Terasen 2009 ROE Proceeding
JIESC/BCOAPO/CEC IR #1
July 6, 2009

Evidence of the Company

JIESC/BCOAPO/CEC-TGI-1.

TOPIC: Comparable Return Standard

REFERENCE: Evidence of the Company

REQUEST:

a) At page 6 the company repeats the NEB statement as to the comparable investment standard as the return has to

"be comparable to the return available from the application of the invested capital to other enterprises of like risk (comparable investment requirement)"

On page 10 the company provides Ms. McShane's interpretation as:

"to earn a return on investment commensurate with that of comparable risk Enterprises"

In the company's view are these two statements identical?

b) Further to a), if another company that is otherwise identical is earning 10% but selling for twice book value, so that the return earned by the investor on the market value of their investment is 5.0%, what rate of return does the company view as meeting the comparable return standard; 5.0% or 10%. Please answer in detail.

c) If the answer to b) is 10% please explain how the capital from the company can be reallocated or invested to earn 10% if the company has to pay twice book value to get at that 10% return?

d) Please provide the amount of the total assets purchased by Fortis and the book value of the equity.

e) Please indicate the purchase price Fortis paid for TGI both in terms of the total amount including the assumption of debt and on a straight equity basis.

f) Please estimate the equity market to book ratio implicit in the acquisition of TGI by Fortis.

JIESC/BCOAPO/CEC-TGI-2.

TOPIC: Comparable Canadian Utility Returns

REFERENCE: Evidence of the Company, Page 13

REQUEST:

a) Please explain how column 3 of the table was calculated.
b) If the answer to b) is the ROE was multiplied by the equity component please explain the foundations for such a calculation and what it is supposed to mean.

JIESC/BCOAPO/CEC-TGI-3.

TOPIC: ROE Studies

REFERENCE: Evidence of the Company, Page 17

REQUEST:

a) Please confirm that the authors of both the Concentric and NERA studies have appeared as expert witnesses on behalf of utilities both in Canada and the United States.
b) Please explain why reports authored by experts on behalf of utilities that are not present to be cross examined in this hearing should be given any weight.

JIESC/BCOAPO/CEC-TGI-4.

TOPIC: Risk Premium Over Corporate Bond Yields

REFERENCE: Evidence of the Company, Page 22

REQUEST:

a) Please confirm that the yield on default risky corporate debt is a promised yield, that is, it is the promised payments discounted at a rate that sets their present value equal to the market value.
b) Please indicate, with appropriate citations to the literature, any support for the claim that equity investors require a premium over debt investors if the debt return is the promised yield on corporate debt.

c) Please confirm that there are lots of debt issues where the promised yield has been almost 100% because the probability of default and non-payment is also very high.

d) Please confirm that there have been many times in the past where utility commissions in Canada have awarded ROEs less than the government bond rate, let alone the utility's borrowing cost. If this cannot be confirmed please provide the allowed ROE and borrowing cost for TGI's predecessor companies for the period 1980-1985.

JIESC/BCOAPO/CEC-TGI-5.

TOPIC: Business Risk

REFERENCE: Evidence of the Company, Tab 1

REQUEST:

a) Would TGI agree that for a regulated utility sooner or later its business risk has to materialise in terms of an inability to earn its allowed ROE if the risk is real? If not agreed, why not.

b) In TGI's judgment does the fact of being regulated by the BCUC increase or decrease its risk? Please be specific in terms of justifying the answer.

c) Please provide TGI's (and predecessor companies) actual and allowed ROE since 1994 clearly itemising the impact of incentive agreements.

d) Please explain any deviations of more than 0.20% in the data provided in a) and explain their cause.

e) Can TGI or Ms. McShane please provide equivalent data to c) for Enbridge Gas Distribution Inc, Union Gas, ATCO Gas and Gaz Metro?

JIESC/BCOAPO/CEC-TGI-6.

TOPIC: Business Risk

REFERENCE: Evidence of the company Tab 1

REQUEST:

a) Please specify the major deferral accounts that have been available to TGI (and predecessor companies) since 1994, when they were introduced and which ones remain in effect. In the judgment of TGI have these deferral accounts increased or decreased TGI's risk?

b) Can TGI or Ms. McShane please provide equivalent data to a) for Enbridge Gas Distribution Inc, Union Gas, ATCO Gas and Gaz Metro.

c) In TGI's judgment has it more regulatory protection in terms of deferral accounts than the companies listed in b) above.

JIESC/BCOAPO/CEC-TGI-7.

TOPIC: Business risk

REFERENCE: Evidence of the company Tab 1

REQUEST:

a) Please indicate the regulated average depreciation rate in effect for each year since 1994 and the dates when depreciation studies have been filed with the BCUC.
b) Please provide equivalent data to that in a) above for Enbridge Gas Distribution Inc, Union Gas, ATCO Gas and Gaz Metro.

JIESC/BCOAPO/CEC-TGI-8.

TOPIC: Business risk

REFERENCE: Evidence of the company Tab 1

REQUEST:

a) Please provide the regulated capital structures in effect for TGI (and predecessor companies) for each year since 1994 broken out into long term debt, short term debt, preferred shares and common shares.
b) Please provide equivalent data to that in a) above for Enbridge Gas Distribution Inc, Union Gas, ATCO Gas and Gaz Metro.

JIESC/BCOAPO/CEC-TGI-9.

TOPIC: Business Risk

REFERENCE: Evidence of the Company, Tab 1

REQUEST:

a) Please indicate when TGI (or predecessor companies) moved from being regulated on an historic test year basis to a forward test year basis.

b) Please provide extracts from any testimony introduced at the time of the change to indicate that the allowed ROE was reduced since it was being applied to a forward instead of an historic test year rate base.

c) In TGI's judgment should the allowed ROE be the same for two otherwise identical utilities that differ only in being regulated on an historic versus a forward test year basis?

Evidence of Mr. Carmichael

JIESC/BCOAPO/CEC-TGI-10

TOPIC: BCUC Formula ROE

REFERENCE: Evidence of Mr. Carmichael, Pages 3-4

REQUEST

a) Please indicate the BCUC ROE formula in effect for each of the periods between the reviews in 1997, 1999 and 2006 and the specific changes made after each review.
b) Please indicate the allowed ROE produced for 2010 for the different ROE formula in a) above based on a forecast long term Canada (LTC) forecast yield of 4.25% and 4.75% respectively.
c) In Mr. Carmichael's view are any of the ROEs produced by the various BCUC ROE formula fair and reasonable?
d) Does Mr. Carmichael believe that the BCUC conducted a fair and careful examination of the evidence placed before it in these reviews?
e) Mr Carmichael refers to the change in LTC yields in 2008 and 2008 as "major". Please indicate the decline in LTC yields between these ROE reviews mentioned in a) above, were these also major and if so what change in yields would Mr. Carmichael not consider major (for example, 0.50%, 0.75%)?

JIESC/BCOAPO/CEC-TGI-11.

TOPIC: US Comparables

REFERENCE: Evidence of Mr. Carmichael, Page 5

REQUEST

a) Does Mr. Carmichael judge "Comparable" to mean "the same" or like the BCUC does he judge the rating agencies to mean comparable in the sense of a benchmark to which they then make adjustments when coming to a definite [?] conclusion?
b) As Mr. Carmichael mentions (page 40), Moody's adjusts the rating for TGI from that produced mechanically from simple financial metrics to a higher rating based on the protective regulatory environment in BC. Does Mr. Carmichael believe that this exercise of judgement is unique to Moody's or does he judge other investors to make similar adjustments?

c) Provide a copy of the last presentation (pitch) Mr. Carmichael made as an investment dealer to sell Fortis and/or Terasen debt issues to prospective investors.
d) Provide a copy of the last presentation (pitch) Mr. Carmichael made as an investment dealer to sell a Canadian utility debt issue to prospective investors.

JIESC/BCOAPO/CEC-TGI-12.

TOPIC: NEB TQM Decision

REFERENCE: Evidence of Mr. Carmichael, Page 8

REQUEST

a) Can Mr. Carmichael confirm that the NEB's 2008 TQM decision applies specifically to the years 2007 and 2008 and only to TQM and that the NEB ROE formula is still in force for other pipelines and for TQM for subsequent years? If not confirmed, why not.
b) Can Mr. Carmichael speculate as to why such a major change in regulatory policy is restricted to only one Class 1 NEB regulated pipeline and only for two specific years?
c) Please confirm that almost all TQM's debt is up for renewal so that the market and embedded cost of debt is essentially the same. If not confirmed, why not.
d) Can Mr. Carmichael provide TGI's embedded cost of debt for each year since 2000, including a forecast for 2009?
e) If TGI is awarded a 6.4% ATWACC on its book value rate base similar to TQM, please estimate TGI's ROE using the 2009 embedded cost of debt. Please provide all the necessary calculations.
f) What tax rate would Mr. Carmichael recommend should be used with the ATWACC methodology adopted by the NEB; the statutory rate or a flow through rate?

JIESC/BCOAPO/CEC-TGI-13.

TOPIC: BC Economy

REFERENCE: Evidence of Mr. Carmichael, Page 15

REQUEST:

a) Mr. Carmichael indicates that the current Canadian recession will be milder than the last two and discusses the current state of the BC economy and then on page 41 raises this as a risk factor. Please provide TGI (and predecessor companies) actual and allowed ROE for each year since 1997 and identify the impact of incentive regulation on the actual ROEs.

b) How sensitive does Mr. Carmichael regard TGI's actual ROE to economic conditions and in his judgment does TGI's RSAM mitigate this sensitivity? If not, why not and to what degree does it not.

JIESC/BCOAPO/CEC-TGI-14.

TOPIC: LTC Yields

REFERENCE: Evidence of Mr. Carmichael, Page 17

REQUEST:

a) In the table on page 17 would Mr. Carmichael agree that the yield curve between 2005 and 2007 generally reflected a tightening monetary policy? taTt is, the Bank of Canada was deliberately forcing up interest rates to slow down the Canadian economy and that this policy was only changed in December 2007 after which the Bank started cutting rates to offset a slowdown? If not, why not?

b) Would Mr Carmichael agree that during the flight to quality following the collapse of Lehman Brothers, Treasury bill yields went negative in the US as investors were willing to put money into a "safe" short term investments for a guaranteed negative rate of return?

c) Can Mr. Carmichael provide the Canadian Treasury bill yield for the same periods as in the table on page 17 and confirm that these yields have collapsed from the 2.0% level of September 2008 to the 0.35% level of Spring 2009? If not confirmed, please provide weekly Canadian T Bill yields since August 2008.

d) Would Mr. Carmichael agree that during this tighter monetary policy period the LTC yields barely moved and that they only dropped below 4.0% in December 2008 as fears of a "Great Depression-2" and deflation started being raised?

e) Can Mr. Carmichael confirm that from December 2008 until the current period there has been no significant decline in the stock of long Canada bonds outstanding, so the decline in LTC yields can not be caused by a "supply" effect due to budget surpluses? If not confirmed, why not?

f) Can Mr. Carmichael confirm that LTC yields are now above 4.0% as deflationary fears have subsided and the recognition has set in that we are simply in a recession?

g) Given his answers to a)-f) above can Mr. Carmichael weight the three factors he gives in order of their importance in affecting current LTC yields?

JIESC/BCOAPO/CEC-TGI-15.

TOPIC: Credit Spreads

REFERENCE: Evidence of Mr. Carmichael, Page 21

REQUEST:

a) Please provide all the data underlying chart 4 on page 21 in Excel machine readable form so that the graph can be replicated.
b) Can Mr. Carmichael confirm that bonds are predominantly traded in a dealer market where the original underwriter normally commits to making a market in those bonds?
c) Can Mr. Carmichael confirm that following the near bankruptcy of the major US investment banks these dealer inventories were massively liquidated from September-December 2008 and the major US investment banks no longer bought bonds for the own account via proprietary trading, which is why liquidity in many areas of the bond market "virtually" disappeared?
d) Given his answer to c) above how much of the increase in corporate spreads would Mr. Carmichael ascribe to liquidity concerns and the unwillingness or inability of investment banks to hold corporate bonds in inventory to make a market?
e) Would Mr. Carmichael agree that the collapse in credit spreads from their peaks in March 2009 has coincided with a recovery in bank shares as fears of the failure of more US banks has subsided and US government intervention in support of its banks has allowed them to return to "normal" activities.
f) Can Mr. Carmichael update chart 4 and also provide the latest spreads for TGI?

JIESC/BCOAPO/CEC-TGI-16.

TOPIC: TGI Spreads

REFERENCE: Evidence of Mr. Carmichael, Page 22-33

REQUEST:

a) On page 24 Mr. Carmichael recognizes that spreads are volatile and cyclical (regular). Does he agree that from his table on page 22, the 5, 10 and 30 year credit spreads increased from 2006 to 2009 by 225, 208 and 171 bps respectively?

b) Can Mr. Carmichael further confirm from his table on page 33 that TGI's new issue yields changed over this same period by -4, 85 and 113 bps respectively?

c) Can Mr. Carmichael confirm that in February 2009 TGI issued long term debt and indicate its maturity.

d) Given that long term (10 year and above) debt involved an absolute increase in yield since 2006 and Mr. Carmichael acknowledges that these sorts of spread changes occur regularly, does he judge TGI to have acted prudently in issuing long term debt, rather than shorter term debt which they could then role over once markets returned to more normal conditions as they now have done?

e) As an investment banker would Mr. Carmichael have recommended a long term bond issue in February 2009 given the temporary liquidity conditions in the bond market and cyclically higher spreads? ,If the answer is yes, please indicate all Canadian non rate of return regulated companies that issued non-callable 30 year debt in the period January-May 2009 and the amount they raised.

JIESC/BCOAPO/CEC-TGI-17.

TOPIC: Earnings Yield

REFERENCE: Evidence of Mr. Carmichael, Page 30

REQUEST:

a) All else constant, what happens to the earnings yield of a company with very high growth prospects versus one with declining or negative growth prospects?

b) Can Mr. Carmichael explain the dividend discount, DCF, Gordon or constant growth model and explain what happens to the dividend yield if an investor wants a 10% rate of return and the expected growth rate changes from 4% to 6%?

c) Can Mr. Carmichael confirm that increases in both the earnings yield and dividend yield are also a natural consequence of a reduction in investor growth expectations? If not confirmed, why not?

d) Can Mr. Carmichael confirm that earnings and dividend growth expectations fall during a recession as corporate profitability declines? If not confirmed, why not?

e) Can Mr. Carmichael provide extracts of any testimony he filed indicating a decline in the cost of equity when the earnings yield and dividend yield were below their long run average values, for example in 2004?

JIESC/BCOAPO/CEC-TGI-18.

TOPIC: Investment Outflows

REFERENCE: Evidence of Mr. Carmichael, Page 33

REQUEST:

a) Mr. Carmichael refers to the investment outflows following the repeal of the foreign property rules. Please indicate the amounts of Canadian portfolio investment outflows since 1995 deflated by some aggregate measure that Mr. Carmichael deems appropriate such as GDP or total market capitalisation.

b) Given a) above when does Mr. Carmichael regard investment outflows as peaking and is the trend to increasing or decreasing outflows?

c) By diversifying into foreign markets is the risk of an average Canadian equity portfolio increased or decreased? That is, are foreign markets on average perfectly correlated with the Canadian market?

d) If foreign and Canadian equity markets are not perfectly correlated and risk is reduced what does basic financial theory say happens to the investor's required rate of return or cost of equity capital? If Mr. Carmichael says anything other than risk is reduced, please provide relevant citations to the literature.

JIESC/BCOAPO/CEC-TGI-19.

TOPIC: Investment Restrictions

REFERENCE: Evidence of Mr. Carmichael, Page 42

REQUEST:

a) Please provide all citations to regulations that prohibit Canadian institutions from holding sub A(low) rated corporate debt.

b) Please confirm that within the last twenty years both TransCanada Pipelines and Westcoast have been rated below A(low).

c) Please confirm that at the current point in time several Canadian utility holding companies are rated below A(low) by S&P.

d) Please confirm that the modal (median) bond rating for US utilities is below A(Low). If Mr. Carmichael cannot so confirm please provide the S&P bond ratings for all utilities and utility holding companies in the US as of the end of 2008.

JIESC/BCOAPO/CEC-TGI-20.

TOPIC: Concentric Report

REFERENCE: Evidence of Mr. Carmichael, Page 42

REQUEST:

a) Please confirm that the Concentric Energy report discussed on page 42 was produced by the same consulting firm that provided testimony on behalf of utilities in the recent AUC generic cost of capital hearing.
b) Please confirm that the Concentric report also shows that the US utilities had higher common equity ratios and lower bond ratings. If Mr. Carmichael cannot so confirm, please provide the common equity ratios for all the US utilities for which he is providing bond ratings in answer to c) above.
c) Please indicate how, if the business risk is the same between US and Canadian utilities, the Canadian utilities can have higher bond ratings while at the same time having lower ROEs and lower common equity ratios?

JIESC/BCOAPO/CEC-TGI-21.

TOPIC: ROE and A Spreads

REFERENCE: Evidence of Mr. Carmichael, Page 45

REQUEST:

a) Please confirm that the ROE in the table on page 45 is based on forecast LTC yields and explain the basis for the new issue TGI yield, that is, is this the average for the year, a forecast based on the same LTC yield forecast or what is it? Please provide the data to support this TGI yield.
b) Please estimate the ROE based on forecast LTC yields of 4.25% and 4.75%.
c) Please estimate the current new issue cost consistent with that estimated in the table on Page 45, based on a spread of 125 bps.
d) What spread between the ROE and TGI's borrowing cost would Mr. Carmichael judge to result in a fair and reasonable ROE.
e) Further to d) above, is Mr. Carmichael aware that utilities have in the past suggested that ROE formulae should remain intact as long as the ROE spread over the LTC yield were twice the spread of their borrowing costs over the LTC yield? Can Mr. Carmichael estimate and provide this value for each year in the table on page 45, for his current forecast LTC yield and that which is produced from his answers to b) and c) above?

JIESC/BCOAPO/CEC-TGI-22.

TOPIC: Broken ROE Formula

REFERENCE: Evidence of Mr. Carmichael, Page 47

REQUEST:

a) Can Mr. Carmichael provide a copy of the RBC report that categorically says that the formula is broken?
b) Can Mr. Carmichael confirm that the RBC report was written when LTC yields were at their cyclical lows?
c) In terms of the BMO capital markets report, can Mr. Carmichael indicate whether in his judgment increasing the allowed ROE can ever be viewed as bad news for bond holders?
d) Please provide the most recent copy of the BMO credit weekly.

Evidence of Ms. McShane

JIESC/BCOAPO/CEC-TGI-23.

TOPIC: Comparable Earnings Testimony

REFERENCE: Evidence of Ms. McShane Pages 3-4

REQUEST:

a) Please indicate (with full references and citations) any ROE decisions by a Canadian regulator in the last ten years that has placed any weight on comparable earnings testimony in the manner developed by Ms. McShane for TGI.
b) Please indicate (with full references and citations) any ROE decisions by a Canadian regulator in the last twenty years that has placed any weight on comparable earnings testimony in the manner developed by Ms. McShane for TGI without a market to book adjustment.
c) Please indicate (with full references and citations) any ROE decisions by a Canadian regulator in the last ten years that has placed any weight on discounted cash flow estimates in any manner, particularly as implemented by Ms. McShane for TGI.
d) Please indicate (with full references and citations) any ROE decisions by a Canadian regulator in the last ten years that has placed any weight on direct evidence of the fair ROE derived from US utilities or US stock market performance.

JIESC/BCOAPO/CEC-TGI-24.

TOPIC: Fair Return Standard

REFERENCE: Evidence of Ms. McShane Pages 5-6

REQUEST:

a) Does Ms. McShane accept Mr. Justice Lamont’s definition of a fair rate of return quoted in A1 as a return on other securities of equal attractiveness, stability and certainty to that of the company’s enterprise? If not why not?
b) Would Ms. McShane accept that Mr Justice Lamont’s definition came out of changed conditions in the money market and it is to the money market (now capital) market that we should look to estimate fair rates of return? If not why not?
c) Given her answers to a) and b) would Ms McShane accept that the yield on government securities, as a default free instrument, is an accurate

reflection of investor expected returns from holding those securities? If not why not?

d) Would Ms. McShane accept that the cornerstone of any discount rate or required rate of return or fair rate of return is the risk free rate from investing in Government of Canada securities? If not why not?

e) What other “objective” factors that all expert witnesses can agree on, can Ms. McShane point to that drive equity return requirements or fair rates of return, other than the yields on Government of Canada bonds? Please list them and indicate why she feels that they are both objective and commonly accepted by other expert witnesses? If necessary please provide citations to other expert witness testimony both on the part of companies and interveners.

f) Please provide a full list of all ROE adjustment formulae currently in use in Canada, when they were first adopted and when they have been reviewed and/or changed.

g) Please indicate whether Ms. McShane judges the reviews indicated in f) above to have been comprehensive and the decisions based on all the evidence put before them by both the company and intervener witnesses; or whether a particular decision was based either on incomplete evidence or faulty analysis.

h) Please indicate whether Ms. McShane would judge similar conclusions made by regulatory tribunals faced with the same sorts of analyses to involve circular reasoning or the lack of independent analysis by the regulatory tribunal involved. In particular, which tribunals would Ms. McShane judge to have been negligent in arriving at their decision on their ROE formula?

i) Please indicate which tribunals Ms. McShane provided expert testimony to when their ROE formula were either implemented or changed and which she regards as having used circular reasoning rather than basing their decisions on the evidence before them.

JIESC/BCOAPO/CEC-TGI-25.

TOPIC: Long Canada Bond Yields

REFERENCE: Evidence of Ms. McShane Page 6

REQUEST:

a) For the decline in long Canada bond yields please provide evidentiary support for the notion that equities are not “locked in” similar to long bonds. In particular is it Ms. McShane’s view that equities performed well during the 1970s when inflation reached into double figures in Canada? If so please provide evidentiary support.

b) In terms of the supply impact on Long Canada yields, please define what she understands by the break-even inflation rate (BEIR) and confirm that the yield on the nominal bond is depressed for whatever reason the BEIR is a biased low estimate of future inflation? If she can not so confirm please explain why not?

c) If in b) above Ms. McShane feels that the yield on the real return bond is similarly depressed, please provide all evidentiary basis for the conclusion that the supply impact is equally felt in these two areas of the bond market.

d) Please provide all evidentiary support that the current BEIR is a biased low estimate of future inflation.

JIESC/BCOAPO/CEC-TGI-26.

TOPIC: Comparability of US Utilities

REFERENCE: Evidence of Ms. McShane Page 8

REQUEST:

a) Would Ms. McShane agree that the US and Canadian banking systems, like the utilities, have a similarity in their business and operating environment? If not please discuss the technological differences in US vs Canadian banking.

b) Please list all the Canadian and US banks that have either failed or been taken over due to fears surrounding their future profitability, solvency or viability over the last two years.

c) Please list all the Canadian and US utility holding companies that have either failed or been taken over due to fears surrounding their future profitability, solvency or viability over the last ten years.

JIESC/BCOAPO/CEC-TGI-27.

TOPIC: US Fair Return Awards

REFERENCE: Evidence of Ms. McShane Page 9

REQUEST:

a) Ms. McShane refers to US regulators using a variety of cost of equity tests. Please indicate for each of the US utilities in her US tests how their allowed ROE was last set and the weights that the regulator applied to each cost of equity test.

b) Further to a) above please indicate (complete with citations) which US jurisdictions apply any material weight to either the comparable earnings test as implemented by Ms. McShane or CAPM.
c) Please indicate the “average” period between rate reviews for the US utilities included in Ms. McShane’s sample and whether regulatory lag would tend to increase or decrease the sensitivity of a US utility’s allowed ROE to interest rate changes.
d) Further to c) above please confirm that Ms. McShane’s 0.55 estimate comes from regressing the allowed ROE against actual (lagged) and not forecast long term interest rates.

JIESC/BCOAPO/CEC-TGI-28.

TOPIC: Karen Taylor’s Remarks

REFERENCE: Evidence of Ms. McShane Page 11

REQUEST: In terms of Karen Taylor’s remarks please confirm that these were made after TransCanada took a request for review and variance of the NEB’s confirmation of its ROE formula in 2001 to the Appeals Court and were rejected.

JIESC/BCOAPO/CEC-TGI-29.

TOPIC: Default Risky Bond Yields

REFERENCE: Evidence of Ms. McShane Page 11

REQUEST:

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.
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.
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 into 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.
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.

e) On Page 12 Ms. McShane refers to the difference between the allowed ROE and the TGI bond yield as being 2.4-2.7% in 1999 and 2006. If this difference increases from the referenced 1.4% at the time of her testimony back to 2.0-2.7% level at the time of the hearing would Ms. McShane accept the Board's ROE formula as being reasonable? If not why not?

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 less than half the spread between "A" rated utility debt and the equivalent term long Canada bond. Can Ms. McShane confirm this condition and would she accept the BCUC's ROE formula satisfied this condition? If not why not?

JIESC/BCOAPO/CEC-TGI-30.

TOPIC: Risk Assessments

REFERENCE: Evidence of Ms. McShane Pages 12-13

REQUEST:

a) Please indicate whether share prices fall when investors perceive the economy is going into recession and earnings are expected to fall?

b) Given Ms. McShane's answer to a) above how much of the increase in dividend yields does she allocate to declining growth in earnings versus increases in risk aversion? Please explain in full.

c) Please indicate whether or not the value of the VIX is the implied volatility from a call option on the TSX60 index.

d) Please indicate all financial and economic theory that indicates that observing an increase in volatility means that investor risk aversion or attitude towards risk has increased.

e) Please indicate whether Ms. McShane accepts basic financial theory that an investor's risk premium is determined by the product of the perceived risk and risk aversion. If not why not?

JIESC/BCOAPO/CEC-TGI-31.

TOPIC: NEB's TQM Decision

REFERENCE: Evidence of Ms. McShane, Page 16

REQUEST:

a) With reference to the NEB's TQM decision please provide the full passage in the decision that indicates that the NEB believes that US companies were relevant proxies for the cost of capital for ***all*** Canadian utilities rather than pipelines that have pipe on both sides of the border and are fully integrated into one continental pipeline system.
b) Please confirm that the NEB's TQM decision was specifically restricted to TQM for 2007 and 2008 just as its 2001 decision was restricted to the TransCanada Mainline.
c) Please indicate whether the NEB regarded TQM's business risk as having increased or decreased since 1994 and why.
d) Please indicate whether in its 2001 and 2004 decision the NEB regarded the TransCanada Mainline's business risks as having increased or decreased and how the NEB responded to that assessment.

JIESC/BCOAPO/CEC-TGI-32.

TOPIC: Fair Return Standard

REFERENCE: Evidence of Ms. McShane, Pages 18-28

REQUEST:

a) With reference to the fair return standard and Ms. McShane's prior references to the NEB's TQM decision, please indicate whether the NEB stated that there were three standards or three implications of one standard and provide the full statement and citation.
b) Does Ms. McShane regard the rates that Canadian utilities have been paying for debt capital as fair and reasonable?
c) Please provide all the weekly copies of the RBC publication listed on page 28 since January 2, 2007.

JIESC/BCOAPO/CEC-TGI-33.

TOPIC: Comparable Returns

REFERENCE: Evidence of Ms. McShane, Page 30

REQUEST:

a) Would Ms. McShane agree that when market interest rates go down, older equivalent maturity bonds with higher interest rates sell on higher prices so their yields to maturity, based on current market prices are approximately the same? If not why not?
b) In accessing the debt markets does Ms. McShane believe that an entity has to issue debt at the old higher interest rate in order to compete with those higher interest rate bonds or that bonds can be issued at the new lower market interest rate? Please explain in detail.
c) If bonds can be issued at the new lower market interest rate would Ms. McShane accept that a firm can raise capital even when there are bonds with higher coupon rates in the market? Would Ms. McShane agree that such a situation does not compromise the fair return standard? If she disagrees please explain in detail.
d) If a utility in another jurisdiction has a higher allowed ROE due to regulatory lag would Ms. McShane argue that this compromises the fair return standard based on the arguments on page 30?
e) Please explain in detail whether allowing a lower ROE based on current capital market conditions violates the fair return standard if other utilities are on higher allowed ROEs due to regulatory lag.

JIESC/BCOAPO/CEC-TGI-34.

TOPIC: Business Risk

REFERENCE: Evidence of Ms. McShane, Page 31

REQUEST:

a) Please provide a cost comparison of natural gas against its major competitor fuels (fuel oil and electricity) for TGI's major rate classes for each year since 2000.
b) Please indicate TGI's current depreciation rate based on its major asset classes for each year since 2000.
c) Please file a copy of the last depreciation study TGI filed with the BCUC.
d) Please indicate whether TGI has filed any material change statements in regards to its business risk over the last five years and provide copies.

e) Please indicate whether the MD&A discussion in regulatory filings with the OSC accurately reflect the company's view of its business risk.

f) Please indicate whether in Ms. McShane's view TGI has greater lesser or equivalent business risk to EGDI, Union Gas and ATCO Gas and provide the supporting rationale.

g) Please indicate the extent to which Ms. McShane's business risk assessment has taken into account the RSAM available to TGI relative to EGDI, Union Gas and ATCO Gas.

h) Please indicate the extent to which Ms. McShane's business risk assessment has taken into account the composition of revenues earned by TGI relative to EGDI, Union Gas and ATCO Gas, that is, revenue broken out according to industrial, commercial and residential revenue.

i) Please provide the revenue breakdown for TGI, EGDI, Union Gas and ATCO Gas according to industrial, commercial and residential revenue for each year since 2000.

j) Please provide the annual growth in rate base for TGI, EGDI, Union Gas and ATCO Gas for each year since 2000 and the forecasts for 2009 and 2010.

JIESC/BCOAPO/CEC-TGI-35.

TOPIC: Relative Credit Metrics

REFERENCE: Evidence of Ms. McShane, Pages 32-40

REQUEST:

a) With reference to the comparison with the TransCanada pipelines please confirm the following:
   a. The 36% for Foothills and the TCPL BC System and 40% for the Mainline arose from negotiated settlements where other items were traded off by the shippers. If not confirmed, why not.
   b. For the Mainline please confirm that the shippers negotiated for the Mainline to repurchase its junior subordinated debentures (JSDs) and apply the capital gain to reduce tolls. If not confirmed, why not.
   c. The NEB regards the business risk of all the export pipelines as having increased due to the maturing of the WCSB and has also increased their depreciation rate accordingly.
   d. Shale gas development may have a material effect on natural gas reserves and production.
   e. Please file the latest TransCanada throughput study.

b) For the electric transmission and distribution companies on page 33:

a. Please confirm that the Union Gas 36% common equity was the result of a negotiated settlement and indicate what the interveners traded off to agree to the increase.
b. For the Electric distribution companies (Discos) please confirm that the OEB simply removed the lower common equity ratio of 35% and moved all Discos to the same 40% so that the vast bulk of the Ontario Discos had an unchanged common equity ratio. If not confirmed, why not.

c) With respect to the unsolicited rating by S&P please provide the ratings history of TGI by S&P, the reasons why TGI stopped paying for the rating and the press release when the decision was announced.

d) With respect to the Moody's quote on page 35 please provide the full quote and confirm that Mr. Carmichael's quotation on page 39-40 is accurate and that Moody's regards the BCUC's protective regulatory environment as offsetting the straight statistical comparison.

e) Please explain why Ms. McShane feels that it is not necessary to note Moody's judgment of the supporting nature of the BCUC regulatory environment.

f) With respect to the Canadian utilities please calculate the ratios in Schedules 5 separately for the private investor owned and government owned utilities and explain why Ms. McShane chose to compare TGI with Crown and government owned entities rather than private investor owned utilities.

g) For the US utilities in Table 6 Ms. McShane has restricted her sample to utilities with "A" bond ratings. Please provide equivalent data for ***all*** US utilities regardless of their bond rating so the total population of US utilities can be analysed similar to the total population of Canadian utilities that she uses.

h) Please provide the schedules Ms. McShane used for US electric utilities in her Ontario Power Generation testimony in 2007 and explain in detail why she has chosen to compare the total ***population*** of Canadian utilities to a restricted ***sample*** of US utilities.

JIESC/BCOAPO/CEC-TGI-36.

TOPIC: Long Canada Forecast

REFERENCE: Evidence of Ms. McShane, Page 44

REQUEST:

a) Please update your long Canada forecast for 2010 and provide the referenced pages from the Consensus forecast.

b) Is it Ms. McShane's judgment that the Consensus Economics forecast has been and is an accurate forecast of the future long Canada yield? If so, please provide the evidentiary basis for this.

c) Please indicate why the best forecast for next year's 30 year yield cannot be obtained from the current yield curve?

JIESC/BCOAPO/CEC-TGI-37.

TOPIC: Investment Flows

REFERENCE: Evidence of Ms. McShane, Pages 45-7

REQUEST:

a) If only 47% of Canadian outward portfolio investment is to the US why should sole reliance be placed on historic US equity risk premiums?

b) If US interest rates are expected to be 0.20% higher than in Canada why would we expected equity rates of return to be the same?

c) In Ms. McShane's judgement is the US treasury yield a correct indicator of a US risk free rate in view of the US$ position as the world's reserve currency? If Ms. McShane believes it to be unaffected by liquidity considerations please provide the evidentiary basis for such an assumption.

d) On page 49 Ms. McShane estimates the realized arithmetic market risk premium in Canada at 4.6%, but in her estimates she uses 6.75% (page 57). Please provide the evidentiary basis for assuming that Canadian investors will earn an average 2.15% going forward more than they have earned for the last 60 years. In other words how are they going to earn this extra risk premium?

e) In light of d) above and the reduction in investment barriers, if capital leaves Canada for other areas due to higher rates of return, is it Ms. McShane's judgment that a reduction in demand for Canadian equities will increase or decrease their value? If the answer is decrease, how can Canadian investors expect to earn higher returns in the future?

JIESC/BCOAPO/CEC-TGI-38.

TOPIC: Investment Flows

REFERENCE: Evidence of Ms. McShane, Page 51

REQUEST:

a) Ms. McShane calculates the average common equity return in Canada on page 51 over different time horizons. Please provide the average CPI rate of inflation over those same time horizons and the real rate of return.

b) Please indicate what Ms. McShane's forecast long run inflation rate is and the expected return on the Canadian equity market given the real rate of return estimated in a) above. If the long run inflation forecast exceeds the mid point of the Bank of Canada's range please indicate why she expects the Bank not to be able to enforce its policy objectives.

c) In the calculation of the market risk premium of 6.75% would she agree that the realized inflation rate over the period that generated the 11.0-12.0% equity return differs from the inflation forecast implicit in the current 4.25%-5.25% forecast long Canada bond yields? Why or why not?

JIESC/BCOAPO/CEC-TGI-39.

TOPIC: Relative Standard Deviations

REFERENCE: Evidence of Ms. McShane, Page 52

REQUEST: Please provide all evidentiary support for the proposition that relative risk can be measured by the ratio of the standard deviations of two undiversified portfolios.

JIESC/BCOAPO/CEC-TGI-40.

TOPIC: Risk Measures

REFERENCE: Evidence of Ms. McShane, Page 54

a) On page 54 Ms. McShane notes the low R Squared of her regressions, please indicate why 32% is low and what the benchmark is for assessing explained variance in stock market returns.

b) Please explain in full why she chose the time period 1970-2008 rather than the full period for which data is available?

c) Please provide a graph of the actual and fitted values for the two regression equations on page 52.

d) Please indicate whether or not the 2.25% on page 55 reflects the intercept of the two equations on page 54. If so provide the calculations in full as to how she obtained them from the intercept values on page 54. If not please explain.

e) Please explain why the BCUC should place any reliance on an unexplained factor on the assumption that whatever it is it will repeat itself?

f) With reference to e) above, would Ms. McShane agree that one reason for the higher returns could be the improved regulatory environment as represented by the adoption of forward test years, the removal of the commodity function, fuel pass-throughs, the increased use of deferral accounts, the adoption of ROE formulae, since these have made utilities progressively lower risk and more valuable? If not please explain how these risk reduction changes would show up in her regression model when she uses fixed coefficients, that is, the risk factors (betas) are constant throughout the time period.

g) Please provide citations to any and all Canadian regulatory decisions that have approved the use of adjusted betas by "squashing" them with 1.0 as indicated on page 55.

JIESC/BCOAPO/CEC-TGI-41.

TOPIC: Risk Premium Fair Return Estimates

REFERENCE: Evidence of Ms. McShane, Page 57

a) In this testimony Ms. McShane uses a utility risk adjustment (beta) of 0.65-0.70 and a market risk premium of 6.75%. For each Canadian case where she has filed testimony since 1995 can she please provide her benchmark beta and her market risk premium estimates and explain why they have changed over time.

b) Please provide the allowed ROE for TGI with the current formula ROE at Ms. McShane's forecast 4.25-5.25% long Canada bond yields.

c) Please confirm that in her 2007 OPG testimony Ms. McShane recommended that the OEB formula ROE should not be reviewed unless the forecast long Canada bond yield fell outside of a range from 3.0% to 8.0%.

JIESC/BCOAPO/CEC-TGI-42.

TOPIC: Risk Comparisons

REFERENCE: Evidence of Ms. McShane, Page 58

a) Please provide all statistical work that Ms. McShane has performed to justify the assumption that US utilities are comparable in risk to TGI.
b) Please confirm that the Concentric report referenced in footnote 62 was authored by the same people who appeared as expert witnesses on behalf of various utilities in the Alberta Utilities Commission’s 2008 generic cost of capital hearing.
c) Please explain why the BCUC should give more weight to the Concentric report than any other utility sponsored expert testimony that has been presented over the last two years.
d) Please confirm that Ms. McShane appeared alongside the authors of the Concentric report in the recent AUC generic hearing on behalf of several Alberta utilities. Explain why this is not mentioned in her report.

JIESC/BCOAPO/CEC-TGI-43.

TOPIC: Risk Comparisons

REFERENCE: Evidence of Ms. McShane, Page 59

a) Please provide in an Excel readable format the full data set used in the analysis on page 59, that is, the monthly dividend yield, growth forecast and treasury yield from March 1991 to March 2009 for the US utilities.
b) Please provide separately a regression equation similar to that in Schedule 12 of the dividend yield against the explanatory variables and the growth forecast against the explanatory variables.
c) At the bottom of page 60 Ms. McShane jumps from the regression results based on US data to discussing the impact of the long term Canada yield. Please indicate whether she judges the Government of Canada’s bond issues to be those of a reserve currency with a similar international demand to those issued by the US government.
d) Would Ms. McShane agree that US government bond yields are lower than would be the case if the US was not the world’s reserve currency and her market risk premium estimates correspondingly lower? If not why not?
e) Can Ms. McShane agree that TGI’s bond spreads over long Canadas have now dropped by a further 75 basis points since the time of her testimony

which with her coefficient on the spread of 1.23 indicates a drop in the fair rate of return of almost 1.0%? If not why not.

f) Further to e) above please update the rate of return estimate to reflect Ms. McShane's current interest rate forecast and TGI's current spread.
g) Please indicate whether in Ms. McShane's judgment a utility regulator should pass through all the volatility observed over the last year in A spreads into the allowed ROE or whether the regulator should take a longer term view of spreads that clearly fluctuate with the business cycle?

JIESC/BCOAPO/CEC-TGI-44.

TOPIC: Experienced Returns

REFERENCE: Evidence of Ms. McShane, Page 62

a) With reference to experienced returns on utilities, please indicate whether or not these returns would be higher or lower if allowed ROEs were systematically set too high and too low?
b) Please estimate these experienced returns for the two sub periods 1956 (1947)-1981 and 1982-2008 and whether in her judgement the "risk premia" are the same in both periods.
c) Please discuss any differences and why such estimates are not circular in reflecting pervious regulatory decisions.
d) Please indicate any Canadian regulator which has explicitly placed any reliance on such experienced returns.

JIESC/BCOAPO/CEC-TGI-45.

TOPIC: DCF Tests

REFERENCE: Evidence of Ms. McShane, Page 65

a) With reference to the accepted optimism of analyst growth forecasts, please indicate the regulatory bodies who have questioned their reliability and any bodies that have accepted them and based their ROE awards on them without adjustment.
b) Please provide all evidence that "sell side" analyst forecasts are accepted by investors and fully incorporated into equity prices. Further please indicate why "buy side" analysts exist if sell side analyst's views are fully incorporated into equity prices?
c) Please indicate how the well accepted analyst optimism bias is removed even if they are accepted and fully incorporated into equity prices given that analysts disagree? That is, which analyst forecasts are fully incorporated into equity prices and why would it be the median or average when a new analyst has an incentive to give a radical forecast to distinguish them from the crowd?

d) Please indicate why Ms. McShane believes that a private forecaster like Value Line whose estimates are not widely available is more likely to have their forecasts impounded into equity prices than other forecasters? Please indicate the annual cost of a Value Line subscription.
e) Please provide the annual dividend per share for each of the firms in her US DCF sample both individually and as a sample average and provide a time series regression of their annual dividend per share growth rate against the growth rate in nominal US GDP to verify the assumption that growth rates will taper off to the long run GDP growth rate.
f) If these utilities are comparable to a mature utility like NP please justify in full why a mature company is likely to grow at the average GDP growth rate. That is, where is the "room" for above average growth companies in GDP growth if mature companies are growing at the GDP growth rate?

JIESC/BCOAPO/CEC-TGI-46.

TOPIC: Overall Recommendation

REFERENCE: Evidence of Ms. McShane, Page 73

a) Ms. McShane recommends a fair ROE of 11.0% on a 40% common equity ratio. Please indicate any Canadian local distribution company (gas or electric) that is allowed to earn 11.0% or more on 40% or more common equity and provide the specific circumstances of those utilities.
b) Please confirm that in explicitly considering the usefulness of ATWACC the EUB stated (Decision U-99099, page 300)

"The Board observes that the intrinsic long-run value of a pure play regulated entity is best represented by book value. In other words, the present worth of future regulated earnings, discounted at the allowed return, is by definition equal to book value assuming achieved regulated earnings on average equal allowed regulated earnings. Accordingly, the Board considers that book capitalization represents the best indicator of the long-run market capitalization for a pure play regulated firm."

c) Please also confirm that in the same decision (U99099, page 303) the AEUB stated:

"The Board would be derelict in its statutory responsibilities to recognize market capitalization ratios that are derived from a market value capitalization that deviates from the intrinsic long-run value of the regulated firm."

d) Please explain why the BCUC should accept a methodology that is based on using market values that are significantly above the regulated book values when this indicates that investors have, by definition, earned an above average rate of return and bid up the value of the regulated assets.

e) Please confirm that if the value of regulated assets significantly exceeds their book value and the ROE has consistently been fair then by definition the investor then earns an above average rate of return. If not why not and explain in detail.

JIESC/BCOAPO/CEC-TGI-47.

TOPIC: Risk Free Rate

REFERENCE: 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 56.
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.

JIESC/BCOAPO/CEC-TGI-48.

TOPIC: Financial Flexibility

REFERENCE: Evidence of Ms. McShane, Appendix E

a) Ms. McShane’s financing flexibility adjustment on page E-4 is explicitly based on targeting a market to book ratio of 1.05-1.1 so that the utility can issue stock at above book value. In her judgment is such an adjustment still needed if the market to book is for example 2.0 such that there is no chance of selling stock below book value even before a financing flexibility adjustment. Please explain in full.

JIESC/BCOAPO/CEC-TGI-49.

TOPIC: Overall Recommendation

REFERENCE: Evidence of Ms. McShane, Appendix F

a) Please provide the underlying data [in Excel format] used to construct Figure F-1 and provide the source documents.

b) Please provide the underlying data used to construct Figure F-2 and provide the source documents in addition please provide the ROE consistent with the data.

Evidence of Dr. Vander Weide

JIESC/BCOAPO/CEC-TGI-50.

TOPIC: Background of Dr. Vander Weide

REFERENCE: Evidence of Dr. Vander Weide

REQUEST:

a) Please provide a copy of the research summary for Dr. Vander Weide and copies of all working papers listed on Duke University's web site for Dr. Vander Weide.
b) Please provide copies of all research publications by Dr. Vander Weide during the last twenty years, that is, since 1988.
c) Please indicate all testimony filed by Dr. Vander Weide in a utility rate hearing since 1988 that was sponsored by an entity, *other* than the utility being examined and the name of the sponsoring party.

JIESC/BCOAPO/CEC-TGI-51.

TOPIC: ROE Formula

REFERENCE: Evidence of Dr. Vander Weide, Page 8

REQUEST:

a) Dr. Vander Weide's estimate of the BCUC formula return relies on the Consensus Economics long bond forecast yield of 3.69%. Please provide the relevant pages of this forecast, and indicate whether it is for the 30 year or 10 year bond.
b) Please update this forecast and ROE estimate using the latest data.

JIESC/BCOAPO/CEC-TGI-52.

TOPIC: Achieved Utility Returns

REFERENCE: Evidence of Dr. Vander Weide, Page 10 on

REQUEST:

a) Is Professor Vander Weide aware of any Canadian regulatory board that has specifically accepted achieved returns on utility holding companies as an estimate of the ex ante risk premium for regulated utilities?

b) Can Professor Vander Weide confirm that if due to regulatory lag the allowed ROE is not decreased with market interest rates and fair returns, then utility stock prices will increase in response to the higher than fair allowed return? If not confirmed, why not?
c) Can Professor Vander Weide confirm that achieved returns by utility holding companies in part reflect the actions of the regulator in changing the fair return in response to market conditions? If not confirmed, can Dr. Vander Weide discuss in detail why investors in utilities do not react to the decisions of regulators in terms of the fair return?
d) If Dr. Vander Weide accepts that achieved returns in part reflect the actions of regulators, can he explain why such evidence should not be regarded as circular? Further if it is regarded as circular in reflecting in part the actions of the regulator, please explain how this can be regarded as objective evidence as to expected returns.

JIESC/BCOAPO/CEC-TGI-53.

TOPIC: Achieved Utility Returns

REFERENCE: Evidence of Dr. Vander Weide, Page 10 on

REQUEST:

a) Please discuss the composition of the "legacy" utility sub index of the TSE prior to 1999 and whether it includes regulated and non-regulated activities.
b) Please discuss whether BCE and Nortel were a part of the legacy utility sub-index and whether this introduces a bias into the achieved return.
c) Please discuss why Dr. Vander Weide did not use either the electricity or gas sub indexes of the legacy TSE index, or the pipeline index instead of the overall utility sub index.
d) Can Dr. Vander Weide explain whether or not pipelines have ever been a part of the legacy TSX utility sub index?
e) With reference to footnote 2, please confirm that it was the TSE300 and its constituent sub indexes that was discontinued in 2002 when the TSX sub contracted out the maintenance of its indexes to S&P and that S&P played no role in the management of the TSE's indexes until that date.

JIESC/BCOAPO/CEC-TGI-54.

TOPIC: Achieved Utility Returns

REFERENCE: Evidence of Dr. Vander Weide, Page 13, Table 1

REQUEST:

a) Would Dr. Vander Weide confirm that utility shares are regarded as interest sensitive since they generally have relatively large dividend yields? If not confirmed, can Dr. Vander Weide please provide the dividend yields of the comparables in Table 1 and the dividend yield on the TSX Composite for the same time periods.
b) Would Dr. Vander Weide agree that interest rates have declined since 1983 and as a result interest sensitive investments like utility shares have earned returns above what was expected? If not agreed, can Dr. Vander Weide please provide a table of long Canada interest rates for each year since 1956?
c) In Dr. Vander Weide's judgement, can some of the higher experienced risk premium earned by the BMO utility sample since 1983 relative to that of the TSX utility group since 1956 be due to the decline in interest rates since 1983? If not please explain in detail.
d) In view of Dr. Vander Weide's judgment on page 8 that "it is best to use long run periods of history," why should any weight be placed on the period since 1983, rather than the longer period since 1956?
e) Please provide the return on the long Canada bond for the two sub periods in Table 1 from the same CIA source used to obtain the yields.

JIESC/BCOAPO/CEC-TGI-55.

TOPIC: TSX Utilities

REFERENCE: Evidence of Dr. Vander Weide, Page 13, Table 1

REQUEST:

a) Please confirm that most of the firms listed as TSX utilities are power firms (electricity generation).
b) Please discuss why Professor Vander Weide uses a BMO index as well as a TSX index and his involvement with personnel from BMO in developing his testimony and knowledge of Canada,
c) Please discuss the rate of return regulated activities of TransAlta.

d) Please discuss in full Dr. Vander Weide's risk ranking of TGI relative to TransAlta and the other Canadian unregulated power firms included in the TSX utilities group.

JIESC/BCOAPO/CEC-TGI-56.

TOPIC: 0.50 bp Adjustment to Long Canada Bond Yields

REFERENCE: Evidence of Dr. Vander Weide, Page 17

REQUEST:

a) Is Professor Vander Weide aware and agree that if the "beta " of a utility is 0.50, then using an adjustment mechanism of 0.50 means that the market expected return is invariant to interest rate changes? If not in agreement, why not?
b) Does Professor Vander Weide believe that the expected return on the market is invariant to changes in interest rates?
c) Does Professor Vander Weide believe in the CAPM and does he believe that CAPM expected rates of return are invariant to changes in interest rates?
d) Does Professor Vander Weide teach the CAPM and portfolio theory? If so, please provide a copy of his most recent course outlines.
e) Please discuss if the volatility attached to utility stocks is idiosyncratic and can be removed through diversification or not.
f) Please confirm that the only risk comparison in Dr. Vander Weide's testimony is the statement on page 16 that Canadian utilities have more regulatory risk due to the fact that they have formula determined ROEs. If not please explain in full where and on what basis he has assessed the risk of TGI relative to his sample of US utilities.

JIESC/BCOAPO/CEC-TGI-57.

TOPIC: US and Canadian Utility Comparability

REFERENCE: Evidence of Dr. Vander Weide, Page 16

REQUEST:

a) Dr Vander Weide claims that US and Canadian utilities are similar in terms of business risk because they use the same technology, have the same underlying economics and the same regulatory principles, would he agree that the same principle applies to banking since both countries enforce the same regulatory principles set by the Bank for International Settlements (BIS)? If not agreed, why not? Outline in what ways the US and Canadian utilities are dissimilar.

b) Please indicate all Canadian and US banks that have either failed or been forcibly acquired over the last two years.

c) Is Dr. Vander Weide aware of the new proposals in the US outlined by President Obama to remedy the regulatory failures evident in the US financial system? Briefly outline the proposals.

d) Can Dr. Vander Weide explain what he understands by "light handed" regulation in the US and whether this has had any influence on the failures of the US regulatory system?

e) Can Dr. Vander Weide please indicate which of the companies in his US utility samples in Exhibits 5 & 6 are regulated on an historic cost rather than a forward test year basis, and whether the allowed ROE should be the same regardless of the test year basis of the rate base to which it is applied.

JIESC/BCOAPO/CEC-TGI-58.

TOPIC: Forward Looking Utility Risk Premiums

REFERENCE: Evidence of Dr. Vander Weide, Page 17 on

REQUEST:

a) Can Dr. Vander Weide please confirm that his forward looking estimates are based on analyst forecasts compiled from the IBES data base?

b) Please provide all analyses that Professor Vander Weide has performed to correct for the well known optimism bias attached to analyst forecasts.

c) Please provide copies of any research performed by Dr. Vander Weide on the unbiased nature of analyst forecasts during the period up to 2002 when US investment banks in the Global Settlement admitted that such forecasts and reports were biased.

d) Can Dr. Vander Weide please confirm that his "forward looking estimates are based in part on data from the period when US investment banks have admitted that US security analyst reports were biased.

e) Can Dr. Vander Weide confirm that unlike other witnesses, like Ms. McShane, he has not moderated his use of analyst growth estimates by tapering them to a longer run forecast based on GDP growth estimates?

JIESC/BCOAPO/CEC-TGI-59.

TOPIC: DCF Implied Risk Premiums

REFERENCE: Evidence of Dr. Vander Weide, Page 18-20

REQUEST:

a) Please provide the full regression model [in Excel format if possible], complete with standard statistics, estimated for the equation on page 20 and the actual estimate that produces the forward looking risk premia of 7.5-8.0%.
b) Please break out the data in Exhibits 5 & 6 into the dividend yield and growth components and provide the monthly data back to September 1999.
c) Please provide a separate regression analyses based on the difference between the dividend yield and the long bond yield and the growth component and the long bond yield equivalent to the equation on page 20, complete with all the underlying statistics.
d) Please provide the basic regression statistics attached to the latest DCF utility risk premium estimate of 4.40% and explain in detail why this is not the best estimate of the utility risk premium in the US.
e) Please explain why estimating a regression equation on historic data and using a forecast interest rate is "better" than simply using the latest DCF estimate.

JIESC/BCOAPO/CEC-TGI-60.

TOPIC: DCF Implied Risk Premiums

REFERENCE: Evidence of Dr. Vander Weide, Page 18 & Page 54

REQUEST:

a) Dr. Vander Weide uses a quarterly dividend discount model. Please provide all evidentiary support for the assumption that utilities increase their dividends on a quarterly basis.
b) Please provide the quarterly dividend for TransCanada, Enbridge Inc, Canadian Utilities, Emera and Fortis since 2000.
c) Please provide any published academic literature that supports the application of a quarterly dividend discount model to determine the fair ROE for a utility.
d) Please indicate whether awarding a fair ROE based on the current annual dividend updated by its annual growth rate allows the investor to earn a quarterly rate of return by reinvesting the quarterly dividend.

JIESC/BCOAPO/CEC-TGI-61.

TOPIC: Standard Deviation Risk Assessments

REFERENCE: Evidence of Dr. Vander Weide, Page 23

REQUEST:

a) Please indicate any research Dr. Vander Weide is aware of (with relevant citations) that bases risk assessments on the ratio of two standard deviations for undiversified portfolio's.

b) Please indicate that if the standard deviation of the utilities sub index were higher due to fully diversifiable risk factors, such as interest rate changes, then this risk assessment process overstates utility risk. If not agreed, why not?

c) In Table 3 please regress the returns of the BMO and TSX utility index on both the TSX market return and the return on the long Canadian bond obtained from the same Canadian Institute of Actuaries data base that Dr. Vander Weide used to obtain yield estimates and report the results and relevant statistics.

d) Given c) above does Dr. Vander Weide believe that utilities are interest rate sensitive investments and does he believe this risk is priced by investors?

JIESC/BCOAPO/CEC-TGI-62.

TOPIC: TGI Yield Spreads

REFERENCE: Evidence of Dr. Vander Weide, Page 25

REQUEST:

a) Please update Dr. Vander Weide's estimate of the current and forecast long Canada (30 year) bond yield and the yield on TGI's long term debt.

b) Has the decline in TGI's spread over the long Canada bond yield since the time of Dr. Vander Weide's testimony caused him to reconsider his recommendations?

c) If TGI's spread tightened back to the 120 bps level and the long Canada bond yield increased to 4.5%, both consistent with a strong economy, would Dr. Vander Weide accept that the BCUC formula ROE was fair and reasonable? If not agreed, why not?

JIESC/BCOAPO/CEC-TGI-63.

TOPIC: Utility WACC

REFERENCE: Evidence of Dr. Vander Weide, Page 38, Table 7

REQUEST:

a) Please confirm that in estimating the utility WACC Dr. Vander Weide recommends any combination of debt and equity that results in a WACC of 8.0%.
b) Please calculate the ATWACC, that is the cost of equity and the after tax cost of debt, using a 30% tax rate with TGI's 35% common equity ratio, his suggested 40% and 50%. Which of these capital structures would ratepayers prefer given that he is indifferent between them?
c) In the recent Albert Utilities Commission Dr. Vander Weide provided testimony with Drs. Kolbe and Vilbert on behalf of NGTL. Can Dr. Vander Weide confirm that they proposed any combination of debt and equity that kept the ATWACC constant?
d) Is it possible for ATWACC and WACC both to remain constant as the debt ratio is varied for a taxable firm? If not can Dr. Vander Weide explain in detail why he recommends keeping the WACC, rather than the ATWACC constant?