1	Q.	Evidence of Ms. McShane Page 11	
2 3 4 5 6		(a)	Please provide a detailed explanation of how yields to maturity on default risky bonds are calculated and explain why they are commonly called "promised" yields.
0 7 8 9		(b)	Please provide a detailed explanation on whether in Ms. McShane's judgement a promised yield on a default risky bond is an expected rate of return on a stock as calculated by her DCF and risk premium studies.
10 11 12 13 14 15		(c)	If in Ms. McShane's judgement yields on default risky bonds are not expected rates of return please explain in detail the factors that go in to determining promised yields and whether these are the sole factors that affect equity rates of return. If they are not please discuss the additional factors that affect equity returns.
10 17 18 19 20		(d)	Please explain in detail how promised yields can be compared to expected returns without making any adjustment? Please provide a theoretical model that Ms. McShane relies on to make such a judgment and provide the relevant citations.
21 22 23 24 25 26 27 28		(e)	On Page 12 Ms. McShane refers to the difference between the allowed ROE and A bond yield as being 3.25-3.0% in 2003 and 2007 when the PUB reviewed its ROE formula. If this difference drops from the 1.7% at the time of her testimony back to 3.0-3.25% level at the time of the hearing would Ms. McShane accept the Board's ROE formula as being reasonable? If not why not?
29 30 31 32 33 34 35 26		(f)	In 2003 Ms. McShane provided testimony on behalf of the ATCO group of companies before the Alberta EUB. At that time ATCO recommended that the AEUB automatically call a hearing to review its ROE formula if it produced a utility risk premium at least twice the spread between "A" rated utility debt and the equivalent long term Canada bond. Can Ms. McShane confirm this condition and would she accept the PUB's ROE formula if it satisfied this condition? If not why not?
 30 37 38 39 40 41 42 43 44 	A.	(a)	The yield to maturity is equal to the annualized rate of return that an investor would receive if the bond is held to maturity; it is the market rate which equates the price of the bond to the present value of future cash flows, which include the return of principal at maturity and the coupon payments assuming reinvestment of the coupon payments at the same market rate. The term "promised yield" means that it reflects the repayment of all the coupons and the principal at maturity as promised.

- (b) The promised yield on a bond is equal to its expected return when the bond has no default risk. The higher the default risk, the bigger the gap between promised yield and expected rate of return on the bond. For bonds with low default risk, the smaller the gap between promised yield and expected return.
 - (c) The promised yield is a function of market rates of interest (which reflect a real rate plus the expected rate of inflation), the duration of the bond, the probability of default, the expected recovery in the case of default, the liquidity of the bond and investors' risk aversion. Additional factors which would impact the expected return on equity include expected growth in earnings (which would be a function of the industry and of the economy) and financial leverage.
- (d) The discussion on page 11 is to trends in yields on a basket of A rated utility bonds, where the probability of default is small, and the difference between the expected return and the promised yield would be relatively small and the trend in A rated utility bond yields and spreads would be a valid indicator of the trend in the cost of equity. Since both debt and equity holders have financial claims on the same cash flows of a corporation, all other things equal, it makes logical sense that an increase in the firm's cost of debt will be accompanied by an increase in its cost of equity. She would further note that corporate spreads are a widely used variable for estimating equity returns and various empirical studies have shown that there is a positive relationship between corporate spreads and the equity risk premium, e.g., Chen, N. F., R. Roll and S. A. Ross, 1986, "Economic Forces and the Stock Market", Journal of Business, 59, pages 383-403; Harris, R.S. and F.C. Marston, "Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts", Summer 1992, Financial Management, pages 63-70.
 - To the extent that Ms. McShane relies directly on spreads for the estimation of the cost of equity (e.g., in the DCF based equity risk premium test or the relationship between allowed returns, government bond yields and spreads), she has considered the empirical relationship indicated by the relevant data.
 - (e) No. First, the empirical evidence indicates that the ROE is not as sensitive to long-term government bond yields as the formula indicates. Second, the analysis that Ms. McShane conducted, which takes into account factors other than the interest rate environment, e.g., returns available to investments of comparable risk, indicates a fair ROE is materially higher than the formula ROE would indicate.
- 40(f)The proposal was that the formula should be reviewed if the spread on an agreed-41upon index of long-term A-rated utility bond yields exceeds 50% of the42benchmark utility risk premium implicit in the allowed return. She would not43accept the PUB's formula if it simply met this condition. It is important to recall44that the proposal in the referenced proceeding was premised on both the applied45for return on equity and the proposed formula (which was to vary the ROE by4650% of the change in long-term Canada bond yields).