R-3807-2012 / R-3811-2012 DR. BOOTH'S INFORMATION REQUESTS TO DR. GASKE ON BEHALF OF THE INDUSTRIAL GAS USERS ASSOCIATION (IGUA)

Q.1 Reference: Summary of evidence (pages 4-6 and page 8)

- 1.1. Would Dr. Gaske confirm that when he develops his principles for a fair rate of return he is referring to rate of return regulated utilities subject to provincial statute to protect ratepayers from excessive charges and ensure that rates are fair and reasonable?
- 1.2 Would Dr. Gaske confirm that Intragaz has been "regulated" not by cost of service methodology but avoided cost since it operates in a competitive market?
- 1.3 Would Dr. Gaske confirm that Intragaz is requesting cost of service regulation, which would increase charges above those charged by avoided cost? If not, why not?
- 1.4 Would Dr. Gaske confirm that previously Intragaz has requested the same ROE as Gaz Metro under cost of service regulation and indicate what that rate currently would be for 2013?
- 1.5 Should the Regie allow Intragaz his recommended ROE on 50% common equity and this increases the cost of service rates above avoided cost would he confirm that he judges the resulting tolls to be fair and reasonable?
- 1.6 Would Dr. Gaske indicate in what cases (with his recommended ROE and risk premium) he has recommended a fair ROE for a firm operating in a competitive market originally operating under avoided cost?
- 1.7 In terms of the fair ROE definition when Mr. Gaske mentions Comparable Earnings as a standard does he mean the legal and economic standard in Canada of Mr. Justice Lamont's definition in Northwestern Utilities
 - "that the company will be allowed as large a return on the capital invested in the enterprise as it would receive if it were investing the same amount in other securities possessing an attractiveness, stability and certainty equal to that of the company's enterprise."
- 1.8 Would Dr. Gaske confirm that his evidence is based on the legal standard in Canada that the fair rate of return is a market test based on the return on **securities** of equivalent risk? If Dr. Gaske cannot do so, can he please explain why he is advocating a position contrary to the legal standard in Canada?

Q.2 Reference: Stand-alone principle (page 11)

- 2.1 Would Dr. Gaske agree that the stand alone principle is designed to protect ratepayers from a parent charging fees that exceed the market cost of the services which is why the AUC approached the definition the way that it did?
- 2.2 Would Dr. Gaske agree that where the debt rating of a subsidiary is lower due to its ownership by a dodgy parent (under for example, S&P's rating criteria) then the regulator should lower the debt cost charged off in rates to what the cost would have been if not owned by a dodgy parent? If not, why not?
- 2.3 Would Dr. Gaske agree that the stand-alone principle does not apply to utilities of Inefficient scale that would not exist in a competitive market, which is why the Ontario Energy Board, for example, deems not just the ROE and capital structure but also the debt cost for local electricity distribution companies?
- 2.4 Please explain why Intragaz is structured as a limited partnership and whether this confers tax benefits on Gaz Metro and GDF Quebec and whether this is consistent with the stand alone principle. (If Dr. Gaske cannot answer these questions please refer them to Intragaz).
- 2.5 Would Mr. Gaske agree that a long term contract with Gaz Metro for 10-15 years essentially lowers the risk of Intragaz to that of Gaz Metro, since the revenue requirement is then only subject to the risk of non-payment.
- 2.6 Would Mr Gaske confirm that TQM's revenue requirement is currently recovered as a transportation by others (TBO) charge in the TransCanada Mainline tolls and the NEB in its 2008 TQM decision substantially considered TQM's risk as the same as the Mainline's?
- 2.7 Would Mr. Gaske confirm that when ATCO Pipeline's assets were integrated with NGTL's to form the Alberta System, the AUC reduced its common equity ratio to 38%, since its revenue requirement was recovered as a direct charge to NGTL.
- 2.8 Given 2.6 and 2.7 above if the Regie approves cost of service regulation for Intragaz and a long term contract with TQM, please explain in detail why Intragaz should not have the same common equity ratio and allowed ROE as Gaz Metro?
- 2.9 Please indicate the value of the rate base should the Regie set the revenue requirement based on current alternative cost with a cost of capital that reflects 50% debt at 5.75%, 50% equity at Mr Gaske's recommended ROE, a 30% implied tax rate and Intragaz' requested depreciation rate. Please explain all assumptions and calculations in detail.

Q.3 Reference: Retroactive Ratemaking (pages 14-16)

- 3.1 If the Regie allows cost of service regulation for Intragaz would Mr. Gaske confirm that it needs to determine the entering rate base as well as ROE and common equity ratio?
- 3.2 Would Mr. Gaske consider it to be retroactive ratemaking if the Regie sets the value of the entering rate base for cost of service ratemaking purposes such that the resulting tolls are equivalent to those under avoided cost? Please explain in detail why or why not.

Q.4 Reference: Oil Pipeline relevance (pages 4-6)

- 4.1 Can Dr. Gaske explain in detail why he would bring in US regulation of an oil pipeline as supporting evidence of a Canadian natural gas storage company?
- 4.2 Is Dr. Gaske's point simply that a regulator can use price cap regulation where costs are difficult to determine?

Q.5 Reference: Regulation of Intragaz (pages 20-30)

- 5.1 Please confirm that competitive storage exists in Union Gas' facilities and has been dramatically expanded since the emergence of Dawn as a natural gas hub.
- 5.2 Please discuss the relative economics of Gaz Metro using Union or Enbridge facilities for storage rather than Intragaz, (mid-stream storage), that is how much competition is there for Intragaz' facilities?
- 5.3. Dr. Gaske discusses the write off by Sempra of its investment in Liberty Gas Storage (and Avoca's bankruptcy). Can Dr. Gaske point to any instance in Canada where a utility has been required to write off assets before being placed in service after they have received regulatory approval to construct? That is, is he aware that the utility normally seeks regulatory approval prior to construction in Canada, rather than waiting until the asset is placed into service? In Dr. Gaske's view is this a regulatory difference between the US and Canada?
- 5.4 Please discuss the competitive storage market in the area served by both Avoca and Liberty Gas storage, that is, are there other storage facilities serving the same market?
- 5.5 In the case of Transco, can Dr. Gaske discuss who was at risk of the lost gas and whether Transco was regulated on rate of return principles at the time similar to those Intragaz is seeking at this time from the Regie?

Q.6 Reference: Risk of Intragaz (pages 32-34)

- 6.1 Dr. Gaske indicates that Intragaz expects to be backstopped by ten (10) year contracts by Gaz Metro. Using Dr. Gaske's recommended ROE, please discount the ten year expected net income to Intragaz's shareholders and estimate the share of the current book equity accounted for by the ten (10) year contract and what share is exposed to non-renewal at the end of the life of the contract.
- 6.2 Please indicate the annual flows into and out of Intragaz's facilities for each year since 2000.
- 6.3 Please indicate how in Dr. Gaske's judgment the need for Intragaz's facilities will be met at the end of ten (10) years if not from Intragaz?
- 6.4 Does Dr. Gaske warrant that the technological and engineering risks attached to the development of Intragaz's facilities still exist after the facilities have been in existence for so long and Intragaz is not planning new storage facilities? If so, please explain in detail.
- 6.5 Please provide the contracting arrangements for the storage facilities referenced on page 33 as lacking an investment grade bond rating.
- 6.6 Please indicate whether the storage facilities referred to as non-investment grade on page 34 operate in a competitive market where gas purchasers have a variety of options in storing gas and moving it to preferred locations across different pipelines.
- 6.7 Please indicate whether any of the non-investment grade storage facilities have significant ownership by a either a gas pipeline or gas distributor.
- 6.8 Please indicate why Intragaz would be regarded as more risky than the proxy group when its owner is the local gas distribution company and its proposed rate base is so small?

Q.7 Reference: Required Rate of Return (pages 34-55)

- 7.1 In discussing the BCUC's adoption of DCF tests, can Dr. Gaske confirm that the BCUC reduced the US DCF estimates of Ms. McShane by 50-100 basis points (decision page 52) and explain why he does not mention this in his evidence?
- 7.2 On pages 35-40 Dr. Gaske discusses the US and Canadian economies would he confirm that the Governor of the Bank of Canada in August commented that the Canadian financial system is firing on all cylinders whereas on September 13 the US Federal Reserve was forced into unlimited quantitative easing due to the weakness in the US?
- 7.3 Does Dr. Gaske judge the diametrically opposed actions of the Bank of Canada and the US Federal Reserve support an assumption that the markets are the same and estimates from one market can be used in the other without any adjustments? If so please justify in detail.
- 7.4 Please confirm that the Schedule 9 common equity ratio for the Canadian comparable firms is 36% and not 50%.
- 7.5 In terms of the CAPM discussion on page 46, please confirm that it is always possible to find factors unique to a particular firm that help explain its return and reduce the unexplained variance, for example, interest rates or oil prices, but to be priced by definition these have to affect all firms. If not please explain in detail why not.
- 7.6 Please provide a copy of the paper referenced in footnote 45 and confirm that the "journal" is not actually a journal but the publication of non-refereed conference proceedings.
- 7.7 In terms of the CAPM discussion, please confirm that surveys of the market risk premium avoid the problems discussed on pages 46-49 since they rely on current data as to what market participants require.
- 7.8 In terms of the discussion of Fama-French, please confirm that like the CAPM they rely on the same market risk premium but simply allocate the market return slightly differently to take into account book to market and size. That is, the central role of the market risk premium is not reduced by moving from the CAPM to the Fama-French or Carhart models. If not please explain in detail why the general level of the required rate of return is changed going from a single to a multi-factor model.

- 7.9 Please indicate any decision by a Canadian regulator that has accepted the Fama-French or Carhart models, and in particular the decision (D-2007-116) of the Regie when presented with such evidence. Please explain why the Regie should now approve a methodology that is expressly rejected in its decision D-2007-116.
- 7.10 Apart from the decision of the BCUC, is Dr. Gaske aware of any other Canadian regulator that has placed less weight on the CAPM? In particular, in his review of decisions by Canadian regulators is he aware of the support of the CAPM provided by the AUC, the NEB and not least the Regie and if so why has he not referenced these more numerous decisions that come to opposite conclusions to the BCUC?

Q.8 Reference: Competition (pages 55-60)

- 81. Dr. Gaske argues that Intragaz competes for capital and as a result looks at both a Canadian and US sample. Please indicate the foreign ownership of both of Intragaz parents: Gaz Metro and GDF Quebec Inc.
- 8.2 Have either Gaz Metro or GDF Quebec ever raised US \$ financing and directly "competed" with the reference sample of US companies in the capital market?
- 8.3 Please list the US equity ownership of the Canadian comparable companies and the proportion of their debt financing raised in US \$.
- 8.4 Please list the Canadian utilities that are listed on US stock exchanges.
- 8.5 Please confirm that the dividend tax credit is not extended to non-Canadian share owners and discuss how this combined with the with-holding tax makes ownership of Canadian utilities tax preferred by Canadian investors.
- 8.6 Please discuss whether US investors are allowed to buy Canadian limited partnerships and provide a prospectus of any Canadian limited partnership that specifically indicates that the units are offered for sale in the United States, rather than the normal prohibition.
- 8.7 Please confirm that neither Enbridge nor TransCanada are listed in the TSX/S&P utilities index contrary to the statement on page 56.
- 8.8 Please indicate why income funds were eliminated when the US comparable sample mainly consists of limited partnerships that are essentially the same as Canadian income funds (trusts).

- 8.9 Please indicate whether the financial institutions approached to finance 50% of Intragaz' rate base are Quebec or US based institutions and whether the financing is in US or CDN \$.
- 8.10 Please indicate whether or not Mr. Gaske judges that small limited partnerships like Intragaz regularly access international capital markets, given the limited size of their financing requirements.
- 8.11 Does Mr. Gaske judge Intragaz to be of sufficient size to access public markets or does he judge to be restricted to the private placement market.

Q.9 Reference: ROE Analyses (pages 60-70)

- 9.1 Please provide the dividend payouts of the US sample for each year and confirm that for your US sample as limited partnership they are required to pay out substantially all of their income to their partners, which is why their dividend yields are so high.
- 9.2 Please explain how the income to limited partnership units can grow significantly when the bulk of their income is paid out and very little retained for growth?
- 9.3 In the discussion of growth rates on page 61 are these nominal or real growth rates?
- 9.4 Please confirm that the growth rate in the DCF model is an infinite growth rate and as such any growth rate that exceeds that for GDP implies that sooner or later that particular company will **be** the total GDP.
- 9.5 Please confirm that due to the well-known problem in 9.4 above that most analysts and regulatory authorities only use such a growth rates for a finite period, usually the 5 years of the analyst growth rate period, after which the growth rate used is that for GDP. If Dr. Gaske cannot so confirm please explain why he has not restricted growth rates to a range which makes economic sense, rather than assuming they continue to infinity.
- 9.6 Please confirm that contrary to the statement on page 63, there is voluminous empirical evidence that shows that analyst growth rates are biased high estimates of future growth rates, that is that sell side security analysts are over-optimistic.
- 9.7 Please indicate why Dr. Gaske has made no adjustments to account for analyst optimism.

- 9.8 Please confirm that analysts forecast earnings growth rates and not the dividend growth rates as required in the DCF model and that since earnings growth rates are more volatile than dividends the future growth rate in dividends is over estimated in the same way that arithmetic growth rates exceed compound ones.
- 9.9 Please indicate any Canadian regulator that has awarded a benchmark ROE over 10% since 2000. If the fair ROE was not at Dr. Gaske's 10.83%-11.78%, would investors be very unhappy and cause Canadian utility stocks to sell at a discount? If not why not and explain in detail.
- 9.10 Please provide the market to book ratios since 2000 for each of the Canadian and US utilities Mr. Gaske uses in his estimates along with their annual ROE and the average yield on the long term government bond (US Treasuries for US and CDN for Canada).

Q.10 Reference: Summary of evidence (pages 4-6)

- 10.1 Please indicate any regulatory authority that has placed any reliance on an historic risk premium analysis based on such a short time period as 1993-2007.
- 10.2 Please indicate the standard error of the estimate referred to in the Wilhelm study.
- 10.3 Please indicate why Dr. Gaske has not looked at risk premiums based on the standard sources such as the Canadian Institute of Actuaries data that goes back to 1924 or the Dimson et al study that goes back to 1900, given the error attached to shorter time periods.
- 10.4 Please confirm that corporate bond yields are technically promised yields since the corporate may default and as such are not *expected* rates of return, which is why they are not used as the base for risk premium studies.
- 10.5 Please indicate any regulatory body in Canada that has used corporate bond yields as the base for a risk premium analysis and provide the supporting references.

Q.11 Reference: Exhibits

- 11.1 In Schedule 1, please confirm that the most recent utility spread data for Canada has a difference of only 0.10% between BBB and A rated bonds, i.e.: 1.46% vs 1.56% spread.
- 11.2 Please confirm that the most recent data for the US has a difference of 0.71% between BBB and A rated utility bonds, i.e.: 1.22% vs 1.93%.
- 11.3 Please confirm that US BBB rated utility bonds are generally regarded as much riskier than BBB rated Canadian utilities, which are mainly low risk *smaller* utilities (except for S&P ratings where there are weak parents). If not please explain why not.
- 11.4 Please explain why Intragaz in Schedule 2 is compared to Canadian holding companies, rather than to the operating subsidiaries which are the utilities.
- 11.5 Please confirm that in Schedule 2 Dr. Gaske is again comparing Intragaz with US holding companies (LPs)
- 11.6 Please explain why Dr. Gaske does not report DBRS bond ratings for the Canadian companies.
- 11.7 Please indicate what significance Dr. Gaske ascribes to the fact that the Canadian utilities have a median A rating and 36% common equity, whereas the US utilities have a median BBB rating and over 50% common equity. Isn't the logical conclusion that the US utilities are riskier?
- 11.8 In Schedule 5, please provide the standard DCF estimates where the Canadian utilities grow at the analyst growth rate for 5 years and then the growth rate in GDP.
- 11.9 In Schedule 5, please provide the standard DCF estimates where the US limited partnerships only have their income grow at the inflation rate with no real growth.
- 11.10 Please provide the dividend and earnings per share data for each utility in Dr. Gaske's US and Canadian samples since 1990 where data permits a well as the nominal GDP growth rates in the US and Canada.