Consumers Council of Canada and the Vulnerable Energy Consumers Coalition (CCC) and (VECC) INTERROGATORY #31 List 1

Interrogatory

Ref: B1/T3/S1 p. B-22

Issue 4.0
Issue: Cost of Capital/Capital Structure

Topic: Two Factor Model

Request:

Would Ms. McShane

1. Agree that her model on page B-22 is an example of a two factor model where returns are driven by a market factor and a bond factor.

2. Confirm that if a long bond is used as a risk factor that the correct risk free rate is then one which does not have this bond market risk so as a result she can not use this model to estimate risk premiums based on long Canada bond yields.

3. Please provide her estimate of the bond (or interest rate risk) market risk premium and would she agree that by definition this can not exceed the risk premium required to hold the long Canada bond since no conventional equity security can have more bond market risk than the long Canada bond.

4. Estimate the utility return using a current estimate of the interest rate (bond market) risk premium and risk free rate.

Response

1. It is an example of a two factor model, where the change in the utility stock price is explained both by changes in the equity market composite and changes in long Canada bond prices.

2. Ms. McShane agrees that, in theory, a true risk-free rate would have no interest rate risk. She also agrees if the model were intended to estimate an interest rate risk premium, then it would be incorrect to add an interest rate risk premium to a bond yield that already included interest rate risk. Ms. McShane did not do this. The calculation at B-22 estimates the utility return and relative risk premium for a utility based on (1) the historic relationship between utility equities and the

overall equity and the government bond markets, and (2) the expected values for both equity and government bond market returns.

3. Ms. McShane has not created a model that includes an interest rate risk premium, and thus has not made such an estimate. She agrees that a conventional equity security cannot have more interest rate risk than the long Canada bond.

4. See response to 3).