First Topic: Concentric Evidence and Previous Testimony

Reference: Dr. Coyne's evidence page ii to page 12

Preamble:

Dr. Coyne indicates that he is a Senior Vice President of Concentric and the basis for his recommendation

Question 1:

1.2 Please confirm that previously, for example before the Alberta Utilities Commission, Dr. Coyne has filed testimony with Dr. Stephen Gaske also of Concentric and that they are both senior members of Concentric providing fair rate of return testimony

1.3 Please confirm that Dr. Gaske filed testimony before the Regie in a recent intervention on behalf of Intragaz limited partnership (R-3807-2012) and provide copies of that testimony and indicate whether he consulted or discussed with Dr. Gaske that testimony.

1.4 Please confirm that in his current testimony Dr. Coyne states "Concentric has estimated" (page 6), is this taken to mean that Concentric ensures that the testimony of Dr. Coyne and Dr. Gaske reflects the views of Concentric and he agrees with Dr. Gaske's Intragaz testimony.

1.5 Please confirm that Dr. Gaske recommended an 11.50% fair ROE based on the median ROE of a proxy group of Canadian utilities ***supported by*** the DCF results from a proxy group of US utilities (page 5).

1.6 Please confirm that Dr. Gaske recommended a 50% common equity ratio for Intragaz.

1.7 Please confirm that the Canadian proxy group had a median return of 11.78% and the US proxy group 11.26%

1.8 Please confirm that Dr. Gakse's Canadian sample is the same as that used by Dr. Coyne except that Dr. Coyne also looks at Valener.

1.9 Please indicate why in this testimony Dr. Coyne uses the mean (average) of his sample's return estimates rather than the median as used by Dr. Gaske?

1.10 Please indicate why in this testimony Dr. Coyne places principal weight on the US sample estimates whereas Dr. Gaske placed primary emphasis on the Canadian sample's estimates? In particular given the relative scarcity of both storage companies and pure electric distribution and transmission companies why should the weight have shifted from Canadian proxy groups to US proxy groups within such a short period of time?

1.11 Please provide the Regie's ROE and capital structure decision for Intragaz

Second Topic: Credit rating reports

Reference: Dr. Coyne's evidence page 16-17

Preamble:

Dr. Coyne discusses the Moody's and DBRS credit rating reports.

Question 2:

2.1 Dr. Coyne mentions that Merril Lynch estimates the cost of the provincial guarantee of Hydro Quebec's debt is 50 basis points, please provide the document that contains this estimate.

2.2 Dr. Coyne mentions that Merril Lynch estimates the cost of the provincial guarantee of Hydro Quebec's debt is 50 basis points, please provide the document that contains this estimate.

2.3 Dr. Coyne notes Moody's and DBRS's statements about HQ's ROE and deemed equity ratio and their impact on HQ's credit metrics, would Dr. Coyne agree that given the provincial guarantee HQ could finance with 90% debt and a lower ROE as long as it does not impact the provincial credit rating. If not why not.

2.4 Is Dr. Coyne aware that even if HQ were not a crown corporation but a separate company the rating agencies would still consider the importance of the utility to the province and the level of implied support? As a result they would take this into account even without a guarantee?

2.5 Is Dr. Coyne aware that Ontario Hydro was reorganised and is no longer a crown corporation but has been split into different parts as Ontario Business Corporation Act (OBCA) companies? Is Dr. Coyne aware that S&P takes into account the importance of the post-split Ontario Hydro companies to the province in their ratings?

2.6 Please provide a copy of Hydro One and Ontario Power Generation's latest credit rating reports from the major credit rating agencies.

2.7 Please explain why in his analysis Dr. Coyne did not include a discussion of New Brunswick Power in his analysis?

2.8 Please provide the latest allowed ROE and common equity ratio for NB Power.

Third Topic: Fair Return Standard

Reference: Dr. Coyne's evidence page 17

Preamble:

Dr. Coyne discusses the fair return standard

Question 3

3.1 Please provide a copy of the Major and Priddle and indicate why the paper was written and on whose behalf.

3.2 In terms of the application of the fair return standard to Hydro Quebec, please confirm that Hydro Quebec is a crown corporation and reports to the Minister of Energy and that the Regie is a branch of the provincial government.

3.3 Please indicate all instances that Dr. Coyne is aware of where Hydro Quebec has appealed to the Minister of Energy concerning a ruling by the Regie.

3.4 Please confirm the following passage taken from the Government of Quebec's web page http://www.mrn.gouv.qc.ca/english/energy/ and indicate whether Dr. Coyne judges this to be a reflection of a "stand-alone" owner or whether HQ's owner views the utility as being a critical component of Quebec's industrial policy.

Québec has chosen energy as a core element of its development. It is one of only a handful of societies in the world to have a plentiful supply of clean energy, and its leadership in the electricity generating field has earned international recognition; 97% of all the electricity it produces is "green" electricity!

Québec is already acknowledged as a worldwide reference in the area of hydro-electric development, and is now positioning itself as a North American leader in the wind energy sector. This is a responsible environmental choice of which it is justifiably proud!

Québec has also acquired expertise and know-how in the field of energy technology, and this will help it to develop the plentiful and varied sources of energy available throughout its vast territory.

3.5 Dr. Coyne provides the allowed ROEs for both HQD and HQT on page 21, please indicate when HQ first decided that these allowed ROEs were inadequate and when it requested that they be reviewed. That is, when was the decision made that the allowed ROEs violated the fair return standard?

Fourth Topic: Proxy samples

Reference: Dr. Coyne's evidence page 22-28

Preamble:

Dr. Coyne discusses his three proxy samples

Question 4

4.1 For the Canadian utility sample on page 23-4 please provide since 2001 their book value per share, earnings per share and dividend per share.

4.2 For the US utility sample discussed on page 24 for each Value Line company initially reviewed, as well as the proxy sample finally chosen please, provide their book value per share, earnings per share and dividend per share since 2001.

4.3 For the Canadian power companies on page 25 and New Brunswick Power and Newfoundland Hydro please provide their common equity ratio, book value per share, earnings per share and dividend per share since 2001.

4.4 For the Canadian power companies on page 25 please indicate which ones are provincial power companies with a provincial monopoly equivalent to Hydro Quebec.

4.5 Please confirm that Enmax and Epcor are the former Calgary and Edmonton owned distribution utilities and explain why they were included in the sample since they do not have significant transmission or generation operations.

4.6 Please confirm that when Dr. Coyne talks about credit ratings being based on business and financial risk (page 26) he is aware that for these large publicly owned power utilities it also reflects the degree of support expected from their owners and their importance to the provincial economy.

4.7 Please indicate which of the Canadian and US privately listed companies in his first two samples Dr. Coyne would regard as "too big or too important to fail" and thus automatically generate government support in the event of any problems.

4.8 Is Dr. Coyne aware that a major issue in bank regulation at present is the importance of major US banks such as Citibank and Bank America and that even without explicit government guarantees they are deemed to be too big to fail and that this implicit support is factored into their credit ratings?

4.9 In the case of Enbridge and TransCanada is Dr. Coyne aware that both companies are (natural gas) transmission utilities and regulated by the National Energy Board. Why would he regard these as non-regulated activities?

Fifth Topic: Board decisions on US data

Reference: Dr. Coyne's evidence page 28-34

Preamble:

Dr. Coyne discusses his three board decisions on the use of US data

Question 5

5.1 Does Dr. Coyne regard the quoted passages from the NEB, OEB and BCUC as representing a complete survey of board decisions regarding the use of US data in a Canadian market? If he answer is yes, please indicate why he has not included the latest decision by the Board of Commissioners of Newfoundland and Labrador.

5.2 For the BCUC in the Terasen Gas (TGI) decision referenced (page 52) please confirm the following quote from the decision:

> The Commission Panel agrees with Dr Booth that "significant risk adjustments" to US utility data are required in this instance to recognize the fact that TGI possesses a full array of deferral mechanisms which give it more certainty that it will, in the short-term, earn its allowed return than the *Value Line* US natural gas LDCs enjoy. The Commission Panel notes Dr. Booth's suggestion that the risk premium required by US utilities is between 90 and 100 basis points more than utilities in Canada require may set an upper limit on the necessary adjustment. Accordingly, the Commission Panel will reduce its DCF estimate by between 50 and 100 basis points to a range of 9.0 percent to 10.0 percent, before any allowance for financing flexibility.

5.3 Would Dr. Coyne agree that the BCUC considered US evidence useful, but recognised that it has to be adjusted when applied to TGI? If not please explain why he would reference the BCUC decision but not the important qualification outlined in 5.2 above.

Sixth Topic: The comparability of US and Canadian data

Reference: Dr. Coyne's evidence page 34-41

Preamble:

Dr. Coyne discusses reason why he judges US and Canada to be comparable, that is, estimates can be used in Canada with minimal (no?) adjustment

Question 6

6.1 On page 39 Dr. Coyne discusses ten year bond yields in the US and Canada, please explain what Dr. Coyne understands by the term structure of interest rates or the yield curve.

6.2 Please provide the current three month treasury bill and the 30 year government bond yield for both the US and Canada for each month end since January 2013 to the present.

6.3 Please confirm that the difference between the 30 year and three month government yield is called the yield spread and commonly taken to be indicative of business conditions, if not why not.

6.4 Please confirm that currently the yield spread is higher in the US than in Canada because the US has yet to recover from the "Great Recession" and its economy is weaker than Canada's.

6.5 Please confirm that with higher T Bill yields in Canada and lower long term Bond yields it is a matter of arithmetic that there is a point where they should be similar and this is currently about the ten year mark.

6.6 Please confirm that if Dr. Coyne had looked at long bond yields or T Bill yields his conclusion that yields were about the same in the US and Canada would not have been true.

6.7 Please confirm that the non-accelerating rate of unemployment (NAIRU) in the US is regarded by the BEA as 5.2% and is significantly higher than in Canada.

6.8 Please indicate when both the US and Canada recovered all the jobs lost during the Great Recession.

Seventh Topic: Dr. Coyne's risk analysis

Reference: Dr. Coyne's evidence page 41-50

Preamble:

Dr. Coyne discusses the business and financial risk of his comparable firms.

Question 7

7.1 On page 44 Dr. Coyne discusses short versus ling term risk whereas HQ ignores long term risk in their discussion. Can Dr. Coyne explain why he considers long term risk relevant while HQ does not?

7.2 Please indicate whether HQ agrees with Dr. Coyne's judgement (page 48) that HQD faces greater long term risk than the operating companies in the Canadian and US proxy groups due to the concentration of industrial customers.

7.3 Please indicate whether in Dr. Coyne's judgment HQD would be lower risk if all of HQD's customers closed down and HQD only served the commercial and residential customers that did not leave when the industries closed down.

7.4 With regard to the competitive threat from natural gas, please indicate from his review of past decisions whether Dr. Coyne judges the Regie to agree with him and has accordingly lowered the business risk assessment of Gaz Metropolitain and increased either its debt ratio or lowered its ROE to reflect the lower risk?

7.5 Please provide all data that Dr. Coyne has analysed to examine the competitive position of electricity in Quebec with natural gas, fuel oil (#6) wood chips and any other energy source Dr. Coyne views as relevant for industrial, commercial and residential users.

7.6 Please indicate from the analysis in 7.5 above whether in Dr. Coyne's view this competitive position has materially changed since 2001.

7.7 In terms of Concentric's US sample please indicate which companies are "state wide" utilities that are considered critical for the state's development and accordingly has a "too big to fail" implied support.

Eighth Topic: Dr. Coyne's financial risk analysis

Reference: Dr. Coyne's evidence page 51-64

Preamble:

Dr. Coyne discusses HQT and HQD's "higher" financial risk.

Question 8

8.1 Please confirm that financial leverage (the use of debt) magnifies underlying business risk.

8.2 Please confirm that if a utility always over earns its allowed ROE then financial leverage has been positive in magnifying the ROE. If not explain in detail why not.

8.3 Please provide the average over-earning of the allowed ROE by both HQT and HQD since 2001 and provide Dr. Coyne's judgement as to whether in practise the use of more debt has increased or reduced the ROE.

8.4 Please confirm or explain why Dr. Coyne disagrees with the judgement that the Regie has allowed HQT and HQD lower common equity ratios due to its judgment that both have lower business risk than the typical Canadian utility and as a result no leverage adjustment increasing the ROE is needed.

8.5 Please provide the full analysis for the 0.41% premium ROE for electricity generation (page 53).

8.6 Please provide the full analysis for the judgement that HQT and HQD need an additional 1.50-3.0% ROE to compensate for the additional financial "risk" that Dr. Coyne judges them to have (page 52) relative to his US proxy group.

8.7 Please confirm that the coefficient of variation as used by Dr. Coyne is the reciprocal of the average ROE divided by its variability which is commonly used as a performance measure in finance, ie., something has earned a higher ROE relative to its risk.

8.8 Please confirm that due to 8.6 the coefficient of variation has been rejected by Canadian regulators as a risk measure. If not please provide extracts from any Canadian board decision that has endorsed the use of the coefficient of variation.

Ninth Topic: **Determination of the ROE**

Reference: Dr. Coyne's evidence page 64-86

Preamble:

Dr. Coyne estimates the fair ROE for HQT and HQD using risk premium models.

Question 9

9.1 Dr. Coyne uses a long term forecast of the ten year government bond rate from 2013-2018. Please indicate why Dr. Coyne judges the market to be inefficient since market participants buy long term bonds with an expectation in mind as to the path of future long term interest rates.

9.2 Please indicate why Dr. Coyne would disagree with financial theory that the best predictor of the long term return from bonds is the current long term bond yield.

9.3 Can Dr. Coyne please provide all evidence that he is aware of that economists are better predictors of future interest rates than market participants.

9.4 Please provide the October forecast referred to on page 69 and indicate the yield on long Canada bonds at that time and currently.

9.5 Dr. Coyne confirms that both Value Line and Bloomberg adjust their betas (page 70). Please provide any evidence that Dr. Coyne is aware of those utility betas revert to 1.0 as assumed in the Value Line and Bloomberg adjustment methodology.

9.6 Please provide citations from any Canadian regulator that has accepted the beta adjustment methodology used by both Value Line and Bloomberg.

9.7 Please provide copies of the numerous studies cited on page 71 and indicate why Dr. Coyne is relying on a 1971 study on earlier data for all stocks, rather than for a study on utility stocks.

9.8 Please provide all information that Dr. Coyne is aware of that the future market risk premium on the stock market will exceed the historic risk premium as implied in his historical (sic) compared to the "forward" looking market risk premium on page 75.

9.9 Would Dr. Coyne accept that f the judgement of the BCUC is accepted and the US DCF estimates are discounted by 0.50-1.0% then his forward looking market risk premium also has to be lowered? If not why not.

9.10 Please provide the evidentiary basis for the 0.75% adjustment for other models (page 77).

Tenth Topic: Determination of the ROE

Reference: Dr. Coyne's evidence page 86-105

Preamble:

Dr. Coyne estimates the fair ROE for HQT and HQD using DCF models.

Question 10

10.1 Please indicate whether anyone has ever indicated that financial analyst opinions are not reflected in stock prices (page 91) and confirm that the question is whether the stock market uses the same expected growth rates forecast by analysts. If not why not.

10.2 Please indicate that the Carleton et al article cited on page 91 simply indicates that analyst forecast growth rates are better than simple extrapolation and which analysts before the Regie have ever used simple extrapolation of utility growth rates.

10.3 Please confirm that utility regulation should cause the market value of the firm's shares to approximate in the long run their book value. Otherwise the investor has earned an above fair return. If not please explain in detail why not.

10.4 Please confirm that if the book value of the shares equals the market value the sv term (page 104) collapses to zero.

10.5 Please provide all data that Dr. Coyne is aware of that the long run dividend growth rate for Canadian and USutilities equals the long run GDP growth rate (page 106).

10.6 Please confirm that if utilities have higher dividend yields than the market as a whole the use of GDP growth as a long run growth for utilities implies that the expected return from utilities exceeds that for the market as whole and utilities as a group are above average risk. If not why not.

10.7 Using the dividend per share data requested in IR 4 please provide the average compound growth rate in dividend per share for all of Dr. Coyne's samples of proxy companies and for the US and Canadian GDP since 2001.

10.8 Using the dividend per share data provided in answer to question 4, please regress the change in the dividend per share against the GDP growth rate since 2001 for each of the firms in Dr. Coyne's proxy samples and provide all the normal regression output.