ANSWER TO DR. BOOTH'S INFORMATION REQUESTS TO DR. GASKE

Source: Information Request n° 1 to Dr. Gaske

Date: October 25, 2012

Intervener: INDUSTRIAL GAS USERS ASSOCIATION

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

Dr. Booth 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?

Answer:

Dr. Gaske has developed his principles for a fair rate of return from widely-accepted regulatory principles and has reviewed Régie precedent to verify that the Régie abides by those rate principles. The Régie is guided by "An Act Respecting The Régie de l'énergie," which authorizes the Régie to set rates for regulated energy companies in Québec. As detailed in Dr. Gaske's Prepared Direct Testimony, pages 10-11, the official Act ensures that there are sufficient revenues to cover all costs, including the return allowed to the shareholder. As Dr. Gaske notes on page 10 of his Prepared Direct Testimony, the Régie is guided by the three primary criteria of the fair return (financial integrity, capital attraction, and the comparability standard), with respect to fixing a reasonable return. As Dr. Gaske states on page 11 of his Prepared Direct Testimony, the Régie acknowledges that the "user's ability to pay does not come into play on the quantum of a reasonable return for the shareholder." Thus, the zone of reasonableness for rates must satisfy the fair return standard at a minimum but should not be excessive for ratepayers at a maximum.

Dr. Booth 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?

Answer:

Dr. Gaske confirms that Intragaz has been regulated by "avoided cost" rates, but disagrees with the premise that this was because it operated in a competitive market.

The avoided cost rates were set at a premium to cost of service based rates to attract investment in the development of the Pointe-du-Lac storage site. When it came time to develop the Saint-Flavien site in 1993, the same logic was applied by the Régie in again approving Avoided Cost rates.

Dr. Gaske discusses Intragaz' full regulatory history on pages 20-22 of his Prepared Direct Testimony. Dr. Gaske recounts that initial attempts by the Régie to set cost-based rates were unsuccessful in attracting the necessary investment to develop the storage site, even with a substantial premium over cost based rates, due to the high development risk of the project. Ultimately, the only rate that attracted investment for the development of storage fields was a rate equal to the avoided cost of alternative arrangements that Gaz Métro might require in order to meet the needs of its customers. The "Avoided Cost" provided a premium over cost based rates.

Dr. Booth 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?

Answer:

Dr. Gaske confirms that Intragaz is requesting cost of service regulation to ensure just and reasonable rates that are sufficient to recover its cost of service. Whether this is above or below the "avoided cost" rate will depend on how and when the avoided cost is measured. In addition, please see page 26 of Dr. Gaske's Prepared Direct Testimony (Document B-0015, Intragaz-1, Document 5).

Dr. Booth 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?

Answer:

In the R-3753-2011 application, Intragaz was seeking just and reasonable rates that are sufficient to recover its cost of service and made a recommendation to use Gaz Métro's rate of return. In its decision D-2011-140, the Régie noted that:

"Intragaz proposes this approach in order to simplify the treatment of the case and to limit the expenses associated with an in-depth debate on the most appropriate rate of return." (paragraph 24, translation).

The Régie ultimately concluded that there was insufficient evidence to support such a proposal. (paragraph 40, translation).

Dr. Booth 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?

Answer:

Yes. As. Dr. Gaske indicated on page 68 of his Prepared Direct Testimony, the combined recommended equity ratio and ROE for Intragaz is the minimum return actually required to enable Intragaz to attract common equity capital on reasonable terms. See the responses to IGUA 1.1 and 1.2.

Dr. Booth 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?

Answer:

Dr. Gaske has not testified in any proceedings with the precise circumstances described in this question.

Dr. Booth 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."

Answer:

Yes. Please see page 8 of Dr. Gaske's Prepared Direct Testimony.

Dr. Booth 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?

Answer:

Yes, Dr. Gaske's DCF analyses are based on the prices and required returns on the securities of publicly-traded proxy companies with risks comparable to those of Intragaz.

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Question 2 Reference: Stand-alone principle (page 11)

Dr. Booth 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?

Answer:

The stand-alone principle is designed to protect both ratepayers and investors. The quote from the Alberta Energy and Utilities Board that appears on pages 11-12 of Dr. Gaske's evidence makes it clear that the stand-alone principle "ensures that the revenue requirement of regulated utility operations is not influenced up or down by the operations of a parent or sister company." The quote also makes it clear that the goal is to reflect the cost of service of the regulated company.

Dr. Booth 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?

Answer:

Depending upon the specific circumstances it is possible that the debt costs of a regulated company should be adjusted either upward or downward if those costs are unduly affected by its relationship to its parent company. In this proceeding Intragaz is proposing a debt cost that is specific to the stand-alone risks of its operations. This is similar to the treatment that the Régie has used in setting rates for Gazifère in the past, even though Gazifère is a subsidiary of Enbridge.

Dr. Booth 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?

Answer:

No. It is Dr. Gaske's understanding that the OEB policy on deemed debt cost for electric distribution companies is to use the actual embedded debt cost when the debt is borrowed from independent third parties, and to use a deemed debt cost only when the debt is borrowed from an affiliate. [OEB, Report of the Board on Cost of Capital for Ontario's Regulated Utilities, December 11, 2009, Section 4.4.1] Thus, the OEB policy is entirely consistent with the stand-alone principle which is intended to ensure that the revenue requirement of regulated utility operations is not influenced up or down by the operations of a parent or sister company.

Similarly, Gazifère is a small utility regulated by the Régie and its capital structure and debt cost are calculated on a stand-alone basis even if it obtains financing through its parent, Enbridge Inc. Please see the response to IGUA 6.8.

Dr. Booth 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).

Answer:

Intragaz est une société en commandite depuis sa création en 1990. Sa structure est déterminée par ses associés. En tant que société en commandite, la charge fiscale d'Intragaz est transférée à ses associés. Intragaz ne voit pas en quoi les règles fiscales des sociétés en commandite pourraient être incohérentes avec le principe du « stand-alone ».

Dr. Booth 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.

Answer:

No. Both the short-term and long-term risks of Intragaz remain significantly higher than Gaz Metro's. In term of short term risk, Intragaz' operational risk is much higher than

Gaz Metro's which increases the risk of Intragaz not being able to recover its costs of service, either because of unforeseen costs or lower revenues due to its incapacity to meet contractual obligations, or a combination of both. In terms of long-term risks, the fact of having a 10-15 contract still leaves a very significant risk of not being able to recover a large part of its investments should the contract with its sole customer not be renewed. Please see the responses to Régie 22.2, 22.4 and 22.5.

Dr. Booth 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?

Answer:

The NEB's Reasons for Decision in RH-1-2008 states "At present, over 99 per cent of TQM's revenue requirement is recovered from TransCanada in the form of 12 monthly payments, and TransCanada includes these payments in its revenue requirement as a Transmission by Others cost." (National Energy Board, Reasons for Decision, RH-1-2008, March 2009, at 43)

Dr. Gaske disagrees with the suggestion that the NEB substantially considered TQM's risk as the same as the Mainline's. The NEB noted "[i]n assessing changes to TQM's business risk, the Board is using TQM's risk at the time of the RH-2-94 proceeding as the point of comparison, which was the last time that the Board fully evaluated it;" and concluded "that TQM's overall business risk has increased relative to 1994, as a result of increased market, supply and competitive risks." (National Energy Board, Reasons for Decision, RH-1-2008, March 2009, at 49 and 51) The relevant factor was TQM's present day risk relative to TQM's risk at the time of the RH-2-94 proceeding, not relative to the Mainline's risk.

Dr. Gaske notes that the authorized ROEs for TQM and the Mainline indicate that the two pipelines do not face the same level of risk. For example, for 2008, TQM's authorized ROE was 9.75 percent on 40 percent deemed common equity while the Mainline's authorized ROE was 8.71 percent on 40 percent deemed common equity. (TransCanada Corporation, Annual Information Form, February 22, 2010, at 3 and 7)

Dr. Booth 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.

Answer:

In the AUC's 2011 Generic Cost of Capital decision, the AUC set ATCO Pipelines' common equity ratio at 38 percent for 2012 which incorporates the impact on risk from

ATCO Pipelines' integration with NGTL. (Alberta Utilities Commission, Decision 2011-474, December 8, 2011, at 48). Dr. Gaske notes that ATCO Pipelines does not have the same common equity ratio and allowed ROE as NGTL. ATCO Pipelines' common equity ratio and allowed ROE were set by the AUC at 38 percent and 8.75 percent, respectively, for 2012. NGTL, on the other hand, has a common equity ratio of 40 percent and an allowed ROE of 9.70 percent per the "Alberta System 2010-2012 Revenue Requirement Settlement".

Dr. Booth 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?

Answer:

As discussed on pages 33-34 of Dr. Gaske's Prepared Direct Testimony (Document B-0015, Intragaz-1, Document 5) gas storage operations like Intragaz have significantly greater risks than local distribution companies like Gaz Métro. A long-term contract will not eliminate the greater risks of Intragaz. Please see the responses to IGUA 2.5 and Régie 22.5.

In the ATCO Pipelines example, it is important to note that the NGTL TBO of the ATCO Pipelines system had a contract term that was in perpetuity. In other words, the contract was to remain in effect for the entire life of the ATCO Pipeline facilities. That contract term involves significantly less risk than the 10-year contract proposed by Intragaz. See the response to Régie 22.5.

Neither of the TBO arrangements cited in this request resulted in the "sellers" having the same common equity and allowed ROE as the "buyer." Instead, both TQM and ATCO Pipelines received return and capital structure allowances that were based on their stand-alone risks. Please see the responses to IGUA 2.6 and 2.7.

There are other precedents for the principle that the return and capital structure should be established on a stand-alone basis. For example, Gazifère is regulated by the Régie and its capital structure and debt costs are calculated on a stand-alone basis even though it obtains financing through its parent, Enbridge Inc.

Dr. Booth 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.

Answer:

Dr. Gaske has not conducted a study of the avoided cost for Gaz Métro and is unable to make the requested calculations based on the information given.

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Date: October 25, 2012

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Question 3 Reference: Retroactive Ratemaking (pages 14-16)

Dr. Booth 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?

Answer:

Yes. According to an Act Respecting the Régie de l'énergie:

> *49. When fixing or modifying rates for the transmission of electric power or for the transmission, delivery or storage of natural gas, the Régie shall, in particular, (1) determine the rate base of the electric power carrier or of the natural gas distributor after giving due consideration, in particular, to the fair value of the assets the Régie considers prudently acquired and useful for the operation of the electric power transmission system or of a natural gas distribution system, …;*
>
> *50. The fair value of the assets of the electric power carrier or a natural gas distributor shall be determined on the basis of the original cost, less depreciation*.

Thus, depreciated original cost is the default value for regulated assets. A lesser value is equivalent to a cost disallowance and would be contrary to the Act. In prior proceedings Gazifère and Hydro-Québec both established their rate bases on historical original cost when they first had their rate bases approved by the Régie.

Dr. Booth 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.

Answer:

A well established regulatory principle is that rates must be set on a forward-looking basis. Dr. Gaske discusses the Prohibition Against Retroactive Ratemaking on pages 14-16 of his Prepared Direct Testimony (Document B-0015, Intragaz-1, Document 5). Depending on the reason for such action, the treatment described in the question would not necessarily be retroactive ratemaking. Instead, if the "avoided cost rate base equivalent" is less than the original cost rate base, such treatment would be a disallowance of rate base. Because of the established regulatory principle that assets included in rate base are valued at historical costs (see An Act Respecting the Régie de l'énergie, section 50), any such disallowance in rate based would need to be justified, otherwise the resulting rates could not be considered just and reasonable. Thus, it would not necessarily be retroactive ratemaking but it would be contrary to the Act. See the response to IGUA 3.1.

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Question 4 Reference: Oil Pipeline relevance (pages 4-6)

Dr. Booth 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?

Answer:

The fair return standard applies to rate regulation in general across a wide range of regulated industries. The example of U.S. oil pipeline regulation is an instance where a regulator used an alternative ratemaking method, but also recognized that cost of service should be used when the alternative method fails to recover the cost of service. This approach is an example of the importance of the fair return standard even when a regulator may use an alternative approach.

Dr. Booth 4.2

Is Dr. Gaske's point simply that a regulator can use price cap regulation where costs are difficult to determine?

Answer:

No. See the response to 4.1.

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

Dr. Booth 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.

Answer:

The amount of Union's capacity, and capacity under contract, has expanded. Dr. Gaske has not conducted an analysis of the amount of unsold storage capacity at the Union Gas facilities or the competiveness of those facilities. However, please refer to Exhibit B-0012 (Intragaz-1, document 8) filed in this proceeding.

Dr. Booth 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?

Answer:

Please refer to Exhibit B-0012 (Intragaz-1, document 8) filed in this proceeding.

Dr. Booth 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?

Answer:

Dr. Gaske is aware of one instance in Canada where a utility has been required to write-off assets before those assets were placed into service, but after those assets had received regulatory approval to be constructed. Specifically, in the National Energy Board's Reasons for Decision in RH-4-85, the Board permitted Trans-Québec and Maritimes Pipeline Inc. ("TQM") to recover in tolls certain costs associated with facilities previously approved by the Board that were subsequently not constructed, but also disallowed the recovery of certain assets. In that decision, the Board allowed TQM to amortize the proposed costs over three years and include such costs in tolls, with the exception of the associated accumulated funds used during construction and costs incurred for a SCADA system that were deemed by the Board to have been imprudently incurred.

The U.S. storage examples all required certificates of public convenience and necessity from the FERC before construction could begin. Thus, this is not a regulatory difference between Canada and the U.S.

Dr. Booth 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?

Answer:

Yes. There were competitive facilities serving essentially the same markets, however the operational failure of these facilities was unrelated to competition. Avoca was located in New York state in a region with many other storage facilities and Liberty was located in Louisiana, another region with many other production-area storage facilities.

Dr. Booth 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?

Answer:

Transco was regulated using cost of service principles and the storage facility was rolled in with the pipeline rate base during that time period. Dr. Gaske does not know who was liable for the lost gas in that case.

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

Dr. Booth 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.

Answer:

Please see Intragaz-1, Document 2, Annex 3. The net present value of the equity portion of Intragaz' return over the next ten years is $32.2 million. Annexe 3 shows that Intragaz' 2013 rate base is $108.6 million which declines to $77.7 million in 2022. Therefore, approximately 72 percent of Intragaz' 2013 rate base is at risk of non-recovery at the end of the ten-year contract in 2022.

(1) Description	(2) 2013	(3) 2014	(4) 2015	(5) 2016	(6) 2017	(7) 2018	(8) 2019	(9) 2020	(10) 2021	(11) 2022
1 Rate Base ($000)	108,570.6	105,102.6	101,651.7	98,188.1	94,710.5	91,224.8	87,736.9	84,273.9	80,892.4	77,657.0
2 % Common Equity	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
3 Return on Equity	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%
4 Equity Portion of WACC	5.875%	5.875%	5.875%	5.875%	5.875%	5.875%	5.875%	5.875%	5.875%	5.875%
5 Equity Portion of Return ($000)	6,378.5	6,174.8	5,972.0	5,768.6	5,564.2	5,359.5	5,154.5	4,951.1	4,752.4	4,562.3
6 Net Present Value ($000)	32,230.3									

Line 1: Intragaz-1, Document 2, Annexe 3, Line 5
Line 2: Prepared Direct Testimony of J. Stephen Gaske, at 6
Line 3: Prepared Direct Testimony of J. Stephen Gaske, at 6
Line 4: Equals Line 2 x Line 3
Line 5: Equals Line 1 x Line 4
Line 6: Equals net present value of Line 5, discount rate equals 11.75%

Dr. Booth 6.2

Please indicate the annual flows into and out of Intragaz's facilities for each year since 2000.

Answer:

Please find hereafter the annual flows into and out Intragaz's facilities.

	Pointe-du-Lac (*10³m³)		Saint-Flavien (*10³m³)	
Year	**Injected**	**Withdrawn**	**Injected**	**Withdrawn**
2000	56 129	55 654	70 158	43 488
2001	14 622	12 126	82 200	52 559
2002	35 161	34 723	93 181	76 809
2003	43 916	43 685	109 388	86 422
2004	29 449	29 381	108 667	97 465
2005	33 399	32 429	119 953	113 559
2006	13 298	11 906	117 876	97 854
2007	40 745	42 980	111 519	121 996
2008	30 670	26 307	121 124	121 637
2009	31 596	33 572	113 828	116 296
2010	27 502	24 567	120 368	119 433
2011	28 867	28 843	120 254	122 413
2012 (including Nov. 4)	**21 883**	**20 119**	**101 782**	**78 794**

Dr. Booth 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?

Answer:

This question is beyond the scope of Dr. Gaske's testimony. He has not conducted a facilities forecast for Gaz Métro and is not aware that any such forecast exists at this time. Please see the responses to Régie requests 22.3 and 22.5.

Dr. Booth 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.

Answer:

Please see the responses to Régie 21.1 and 21.2.

Dr. Booth 6.5

Please provide the contracting arrangements for the storage facilities referenced on page 33 as lacking an investment grade bond rating.

Answer:

Please see the end of this section for the Standard & Poor's report referenced on page 33 of Dr. Gaske's Prepared Direct Testimony. Below is a list of the specific storage facilities mentioned in that report and their credit ratings in parentheses:

- Port Barre Investments LLC (d/b/a Bobcat Gas Storage) (B+)
- SG Resources Mississippi LLC (BB)
- Pine Prairie Energy Center LLC (B)
- Dr. Gaske has not conducted the requested research.

Dr. Booth 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.

Answer:

Please see the response to Q 6.5. Below is a table presenting the specific storage facilities mentioned in the S&P report, their locations, and the type of market in which they operate:

Storage Facility	Location	Market
Port Barre Investments LLC (d/b/a Bobcat Gas Storage)	St. Landry Parish, Louisiana	Competitive
SG Resources Mississippi LLC	Greene County, Mississippi	Competitive
Pine Prairie Energy Center LLC	Evangeline Parish, Louisiana	Competitive

Dr. Booth 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.

Answer:

Please see the response to Q 6.5. Below is a table presenting the specific storage facilities mentioned in the S&P report and their owners:

Storage Facility	Current Owner	Gas Pipeline or Gas Distributor?
Port Barre Investments LLC (d/b/a Bobcat Gas Storage)	Spectra Energy Corp.	Yes
SG Resources Mississippi LLC	PAA Natural Gas Storage LP	No
Pine Prairie Energy Center LLC	PAA Natural Gas Storage LP	No

Dr. Booth 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?

Answer:

Please see pages 20-21, 27-30, 33-34, and 59-60 of Dr. Gaske's Prepared Direct Testimony (Document B-0015, Intragaz-1, Document 5). Also see the responses to Régie 22.2, 22.3, 22.4 and 22.5. In addition, it should be noted that the Régie expressly recognized that smaller companies are riskier in its Decision D-2010-147 (26 November 2010) when it wrote:

> *[89] "The Board assesses the overall risk of Gazifère above average, mainly because of its size and the competition from electricity in Quebec..." (TRANSLATION)*

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December 23, 2008

U.S. Natural Gas Storage Owners Face Uncertainty As the Sector Copes With Volatile Prices And Demand

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U.S. Natural Gas Storage Owners Face Uncertainty As the Sector Copes With Volatile Prices And Demand

In the last decade, increased volatility of U.S. natural gas prices has raised the value of storage services and, as a result, the valuations for these assets. The stable nature of firm storage contracts and the increasing trend in lease rates have led some project sponsors to view gas storage as annuity-like and low risk. However, because gas price volatility remains unpredictable the sustainability of current lease rates is unknown and the long-term prospects for storage revenues are uncertain. One factor changing the normal pattern of demand is a surge in power plant usage that has significantly increased traditionally flat summer demand.

Given the weaker macroeconomic outlook in the U.S. and our expectations for natural gas production and liquefied natural gas (LNG) imports, we do not expect credit prospects to significantly improve for the asset class in the near term. Our specific concerns include:

- The long-term potential for decreased demand volatility to weaken storage prices,
- The uncertain extrinsic value of storage that may limit profitability, and,
- How well suited storage assets are for the demand characteristics of their specific market.

Standard & Poor's Ratings Services does not currently rate any storage project above 'BB', partially due to the above concerns. Nonetheless, we believe that under the right circumstances and with the proper contract mix, it is possible for select projects to reach the investment-grade rating category ('BBB-' and above).

It is important to note that our guidelines for considering an investment-grade rating are not meant to be prescriptive. There is a significant variety of credit quality across the sector depending on an individual project's exposure to market risk, construction risk, and its overall leverage, and we will evaluate each project based on its individual merits.

Differences Between Project-Financed and Corporate Entities

Whether a storage asset (depleted reservoir, salt dome cavern, or aquifer) developer is a diversified midstream energy company, a regulated utility, or a single-asset project sponsor, we view the general risks of storage development similarly. Although the individual risks are similar, projects financed on a single-asset basis entail a much higher degree of financial risk than an integrated midstream company that relies on a more diverse revenue stream.

In addition, storage facilities can enhance the value of a midstream or regulated utility's other assets. A pipeline company may view access to storage as a means of increasing its pipeline assets' value and competitive position because access to storage provides its gas transportation customers with greater reliability and diversity of supply. Local gas distribution companies (LDC) may focus more acutely on a storage project's ability to establish service reliability, particularly in the eyes of regulatory authorities, since they can pass storage costs through to consumers in their rate schedule. These positive effects on the larger business have led several companies to move forward with storage projects even when the storage asset's speculative-grade credit profile could put downward pressure on the corporate rating.

Unlike LDCs, many storage projects are not regulated and therefore lack stable pricing and returns. While a project can enter into storage contracts with highly rated counterparties to establish reliable revenues for a fixed period, all of the debt tenors on the projects we rate extend beyond the contract period, exposing the projects to merchant risk when the storage contracts roll off. This places a greater emphasis on whether the long-term fundamentals will support current asset valuations and storage prices that have nearly doubled over the past five years.

Storage Assets Rely On A Volatile Imbalance of Supply And Demand

By absorbing and releasing gas production when needed, gas storage balances steady production output with volatile demand, thereby maintaining reliability. Storage owners charge a monthly rental fee for physical capacity reserved under long-term contracts. These fees may face downward pressure on a number of fronts, presenting a key credit concern for the storage sector.

Customers and contract terms

Customer willingness to pay for storage is a function of the arbitrage opportunity in buying and storing gas when prices are cheap and withdrawing when gas becomes more expensive. That spread has become increasingly volatile and unpredictable, making the long-term value proposition of storage uncertain. Shorter contract terms relative to debt tenor expose sponsors to the risk of lower storage prices if spreads contract. We would expect any candidate for investment grade to have long-term contracts and an appropriate leverage profile that ensures contract revenue will comfortably cover all operating costs and debt service for a substantial portion of the debt's tenor. On a debt per bcf basis, our most highly rated project will have $7.8 million of debt per bcf at full capacity, and we would not expect an investment grade asset to exceed this level of leverage.

The type of storage customer is also important. For example, regulated LDCs tend to be highly rated counterparties that are more likely to recontract even if spreads fluctuate. This is because they are more concerned with the total cost of maintaining reliability. So, in addition to the spread in gas prices, they also consider the physical hedge that storage provides if supply disruptions occur, and the alternative costs of securing gas shipments at peak demand times. However, marketers tend to have weaker credit profiles and focus more singularly on speculative trading profit, making them more sensitive to lower spreads and therefore less reliable as customers from a credit perspective.

Storage asset types

There are three major types of underground storage, each with unique characteristics that may affect earning potential: depleted reservoirs, salt dome caverns, and aquifers. Depleted reservoirs and aquifers generally tend to have higher capacities, but a low injection and withdrawal, or "cycle" rates. Salt caverns and smaller confined reservoirs that can achieve higher pressure can cycle more gas over short periods of time in what is known as "high-turn" or "high-deliverability" storage. High-turn storage typically commands a premium because it allows a customer to capture the arbitrage between current cash costs and future expected gas prices caused by short-term price volatility. It also requires less "pad gas" to prime the cavern, allowing for a higher proportion of "working" gas (the volume of gas that can be actively managed). In addition to earning revenue from storage contracts, owners of high-turn storage can derive market revenue from hub and ancillary services. Conversely, lower turn storage requires a higher investment in pad gas and is better suited to a seasonal injection and withdrawal profile.

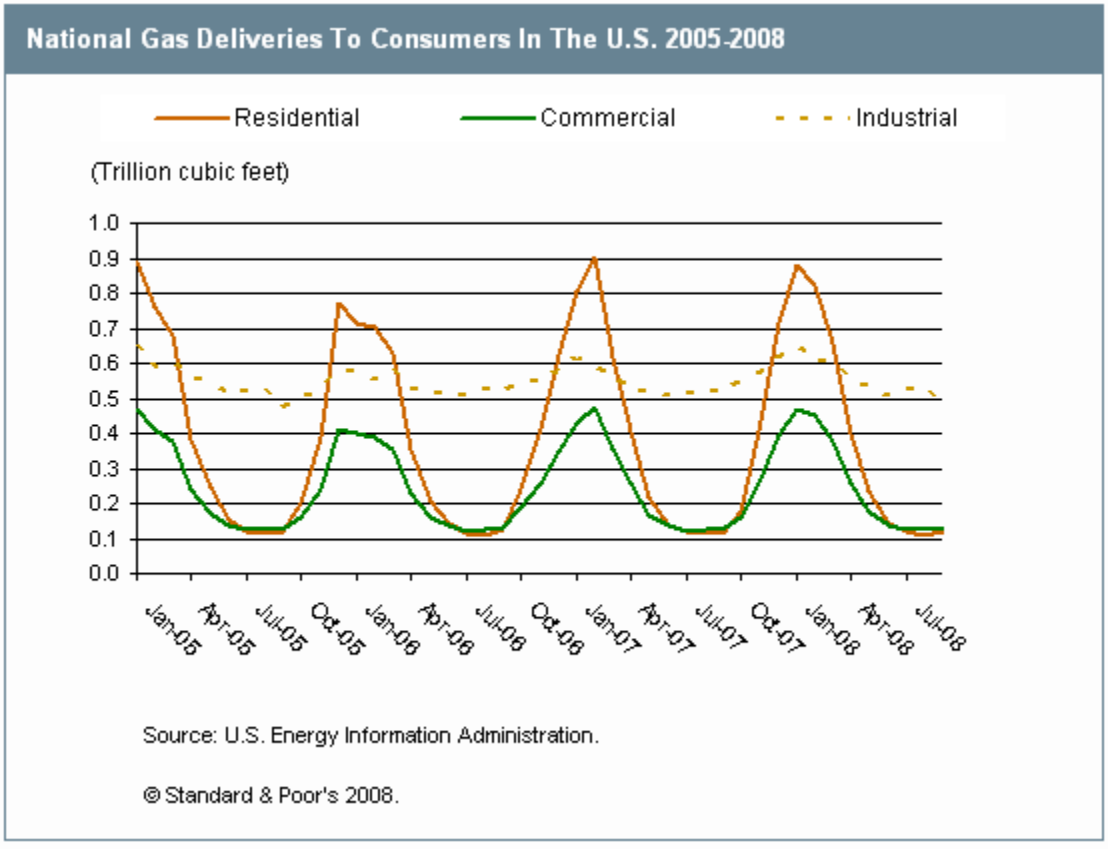
Geographic distribution

Most storage assets are concentrated in the Midwest and Northeast demand centers that have a large seasonal fluctuation in natural gas needs. In the upper Midwest, which doesn't have significant gas resources and therefore lacks depleted reservoirs, there is a high concentration of aquifer storage. In the Northeast, the South, and the Gulf Coast regions, depleted reservoirs are more common and frequently used. In addition, the Gulf Coast's geologic profusion of salt deposits, its location near production assets (including potential LNG import terminals and gas-producing shale deposits), and its access to takeaway pipelines servicing the East Coast markets, have led to the increasing development of high deliverability salt caverns. Access to pipelines servicing the Southeast has become particularly valuable given Florida's intensive use of gas-fired power plants because salt cavern storage's high deliverability can provide a rapid response if supply interruptions occur or demand spikes.

Intrinsic value

Several factors with varying degrees of predictability cause gas price volatility. In many parts of the country there is a significant and relatively predictable seasonal volatility in demand linked to residential and commercial winter heating (see chart 1).

Chart 1

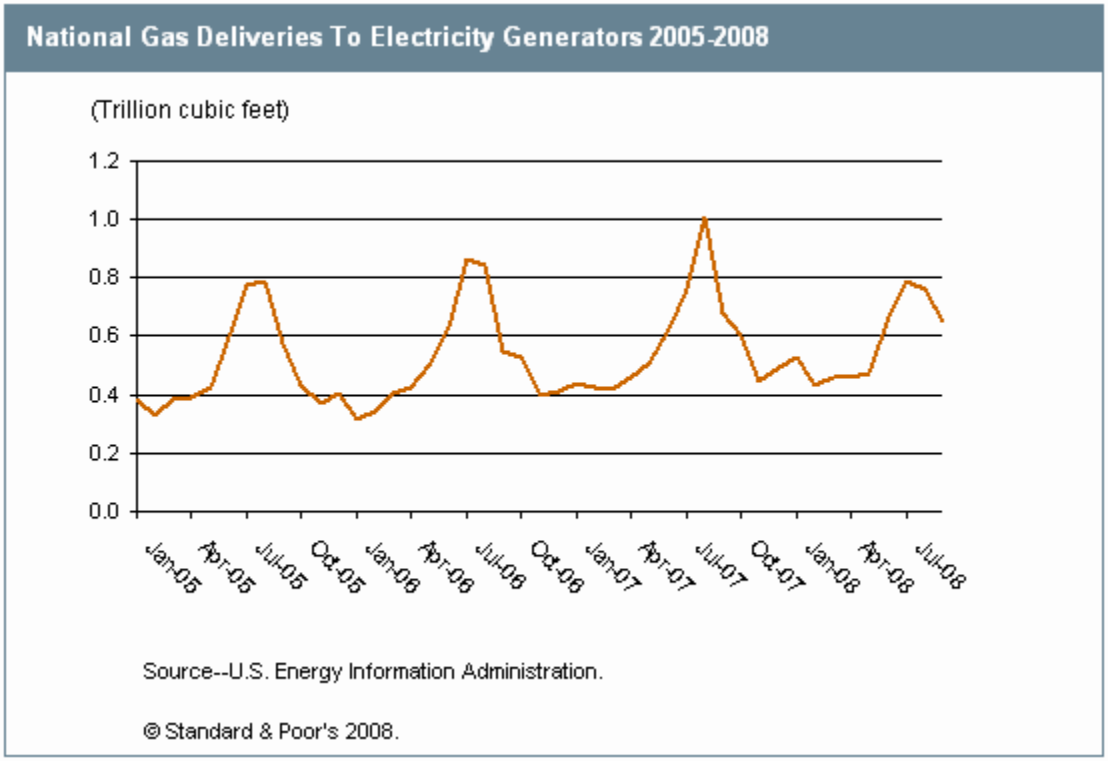


The so called "intrinsic" value of storage comes from the resulting seasonal fluctuation in natural gas prices. Companies buy and inject gas from spring to fall, when prices are low, and withdraw gas and sell it in the winter, when prices are high. Large-capacity, low-turn assets are best suited to this type of injection/withdrawal profile, and the value of high deliverability does not earn a large premium. As a result, we typically see depleted reservoirs and

aquifers as the primary providers of seasonal gas storage, although it is also a function of geography.

While there is a relatively consistent seasonal demand profile, a number of factors may narrow the seasonal gas price spread in the future. This would erode the market value of storage and raise credit issues for projects that face recontracting risk. To begin with, storage itself helps to reduce price swings. As with any arbitrage opportunity, players that profit from price differentials also help to bring the market into equilibrium. In addition, the proliferation of gas-fired power plants in response to tighter emissions regulation has reduced seasonal differences by creating a strong countercyclical summertime gas demand. The timing of the summertime gas demand spikes from power plants are nearly opposite that of the residential and commercial users (see chart 2). Increased summertime demand raises gas prices, shrinking the price differential between injection and withdrawal periods, and reduces the intrinsic value of storage. In the summer of 2008, gas prices reached record levels, partially due to the increased demand from power generation.

Chart 2



Because gas is a relatively clean fuel compared with other hydrocarbons, it accounts for most of new capacity since 2000. In 2006 alone, gas power plants accounted for 72% of new capacity additions. We expect a continuation of this trend in the near term and the potential for a contraction in spreads represents a credit concern for the asset class.

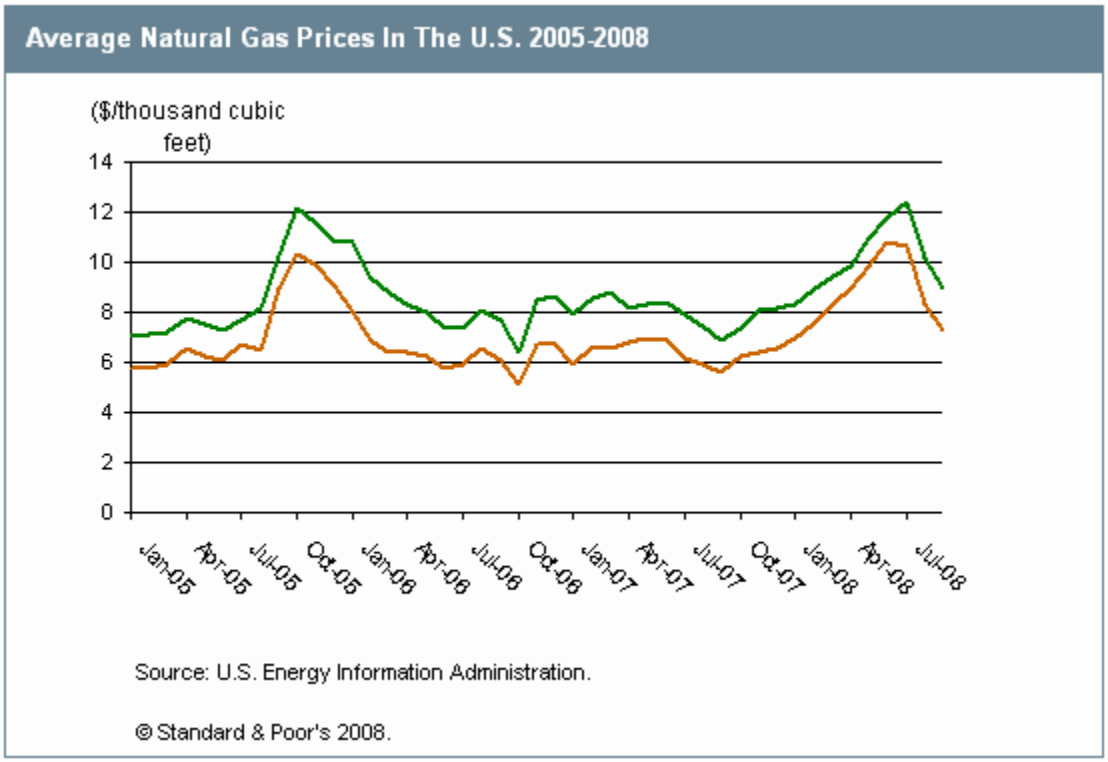
Extrinsic value

In addition to the intrinsic value of storage, higher-turn storage service may be able to more aggressively capture short-term volatility to realize the extrinsic value of hub services. Hub services include revenues from wheeling and park-and-loan activities, as well as other ancillary services. Wheeling is essentially moving gas from one pipeline to

another and charging for the service. Park-and-loan entails short-term gas trades out of the owner's capacity, similar to a put or call option on the price of gas. These revenue streams represent a storage operator's ability to optimize the asset. However, we take a conservative view of any extrinsic value assumptions because they are unpredictable. The value gained from such activity comes from gas price volatility, which has fluctuated between 5 and 20 cents per million Btu for three-day periods over the past six years, and is currently about one-third of 2005 levels . Projects like Port Barre Investments LLC (d/b/a Bobcat Gas Storage; B+/Negative/--), which will rely on hub services for 30% of revenues, carry far more financial risk exposure than a project like SG Resources Mississippi LLC (BB/Stable/--), which relies on hub services for only 14% of revenues.

The imbalances and short-term volatility needed to generate extrinsic value result from natural gas production and transmission disruptions, or by demand volatility, which has risen with the increase in gas-fired power generation. Gas-fired turbines typically respond to electricity demand volatility and forced outages during peak periods, both of which increase gas-demand volatility. These fluctuations are more short term in nature than seasonal swings, and gas storage helps to address them. Greater volatility increases the extrinsic value, and conversely, lower volatility reduces it. Production shut-ins due to Gulf of Mexico hurricanes are one of the largest causes of volatility in recent years. For example, gas prices surged in response to supply disruptions after Hurricane Katrina in 2005 (see chart 3).

Chart 3



In mid-2008, prices had another run-up, but this time commodity price volatility across the energy sector was the culprit. So, while seasonal demand cycles still exist, they have a less pronounced effect on prices than supply-and-demand shocks, and macroeconomic conditions that can affect global commodity prices. This has placed a premium on high deliverability storage assets like salt caverns, but unless long-term contracts can capture this

value, storage revenues will have merchant exposure to uncertain volatility.

Construction Risks

Construction risk typically weighs more heavily on the initial credit profile of a storage project than operating risk, particularly for salt cavern assets, potentially capping a rating during the asset's development phase. We have seen gas storage construction performed with varying degrees of success. Poor planning and incomplete or inaccurate engineering has led to significant cost overruns on some projects. In the case of Pine Prairie Energy Center LLC (B/Stable/--), costs increased by 35%, and on Bobcat by 50%. These increases forced their sponsors to infuse increasing amounts of equity to preserve the project's overall leverage and credit profile. Meanwhile, storage development at a more diversified midstream company tends to represent a relatively small portion of capital expenditures. While construction problems could still be damaging, the ratings impact would be more limited for a midstream company than for a single-asset storage project.

Although the technology and construction methods used in gas storage are proven, we have seen problems arise due to the overheated construction market over the past several years. Fixed-price contracts have been rare in the construction sector, and although there are signs that demand may be abating with current macroeconomic conditions, our credit analysis will continue to emphasize the portion of engineering that has been completed, the portion of development costs that have been fixed, and whether any key components with price risk and long lead times remain unordered. Successful projects commonly have contingencies of at least 20% on the unfixed portion of the construction budget.

We also attribute a heavy weight to management's involvement in the design and construction process. Experienced teams have been able to significantly reduce the number of change orders and associated cost and schedule slippages that have lately become common. When SG Resources Mississippi completed the first phase of its development program with minimal overruns, we raised its rating to 'BB' from 'BB-' in light of its demonstrated risk mitigation and the successful partial completion of development.

Operating risk tends to be lower with gas storage, as with much of the midstream space, compared with assets like power generation. The most complex components at an operating asset are compressors, and we expect to see a strong operational track record with a maintenance budget allocation in line with industry standards on higher rated gas storage projects.

Storage Outlook: Uncertain

The long-term value of storage assets remains unknown. If seasonal and short-term price volatility decreases, the earning potential of storage may decline. Meanwhile, the weak macroeconomic outlook has led to lower commodity prices over the last quarter and potentially reduced the spiky volatility associated with low reserve margins that has contributed to high extrinsic value realization over the past five years. One of the premises of some of the recent run-up in storage prices has been the expectation of a robust LNG import market with accompanying terminal development. Standard & Poor's has taken a conservative view of LNG growth, and significant import growth has so far failed to materialize. If LNG imports increase or production from unconventional sources in shale deposits goes up, demand for storage assets could rise as well, particularly in the Gulf Coast region.

With continuing uncertainty, we will increasingly view the best candidates for investment grade as those projects

that effectively mitigate construction risk, take a conservative approach to extrinsic value assumptions, and lock in long-term storage contracts with highly rated counterparties to secure a reliable stream of revenue that comfortably services debt amortization.

Click on this link to see other articles in "Special Report: U.S. Midstream Energy: The Squeeze Is On."

Click on this link to go to the Special Report Archive.

ANSWER TO DR. BOOTH'S INFORMATION REQUESTS TO DR. GASKE

Source: Information Request n° 1 to Dr. Gaske

Date: October 25, 2012

Intervener: INDUSTRIAL GAS USERS ASSOCIATION

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

Dr. Booth 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?

Answer:

In setting the allowed return on equity for Terasen Gas Inc. et al, the BCUC reduced "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." (British Columbia Utilities Commission, In the Matter of Terasen Gas Inc., Terasen Gas (Vancouver Island) Inc., Terasen Gas (Whistler) Inc. and Return on Equity and Capital Structure, Decision, December 16, 2009, at 51)

Dr. Gaske's testimony cites the BCUC decision for the principle that the DCF model has been accepted in Canada and he is not recommending that the Régie set the allowed ROE for Intragaz equal to the ROE authorized by the BCUC.

Dr. Booth 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?

Answer:

Dr. Gaske confirms that in an interview with the BBC on August 8, 2012, Bank of Canada Governor Mark Carney said "…we have a financial system that's firing on all

cylinders and so we will have to adjust – we will adjust if it's appropriate." However, an article published by the CBC on October 24, 2012 notes "[t]he governor of the Bank of Canada, Mark Carney, said Wednesday his inclination toward raising interest rates is 'less imminent,' given risks to economic growth from tepid global demand and high household debt in Canada." That article also notes that Canada's "economy is still operating below capacity and won't be firing on all cylinders until the end of next year." (CBC News, "Carney says inclination to hike rates 'less imminent'", October 24, 2012)

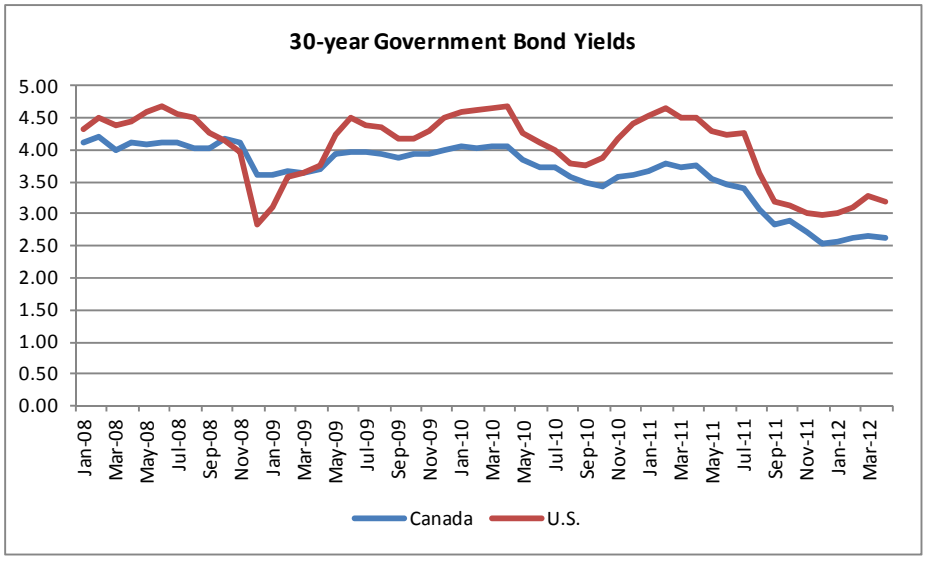
Dr. Gaske's disagrees with the characterization of the Federal Reserve's actions as "unlimited" quantitative easing, but on September 13, 2012, the Federal Open Market Committee announced the extension of its quantitative easing program through the end of 2012. (Federal Reserve Press Release, September 13, 2012)

Dr. Booth 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.

Answer:

Please see the response to Q 7.2. Regardless of the differing actions taken by the Bank of Canada and the U.S. Federal Reserve, Canadian and U.S. inflation rates, GDP growth rates, and interest rates have demonstrated a remarkably strong correlation over time. Please see page 3 of Schedule 1 of Dr. Gaske's Prepared Direct Testimony (Document B-0008) for charts comparing inflation rates and GDP growth rates for the U.S. and Canada. Below is a chart of the Canadian and U.S. government bond yields presented on pages 4-7 of Schedule 1 of Dr. Gaske's Prepared Direct Testimony (Document B-0008).



Dr. Booth 7.4

Please confirm that the Schedule 9 common equity ratio for the Canadian comparable firms is 36% and not 50%.

Answer:

Confirmed. Page 1 of Schedule 9 shows that the mean common equity ratio for Dr. Gaske's proxy group of Canadian utility companies as of December 31, 2011 was 36.28 percent.

Dr. Booth 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.

Answer:

It would be incorrect to say that "to be priced by definition these have to affect all firms." The CAPM assumes that these factors should affect all firms, but there is evidence that the CAPM does not accurately reflect all risks. As discussed in the cited section of Dr. Gaske's evidence, the fact that there are factors other than beta that systematically affect risk (i.e., are not simply random variations in returns) means that these factors, such as firm size, are priced in the market. In addition, the empirical weakness of beta as an explanation of stock returns suggests that beta does not accurately measure the relative risk of securities.

Dr. Booth 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.

Answer:

Please see Q. 7.6 Attachment 1 (Size Premia in Canada). The cited article was published in the Journal of Business Valuation, an online publication of Business Valuation Resources (BVR). The study was originally published by BVR's partner organization, the Canadian Institute of Chartered Business Valuators (CICBV), in February 2009 and subsequently reprinted in BVR's resource library in May 2009. It was not peer reviewed prior to publication.

Dr. Booth 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.

Answer:

The statement proposed in this request is incorrect and cannot be confirmed. Pages 46-49 of Dr. Gaske's evidence discuss several problems with the CAPM. Only one of these problems, the use of historical data in selecting a risk premium, would potentially be mitigated by regularly updated surveys of analysts' market risk premium requirements. The other issues related to an inability to measure beta and the lack of strong empirical support for the accuracy or reliability of beta would not be avoided.

Dr. Booth 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.

Answer:

The discussion in this testimony relies on the finding that the CAPM is not a reliable method for estimating the cost of capital. The testimony recommends the use of a DCF approach and does not rely upon a Fama-French or Carhart model.

Dr. Booth 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

Answer:

Please see pages 45-52 of Dr. Gaske's Prepared Direct Testimony. Dr. Gaske does not advocate for the use of the Fama-French model nor is he aware of any Canadian regulator that has relied on the Fama-French model.

Dr. Booth 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?

Answer:

Dr. Gaske recognizes that, while the DCF method is the primary method used by U.S. regulators, in the past, Canadian regulators generally placed primary weight to the CAPM. Pages 45-52 of Dr. Gaske's Prepared Direct Testimony discuss why the use of the CAPM is no longer reasonable. Therefore, there is no need to list prior precedents with respect to the CAPM. Below are four recent examples of Canadian regulators basing their cost of capital decisions on multiple methodologies rather than solely on the CAPM:

Quebec: The Régie de l'énergie considered the DCF model when setting the allowed ROE for Gaz Métro concluding: "For reasons of caution, as no one model can perfectly reproduce investor expectations of return, the Régie will take into account, for the purpose of determining Gaz Métro's ROE, the results of the DCF model, despite the weaknesses note above." (Régie de l'énergie, R-3752-2011 Phase 2, D-2011-182, November 25, 2011)

The primary weakness in the DCF model that was cited in that decision was that it was difficult to obtain a reliable estimate for the growth rate of dividends given the financial analysts do not produce growth forecasts for regulated Canadian companies. (Paragraph 193, translation). However, in early 2012 SNL Financial began providing compilations of the consensus analysts growth rates for regulated Canadian companies.

Ontario: The Ontario Energy Board considered multiple methodologies, including the DCF model, when setting the cost of capital for Ontario's regulated utilities concluding: "The Board agrees that the use of multiple tests to directly and indirectly estimate the ERP is a superior approach to informing its judgment than reliance on a single methodology. In particular, the Board is concerned that CAPM, as applied by Dr. Booth, does not adequately capture the inverse relationship between the ERP and the long Canada bond yield. As such, the Board does not accept the recommendation that it place overwhelming weight on a CAPM estimate in the determination of the initial ERP." (Ontario Energy Board, EB-200-0084, Report of the Board, December 11, 2009, at 36-37)

Alberta: The Alberta Utilities Commission considered the DCF model when setting the generic cost of capital concluding: "The Commission has reviewed the models and approaches adopted by the various parties and, based on the analyses above, has found that some of the CAPM and DCF results filed in this proceeding (including an analysis of the expected overall Canadian stock market returns) will form the primary

basis for its ROE determination." (Alberta Utilities Commission, Application No. 1606549, Proceeding ID No. 833, Decision 2011-474, December 8, 2011, at 27)

Prince Edward Island: The Island Regulatory and Appeals Commission made reference to the same statement from the BCUC decision cited on page 51 of Dr. Gaske's Prepared Direct Testimony and found "this commentary particularly relevant." (The Island Regulatory and Appeals Commission, Docket UE20940, Order UE10-03, July 12, 2010, at 22)

ANSWER TO DR. BOOTH'S INFORMATION REQUESTS TO DR. GASKE

Source: Information Request n° 1 to Dr. Gaske

Date: October 25, 2012

Intervener: INDUSTRIAL GAS USERS ASSOCIATION

Question 8 Reference: Competition (pages 55-60)

Dr. Booth 8.1

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.

Answer:

Both Gaz Métro and GDF Quebec Inc. are Canadian-based companies. Gaz Métro is owned by Canadian-based companies while GDF Quebec Inc. is owned by GDF Suez, a foreign-based company. Intragaz competes for capital with other foreign investments within its owners' companies. Please see the response to IGUA 8.2.

Dr. Booth 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?

Answer:

Gaz Métro has US affiliates that have debt in US dollars and GDF Québec is a subsidiary of a company with investments and operations throughout the world. GDF Suez, the parent of GDF Québec, issued a press release on October 3, 2012 announcing:

> *"Yesterday, GDF SUEZ accessed the US bond market for the first time in its history by launching a dual-tranche bond issue …"*

http://www.gdfsuez.com/wp-content/uploads/2012/10/CP-GDF-SUEZ-US-bond-market-VA.pdf

In addition to the possibility that U.S. investors might invest in Gaz Métro, the international competition for capital includes the possibility that Canadian investors might invest in U.S. companies. For example, if Canadian individuals, institutions, or corporations find that returns in regulated Canadian companies are insufficient, they might direct more of their capital to U.S. or other international investments.

Dr. Booth 8.3

Please list the US equity ownership of the Canadian comparable companies and the proportion of their debt financing raised in US $.

Answer:

Dr. Gaske has not conducted such a study.

Dr. Booth 8.4

Please list the Canadian utilities that are listed on US stock exchanges.

Answer:

Using the Bloomberg Professional Service and the equity screening function, the following Canadian utilities are listed on U.S. stock exchanges: Enbridge Inc.; Pembina Pipeline Corporation; TransAlta Corporation; and TransCanada Corporation.

Dr. Booth 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.

Answer:

Intragaz disagrees that “with-holding tax makes ownership of Canadian utilities tax preferred by Canadian investors” because of the ability for foreign investors to receive credits for with-held taxes. For example, the dividend tax credit for Canadian investors does not eliminate taxes for Canadian investors. Instead the dividend tax credit effectively reduces the tax rate on their dividends for an individual in the top tax brackets to approximately 30-35 percent. In contrast, dividends paid to foreign investors are subject only to a 5 percent withholding tax. For many foreign investors the dividend withholding tax paid to Canada becomes a tax credit against the tax paid by the foreign investor in its home country. For example, in the US, Internal Revenue Code TITLE 26, Subtitle A, CHAPTER 1, Subchapter A, PART IV, Subpart B, Sec. 27, provides:

(a) Foreign tax credit

The amount of taxes imposed by foreign countries and possessions of the United States shall be allowed as a credit against the tax imposed by this chapter to the extent provided in section 901.

Because Canadian investors pay a significant tax on dividends from Canadian companies, and the fact that the much smaller Canadian withholding tax on dividends paid to foreigners is often credited against taxes paid in their home country, it is incorrect to state that ownership of Canadian utilities creates a tax preference for Canadian investors.

Dr. Booth 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.

Answer:

U.S. investors are allowed to buy Canadian limited partnerships. Dr. Gaske and Intragaz did not review "prospectus of any Canadian limited partnerships" but confirm that U.S. investors could create a Canadian-based holding to acquire a limited-partnership if ownership was restricted to Canadian investors. For example, Intragaz is partially owned by GDF Québec, which is owned by GDF Suez, a foreign company. Please also see the response to IGUA 8.2.

Dr. Booth 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.

Answer:

Confirmed. Although the process for selecting Canadian proxies began with the TSX/S&P utilities index, Enbridge and TransCanada were added to the group because their mix of regulated operations provide a good proxy for the risks of Intragaz.

Dr. Booth 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).

Answer:

Canadian income trusts were eliminated from the group only because they have not been included in the proxy groups presented before the Régie in the recent past.

Enbridge Income Fund Holdings Inc. is likely the only Canadian income fund that Dr. Gaske would have considered as a suitable proxy company for Intragaz. However, it would have been eliminated from the group because published consensus analysts' growth rate estimates are not available for that company.

Dr. Booth 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 $.

Answer:

This question is answered by Cosime.

Lors de notre étude de marché, nous avons interrogé des institutions financières et des investisseurs susceptibles d'être intéressés à prêter des capitaux à long terme (10 ans et plus) en dollars canadiens. Nous avons approché des banques canadiennes, des caisses de retraite canadiennes, des compagnies d'assurance-vie canadiennes, des banques européennes et des banques japonaises. Pour ce qui est des banques européennes et japonaises, nous avons contacté leurs bureaux de New York ou Toronto à partir desquels ces institutions couvrent les marchés américain et canadien. Nous n'avons pas contacté de banques américaines, puisqu'elles ne sont pas actives sur le marché canadien du prêt à long terme.

Dr. Booth 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.

Answer:

Small companies attempt to attract capital from investors who have the option of investing in other countries. Consequently, they are competing for capital in international financial markets even when they do not necessarily issue capital in those markets. Please see the response to Régie 2.3 and 8.11.

Dr. Booth 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.

Answer:

Intragaz could access public markets, and should be in a position to do so. However, its small size suggests that it generally could be more efficient to raise capital from larger investors that can access public markets more efficiently and consolidate investment funds. For example, Gazifère, a small company, receives financing from its parent, Enbridge Inc., but its capital structure and cost of debt are established as if it were a stand-alone company.

ANSWER TO DR. BOOTH'S INFORMATION REQUESTS TO DR. GASKE

Source: Information Request n° 1 to Dr. Gaske

Date: October 25, 2012

Intervener: INDUSTRIAL GAS USERS ASSOCIATION

Question 9 Reference: ROE Analyses (pages 60-70)

Dr. Booth 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.

Answer:

Four of the five companies in Dr. Gaske's U.S. proxy group are structured as master limited partnerships ("MLPs"). Please see Q. 9 Attachment 1 for the dividend payout ratios for Dr. Gaske's U.S. proxy group. MLPs generally distribute most available cash flow to the general and limited partners in the form of quarterly distributions. Most MLP agreements define "available cash flow" as (1) net income (gross revenues minus operating expenses) plus (2) depreciation and amortization, minus (3) capital investments the partnership must make to maintain its current asset base and cash flow stream. These high payout ratios are one of the reasons that the yields of MLPs tend to be higher than for most other companies. Please see the response to IGUA 9.2.

Dr. Booth 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?

Answer:

The assumption that high distribution payouts by MLPs prevent growth, or somehow invalidate investment analysts' estimates of future growth, is not supported by either financial theory or historical experience. One of several reasons pipeline MLPs have produced significant growth rates despite high distribution payouts is because they retain and reinvest cash flow.

These companies generally produced more than enough cash flow from their business operations to pay dividend distributions and also have cash left for investment in new plant. Companies that are able to pay distributions and retain cash for investment in new plant are often able to generate internal growth without adding to retained earnings. That is not to say that the MLPs must retain cash flow in order to maintain and increase their distributions. Instead, they also borrow and issue equity to add facilities that are accretive to earnings. Thus, although MLPs rely less on retained earnings than many corporations, they are able to generate significant sustainable growth in many ways.

It is reasonable to assume that investment analysts are aware of the practices of the MLPs when growth rate projections are made and that market prices and growth rate projections adequately reflect all of these conditions. In fact analysts describe how it is possible that income to limited partnership units can grow significantly despite the fact that very little income is retained for growth. In AG Edwards MLP Primer they note:

> …over the past few years a new breed of growth MLP has emerged, offering unit holders above average current yields, capital appreciation potential, distribution growth well above inflation rates, plus the added benefit of tax deferred income. While all of these variables are important, the key valuation driver is distribution growth potential. In our opinion, top tier growth MLPs exhibit balanced, sustainable growth in distributable cash flow (DCF), which should ultimately lead to above-average distribution growth and capital appreciation.
>
> * * * *
>
> MLPs grow mainly by making accretive acquisitions.
> -- A.G. Edwards, *MLP Primer*, pp. 8 and 10

Merrill-Lynch also notes that MLPs tend to generate significant growth despite high payout ratios:

> **A compelling blend of growth and income**
> …MLPs typically pay out the bulk of their operating cash flow in the form of quarterly distributions, with an objective of growing these cash distributions over time. …We project Energy MLPs' robust cash distribution growth will continue, and expect it to average 5-8% over the next several years.
>
> Merrill-Lynch elaborates on some of the drivers of MLP growth in the following passage:
>
> MLP cash distribution growth should be driven increasingly by a focus on growth from internal projects, as MLPs undertake needed energy infrastructure projects related to changing energy supply and demand dynamics. We expect these projects will provide MLPs with attractive and

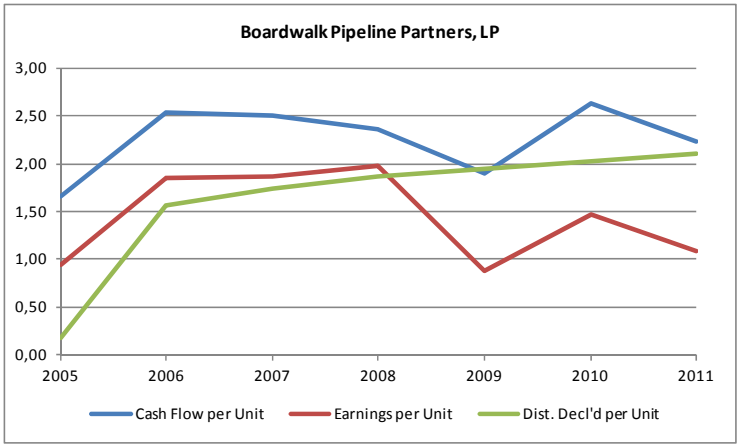
high-returning organic growth opportunities that should drive cash distribution growth. We also expect growth to be supplemented by other internal initiatives (for example, fee increases) which, along with acquisitions, have been historically relied upon for distribution growth.

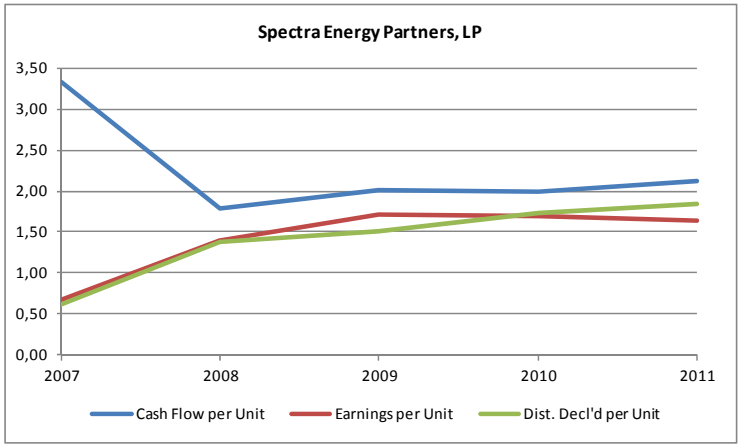
MLP equity holders generally experience growth in earnings, cash flow and distributions per share when a company pursues any of the following strategies:

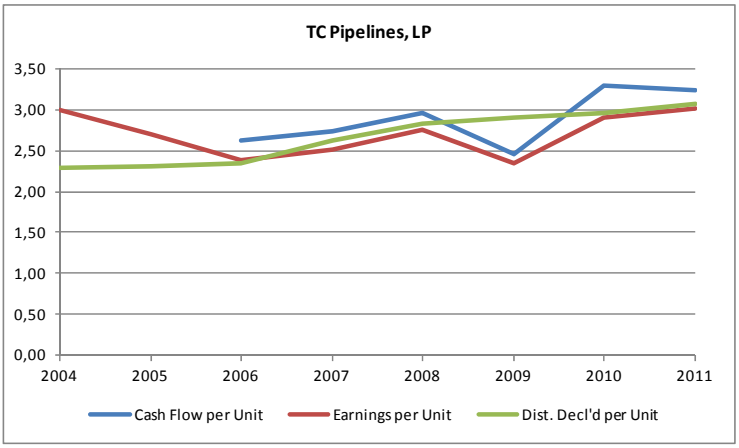
1. Reinvesting cash flow in the company,
2. Selling new common equity to invest in assets that increase the earnings per share for existing shareholders (i.e., “accretive investments),
3. Paying down debt to reduce interest expenses, or,
4. Borrowing to invest in projects that have a return that exceeds the cost of debt.

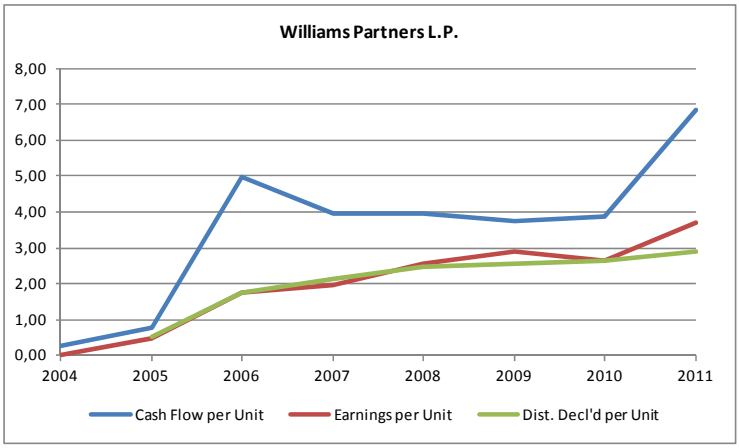
These multiple sources of growth explain why investment analysts often project long-term growth rates that are higher than a simple earnings retention growth rate might suggest.

Historical experience concerning earnings, distributions and earnings retention growth rates are shown for each of the Dr. Gaske’s MLP proxy companies on the charts on next page. It can be seen that there is virtually no relationship between earnings retention growth rates, which are commonly negative, and the positive trend in actual earnings and distributions for the MLPs. The experiences of the MLPs demonstrate that growth in dividend distributions continue to trend upwards due to the MLP retaining and reinvesting a portion of free cash flow, as well as other sources of earnings growth that are not taken into account when the assumption is made that growth can only come from retained earnings.









Dr. Booth 9.3

In the discussion of growth rates on page 61 are these nominal or real growth rates?

Answer:

The growth rates discussed on lines 11-18 of page 61 of Dr. Gaske's Prepared Direct Testimony apply to nominal GDP.

Dr. Booth 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.

Answer:

In theory, the constant growth form of the DCF model assumes a single infinite growth rate. However, expected growth beyond approximately 20-30 years has very little impact on the DCF result. Consequently, investors might reasonably expect an individual company to grow more rapidly than the economy for an extended period of time without also expecting that company to become larger than the economy.

Dr. Booth 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.

Answer:

Please see the response to Q. 9.4. Many practitioners use analysts' growth rate estimates for a period beyond five years and these estimates have been shown to be reliable indicators of expected growth rates.

For example, a 1986 article entitled "Using Analysts' Growth Forecasts to Estimate Shareholders Required Rates of Return" by Dr. Robert Harris, for example, demonstrated that financial analysts' earnings forecasts (referred to in the article as "FAF") in a Constant Growth DCF formula are an appropriate method of calculating the expected market risk premium.1 In that regard, Dr. Harris noted that:

> *…a growing body of knowledge shows that analysts' earnings forecasts are indeed reflected in stock prices. Such studies typically employ a consensus measure of FAF calculated as a simple average of forecasts by individual analysts.*[2]

Dr. Harris further noted that,

> *Given the demonstrated relationship of FAF to equity prices and the direct theoretical appeal of expectational data, it is no surprise that FAF have been used in conjunction with DCF models to estimate equity return requirements*.[3]

In a somewhat later article, Professors Carleton and Vander Weide performed a study to determine whether projected earnings growth rates are superior to historical measures of growth in the implementation of the DCF model.[4] Although the purpose of that study was to "investigate what growth expectation is embodied in the firm's current stock price,"[5] the authors clearly indicate the importance of earnings projections in the context of the DCF model. Professors Carleton and Vander Weide concluded that:

> *…our studies affirm the superiority of analysts' forecasts over simple historical growth extrapolations in the stock price formation process.*

---

1 Robert S. Harris, *Using Analysts' Growth Forecasts to Estimate Shareholder Required Rates of Return*, Financial Management, 1986 at 66.

2 *Ibid.*, at 59. Emphasis added.

3 *Ibid.*, at 60.

4 James H. Vander Weide, Willard T. Carleton, *Investor growth expectations: Analysts vs. history,* The Journal of Portfolio Management, Spring, 1988.

5 *Ibid.*, at 78.

> *Indirectly, this finding lends support to the use of valuation models whose input includes expected growth rates*.[6]

Similarly, in an article entitled Estimating Shareholder Risk Premia Using Analysts Growth Forecasts, Harris and Marston presented "estimates of shareholder required rates of return and risk premia which are derived using forward-looking analysts' growth forecasts".[7] In addition to other findings, Harris and Marston reported that,

> *…in addition to fitting the theoretical requirement of being forward-looking, the utilization of analysts' forecasts in estimating return requirements provides reasonable empirical results that can be useful in practical applications*.[8]

More recently (2004), the Carleton and Vander Weide study was updated to determine whether the finding that analysts' earnings growth forecasts are relevant in the stock valuation process still holds. The results of that updated study continued to demonstrate the importance of analysts' earnings forecasts, including the application of those forecasts to utility companies.[9] Similarly, Brigham, Shome and Vinson noted that "evidence in the current literature indicates that (1) analysts' forecasts are superior to forecasts based solely on time series data; and (2) investors do rely on analysts' forecasts."[10]

Dr. Gaske does not believe that most practitioners or regulators calculate the cost of capital based on five years of analysts' growth rate estimates and GDP growth thereafter. Instead, most practitioners and regulators rely solely on analysts' growth rate estimates or they rely on a mixture of analysts' growth rate estimates and some other growth rate estimate (including, possibly, GDP growth forecasts) when it is deemed most reasonable to factor in some other growth rate estimate.

Dr. Booth 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.

---

6 *Ibid.*, at 82.

7 Robert S. Harris, Felicia C. Marston, *Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts*, Financial Management, Summer 1992.

8 *Ibid.*, at 63.

9 Advanced Research Center, *Investor Growth Expectations*, Summer, 2004.

10 *The Risk Premium Approach to Measuring a Utility's Cost of Equity*, Financial Management, Spring 1985.

Answer:

Dr. Gaske is not aware of any recent studies that provide evidence that there is analyst bias in growth rates. To the contrary, he is aware of a number of studies that indicate that there is no such bias. Since the restructuring of the American Securities Industry there is no incentive for analysts to upwardly bias their growth rates. Regulators have separated the stock underwriting business from the research function in an effort to assure the independence and quality of analysts' buy and sell recommendations, as well as the accuracy of their earnings estimates. Equity analysts do not have an incentive to provide overly optimistic research reports because much of this reporting is utilized by institutional clients such as pension funds or mutual funds, and credibility is very important in maintaining that business relationship. Finally, clients expect forecasting accuracy in the reports of equity analysts if compensation is based on the revenue an analyst generates for his employer. There is ample evidence to support the conclusion that earnings estimates are reasonably accurate, and accordingly are relied upon by utility investors.

Dr. Gaske is aware of several studies that discuss the issue of analyst bias in growth rates. A Study by Ramnath *et al.* finds the I/B/E/S (now Thomson FirstCall) forecasts more accurate than Value Line, yet Value Line does not have the same potential conflicts of interest noted above because it is neither an underwriter nor a broker (Sundaresh Ramnath, Steve Rock, and Philip Shane, Value Line and I/B/E/S earnings forecasts, International Journal of Forecasting, Volume 21, Issue 1, 2005, at 185-198). Its revenues come from a very large group of subscribers, who are both buyers and sellers of common stocks.

In a more recent study by the very same authors (Ramnath *et al.*), the authors review all papers related to the role of financial analysts published since 1992 in major research journals. Based on this review of the research, the authors conclude that "analysts' forecasts effectively proxy for the market's earnings expectations." (Sundaresh Ramnath, Steve Rock, and Philip Shane, *A Review of Research Related to Financial Analysts' Forecasts and Stock Recommendations*, Social Science Research Network, June 30, 2008, at 47)

On the specific topic of analyst bias, the authors cite the following evidence:

- "Though researchers routinely assert that analyst forecasts are optimistic (e.g., research reviewed by Brown 1993), the evidence supporting overall optimism is contextually confined and sample-period specific." (This statement is supported by the footnote: "Abarbanell and Lehavy (2003, 142) note that "[a]fter four decades of research on the rationality of analysts' forecast it is somewhat disconcerting that the most definitive statements observers and critics of earnings forecasters appear willing to agree on are ones for which there is only tenuous empirical support.") (Sundaresh Ramnath, Steve Rock, and Philip Shane, *A Review of Research Related to Financial Analysts' Forecasts and Stock Recommendations*, Social Science Research Network, June 30, 2008, at 67)

- "Recent sample periods do not provide compelling support for forecast optimism. Brown (2001) notes that median forecast errors have decreased over time from slightly negative (optimistic) to zero to slightly positive (pessimistic) for all types of earnings (profits, losses, and zero net income) over the 1984-1999 time period." (Sundaresh Ramnath, Steve Rock, and Philip Shane, *A Review of Research Related to Financial Analysts' Forecasts and Stock Recommendations*, Social Science Research Network, June 30, 2008, at 68)
- "In sum, conclusions regarding overall bias in analyst forecasts are subject to a variety of caveats." (Sundaresh Ramnath, Steve Rock, and Philip Shane, *A Review of Research Related to Financial Analysts' Forecasts and Stock Recommendations*, Social Science Research Network, June 30, 2008, at 69)
- "Overall, biasing earnings forecasts upward to curry favor with management seems tenuous since upward biased forecasts lead to negative forecast errors, and surely management prefers to avoid earnings surprise." (Sundaresh Ramnath, Steve Rock, and Philip Shane, *A Review of Research Related to Financial Analysts' Forecasts and Stock Recommendations*, Social Science Research Network, June 30, 2008, at 71)
- "They [Ljungqvist, *et al*. (2006)] suggest that analysts are concerned about reputation capital and that aggressive recommendations are counterproductive." (Sundaresh Ramnath, Steve Rock, and Philip Shane, *A Review of Research Related to Financial Analysts' Forecasts and Stock Recommendations*, Social Science Research Network, June 30, 2008, at 72)

Another recent article in the Financial Analyst Journal also found that analyst forecast bias has declined significantly or disappeared entirely since the Global Settlement:

> Introduced in 2002, the Global Settlement and related regulations had an even bigger impact than Reg FD on analyst behavior. After the Global Settlement, the mean forecast bias declined significantly, whereas the median forecast bias essentially disappeared. Although disentangling the impact of the Global Settlement from that or related rules and regulations aimed at mitigating analysts' conflicts of interest is impossible, forecast bias clearly declined around the time the Global Settlement was announced. These results suggest that the recent efforts of regulators have helped neutralize analysts' conflicts of interest. (Armen Hovakimian and Ekkachai Saenyasiri, *Conflicts of Interest and Analyst Behavior: Evidence from Recent Changes in Regulation*, Financial Analysts Journal, Volume 66, Number 4, July/August 2010, at 105)

Consequently, the most recent evidence indicates that any possible analyst bias no longer remains after the regulatory changes in the American securities investment industry.

Dr. Booth 9.7

Please indicate why Dr. Gaske has made no adjustments to account for analyst optimism.

Answer:

Dr. Gaske does not believe analyst bias is present in the growth rates he has selected to use for his DCF analysis and accordingly no adjustment is warranted. Please see the response to IGUA 9.6.

Dr. Booth 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.

Answer:

The assertion in this request is incorrect and cannot be confirmed. The request correctly describes the characteristic of historic growth rate measurements that causes arithmetic growth rate calculations to exceed compound (or geometric) growth rate calculations when there is volatility in the historical data. However, the same characteristic does not apply to growth rate forecasts because neither an earnings growth rate forecast nor a dividend growth rate forecast is a volatile number. Therefore, on a forecast basis the arithmetic average and the compound (geometric) average growth rates will be equal to each other and there is no over- or under-estimation inherent in a forecast

Dr. Booth 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.

Answer:

In 2010, the British Columbia Utilities Commission awarded Pacific Northern Gas Ltd. a ROE of 10.15 percent for its West and Tumbler Ridge divisions (British Columbia Utilities Commission, Order Number G-84-10, May 20, 2010). Dr. Gaske's estimate of the cost of common equity capital in this proceeding is for a storage operation. Because the risks

of storage are significantly greater than those of most utility operations, investors generally would require a lower rate of return for utility operations. Therefore, the decision regarding Intragaz should have no effect on utility stocks.

Dr. Booth 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).

Answer:

Please see next page.

Canadian Utilities Ltd			**Emera Inc**			**Enbridge Inc**			**Fortis Inc/Canada**			**TransCanada Corp**			**Boardwalk Pipeline Partners LP**			**Spectra Energy Corp**			**Spectra Energy Partners LP**			**TC Pipelines LP**			**Williams Partners LP**		
CU CN Equity			EMA CN Equity			ENB CN Equity			FTS CN Equity			TRP CN Equity			BWP US Equity			SE US Equity			SEP US Equity			TCP US Equity			WPZ US Equity		
	M/B			M/B			M/B			M/B			M/B			M/B			M/B			M/B			M/B			M/B	
Date	Ratio	ROE	Date	Ratio	ROE	Date	Ratio	ROE	Date	Ratio	ROE	Date	Ratio	ROE	Date	Ratio	ROE	Date	Ratio	ROE	Date	Ratio	ROE	Date	Ratio	ROE	Date	Ratio	ROE
2000	2,10	15,44	2000	1,58	10,88	2000	3,08	16,35	2000	1,29	9,73	2000	1,56	13,97	2005	1,24	9,70	2006	3,11	14,51	2006	n/a	6,54	2000	1,32	14,71	2004	n/a	-57,42
2001	1,90	14,96	2001	1,39	10,58	2001	2,75	18,85	2001	1,57	12,41	2001	1,74	11,61	2006	1,82	16,66	2007	2,38	15,32	2007	1,44	4,29	2001	1,67	16,67	2005	0,53	1,47
2002	1,76	17,40	2002	1,30	6,65	2002	2,28	20,08	2002	1,54	12,24	2002	1,91	13,37	2007	1,56	14,07	2008	1,74	18,21	2008	1,27	8,67	2002	1,66	14,65	2006	3,23	4,96
2003	1,87	13,71	2003	1,47	9,77	2003	2,66	20,09	2003	1,67	12,30	2003	2,21	14,38	2008	0,85	10,40	2009	1,88	13,50	2009	1,80	10,56	2003	2,02	15,07	2007	12,81	25,11
2004	1,79	15,20	2004	1,56	9,80	2004	2,68	17,63	2004	1,66	11,28	2004	2,20	16,31	2009	1,72	4,32	2010	2,08	14,13	2010	2,00	9,66	2004	2,24	18,14	2008	3,51	73,86
2005	2,49	12,24	2005	1,70	8,97	2005	3,06	13,90	2005	2,07	12,40	2005	2,48	17,56	2010	1,85	8,76	2011	2,48	14,92	2011	1,85	9,50	2005	1,88	15,84	2009	0,21	3,82
2006	2,57	14,24	2006	1,78	9,07	2006	3,16	14,26	2006	2,44	11,87	2006	2,58	14,48	2011	1,71	5,84							2006	2,07	13,81	2010	2,66	8,85
2007	2,31	15,96	2007	1,79	10,93	2007	2,86	14,53	2007	1,74	9,99	2007	2,24	13,99										2007	1,40	13,51	2011	3,33	20,77
2008	1,85	15,73	2008	1,61	9,92	2008	2,27	22,69	2008	1,37	8,70	2008	1,59	12,70										2008	1,85	10,71			
2009	1,81	16,10	2009	1,88	11,51	2009	2,58	22,82	2009	1,54	8,41	2009	1,63	9,77										2009	3,08	9,16			
2010	2,37	13,65	2010	2,92	13,94	2010	2,91	13,21	2010	1,80	8,79	2010	1,71	7,99										2010	2,16	12,13			
2011	2,52	15,51	2011	2,79	17,97	2011	3,82	13,02	2011	1,63	8,86	2011	1,95	9,66										2011	1,90	12,62			

Source: Bloomberg Professional

ANSWER TO DR. BOOTH'S INFORMATION REQUESTS TO DR. GASKE

Source: Information Request n° 1 to Dr. Gaske

Date: October 25, 2012

Intervener: INDUSTRIAL GAS USERS ASSOCIATION

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

Dr. Booth 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.

Answer:

The referenced analysis was a benchmark analysis put forward by Dr. Gaske to corroborate the results of his primary DCF Analysis. He used size-differentiated risk premium data from the period 1993-2007 because that was the only Canadian risk premium data, differentiated by size, of which he is aware. Dr. Gaske found that the risk premium generally available on Canadian companies of similar size to Intragaz was 10.6 percent over the 10-year government bond yield. This is roughly equivalent to the Ibbotson study based on risk premium data from 1926 to present, which indicated that similar sized companies received a risk premium of 8.80 percent over long term corporate bond yields. Both analyses yielded similar results, i.e. 12.60 percent and 13.56 percent for the Canadian and U.S. size differentiated risk premium studies, respectively. Dr. Gaske did not rely on these analyses in arriving at his ultimate ROE recommendation. However, they did provide corroborating point estimates of Intragaz' ROE for Dr. Gaske to consider in making his ROE recommendation. Dr. Gaske believes the ROE that he has recommended though lower than his size differentiate risk premium benchmark analyses, still meets the standard of fairness for Intragaz.

Dr. Booth 10.2

Please indicate the standard error of the estimate referred to in the Wilhelm study.

Answer:

A standard error for the estimate is not reported in the study.

Dr. Booth 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.

Answer:

Many studies indicate that size is a significant factor affecting the required rate of return. For example, please see pages 50-51 of Dr. Gaske's Prepared Direct Testimony (Document B-0015, Intragaz-1, Document 5). Because of the exceptionally small size of Intragaz, an average risk premium for mostly larger companies would not be useful in the analysis. The Wilhelm study is the only one of which Dr. Gaske is aware that explicitly considers the effect of size on returns for Canadian companies.

Dr. Booth 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.

Answer:

Dr. Gaske disagrees with the statement that corporate bond yields are not used as the base for risk premium studies. Moreover, because corporate bonds and corporate stocks are both subject to default or bankruptcy risk, corporate bond yields contain more market information and are superior to the risk-free rate as a base for estimating required rates of return on common stocks. Currently, the Ontario ROE formula uses the spread between government and corporate bond yields as a meaningful component of the risk premium formula in Ontario. Similarly, the Régie also incorporates a weighting of the spread between corporate and government bond yields. Corporate bond

yields are often used in risk premium studies because like stocks, they capture the risk that is specific to the corporation in determining the return that equity investors will require in order to take the risk.

Dr. Booth 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.

Answer:

As indicated in Dr. Gaske's response to 10.4 above, the Ontario ROE formula uses the spread between government and corporate bond yields as an input to its risk premium formula. (See Ontario Energy Board, EB-2009-0084, Report of the Board on the Cost of Capital for Ontario's Regulated Utilities (December 11, 2009)). In addition, the Régie also incorporates a weighting of the spread between corporate and government bond yields (See Decision Quebec Régie de l'énergie, D-2011-182, R-3752-2011 Phase 2 (25 novembre 2011)).

ANSWER TO DR. BOOTH'S INFORMATION REQUESTS TO DR. GASKE

Source: Information Request n° 1 to Dr. Gaske

Date: October 25, 2012

Intervener: INDUSTRIAL GAS USERS ASSOCIATION

Question 11 Reference: Exhibits

Dr. Booth 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.

Answer:

Page 5 of Schedule 1 shows that the average spread between BBB-rated and A-rated public utility bond yields for April 2012 was 0.10 percent in Canada (i.e., 4.18% minus 4.08%).

Dr. Booth 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%.

Answer:

Page 7 of Schedule 1 shows that the average spread between BBB-rated and A-rated public utility bond yields for April 2012 was 0.71 percent in the U.S. (i.e., 5.11% minus 4.40%).

Dr. Booth 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.

Answer:

Dr. Gaske cannot confirm this statement. It is not clear from this question who would consider BBB for a U.S. company to be riskier than BBB for a Canadian company. In

general, a ratings agency would regard BBB-rated debt of a U.S. company to have the same risk as BBB-rated debt of Canadian companies. The question also is unclear as to which Canadian utilities are smaller than which US utilities.

Dr. Booth 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.

Answer:

The holding companies have publicly-traded equity with stock prices that can be used in the ROE analysis, while the operating subsidiaries do not have publicly-traded equity. Consequently, the analysis needs to compare the risks of Intragaz to the risks of the publicly-traded proxy companies which are used in the cost of capital analysis.

Dr. Booth 11.5

Please confirm that in Schedule 2 Dr. Gaske is again comparing Intragaz with US holding companies (LPs).

Answer:

Confirmed. See the response to 11.4.

Dr. Booth 11.6

Please explain why Dr. Gaske does not report DBRS bond ratings for the Canadian companies.

Answer:

The table below presents the DBRS Issuer Ratings for the five companies included in Dr. Gaske's Canadian proxy group. Please note that, where available, these ratings are identical to the ratings assigned by S&P as seen on page 3 of Schedule 2 of Dr. Gaske's Prepared Direct Testimony (Document B-0015, Intragaz-1, Document 5).

	Ticker	DBRS Issuer Rating
Canadian Utilities Limited	CU	A
Emera Inc.	EMA	BBB (high)
Enbridge Inc.	ENB	A (low)
Fortis Inc.	FTS	A (low)
TransCanada Corporation	TRP	NR

Dr. Booth 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?

Answer:

No. To the extent that there could be a difference in business risks for US and Canadian utilities, the difference in financial risks would offset that difference such that it would be impossible to determine which utilities have the riskier common stock based on the information in this request.

Dr. Booth 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.

Answer:

This question refers to a non-standard DCF calculation that is not a reasonable analysis for the proxy companies. One could do such a mathematical calculation, but it would not produce a correct DCF analysis or estimate of the cost of capital. For example, there is no reason to believe that these companies are likely to suddenly stop growing at their long-run projected growth rate after five years and suddenly begin growing at the same rate as the economy.

Dr. Booth 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.

Answer:

This question refers to a non-standard DCF calculation that is not a reasonable analysis for the proxy companies. One could do such a mathematical calculation, but it would not produce a correct DCF analysis or estimate of the cost of capital. For example, many U.S. MLPs have maintained growth rates that are greater than the rate of inflation for long periods of time. See, for example, the response to IGUA 9.1.

Dr. Booth 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.

Answer:

Please see table on next page. Nominal GDP growth rates for Canada and the U.S. can be found on pages 1 and 2 of Schedule 1 of Dr. Gaske's Prepared Direct Testimony (Document B-0015, Intragaz-1, Document 5).

.

Canadian Utilities Ltd
CU CN Equity

Date	DPS	EPS
1990	0,68	0,87
1991	0,69	0,90
1992	0,70	1,00
1993	0,71	1,04
1994	0,72	1,11
1995	0,73	1,19
1996	0,74	1,34
1997	0,78	1,43
1998	0,82	1,50
1999	0,86	1,58
2000	0,90	1,80
2001	0,94	1,87
2002	0,98	2,41
2003	1,02	2,05
2004	1,06	2,44
2005	1,10	2,09
2006	1,40	2,57
2007	1,25	3,08
2008	1,33	3,30
2009	1,41	3,71
2010	1,51	3,21
2011	1,61	3,65

Emera Inc
EMA CN Equity

Date	DPS	EPS
1993	0,75	1,07
1994	0,76	1,10
1995	0,78	1,11
1996	0,80	1,05
1997	0,81	1,07
1998	n/a	0,99
1999	0,83	1,16
2000	0,84	1,20
2001	0,85	1,20
2002	0,86	0,85
2003	0,86	1,20
2004	0,88	1,20
2005	0,89	1,11
2006	0,89	1,14
2007	0,90	1,36
2008	0,97	1,29
2009	1,03	1,56
2010	1,16	1,67
2011	1,31	1,99

Enbridge Inc
ENB CN Equity

Date	DPS	EPS
1993	0,25	0,25
1994	0,25	0,14
1995	0,25	0,29
1996	0,25	0,36
1997	0,27	0,39
1998	0,28	0,41
1999	0,30	0,48
2000	0,32	0,64
2001	0,35	0,73
2002	0,38	0,90
2003	0,42	1,01
2004	0,46	0,97
2005	0,52	0,83
2006	0,58	0,91
2007	0,62	0,99
2008	0,66	1,84
2009	0,74	2,14
2010	0,85	1,30
2011	0,98	1,32

Fortis Inc/Canada
FTS CN Equity

Date	DPS	EPS
1990	0,36	0,62
1991	0,37	0,60
1992	0,37	0,64
1993	0,39	0,64
1994	0,41	0,62
1995	0,42	0,63
1996	0,43	0,59
1997	0,44	0,60
1998	0,45	0,53
1999	0,45	0,56
2000	0,46	0,68
2001	0,47	0,90
2002	0,49	0,97
2003	0,53	1,06
2004	0,55	1,07
2005	0,61	1,35
2006	0,70	1,42
2007	0,88	1,40
2008	1,02	1,56
2009	0,78	1,54
2010	1,12	1,65
2011	1,16	1,75

TransCanada Corp
TRP CN Equity

Date	DPS	EPS
1990	0,69	1,23
1991	0,73	1,34
1992	0,78	1,56
1993	0,86	1,62
1994	0,94	1,60
1995	1,02	1,75
1996	1,10	1,85
1997	1,18	1,51
1998	1,18	0,78
1999	1,12	-0,15
2000	0,80	1,50
2001	0,90	1,30
2002	1,00	1,56
2003	1,08	1,76
2004	1,16	2,13
2005	1,22	2,49
2006	1,28	2,21
2007	1,36	2,31
2008	1,44	2,53
2009	1,52	2,11
2010	1,60	1,78
2011	1,66	2,18

Boardwalk Pipeline Partners LP
BWP US Equity

Date	DPS	EPS
2005	0,18	0,67
2006	1,32	1,85
2007	n/a	1,87
2008	1,87	1,98
2009	1,95	0,88
2010	2,03	1,47
2011	2,10	1,09

Spectra Energy Corp
SE US Equity

Date	DPS	EPS
2007	0,88	1,51
2008	0,96	1,82
2009	1,00	1,32
2010	1,00	1,62
2011	1,06	1,82

Spectra Energy Partners LP
SEP US Equity

Date	DPS	EPS
2007	0,30	0,68
2008	1,34	1,40
2009	1,52	1,71
2010	1,70	1,70
2011	1,85	1,63

TC Pipelines LP
TCP US Equity

Date	DPS	EPS
1999	n/a	1,13
2000	0,00	2,08
2001	1,95	2,40
2002	2,05	2,50
2003	2,15	2,63
2004	2,28	2,99
2005	2,30	2,70
2006	2,33	2,39
2007	2,57	2,33
2008	2,78	2,73
2009	2,87	2,34
2010	5,88	2,91
2011	3,06	3,02

Williams Partners LP
WPZ US Equity

Date	DPS	EPS
2005	0,15	0,44
2006	1,61	1,62
2007	2,15	1,97
2008	2,50	2,55
2009	2,54	2,88
2010	5,31	2,66
2011	5,80	3,69

Source: Bloomberg Professional