in such tests.

A. (a) Yes; please see responses to CA-NP-14 and CA-NP-19.

(b) She has not made any explicit adjustments. However, her market risk premium estimates are partially based on the expected return on the equity market less the expected bond return, where the latter is the forecast yield on long-term Canada bonds. Thus to the extent that the yield on long-term Government bonds understates the “true” risk-free rate, it is reflected in both the risk-free rate and market risk premium estimates. In other words, a lower than “true” risk-free rate is offset by a higher market risk premium.

(c) The betas are shown in Attachment A.

(d) Confirmed.

(e) Ms. McShane has not published any asset pricing tests in academic journals. The methodology she used is a simple correlation between betas and returns which demonstrates that over a long period of time, the betas of lower and higher risk sectors of the economy and the returns they have achieved have not conformed to the relationship predicted by the single beta (equity market composite) CAPM, leading to the conclusion that depending on a raw beta to predict the expected return is problematic at best. The methodologies used by academics to test the CAPM and to perform other asset pricing studies are significantly more complex. While the academic models are more complex econometrically, the results of Ms. McShane’s simple correlation are not inconsistent with the findings of more complex studies.

## **Beta Estimates**

<b>Company</b>	<b>"Raw" Beta As Shown on Table 8 of Testimony</b>	<b>"Raw" Beta Vs. S&amp;P 500</b>	<b>"Raw" Beta Vs. S&amp;P 500 Adjusted For Exchange Rate</b>
Canadian Utilities	0.41	0.27	0.25
Emera	0.38	0.31	0.22
Enbridge	0.56	0.49	0.40
Fortis	0.49	0.40	0.32
TransCanada	0.47	0.44	0.30
<b>Median</b>	<b>0.47</b>	<b>0.40</b>	<b>0.30</b>