

September 24, 2012

BC Utility Customers – AMPC/BCPSO/CEC
c/o Bull, Housser & Tupper LLP
3000 Royal Centre, P.O. Box 11130
1055 W. Georgia Street,
Vancouver, BC V6E 3R3

Attention: Mr. Brian Wallace

Dear Mr. Wallace:

**Re: Generic Cost of Capital Proceeding
FortisBC Utilities (the “FBCU”)¹
Response to the British Columbia Utility Customers² (the “BC Utility
Customers”) Information Request (“IR”) No. 1 on the Evidence of Mr. Aaron
Engen**

On August 3, 2012, the FortisBC Utilities filed its Written Evidence in the Generic Cost of Capital proceeding as referenced above. In accordance with the British Columbia Utilities Commission Order No. G-84-12 setting out the Amended Preliminary Regulatory Timetable, the FBCU respectfully submit the attached response to the BC Utility Customers IR No. 1 on the Evidence of Mr. Aaron Engen.

If there are any questions regarding the attached, please contact the undersigned.

Yours very truly,

on behalf of the FORTISBC UTILITIES

Original signed:

Diane Roy

Attachment

cc (e-mail only): Commission Secretary
Registered Parties

¹ comprised of FortisBC Inc., FortisBC Energy Inc., FortisBC Energy (Vancouver Island) Inc., and FortisBC Energy (Whistler) Inc.

² including the Association of Major Power Consumers of BC (“AMPC”), British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners’ and Seniors’ Organization et al (“BCPSO”) and the Commercial Energy Consumers Association of British Columbia (“CEC”).

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1. Topic: Mr. Engen indicates that he played a key role in the purchase of Pacific Northern Gas by AltaGas Ltd. Please provide the following details of this transaction:

1.1 Book value of common equity as of the transaction date

Response:

The response to this question will be filed by PNG directly.

1.2 Purchase price paid for the common equity at the close of the transaction

Response:

The response to this question will be filed by PNG directly.

1.3 A discussion of any additional closing expenses in addition to 1.2 above following the transaction

Response:

The response to this question will be filed by PNG directly.

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1.4 Details on the assumption of debt or any changes

Response:

The response to this question will be filed by PNG directly.

1.5 How the transaction was effected, that is who purchased what and whether a temporary financing vehicle was used.

Response:

The response to this question will be filed by PNG directly.

1.6 Who was the lead BMO employee in this transaction, was it Mr. Engen or the Head of M&A at BMO?

Response:

Mr. Engen led BMO Capital Market's advisory mandate on the transaction.

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2. Topic: Mr. Engen indicates that he was asked by FEI to opine on whether FEI's requested 10.5% ROE on 40% common equity is fair and reasonable in the context of Canadian financial market conditions.

2.1 Has Mr. Engen ever been qualified as a cost of capital expert witness in a Canadian regulatory hearing?

Response:

No, Mr. Engen has not been qualified as a cost of capital expert in any Canadian regulatory hearing. That said, Mr. Engen was not asked by FEI to opine on the cost of capital in these proceedings and he has not done so. Ms. McShane and Dr. Vander Weide were asked to and have opined on the cost of capital in these proceedings. Mr. Engen was asked to consider whether the cost of capital opinions delivered by Ms. McShane and Dr. Vander Weide were reasonable in the context of Canadian financial market conditions.

2.2 Has Mr. Engen ever prepare cost of capital testimony as an expert witness, similar in spirit to that prepared by Dr. Vander Weide, Ms. McShane and Concentric? If the answer is yes please provide copies of the most recent testimony.

Response:

Please refer to the response to BC Util Cust-Engen IR 1.2.1.

2.3 Please indicate why he was not asked to opine on whether 10.5% ROE on 40% common equity was fair and reasonable in the context of US financial market conditions.

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Response:

FEI requested that Mr. Engen provide his observations with a focus on the Canadian markets as being more relevant to FEI's evidence.

- 2.4 Please provide a list of all Mr. Engen's writings that have been peer reviewed and represent a contribution to our understanding of financial matters.

Response:

Mr. Engen has not written any peer reviewed publications and was not retained by FEI to provide evidence as an academic expert witness. Mr. Engen was retained by FEI to appear as a capital markets expert witness and to provide capital markets-based opinions and advice. As described in Mr. Engen's written evidence, his expertise stems from first hand capital markets, financial advisory, and transactional experience. His knowledge and experience as a capital markets participant supplements the academic work provided by FEI's other expert witnesses.

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3. Topic: In terms of current equity market conditions (page 7)

- 3.1 Please indicate whether Mr. Engen was taught as an MBA student that a market that reacts very quickly and aggressively as news emerges is the hallmark of an efficient market.

Response:

Mr. Engen confirms that the efficient market hypothesis was taught as part of his MBA course studies. There are times, such as today, however, when the market is prone to react more quickly and aggressively to news, some might say to overreact to such news and information. In the current market, the very sensitive current market tone is the result of heightened investor concerns over market risk stemming from uncertainty over the European sovereign debt crisis, the sustainability of the U.S. (and global) economic recovery, and slowing Chinese economic growth.

- 3.2 Please indicate whether Mr. Engen either agrees or disagrees with the proposition in 3.1 above.

Response:

Please refer to the response to BC Util Cust IR-Engen 1.3.1.

- 3.3 Please indicate whether Mr. Engen is aware of a Royal Bank of Canada (August 22, 2012) publication that on page 7 titled "the evaporation of risk" noted:
- The VIX in the US (volatility index) closed out the week at 13.5 its lowest level since mid-2007
 - Corporate bonds are setting new record low yields
 - The collapse of risk premia has helped the S&P500 to a 10.6% gain since the June low

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Even if Mr. Engen is not aware of this publication would he agree or disagree with this description of equity and debt capital markets in August 2012?

Response:

Mr. Engen is not aware of the referenced Royal Bank of Canada publication. Mr. Engen confirms that as of August 22, 2012, the VIX stood at 15.1. This is, of course, a single point in time reference. As Mr. Engen points out at page 20 of his evidence, the VIX averaged 22.8 from July 2009 to July 2012.

Mr. Engen agrees that corporate bond yields are at low levels given the fall in Government of Canada benchmark bond yields as investors seek the safety of those bonds in the face of increasing risk aversion. The result has been a case where capital preservation has mattered more than return on capital. This has been going on as corporate spreads remain at higher levels as illustrated in Figure 13 of Mr. Engen's written evidence.

Mr. Engen has not researched or considered the issues involving the last point referencing U.S. risk premia on the U.S's S&P 500 index and the index's recent performance.

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4. Topic: In terms of financial market globalization

- 4.1 Mr. Engen refers to Canadian issuers raising substantial capital outside of Canada. Please provide details on all Canadian utility offerings outside Canada since 2006 that were used to finance Canadian regulated assets.

Response:

Mr. Engen does not have the requested information and it is not available without substantial research and effort. Even then, such an endeavour would not be expected to produce the requested data as financings are not necessarily "color coded" for financing Canadian regulated assets. Still, if such information were available, it has no bearing on whether on whether Canada's financial market is globalized. Please also refer to the response to BC Util Cust-Engen IR 1.4.2.

- 4.2 Please indicate the proportion of non-C\$ debt in the debt structure of the following Canadian utilities: Nova Scotia Power, Gaz Metro, Enbridge Gas Distribution, Union Gas, FortisEnergy BC, Newfoundland Power, Fortis BC.

Response:

Neither FortisBC Energy nor FortisBC has any non-Canadian debt in its capital structure.

Mr. Engen does not have the requested information for the other referenced Canadian utilities. Again, such information has no bearing on whether Canada's financial market is globalized. Utilities may not choose to finance outside the Canadian market, but the globalization of the market means that they can do so if they so choose and that they compete for Canadian capital alongside non-Canadians.

- 4.3 Please indicate which Canadian utilities are inter-listed in the US and the proportion of US versus Canadian ownership and trading as of the latest date available.

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Response:

Mr. Engen is aware of only Enbridge Inc. and TransCanada Corp. as being inter-listed in the U.S. Information regarding the proportion of U.S versus Canadian ownership is not available. The following table provides the requested trading information.

	Canadian Trading Volumes	U.S. Trading Volumes
TransCanada	83.5%	16.5%
Enbridge	76.8	23.2%

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5. Topic: Mr. Engen indicates that “nothing can be learned about the appropriateness of allowed return on equity from recent Canadian merger and acquisitions activity involving regulated assets.” Page 11

- 5.1 Please provide any academic and professional research articles which would support the notion that the expected level of earnings, as reflected in the ROE, has no influence on the price paid for an asset.

Response:

The question, as posed, mischaracterises Mr. Engen’s evidence. As evidenced in the quotation in the topic above, Mr. Engen speaks to “allowed return[s] on equity”, not expected levels of earnings. To be clear, though, Mr. Engen agrees with the notion that ***expected levels of earnings are what matter*** when evaluating merger and acquisition activity, not allowed returns. Purchaser expected levels of earnings can be materially different than allowed ROEs. Moreover, the price paid can be affected by the various strategic considerations discussed in Mr. Engen’s evidence.

Please refer to the response to BCUC IR 1.31 series for further discussion.

- 5.2 Please confirm that in Mr. Engen’s judgment two utilities one allowed an ROE of 5% and the other 15% would have the same purchase price to book ratio if all the other factors listed on page 12 were the same.

Response:

Generally one would expect that to be the case, but not necessarily so. Mr. Engen has worked with acquirers of regulated assets prepared to pay higher valuations for regulated assets with higher allowed returns, all else equal.

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- 5.3 Please indicate whether if asked to provide a fairness opinion on a transaction he would indicate that the allowed ROE for a Canadian public utility has no bearing on the purchase price to book multiple.

Response:

Strictly speaking, investment bank fairness opinions are limited to whether a proposed transaction is "fair from a financial point of view". That aside, allowed ROEs (current and forecast) are a relevant valuation consideration insofar as they, along with other financial and strategic factors, determine forecast cashflows and earnings. Please also refer to the response to BC Util Cust-Engen IR 1.5.1.

- 5.4 Please provide copies of any fairness opinions where he has rendered the judgement in 5.3 above.

Response:

Please refer to the response to BC Util Cust-Engen IR 1.5.3.

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6. Topic: Mr. Engen concludes that 10.5% ROE on 40% common equity is fair and reasonable in the context of current capital market conditions.

- 6.1 Please provide copies of all BMO "strategy" reports on the US and Canadian equity markets for 2012, where prospective returns on the equity market have been estimated.

Response:

To be clear, the evidence filed by Mr. Engen is his own and not that of BMO Capital Markets. While Mr. Engen is not aware of any such reports, he declines to respond to this question as it requires that he provide new evidence respecting BMO Capital Markets which is not referred to in his evidence and does not seek clarification of Mr. Engen's evidence.

- 6.2 Please indicate whether BMO has a defined benefit pension plan and provide the plan actuary's latest assumptions as regards the expected returns on Canadian equities, US equities, non-North American equities, and fixed income securities.

Response:

Please refer to the response to BC Util Cust-Engen IR 1.6.1.

- 6.3 Please provide copies of any Bank of Montreal studies circulated since 2010 on the historic performance of the Canadian and US equities markets versus the bond market.

Response:

Please refer to the response to BC Util Cust-Engen IR 1.6.1.

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7. Topic: In terms of trading volumes and volatility on the Canadian market, pages 20-22.

7.1 Please indicate whether the Bloomberg data relied on is for the TSX or whether it also includes alternative trading mechanisms, such as alpha.

Response:

The data provided includes trading volumes from the TSX as well as other alternative trading platforms including: Alpha Trading Systems, Alpha Venture, Canadian National Stock Exchange, Chi-X Canada, Instinet Canada Cross, Liquidnet Canada, Omega ATS, PURE Trading, TMX Select, TriAct Canada, and TSX Venture Exchange.

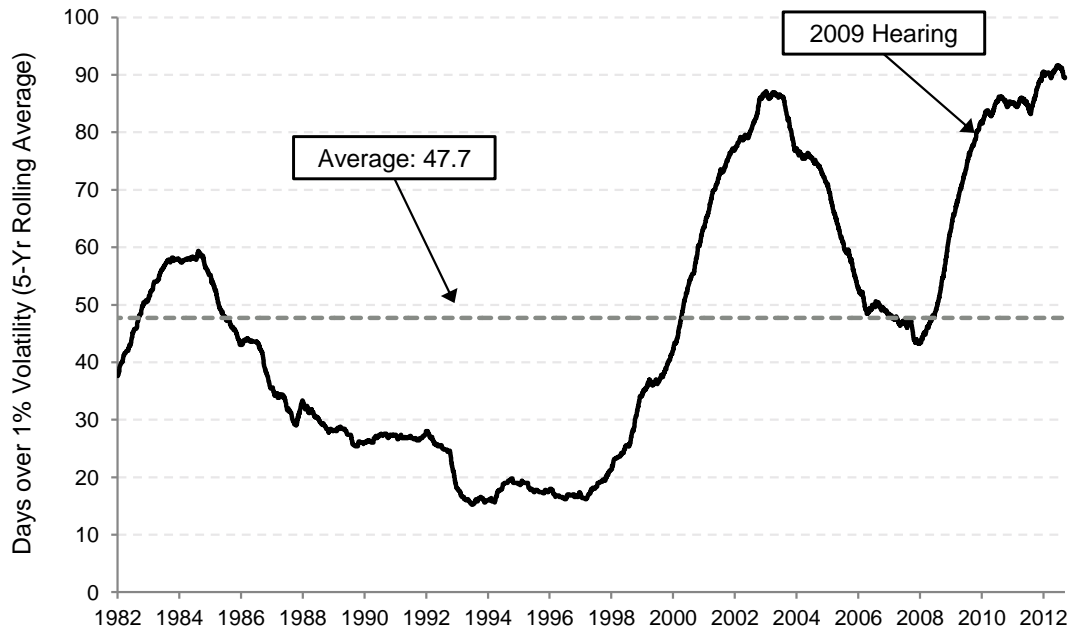
7.2 Please provide the latest data on the Canadian volatility index and update the chart on page 21

Response:

The requested chart is below.

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**S&P/TSX Volatility (1%+ Days)
January 1, 1977 to September 12, 2012**



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8. Topic: Mr. Engen discusses PE ratios and indicates that declining PE ratios are "compelling evidence that the cost of equity in Canada has been rising," page 26.

- 8.1 Please confirm that PE ratios reflect future growth opportunities and increase with the opportunities increase and decrease when they decrease. If not why not?

Response:

All else equal including, in particular, share prices (in other words, share prices do not change), PE ratios will decrease (increase) when expected earnings rise (fall). Falling P/E ratios indicate that the market attributes less value to the earnings. If the market's valuation of earnings is unchanged, then share prices will rise (fall) to reflect expected increases (declines) in earnings with the result that P/E ratios remain unchanged.

- 8.2 Please confirm that the very high PE ratio on the Canadian market in 1999-2001 was in part driven by the very high growth expectations attached to Nortel and JDS Uniphase.

Response:

Mr. Engen's evidence does not touch on the 1999-2001 period. His analysis begins with the 10-year period beginning in January 2002. Consequently, he has no comment on what may or may not have affected the market prior to that period.

- 8.3 Please provide the Shiller business cycle averaged PE ratio for the US market and comment on whether equity markets are materially over or under valued based on longer term PE ratios.

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Response:

Mr. Engen declines to respond to this request as the request requires that he undertake research and analysis, and provide new evidence which is not referred to in his written evidence. The request is not a question or clarification of his evidence and it does not constitute a request for material in his possession.

- 8.4 Please indicate why if looking at PE ratios provides "compelling evidence" on the cost of capital it is not a major topic in expert testimony on the cost of equity capital, that is please provide citations to the testimony of Ms. McShane, Dr. Vander Weide and Concentric that support this assertion.

Response:

The question mischaracterizes Mr. Engen's written evidence by overstating Mr. Engen's position. He does not say that "looking at PE ratios provides 'compelling evidence' on the cost of capital." His position is much more specific pointing to the index's falling P/E ratio while earnings have been rising. Such circumstances point to a rising cost of capital. P/E ratios do not always indicate a change in the cost of capital. Such is the case, for example, when P/E ratios increase in the face of expected earnings growth. Please refer to the response to BC Util Cust-Engen IR 1.8.1.

Moreover, when P/E ratios can be looked to as an indication of the cost of capital, it is a directional indicator only. As Ms. McShane and Dr. Vander Weide were asked to determine the cost of capital, market-based P/E valuations are not relevant to those determinations. Ms. McShane does discuss Earnings/Price ratios (the inverse of P/E ratios) in her evidence to demonstrate the upward trend in the market cost of equity at lines 781-799.

- 8.5 Please confirm that the equity price ratio (inverse of the PE ratio) was commonly used as a measure of the equity cost for regulated utilities in the 1950s prior to significant inflation and being supplanted by the dividend growth (DCF) model.



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Response:

Mr. Engen cannot confirm or deny the assertion as he has not done the research to do so.

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9. Topic: Debt capital market conditions, pages 30-35

- 9.1 Mr. Engen's graphs are all of spreads of corporate over equivalent maturity Government of Canada bond yields, please provide the exact same graphs on these pages for the respective yields on the underlying securities and provide this data in an excel file capable of verification and replication.

Response:

Mr. Engen does not have the requested data and it is not available through BMO Capital Markets as the firm only maintains a record of the applicable spreads.

- 9.2 Please confirm that recently some utilities, such as Enbridge Gas Distribution Inc have issued 40 year fixed rate debt to finance their utility operations.

Response:

Confirmed.

- 9.3 Please indicate the number and amount of 40 year fixed rate utility debt issues for each year since 1990.

Response:

BMO Capital Markets only has a record of 40-year bond deals back to 2006. The following table summarizes all 40-year bond offerings since 2006.

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Date	Issuer	Amount (millions)	Maturity
16-Oct-06	Hydro One Inc	\$75 mm	09-Oct-46
08-Dec-06	FortisAB Inc	\$110 mm	03-Jan-47
22-Jun-07	FortisBC	\$105 mm	04-Jul-47
22-Oct-10	FortisAB Inc	\$125 mm	27-Oct-50
15-Nov-10	CU Inc	\$125 mm	18-Nov-50
17-Nov-10	ENB Gas Dist	\$200 mm	22-Nov-50
19-Nov-10	FortisBC	\$100 mm	24-Nov-50
06-Sep-11	ENB Gas Dist	\$100 mm	22-Nov-50
19-Dec-11	Hydro One Inc	\$100 mm	22-Dec-51
16-Apr-12	Lower Mattagami Energy Ltd	\$225 mm	23-Apr-52
16-May-12	Hydro One Inc	\$125 mm	22-Dec-51

9.4 Please indicate whether the Government of Canada or the US. issues 40 year fixed rate debt.

Response:

Neither of the Canadian or U.S. governments issues 40-year debt.

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- 9.5 Please indicate whether rising corporate spreads could also be due to foreign investor interest in AAA rated Canadian government debt, rather than increased risk aversion.

Response:

There is no question that foreign investor interest has been helping to push Government of Canada bond yields lower. As Mr. Engen points out at page 40-41 of his evidence, the foreign capital inflows into the Canadian bond market are increasing. Those inflows reflect two broad motivations, safe-haven flows and official diversification flows. The former is being driven by Euro area-led concerns about the global economy and financial markets as risk aversion has crested resulting in a market condition where return of capital matters more than return on capital.

- 9.6 Please provide any and all studies that Mr. Engen is aware of that corporate spreads reflect "increased risk aversion" and whether if they do the spread is totally a reflection of risk aversion or includes the effect of other factors.

Response:

Mr. Engen is not aware of such studies and would expect that any studies, were they to be done, would only appear in the future.

While such studies may prove to be a fruitful exercise at some point in time, real time observations are necessary to understand current market tone and conditions and current investor issues and concerns.

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10. Topic: Corporate bond market, pages 37-40

- 10.1 Please indicate whether the data on page 37 is for DBRS or S&P bond ratings or the higher of the two?

Response:

The data in Figure 16 is based on S&P bond ratings.

- 10.2 Please provide the actual data in the pie chart on page 37 broken down according to DBRS and S&P bond ratings separately.

Response:

A copy of the referenced data is provided in Attachment 10.2.

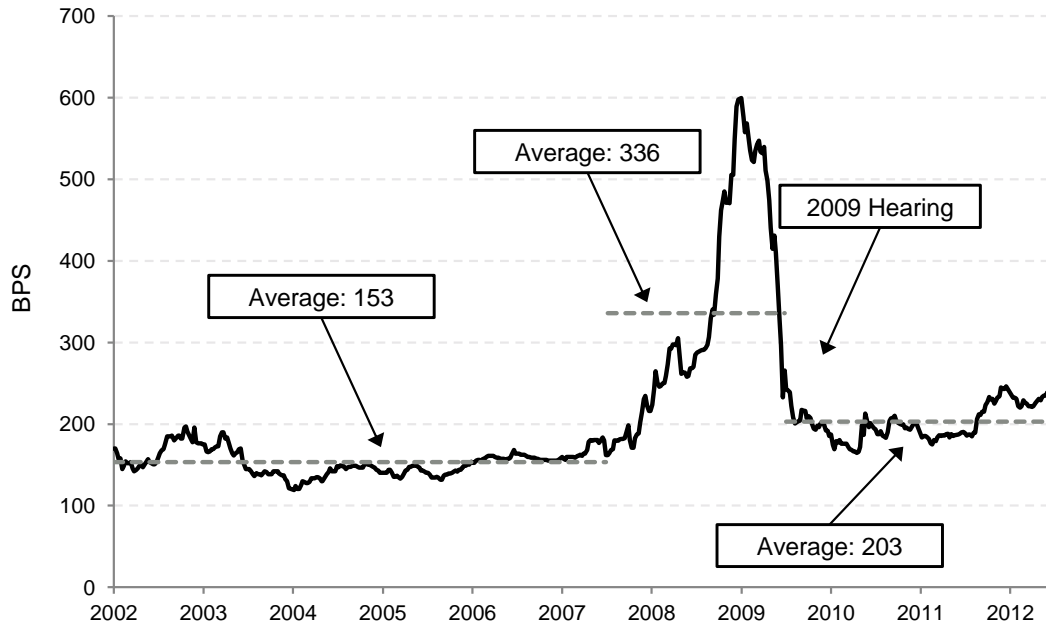
- 10.3 On page 39 Mr. Engen asserts that corporate bond holders expect the regulatory environment to protect their return on and of capital. Does Mr. Engen accept that investors in corporate bonds are at risk of default and downgrades which is why they require higher yields on corporate versus government bonds?

Response:

Like equity investors, utility bond investors provide debt capital to utilities in the face of many risks. They require higher yields to compensate them for business and financial risks (as may be reflected in credit rating downgrades) as well as the risk of default. But the debt capital is provided to Canadian utilities at lower rates than those seen by non-utility issuers because of the protective nature of the Canadian regulatory environment. Evidence of the lower returns utility bond investors receive can be seen by comparing spreads with non-utility issuers. The following chart demonstrates Canadian generic "A" 30-year spreads and averages over the same periods in Figure 13 of Mr. Engen's evidence.

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Canadian Generic "A" Rated 30-Year Spreads



As the chart illustrates, when compared with average 30-yields for the Canadian utilities group shown in Figure 13 of Mr. Engen's evidence, it is clear that utility bond investors receive less of a return than investors in generic A-rated bonds. Over the periods shown in the two charts, the differences amounted to -33 bps over January 2002 to July 2007, -110 bps over July 2007 to June 2009, and -39 bps over July 2009 to July 2012.

Please also refer to BCUC IR 1.21.1.

- 10.4 Would Mr. Engen agree that the legal requirement is for a regulator to preserve a utility's credit, that is, access to capital and not its credit rating? If not please explain what jurisprudence he relies on for this judgment.

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Response:

The question mischaracterises the fair return standard. Preserving "a utility's credit" is not, as the question suggests, a matter of maintaining the utility's "access to capital". A regulator's obligations in setting allowed returns on capital stems from the fair return standard which has three components: the comparable investment standard; the capital attraction standard; and the financial integrity standard. The capital attraction standard is not the same as the financial integrity standard as the question implies.

Judicial decisions have set out that under the fair return standard returns should be, among other things:

- sufficient to assure confidence in the financial integrity of the utility, and
- adequate, under efficient and economical management, to maintain and support its credit and enable it to raise money on reasonable terms and conditions.

The test for the fair return standard does not explicitly require any particular credit rating. Mr. Engen, however, is of the view that maintaining an A-category rating is necessary to ensure access to capital on reasonable terms and conditions in all market conditions.

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11. Topic: Government of Canada bond market, pages 40-42

- 11.1 Please confirm that Mr. Engen judges foreign investors to "overlook" the relative lack of liquidity in the Canada government bond market relative to the US. Does Mr. Engen believe that these investors do not "do their homework"?

Response:

- (a) Confirmed as discussed in Mr. Engen's written evidence at page 41, lines 5 to 7.
- (b) No. To the contrary, Mr. Engen assumes foreign investors have "done their homework" and are prepared to overlook the relative lack of liquidity in Government of Canada bonds.

- 11.2 Please provide the full interest rate forecast document that the BMO forecast on page 41 is derived from.

Response:

A copy of the referenced document is provided in Attachment 11.2.

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12. Topic: Canadian equity issues, pages 42-

- 12.1 Is it Mr. Engen's view that the foreign issue of equity securities is to finance the purchase of foreign assets or that the funds are brought back into Canada to finance the purchase of Canadian assets?

Response:

Mr. Engen expects that capital raised through foreign issues of securities is used to finance all aspects of business activity including both the financing of foreign and Canadian asset purchases.

- 12.2 Mr. Engen indicates that "massive" amounts of capital will be required to build proposed infrastructure assets, please provide a five year forecast of the required infrastructure that requires funding for each year beyond 2012. Please confirm that Mr. Engen expects Canadian firms to issue US dollar securities to finance Canadian assets.

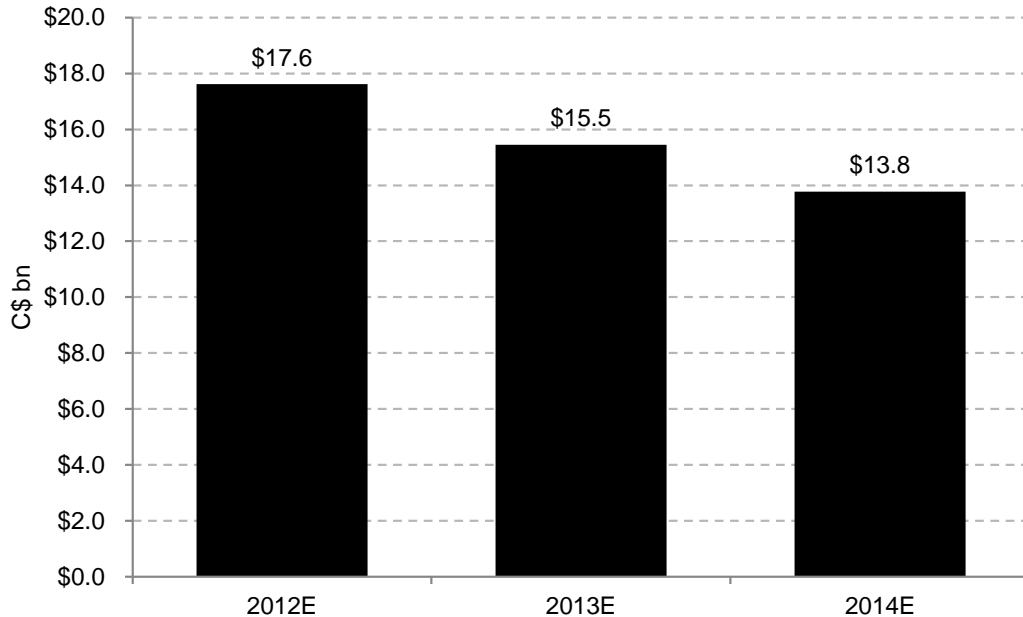
Response:

The following chart illustrates the expected capital requirements for select Canadian energy infrastructure companies to 2014. Data beyond that period is not reasonably available. The selected companies include: AltaGas, Enbridge Income Fund, Gibsons, Inter Pipe, Keyera, Pembina, Valener, Veresen, Algonquin, Atlantic Power, Boralex, Brookfield Renewable, Capital Power, Capstone Infrastructure, Innergex, MAXIM Power, Northland, TransAlta, ATCO, Canadian Utilities, Emera, Enbridge, Fortis, and TransCanada. The data is based on consensus estimates as reported by Bloomberg as at July 4, 2012. The data does not include capital requirements for crown corporations which are also large consumers of capital.

Mr. Engen expects certain Canadian firms will issue US dollar securities to finance their operations generally, although such would more likely to be the case where the issuer has U.S. operations.

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Capital Requirements for Select Canadian Energy Infrastructure Companies



- 12.3 Can Mr. Engen provide an estimate of US dollar financing by the provinces of Canada as a proportion of total provincial financing for each year since 1970 and comment whether they are as reliant on US dollar financing currently as they were in earlier years.

Response:

Mr. Engen declines to respond to this request as the request requires that he undertake research and analysis, and provide new evidence which is not referred to in his written evidence. The request is not a question or clarification of his evidence and it does not constitute a request for material in his possession.

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- 12.4 Please confirm that with-holding taxes are still levied on dividends between the US and Canada and that US residents do not get the benefit of the dividend tax credit.

Response:

Please refer to the response to BC Util Cust-Engen IR 1.12.3.

- 12.5 Please indicate whether as an investment banker Mr. Engen markets new issues of Canadian utility or bank preferred shares to US investors and whether such issues are normally registered with the SEC for sale to US residents.

Response:

Although there are exceptions, preferred shares are not marketed to U.S. investors and issues of preferred shares are not registered with the SEC.

- 12.6 Please indicate where the statement that US allowed utility returns (page 50) are relevant for Canadian returns follows from the prior discussion of equity and debt capital flows? Is it Mr. Engen's judgement that observing capital flows indicates that markets are perfectly integrated, such that the law of one price holds?

Response:

The conclusions provided by Mr. Engen are derived from his evidence regarding the globalization of Canada's financial markets as demonstrated by cross-border investment, cross-border capital offerings, and market structural developments. Mr. Engen does not have a view on the law of one price.

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- 12.7 In Mr. Engen's judgment what level of capital flows between two countries would support a judgement of an integrated market, rather than a partially segmented market where the law of one price does not hold?

Response:

Please refer to the response to BC Util Cust-Engen IR 1.12.6.

- 12.8 Please provide all research and citations to the academic literature on market integration that would support Mr. Engen's conclusion that allowed utility ROEs in the US are relevant for Canadian allowed ROEs.

Response:

Mr. Engen has not undertaken a survey of such sources to be able to respond to this question. The practice of referencing U.S. comparables for valuation purposes is well accepted in the financial industry and markets. Considering allowed ROEs established for comparable U.S. regulated assets would be consistent with that practice.

- 12.9 Would Mr. Engen agree that if US allowed ROEs are relevant, then the same argument also applies to long term US treasury interest rates and that the Canadian government should be paying higher rates on its 30 year debt than it is actually paying?

Response:

Yes, the same argument applies to U.S. treasuries but no, it does not mean Government of Canada bond rates should be higher than they currently are. Government of Canada bond rates are determined first by considering the relevant U.S. treasury yields and then making the necessary adjustments to reflect Canada's economic outlook relative to that of the U.S. and by

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supply of, and demand for, the Canadian bonds. U.S. treasuries are the benchmark for Government of Canada bonds.

In the same fashion, it would be correct to select a portfolio of appropriate, comparable U.S. utilities, consider their allowed ROE's and make necessary adjustments thereto to arrive at indicative allowed ROE's levels for Canadian Utilities.

12.10 Please provide the following current interest rates for US and Canadian government debt: 3 month Treasury Bills, 1 year notes, 5 year notes, 10 year bonds, 30 year bonds and the 30 year real return (TIPS). In each case please report the definition of the series and the source.

Response:

As of September 12, 2012, Government of Canada bond yields stood at 1.447% (5-year), 1.901% (10-year), and 2.495% (30-year). Mr. Engen declines to obtain and provide the remaining requested data as it requires he provide new evidence which is not referred to in his written evidence. The requested data is not a question or clarification of his evidence and it does not constitute a request for material in his possession.

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13. Topic: Price to book multiples, pages 51-68

- 13.1 Discussing price to book ratios is not normally in the testimony of an investment banker discussing capital market conditions, please provide the written instructions that Mr. Engen was given in providing his testimony and whether he was specifically asked to address this topic.

Response:

Mr. Engen has provided evidence regarding regulated asset acquisition price-to-book issues in connection with Alberta's 2009 and 2011 generic cost of capital proceedings and in Gaz Metro's cost of capital proceedings in 2009. Mr. Engen has a verbal retainer agreement with FEI that establishes the terms and conditions of his engagement for this application. The scope of his engagement is outlined at pages 6 and 7 of his written evidence.

- 13.2 Mr. Engen indicates that nothing can be learned from looking at price to book ratios, please confirm that before the AUC he made several statements to the effect that looking at them reflected "unsound thinking" and "absurdity." Please indicate why he has toned down his comments and provide copies of all articles that he has published that would qualify him as an expert witness on this topic.

Response:

The changes were made as part of Mr. Engen's ongoing review and editing of his work. Mr. Engen has not published any articles on the lack of usefulness that price to book multiples have in determining regulated asset-buyer expected returns. Given the basic principles involved, publishing a relevant article is not necessary to provide credible views on the issue. Mr. Engen relies on his financial advisory and transactional experience where he has dealt with clients considering the purchase (sale) of regulated assets and the price to pay (receive) for such assets.

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- 13.3 Please confirm that in 2009 before the AUC; in 2008 before the NEB and 2009 before the Regie de l'Energie he testified along with Drs. Kolbe and Vilbert and that Dr. Kolbe is the author of a text (along with James Read and George Hall) estimating the rate of return for public utilities, MIT Press 1984 and that Dr. Kolbe has been recognized as an expert financial witness and appeared as such in those proceedings.

Response:

Confirmed, although the text is entitled, "The Cost of Capital, Estimating the Rate of Return for Public Utilities".

- 13.4 Please confirm that in that text (page 25) Dr. Kolbe states

"We examine the proposition that regulators' actions should make the ratio of a regulated stock's market value to its book value (Slightly more than) one. This prescription is frequently heard, but not always agreed to. It turns out to be simply another way of saying that the allowed rate of return should equal the cost of capital."

Dr. Kolbe goes on to develop this result in some detail, but can Mr. Engen please indicate what expertise he brings to bear to dispute the wisdom of the expert financial witness with whom he appeared in the above hearings?

Response:

As has been discussed by Dr. Kolbe at other regulatory hearings, his 1984 position on this issue was disproved by the 1987 stock market crash and subsequently by the tech bubble. Attached as Attachment 13.4 is an excerpt from Dr. Kolbe's RH2-2004, Phase II, Reply Evidence on this point. Although the whole section is provided in Attachment 13.4, the part that describes the evolution of his views starts on internal page 15. In addition, Attachment 13.4 includes the transcript from cross-examination by counsel on this point in that proceeding which explored these issues in depth over parts of two days.

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13.5 Is Mr. Engen aware of a decision by the AEUB (Decision U-99099, page 300) that

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

Would Mr. Engen disagree with the AEUB decision that explicitly states that for a regulated utility the book value of the assets best represents the long run market values, or alternatively the market to book ratio should equal 1.0 in the long run?

Response:

Mr. Engen does not agree or disagree with the reference from the AEUB's decision. The reference is to the trading value of public pure play regulated firms in the context of considering whether the ATWACC (after tax weighted average cost of capital) methodology ought to be used in determining rates of return. Mr. Engen's evidence refers specifically to the validity of considering acquisition price to book values, not public market trading values.

Mr. Engen notes, however, that the same board in its 2003 Generic Cost of Capital Decision (EUB Decision 2004-052 (July 2, 2004), at page 28) stated:

"The Board agrees with the Applicants that there are a number of factors impacting market-to-book ratios of utility holding companies and that one has to be cautious making inferences regarding the regulated utilities. **The Board also agrees that there may be strategic factors affecting the price that is paid to acquire a utility.**

For example, NGTL submitted that its parent did not acquire a further interest in the Foothills pipeline, paying 1.6 times book value, for the opportunity to earn a return at the NEB formula rate; rather, the investment was made in an effort to increase the

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probability that TCPL will participate in a Northern pipeline project. **The Board also recognizes that, in some cases, a premium might be paid for regulated assets in anticipation of significant further growth in rate base, to achieve geographic diversification or to obtain a foothold in a new market.** However, parties are also aware of the constraints placed on regulated utilities with respect to affiliate transactions, particularly with unregulated affiliates." [emphasis added]

- 13.6 Would Mr. Engen agree that when a firm issues debt if the coupon (stated interest) rate is equal to the market's required rate of return, that the issue sells at its par value and the market price divided by this par value is 1.0? And further that if the market required rate of return drops the bond sells at a premium to its par value, so the market price divided by the par value is in excess of 1.0? And conversely when the stated interest rate is less than the market's required rate of return the bond sells at a discount so its market value is less than its par value?

Response:

Agreed, although comparing bonds to regulated assets is misleading. Returns on debt are comprised of two factors, price and interest (which in the case of the question, implies the interest rate is fixed). Unlike regulated assets:

- the yield on invested capital (the bonds) does not change as is the case with regulated assets when, for example, allowed returns change;
- the amount of invested capital does not change as is the case with regulated assets when deemed capital structures change; and
- the value of invested capital (the bonds) is not affected by strategic considerations as can be the case with acquiring regulated assets.

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- 13.7 Can Mr. Engen confirm that if we simply note that par value is the book value of the bond when issued that when the market's required rate of return equals the coupon the bond's market to book ratio is 1.0 and when the market's required rate of return drops (increases) below the coupon the market to book ratio goes above (below) 1.0? If not please explain in detail why he does not believe that this is way that bonds are priced and the market reacts.

Response:

Please refer to the response to BC Util Cust-Engen IR 1.13.6.

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14. Topic: Strategic rationale in Mergers and Acquisitions, pages 51-60

14.1 In its 2003 generic decision the Alberta Energy and Utilities Board stated (page 28)

"In the absence of such strategic factors, the Board would not expect a prudent investor to pay a significant premium unless the currently awarded returns are higher than that required by the market. The Board acknowledges the views of some parties that payment of a premium over book value for a regulated utility indicates that the recent ROE awards may have been higher than required by the market. The Board is not aware of the strategic factors that may have affected the price paid to acquire Alberta utilities in recent years. Nevertheless, the experience regarding the market-to-book values of utilities and the experience regarding the acquisition of Alberta utilities in recent years gives the Board some comfort that its recent ROE awards have not been too low. "

Does Mr. Engen agree with the AEUB that if an acquirer pays \$180 for utility assets with a book value of \$100, then if the ROE is fair then the value of those assets is only a little more than \$100? And further the acquisition has to generate synergies worth \$80 or 80% of the value of the assets being purchased to justify the purchase price? If not please explain in detail why not?

Response:

Mr. Engen does not agree that the AEUB's decision is as stated in the question. Moreover, as that Board has said the value of regulated assets can be influenced by strategic factors, anticipation of significant further growth in rate base, the desire to achieve geographic diversification, or to obtain a foothold in a new market. (Please refer to BC Util Cust-Engen IR 1.13.5) Indeed, the concept that strategic factors may influence the value of a regulated asset is confirmed by the Board in the very quotation referred to above where the Board starts out by acknowledging that in "the absence of such strategic factors..."

With respect to whether synergies worth \$80 must be generated to justify the purchase price, the answer is, no. As Mr. Engen discusses in his evidence, regulated asset purchase prices are not justified by synergies (unless the buyer will be able to keep a portion of such synergies), but by various strategic rationale including:

- geographic diversification;

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- establishing a strategic foothold in a new market; and
- protecting the buyer's regulated asset franchise.

Additional justifications for regulated asset purchase prices include financial and structuring considerations such as:

- expected growth in the regulated asset's rate base;
- the need to include a "control premium" when purchasing a business;
- expected increases in allowed ROEs (generally stemming from changing economic circumstances);
- opportunities to increase the deemed equity component of the regulated asset's capital structure;
- anticipated operating efficiencies which would allow the buyer to generate earnings in excess of allowed returns;
- the ability to implement performance based regulation or other incentive fee and cost improvement sharing structures;
- the ability to deduct interest on regulated asset ownership structure debt in Canada and in the buyer's home jurisdiction (double dip interest deductibility);
- access to other, higher ROE assets or businesses which are acquired alongside the regulated assets; and
- collateral benefits (synergies) may be generated between the acquired regulated assets and assets already owned by the buyer.

14.2 In terms of the strategic factors discussed by Mr. Engen on page 53 and beyond:

- a. The double dip (page 55) referred to only applies to foreign acquirers and relies on double leverage, ie., that the parent borrows against the same

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regulated assets as the utility itself. Has Mr. Engen any evidence that Canadian purchasers of Canadian assets are unwilling to pay a premium to buy Canadian regulated assets?

Response:

The question incorrectly asserts that the double dip structure relies on double leverage. It does not. The double dip structure refers to the ability to deduct the same interest expenses in both Canada and the foreign jurisdiction – hence the term “double dip”.

Mr. Engen has evidence that Canadian purchasers of Canadian assets have paid more than book value for regulated assets. In doing so, Canadian purchasers would rely on other of the considerations described in the response to BC Util Cust-Engen IR 1.14.1.

- b. Would Mr. Engen agree that if double leverage does occur and the debt is rated investment grade and its cost “fair and reasonable,” this implies that the utility capital structure is not optimal and some debt capacity has been transferred to the parent. If not please explain in detail why not.

Response:

Not agreed. The increased leverage resulting from a double-levered structure generates increased risk to the shareholder. Evidence of the increased risk can be seen in lower credit ratings and higher yields for “holdco” debt. While a shareholder-owner may be prepared to take on increased risk associated with double leverage, it would not be prudent to finance the regulated asset in the same fashion. Assurances of ongoing access to capital are a necessary component of providing service by the regulated business whereas a shareholder does not need such access. If the shareholder-owner has problems accessing capital because of the level of leverage at the holdco, he may run into financial difficulties and risks losing the regulated asset to creditors. Regulated asset services, however, would be unaffected because the utility itself was prudently capitalized and would retain its access to capital on reasonable terms and conditions.

Ratepayers should not be subjected to the risks associated with higher leverage levels which shareholder-owners may be willing to take.

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- c. Further to the double leverage problem, given that modal bond ratings tend to be higher in Canada than the US would Mr. Engen agree that the double leverage and debt capacity transfer problem is greater in Canada than the US, if not why not?

Response:

Without specific evidence of what "modal bond ratings" the question refers to nor any evidence of "double leverage and debt capacity transfer" problems, Mr. Engen cannot respond to this question.

- d. Mr. Engen mentions growth (page 53) as a reason for paying a premium, but if the new assets only earn a fair return please explain in detail how acquiring future assets at a market to book of 1.0 increases the price an acquirer is willing to pay today. Doesn't growth only increase the market to book ratio if the acquirer expects that future assets to have an allowed ROE in excess of a fair return? Again if not, please explain in detail why not and reference outside published sources.

Response:

To be clear, Mr. Engen's written evidence does not speak to acquisition "market to book" ratios. His evidence relates to (purchase) price-to-book ratios where buyers of regulated assets consider acquisition price-to-book ratios in the context of aggregate book values (acquisition equity purchase price + new equity to finance rate base growth). Rate base growth decreases aggregate price-to-book ratios as discussed in Mr. Engen's written evidence. If rate base growth is large enough, additional invested equity increases aggregate book value to the point where any premium to book value paid to acquire the regulated asset becomes minimal relative to aggregate book value. Growth in rate base does not "increase the market to book ratio" as suggested in the question.

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The principal that rate base growth can lead purchasers to pay a premium to acquire regulated assets was recognized by the AEUB. Please refer to the response to BC Util Cust-Engen IR 1.13.5.

- e. If future ROEs are expected to increase (page 53) please confirm that the market to book ratio will only increase if the increased ROE is expected to increase above any increase in the cost of capital and as a result the utility earns more than a fair return? If not why not.

Response:

Not confirmed. If a buyer believes returns are too low and do not reflect the buyer's view of the real cost of equity and that he will be able to convince the regulator that such is the case, he may pay more than book value for the asset. Moreover, even assuming allowed returns always equal the cost of equity, the present value of cash flows rises with future increases in allowed ROEs. Please see following Table 1 for an example calculation.

The example calculation assumes an initial rate base of \$1,000, deemed equity of 40%, and a straight line 5% depreciation rate. The 5% depreciation rate was used to shorten the overall analysis period to 20 years which can be captured on a single page (albeit with a rather small font). In the example, with a starting allowed ROE of 9% and 50 bps increases in allowed ROEs in years 2, 3, and 4, the PV of the cash flow from earnings and depreciation rises from \$400 to \$426.1. A copy of the referenced calculation is provided in Attachment 14.2.e.

- f. Similarly if the deemed equity ratio increases, please confirm that this only increases value if the allowed ROE exceeds a fair rate of return (Averch-Johnson effect) or there is a transfer of debt capacity to the parent. If not please explain why not.

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Response:

Mr. Engen does not confirm that expected increases in deemed equity ratios only increase value if approved ROEs exceed the fair rate of return.

Regulated Asset owners can finance increases in deemed equity ratios when allowed ROE's are set at fair rates of return and increase aggregate owner value where:

- the owner has excess cash on the balance sheet earning low deposit interest rates and uses the cash to finance the deemed equity increase;
- the owner is able to withdraw capital from other lower returning businesses (where, for example, the business is performing poorly) and uses the cash to finance the deemed equity increase; and
- the owner funds the equity increase with debt at a holdco level (please refer to the response to BC Util Cust-Engen IR 1.14.2(b) for a discussion of holdco debt capacity considerations).

- g. Please confirm that if the acquirer expects to generate operating efficiencies (page 53), in Canada this will result in a lower revenue requirement as lower costs are passed through to ratepayers under cost of service regulation? If Mr. Engen does not believe this, please explain his understanding of how cost of service regulation is supposed to work in Canada.

Response:

Operating efficiencies accrue to customers. Nevertheless, there are instances where regulated asset owners have been able to generate returns on equity greater than approved returns through operating efficiencies. That aside, whether a buyer is actually able to retain any efficiencies is not the issue in the context of determining buyer expected returns on equity arising out of an acquisition of regulated assets. Rather, the issue is whether the buyer believed, planned or expected to retain such efficiencies as it is such belief, plan or expectation that drives expected returns on equity.

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- h. Performance based regulation (PBR) can indeed increase the earned ROE, but can Mr. Engen agree that this will only increase the market value if the increased ROE more than compensates for any increase in risk that the utility is subject to. Does Mr. Engen believe that PBR does not increase a utility's risk so higher ROEs are reflected in the market to book ratio?

Response:

Mr. Engen cannot agree or disagree because the answer depends on the structure of the PBR program. Regulated asset buyers have acquired regulated assets in Canada with the belief that they can run the regulated assets more efficiently than was the case with the prior owner and use PBR to capture a portion of the efficiencies to improve their returns.

- i. Has Mr. Engen any evidence that purchasers of Canadian regulated assets pay a higher price to buy regulated assets subject to PBR? If he has please provide transaction details for the purchase of both types of regulated assets since 1990.

Response:

As indicated in Mr. Engen's evidence, the point is not that regulated asset purchasers "pay a higher price to buy regulated assets subject to PBR." It is the expectation that there is an "ability to implement" PBR after the asset is acquired which can induce a buyer to pay a higher price for regulated assets.

- j. Can Mr. Engen please provide a worked example of a utility that is exactly earning its cost of capital and the size of the PBR efficiencies required to generate a market to book ratio of 1.80X.

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Response:

Too many assumptions, including the design of the PBR program, are required to develop the requested model. That said, Mr. Engen agrees that it would require very large, if not impossible to achieve, PBR efficiencies to justify a market-to-book ratio purchase price of 1.8x. But then Mr. Engen is not suggesting that PBR efficiencies alone would support higher purchase prices. If large rate base growth is expected, coupled with other of the financial factors outlined in Mr. Engen's evidence, the size of the efficiencies required to support the higher purchase price multiple decreases. As indicated in Mr. Engen's written evidence, purchasers of regulated assets would generally consider some or all of the various financial and strategic factors to support paying higher prices for a regulated asset.

- k. Mr. Engen mentions access to other assets or collateral benefits with other assets, can Mr. Engen discuss in detail whether such benefits violate the stand alone principle or whether he simply means that the utility is charged higher prices than their cost when the services are provided by its parent.

Response:

There is no reason to believe that collateral benefits would violate the standalone principle. Mr. Engen is not suggesting that the utility is charged prices above cost when services are provided to it by an affiliated company. In that regard, Mr. Engen notes that utilities in B.C., for example, are governed by affiliate codes of conduct which oversee pricing of inter-affiliate sales or services. Where services are provided at market and regulator-approved prices, providing such services will be attractive to the buyer to the extent they support another, higher return business. Providing engineering services to the utility would be an example of such a situation.

Further, collateral benefits do not have to involve providing services to the utility by an affiliated company at all. Such benefits can include increased parent market capitalization and associated access to greater equity capital and an improved parent business risk profile.

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15. Topic: Rate base growth, page 53

- 15.1 In table 1 Mr. Engen concocts an example where the immediate market to book ratio for the total rate base is 1.32X. Please provide the market to book ratio for the equity component given that the debt was assumed. For example, would Mr. Engen agree that if the equity ratio was 35% then the debt assumed was \$406.9 and the book equity was \$219.1, so that the value paid for the equity was \$422.1 (\$829-\$406.9) and the market to book ratio based on the equity values was not 1.32X but 1.93X. If not please explain why not.

Response:

Mr. Engen did not "concoct" the example in Table 1 of his evidence. The example is from AltaLink's purchase of TransAlta's transmission assets in 2001 and, contrary to the question's assertion, no debt was assumed in the transaction.

In any event, assuming an equity portion of 35%, AltaLink's purchase of the Alberta transmission assets is a good example of the impact significant rate base growth has on price-to-book valuations. While the initial price-to-book value of the transmission assets was approximately 1.9x, AltaLink's aggregate price-to-book value after substantial post acquisition investment falls significantly to approximately 1.2x. Similar analysis was provided to the Alberta Utilities Commission in April 2011 in connection with its 2011 Generic Cost of Capital Proceedings. At that time, the aggregate price:BV was 1.26x. As expected, rate base growth of over \$800 million over the past year has further reduced the aggregate purchase price multiple to its current 1.21x.

The following table provides the relevant price-to-book calculations.

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Transmission Purchase Metrics	
(a) Transmission System Acquisition Price	\$829
Original Rate Base	\$626
Assumed Deemed Equity Component	35.0%
Deemed Rate Base Equity	\$219
Assumed Deemed Debt Component	65.0%
(b) Deemed Rate Base Debt	\$407
(c) Purchase Price Allocated to Deemed Equity (a)-(b)	\$422
(d) Transmission Acquisition Equity Premium	\$203
Acquisition Price:BV	1.93x
Current Metrics	
Current Rate Base (Mdyear 2012)	\$2,546
Deemed Equity Component	38.0%
(e) Current Deemed Equity	\$967
Transmission Acquisition Equity Premium (d)	\$203
Aggregate Equity Cost (d)+(e)	\$1,171
Aggregate Price:BV	1.21x

- 15.2 Would Mr. Engen agree that since the debt is assumed, the relevant market to book ratio is that based on equity values and not the total rate base? If he disagrees please provide a reference to the literature, such as Dr. Kolbe's book, that states that acquirers are interested in the rate base market to book, rather than equity market to book in an acquisition.

Response:

The question's assumption that debt is always assumed is incorrect. As the AltaLink acquisition demonstrates, debt is not always assumed by purchasers of regulated assets. Consequently, it is equally correct to refer to purchase price-to-book (rate base) as it is to equity. Although Mr. Engen is not aware of "literature" on the point, evidence of investor interest in and focus on purchase price-to-rate-base metrics can easily be seen in equity research reports written in response to recent regulated asset acquisitions. Two examples are provided below.

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In a 2011 research report¹, Linda Ezergailis, an equity research analyst with TD Securities wrote the following about Gaz Metro's purchase of Central Vermont Public Service Corporation:

"Price: US \$35.25 per share in cash for an aggregate purchase price of US \$702 million, which includes approximately US \$230 million in debt. **This represents a 1.5x price-to-total rate base multiple...**" [emphasis added]

In a 2012 research report², Matthew Akman, an equity research analyst with Scotia Capital, wrote the following about Fortis' acquisition of CH Energy:

"Our preliminary analysis suggests FTS is proposing to pay **about 1.5x closing rate base...**" [emphasis added]

In his report Mr. Akman goes on to discuss several other recent utility acquisitions by Canadian companies and in each case cites the applicable rate base purchase price multiples, namely:

- Gaz Metro (buyer) - Central Vermont: 1.6x
- Fortis (buyer) - Aquila Canada: 1.5x
- Capstone (buyer) - Bristol Water: 1.2x
- ATCO (buyer) - Western Australia Gas: 1.2x
- Algonquin (buyer) - Granite State Electric: 1.1x
- Algonquin (buyer) - Midwest Natural Gas: 1.1x

15.3 Mr. Engen adds future rate base expansion of \$1,920 at book value to both the numerator and the denominator, that is, the market to book ratio of the incremental investment of \$1,910 is assumed to be 1.0. Is this to indicate that Mr. Engen believes that the true market to book ratio for regulated assets earning a

¹ TD Newcrest, Pipelines, Power & Utilities, Linda Ezergailis, "Gaz Metro Wins Bid for SVPS", July 13, 2011.

² Scotiabank, Matthew Akman, "CH Energy – It's a Start", February 22, 2012.

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fair ROE should be 1.0X? If not please explain why he is assuming a market to book ratio of 1.0 in this example.

Response:

No. The \$1,920 reflects the capital spent by the company to grow the rate base by, in this case, \$1,920. In other words, the company had to spend \$1,920 to grow the rate base by \$1,920 (unlike the initial purchase in which the company spent \$829 to grow their rate base from \$0 to \$626). Mr. Engen does not assume anything about market to book ratios in this analysis.

- 15.4 Please confirm that the 1.08 is simply a weighted average of the acquisition multiple of 1.32 and the incremental investment multiple of 1.0 with the weights the relative asset sizes; and that if we extend the time period, so that the incremental assets increase even more, we can drive the market to book as close to 1.0 as we want? If Mr. Engen does not agree please provide the market to book ratio based on new investment in regulated assets of \$10 billion.

Response:

The aggregate price to rate base is calculated by dividing the total capital spent to acquire the current rate base (purchase price of \$829 million plus net follow-on investment of \$1,920 million = \$2,749) divided by the current rate base (\$2,546 million) which equals 1.08x. Mr. Engen confirms that although taking the weighted average price to rate bases would be an unusual way of determining the aggregate price to rate base multiple, such can be done.

Mr. Engen agrees that as incremental assets increase the market to book ratio can be driven to as close to 1.0x as one wants. And that is the point of his evidence on this issue. When buyers of regulated assets see strong growth opportunities for such assets they can pay higher than expected prices because, frankly, if the growth is significant enough premiums to book value become immaterial over time. Such is the case with AltaLink as the company anticipates very large growth in rate base in the coming years.

The concept that significant growth in rate base can support a premium being paid for regulated assets has been acknowledged by the EUB. Please refer to the response to BC Util Cust-Engen IR 1.13.5

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- 15.5 Please redo the example in Table 1 assuming that incremental assets have the same equity market to book as the average market to book of Canadian regulated utilities of 1.90X and a 40% common equity ratio.

Response:

Mr. Engen cannot provide the requested table because regulated asset owners grow rate base assets by amounts equal to their invested capital, not by amounts somehow connected to market to book ratios of Canadian regulated companies.

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16. Topic: EPS accretion, pages 58-62

- 16.1 Can Mr. Engen agree that EPS accretion/dilution is normally taught in a mergers and acquisitions course? Is Mr Engen part of the M&A team at BMO and has he ever taken an M&A course?

Response:

Mr. Engen expects that aspects of EPS accretion/dilution concepts would be taught in a mergers and acquisition course. Mr. Engen's background and experience are outlined at pages 4 to 6 of his written evidence.

- 16.2 Is Mr. Engen aware that his accretion argument is also known as the "multiplier game" and was responsible for the conglomerate merger boom and crash of the 1960's? For example suppose a company with a PE multiple of 100 has earnings of \$100. It will then have a market value of \$10,000 and with 1,000 shares outstanding it has a price per share of \$10. If it wants to buy a company with earnings of \$100 and a PE of 10 it only has to issue 100 shares assuming it sells the shares at its market price. After the acquisition it will then have \$200 in earnings and its EPS increases from \$0.10 to \$0.182 or \$200/1100 shares. As long as a high PE ratio company sells shares to buy a low PE ratio company the earnings per share go up. Would Mr. Engen agree with the arithmetic in this example?

Response:

Mr. Engen has not researched what may or may not have driven merger and acquisition activities in the 1960s.

Mr. Engen agrees the arithmetic is correct.

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- 16.3 Further would Mr. Engen agree that after the acquisition the company now consists of a 90% high PE ratio division (10,000/11,000) and a 10% low PE ratio division, so that any sensible person would lower the PE multiple for the combined firm, so there is no value created by the transaction? Further would Mr. Engen agree that if investors are not informed as to the nature of the transaction and the PE ratio is not lowered it results in a Ponzi scheme, whereby an acquirer can continue to make acquisitions as long as the market keeps applying a high PE ratio to its shares?

Response:

Not agreed. There is no inherent reason why an acquisition of assets previously trading at a lower valuation multiple would necessarily lead to a fall in the acquirer's valuation. Assets with the same or better characteristics as the acquirer's assets, including risks and opportunities, can trade at weaker multiples for many reasons including poor management, over levered capital structures, or the assets are part of a portfolio of assets which include otherwise undesirable assets. Because assets trade at a lower multiple does not mean they are necessarily of lower quality. To the contrary, acquired assets can be of a higher quality than the acquiror's assets and lead to a multiple expansion for the purchaser. All this is particularly true when speaking of regulated assets in the context of Mr. Engen's evidence.

Even where an acquisition does not pan out in the way management hopes, it is not a Ponzi scheme as the question asserts. A "Ponzie scheme" is a fraudulent investment structure which pays returns to its investors out of their own money or money paid by subsequent investors and not from any profit earned from the business.

- 16.4 Is Mr. Engen aware that the conglomerate merger (ITT etc) wave of the 1960s was based on this multiplier (or accretion) game, since investors could not see that the increased earnings were from arithmetic, rather than organic growth? And that when it finally dawned on investors that these supposed high growth companies were a Ponzi scheme and had become a collection of low PE companies, the market crashed?

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Response:

The question assumes many facts regarding events and markets some 50 years ago which Mr. Engen has not researched and are not relevant to his evidence respecting EPS accretion. Mr. Engen does not contemplate a wave of conglomerate building in the context of how EPS accretion/dilution concepts are used in evaluating acquisition opportunities.

- 16.5 Can Mr. Engen agree that his examples are based on a PE above the inverse of the approved ROE which means that the fair ROE is below the allowed ROE and the shares trade at above book value since the regulator has not lowered the allowed ROE? Consequently, with a higher PE multiple resulting from an unfairly high ROE, the utility can make acquisitions of fairly regulated utilities trading at book value, and a lower PE, and then see accretion?

Response:

Not agreed. While true that the trading PEs are all above the inverse of B.C.'s benchmark 9.5% allowed ROE (10.5x), it does not mean that the "fair ROE" (whatever that might mean) is lower than the allowed ROE. Mr. Engen understands that the inverse of PE, an earnings yield, is not a measure of the cost of equity. Further, allowed returns have been falling both in B.C. and across Canada since the 1990s.

It is also not correct to suggest that the entities listed in Table 2 trade above book value because the BCUC has not lowered the allowed ROE. The vast majority of the entities listed in the table do not have assets regulated by the BCUC and many have no regulated assets at all and yet all trade at PE multiples which would allow them to acquire B.C.-based regulated assets on an EPS accretive basis. Only a few of the listed entities own any regulated assets and of those that do, most own material non-regulated assets.

Mr. Engen does not agree with the question/statement, "Consequently, with a higher PE multiple resulting from an unfairly high ROE, the utility can make acquisitions of fairly regulated utilities trading at book value, and a lower PE, and then see accretion? The question/statement reference "a higher PE multiple resulting from an unfairly high ROE" is based on the assumption that PE multiples are driven by approved ROEs. The assertion is made without any supporting evidence.

Attachment 10.2

FortisBC - Testimony

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Information Request 10.2

Pricing Date	Issuer	Size	DBRS	S&P
(dd-mmm-yy)		(C\$mm)	(rating)	(rating)
08-Jan-02	BELL CANADA	500	A	A
08-Jan-02	CITIGROUP FINANCE CANADA INC	350	AA	AA
09-Jan-02	GMAC OF CANADA LTD.	50	A	BBB
10-Jan-02	RIOCAN REAL ESTATE INVES	125	BBB	BBB
10-Jan-02	ALIANTELECOM INC.	100	A	A
10-Jan-02	GMAC OF CANADA LTD.	25	A	BBB
10-Jan-02	GMAC OF CANADA LTD.	25	A	BBB
10-Jan-02	GMAC OF CANADA LTD.	1	A	BBB
11-Jan-02	MARITIME LIFE CANADIAN F	150	A	AA
14-Jan-02	LAURENTIAN BANK OF CANADA	125	A	A
17-Jan-02	EPCOR UTILITIES INC.	300	A	A
17-Jan-02	TALISMAN ENERGY	325	BBB	BBB
17-Jan-02	MBNA CANADA BK	30	A	BBB
23-Jan-02	GTAA	500	A	A
25-Jan-02	TEXTRON FINANCIAL CANADA	55	UNRATED	A
28-Jan-02	MBNA CANADA BK	50	A	BBB
28-Jan-02	CITIGROUP FINANCE CANADA INC	25	AA	AA
29-Jan-02	ROGERS CABLE INC.	450	BBB	BBB
29-Jan-02	TEXTRON FINANCIAL CANADA	100	UNRATED	A
29-Jan-02	CITIGROUP FINANCE CANADA INC	25	AA	AA
31-Jan-02	GEORGE WESTON LIMITED	250	A	A
31-Jan-02	GEORGE WESTON LIMITED	150	A	A
31-Jan-02	BANK OF NOVA SCOTIA, THE	150	AA	A
31-Jan-02	BANK OF NOVA SCOTIA, THE	135	AA	A
31-Jan-02	BANK OF NOVA SCOTIA, THE	15	AA	A
04-Feb-02	CONGRESS FINANCIAL CAPIT	300	A	UNRATED
07-Feb-02	CANADIAN IMPERIAL BANK OF COM	160	AA	AA
08-Feb-02	GMAC OF CANADA LTD.	7	A	A
08-Feb-02	SHELL CANADA	250	AA	AA
11-Feb-02	BANK OF NOVA SCOTIA, THE	30	AA	A
11-Feb-02	GMAC OF CANADA LTD.	0	A	BBB
12-Feb-02	GMAC OF CANADA LTD.	5	A	BBB
13-Feb-02	BANK OF NOVA SCOTIA, THE	200	AA	A
13-Feb-02	GMAC OF CANADA LTD.	5	A	BBB
14-Feb-02	GMAC OF CANADA LTD.	92	A	BBB
19-Feb-02	MTS INC	70	A	A
19-Feb-02	BELL CANADA	400	A	A
19-Feb-02	GMAC OF CANADA LTD.	0	A	BBB
22-Feb-02	GMAC OF CANADA LTD.	0	A	BBB
25-Feb-02	GMAC OF CANADA LTD.	7	A	BBB
26-Feb-02	LOBLAW COMPANIES LIMITED AND	200	A	A
26-Feb-02	GMAC OF CANADA LTD.	40	A	BBB
27-Feb-02	GMAC OF CANADA LTD.	25	A	BBB
27-Feb-02	GMAC OF CANADA LTD.	40	A	BBB

FortisBC - Testimony

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01-Mar-02	YORK UNIVERSITY	200	AA	AA
01-Mar-02	GMAC OF CANADA LTD.	10	A	BBB
04-Mar-02	GMAC OF CANADA LTD.	0	A	BBB
04-Mar-02	GMAC OF CANADA LTD.	25	A	BBB
05-Mar-02	MARITIME LIFE CANADIAN F	200	A	AA
06-Mar-02	GMAC OF CANADA LTD.	15	A	BBB
07-Mar-02	FORD CREDIT CDA. LTD.	425	A	BBB
07-Mar-02	CANADA LIFE CAPITAL TRUS	300	A	A
07-Mar-02	CANADA LIFE CAPITAL TRUS	150	A	A
13-Mar-02	GMAC OF CANADA LTD.	10	A	BBB
14-Mar-02	GMAC OF CANADA LTD.	0	A	BBB
14-Mar-02	GMAC OF CANADA LTD.	5	A	BBB
14-Mar-02	CITIGROUP FINANCE CANADA INC	150	AA	AA
15-Mar-02	ENBRIDGE INC	150	A	A
18-Mar-02	SHELL CANADA	140	AA	AA
18-Mar-02	SHELL CANADA	105	AA	AA
19-Mar-02	GMAC OF CANADA LTD.	15	A	BBB
19-Mar-02	GMAC OF CANADA LTD.	50	A	BBB
19-Mar-02	GMAC OF CANADA LTD.	100	A	BBB
19-Mar-02	GMAC OF CANADA LTD.	34	A	BBB
19-Mar-02	GMAC OF CANADA LTD.	25	A	BBB
20-Mar-02	GMAC OF CANADA LTD.	25	A	BBB
20-Mar-02	GMAC OF CANADA LTD.	35	A	BBB
20-Mar-02	GMAC OF CANADA LTD.	10	A	BBB
22-Mar-02	GMAC OF CANADA LTD.	30	A	BBB
27-Mar-02	TEXTRON FINANCIAL CANADA	25	UNRATED	UNRATED
27-Mar-02	JOHN DEERE CREDIT INC.	300	A	A
02-Apr-02	TEXTRON FINANCIAL CANADA	45	UNRATED	A
03-Apr-02	EMERA	90	BBB	BBB
03-Apr-02	GMAC OF CANADA LTD.	50	A	BBB
04-Apr-02	AEROPORTS DE MONTREAL	300	A	A
04-Apr-02	GMAC OF CANADA LTD.	100	A	BBB
04-Apr-02	GMAC OF CANADA LTD.	10	A	BBB
04-Apr-02	AEROPORTS DE MONTREAL	150	A	A
05-Apr-02	BANK OF NOVA SCOTIA, THE	100	AA	A
12-Apr-02	GMAC OF CANADA LTD.	10	A	BBB
12-Apr-02	GMAC OF CANADA LTD.	15	A	BBB
12-Apr-02	GMAC OF CANADA LTD.	25	A	BBB
12-Apr-02	GMAC OF CANADA LTD.	25	A	BBB
12-Apr-02	GMAC OF CANADA LTD.	30	A	BBB
15-Apr-02	GMAC OF CANADA LTD.	1	A	BBB
16-Apr-02	GMAC OF CANADA LTD.	10	A	BBB
17-Apr-02	DAIMLERCHRYSLER CANADA F	600	A	BBB
17-Apr-02	HSBC FIN CORP LTD	400	A	A
19-Apr-02	LAURENTIAN BANK OF CANADA	28	A	A
22-Apr-02	BNS CAPITAL TRUST	750	A	A
22-Apr-02	GMAC OF CANADA LTD.	1	A	BBB
22-Apr-02	GMAC OF CANADA LTD.	25	A	BBB

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22-Apr-02	CATERPILLAR FINANCIAL SERVICES	175	A	A
23-Apr-02	GMAC OF CANADA LTD.	0	A	BBB
24-Apr-02	DOMINION CANADA FINANCE	105	BBB	BBB
25-Apr-02	GMAC OF CANADA LTD.	5	A	BBB
26-Apr-02	GMAC OF CANADA LTD.	0	A	BBB
02-May-02	WELLS FARGO (PREVIOUS TRANS C	150	AA	A
02-May-02	CAPITAL DESJARDINS INC.	500	A	A
02-May-02	CAPITAL DESJARDINS INC.	300	A	A
02-May-02	IMPERIAL OIL LTD.	500	AA	AAA
06-May-02	CANADIAN IMPERIAL BANK OF COM	278	AA	AA
06-May-02	CANADIAN IMPERIAL BANK OF COM	50	AA	AA
07-May-02	GMAC OF CANADA LTD.	20	A	BBB
07-May-02	Ottawa MacDonald-Cartier Int'l Airport Aut.	120	A	A
07-May-02	Ottawa MacDonald-Cartier Int'l Airport Aut.	150	A	A
09-May-02	GMAC OF CANADA LTD.	12	A	BBB
13-May-02	COCA COLA ENTERPRISES (CANADA)	60	A	A
13-May-02	GMAC OF CANADA LTD.	15	A	BBB
21-May-02	GMAC OF CANADA LTD.	5	A	BBB
22-May-02	GMAC OF CANADA LTD.	15	A	BBB
22-May-02	CANADIAN IMPERIAL BANK OF COM	30	AA	AA
23-May-02	GMAC OF CANADA LTD.	15	A	BBB
24-May-02	GMAC OF CANADA LTD.	7	A	BBB
28-May-02	GMAC OF CANADA LTD.	5	A	BBB
30-May-02	GMAC OF CANADA LTD.	35	A	BBB
30-May-02	GMAC OF CANADA LTD.	30	A	BBB
31-May-02	GMAC OF CANADA LTD.	25	A	BBB
31-May-02	GMAC OF CANADA LTD.	25	A	BBB
02-Jun-02	GMAC OF CANADA LTD.	0	A	BBB
04-Jun-02	GMAC OF CANADA LTD.	0	A	BBB
04-Jun-02	GMAC OF CANADA LTD.	15	A	BBB
06-Jun-02	HSBC BANK CANADA	100	A	A
06-Jun-02	DOMINION CANADA FINANCE	25	BBB	BBB
10-Jun-02	GTAA	475	A	A
13-Jun-02	GMAC OF CANADA LTD.	75	A	BBB
14-Jun-02	GMAC OF CANADA LTD.	10	A	BBB
14-Jun-02	GMAC OF CANADA LTD.	15	A	BBB
16-Jun-02	GMAC OF CANADA LTD.	0	A	BBB
17-Jun-02	CITIGROUP FINANCE CANADA INC	200	AA	AA
18-Jun-02	SUN LIFE ASSUR CO CDA	800	AA	A
18-Jun-02	SUN LIFE CAPITAL TRUST	200	A	A
18-Jun-02	GMAC OF CANADA LTD.	0	A	BBB
18-Jun-02	GMAC OF CANADA LTD.	5	A	BBB
18-Jun-02	GMAC OF CANADA LTD.	15	A	BBB
20-Jun-02	GMAC OF CANADA LTD.	0	A	BBB
24-Jun-02	GMAC OF CANADA LTD.	0	A	BBB
25-Jun-02	MILIL-AIR INC	106	AAA	UNRATED
26-Jun-02	BLUE WATER BRIDGE AUTORI	110	UNRATED	AA
27-Jun-02	GMAC OF CANADA LTD.	0	A	BBB

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27-Jun-02	CITIGROUP FINANCE CANADA INC	25	AA	AA
27-Jun-02	CITIGROUP FINANCE CANADA INC	50	AA	AA
11-Jul-02	BANK OF NOVA SCOTIA, THE	105	AA	A
11-Jul-02	BANK OF NOVA SCOTIA, THE	100	AA	A
11-Jul-02	HAMILTON UTILITIES CORPO	105	UNRATED	A
11-Jul-02	PEMBINA PIPELINE CORPORA	100	UNRATED	UNRATED
12-Jul-02	GMAC OF CANADA LTD.	5	A	BBB
12-Jul-02	GMAC OF CANADA LTD.	5	A	BBB
15-Jul-02	AQUILA NETWORKS CDA (BC)	50	BBB	UNRATED
19-Jul-02	GE CAPITAL CANADA FUNDIN	750	AAA	AAA
19-Jul-02	GE CAPITAL CANADA FUNDIN	300	AAA	AAA
19-Jul-02	GE CAPITAL CANADA FUNDIN	450	AAA	AAA
25-Jul-02	CITIGROUP FINANCE CANADA INC	30	AA	AA
30-Jul-02	GMAC OF CANADA LTD.	5	A	BBB
31-Jul-02	GMAC OF CANADA LTD.	6	A	BBB
31-Jul-02	CANADIAN IMPERIAL BANK OF COM	25	AA	AA
02-Aug-02	ELECTRICITY DISTRIBUTORS	175	A	A
06-Aug-02	GMAC OF CANADA LTD.	1	A	BBB
08-Aug-02	GMAC OF CANADA LTD.	5	A	BBB
11-Aug-02	GMAC OF CANADA LTD.	0	A	BBB
11-Aug-02	GMAC OF CANADA LTD.	2	A	BBB
13-Aug-02	GMAC OF CANADA LTD.	0	A	BBB
14-Aug-02	GMAC OF CANADA LTD.	16	A	BBB
14-Aug-02	CANADIAN IMPERIAL BANK OF COM	31	AA	AA
16-Aug-02	GMAC OF CANADA LTD.	17	A	BBB
20-Aug-02	GMAC OF CANADA LTD.	15	A	BBB
21-Aug-02	WELLS FARGO (PREVIOUS TRANS C	200	AA	A
23-Aug-02	CONCORDIA UNIVERSITY	200	A	UNRATED
26-Aug-02	TORONTO DOMINION BANK	550	A	A
27-Aug-02	BROOKFIELD COMMERCIAL PR	71	UNRATED	UNRATED
28-Aug-02	GMAC OF CANADA LTD.	3	A	BBB
28-Aug-02	GMAC OF CANADA LTD.	1	A	BBB
29-Aug-02	GMAC OF CANADA LTD.	50	A	BBB
29-Aug-02	GMAC OF CANADA LTD.	10	A	BBB
04-Sep-02	GMAC OF CANADA LTD.	2	A	BBB
04-Sep-02	GMAC OF CANADA LTD.	51	A	BBB
04-Sep-02	GMAC OF CANADA LTD.	15	A	BBB
04-Sep-02	GMAC OF CANADA LTD.	5	A	BBB
05-Sep-02	GMAC OF CANADA LTD.	0	A	BBB
05-Sep-02	GMAC OF CANADA LTD.	25	A	BBB
06-Sep-02	GMAC OF CANADA LTD.	0	A	BBB
06-Sep-02	GMAC OF CANADA LTD.	2	A	BBB
06-Sep-02	GMAC OF CANADA LTD.	1	A	BBB
06-Sep-02	GMAC OF CANADA LTD.	2	A	BBB
09-Sep-02	GMAC OF CANADA LTD.	0	A	BBB
10-Sep-02	BRIGHTON BEACH PARTN	276	A	UNRATED
12-Sep-02	CITIGROUP FINANCE CANADA INC	300	AA	AA
12-Sep-02	HYDRO ONE INC	300	A	A

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12-Sep-02	HYDRO ONE INC	200	A	A
13-Sep-02	MCGILL UNIVERSITY	150	UNRATED	AA
13-Sep-02	JOHN DEERE CREDIT INC.	125	A	A
13-Sep-02	JOHN DEERE CREDIT INC.	150	A	A
16-Sep-02	GMAC OF CANADA LTD.	0	A	BBB
16-Sep-02	GMAC OF CANADA LTD.	1	A	BBB
16-Sep-02	GMAC OF CANADA LTD.	20	A	BBB
16-Sep-02	SHELL CANADA	150	AA	AA
16-Sep-02	SHELL CANADA	100	AA	AA
17-Sep-02	GMAC OF CANADA LTD.	1	A	BBB
17-Sep-02	GMAC OF CANADA LTD.	1	A	BBB
18-Sep-02	GMAC OF CANADA LTD.	7	A	BBB
19-Sep-02	GMAC OF CANADA LTD.	0	A	BBB
19-Sep-02	GMAC OF CANADA LTD.	1	A	BBB
19-Sep-02	GMAC OF CANADA LTD.	10	A	BBB
19-Sep-02	GMAC OF CANADA LTD.	25	A	BBB
20-Sep-02	GMAC OF CANADA LTD.	3	A	BBB
22-Sep-02	GMAC OF CANADA LTD.	0	A	BBB
22-Sep-02	GMAC OF CANADA LTD.	0	A	BBB
23-Sep-02	MTS INC	75	A	A
23-Sep-02	GMAC OF CANADA LTD.	21	A	BBB
24-Sep-02	TIMBERWEST FOREST CORP.	130	BBB	BB
24-Sep-02	GMAC OF CANADA LTD.	3	A	BBB
26-Sep-02	MCMASTER UNIVERSITY	120	AA	AA
27-Sep-02	ENCANA CORP	300	A	A
27-Sep-02	GMAC OF CANADA LTD.	1	A	BBB
27-Sep-02	GMAC OF CANADA LTD.	0	A	BBB
01-Oct-02	GMAC OF CANADA LTD.	0	A	BBB
03-Oct-02	GMAC OF CANADA LTD.	1	A	BBB
04-Oct-02	UNIVERSITY OF GUELPH (UOFG)	100	AA	AA
09-Oct-02	GTAA	285	A	A
15-Oct-02	TD CAPITAL TRUST	350	A	A
15-Oct-02	BELL CANADA	500	A	A
16-Oct-02	NEWFOUNDLAND POWER	75	A	A
16-Oct-02	GE CAPITAL CANADA FUNDIN	425	AAA	AAA
18-Oct-02	GE CAPITAL CANADA FUNDIN	250	AAA	AAA
25-Oct-02	BCE INC	300	A	A
25-Oct-02	BCE INC	1,050	A	A
25-Oct-02	BCE INC	650	A	A
30-Oct-02	MERRILL LYNCH CDA	200	AA	A
30-Oct-02	MERRILL LYNCH CDA	400	AA	A
08-Nov-02	CITIGROUP FINANCE CANADA INC	300	AA	AA
12-Nov-02	ENBRIDGE GAS DISTRIBUTION	150	A	A
12-Nov-02	QUEEN'S U AT KINGSTON	90	AA	AA
12-Nov-02	GE CAPITAL CANADA FUNDIN	217	UNRATED	AAA
18-Nov-02	GMAC OF CANADA LTD.	0	A	BBB
19-Nov-02	CANADIAN UTILITIES	100	A	A
19-Nov-02	CU INC	50	A	A

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19-Nov-02	CU INC	150	A	A
19-Nov-02	MBNA CANADA BK	100	A	UNRATED
19-Nov-02	GTAA	265	A	A
19-Nov-02	GMAC OF CANADA LTD.	0	A	BBB
21-Nov-02	GE CAPITAL CANADA FUNDIN	203	AAA	AAA
22-Nov-02	GMAC OF CANADA LTD.	1	A	BBB
26-Nov-02	OMERS REALTY CORP	500	AAA	AAA
27-Nov-02	GMAC OF CANADA LTD.	0	A	BBB
29-Nov-02	KINGSWAY FINANCIAL SERVI	78	BBB	BBB
02-Dec-02	GE CAPITAL CANADA FUNDIN	113	UNRATED	AAA
04-Dec-02	GMAC OF CANADA LTD.	1	A	BBB
05-Dec-02	IGM FINANCIAL	175	A	A
05-Dec-02	GE CAPITAL CANADA FUNDIN	25	UNRATED	AAA
10-Dec-02	GMAC OF CANADA LTD.	0	A	BBB
11-Dec-02	GMAC OF CANADA LTD.	50	A	BBB
11-Dec-02	GMAC OF CANADA LTD.	1	A	BBB
11-Dec-02	GMAC OF CANADA LTD.	0	A	BBB
11-Dec-02	GMAC OF CANADA LTD.	5	A	BBB
12-Dec-02	UNION GAS	200	A	A
12-Dec-02	GMAC OF CANADA LTD.	20	A	BBB
13-Dec-02	GMAC OF CANADA LTD.	20	A	BBB
16-Dec-02	GMAC OF CANADA LTD.	5	A	BBB
17-Dec-02	GREAT-WEST LIFE CAPITAL	350	A	A
18-Dec-02	GMAC OF CANADA LTD.	1	A	BBB
19-Dec-02	GMAC OF CANADA LTD.	5	A	BBB
20-Dec-02	BANK OF NOVA SCOTIA, THE	300	AA	A
23-Dec-02	GMAC OF CANADA LTD.	40	A	BBB
23-Dec-02	GMAC OF CANADA LTD.	1	A	BBB
23-Dec-02	GMAC OF CANADA LTD.	1	A	BBB
31-Dec-02	GMAC OF CANADA LTD.	1	A	BBB
06-Jan-03	GMAC OF CANADA LTD.	25	A	BBB
07-Jan-03	GMAC OF CANADA LTD.	25	A	BBB
07-Jan-03	GMAC OF CANADA LTD.	25	A	BBB
07-Jan-03	GMAC OF CANADA LTD.	25	A	BBB
08-Jan-03	GMAC OF CANADA LTD.	10	A	BBB
08-Jan-03	GMAC OF CANADA LTD.	25	A	BBB
08-Jan-03	GMAC OF CANADA LTD.	5	A	BBB
08-Jan-03	GMAC OF CANADA LTD.	15	A	BBB
08-Jan-03	ROYAL BANK OF CANADA	5	AA	AA
10-Jan-03	GMAC OF CANADA LTD.	0	A	BBB
13-Jan-03	ALLIANCE PIPE LIMITED PART	400	A	BBB
13-Jan-03	GMAC OF CANADA LTD.	35	A	BBB
13-Jan-03	GMAC OF CANADA LTD.	0	A	BBB
13-Jan-03	GMAC OF CANADA LTD.	0	A	BBB
13-Jan-03	GMAC OF CANADA LTD.	15	A	BBB
15-Jan-03	CANADIAN IMPERIAL BANK OF COM	250	A	A
15-Jan-03	GMAC OF CANADA LTD.	35	A	BBB
15-Jan-03	GMAC OF CANADA LTD.	10	A	BBB

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16-Jan-03	BANK OF NOVA SCOTIA, THE	30	AA	A
17-Jan-03	GMAC OF CANADA LTD.	5	A	BBB
19-Jan-03	BANK OF NOVA SCOTIA, THE	10	AA	A
20-Jan-03	BANK OF NOVA SCOTIA, THE	10	AA	A
20-Jan-03	GMAC OF CANADA LTD.	25	A	BBB
21-Jan-03	GMAC OF CANADA LTD.	20	A	BBB
21-Jan-03	GMAC OF CANADA LTD.	1	A	BBB
21-Jan-03	GMAC OF CANADA LTD.	1	A	BBB
21-Jan-03	BANK OF NOVA SCOTIA, THE	75	AA	A
24-Jan-03	CITIGROUP FINANCE CANADA INC	350	AA	AA
24-Jan-03	GMAC OF CANADA LTD.	1	A	BBB
28-Jan-03	HYDRO ONE INC	300	A	A
28-Jan-03	HYDRO ONE INC	200	A	A
28-Jan-03	MBNA CANADA BK	10	A	BBB
29-Jan-03	MBNA CANADA BK	100	UNRATED	BBB
31-Jan-03	GMAC OF CANADA LTD.	1	A	BBB
31-Jan-03	GMAC OF CANADA LTD.	0	A	BBB
31-Jan-03	FORD CREDIT CDA. LTD.	67	A	BBB
31-Jan-03	FORD CREDIT CDA. LTD.	28	A	BBB
31-Jan-03	FORD CREDIT CDA. LTD.	41	A	BBB
03-Feb-03	GE CAPITAL CANADA FUNDIN	850	AAA	AAA
03-Feb-03	GMAC OF CANADA LTD.	0	A	BBB
04-Feb-03	BELL CANADA	600	A	A
04-Feb-03	GMAC OF CANADA LTD.	0	A	BBB
04-Feb-03	GMAC OF CANADA LTD.	25	A	BBB
05-Feb-03	BNS CAPITAL TRUST	750	A	UNRATED
05-Feb-03	GMAC OF CANADA LTD.	0	A	BBB
05-Feb-03	CITIGROUP FINANCE CANADA INC	75	AA	AA
06-Feb-03	NAV CANADA	450	AA	AA
07-Feb-03	CITIGROUP FINANCE CANADA INC	200	AA	AA
07-Feb-03	FORD CREDIT CDA. LTD.	34	A	BBB
07-Feb-03	FORD CREDIT CDA. LTD.	14	A	BBB
07-Feb-03	FORD CREDIT CDA. LTD.	22	A	BBB
07-Feb-03	GMAC OF CANADA LTD.	1	A	BBB
07-Feb-03	GMAC OF CANADA LTD.	0	A	BBB
07-Feb-03	GMAC OF CANADA LTD.	3	A	BBB
07-Feb-03	GMAC OF CANADA LTD.	25	A	BBB
07-Feb-03	GMAC OF CANADA LTD.	10	A	BBB
12-Feb-03	GMAC OF CANADA LTD.	2	A	BBB
12-Feb-03	LOBLAW COMPANIES LIMITED AND	200	A	A
14-Feb-03	CANADIAN IMPERIAL BANK OF COM	200	AA	A
14-Feb-03	GMAC OF CANADA LTD.	1	A	BBB
14-Feb-03	FORD CREDIT CDA. LTD.	38	A	BBB
14-Feb-03	FORD CREDIT CDA. LTD.	20	A	BBB
14-Feb-03	FORD CREDIT CDA. LTD.	30	A	BBB
18-Feb-03	GMAC OF CANADA LTD.	0	A	BBB
18-Feb-03	GMAC OF CANADA LTD.	0	A	BBB
18-Feb-03	GMAC OF CANADA LTD.	0	A	BBB

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20-Feb-03	GE CAPITAL CANADA FUNDIN	300	AAA	AAA
20-Feb-03	GMAC OF CANADA LTD.	0	A	BBB
20-Feb-03	GMAC OF CANADA LTD.	1	A	BBB
20-Feb-03	SOBEYS INC.	100	BBB	BBB
21-Feb-03	FORD CREDIT CDA. LTD.	53	A	BBB
21-Feb-03	FORD CREDIT CDA. LTD.	19	A	BBB
21-Feb-03	FORD CREDIT CDA. LTD.	25	A	BBB
24-Feb-03	POWER FINANCIAL	250	AA	AA
24-Feb-03	GMAC OF CANADA LTD.	25	A	BBB
25-Feb-03	GEORGE WESTON LIMITED	100	A	A
25-Feb-03	DAIMLERCHRYSLER CANADA F	500	A	BBB
25-Feb-03	GMAC OF CANADA LTD.	17	A	BBB
26-Feb-03	IGM FINANCIAL	150	A	A
26-Feb-03	IGM FINANCIAL	150	A	A
26-Feb-03	HYDRO ONE INC	228	A	A
26-Feb-03	HYDRO ONE INC	235	A	A
26-Feb-03	HYDRO ONE INC	236	A	A
26-Feb-03	HYDRO ONE INC	339	A	A
26-Feb-03	HYDRO ONE INC	109	A	A
26-Feb-03	HYDRO ONE INC	280	A	A
26-Feb-03	HYDRO ONE INC	141	A	A
26-Feb-03	HYDRO ONE INC	168	A	A
26-Feb-03	HYDRO ONE INC	282	A	A
26-Feb-03	HYDRO ONE INC	73	A	A
27-Feb-03	GMAC OF CANADA LTD.	0	A	BBB
27-Feb-03	GMAC OF CANADA LTD.	0	A	BBB
28-Feb-03	FORD CREDIT CDA. LTD.	41	A	BBB
28-Feb-03	FORD CREDIT CDA. LTD.	16	A	BBB
28-Feb-03	FORD CREDIT CDA. LTD.	4	A	BBB
28-Feb-03	FORD CREDIT CDA. LTD.	27	A	BBB
03-Mar-03	GMAC OF CANADA LTD.	2	A	BBB
04-Mar-03	GMAC OF CANADA LTD.	1	A	BBB
04-Mar-03	ROYAL BANK OF CANADA	200	AA	AA
06-Mar-03	GREAT WEST LIFECO	200	AA	AA
06-Mar-03	GREAT WEST LIFECO	400	AA	AA
06-Mar-03	MANULIFE BK OF CANADA	100	A	UNRATED
09-Mar-03	GMAC OF CANADA LTD.	0	A	BBB
12-Mar-03	GMAC OF CANADA LTD.	1	A	BBB
18-Mar-03	GMAC OF CANADA LTD.	1	A	BBB
18-Mar-03	GMAC OF CANADA LTD.	0	A	BBB
21-Mar-03	WELLS FARGO (PREVIOUS TRANS C	200	AA	A
24-Mar-03	GMAC OF CANADA LTD.	1	A	BBB
25-Mar-03	GMAC OF CANADA LTD.	0	A	BBB
25-Mar-03	GMAC OF CANADA LTD.	3	A	BBB
25-Mar-03	GMAC OF CANADA LTD.	0	A	BBB
25-Mar-03	BANK OF NOVA SCOTIA, THE	200	AA	A
27-Mar-03	GMAC OF CANADA LTD.	53	A	BBB
27-Mar-03	GMAC OF CANADA LTD.	5	A	BBB

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27-Mar-03	GMAC OF CANADA LTD.	0	A	BBB
27-Mar-03	NATIONAL BK OF CANADA	100	A	A
28-Mar-03	JOHN DEERE CREDIT INC.	100	A	A
28-Mar-03	GMAC OF CANADA LTD.	5	A	BBB
01-Apr-03	GMAC OF CANADA LTD.	0	A	BBB
02-Apr-03	ONTREA INC	600	AAA	AAA
02-Apr-03	BANK OF NOVA SCOTIA, THE	10	AA	A
02-Apr-03	GMAC OF CANADA LTD.	30	A	BBB
03-Apr-03	GMAC OF CANADA LTD.	1	A	BBB
04-Apr-03	CANADIAN OIL SANDS LTD	150	UNRATED	BBB
04-Apr-03	GMAC OF CANADA LTD.	50	A	BBB
04-Apr-03	GMAC OF CANADA LTD.	1	A	BBB
07-Apr-03	U OF O	150	AA	UNRATED
11-Apr-03	GMAC OF CANADA LTD.	0	A	BBB
11-Apr-03	GMAC OF CANADA LTD.	1	A	BBB
11-Apr-03	NATIONAL BK OF CANADA	40	A	A
15-Apr-03	GMAC OF CANADA LTD.	25	A	BBB
15-Apr-03	GE CAPITAL CANADA FUNDIN	750	AAA	AAA
15-Apr-03	BANK OF NOVA SCOTIA, THE	500	AA	A
15-Apr-03	GMAC OF CANADA LTD.	8	A	BBB
16-Apr-03	HYDRO ONE INC	250	A	A
16-Apr-03	NATIONAL BK OF CANADA	121	A	A
22-Apr-03	CITIGROUP FINANCE CANADA INC	200	AA	AA
22-Apr-03	CITIGROUP FINANCE CANADA INC	200	AA	AA
22-Apr-03	GMAC OF CANADA LTD.	90	A	BBB
22-Apr-03	GMAC OF CANADA LTD.	6	A	BBB
23-Apr-03	GE CAPITAL CANADA FUNDIN	250	AAA	AAA
23-Apr-03	GMAC OF CANADA LTD.	5	A	BBB
24-Apr-03	OMERS REALTY CORP	500	AAA	AAA
24-Apr-03	GMAC OF CANADA LTD.	20	A	BBB
24-Apr-03	GMAC OF CANADA LTD.	20	A	BBB
24-Apr-03	GMAC OF CANADA LTD.	1	A	BBB
24-Apr-03	GMAC OF CANADA LTD.	1	A	BBB
24-Apr-03	GMAC OF CANADA LTD.	20	A	BBB
24-Apr-03	GMAC OF CANADA LTD.	15	A	BBB
24-Apr-03	GMAC OF CANADA LTD.	15	A	BBB
25-Apr-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
25-Apr-03	FORD CREDIT CDA. LTD.	49	A	BBB
25-Apr-03	FORD CREDIT CDA. LTD.	10	A	BBB
25-Apr-03	FORD CREDIT CDA. LTD.	15	A	BBB
28-Apr-03	GMAC OF CANADA LTD.	10	A	BBB
30-Apr-03	TOR. HYDRO CORP.	225	A	A
30-Apr-03	GMAC OF CANADA LTD.	0	A	BBB
30-Apr-03	GMAC OF CANADA LTD.	65	A	BBB
01-May-03	GMAC OF CANADA LTD.	50	A	BBB
01-May-03	HSBC BANK CANADA	100	AA	A
02-May-03	FORD CREDIT CDA. LTD.	16	BBB	BBB
02-May-03	FORD CREDIT CDA. LTD.	5	BBB	BBB

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02-May-03	FORD CREDIT CDA. LTD.	9	BBB	BBB
05-May-03	TERASEN INC	100	A	BBB
06-May-03	FORD CREDIT CDA. LTD.	500	BBB	BBB
06-May-03	GMAC OF CANADA LTD.	35	A	BBB
07-May-03	GMAC OF CANADA LTD.	1	A	BBB
07-May-03	GMAC OF CANADA LTD.	20	A	BBB
08-May-03	GTAA	375	A	A
09-May-03	FORD CREDIT CDA. LTD.	13	BBB	BBB
09-May-03	FORD CREDIT CDA. LTD.	14	BBB	BBB
13-May-03	TORONTO DOMINION BANK	900	A	A
14-May-03	55 SCHOOL BOARD TRUST	891	UNRATED	AA
14-May-03	GTAA	400	A	A
14-May-03	GMAC OF CANADA LTD.	0	A	BBB
14-May-03	CITIGROUP FINANCE CANADA INC	50	AA	AA
14-May-03	BAYERISCHE LANDESBANK	50	UNRATED	AAA
15-May-03	GMAC OF CANADA LTD.	0	A	BBB
16-May-03	BANK OF NOVA SCOTIA, THE	12	AA	A
16-May-03	FORD CREDIT CDA. LTD.	20	BBB	BBB
16-May-03	FORD CREDIT CDA. LTD.	6	BBB	BBB
16-May-03	FORD CREDIT CDA. LTD.	7	BBB	BBB
20-May-03	GMAC OF CANADA LTD.	7	A	BBB
20-May-03	GMAC OF CANADA LTD.	5	A	BBB
21-May-03	GMAC OF CANADA LTD.	0	A	BBB
22-May-03	GMAC OF CANADA LTD.	1	A	BBB
22-May-03	GMAC OF CANADA LTD.	2	A	BBB
22-May-03	DAIMLERCHRYSLER CANADA F	300	A	BBB
23-May-03	GMAC OF CANADA LTD.	0	A	BBB
23-May-03	FORD CREDIT CDA. LTD.	13	BBB	BBB
23-May-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
23-May-03	FORD CREDIT CDA. LTD.	7	BBB	BBB
26-May-03	GMAC OF CANADA LTD.	0	A	BBB
27-May-03	LANTIC SUGAR	65	UNRATED	UNRATED
27-May-03	GMAC OF CANADA LTD.	0	A	BBB
27-May-03	GMAC OF CANADA LTD.	0	A	BBB
28-May-03	ALTALINK, L.P.	100	A	A
28-May-03	ALTALINK, L.P.	200	A	A
28-May-03	GMAC OF CANADA LTD.	0	A	BBB
28-May-03	GMAC INC.	0	A	BBB
28-May-03	GMAC OF CANADA LTD.	0	A	BBB
30-May-03	FORD CREDIT CDA. LTD.	14	BBB	BBB
30-May-03	FORD CREDIT CDA. LTD.	8	BBB	BBB
30-May-03	FORD CREDIT CDA. LTD.	7	BBB	BBB
30-May-03	GMAC OF CANADA LTD.	5	A	BBB
02-Jun-03	GMAC OF CANADA LTD.	7	A	BBB
02-Jun-03	GMAC OF CANADA LTD.	50	A	BBB
03-Jun-03	GE CAPITAL CANADA FUNDIN	600	AAA	AAA
03-Jun-03	SIMON FRASER UNIVERSITY	150	AA	UNRATED
03-Jun-03	NATIONAL BK OF CANADA	100	A	A

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04-Jun-03	LOBLAW COMPANIES LIMITED AND	200	A	A
06-Jun-03	FORD CREDIT CDA. LTD.	25	BBB	BBB
06-Jun-03	FORD CREDIT CDA. LTD.	8	BBB	BBB
06-Jun-03	FORD CREDIT CDA. LTD.	2	BBB	BBB
06-Jun-03	FORD CREDIT CDA. LTD.	10	BBB	BBB
09-Jun-03	GMAC OF CANADA LTD.	30	A	BBB
09-Jun-03	GMAC OF CANADA LTD.	0	A	BBB
09-Jun-03	GMAC OF CANADA LTD.	1	A	BBB
09-Jun-03	GMAC OF CANADA LTD.	50	A	BBB
09-Jun-03	GMAC OF CANADA LTD.	15	A	BBB
09-Jun-03	GREAT LAKES POWER INC	384	A	UNRATED
10-Jun-03	GMAC OF CANADA LTD.	6	A	BBB
10-Jun-03	GMAC OF CANADA LTD.	0	A	BBB
10-Jun-03	GMAC OF CANADA LTD.	25	A	BBB
11-Jun-03	GMAC OF CANADA LTD.	1	A	BBB
11-Jun-03	GMAC OF CANADA LTD.	1	A	BBB
12-Jun-03	GMAC OF CANADA LTD.	0	A	BBB
12-Jun-03	GMAC OF CANADA LTD.	10	A	BBB
12-Jun-03	GMAC OF CANADA LTD.	25	A	BBB
13-Jun-03	LOBLAW COMPANIES LIMITED AND	55	A	A
13-Jun-03	FORD CREDIT CDA. LTD.	25	BBB	BBB
13-Jun-03	FORD CREDIT CDA. LTD.	8	BBB	BBB
13-Jun-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
13-Jun-03	FORD CREDIT CDA. LTD.	6	BBB	BBB
13-Jun-03	CCDCAISSE CENTRALE DESJARDINS	126	UNRATED	AA
16-Jun-03	CITIGROUP FINANCE CANADA INC	200	AA	AA
17-Jun-03	WELLS FARGO (PREVIOUS TRANS C	200	AA	A
17-Jun-03	GMAC OF CANADA LTD.	0	A	BBB
18-Jun-03	HYDRO ONE INC	500	A	A
19-Jun-03	GMAC OF CANADA LTD.	0	A	BBB
20-Jun-03	FORD CREDIT CDA. LTD.	5	BBB	BBB
20-Jun-03	FORD CREDIT CDA. LTD.	11	BBB	BBB
20-Jun-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
20-Jun-03	FORD CREDIT CDA. LTD.	6	BBB	BBB
20-Jun-03	GMAC OF CANADA LTD.	0	A	BBB
23-Jun-03	ALLIANCE PIPE LIMITED PART	300	A	BBB
23-Jun-03	CP RAIL	350	BBB	BBB
24-Jun-03	GMAC OF CANADA LTD.	0	A	BBB
24-Jun-03	GMAC OF CANADA LTD.	3	A	BBB
25-Jun-03	GMAC OF CANADA LTD.	1	A	BBB
25-Jun-03	GMAC OF CANADA LTD.	0	A	BBB
26-Jun-03	HSBC FIN CORP LTD	400	A	A
26-Jun-03	GMAC OF CANADA LTD.	0	A	BBB
26-Jun-03	GMAC OF CANADA LTD.	0	A	BBB
26-Jun-03	INDUSTRIAL ALLIANCE CAP TR	150	A	BBB
27-Jun-03	FORD CREDIT CDA. LTD.	8	BBB	BBB
27-Jun-03	FORD CREDIT CDA. LTD.	11	BBB	BBB
27-Jun-03	FORD CREDIT CDA. LTD.	8	BBB	BBB

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27-Jun-03	FORD CREDIT CDA. LTD.	9	BBB	BBB
30-Jun-03	GMAC OF CANADA LTD.	0	A	BBB
02-Jul-03	GMAC OF CANADA LTD.	0	A	BBB
03-Jul-03	FORD CREDIT CDA. LTD.	5	BBB	BBB
03-Jul-03	FORD CREDIT CDA. LTD.	8	BBB	BBB
03-Jul-03	FORD CREDIT CDA. LTD.	2	BBB	BBB
03-Jul-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
03-Jul-03	GMAC OF CANADA LTD.	0	A	BBB
03-Jul-03	NATIONAL BK OF CANADA	100	UNRATED	A
04-Jul-03	GMAC OF CANADA LTD.	1	A	BBB
04-Jul-03	CANADIAN WESTERN BANK	30	UNRATED	UNRATED
07-Jul-03	GMAC OF CANADA LTD.	5	A	BBB
08-Jul-03	GMAC OF CANADA LTD.	0	A	BBB
09-Jul-03	GMAC OF CANADA LTD.	15	A	BBB
09-Jul-03	GMAC OF CANADA LTD.	0	A	BBB
10-Jul-03	GMAC OF CANADA LTD.	0	A	BBB
10-Jul-03	GMAC OF CANADA LTD.	0	A	BBB
10-Jul-03	MAPLE NHA MORTGAGE TRUST	50	AAA	UNRATED
14-Jul-03	GMAC OF CANADA LTD.	0	A	BBB
14-Jul-03	GMAC OF CANADA LTD.	5	A	BBB
14-Jul-03	JOHN DEERE CREDIT INC.	200	A	A
15-Jul-03	GMAC OF CANADA LTD.	30	A	BBB
15-Jul-03	MBNA CANADA BK	56	A	BBB
16-Jul-03	RBC CAP TR	900	A	A
16-Jul-03	CCDCAISSE CENTRALE DESJARDINS	310	AA	AA
16-Jul-03	GMAC OF CANADA LTD.	0	A	BBB
17-Jul-03	GMAC OF CANADA LTD.	0	A	BBB
17-Jul-03	GMAC OF CANADA LTD.	5	A	BBB
17-Jul-03	GMAC OF CANADA LTD.	30	A	BBB
18-Jul-03	GMAC OF CANADA LTD.	15	A	BBB
18-Jul-03	GMAC OF CANADA LTD.	5	A	BBB
18-Jul-03	GMAC OF CANADA LTD.	10	A	BBB
21-Jul-03	GMAC OF CANADA LTD.	0	A	BBB
21-Jul-03	NATIONAL BK OF CANADA	40	A	A
22-Jul-03	GMAC OF CANADA LTD.	0	A	BBB
23-Jul-03	GMAC OF CANADA LTD.	25	A	BBB
23-Jul-03	CANADIAN IMPERIAL BANK OF COM	10	AA	A
25-Jul-03	FORD CREDIT CDA. LTD.	17	BBB	BBB
25-Jul-03	FORD CREDIT CDA. LTD.	8	BBB	BBB
25-Jul-03	FORD CREDIT CDA. LTD.	10	BBB	BBB
29-Jul-03	CITIGROUP FINANCE CANADA INC	200	AA	AA
29-Jul-03	CITIGROUP FINANCE CANADA INC	300	AA	AA
29-Jul-03	GMAC OF CANADA LTD.	15	A	BBB
29-Jul-03	GMAC OF CANADA LTD.	1	A	BBB
30-Jul-03	MBNA CANADA BK	150	A	UNRATED
30-Jul-03	CATERPILLAR FINANCIAL SERVICES	250	A	A
30-Jul-03	CATERPILLAR FINANCIAL SERVICES	100	A	A
31-Jul-03	GMAC OF CANADA LTD.	0	A	BBB

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01-Aug-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
01-Aug-03	FORD CREDIT CDA. LTD.	15	BBB	BBB
01-Aug-03	FORD CREDIT CDA. LTD.	2	BBB	BBB
01-Aug-03	FORD CREDIT CDA. LTD.	5	BBB	BBB
05-Aug-03	BANK OF NOVA SCOTIA, THE	45	AA	A
05-Aug-03	GMAC OF CANADA LTD.	0	A	BBB
06-Aug-03	MAPLE NHA MORTGAGE TRUST	25	AAA	UNRATED
06-Aug-03	DAIMLERCHRYSLER CANADA F	300	A	BBB
06-Aug-03	BANK OF NOVA SCOTIA, THE	18	AA	A
06-Aug-03	GMAC OF CANADA LTD.	0	A	BBB
08-Aug-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
08-Aug-03	FORD CREDIT CDA. LTD.	3	BBB	BBB
08-Aug-03	FORD CREDIT CDA. LTD.	3	BBB	BBB
11-Aug-03	NATIONAL BK OF CANADA	20	A	A
12-Aug-03	CANADIAN IMPERIAL BANK OF COM	35	AA	A
14-Aug-03	GMAC OF CANADA LTD.	0	A	BBB
15-Aug-03	FORD CREDIT CDA. LTD.	14	BBB	BBB
15-Aug-03	FORD CREDIT CDA. LTD.	5	BBB	BBB
15-Aug-03	FORD CREDIT CDA. LTD.	3	BBB	BBB
15-Aug-03	FORD CREDIT CDA. LTD.	5	BBB	BBB
19-Aug-03	GMAC OF CANADA LTD.	20	A	BBB
19-Aug-03	GMAC OF CANADA LTD.	50	A	BBB
19-Aug-03	BANK OF NOVA SCOTIA, THE	290	AA	A
20-Aug-03	NOVA SCOTIA PW.,INC.	200	A	BBB
20-Aug-03	ARROW LAKES POWER CORP	100	A	UNRATED
21-Aug-03	GMAC OF CANADA LTD.	25	A	BBB
21-Aug-03	CANADIAN IMPERIAL BANK OF COM	300	AA	A
22-Aug-03	SERCO DES INC.	120	UNRATED	A
22-Aug-03	GMAC OF CANADA LTD.	0	A	BBB
22-Aug-03	GMAC OF CANADA LTD.	0	A	BBB
22-Aug-03	FORD CREDIT CDA. LTD.	10	BBB	BBB
22-Aug-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
22-Aug-03	FORD CREDIT CDA. LTD.	9	BBB	BBB
25-Aug-03	CANADIAN IMPERIAL BANK OF COM	325	AA	A
27-Aug-03	BANK OF MONTREAL	600	AA	AA
27-Aug-03	GMAC OF CANADA LTD.	1	A	BBB
27-Aug-03	GMAC OF CANADA LTD.	5	A	BBB
27-Aug-03	CCDCAISSE CENTRALE DESJARDINS	110	AA	AA
29-Aug-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
29-Aug-03	FORD CREDIT CDA. LTD.	7	BBB	BBB
29-Aug-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
29-Aug-03	FORD CREDIT CDA. LTD.	6	BBB	BBB
29-Aug-03	GMAC OF CANADA LTD.	0	A	BBB
29-Aug-03	MANULIFE BK OF CANADA	100	AA	UNRATED
29-Aug-03	ROYAL BANK OF CANADA	200	AA	AA
02-Sep-03	TORONTO DOMINION BANK	1,000	A	A
02-Sep-03	HSBC BANK CANADA	150	AA	A
03-Sep-03	GMAC OF CANADA LTD.	0	A	BBB

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04-Sep-03	MERRILL LYNCH CDA	150	AA	A
04-Sep-03	MERRILL LYNCH CDA	250	AA	A
04-Sep-03	GMAC OF CANADA LTD.	0	A	BBB
04-Sep-03	GMAC OF CANADA LTD.	20	A	BBB
04-Sep-03	GMAC OF CANADA LTD.	25	A	BBB
05-Sep-03	GMAC OF CANADA LTD.	20	A	BBB
05-Sep-03	GMAC OF CANADA LTD.	0	A	BBB
05-Sep-03	NATIONAL BK OF CANADA	300	A	A
05-Sep-03	FORD CREDIT CDA. LTD.	5	BBB	BBB
05-Sep-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
05-Sep-03	FORD CREDIT CDA. LTD.	9	BBB	BBB
05-Sep-03	FORD CREDIT CDA. LTD.	9	BBB	BBB
08-Sep-03	GMAC OF CANADA LTD.	0	A	BBB
08-Sep-03	GMAC OF CANADA LTD.	0	A	BBB
08-Sep-03	BANK OF NOVA SCOTIA, THE	25	AA	A
09-Sep-03	CANADIAN IMPERIAL BANK OF COM	50	AA	A
09-Sep-03	MBNA CANADA BK	41	A	UNRATED
09-Sep-03	MERRILL LYNCH CDA	25	AA	A
10-Sep-03	MOLSON INC.	200	A	BBB
11-Sep-03	TIMBERWEST FOREST CORP.	65	BBB	BB
12-Sep-03	CCDCAISSE CENTRALE DESJARDINS	70	AA	AA
12-Sep-03	GMAC OF CANADA LTD.	5	A	BBB
12-Sep-03	FORD CREDIT CDA. LTD.	3	BBB	BBB
12-Sep-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
12-Sep-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
12-Sep-03	FORD CREDIT CDA. LTD.	5	BBB	BBB
15-Sep-03	VOLKSWAGEN CANADA INC.	250	A	A
15-Sep-03	TORSTAR CORP	35	BBB	UNRATED
15-Sep-03	GMAC OF CANADA LTD.	5	A	BBB
15-Sep-03	GMAC OF CANADA LTD.	25	A	BBB
16-Sep-03	HONDA CANADA FINANCE INC	300	A	UNRATED
16-Sep-03	CANADIAN IMPERIAL BANK OF COM	39	AA	A
16-Sep-03	GMAC OF CANADA LTD.	0	A	BBB
16-Sep-03	BANK OF NOVA SCOTIA, THE	27	AA	A
17-Sep-03	GMAC OF CANADA LTD.	35	A	BBB
18-Sep-03	CANADIAN IMPERIAL BANK OF COM	20	AA	A
19-Sep-03	TORSTAR CORP	10	BBB	UNRATED
19-Sep-03	FORD CREDIT CDA. LTD.	15	BBB	BBB
19-Sep-03	FORD CREDIT CDA. LTD.	8	BBB	BBB
19-Sep-03	FORD CREDIT CDA. LTD.	6	BBB	BBB
19-Sep-03	FORD CREDIT CDA. LTD.	7	BBB	BBB
22-Sep-03	TERASEN GAS	150	A	BBB
22-Sep-03	CITIGROUP FINANCE CANADA INC	200	AA	AA
22-Sep-03	DAIMLERCHRYSLER CANADA F	18	A	BBB
23-Sep-03	FORD CREDIT CDA. LTD.	500	BBB	BBB
23-Sep-03	GMAC OF CANADA LTD.	0	A	BBB
23-Sep-03	GMAC OF CANADA LTD.	0	A	BBB
23-Sep-03	ROYAL BANK OF CANADA	10	AA	AA

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24-Sep-03	NOVA SCOTIA PW.,INC.	100	A	BBB
24-Sep-03	BANK OF NOVA SCOTIA, THE	240	AA	A
24-Sep-03	GMAC OF CANADA LTD.	10	A	BBB
24-Sep-03	GMAC OF CANADA LTD.	10	A	BBB
24-Sep-03	GMAC OF CANADA LTD.	0	A	BBB
25-Sep-03	GMAC OF CANADA LTD.	10	A	BBB
25-Sep-03	GMAC OF CANADA LTD.	15	A	BBB
26-Sep-03	FORD CREDIT CDA. LTD.	7	BBB	BBB
26-Sep-03	FORD CREDIT CDA. LTD.	10	BBB	BBB
26-Sep-03	FORD CREDIT CDA. LTD.	5	BBB	BBB
26-Sep-03	FORD CREDIT CDA. LTD.	6	BBB	BBB
29-Sep-03	GMAC OF CANADA LTD.	20	A	BBB
29-Sep-03	BANK OF NOVA SCOTIA, THE	483	AA	A
29-Sep-03	GMAC OF CANADA LTD.	10	A	BBB
29-Sep-03	CCDCAISSE CENTRALE DESJARDINS	31	AA	AA
30-Sep-03	GMAC OF CANADA LTD.	0	A	BBB
30-Sep-03	GMAC OF CANADA LTD.	0	A	BBB
30-Sep-03	MBNA CANADA BK	26	A	UNRATED
01-Oct-03	BANK OF NOVA SCOTIA, THE	30	AA	A
01-Oct-03	GMAC OF CANADA LTD.	25	A	BBB
02-Oct-03	AEROPORTS DE MONTREAL	200	A	A
02-Oct-03	AEROPORTS DE MONTREAL	150	A	A
02-Oct-03	BANK OF NOVA SCOTIA, THE	170	AA	A
02-Oct-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
02-Oct-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
02-Oct-03	FORD CREDIT CDA. LTD.	8	BBB	BBB
02-Oct-03	FORD CREDIT CDA. LTD.	6	BBB	BBB
03-Oct-03	GMAC OF CANADA LTD.	5	A	BBB
06-Oct-03	CDP FIN INC.	750	AAA	AAA
07-Oct-03	GMAC OF CANADA LTD.	10	A	BBB
07-Oct-03	DAIMLERCHRYSLER CANADA F	14	A	BBB
09-Oct-03	CFI TRUST	25	AA	UNRATED
09-Oct-03	GMAC OF CANADA LTD.	0	A	BBB
10-Oct-03	ROYAL BANK OF CANADA	250	AA	AA
14-Oct-03	GMAC OF CANADA LTD.	10	A	BBB
14-Oct-03	GMAC OF CANADA LTD.	10	A	BBB
14-Oct-03	GMAC OF CANADA LTD.	30	A	BBB
14-Oct-03	MOLSON INC.	50	A	BBB
15-Oct-03	GMAC OF CANADA LTD.	0	A	BBB
15-Oct-03	GMAC OF CANADA LTD.	0	A	BBB
15-Oct-03	TERANET INC.	300	A	A
16-Oct-03	GMAC OF CANADA LTD.	0	A	BBB
17-Oct-03	SHOPPERS DRUG MART CORPORATIO	300	A	BBB
20-Oct-03	GMAC OF CANADA LTD.	5	A	BBB
20-Oct-03	ROYAL BANK OF CANADA	28	A	A
21-Oct-03	ROYAL BANK OF CANADA	1,000	A	A
21-Oct-03	MBNA CANADA BK	19	A	UNRATED
22-Oct-03	CANADIAN IMPERIAL BANK OF COM	23	AA	A

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22-Oct-03	FORD CREDIT CDA. LTD.	0	BBB	BBB
22-Oct-03	FORD CREDIT CDA. LTD.	0	BBB	BBB
22-Oct-03	FORD CREDIT CDA. LTD.	0	BBB	BBB
22-Oct-03	FORD CREDIT CDA. LTD.	1	BBB	BBB
22-Oct-03	GMAC OF CANADA LTD.	0	A	BBB
22-Oct-03	CANADIAN IMPERIAL BANK OF COM	25	AA	A
23-Oct-03	GMAC OF CANADA LTD.	0	A	BBB
27-Oct-03	TORONTO DOMINION BANK	10	AA	A
27-Oct-03	ROYAL BANK OF CANADA	26	AA	AA
28-Oct-03	GMAC OF CANADA LTD.	0	A	BBB
28-Oct-03	GAZ METRO INC	125	A	A
28-Oct-03	GMAC OF CANADA LTD.	5	A	BBB
28-Oct-03	ROYAL BANK OF CANADA	20	AA	AA
29-Oct-03	TELEBEC LTEE	70	UNRATED	A
30-Oct-03	GMAC OF CANADA LTD.	0	A	BBB
30-Oct-03	GMAC OF CANADA LTD.	0	A	BBB
31-Oct-03	CCDCAISSE CENTRALE DESJARDINS	300	AA	AA
31-Oct-03	FORD CREDIT CDA. LTD.	5	BBB	BBB
31-Oct-03	FORD CREDIT CDA. LTD.	8	BBB	BBB
31-Oct-03	MARITIME LIFE CANADIAN F	200	A	AA
03-Nov-03	GMAC OF CANADA LTD.	1	A	BBB
03-Nov-03	TORONTO DOMINION BANK	15	AA	A
03-Nov-03	BANK OF NOVA SCOTIA, THE	45	AA	A
03-Nov-03	GMAC OF CANADA LTD.	10	A	BBB
04-Nov-03	DAIMLERCHRYSLER CANADA F	400	A	BBB
04-Nov-03	HSBC FIN CORP LTD	200	A	A
05-Nov-03	GMAC OF CANADA LTD.	0	A	BBB
05-Nov-03	GMAC OF CANADA LTD.	3	A	BBB
06-Nov-03	GMAC OF CANADA LTD.	0	A	BBB
07-Nov-03	FORD CREDIT CDA. LTD.	3	BBB	BBB
07-Nov-03	FORD CREDIT CDA. LTD.	8	BBB	BBB
07-Nov-03	FORD CREDIT CDA. LTD.	3	BBB	BBB
10-Nov-03	GMAC OF CANADA LTD.	0	A	BBB
10-Nov-03	MBNA CANADA BK	20	A	UNRATED
12-Nov-03	SHAW COMMUNICATIONS INC	350	BB	BB
12-Nov-03	GMAC OF CANADA LTD.	0	A	BBB
12-Nov-03	GMAC OF CANADA LTD.	0	A	BBB
13-Nov-03	GMAC OF CANADA LTD.	0	A	BBB
14-Nov-03	FORD CREDIT CDA. LTD.	9	BBB	BBB
14-Nov-03	FORD CREDIT CDA. LTD.	6	BBB	BBB
14-Nov-03	FORD CREDIT CDA. LTD.	15	BBB	BBB
14-Nov-03	BANK OF NOVA SCOTIA, THE	1,000	AA	A
14-Nov-03	GMAC OF CANADA LTD.	10	A	BBB
17-Nov-03	LOBLAW COMPANIES LIMITED AND	200	A	A
17-Nov-03	GMAC OF CANADA LTD.	0	A	BBB
17-Nov-03	GMAC OF CANADA LTD.	0	A	BBB
17-Nov-03	CANADIAN IMPERIAL BANK OF COM	25	UNRATED	UNRATED
17-Nov-03	GMAC OF CANADA LTD.	16	A	BBB

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17-Nov-03	GMAC OF CANADA LTD.	15	A	BBB
17-Nov-03	GMAC OF CANADA LTD.	5	A	BBB
17-Nov-03	GMAC OF CANADA LTD.	10	A	BBB
18-Nov-03	TRANSCANADA PIPELINES LT	450	A	A
18-Nov-03	407 INTERNATIONAL INC	230	BBB	BBB
18-Nov-03	GMAC OF CANADA LTD.	0	A	BBB
19-Nov-03	GMAC OF CANADA LTD.	1	A	BBB
19-Nov-03	DAIMLERCHRYSLER CANADA F	9	A	BBB
19-Nov-03	BANK OF NOVA SCOTIA, THE	15	AA	A
20-Nov-03	GMAC OF CANADA LTD.	25	A	BBB
20-Nov-03	GMAC OF CANADA LTD.	10	A	BBB
20-Nov-03	GMAC OF CANADA LTD.	25	A	BBB
21-Nov-03	FORD CREDIT CDA. LTD.	5	BBB	BBB
21-Nov-03	FORD CREDIT CDA. LTD.	3	BBB	BBB
21-Nov-03	FORD CREDIT CDA. LTD.	2	BBB	BBB
21-Nov-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
21-Nov-03	CADBURY BEVERAGES CDA INC	325	BBB	BBB
24-Nov-03	ALTALINK, L.P.	125	A	A
24-Nov-03	GMAC OF CANADA LTD.	10	A	BBB
24-Nov-03	GMAC OF CANADA LTD.	5	A	BBB
24-Nov-03	BANK OF NOVA SCOTIA, THE	20	AA	A
26-Nov-03	GMAC OF CANADA LTD.	0	A	BBB
26-Nov-03	RABOBANK NEDERLAND	1,000	AAA	AAA
27-Nov-03	GMAC OF CANADA LTD.	0	A	BBB
27-Nov-03	CCDCAISSE CENTRALE DESJARDINS	75	AA	AA
28-Nov-03	FORD CREDIT CDA. LTD.	1	BBB	BBB
28-Nov-03	FORD CREDIT CDA. LTD.	5	BBB	BBB
28-Nov-03	FORD CREDIT CDA. LTD.	1	BBB	BBB
28-Nov-03	FORD CREDIT CDA. LTD.	2	BBB	BBB
01-Dec-03	BANK OF NOVA SCOTIA, THE	51	AA	A
01-Dec-03	GMAC OF CANADA LTD.	10	A	BBB
02-Dec-03	GMAC OF CANADA LTD.	112	A	BBB
03-Dec-03	GMAC OF CANADA LTD.	0	A	BBB
03-Dec-03	HUDSON'S BAY COMPANY	120	BB	BB
03-Dec-03	ROYAL BANK OF CANADA	60	AA	AA
03-Dec-03	MBNA CANADA BK	11	A	UNRATED
03-Dec-03	BANK OF NOVA SCOTIA, THE	200	AA	A
04-Dec-03	GMAC OF CANADA LTD.	0	A	BBB
04-Dec-03	GMAC OF CANADA LTD.	1	A	BBB
04-Dec-03	CANADIAN IMPERIAL BANK OF COM	450	AA	A
05-Dec-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
05-Dec-03	FORD CREDIT CDA. LTD.	3	BBB	BBB
05-Dec-03	FORD CREDIT CDA. LTD.	3	BBB	BBB
05-Dec-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
05-Dec-03	GMAC OF CANADA LTD.	10	A	BBB
05-Dec-03	CANADIAN IMPERIAL BANK OF COM	25	AA	A
08-Dec-03	GTAA	200	A	A
08-Dec-03	UNIVERSITY OF TORONTO	200	UNRATED	AA

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08-Dec-03	GMAC OF CANADA LTD.	0	A	BBB
08-Dec-03	BANK OF NOVA SCOTIA, THE	45	AA	A
08-Dec-03	GMAC OF CANADA LTD.	5	A	BBB
08-Dec-03	ROYAL BANK OF CANADA	20	AA	AA
09-Dec-03	GMAC OF CANADA LTD.	0	A	BBB
10-Dec-03	GMAC OF CANADA LTD.	0	A	BBB
10-Dec-03	CITIGROUP FINANCE CANADA INC	300	AA	AA
10-Dec-03	CANADIAN IMPERIAL BANK OF COM	206	AA	A
11-Dec-03	ENBRIDGE GAS DISTRIBUTION	150	A	A
11-Dec-03	ENBRIDGE GAS DISTRIBUTION	150	A	A
11-Dec-03	GMAC OF CANADA LTD.	0	A	BBB
11-Dec-03	GMAC OF CANADA LTD.	0	A	BBB
12-Dec-03	GMAC OF CANADA LTD.	0	A	BBB
12-Dec-03	GMAC OF CANADA LTD.	60	A	BBB
12-Dec-03	GMAC OF CANADA LTD.	60	A	BBB
12-Dec-03	FORD CREDIT CDA. LTD.	7	BBB	BBB
12-Dec-03	FORD CREDIT CDA. LTD.	3	BBB	BBB
12-Dec-03	FORD CREDIT CDA. LTD.	2	BBB	BBB
12-Dec-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
12-Dec-03	NORANDA OPERATING TR	39	BBB	UNRATED
15-Dec-03	GMAC OF CANADA LTD.	0	A	BBB
15-Dec-03	BANK OF NOVA SCOTIA, THE	20	AA	A
15-Dec-03	DAIMLERCHRYSLER CANADA F	32	A	BBB
16-Dec-03	GMAC OF CANADA LTD.	0	A	BBB
16-Dec-03	NORANDA OPERATING TR	115	BBB	UNRATED
16-Dec-03	BANK OF NOVA SCOTIA, THE	50	AA	A
16-Dec-03	BANK OF NOVA SCOTIA, THE	80	AA	A
16-Dec-03	GMAC OF CANADA LTD.	5	A	BBB
16-Dec-03	BANK OF NOVA SCOTIA, THE	16	AA	A
17-Dec-03	ROYAL BANK OF CANADA	20	AA	AA
18-Dec-03	FORD CREDIT CDA. LTD.	3	BBB	BBB
18-Dec-03	FORD CREDIT CDA. LTD.	3	BBB	BBB
18-Dec-03	FORD CREDIT CDA. LTD.	4	BBB	BBB
18-Dec-03	FORD CREDIT CDA. LTD.	10	BBB	BBB
18-Dec-03	GMAC OF CANADA LTD.	10	A	BBB
19-Dec-03	MANULIFE BK OF CANADA	100	AA	UNRATED
19-Dec-03	LAURENTIAN BANK OF CANADA	10	BBB	BBB
23-Dec-03	CANADIAN IMPERIAL BANK OF COM	16	AA	A
30-Dec-03	MBNA CANADA BK	12	A	UNRATED
31-Dec-03	BANK OF NOVA SCOTIA, THE	450	AA	A
31-Dec-03	ROYAL BANK OF CANADA	150	AA	AA
05-Jan-04	DAIMLERCHRYSLER CANADA F	14	A	BBB
06-Jan-04	GMAC OF CANADA LTD.	50	A	BBB
07-Jan-04	GMAC OF CANADA LTD.	0	A	BBB
07-Jan-04	GMAC OF CANADA LTD.	0	A	BBB
07-Jan-04	ROYAL BANK OF CANADA	50	AA	AA
08-Jan-04	GMAC OF CANADA LTD.	0	A	BBB
08-Jan-04	GMAC OF CANADA LTD.	0	A	BBB

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09-Jan-04	CANADIAN OIL SANDS LTD	20	UNRATED	BBB
09-Jan-04	FORD CREDIT CDA. LTD.	7	BBB	BBB
09-Jan-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
09-Jan-04	FORD CREDIT CDA. LTD.	23	BBB	BBB
09-Jan-04	FORD CREDIT CDA. LTD.	25	BBB	BBB
09-Jan-04	ROYAL BANK OF CANADA	10	AA	AA
09-Jan-04	ROYAL BANK OF CANADA	10	AA	AA
12-Jan-04	CANADIAN OIL SANDS LTD	175	UNRATED	BBB
12-Jan-04	UNIVERSITE DU QUE A MTL	150	A	UNRATED
13-Jan-04	ROYAL BANK OF CANADA	500	AA	AA
13-Jan-04	GMAC OF CANADA LTD.	0	A	BBB
14-Jan-04	407 INTERNATIONAL INC	245	BBB	BBB
14-Jan-04	GMAC OF CANADA LTD.	20	A	BBB
14-Jan-04	GMAC OF CANADA LTD.	5	A	BBB
14-Jan-04	BANK OF NOVA SCOTIA, THE	20	AA	A
15-Jan-04	DAIMLERCHRYSLER CANADA F	200	A	BBB
16-Jan-04	GMAC OF CANADA LTD.	5	A	BBB
16-Jan-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
16-Jan-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
16-Jan-04	FORD CREDIT CDA. LTD.	8	BBB	BBB
16-Jan-04	FORD CREDIT CDA. LTD.	8	BBB	BBB
16-Jan-04	GMAC OF CANADA LTD.	10	A	BBB
19-Jan-04	GMAC OF CANADA LTD.	10	A	BBB
20-Jan-04	CU INC	180	A	A
20-Jan-04	GMAC OF CANADA LTD.	0	A	BBB
20-Jan-04	GMAC OF CANADA LTD.	0	A	BBB
20-Jan-04	CANADIAN IMPERIAL BANK OF COM	600	AA	A
20-Jan-04	GMAC OF CANADA LTD.	10	A	BBB
20-Jan-04	GMAC OF CANADA LTD.	20	A	BBB
21-Jan-04	GMAC OF CANADA LTD.	0	A	BBB
21-Jan-04	GMAC OF CANADA LTD.	5	A	BBB
21-Jan-04	TORONTO DOMINION BANK	20	AA	A
22-Jan-04	GMAC OF CANADA LTD.	0	A	BBB
22-Jan-04	ROYAL BANK OF CANADA	500	A	A
22-Jan-04	GMAC OF CANADA LTD.	25	A	BBB
23-Jan-04	TEXTRON FINANCIAL CANADA	60	UNRATED	A
23-Jan-04	ROYAL BANK OF CANADA	10	A	A
23-Jan-04	FORD CREDIT CDA. LTD.	7	BBB	BBB
23-Jan-04	FORD CREDIT CDA. LTD.	8	BBB	BBB
23-Jan-04	FORD CREDIT CDA. LTD.	17	BBB	BBB
23-Jan-04	FORD CREDIT CDA. LTD.	7	BBB	BBB
26-Jan-04	LOBLAW COMPANIES LIMITED AND	200	A	A
27-Jan-04	GMAC OF CANADA LTD.	5	A	BBB
27-Jan-04	GMAC OF CANADA LTD.	2	A	BBB
27-Jan-04	CANADIAN IMPERIAL BANK OF COM	130	AA	A
28-Jan-04	GTAA	350	A	A
29-Jan-04	GTAA	250	A	A
30-Jan-04	FORD CREDIT CDA. LTD.	8	BBB	BBB

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30-Jan-04	FORD CREDIT CDA. LTD.	9	BBB	BBB
30-Jan-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
30-Jan-04	FORD CREDIT CDA. LTD.	8	BBB	BBB
04-Feb-04	CANADIAN IMPERIAL BANK OF COM	250	AA	A
05-Feb-04	UE WATERHEATER INCOME FD	200	A	UNRATED
05-Feb-04	UE WATERHEATER INCOME FD	200	A	UNRATED
05-Feb-04	ROYAL BANK OF CANADA	10	AA	AA
06-Feb-04	TRANSCANADA PIPELINES LT	200	A	A
06-Feb-04	GMAC OF CANADA LTD.	1	A	BBB
06-Feb-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
06-Feb-04	FORD CREDIT CDA. LTD.	6	BBB	BBB
06-Feb-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
06-Feb-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
06-Feb-04	FORD CREDIT CDA. LTD.	7	BBB	BBB
06-Feb-04	DAIMLERCHRYSLER CANADA F	26	A	BBB
09-Feb-04	CANADIAN IMPERIAL BANK OF COM	21	AA	A
09-Feb-04	GMAC OF CANADA LTD.	10	A	BBB
09-Feb-04	CANADIAN IMPERIAL BANK OF COM	125	AA	AA
10-Feb-04	CTV SPECIALTY TV INC.	300	UNRATED	UNRATED
10-Feb-04	GMAC OF CANADA LTD.	0	A	BBB
10-Feb-04	GMAC OF CANADA LTD.	0	A	BBB
11-Feb-04	MERRILL LYNCH CDA	200	AA	A
11-Feb-04	GMAC OF CANADA LTD.	10	A	BBB
11-Feb-04	MERRILL LYNCH CDA	25	AA	A
12-Feb-04	GMAC OF CANADA LTD.	85	A	BBB
13-Feb-04	GMAC OF CANADA LTD.	20	A	BBB
13-Feb-04	GMAC OF CANADA LTD.	1	A	BBB
13-Feb-04	BANK OF NOVA SCOTIA, THE	500	AA	A
13-Feb-04	FORD CREDIT CDA. LTD.	8	BBB	BBB
13-Feb-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
13-Feb-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
13-Feb-04	FORD CREDIT CDA. LTD.	6	BBB	BBB
17-Feb-04	FORD CREDIT CDA. LTD.	500	BBB	BBB
18-Feb-04	GMAC OF CANADA LTD.	0	A	BBB
19-Feb-04	CANADIAN TIRE CORP, LTD	200	A	BBB
19-Feb-04	HYDRO ONE INC	250	A	A
19-Feb-04	GMAC OF CANADA LTD.	0	A	BBB
20-Feb-04	GMAC OF CANADA LTD.	15	A	BBB
20-Feb-04	GMAC OF CANADA LTD.	5	A	BBB
20-Feb-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
20-Feb-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
20-Feb-04	FORD CREDIT CDA. LTD.	0	BBB	BBB
20-Feb-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
20-Feb-04	FORD CREDIT CDA. LTD.	10	BBB	BBB
20-Feb-04	ROYAL BANK OF CANADA	10	AA	AA
20-Feb-04	ROYAL BANK OF CANADA	18	AA	AA
23-Feb-04	CANADIAN IMPERIAL BANK OF COM	210	AA	A
24-Feb-04	MINTO DEVELOPMENTS INC.	60	UNRATED	UNRATED

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25-Feb-04	GMAC OF CANADA LTD.	0	A	BBB
25-Feb-04	GMAC OF CANADA LTD.	35	A	BBB
25-Feb-04	HSBC BANK CANADA	2	AA	A
27-Feb-04	GMAC OF CANADA LTD.	0	A	BBB
27-Feb-04	GMAC OF CANADA LTD.	0	A	BBB
27-Feb-04	BANK OF NOVA SCOTIA, THE	200	AA	A
27-Feb-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
27-Feb-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
27-Feb-04	FORD CREDIT CDA. LTD.	0	BBB	BBB
27-Feb-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
27-Feb-04	FORD CREDIT CDA. LTD.	8	BBB	BBB
01-Mar-04	CANADIAN IMPERIAL BANK OF COM	35	AA	A
01-Mar-04	GMAC OF CANADA LTD.	15	A	BBB
02-Mar-04	GMAC OF CANADA LTD.	10	A	BBB
02-Mar-04	GMAC OF CANADA LTD.	5	A	BBB
03-Mar-04	ROYAL BANK OF CANADA	100	AA	AA
03-Mar-04	ROYAL BANK OF CANADA	100	AA	AA
04-Mar-04	GEORGE WESTON LIMITED	200	A	A
04-Mar-04	INDUSTRIAL ALLIANCE INS	150	A	A
04-Mar-04	BANK OF NOVA SCOTIA, THE	75	AA	A
05-Mar-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
05-Mar-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
05-Mar-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
05-Mar-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
05-Mar-04	FORD CREDIT CDA. LTD.	7	BBB	BBB
05-Mar-04	GMAC OF CANADA LTD.	20	A	BBB
05-Mar-04	GMAC OF CANADA LTD.	0	A	BBB
08-Mar-04	GMAC OF CANADA LTD.	17	A	BBB
10-Mar-04	CITIGROUP FINANCE CANADA INC	200	AA	AA
10-Mar-04	CAPITAL DESJARDINS INC.	450	A	A
11-Mar-04	BELL CANADA	450	A	A
11-Mar-04	BANK OF MONTREAL	525	AA	AA
11-Mar-04	JOHN DEERE CREDIT INC.	100	UNRATED	A
12-Mar-04	GMAC OF CANADA LTD.	2	A	BBB
12-Mar-04	GMAC OF CANADA LTD.	3	A	BBB
12-Mar-04	FORD CREDIT CDA. LTD.	7	BBB	BBB
12-Mar-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
12-Mar-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
12-Mar-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
12-Mar-04	FORD CREDIT CDA. LTD.	14	BBB	BBB
12-Mar-04	GMAC OF CANADA LTD.	7	A	BBB
15-Mar-04	CANADIAN IMPERIAL BANK OF COM	75	AA	A
15-Mar-04	DAIMLERCHRYSLER CANADA F	10	A	BBB
17-Mar-04	GMAC OF CANADA LTD.	15	A	BBB
17-Mar-04	MAPLE NHA MORTGAGE TRUST	50	AAA	UNRATED
17-Mar-04	MAPLE NHA MORTGAGE TRUST	30	AAA	UNRATED
18-Mar-04	GMAC OF CANADA LTD.	0	A	BBB
19-Mar-04	FORD CREDIT CDA. LTD.	5	BBB	BBB

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19-Mar-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
19-Mar-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
19-Mar-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
19-Mar-04	FORD CREDIT CDA. LTD.	20	BBB	BBB
19-Mar-04	GMAC OF CANADA LTD.	4	A	BBB
22-Mar-04	BANK OF NOVA SCOTIA, THE	13	AA	A
23-Mar-04	GMAC OF CANADA LTD.	0	A	BBB
23-Mar-04	BANK OF NOVA SCOTIA, THE	10	AA	A
24-Mar-04	GMAC OF CANADA LTD.	0	A	BBB
26-Mar-04	FORD CREDIT CDA. LTD.	11	BBB	BBB
26-Mar-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
26-Mar-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
26-Mar-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
26-Mar-04	FORD CREDIT CDA. LTD.	11	BBB	BBB
26-Mar-04	CANADIAN IMPERIAL BANK OF COM	16	AA	A
29-Mar-04	CANADIAN IMPERIAL BANK OF COM	230	AA	A
29-Mar-04	MANULIFE BK OF CANADA	100	AA	UNRATED
31-Mar-04	BANK OF NOVA SCOTIA, THE	20	AA	A
31-Mar-04	BANK OF NOVA SCOTIA, THE	20	AA	A
31-Mar-04	CANADIAN IMPERIAL BANK OF COM	16	AA	A
02-Apr-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
02-Apr-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
02-Apr-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
02-Apr-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
02-Apr-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
02-Apr-04	GMAC OF CANADA LTD.	1	A	BBB
02-Apr-04	GMAC OF CANADA LTD.	0	A	BBB
05-Apr-04	DAIMLERCHRYSLER CANADA F	6	A	BBB
06-Apr-04	HSBC FIN CORP LTD	400	A	A
07-Apr-04	ROYAL BANK OF CANADA	1,000	A	A
07-Apr-04	CANADIAN IMPERIAL BANK OF COM	10	AA	A
07-Apr-04	GMAC OF CANADA LTD.	45	A	BBB
08-Apr-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
08-Apr-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
08-Apr-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
08-Apr-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
08-Apr-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
13-Apr-04	BANK OF MONTREAL	800	AA	AA
13-Apr-04	ROYAL BANK OF CANADA	91	UNRATED	AA
15-Apr-04	CANADIAN IMPERIAL BANK OF COM	500	AA	A
15-Apr-04	GMAC OF CANADA LTD.	0	A	BBB
16-Apr-04	YELLOW MEDIA INC.	450	BBB	BBB
16-Apr-04	YELLOW MEDIA INC.	300	BBB	BBB
16-Apr-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
16-Apr-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
16-Apr-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
16-Apr-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
16-Apr-04	FORD CREDIT CDA. LTD.	4	BBB	BBB

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16-Apr-04	GMAC OF CANADA LTD.	0	A	BBB
16-Apr-04	GMAC OF CANADA LTD.	0	A	BBB
19-Apr-04	BANK OF NOVA SCOTIA, THE	15	AA	A
20-Apr-04	GMAC OF CANADA LTD.	30	A	BBB
21-Apr-04	DAIMLERCHRYSLER CANADA F	5	A	BBB
21-Apr-04	GMAC OF CANADA LTD.	0	A	BBB
21-Apr-04	GMAC OF CANADA LTD.	15	A	BBB
23-Apr-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
23-Apr-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
23-Apr-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
23-Apr-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
23-Apr-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
26-Apr-04	TERASEN GAS	150	A	UNRATED
26-Apr-04	ROYAL BANK OF CANADA	18	AA	A
27-Apr-04	GMAC OF CANADA LTD.	1	A	BBB
27-Apr-04	GMAC OF CANADA LTD.	5	A	BBB
27-Apr-04	YORK UNIVERSITY	100	AA	AA
28-Apr-04	GMAC OF CANADA LTD.	10	A	BBB
28-Apr-04	ROYAL BANK OF CANADA	15	AA	AA
30-Apr-04	GMAC OF CANADA LTD.	0	A	BBB
30-Apr-04	NAV CANADA	250	AA	AA
30-Apr-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
30-Apr-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
30-Apr-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
30-Apr-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
30-Apr-04	FORD CREDIT CDA. LTD.	10	BBB	BBB
03-May-04	CANADIAN IMPERIAL BANK OF COM	750	A	A
03-May-04	GMAC OF CANADA LTD.	25	A	BBB
04-May-04	CANADIAN IMPERIAL BANK OF COM	10	AA	A
05-May-04	GMAC OF CANADA LTD.	15	A	BBB
05-May-04	GMAC OF CANADA LTD.	15	A	BBB
05-May-04	ROYAL BANK OF CANADA	15	AA	AA
06-May-04	BANK OF NOVA SCOTIA, THE	185	AA	A
07-May-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
07-May-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
07-May-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
07-May-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
07-May-04	FORD CREDIT CDA. LTD.	14	BBB	BBB
10-May-04	GMAC OF CANADA LTD.	20	A	BBB
12-May-04	GMAC OF CANADA LTD.	0	A	BBB
13-May-04	NATIONAL BK OF CANADA	60	A	UNRATED
13-May-04	ROYAL BANK OF CANADA	10	AA	AA
14-May-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
14-May-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
14-May-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
14-May-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
14-May-04	FORD CREDIT CDA. LTD.	10	BBB	BBB
14-May-04	CANADIAN IMPERIAL BANK OF COM	185	AA	AA

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17-May-04	BANK OF NOVA SCOTIA, THE	15	AA	A
18-May-04	DAIMLERCHRYSLER CANADA F	500	A	BBB
19-May-04	BC FERRY SERVICES INC.	250	A	A
19-May-04	CANADIAN IMPERIAL BANK OF COM	50	AA	AA
19-May-04	CANADIAN IMPERIAL BANK OF COM	16	AA	A
21-May-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
21-May-04	FORD CREDIT CDA. LTD.	7	BBB	BBB
21-May-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
21-May-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
21-May-04	FORD CREDIT CDA. LTD.	7	BBB	BBB
21-May-04	GMAC OF CANADA LTD.	10	A	BBB
26-May-04	GMAC OF CANADA LTD.	0	A	BBB
27-May-04	THOMSON REUTERS CORPORATION (250	A	A
27-May-04	MAPLE NHA MORTGAGE TRUST	75	AAA	UNRATED
27-May-04	CANADIAN IMPERIAL BANK OF COM	100	AA	A
28-May-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
28-May-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
28-May-04	FORD CREDIT CDA. LTD.	8	BBB	BBB
28-May-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
28-May-04	FORD CREDIT CDA. LTD.	9	BBB	BBB
28-May-04	GMAC OF CANADA LTD.	0	A	BBB
31-May-04	GMAC OF CANADA LTD.	0	A	BBB
31-May-04	GMAC OF CANADA LTD.	0	A	BBB
31-May-04	GMAC OF CANADA LTD.	25	A	BBB
01-Jun-04	GMAC OF CANADA LTD.	0	A	BBB
01-Jun-04	GMAC OF CANADA LTD.	20	A	BBB
02-Jun-04	GMAC OF CANADA LTD.	0	A	BBB
03-Jun-04	GMAC OF CANADA LTD.	10	A	BBB
04-Jun-04	GMAC OF CANADA LTD.	2	A	BBB
04-Jun-04	GMAC OF CANADA LTD.	0	A	BBB
04-Jun-04	GMAC OF CANADA LTD.	20	A	BBB
04-Jun-04	FORD CREDIT CDA. LTD.	6	BBB	BBB
04-Jun-04	FORD CREDIT CDA. LTD.	6	BBB	BBB
04-Jun-04	FORD CREDIT CDA. LTD.	9	BBB	BBB
04-Jun-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
04-Jun-04	FORD CREDIT CDA. LTD.	9	BBB	BBB
07-Jun-04	MTS INC	150	BBB	BBB
07-Jun-04	MTS INC	200	BBB	BBB
07-Jun-04	CANADIAN IMPERIAL BANK OF COM	32	AA	A
07-Jun-04	DAIMLERCHRYSLER CANADA F	22	A	BBB
08-Jun-04	JOHN DEERE CREDIT INC.	75	A	A
08-Jun-04	GMAC OF CANADA LTD.	0	A	BBB
08-Jun-04	BANK OF NOVA SCOTIA, THE	50	AA	A
09-Jun-04	CITIGROUP FINANCE CANADA INC	200	AA	AA
09-Jun-04	CITIGROUP FINANCE CANADA INC	250	AA	AA
10-Jun-04	CANADIAN IMPERIAL BANK OF COM	700	AA	A
11-Jun-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
11-Jun-04	FORD CREDIT CDA. LTD.	1	BBB	BBB

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11-Jun-04	FORD CREDIT CDA. LTD.	8	BBB	BBB
11-Jun-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
11-Jun-04	FORD CREDIT CDA. LTD.	8	BBB	BBB
11-Jun-04	ROYAL BANK OF CANADA	25	AA	AA
14-Jun-04	ROYAL BANK OF CANADA	600	A	A
14-Jun-04	GMAC OF CANADA LTD.	0	A	BBB
14-Jun-04	GMAC OF CANADA LTD.	15	A	BBB
15-Jun-04	GMAC OF CANADA LTD.	10	A	BBB
18-Jun-04	GMAC OF CANADA LTD.	0	A	BBB
18-Jun-04	GMAC OF CANADA LTD.	0	A	BBB
18-Jun-04	CANADIAN IMPERIAL BANK OF COM	40	AA	A
18-Jun-04	CANADIAN IMPERIAL BANK OF COM	250	AA	A
18-Jun-04	GMAC OF CANADA LTD.	67	A	BBB
18-Jun-04	FORD CREDIT CDA. LTD.	7	BBB	BBB
18-Jun-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
18-Jun-04	FORD CREDIT CDA. LTD.	7	BBB	BBB
18-Jun-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
18-Jun-04	FORD CREDIT CDA. LTD.	15	BBB	BBB
21-Jun-04	CANADIAN IMPERIAL BANK OF COM	50	AA	A
21-Jun-04	ROYAL BANK OF CANADA	60	AA	AA
22-Jun-04	GMAC OF CANADA LTD.	2	A	BBB
22-Jun-04	HYDRO ONE INC	120	A	A
22-Jun-04	CANADIAN IMPERIAL BANK OF COM	150	AA	A
22-Jun-04	ROYAL BANK OF CANADA	10	AA	AA
22-Jun-04	BFI CANADA INC.	58	BBB	UNRATED
22-Jun-04	BFI CANADA INC.	47	BBB	UNRATED
23-Jun-04	WELLS FARGO (PREVIOUS TRANS C	200	AA	AA
23-Jun-04	CANADIAN OIL SANDS LTD	200	UNRATED	BBB
23-Jun-04	GMAC OF CANADA LTD.	0	A	BBB
24-Jun-04	GMAC OF CANADA LTD.	0	A	BBB
24-Jun-04	CANADIAN IMPERIAL BANK OF COM	400	AA	A
25-Jun-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
25-Jun-04	FORD CREDIT CDA. LTD.	14	BBB	BBB
25-Jun-04	FORD CREDIT CDA. LTD.	9	BBB	BBB
25-Jun-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
25-Jun-04	FORD CREDIT CDA. LTD.	11	BBB	BBB
25-Jun-04	DAIMLERCHRYSLER CANADA F	33	A	BBB
28-Jun-04	GMAC OF CANADA LTD.	1	A	BBB
28-Jun-04	GMAC OF CANADA LTD.	0	A	BBB
28-Jun-04	CANADIAN IMPERIAL BANK OF COM	31	AA	A
28-Jun-04	ROYAL BANK OF CANADA	23	AA	AA
29-Jun-04	GMAC OF CANADA LTD.	1	A	BBB
29-Jun-04	GMAC OF CANADA LTD.	5	A	BBB
30-Jun-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
30-Jun-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
30-Jun-04	FORD CREDIT CDA. LTD.	7	BBB	BBB
30-Jun-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
30-Jun-04	FORD CREDIT CDA. LTD.	5	BBB	BBB

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30-Jun-04	GMAC OF CANADA LTD.	15	A	BBB
06-Jul-04	CANADIAN IMPERIAL BANK OF COM	14	AA	A
07-Jul-04	CDP FIN INC.	225	AAA	AAA
07-Jul-04	CDP FIN INC.	250	AAA	AAA
07-Jul-04	CDP FIN INC.	275	AAA	AAA
07-Jul-04	GMAC OF CANADA LTD.	0	A	BBB
08-Jul-04	CATERPILLAR FINANCIAL SERVICES	300	A	A
08-Jul-04	GMAC OF CANADA LTD.	10	A	BBB
08-Jul-04	GMAC OF CANADA LTD.	0	A	BBB
09-Jul-04	GMAC OF CANADA LTD.	1	A	BBB
09-Jul-04	GMAC OF CANADA LTD.	0	A	BBB
09-Jul-04	GMAC OF CANADA LTD.	0	A	BBB
09-Jul-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
09-Jul-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
09-Jul-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
09-Jul-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
09-Jul-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
14-Jul-04	GMAC OF CANADA LTD.	15	A	BBB
14-Jul-04	GMAC OF CANADA LTD.	0	A	BBB
14-Jul-04	GMAC OF CANADA LTD.	0	A	BBB
14-Jul-04	DAIMLERCHRYSLER CANADA F	15	A	BBB
14-Jul-04	CANADIAN IMPERIAL BANK OF COM	50	AA	A
14-Jul-04	CANADIAN IMPERIAL BANK OF COM	75	AA	A
16-Jul-04	GMAC OF CANADA LTD.	0	A	BBB
16-Jul-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
16-Jul-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
16-Jul-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
16-Jul-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
16-Jul-04	FORD CREDIT CDA. LTD.	6	BBB	BBB
16-Jul-04	GMAC OF CANADA LTD.	35	A	BBB
20-Jul-04	ROYAL BANK OF CANADA	15	AA	AA
21-Jul-04	CITIGROUP FINANCE CANADA INC	200	AA	AA
21-Jul-04	CITIGROUP FINANCE CANADA INC	200	AA	AA
21-Jul-04	CANADIAN IMPERIAL BANK OF COM	23	AA	A
21-Jul-04	JOHN DEERE CREDIT INC.	75	UNRATED	A
21-Jul-04	ROYAL BANK OF CANADA	15	AA	AA
22-Jul-04	GMAC OF CANADA LTD.	0	A	BBB
23-Jul-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
23-Jul-04	FORD CREDIT CDA. LTD.	8	BBB	BBB
23-Jul-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
23-Jul-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
23-Jul-04	FORD CREDIT CDA. LTD.	7	BBB	BBB
27-Jul-04	GMAC OF CANADA LTD.	0	A	BBB
27-Jul-04	GMAC OF CANADA LTD.	50	A	BBB
28-Jul-04	MERRILL LYNCH CDA	150	AA	A
28-Jul-04	MERRILL LYNCH CDA	30	UNRATED	A
29-Jul-04	GMAC OF CANADA LTD.	0	A	BBB
29-Jul-04	BANK OF MONTREAL	225	AA	AA

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29-Jul-04	GMAC OF CANADA LTD.	0	A	BBB
30-Jul-04	FORD CREDIT CDA. LTD.	9	BBB	BBB
30-Jul-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
30-Jul-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
30-Jul-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
30-Jul-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
30-Jul-04	CANADIAN IMPERIAL BANK OF COM	25	AA	A
04-Aug-04	GMAC OF CANADA LTD.	0	A	BBB
04-Aug-04	ROYAL BANK OF CANADA	15	AA	AA
06-Aug-04	GMAC OF CANADA LTD.	5	A	BBB
06-Aug-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
06-Aug-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
06-Aug-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
06-Aug-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
06-Aug-04	FORD CREDIT CDA. LTD.	10	BBB	BBB
06-Aug-04	CML HEALTHCARE ACQU	190	UNRATED	UNRATED
09-Aug-04	GMAC OF CANADA LTD.	80	A	BBB
10-Aug-04	GMAC OF CANADA LTD.	25	A	BBB
11-Aug-04	HONDA CANADA FINANCE INC	300	A	UNRATED
11-Aug-04	ROYAL BANK OF CANADA	300	A	UNRATED
11-Aug-04	BANK OF NOVA SCOTIA, THE	250	AA	A
12-Aug-04	DOMINION CANADA FINANCE	230	BBB	BBB
12-Aug-04	BANK OF NOVA SCOTIA, THE	500	AA	A
12-Aug-04	GMAC OF CANADA LTD.	15	A	BBB
13-Aug-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
13-Aug-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
13-Aug-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
13-Aug-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
13-Aug-04	FORD CREDIT CDA. LTD.	6	BBB	BBB
13-Aug-04	CANADIAN IMPERIAL BANK OF COM	13	AA	A
17-Aug-04	GMAC OF CANADA LTD.	50	A	BBB
17-Aug-04	CANADIAN IMPERIAL BANK OF COM	13	AA	A
18-Aug-04	BANK OF MONTREAL	600	AA	AA
18-Aug-04	HYDRO ONE INC	65	A	A
18-Aug-04	GMAC OF CANADA LTD.	10	A	BBB
20-Aug-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
20-Aug-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
20-Aug-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
20-Aug-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
20-Aug-04	FORD CREDIT CDA. LTD.	10	BBB	BBB
20-Aug-04	HYDRO ONE INC	65	A	A
24-Aug-04	WELLS FARGO (PREVIOUS TRANS C	200	AA	AA
24-Aug-04	CANADIAN IMPERIAL BANK OF COM	150	AA	A
25-Aug-04	BANK OF NOVA SCOTIA, THE	25	AA	A
25-Aug-04	LANDWIRTSCHAFTLICHE RENTEBANK	600	UNRATED	AAA
26-Aug-04	ROYAL BANK OF CANADA	15	A	AA
27-Aug-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
27-Aug-04	FORD CREDIT CDA. LTD.	2	BBB	BBB

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27-Aug-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
27-Aug-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
27-Aug-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
27-Aug-04	CANADIAN IMPERIAL BANK OF COM	80	AA	A
30-Aug-04	GTAA	250	A	A
30-Aug-04	GMAC OF CANADA LTD.	0	A	BBB
30-Aug-04	GMAC OF CANADA LTD.	52	A	BBB
31-Aug-04	BANK OF MONTREAL	600	AA	AA
02-Sep-04	BANK OF NOVA SCOTIA, THE	15	AA	A
03-Sep-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
03-Sep-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
03-Sep-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
03-Sep-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
03-Sep-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
08-Sep-04	CANADIAN IMPERIAL BANK OF COM	500	A	A
08-Sep-04	GMAC OF CANADA LTD.	91	A	BBB
09-Sep-04	BANK OF NOVA SCOTIA, THE	250	AA	A
09-Sep-04	GMAC OF CANADA LTD.	0	A	BBB
09-Sep-04	GMAC OF CANADA LTD.	20	A	BBB
10-Sep-04	TERASEN INC	125	A	UNRATED
10-Sep-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
10-Sep-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
10-Sep-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
10-Sep-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
10-Sep-04	FORD CREDIT CDA. LTD.	8	BBB	BBB
10-Sep-04	GMAC OF CANADA LTD.	0	A	BBB
10-Sep-04	GMAC OF CANADA LTD.	1	A	BBB
10-Sep-04	GMAC OF CANADA LTD.	0	A	BBB
10-Sep-04	GMAC OF CANADA LTD.	50	A	BBB
10-Sep-04	GMAC OF CANADA LTD.	25	A	BBB
13-Sep-04	RIOCAN REAL ESTATE INVES	110	BBB	BBB
13-Sep-04	GMAC OF CANADA LTD.	20	A	BBB
13-Sep-04	GMAC OF CANADA LTD.	20	A	BBB
13-Sep-04	GMAC OF CANADA LTD.	0	A	BBB
14-Sep-04	GMAC OF CANADA LTD.	25	A	BBB
16-Sep-04	BANK OF NOVA SCOTIA, THE	200	AA	A
16-Sep-04	GMAC OF CANADA LTD.	26	A	BBB
16-Sep-04	GMAC OF CANADA LTD.	15	A	BBB
16-Sep-04	GMAC OF CANADA LTD.	10	A	BBB
17-Sep-04	CITIGROUP FINANCE CANADA INC	75	AA	AA
17-Sep-04	GMAC OF CANADA LTD.	28	A	BBB
17-Sep-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
17-Sep-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
17-Sep-04	FORD CREDIT CDA. LTD.	7	BBB	BBB
17-Sep-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
17-Sep-04	FORD CREDIT CDA. LTD.	8	BBB	BBB
17-Sep-04	GMAC OF CANADA LTD.	50	A	BBB
20-Sep-04	LAKE SUPERIOR POWER	77	BBB	UNRATED

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20-Sep-04	DAIMLERCHRYSLER CANADA F	9	A	BBB
20-Sep-04	GMAC OF CANADA LTD.	25	A	BBB
20-Sep-04	GMAC OF CANADA LTD.	10	A	BBB
21-Sep-04	HSBC FIN CORP LTD	250	A	A
21-Sep-04	CITIGROUP FINANCE CANADA INC	75	AA	AA
21-Sep-04	ENBRIDGE GAS DISTRIBUTION	200	A	A
22-Sep-04	WELLS FARGO (PREVIOUS TRANS C	200	AA	AA
22-Sep-04	MTS INC	220	BBB	BBB
22-Sep-04	INTRAWEST CORPORATION	125	UNRATED	B
22-Sep-04	CITIGROUP FINANCE CANADA INC	50	AA	AA
22-Sep-04	CENTRAL 1 CREDIT UNION	125	A	A
22-Sep-04	CANADIAN IMPERIAL BANK OF COM	23	AA	A
22-Sep-04	ROYAL BANK OF CANADA	15	AA	AA
22-Sep-04	ROYAL BANK OF CANADA	10	AA	AA
23-Sep-04	BMO CAPITAL TRUST	600	A	A
24-Sep-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
24-Sep-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
24-Sep-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
24-Sep-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
24-Sep-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
24-Sep-04	GMAC OF CANADA LTD.	0	A	BBB
24-Sep-04	GMAC OF CANADA LTD.	0	A	BBB
24-Sep-04	GREAT CANADIAN GAMING CORPORA	150	BBB	UNRATED
27-Sep-04	GMAC OF CANADA LTD.	0	A	BBB
27-Sep-04	GMAC OF CANADA LTD.	10	A	BBB
27-Sep-04	GMAC OF CANADA LTD.	50	A	BBB
28-Sep-04	GMAC OF CANADA LTD.	20	A	BBB
28-Sep-04	GMAC OF CANADA LTD.	10	A	BBB
29-Sep-04	MAGNA INTERNATIONAL INC	55	A	A
29-Sep-04	MAGNA INTERNATIONAL INC	53	A	A
29-Sep-04	MAGNA INTERNATIONAL INC	50	A	A
29-Sep-04	MAGNA INTERNATIONAL INC	48	A	A
29-Sep-04	MAGNA INTERNATIONAL INC	160	A	A
30-Sep-04	GMAC OF CANADA LTD.	0	A	BBB
30-Sep-04	CANADIAN IMPERIAL BANK OF COM	425	AA	A
30-Sep-04	BANK OF NOVA SCOTIA, THE	300	AA	A
30-Sep-04	ROYAL BANK OF CANADA	15	AA	AA
30-Sep-04	LANDWIRTSCHAFTLICHE RENTEBANK	400	UNRATED	AAA
01-Oct-04	GMAC OF CANADA LTD.	1	A	BBB
01-Oct-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
01-Oct-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
01-Oct-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
01-Oct-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
01-Oct-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
04-Oct-04	BRILLIANT POWER FUNDING CORPOR	50	A	UNRATED
05-Oct-04	BC FERRY SERVICES INC.	250	A	A
05-Oct-04	GMAC OF CANADA LTD.	0	A	BBB
05-Oct-04	CANADIAN IMPERIAL BANK OF COM	100	AA	A

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06-Oct-04	KREDITANSTALT FUR WIEDE	500	UNRATED	AAA
07-Oct-04	UNIVERSITY OF ONT INST OF TEC	220	BBB	UNRATED
07-Oct-04	ROYAL BANK OF CANADA	30	AA	AA
08-Oct-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
08-Oct-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
08-Oct-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
08-Oct-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
08-Oct-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
12-Oct-04	WEST FRASER TIMBER	150	BBB	BBB
12-Oct-04	GMAC OF CANADA LTD.	0	A	BBB
13-Oct-04	GMAC OF CANADA LTD.	0	A	BBB
14-Oct-04	GMAC OF CANADA LTD.	0	A	BBB
14-Oct-04	NATIONAL BK OF CANADA	174	A	UNRATED
14-Oct-04	NATIONAL BK OF CANADA	325	A	UNRATED
14-Oct-04	NATIONAL BK OF CANADA	112	A	UNRATED
14-Oct-04	GMAC OF CANADA LTD.	10	A	BBB
15-Oct-04	FORTISAB INC	200	A	UNRATED
15-Oct-04	FORTISAB INC	200	A	UNRATED
15-Oct-04	ROYAL BANK OF CANADA	500	AA	UNRATED
15-Oct-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
15-Oct-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
15-Oct-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
15-Oct-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
15-Oct-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
18-Oct-04	CANADIAN IMPERIAL BANK OF COM	200	AA	A
18-Oct-04	DAIMLERCHRYSLER CANADA F	8	A	BBB
18-Oct-04	ROYAL BANK OF CANADA	7	AA	AA
20-Oct-04	CANADIAN IMPERIAL BANK OF COM	18	AA	A
22-Oct-04	BANK OF MONTREAL	200	AA	AA
22-Oct-04	BANK OF MONTREAL	400	AA	AA
22-Oct-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
22-Oct-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
22-Oct-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
22-Oct-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
22-Oct-04	FORD CREDIT CDA. LTD.	6	BBB	BBB
25-Oct-04	NAV CANADA	225	AA	AA
25-Oct-04	KREDITANSTALT FUR WIEDE	500	UNRATED	AAA
26-Oct-04	CANADIAN IMPERIAL BANK OF COM	10	AA	A
27-Oct-04	CITIGROUP FINANCE CANADA INC	200	AA	AA
27-Oct-04	CITIGROUP FINANCE CANADA INC	200	AA	AA
28-Oct-04	THOMSON REUTERS CORPORATION (300	A	A
28-Oct-04	THOMSON REUTERS CORPORATION (600	A	A
28-Oct-04	WELLS FARGO (PREVIOUS TRANS C	200	AA	AA
28-Oct-04	GMAC OF CANADA LTD.	0	BBB	BBB
28-Oct-04	FORD CREDIT CDA. LTD.	100	BBB	BBB
29-Oct-04	SUMMIT REAL EST INV TR	115	BBB	UNRATED
29-Oct-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
29-Oct-04	FORD CREDIT CDA. LTD.	2	BBB	BBB

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29-Oct-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
29-Oct-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
29-Oct-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
01-Nov-04	CANADIAN IMPERIAL BANK OF COM	100	AA	A
02-Nov-04	BANK OF NOVA SCOTIA, THE	250	AA	AA
03-Nov-04	BEAR STEARNS COMPANIES	200	A	A
03-Nov-04	NATIONAL BK OF CANADA	200	A	UNRATED
03-Nov-04	BANK OF NOVA SCOTIA, THE	50	AA	AA
03-Nov-04	EUROPEAN INVESTMENT BANK	300	UNRATED	AAA
04-Nov-04	GMAC OF CANADA LTD.	0	BBB	BBB
04-Nov-04	BEAR STEARNS COMPANIES	275	A	A
04-Nov-04	CCDCAISSE CENTRALE DESJARDINS	300	AA	AA
05-Nov-04	MAPLE NHA MORTGAGE TRUST	50	AAA	UNRATED
05-Nov-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
05-Nov-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
05-Nov-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
05-Nov-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
05-Nov-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
05-Nov-04	HSBC BANK CANADA	105	AA	A
05-Nov-04	HSBC BANK CANADA	100	AA	A
05-Nov-04	CANADIAN IMPERIAL BANK OF COM	250	AA	A
09-Nov-04	ONT SCHOOL BOARD	493	AA	AA
09-Nov-04	HYDRO ONE INC	40	UNRATED	UNRATED
09-Nov-04	INTER AMERICAN DEVELOPMENT BK	300	UNRATED	AAA
10-Nov-04	ROYAL BANK OF CANADA	100	AA	UNRATED
12-Nov-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
12-Nov-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
12-Nov-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
12-Nov-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
12-Nov-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
12-Nov-04	GMAC OF CANADA LTD.	0	BBB	BBB
15-Nov-04	TOYOTA CREDIT CANADA INC.	400	UNRATED	AAA
15-Nov-04	YELLOW MEDIA INC.	250	BBB	BBB
15-Nov-04	DAIMLERCHRYSLER CANADA F	300	A	BBB
15-Nov-04	CU INC	100	A	A
15-Nov-04	CU INC	200	A	A
15-Nov-04	NATIONAL BK OF CANADA	25	A	A
15-Nov-04	REPUBLIC OF AUSTRIA	300	UNRATED	AAA
16-Nov-04	407 INTERNATIONAL INC	150	A	A
16-Nov-04	GMAC OF CANADA LTD.	25	BBB	BBB
16-Nov-04	MAPLE LEAF FOODS INC.	105	UNRATED	UNRATED
16-Nov-04	MAPLE LEAF FOODS INC.	20	UNRATED	UNRATED
17-Nov-04	GMAC OF CANADA LTD.	0	BBB	BBB
17-Nov-04	GMAC OF CANADA LTD.	0	BBB	BBB
18-Nov-04	TORONTO DOMINION BANK	800	AA	A
18-Nov-04	HSBC BANK CANADA	150	AA	A
18-Nov-04	GMAC OF CANADA LTD.	0	BBB	BBB
18-Nov-04	ROYAL BANK OF CANADA	10	AA	AA

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19-Nov-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
19-Nov-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
19-Nov-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
19-Nov-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
19-Nov-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
19-Nov-04	GMAC OF CANADA LTD.	0	BBB	BBB
23-Nov-04	FORTIS BC	140	BBB	UNRATED
24-Nov-04	CANADIAN IMPERIAL BANK OF COM	22	AA	A
24-Nov-04	GMAC OF CANADA LTD.	1	BBB	BBB
25-Nov-04	GMAC OF CANADA LTD.	20	BBB	BBB
26-Nov-04	CANADIAN IMPERIAL BANK OF COM	363	AA	A
26-Nov-04	BANK OF NOVA SCOTIA, THE	12	AA	AA
26-Nov-04	BANK OF NOVA SCOTIA, THE	50	AA	AA
26-Nov-04	BANK OF NOVA SCOTIA, THE	50	AA	AA
26-Nov-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
26-Nov-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
26-Nov-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
26-Nov-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
26-Nov-04	FORD CREDIT CDA. LTD.	7	BBB	BBB
26-Nov-04	GMAC OF CANADA LTD.	0	BBB	BBB
26-Nov-04	EUROFIMA	250	UNRATED	AAA
29-Nov-04	BANK OF MONTREAL	650	AA	AA
29-Nov-04	CANADIAN IMPERIAL BANK OF COM	10	AA	A
29-Nov-04	BANK OF NOVA SCOTIA, THE	30	AA	AA
30-Nov-04	407 INTERNATIONAL INC	340	A	A
30-Nov-04	HSBC BANK CANADA	100	A	UNRATED
30-Nov-04	DAIMLERCHRYSLER CANADA F	7	A	BBB
30-Nov-04	CANADIAN IMPERIAL BANK OF COM	20	AA	A
30-Nov-04	407 INTERNATIONAL INC	162	A	A
30-Nov-04	SLM CORP	200	UNRATED	A
01-Dec-04	GMAC OF CANADA LTD.	0	BBB	BBB
02-Dec-04	MERRILL LYNCH CDA	200	AA	A
02-Dec-04	MERRILL LYNCH CDA	20	UNRATED	UNRATED
02-Dec-04	MERRILL LYNCH CDA	15	UNRATED	UNRATED
02-Dec-04	COUNTRYWIDE HOME LOANS	150	UNRATED	A
03-Dec-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
03-Dec-04	FORD CREDIT CDA. LTD.	19	BBB	BBB
03-Dec-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
03-Dec-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
03-Dec-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
03-Dec-04	GMAC OF CANADA LTD.	10	BBB	BBB
03-Dec-04	MANULIFE BK OF CANADA	50	AA	UNRATED
03-Dec-04	GMAC OF CANADA LTD.	15	BBB	BBB
04-Dec-04	GMAC OF CANADA LTD.	1	BBB	BBB
06-Dec-04	BANK OF NOVA SCOTIA, THE	500	AA	AA
06-Dec-04	TORONTO DOMINION BANK	10	AA	A
06-Dec-04	ROYAL BANK OF CANADA	10	AA	AA
07-Dec-04	WELLS FARGO (PREVIOUS TRANS C	300	AA	AA

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08-Dec-04	GMAC OF CANADA LTD.	1	BBB	BBB
08-Dec-04	CANADIAN IMPERIAL BANK OF COM	10	AA	A
08-Dec-04	MANULIFE BK OF CANADA	150	AA	UNRATED
08-Dec-04	CANADIAN IMPERIAL BANK OF COM	10	AA	A
09-Dec-04	FINNING INTERNATIONAL IN	150	BBB	BBB
09-Dec-04	BROOKFIELD ASSET MGMT	400	BBB	BBB
09-Dec-04	BROOKFIELD ASSET MGMT	100	BBB	BBB
09-Dec-04	FORD CREDIT CDA. LTD.	100	BBB	BBB
09-Dec-04	BANK OF NOVA SCOTIA, THE	15	AA	AA
10-Dec-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
10-Dec-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
10-Dec-04	FORD CREDIT CDA. LTD.	2	BBB	BBB
10-Dec-04	FORD CREDIT CDA. LTD.	1	BBB	BBB
10-Dec-04	FORD CREDIT CDA. LTD.	8	BBB	BBB
10-Dec-04	GMAC OF CANADA LTD.	0	BBB	BBB
10-Dec-04	CANADIAN IMPERIAL BANK OF COM	220	AA	A
13-Dec-04	GMAC OF CANADA LTD.	4	BBB	BBB
13-Dec-04	JOHN DEERE CREDIT INC.	100	A	A
13-Dec-04	NATIONAL BK OF CANADA	14	A	A
13-Dec-04	BANK OF NOVA SCOTIA, THE	15	AA	AA
14-Dec-04	GMAC OF CANADA LTD.	0	BBB	BBB
14-Dec-04	REPUBLIC OF AUSTRIA	250	UNRATED	AAA
15-Dec-04	ENBRIDGE INCOME FUND	100	BBB	UNRATED
15-Dec-04	ENBRIDGE INCOME FUND	90	BBB	UNRATED
15-Dec-04	NATIONAL BK OF CANADA	350	A	A
15-Dec-04	GMAC OF CANADA LTD.	0	BBB	BBB
15-Dec-04	ROYAL BANK OF CANADA	500	AA	AA
15-Dec-04	BCIMC REALTY CORP	200	AA	UNRATED
15-Dec-04	BCIMC REALTY CORP	100	AA	UNRATED
16-Dec-04	MI DEV INC	265	BBB	UNRATED
16-Dec-04	ROTHMANS, BENSON/HEDGE	97	A	UNRATED
16-Dec-04	CANADIAN IMPERIAL BANK OF COM	150	AA	A
16-Dec-04	CANADIAN IMPERIAL BANK OF COM	330	AA	A
16-Dec-04	RIOCAN REAL ESTATE INVES	110	BBB	BBB
16-Dec-04	ROYAL BANK OF CANADA	15	AA	AA
16-Dec-04	GMAC OF CANADA LTD.	15	BBB	BBB
17-Dec-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
17-Dec-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
17-Dec-04	FORD CREDIT CDA. LTD.	3	BBB	BBB
17-Dec-04	FORD CREDIT CDA. LTD.	4	BBB	BBB
17-Dec-04	FORD CREDIT CDA. LTD.	5	BBB	BBB
17-Dec-04	GMAC OF CANADA LTD.	0	BBB	BBB
20-Dec-04	CANADIAN IMPERIAL BANK OF COM	24	AA	A
21-Dec-04	BANK OF NOVA SCOTIA, THE	15	AA	AA
21-Dec-04	NATIONAL BK OF CANADA	58	UNRATED	UNRATED
22-Dec-04	BEAR STEARNS COMPANIES	125	A	A
23-Dec-04	GMAC OF CANADA LTD.	0	BBB	BBB
23-Dec-04	GMAC OF CANADA LTD.	2	BBB	BBB

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23-Dec-04	BANK OF NOVA SCOTIA, THE	900	AA	AA
23-Dec-04	BANK OF NOVA SCOTIA, THE	600	AA	AA
23-Dec-04	ROYAL BANK OF CANADA	12	AA	AA
30-Dec-04	GMAC OF CANADA LTD.	0	BBB	BBB
05-Jan-05	GMAC OF CANADA LTD.	2	BBB	BBB
06-Jan-05	TRANSCANADA PIPELINES LT	300	A	A
07-Jan-05	ROTHMANS, BENSON/HEDGE	53	A	UNRATED
07-Jan-05	TORONTO DOMINION BANK	400	AA	A
07-Jan-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
07-Jan-05	FORD CREDIT CDA. LTD.	4	BBB	BBB
07-Jan-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
07-Jan-05	FORD CREDIT CDA. LTD.	1	BBB	BBB
07-Jan-05	FORD CREDIT CDA. LTD.	10	BBB	BBB
07-Jan-05	CANADIAN IMPERIAL BANK OF COM	19	AA	A
10-Jan-05	GMAC OF CANADA LTD.	4	BBB	BBB
10-Jan-05	GMAC OF CANADA LTD.	45	BBB	BBB
10-Jan-05	BANK OF NOVA SCOTIA, THE	207	AA	AA
11-Jan-05	GMAC OF CANADA LTD.	2	BBB	BBB
12-Jan-05	HSBC BANK CANADA	10	AA	A
13-Jan-05	LOBLAW COMPANIES LIMITED AND	300	A	A
13-Jan-05	GMAC OF CANADA LTD.	5	BBB	BBB
13-Jan-05	GMAC OF CANADA LTD.	8	BBB	BBB
13-Jan-05	GMAC OF CANADA LTD.	0	BBB	BBB
13-Jan-05	ROYAL BANK OF CANADA	150	AA	AA
13-Jan-05	ROYAL BANK OF CANADA	150	AA	AA
14-Jan-05	TORONTO DOMINION BANK	325	AA	A
14-Jan-05	TORONTO DOMINION BANK	250	AA	A
14-Jan-05	TORONTO DOMINION BANK	500	AA	A
14-Jan-05	BOARDWALK REAL ESTATE INV TR	120	BBB	UNRATED
14-Jan-05	FORD CREDIT CDA. LTD.	3	BBB	BBB
14-Jan-05	FORD CREDIT CDA. LTD.	12	BBB	BBB
14-Jan-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
14-Jan-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
14-Jan-05	FORD CREDIT CDA. LTD.	8	BBB	BBB
18-Jan-05	BANK OF MONTREAL	500	A	A
18-Jan-05	CANADIAN IMPERIAL BANK OF COM	25	AA	A
19-Jan-05	GMAC OF CANADA LTD.	0	BBB	BBB
19-Jan-05	GMAC OF CANADA LTD.	2	BBB	BBB
20-Jan-05	WELLS FARGO (PREVIOUS TRANS C	300	AA	AA
20-Jan-05	GMAC OF CANADA LTD.	0	BBB	BBB
20-Jan-05	CANADIAN IMPERIAL BANK OF COM	150	AA	A
20-Jan-05	CANADIAN IMPERIAL BANK OF COM	50	AA	A
21-Jan-05	BROOKFIELD ASSET MGMT	50	BBB	BBB
21-Jan-05	WILFRID LAURIER UNIVERSI	115	UNRATED	UNRATED
21-Jan-05	FORD CREDIT CDA. LTD.	1	BBB	BBB
21-Jan-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
21-Jan-05	FORD CREDIT CDA. LTD.	1	BBB	BBB
21-Jan-05	FORD CREDIT CDA. LTD.	1	BBB	BBB

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21-Jan-05	FORD CREDIT CDA. LTD.	1	BBB	BBB
24-Jan-05	CONGRESS FINANCIAL CAPIT	400	A	UNRATED
24-Jan-05	INTER PIPELINE (CORRIDOR) INC	150	A	UNRATED
24-Jan-05	INTER PIPELINE (CORRIDOR) INC	150	A	UNRATED
24-Jan-05	ROYAL BANK OF CANADA	50	AA	AA
25-Jan-05	CANADIAN IMPERIAL BANK OF COM	580	AA	A
25-Jan-05	ROYAL BANK OF CANADA	10	AA	AA
26-Jan-05	NATIONAL BK OF CANADA	16	UNRATED	UNRATED
26-Jan-05	GMAC OF CANADA LTD.	10	BBB	BBB
28-Jan-05	TORONTO DOMINION BANK	28	AA	A
28-Jan-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
28-Jan-05	FORD CREDIT CDA. LTD.	4	BBB	BBB
28-Jan-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
28-Jan-05	FORD CREDIT CDA. LTD.	1	BBB	BBB
28-Jan-05	FORD CREDIT CDA. LTD.	6	BBB	BBB
28-Jan-05	CANADIAN IMPERIAL BANK OF COM	195	AA	A
28-Jan-05	KREDITANSTALT FUR WIEDE	450	UNRATED	AAA
31-Jan-05	TORONTO DOMINION BANK	350	AA	A
31-Jan-05	CANADIAN IMPERIAL BANK OF COM	80	AA	A
31-Jan-05	CANADIAN IMPERIAL BANK OF COM	200	AA	A
31-Jan-05	TORONTO DOMINION BANK	6	AA	A
02-Feb-05	MAPLE NHA MORTGAGE TRUST	75	AAA	UNRATED
02-Feb-05	HYDRO OTTAWA HLDG INC	200	A	A
03-Feb-05	GTAA	350	A	A
03-Feb-05	ROYAL BANK OF CANADA	20	AA	AA
03-Feb-05	GMAC OF CANADA LTD.	0	BBB	BBB
04-Feb-05	FORD CREDIT CDA. LTD.	1	BBB	BBB
04-Feb-05	FORD CREDIT CDA. LTD.	3	BBB	BBB
04-Feb-05	FORD CREDIT CDA. LTD.	1	BBB	BBB
04-Feb-05	FORD CREDIT CDA. LTD.	1	BBB	BBB
04-Feb-05	FORD CREDIT CDA. LTD.	4	BBB	BBB
04-Feb-05	CANADIAN IMPERIAL BANK OF COM	14	AA	A
07-Feb-05	BCIMC REALTY CORP	150	AA	UNRATED
07-Feb-05	BCIMC REALTY CORP	150	AA	UNRATED
07-Feb-05	NATIONAL BK OF CANADA	60	A	A
07-Feb-05	BANK OF NOVA SCOTIA, THE	150	AA	AA
08-Feb-05	BELL CANADA	700	A	A
08-Feb-05	GE CAPITAL CANADA FUNDIN	400	AAA	AAA
08-Feb-05	GE CAPITAL CANADA FUNDIN	600	AAA	AAA
08-Feb-05	NATIONAL AUSTRALIA BANK LIMIT	350	UNRATED	AA
08-Feb-05	HSBC BANK CANADA	200	AA	A
10-Feb-05	ENBRIDGE INC	250	A	A
10-Feb-05	GMAC OF CANADA LTD.	0	BBB	BBB
10-Feb-05	DEUTSCHE BANK AG	300	UNRATED	AA
11-Feb-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
11-Feb-05	FORD CREDIT CDA. LTD.	3	BBB	BBB
11-Feb-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
11-Feb-05	FORD CREDIT CDA. LTD.	1	BBB	BBB

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11-Feb-05	FORD CREDIT CDA. LTD.	6	BBB	BBB
11-Feb-05	GMAC OF CANADA LTD.	0	BBB	BBB
14-Feb-05	GMAC OF CANADA LTD.	5	BBB	BBB
14-Feb-05	GMAC OF CANADA LTD.	0	BBB	BBB
14-Feb-05	GMAC OF CANADA LTD.	0	BBB	BBB
14-Feb-05	LANDWIRTSCHAFTLICHE RENTEBANK	250	UNRATED	AAA
15-Feb-05	CITIGROUP FINANCE CANADA INC	200	AA	AA
15-Feb-05	BANK OF NOVA SCOTIA, THE	1,000	AA	AA
15-Feb-05	GMAC OF CANADA LTD.	150	BBB	BBB
16-Feb-05	CANADIAN IMPERIAL BANK OF COM	25	AA	A
17-Feb-05	OSIFA	650	AA	AA
17-Feb-05	NATIONAL BK OF CANADA	300	A	A
17-Feb-05	RESIDENTIAL INCOME FUND	38	UNRATED	UNRATED
18-Feb-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
18-Feb-05	FORD CREDIT CDA. LTD.	4	BBB	BBB
18-Feb-05	FORD CREDIT CDA. LTD.	3	BBB	BBB
18-Feb-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
18-Feb-05	FORD CREDIT CDA. LTD.	5	BBB	BBB
18-Feb-05	GMAC OF CANADA LTD.	0	BBB	BBB
21-Feb-05	GMAC OF CANADA LTD.	18	BBB	BBB
22-Feb-05	TERASEN GAS	150	A	UNRATED
22-Feb-05	TORONTO DOMINION BANK	7	AA	A
22-Feb-05	GMAC OF CANADA LTD.	0	BBB	BBB
22-Feb-05	ROYAL BANK OF CANADA	15	AA	AA
23-Feb-05	CANADIAN IMPERIAL BANK OF COM	425	AA	A
23-Feb-05	CANADIAN IMPERIAL BANK OF COM	275	AA	A
23-Feb-05	GMAC OF CANADA LTD.	125	BBB	BBB
23-Feb-05	MERRILL LYNCH CDA	20	AA	A
23-Feb-05	MERRILL LYNCH CDA	15	AA	A
23-Feb-05	GMAC OF CANADA LTD.	25	BBB	BBB
23-Feb-05	BANK NEDERLANDSE GEMEENTEN N.	200	UNRATED	AAA
24-Feb-05	GMAC OF CANADA LTD.	2	BBB	BBB
24-Feb-05	GMAC OF CANADA LTD.	0	BBB	BBB
25-Feb-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
25-Feb-05	FORD CREDIT CDA. LTD.	3	BBB	BBB
25-Feb-05	FORD CREDIT CDA. LTD.	1	BBB	BBB
25-Feb-05	FORD CREDIT CDA. LTD.	1	BBB	BBB
25-Feb-05	FORD CREDIT CDA. LTD.	4	BBB	BBB
25-Feb-05	DEXIA MUNICIPAL AGENCY	200	UNRATED	AAA
28-Feb-05	CITIGROUP FINANCE CANADA INC	100	AA	AA
28-Feb-05	GMAC OF CANADA LTD.	8	BBB	BBB
28-Feb-05	GMAC OF CANADA LTD.	6	BBB	BBB
28-Feb-05	GMAC OF CANADA LTD.	0	BBB	BBB
28-Feb-05	BANK OF NOVA SCOTIA, THE	15	AA	AA
01-Mar-05	RIOCAN REAL ESTATE INVES	200	BBB	BBB
01-Mar-05	CANADIAN IMPERIAL BANK OF COM	225	AA	A
02-Mar-05	GMAC OF CANADA LTD.	0	BBB	BBB
03-Mar-05	CANADIAN IMPERIAL BANK OF COM	80	AA	A

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04-Mar-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
04-Mar-05	FORD CREDIT CDA. LTD.	3	BBB	BBB
04-Mar-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
04-Mar-05	FORD CREDIT CDA. LTD.	1	BBB	BBB
04-Mar-05	FORD CREDIT CDA. LTD.	9	BBB	BBB
04-Mar-05	ALLIANCE LEICESTER PLC	200	UNRATED	A
07-Mar-05	RIOCAN REAL ESTATE INVES	150	BBB	BBB
07-Mar-05	KOMMUNALBANKEN AS	200	UNRATED	AAA
08-Mar-05	CITIGROUP FINANCE CANADA INC	50	AA	AA
08-Mar-05	ROYAL BANK OF CANADA	15	AA	AA
08-Mar-05	DANSKE BANK A/S	150	UNRATED	AA
09-Mar-05	CANADIAN IMPERIAL BANK OF COM	370	AA	A
09-Mar-05	RABOBANK NEDERLAND	500	AAA	AAA
10-Mar-05	GMAC OF CANADA LTD.	0	BBB	BBB
10-Mar-05	GMAC OF CANADA LTD.	0	BBB	BBB
11-Mar-05	FORD CREDIT CDA. LTD.	3	BBB	BBB
11-Mar-05	FORD CREDIT CDA. LTD.	7	BBB	BBB
11-Mar-05	FORD CREDIT CDA. LTD.	3	BBB	BBB
11-Mar-05	FORD CREDIT CDA. LTD.	3	BBB	BBB
11-Mar-05	FORD CREDIT CDA. LTD.	5	BBB	BBB
11-Mar-05	JOHN DEERE CREDIT INC.	75	A	A
11-Mar-05	DEPFA ACS BK	300	UNRATED	AAA
14-Mar-05	INSTITUTO DE CREDITO OFICIAL	250	UNRATED	AAA
14-Mar-05	NEDERLANDSE WATERSCHAPSBANK	200	UNRATED	AAA
16-Mar-05	ROYAL BANK OF SCOTLAND PLC TH	700	UNRATED	AA
18-Mar-05	FORD CREDIT CDA. LTD.	1	BBB	BBB
18-Mar-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
18-Mar-05	FORD CREDIT CDA. LTD.	2	BBB	BBB
18-Mar-05	FORD CREDIT CDA. LTD.	1	BBB	BBB
18-Mar-05	FORD CREDIT CDA. LTD.	3	BBB	BBB
18-Mar-05	NATIONAL BK OF CANADA	100	A	UNRATED
21-Mar-05	CANADIAN IMPERIAL BANK OF COM	150	AA	A
22-Mar-05	CANADIAN IMPERIAL BANK OF COM	100	AA	A
24-Mar-05	FORD CREDIT CDA. LTD.	0	BBB	BBB
24-Mar-05	FORD CREDIT CDA. LTD.	0	BBB	BBB
29-Mar-05	TEXTRON FINANCIAL CANADA	130	UNRATED	A
29-Mar-05	CANADIAN IMPERIAL BANK OF COM	400	AA	A
29-Mar-05	DAIMLERCHRYSLER CANADA F	6	A	BBB
30-Mar-05	CANADIAN IMPERIAL BANK OF COM	310	AA	A
31-Mar-05	BANK OF MONTREAL	40	AA	AA
31-Mar-05	HSBC BANK CANADA	200	AA	AA
08-Apr-05	DAIMLERCHRYSLER CANADA F	350	A	BBB
11-Apr-05	DANSKE BANK A/S	250	UNRATED	AA
12-Apr-05	ROYAL BANK OF CANADA	15	AA	AA
14-Apr-05	NATIONAL BK OF CANADA	25	A	A
14-Apr-05	KIMCO NORTH TRUST III	150	UNRATED	A
14-Apr-05	ACCESS HEALTH VANCOUVER	31	UNRATED	UNRATED
15-Apr-05	BANK OF MONTREAL	900	AA	AA

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15-Apr-05	TORONTO DOMINION BANK	25	AA	A
18-Apr-05	TORONTO DOMINION BANK	225	AA	A
19-Apr-05	BANK OF MONTREAL	500	A	A
19-Apr-05	TORONTO DOMINION BANK	13	AA	A
20-Apr-05	BANK OF MONTREAL	400	AA	AA
20-Apr-05	CANADIAN IMPERIAL BANK OF COM	125	AA	A
20-Apr-05	CANADIAN IMPERIAL BANK OF COM	100	AA	A
26-Apr-05	HSBC BANK CANADA	200	A	A
26-Apr-05	JOHN DEERE CREDIT INC.	75	A	A
28-Apr-05	HONDA CANADA FINANCE INC	225	A	A
28-Apr-05	HONDA CANADA FINANCE INC	75	A	A
28-Apr-05	HSBC FIN CORP LTD	400	A	A
28-Apr-05	BANK OF NOVA SCOTIA, THE	20	AA	AA
28-Apr-05	ACCESS ROADS EDMONTON	150	UNRATED	UNRATED
04-May-05	ALBERTA ETHANE GATHERING SYST	110	UNRATED	UNRATED
04-May-05	BANK NEDERLANDSE GEMEENTEN N.	200	UNRATED	AAA
06-May-05	CITIGROUP FINANCE CANADA INC	50	AA	AA
06-May-05	CITIGROUP FINANCE CANADA INC	50	AA	AA
06-May-05	CITIGROUP FINANCE CANADA INC	50	AA	AA
09-May-05	TORONTO DOMINION BANK	20	AA	A
10-May-05	NOVA SCOTIA PW.,INC.	100	A	BBB
10-May-05	GTAA	510	A	A
10-May-05	CITIGROUP FINANCE CANADA INC	50	AA	AA
11-May-05	BANK NEDERLANDSE GEMEENTEN N.	100	UNRATED	AAA
12-May-05	NATIONAL BK OF CANADA	80	A	A
12-May-05	NATIONAL BK OF CANADA	140	A	A
12-May-05	NATIONAL BK OF CANADA	145	A	A
12-May-05	CANADIAN IMPERIAL BANK OF COM	45	AA	A
16-May-05	HYDRO ONE INC	150	A	A
16-May-05	HYDRO ONE INC	350	A	A
16-May-05	CDN REAL ESTATE INV (CRE	25	BBB	UNRATED
16-May-05	CDN REAL ESTATE INV (CRE	35	BBB	UNRATED
17-May-05	CANADIAN TIRE CORP. LTD	300	A	BBB
17-May-05	CANADIAN IMPERIAL BANK OF COM	10	AA	A
18-May-05	ALIANTELECOM INC.	150	A	UNRATED
26-May-05	CANADIAN NATURAL RESOURCES LT	400	BBB	BBB
26-May-05	CANADIAN IMPERIAL BANK OF COM	160	AA	A
26-May-05	FORD CREDIT CDA. LTD.	75	BBB	BB
27-May-05	TORONTO DOMINION BANK	210	AA	A
27-May-05	CANADIAN IMPERIAL BANK OF COM	50	AA	A
27-May-05	NATIONAL BK OF CANADA	15	A	A
27-May-05	UNITED FARMERS OF ALBERTA CO-	85	UNRATED	UNRATED
31-May-05	ACCESS HEALTH VANCOUVER	68	UNRATED	UNRATED
01-Jun-05	GE CAPITAL CANADA FUNDIN	750	AAA	AAA
01-Jun-05	JOHN DEERE CREDIT INC.	100	A	A
01-Jun-05	RIOCAN REAL ESTATE INVES	30	UNRATED	UNRATED
02-Jun-05	HUSKY INJECTION (HIMSL)	95	UNRATED	UNRATED
02-Jun-05	FORD CREDIT CDA. LTD.	250	BBB	BB

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03-Jun-05	ACCESS HEALTH ABBOTSFORD LTD.	209	UNRATED	UNRATED
03-Jun-05	FORD CREDIT CDA. LTD.	250	BBB	BB
06-Jun-05	CITIGROUP FINANCE CANADA INC	100	AA	AA
06-Jun-05	ROYAL BANK OF CANADA	12	AA	AA
07-Jun-05	WELLS FARGO (PREVIOUS TRANS C	1,000	AA	AA
07-Jun-05	MANULIFE BK OF CANADA	100	AA	UNRATED
08-Jun-05	DAIMLERCHRYSLER CANADA F	600	A	BBB
08-Jun-05	BANK OF MONTREAL	50	AA	AA
08-Jun-05	MANULIFE BK OF CANADA	100	AA	UNRATED
08-Jun-05	CANADIAN IMPERIAL BANK OF COM	135	AA	A
09-Jun-05	BROOKFIELD ASSET MGMT	300	A	A
09-Jun-05	CANADIAN IMPERIAL BANK OF COM	260	AA	A
09-Jun-05	RIOCAN REAL ESTATE INVES	100	BBB	BBB
09-Jun-05	MANULIFE BK OF CANADA	6	AA	UNRATED
10-Jun-05	DOFASCO INC	250	A	A
13-Jun-05	FORD CREDIT CDA. LTD.	200	BBB	BB
14-Jun-05	HSBC FIN CORP LTD	250	A	A
14-Jun-05	DAIMLERCHRYSLER CANADA F	7	A	BBB
14-Jun-05	HSBC BANK CANADA	50	A	UNRATED
14-Jun-05	CANADIAN IMPERIAL BANK OF COM	50	AA	A
14-Jun-05	MANULIFE BK OF CANADA	16	AA	UNRATED
16-Jun-05	ROYAL BANK OF CANADA	21	AA	AA
16-Jun-05	CANADIAN IMPERIAL BANK OF COM	270	AA	A
16-Jun-05	MERRILL LYNCH CDA	27	AA	A
20-Jun-05	CITIGROUP FINANCE CANADA INC	100	AA	AA
20-Jun-05	GMAC OF CANADA LTD.	60	BBB	BBB
21-Jun-05	ROYAL BANK OF CANADA	500	A	A
21-Jun-05	SYMPHONY TRUST	25	AAA	UNRATED
21-Jun-05	ROYAL BANK OF CANADA	4	AA	AA
22-Jun-05	MBNA CANADA BK	300	A	BBB
22-Jun-05	CITIGROUP FINANCE CANADA INC	100	AA	AA
23-Jun-05	WELLS FARGO (PREVIOUS TRANS C	400	AA	AA
23-Jun-05	MANULIFE BK OF CANADA	50	AA	UNRATED
23-Jun-05	LAURENTIAN BANK OF CANADA	10	BBB	BBB
23-Jun-05	TELEBEC LTEE	30	UNRATED	A
23-Jun-05	ROYAL BANK OF CANADA	21	AA	AA
23-Jun-05	BEAR STEARNS COMPANIES	150	A	A
24-Jun-05	FIRST CAPITAL REALTY	100	UNRATED	UNRATED
27-Jun-05	TORONTO DOMINION BANK	53	AA	A
28-Jun-05	JOHN DEERE CREDIT INC.	50	UNRATED	A
28-Jun-05	MANULIFE BK OF CANADA	10	AA	UNRATED
30-Jun-05	MUNICIPAL ENTERPRISE	50	UNRATED	UNRATED
04-Jul-05	OKANAGAN LAKE CONC LP	157	UNRATED	A
06-Jul-05	CANADIAN IMPERIAL BANK OF COM	145	AA	A
06-Jul-05	CANADIAN IMPERIAL BANK OF COM	160	AA	A
06-Jul-05	CANADIAN IMPERIAL BANK OF COM	90	AA	A
06-Jul-05	CANADIAN IMPERIAL BANK OF COM	250	AA	A
06-Jul-05	ROYAL BANK OF CANADA	16	AA	AA

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08-Jul-05	ROYAL BANK OF CANADA	20	AA	AA
11-Jul-05	ROYAL BANK OF CANADA	18	AA	AA
12-Jul-05	BANK OF MONTREAL	35	AA	AA
12-Jul-05	BANK OF NOVA SCOTIA, THE	15	AA	AA
12-Jul-05	BANK OF NOVA SCOTIA, THE	15	AA	AA
13-Jul-05	BEAR STEARNS COMPANIES	450	A	A
14-Jul-05	ROYAL BANK OF CANADA	300	A	A
14-Jul-05	CO-OPERATORS FINANCIAL SERVIC	150	BBB	BBB
15-Jul-05	GREAT CANADIAN GAMING CORPORA	150	BBB	UNRATED
15-Jul-05	ROYAL BANK OF CANADA	150	AA	AA
15-Jul-05	BANK OF NOVA SCOTIA, THE	110	AA	AA
15-Jul-05	BANK OF NOVA SCOTIA, THE	100	AA	AA
15-Jul-05	LANDESBANK BADEN - WUERTTEMBERG	150	UNRATED	AA
18-Jul-05	UNIVERSITY OF BC	125	UNRATED	AA
18-Jul-05	NORDEA BANK AB	400	UNRATED	A
19-Jul-05	CITIGROUP FINANCE CANADA INC	175	AA	AA
19-Jul-05	ROYAL BANK OF CANADA	100	AA	UNRATED
19-Jul-05	TORONTO DOMINION BANK	30	AA	A
20-Jul-05	ONT SCHOOL BOARD	123	AA	AA
20-Jul-05	CANADIAN IMPERIAL BANK OF COM	10	A	A
20-Jul-05	MANULIFE BK OF CANADA	10	AA	AA
21-Jul-05	ROYAL BANK OF CANADA	22	AA	AA
22-Jul-05	U.S. BANK NATIONAL ASSOCIATIO	450	UNRATED	A
22-Jul-05	BANK OF NOVA SCOTIA, THE	15	AA	AA
25-Jul-05	TORONTO DOMINION BANK	22	AA	A
26-Jul-05	BANK OF MONTREAL	600	AA	AA
26-Jul-05	ROYAL BANK OF CANADA	20	AA	AA
27-Jul-05	CANADIAN IMPERIAL BANK OF COM	15	AA	A
27-Jul-05	BANK OF NOVA SCOTIA, THE	15	AA	AA
27-Jul-05	NATIONAL AUSTRALIA BANK LIMIT	400	UNRATED	AA
28-Jul-05	CITIGROUP FINANCE CANADA INC	100	AA	AA
28-Jul-05	MANULIFE BK OF CANADA	16	AA	AA
28-Jul-05	GMAC OF CANADA LTD.	100	BBB	UNRATED
04-Aug-05	SLM CORP	250	UNRATED	A
05-Aug-05	TORONTO DOMINION BANK	10	AA	A
08-Aug-05	BANK OF NOVA SCOTIA, THE	20	AA	AA
08-Aug-05	NRW.BANK	150	UNRATED	AA
09-Aug-05	TORONTO DOMINION BANK	28	AA	A
10-Aug-05	NEWFOUNDLAND POWER	60	A	A
11-Aug-05	DEPFA ACS BK	350	UNRATED	AAA
12-Aug-05	ABBEEY NAT'L TREASURY SER	275	UNRATED	AA
17-Aug-05	BANK OF NOVA SCOTIA, THE	750	AA	AA
17-Aug-05	MANULIFE BK OF CANADA	15	AA	UNRATED
17-Aug-05	BANK OF IRELAND (GOVERNOR AND	250	UNRATED	UNRATED
17-Aug-05	STATENS BOST (SWEDISH HOUSING	100	UNRATED	AA
19-Aug-05	SIGMA FINANCE CORPORATION	125	UNRATED	AAA
22-Aug-05	HSBC BANK CANADA	400	AA	A
23-Aug-05	CANADIAN HYDRO DEV, INC	120	BBB	UNRATED

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25-Aug-05	ALTAGAS LTD	100	BBB	BBB
25-Aug-05	BANK OF NOVA SCOTIA, THE	100	AA	AA
26-Aug-05	BANK OF NOVA SCOTIA, THE	350	AA	AA
29-Aug-05	JPMORGAN CHASE BK, N.A.	850	UNRATED	A
30-Aug-05	CANADIAN TIRE CORP, LTD	200	A	BBB
31-Aug-05	CAMECO CORP	300	A	BBB
31-Aug-05	RABOBANK NEDERLAND	750	AAA	AAA
02-Sep-05	TORSTAR CORP	50	BBB	UNRATED
02-Sep-05	SANTANDER INT'L DEBT SA	300	UNRATED	A
06-Sep-05	TORSTAR CORP	25	BBB	UNRATED
06-Sep-05	CANADIAN IMPERIAL BANK OF COM	1,300	A	A
06-Sep-05	KREDITANSTALT FUR WIEDE	50	UNRATED	UNRATED
07-Sep-05	TORSTAR CORP	25	BBB	UNRATED
07-Sep-05	DAIMLERCHRYSLER CANADA F	500	A	BBB
07-Sep-05	HSBC FIN CORP LTD	400	AA	A
08-Sep-05	AEROPORTS DE MONTREAL	300	A	A
09-Sep-05	BANK OF IRELAND (GOVERNOR AND	400	A	A
09-Sep-05	BANK OF MONTREAL	500	AA	AA
12-Sep-05	ROYAL BANK OF CANADA	10	AA	AA
13-Sep-05	BANK OF AMERICA	250	AA	AA
13-Sep-05	BANK OF AMERICA	400	AA	AA
13-Sep-05	NATIONAL BK OF CANADA	300	A	UNRATED
13-Sep-05	TORONTO DOMINION BANK	50	AA	A
15-Sep-05	MOLSON COORS CAP. FIN. ULC	900	BBB	BBB
15-Sep-05	BELL CANADA	200	A	A
15-Sep-05	CALLOWAY REIT	200	BBB	UNRATED
15-Sep-05	TD BANK NATIONAL ASSOCIATION	270	A	A
15-Sep-05	MERRILL LYNCH CDA	35	AA	A
16-Sep-05	UNION GAS	200	A	BBB
16-Sep-05	ENCANA CORP	500	A	A
16-Sep-05	MANULIFE BK OF CANADA	20	AA	UNRATED
19-Sep-05	CITIGROUP FINANCE CANADA INC	200	AA	AA
20-Sep-05	TQM INC	75	A	BBB
21-Sep-05	MBNA CANADA BK	200	A	BBB
21-Sep-05	HONDA CANADA FINANCE INC	350	A	UNRATED
21-Sep-05	HONDA CANADA FINANCE INC	150	A	UNRATED
21-Sep-05	KOMMUNALKREDIT AUSTRIA A	37	UNRATED	UNRATED
22-Sep-05	METCALFE&MANSFIELD ALTER INV	16	UNRATED	UNRATED
22-Sep-05	WINNIPEG AIRPORT AUTHORITY	250	UNRATED	A
23-Sep-05	BMO CAPITAL TRUST	450	A	A
28-Sep-05	CITIGROUP FINANCE CANADA INC	200	UNRATED	AA
28-Sep-05	ROYAL BANK OF CANADA	2	UNRATED	UNRATED
29-Sep-05	CANADIAN IMPERIAL BANK OF COM	12	A	A
29-Sep-05	CITIGROUP, INC.	500	AA	UNRATED
30-Sep-05	LIEVRE POWER FINANCING	225	A	UNRATED
30-Sep-05	MERRILL LYNCH CDA	15	UNRATED	UNRATED
03-Oct-05	BANK OF NOVA SCOTIA, THE	20	AA	AA
04-Oct-05	TOROMONT INDUSTRIES	125	BBB	UNRATED

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04-Oct-05	DNB NOR BANK ASA	300	UNRATED	A
06-Oct-05	METRO INC	200	BBB	BBB
06-Oct-05	METRO INC	400	BBB	BBB
07-Oct-05	MANULIFE BK OF CANADA	50	AA	UNRATED
12-Oct-05	TORONTO DOMINION BANK	8	AA	A
12-Oct-05	ROYAL BANK OF CANADA	14	AA	AA
14-Oct-05	MACQUARIE BANK LIMITED	200	UNRATED	A
14-Oct-05	DAIMLERCHRYSLER CANADA F	150	A	BBB
14-Oct-05	BANK OF NOVA SCOTIA, THE	17	AA	AA
17-Oct-05	CANADIAN IMPERIAL BANK OF COM	370	AA	A
18-Oct-05	NATIONAL BK OF CANADA	500	A	A
18-Oct-05	CITIGROUP FINANCE CANADA INC	150	AA	AA
18-Oct-05	CANADIAN IMPERIAL BANK OF COM	10	A	A
19-Oct-05	TERASEN GAS	150	A	UNRATED
20-Oct-05	RBC CAP TR	1,200	A	A
20-Oct-05	LAND NORDRHEIN-WESTFALEN	200	UNRATED	AA
21-Oct-05	GTAA	350	A	A
21-Oct-05	SOBEYS INC.	175	BBB	BBB
24-Oct-05	BANK OF MONTREAL	15	AA	AA
27-Oct-05	TORONTO DOMINION BANK	800	A	A
27-Oct-05	FORTIS BC	100	BBB	UNRATED
27-Oct-05	CITIGROUP FINANCE CANADA INC	150	A	AA
27-Oct-05	HSBC BANK CANADA	5	AA	A
01-Nov-05	SWEDBANK	300	UNRATED	UNRATED
03-Nov-05	BANK OF NOVA SCOTIA, THE	20	AA	AA
04-Nov-05	CANADA SAFEWAY LIMITED	300	BBB	UNRATED
04-Nov-05	LAKEHEAD UNIVERSITY	100	UNRATED	UNRATED
07-Nov-05	ENBRIDGE INC	150	A	A
08-Nov-05	NOVA SCOTIA PW.,INC.	150	A	BBB
08-Nov-05	BANK OF NOVA SCOTIA, THE	110	AA	AA
09-Nov-05	AMEX EXPRESS CANADA CREDIT CO	500	A	A
09-Nov-05	AMEX EXPRESS CANADA CREDIT CO	300	A	A
09-Nov-05	CANADIAN IMPERIAL BANK OF COM	326	AA	A
09-Nov-05	UNIVERSITY OF TORONTO	75	AA	AA
09-Nov-05	SHAW COMMUNICATIONS INC	450	BB	BB
10-Nov-05	BBVA SE FINANCE SA	200	UNRATED	UNRATED
14-Nov-05	BANK OF NOVA SCOTIA, THE	200	AA	AA
14-Nov-05	EPCOR UTILITIES INC.	200	A	BBB
15-Nov-05	COMMONWEALTH BANK OF AUSTRALI	300	A	A
15-Nov-05	CANADIAN IMPERIAL BANK OF COM	10	AA	A
16-Nov-05	CU INC	185	A	A
16-Nov-05	ALTALINK, L.P.	200	BBB	BBB
16-Nov-05	SUN LIFE FIN CORP	600	AA	A
17-Nov-05	RABOBANK NEDERLAND	250	UNRATED	AAA
18-Nov-05	YELLOW MEDIA INC.	550	BBB	BBB
18-Nov-05	YELLOW MEDIA INC.	250	BBB	BBB
18-Nov-05	BANK OF NOVA SCOTIA, THE	300	AA	AA
18-Nov-05	SHERRITT INTERNATIONAL C	274	BB	UNRATED

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21-Nov-05	LEISUREWORLD SENIOR CARE	310	A	A
21-Nov-05	DEPFA ACS BK	250	UNRATED	AAA
22-Nov-05	MANULIFE BK OF CANADA	15	AA	UNRATED
22-Nov-05	HSBC BANK CANADA	7	AA	A
22-Nov-05	DAIMLERCHRYSLER CANADA F	0	A	BBB
23-Nov-05	CITIGROUP FINANCE CANADA INC	200	AA	AA
23-Nov-05	DNB NOR BANK ASA	150	UNRATED	A
25-Nov-05	TORONTO DOMINION BANK	14	AA	A
25-Nov-05	MANULIFE BK OF CANADA	200	AA	UNRATED
30-Nov-05	TRANSALTA CORPORATION	200	BBB	BBB
30-Nov-05	CATERPILLAR FINANCIAL SERVICES	350	A	A
01-Dec-05	EUROHYPO EUROPAISCHE HYPOTHEK	250	AAA	UNRATED
01-Dec-05	CITIGROUP FINANCE CANADA INC	50	AA	AA
02-Dec-05	BEAR STEARNS COMPANIES	130	A	A
05-Dec-05	TRANS-NORTHERN PIPE	135	A	UNRATED
05-Dec-05	SUMMIT REAL EST INV TR	100	BBB	UNRATED
05-Dec-05	MERRILL LYNCH AND CO, IN	250	UNRATED	UNRATED
06-Dec-05	MANULIFE BK OF CANADA	150	AA	UNRATED
07-Dec-05	WELLS FARGO (PREVIOUS TRANS C	200	AA	AA
07-Dec-05	WELLS FARGO (PREVIOUS TRANS C	300	AA	AA
07-Dec-05	CITIGROUP FINANCE CANADA INC	150	AA	AA
08-Dec-05	JOHN DEERE CREDIT INC.	100	A	A
08-Dec-05	ROYAL BANK OF CANADA	10	AA	AA
08-Dec-05	ROYAL BANK OF CANADA	10	AA	AA
09-Dec-05	BROCK UNIVERSITY	93	A	UNRATED
12-Dec-05	CITIGROUP FINANCE CANADA INC	150	AA	AA
13-Dec-05	ENBRIDGE PIPELINES	250	A	A
15-Dec-05	CANADIAN IMPERIAL BANK OF COM	250	A	A
15-Dec-05	CANADIAN IMPERIAL BANK OF COM	300	A	A
16-Dec-05	SLM CORP	200	UNRATED	A
16-Dec-05	ROYAL BANK OF CANADA	500	AA	UNRATED
16-Dec-05	ROYAL BANK OF CANADA	15	AA	AA
16-Dec-05	MANULIFE BK OF CANADA	12	AA	UNRATED
16-Dec-05	DAIMLERCHRYSLER CANADA F	0	A	BBB
22-Dec-05	ROYAL BANK OF CANADA	10	AA	AA
03-Jan-06	AUSTRALIA AND NEW ZEALAND BAN	150	UNRATED	AA
04-Jan-06	ABBAY NAT'L TREASURY SER	300	UNRATED	A
04-Jan-06	LAND NORDRHEIN-WESTFALEN	75	UNRATED	AA
05-Jan-06	BEAR STEARNS COMPANIES	175	A	A
05-Jan-06	TOTAL CAP	100	UNRATED	AA
05-Jan-06	UBS AG JERSEY BRANCH	100	UNRATED	AA
06-Jan-06	ROYAL BANK OF CANADA	300	AA	AA
06-Jan-06	ROYAL BANK OF CANADA	5	AA	AA
09-Jan-06	KOMMUNALBANKEN AS	200	UNRATED	AAA
09-Jan-06	COMPAGNIE DE FINANCEMENT FONC	200	UNRATED	AAA
10-Jan-06	TORONTO DOMINION BANK	1,000	A	A
10-Jan-06	TRANSCANADA PIPELINES LT	300	A	A
10-Jan-06	BANK NEDERLANDSE GEMEENTEN N.	300	AAA	UNRATED

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11-Jan-06	ROYAL BANK OF CANADA	650	AA	AA
11-Jan-06	JOHN DEERE CREDIT INC.	75	A	A
12-Jan-06	BANK OF NOVA SCOTIA, THE	50	AA	AA
12-Jan-06	BANK OF NOVA SCOTIA, THE	25	AA	AA
13-Jan-06	ROYAL BANK OF CANADA	10	AA	AA
13-Jan-06	ROYAL BANK OF CANADA	10	AA	AA
16-Jan-06	MANULIFE BK OF CANADA	15	AA	UNRATED
16-Jan-06	BRITANNIA BUILDING SOCIETY	50	UNRATED	A
17-Jan-06	INTER AMERICAN DEVELOPMENT BK	300	UNRATED	AAA
17-Jan-06	LANDWIRTSCHAFTLICHE RENTEBANK	200	UNRATED	AAA
18-Jan-06	CANADIAN NATURAL RESOURCES LT	400	BBB	BBB
18-Jan-06	LAURENTIAN BANK OF CANADA	150	BBB	BBB
18-Jan-06	DEUTSCHE BANK AG	200	UNRATED	AA
18-Jan-06	BANK OF IRELAND (GOVERNOR AND	100	UNRATED	A
20-Jan-06	CANADIAN IMPERIAL BANK OF COM	90	AA	A
23-Jan-06	BANK OF MONTREAL	500	AA	AA
23-Jan-06	BANK OF NOVA SCOTIA, THE	125	AA	AA
24-Jan-06	CANADIAN IMPERIAL BANK OF COM	750	AA	A
24-Jan-06	TALISMAN ENERGY	350	BBB	BBB
24-Jan-06	CANADIAN IMPERIAL BANK OF COM	10	AA	A
25-Jan-06	AMEX EXPRESS CANADA CREDIT CO	500	A	A
25-Jan-06	ROYAL BANK OF CANADA	15	AA	AA
25-Jan-06	ROYAL BANK OF CANADA	10	AA	AA
25-Jan-06	LAND NORDRHEIN-WESTFALEN	75	UNRATED	AA
26-Jan-06	BANK OF MONTREAL	15	AA	AA
27-Jan-06	CANADIAN IMPERIAL BANK OF COM	460	A	A
30-Jan-06	RABOBANK NEDERLAND	750	AAA	UNRATED
30-Jan-06	BANK OF IRELAND (GOVERNOR AND	200	UNRATED	A
31-Jan-06	CITIGROUP FINANCE CANADA INC	150	AA	AA
31-Jan-06	BANK OF MONTREAL	8	AA	AA
01-Feb-06	GE CAPITAL CANADA FUNDIN	500	AAA	AAA
01-Feb-06	EUROHYPO EUROPAISCHE HYPOTHEK	200	UNRATED	AAA
02-Feb-06	METRO LIFE GLB FDG	100	UNRATED	AA
02-Feb-06	METRO LIFE GLB FDG	400	UNRATED	AA
02-Feb-06	KREDITANSTALT FUR WIEDE	350	UNRATED	AAA
02-Feb-06	LANDWIRTSCHAFTLICHE RENTEBANK	300	UNRATED	AAA
03-Feb-06	ASIAN DEVELOPMENT BANK	250	UNRATED	AAA
06-Feb-06	407 INTERNATIONAL INC	100	A	A
06-Feb-06	CIT GROUP, INC.	150	A	A
06-Feb-06	CIT GROUP, INC.	400	A	A
06-Feb-06	CANADIAN IMPERIAL BANK OF COM	25	AA	A
06-Feb-06	DEUTSCHE BANK AG	300	UNRATED	AA
07-Feb-06	MERRILL LYNCH CDA	18	AA	A
08-Feb-06	407 INTERNATIONAL INC	480	BBB	BBB
08-Feb-06	GLITNIR BANKI HF	150	A	UNRATED
10-Feb-06	ANGLO IRISH BANK CORP PLC	150	A	UNRATED
13-Feb-06	TEXTRON FINANCIAL CANADA	100	UNRATED	A
13-Feb-06	CITIGROUP FINANCE CANADA INC	45	UNRATED	AA

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14-Feb-06	ROYAL BANK OF CANADA	10	AA	AA
14-Feb-06	ERAC CANADA FINANCE LTD	150	A	A
14-Feb-06	ERAC CANADA FINANCE LTD	100	A	A
14-Feb-06	TORONTO DOMINION BANK	8	AA	A
15-Feb-06	JPMORGAN CHASE BK, N.A.	500	UNRATED	A
17-Feb-06	BANK OF NOVA SCOTIA, THE	15	AA	AA
21-Feb-06	GTAA	250	A	A
21-Feb-06	WELLS FARGO (PREVIOUS TRANS C	500	AA	AA
21-Feb-06	NAV CANADA	250	AA	AA
21-Feb-06	NAV CANADA	450	AA	AA
21-Feb-06	ENBRIDGE GAS DISTRIBUTION	300	A	A
21-Feb-06	SLM CORP	325	UNRATED	A
22-Feb-06	YELLOW MEDIA INC.	150	BBB	BBB
22-Feb-06	YELLOW MEDIA INC.	100	BBB	BBB
23-Feb-06	CITIGROUP, INC.	400	AA	A
23-Feb-06	CANADIAN IMPERIAL BANK OF COM	169	A	A
23-Feb-06	CANADIAN IMPERIAL BANK OF COM	145	A	A
23-Feb-06	NETWORK RAIL INFRASTRUCTURE F	500	UNRATED	AAA
28-Feb-06	HYDRO ONE INC	300	A	A
28-Feb-06	NRW.BANK	300	UNRATED	AA
28-Feb-06	SUPERIOR PLUS INC	200	BBB	BBB
28-Feb-06	CANADIAN IMPERIAL BANK OF COM	10	A	A
01-Mar-06	TORONTO DOMINION BANK	40	AA	A
06-Mar-06	SITKA TRUST	100	AAA	UNRATED
08-Mar-06	HSBC BANK CANADA	200	A	A
08-Mar-06	SUN LIFE FIN CORP	700	AA	AA
08-Mar-06	TOYOTA MOTOR CREDIT CORP.	150	UNRATED	AAA
08-Mar-06	INSTITUTO DE CREDITO OFICIAL	400	UNRATED	AAA
09-Mar-06	BANK OF MONTREAL	700	AA	AA
14-Mar-06	KREDITANSTALT FUR WIEDE	400	UNRATED	AAA
15-Mar-06	CITIBANK CANADA	15	AA	AA
16-Mar-06	CANADIAN IMPERIAL BANK OF COM	130	A	A
16-Mar-06	ANGLO IRISH BANK CORP PLC	100	A	UNRATED
20-Mar-06	RIOCAN REAL ESTATE INVES	100	BBB	BBB
21-Mar-06	ENBRIDGE INC	200	A	A
21-Mar-06	ROYAL BANK OF CANADA	10	AA	AA
22-Mar-06	KREDITANSTALT FUR WIEDE	300	UNRATED	AAA
23-Mar-06	CANADIAN IMPERIAL BANK OF COM	1,300	A	A
23-Mar-06	BANK OF NOVA SCOTIA, THE	200	AA	AA
23-Mar-06	MANULIFE FINANCIAL CORP.	350	AA	AA
24-Mar-06	FIRST CAPITAL REALTY	100	BBB	UNRATED
24-Mar-06	BANK OF IRELAND (GOVERNOR AND	100	UNRATED	A
27-Mar-06	DAIMLERCHRYSLER CANADA F	500	A	BBB
27-Mar-06	CITIGROUP FINANCE CANADA INC	100	AA	AA
27-Mar-06	MANULIFE BK OF CANADA	10	AA	UNRATED
27-Mar-06	BEAR STEARNS COMPANIES	100	A	A
27-Mar-06	CITIGROUP FINANCE CANADA INC	100	AA	AA
29-Mar-06	CANADIAN IMPERIAL BANK OF COM	200	A	A

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29-Mar-06	CANADIAN IMPERIAL BANK OF COM	580	A	A
30-Mar-06	SASKATCHEWAN WHEAT POOL	100	B	B
30-Mar-06	BANK OF MONTREAL	10	AA	AA
31-Mar-06	BANK OF NOVA SCOTIA, THE	350	AA	AA
31-Mar-06	RABOBANK NEDERLAND	250	AAA	AAA
03-Apr-06	CANADIAN IMPERIAL BANK OF COM	218	A	A
06-Apr-06	FORTISAB INC	100	A	UNRATED
06-Apr-06	ONT SCHOOL BOARD	245	AA	AA
07-Apr-06	AON FINANCE NS1 ULC	375	UNRATED	BBB
07-Apr-06	NEW YORK LIFE GLOBAL FUNDING	500	UNRATED	AA
10-Apr-06	HSBC FIN CORP LTD	400	AA	A
10-Apr-06	BANK OF MONTREAL	300	AA	AA
10-Apr-06	AMEX EXPRESS CANADA CREDIT CO	200	A	A
11-Apr-06	INSTITUTO DE CREDITO OFICIAL	400	UNRATED	AAA
11-Apr-06	KOMMUNALBANKEN AS	200	UNRATED	AAA
12-Apr-06	BEAR STEARNS COMPANIES	225	A	A
18-Apr-06	BANK OF MONTREAL	700	A	A
19-Apr-06	HYDRO ONE INC	250	A	A
20-Apr-06	DNB NOR BANK ASA	250	UNRATED	A
20-Apr-06	BANK OF MONTREAL	10	AA	AA
20-Apr-06	ROYAL BANK OF CANADA	15	AA	AA
24-Apr-06	CITIGROUP FINANCE CANADA INC	100	AA	AA
24-Apr-06	HSBC BANK CANADA	275	AA	A
25-Apr-06	TORONTO DOMINION BANK	500	A	A
26-Apr-06	GE CAPITAL CANADA FUNDIN	350	AAA	AAA
26-Apr-06	GE CAPITAL CANADA FUNDIN	400	AAA	AAA
26-Apr-06	KREDITANSTALT FUR WIEDE	400	UNRATED	AAA
02-May-06	RESIDENTIAL FDG OF CDA FIN UL	250	BBB	BBB
02-May-06	SHAW COMMUNICATIONS INC	300	BB	BB
02-May-06	ROYAL BANK OF SCOTLAND PLC TH	700	UNRATED	A
08-May-06	CITIGROUP FINANCE CANADA INC	200	AA	AA
09-May-06	GOLDMAN SACHS GROUP, INC	500	AA	A
09-May-06	GOLDMAN SACHS GROUP, INC	750	AA	A
09-May-06	CITIGROUP FINANCE CANADA INC	250	AA	AA
10-May-06	HSBC BANK CANADA	325	AA	A
10-May-06	ROYAL BANK OF CANADA	200	AA	AA
11-May-06	BANK OF MONTREAL	5	AA	AA
15-May-06	TELUS CORPORATION	300	BBB	BBB
15-May-06	BANK OF AMERICA	500	A	A
16-May-06	LEHMAN BROS. HLDGS, INC.	500	A	A
17-May-06	METRO LIFE GLB FDG	300	UNRATED	AA
17-May-06	METRO LIFE GLB FDG	300	UNRATED	AA
17-May-06	BANK OF NOVA SCOTIA, THE	90	AA	A
18-May-06	AMEX EXPRESS CANADA CREDIT CO	350	A	A
19-May-06	EUROHYPO EUROPAISCHE HYPOTHEK	200	UNRATED	AAA
23-May-06	DAIMLERCHRYSLER CANADA F	600	A	BBB
24-May-06	COUNTRYWIDE FINANCIAL CORP	275	UNRATED	A
26-May-06	HYPOTHEK PUBLIC FINANCE BANK	250	UNRATED	A

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26-May-06	CANADIAN IMPERIAL BANK OF COM	125	A	A
26-May-06	CANADIAN IMPERIAL BANK OF COM	230	A	A
26-May-06	BANK OF MONTREAL	10	AA	AA
30-May-06	CANADIAN IMPERIAL BANK OF COM	100	A	A
30-May-06	ROYAL BANK OF CANADA	800	AA	UNRATED
02-Jun-06	SLM CORP	175	UNRATED	A
05-Jun-06	WELLS FARGO (PREVIOUS TRANS C	300	AA	AA
05-Jun-06	WELLS FARGO (PREVIOUS TRANS C	150	AA	AA
05-Jun-06	BANK OF IRELAND (GOVERNOR AND	200	UNRATED	A
06-Jun-06	JOHN DEERE CREDIT INC.	100	A	A
07-Jun-06	NBC CAPITAL TRUST	225	A	BBB
09-Jun-06	NATIONAL GRID PLC	200	A	A
09-Jun-06	CANADIAN IMPERIAL BANK OF COM	320	A	A
12-Jun-06	HSBC FIN CORP LTD	210	AA	A
12-Jun-06	BANK OF MONTREAL	13	AA	AA
14-Jun-06	CITIGROUP FINANCE CANADA INC	125	AA	AA
14-Jun-06	CANADIAN HYDRO DEV, INC	27	BBB	UNRATED
14-Jun-06	CANADIAN HYDRO DEV, INC	121	BBB	UNRATED
15-Jun-06	HSBC FIN CORP LTD	140	AA	A
15-Jun-06	BANK OF MONTREAL	6	AA	AA
15-Jun-06	FRANCE TELECOM SA	250	BBB	A
15-Jun-06	FRANCE TELECOM SA	200	BBB	A
19-Jun-06	HSBC FIN CORP LTD	50	AA	AA
19-Jun-06	CANADIAN IMPERIAL BANK OF COM	350	A	A
20-Jun-06	BANK OF MONTREAL	41	AA	AA
21-Jun-06	CAPITAL POWER INCOME L.P.	210	A	A
22-Jun-06	UNIVERSITY OF WINDSOR	108	A	UNRATED
22-Jun-06	TORONTO DOMINION BANK	17	AA	A
22-Jun-06	CITIBANK CANADA	13	AA	AA
23-Jun-06	CITIGROUP FINANCE CANADA INC	200	AA	AA
26-Jun-06	BANK OF MONTREAL	8	AA	AA
26-Jun-06	MERRILL LYNCH CDA	12	AA	A
27-Jun-06	INSTITUTO DE CREDITO OFICIAL	300	UNRATED	AAA
28-Jun-06	BANK OF NOVA SCOTIA, THE	250	AA	AA
29-Jun-06	JOHN DEERE CREDIT INC.	100	A	A
30-Jun-06	ROYAL BANK OF CANADA	425	AA	AA
30-Jun-06	CANADIAN IMPERIAL BANK OF COM	50	A	A
03-Jul-06	CANADIAN IMPERIAL BANK OF COM	200	A	A
05-Jul-06	GAZ METRO INC	150	A	A
05-Jul-06	GAZ METRO INC	150	A	A
05-Jul-06	SUN LIFE FIN CORP	300	AA	AA
05-Jul-06	GE CAPITAL CANADA FUNDIN	200	AAA	AAA
07-Jul-06	CANADIAN IMPERIAL BANK OF COM	18	A	A
10-Jul-06	CANADIAN IMPERIAL BANK OF COM	115	A	A
11-Jul-06	HALIFAX INTL AIRPORT AUTHORIT	150	UNRATED	A
12-Jul-06	CANADIAN IMPERIAL BANK OF COM	95	A	A
13-Jul-06	DEUTSCHE BANK AG	300	UNRATED	A
18-Jul-06	AMEX EXPRESS CANADA CREDIT CO	450	A	A

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18-Jul-06	JOHN DEERE CREDIT INC.	50	A	A
20-Jul-06	BANK OF MONTREAL	10	AA	AA
21-Jul-06	PUBLISHING & BROADCAST F	150	UNRATED	A
21-Jul-06	BANK OF MONTREAL	8	AA	AA
24-Jul-06	BRITANNIA BUILDING SOCIETY	50	UNRATED	A
25-Jul-06	GE CAPITAL CANADA FUNDIN	350	AAA	AAA
25-Jul-06	GE CAPITAL CANADA FUNDIN	350	AAA	AAA
25-Jul-06	TORONTO DOMINION BANK	10	AA	A
27-Jul-06	FIRST CAPITAL REALTY	100	BBB	UNRATED
31-Jul-06	OPUS TRUST	250	AAA	UNRATED
01-Aug-06	CREDIT AGRICOLE S.A.	400	UNRATED	A
01-Aug-06	CANADIAN IMPERIAL BANK OF COM	100	A	A
01-Aug-06	CANADIAN IMPERIAL BANK OF COM	750	A	A
03-Aug-06	ENBRIDGE INC	300	A	A
03-Aug-06	HYPO PUBLIC FINANCE BANK	300	UNRATED	A
03-Aug-06	HSBC BANK CANADA	175	AA	A
03-Aug-06	HSBC BANK CANADA	175	AA	A
10-Aug-06	TERANET INC.	235	A	A
10-Aug-06	TERANET INC.	235	A	A
10-Aug-06	BANK OF MONTREAL	8	AA	AA
10-Aug-06	CANADIAN IMPERIAL BANK OF COM	10	A	A
10-Aug-06	BANK OF MONTREAL	5	AA	AA
11-Aug-06	KIMCO NORTH TRUST III	200	A	BBB
16-Aug-06	HONDA CANADA FINANCE INC	200	A	UNRATED
16-Aug-06	HONDA CANADA FINANCE INC	300	A	UNRATED
17-Aug-06	HYDRO ONE INC	150	A	A
17-Aug-06	TORONTO DOMINION BANK	35	AA	A
21-Aug-06	LEHMAN BROS. HLDGS, INC.	250	A	A
24-Aug-06	CDN WEST BK CAP TR	105	UNRATED	UNRATED
29-Aug-06	BANK OF MONTREAL	400	AA	AA
29-Aug-06	MANULIFE BK OF CANADA	5	AA	UNRATED
30-Aug-06	MAPLE NHA MORTGAGE TRUST	150	AAA	UNRATED
30-Aug-06	MANULIFE BK OF CANADA	10	AA	UNRATED
30-Aug-06	CANADIAN IMPERIAL BANK OF COM	45	A	A
05-Sep-06	THE WOODBRIDGE CO LTD	200	A	UNRATED
05-Sep-06	CANADIAN IMPERIAL BANK OF COM	100	A	A
06-Sep-06	UNION GAS	165	A	BBB
06-Sep-06	WELLS FARGO (PREVIOUS TRANS C	300	AA	AA
06-Sep-06	FIRST CAPITAL REALTY	100	BBB	UNRATED
06-Sep-06	BANK OF NOVA SCOTIA, THE	1,100	AA	AA
07-Sep-06	MANULIFE BK OF CANADA	100	AA	UNRATED
07-Sep-06	BANK OF MONTREAL	10	AA	AA
08-Sep-06	SITKA TRUST	50	AAA	UNRATED
08-Sep-06	SITKA TRUST	50	AAA	UNRATED
12-Sep-06	NATIONAL AUSTRALIA BANK LIMIT	300	UNRATED	A
12-Sep-06	CITIGROUP FINANCE CANADA INC	175	AA	AA
12-Sep-06	CITIGROUP FINANCE CANADA INC	150	AA	AA
12-Sep-06	BANK OF MONTREAL	6	AA	AA

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13-Sep-06	BANK OF MONTREAL	1,000	AA	AA
14-Sep-06	CANADIAN IMPERIAL BANK OF COM	18	A	A
15-Sep-06	HBOS TREAS. SERVICES PLC	1,000	UNRATED	AA
18-Sep-06	ALTALINK, L.P.	150	A	A
19-Sep-06	CREDIT AGRICOLE S.A.	700	UNRATED	AA
20-Sep-06	BELL ALIANT REGIONAL COMMUNIC	750	BBB	BBB
20-Sep-06	BELL ALIANT REGIONAL COMMUNIC	500	BBB	BBB
20-Sep-06	BNS CAPITAL TRUST	750	A	A
20-Sep-06	TERASEN GAS	120	A	UNRATED
20-Sep-06	GE CAPITAL CORP.	200	UNRATED	AAA
25-Sep-06	NORTHERN ROCK PLC	500	A	UNRATED
26-Sep-06	BEAR STEARNS COMPANIES	350	A	A
26-Sep-06	JOHN DEERE CREDIT INC.	50	A	A
27-Sep-06	COMPAGNIE DE FINANCEMENT FONC	200	UNRATED	AAA
27-Sep-06	TCNZ FINANCE LTD	275	UNRATED	A
27-Sep-06	CANADIAN IMPERIAL BANK OF COM	10	A	A
27-Sep-06	ROYAL BANK OF CANADA	10	AA	AA
27-Sep-06	CITIBANK CANADA	10	AA	A
28-Sep-06	TRANSCANADA PIPELINES LT	400	A	A
28-Sep-06	CITIGROUP FINANCE CANADA INC	100	AA	AA
28-Sep-06	CITIGROUP FINANCE CANADA INC	100	AA	AA
02-Oct-06	PRINCIPAL FINANCIAL GLOBAL FU	250	UNRATED	AA
03-Oct-06	HSBC FIN CORP LTD	400	AA	AA
03-Oct-06	BANK OF MONTREAL	6	AA	AA
04-Oct-06	SOBEYS INC.	125	BBB	BBB
06-Oct-06	CANADIAN IMPERIAL BANK OF COM	10	A	A
06-Oct-06	CALLOWAY REIT	250	BBB	UNRATED
13-Oct-06	RONA	400	BBB	BBB
16-Oct-06	HYDRO ONE INC	75	A	A
17-Oct-06	CAISSE D' AMORTISSEMENT DE LA	400	UNRATED	AAA
19-Oct-06	GTAA	350	A	A
20-Oct-06	CANADIAN IMPERIAL BANK OF COM	375	AA	A
20-Oct-06	BANK OF MONTREAL	18	AA	AA
25-Oct-06	BANK OF NOVA SCOTIA, THE	500	AA	AA
25-Oct-06	NATIONAL BK OF CANADA	340	AA	UNRATED
26-Oct-06	SLM CORP	260	UNRATED	A
26-Oct-06	CANADIAN IMPERIAL BANK OF COM	675	AA	A
27-Oct-06	BROOKFIELD POWER CORP(FKA BRA	200	BBB	BBB
27-Oct-06	BROOKFIELD POWER CORP(FKA BRA	150	BBB	BBB
30-Oct-06	NATIONAL BK OF CANADA	500	A	A
30-Oct-06	MERRILL LYNCH AND CO, IN	700	AA	AA
31-Oct-06	METRO LIFE GLB FDG	350	UNRATED	AA
01-Nov-06	BANK OF MONTREAL	5	AA	AA
02-Nov-06	SANTANDER INT'L DEBT SA	400	UNRATED	AA
06-Nov-06	BMW FINANCE N.V.	100	UNRATED	A
07-Nov-06	DAIMLERCHRYSLER CANADA F	600	A	BBB
07-Nov-06	CANADIAN IMPERIAL BANK OF COM	150	AA	UNRATED
08-Nov-06	Vancouver International Airport Authority	150	AA	AA

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08-Nov-06	RESEAU FERRE DE FRANCE	300	UNRATED	AAA
14-Nov-06	GE CAPITAL CANADA FUNDIN	450	AAA	AAA
14-Nov-06	GE CAPITAL CANADA FUNDIN	550	AAA	AAA
15-Nov-06	CU INC	160	A	A
15-Nov-06	CU INC	160	A	A
15-Nov-06	HSBC BANK CANADA	400	AA	A
16-Nov-06	COMMERZBANK AG	300	UNRATED	BBB
16-Nov-06	JUNTA COMUNIDAD CASTILLA DE M	290	UNRATED	UNRATED
20-Nov-06	UNION GAS	125	A	BBB
20-Nov-06	407 INTERNATIONAL INC	150	A	A
20-Nov-06	BANK OF MONTREAL	8	AA	AA
21-Nov-06	CITIGROUP FINANCE CANADA INC	100	AA	AA
23-Nov-06	BANK OF NOVA SCOTIA, THE	15	AA	AA
24-Nov-06	ING BANK OF CANADA	321	UNRATED	AA
28-Nov-06	HSBC BANK CANADA	250	AA	AA
28-Nov-06	BANK OF MONTREAL	5	AA	AA
29-Nov-06	WELLS FARGO (PREVIOUS TRANS C	350	AA	AA
29-Nov-06	CITIGROUP FINANCE CANADA INC	100	AA	AA
29-Nov-06	BANK OF MONTREAL	10	AA	AA
04-Dec-06	Vancouver International Airport Authority	200	AA	AA
05-Dec-06	MANULIFE FINANCIAL CORP.	550	AA	AA
05-Dec-06	MANULIFE FINANCIAL CORP.	650	A	AA
05-Dec-06	BANK OF NOVA SCOTIA, THE	10	AA	A
06-Dec-06	KEY NOVA SCOTIA FUNDING COMPA	300	A	A
06-Dec-06	TORONTO DOMINION BANK	435	AA	A
06-Dec-06	BANK OF NOVA SCOTIA, THE	750	AA	AA
07-Dec-06	HSBC FIN CORP LTD	250	AA	AA
07-Dec-06	HONDA CANADA FINANCE INC	150	A	UNRATED
07-Dec-06	LANDSBANKI ISLANDS	300	A	A
08-Dec-06	ANGLO IRISH BANK CORP PLC	200	A	UNRATED
08-Dec-06	FORTISAB INC	110	A	UNRATED
08-Dec-06	BANK OF MONTREAL	9	AA	AA
08-Dec-06	CANADIAN IMPERIAL BANK OF COM	10	AA	A
08-Dec-06	CITIBANK CANADA	10	AA	AA
11-Dec-06	TORONTO DOMINION BANK	2,250	AA	A
11-Dec-06	DNB NOR BANK ASA	750	AA	A
13-Dec-06	BANK OF MONTREAL	20	AA	AA
13-Dec-06	BANK OF MONTREAL	2	AA	AA
13-Dec-06	UNIVERSITY OF TORONTO	75	UNRATED	AA
14-Dec-06	ENBRIDGE GAS DISTRIBUTION	175	A	A
14-Dec-06	ANGLO IRISH BANK CORP PLC	500	A	UNRATED
14-Dec-06	CANADIAN IMPERIAL BANK OF COM	365	AA	A
15-Dec-06	ROYAL BANK OF CANADA	10	UNRATED	AA
15-Dec-06	ROYAL BANK OF CANADA	10	AA	AA
18-Dec-06	ENBRIDGE PIPELINES	150	A	A
18-Dec-06	CENTRAL 1 CREDIT UNION	50	A	A
20-Dec-06	BANK OF MONTREAL	24	AA	AA
20-Dec-06	CANADIAN IMPERIAL BANK OF COM	335	AA	A

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20-Dec-06	CANADIAN IMPERIAL BANK OF COM	150	AA	A
20-Dec-06	BANK OF NOVA SCOTIA, THE	27	UNRATED	AA
20-Dec-06	MANULIFE BK OF CANADA	10	AA	UNRATED
22-Dec-06	ROYAL BANK OF CANADA	10	AA	AA
27-Dec-06	BANK OF NOVA SCOTIA, THE	500	AA	AA
04-Jan-07	EKPORTFINANS A/S	200	UNRATED	AA
08-Jan-07	HBOS TREAS. SERVICES PLC	750	UNRATED	AA
09-Jan-07	PROVINCE OF NEW BRUNSWICK	400	A	AA
09-Jan-07	PROVINCE OF ONTARIO	500	AA	AA
09-Jan-07	SANTANDER INT'L DEBT SA	500	UNRATED	AA
09-Jan-07	MANULIFE BK OF CANADA	18	AA	AA
10-Jan-07	HBOS TREAS. SERVICES PLC	150	UNRATED	AA
10-Jan-07	GLACIER CREDIT CARD TR	175	A	A
10-Jan-07	CITIGROUP, INC.	400	AA	AA
10-Jan-07	PROVINCE DE QUEBEC	782	A	AA
11-Jan-07	PROV OF MANITOBA	255	UNRATED	AA
11-Jan-07	IRISH BANK RESOLUTION CORPORA	250	A	UNRATED
11-Jan-07	PROV OF MANITOBA	10	UNRATED	UNRATED
12-Jan-07	BRITANNIA BUILDING SOCIETY	100	UNRATED	A
12-Jan-07	EUROHYPO EUROPAISCHE HYPOTHEK	100	UNRATED	AAA
15-Jan-07	PROVINCE DE QUEBEC	187	UNRATED	A
15-Jan-07	IRISH BANK RESOLUTION CORPORA	50	A	UNRATED
16-Jan-07	HYDRO-QUEBEC	500	A	A
16-Jan-07	ALTAGAS LIMITED	100	BBB	BBB
16-Jan-07	INTER AMERICAN DEVELOPMENT BA	500	UNRATED	AAA
16-Jan-07	BEAR STEARNS COMPANIES	250	A	A
16-Jan-07	CITIBANK CANADA	10	AA	AA
17-Jan-07	BANK OF MONTREAL	81	AA	AA
18-Jan-07	PROVINCE OF NOVA SCOTIA	587	UNRATED	A
18-Jan-07	INTER AMERICAN DEVELOPMENT BA	200	UNRATED	AAA
18-Jan-07	MINTO DEVELOPMENTS INC.	97	UNRATED	AAA
19-Jan-07	MERRILL LYNCH AND CO., INC.	1,250	AA	AA
19-Jan-07	FIRST CAPITAL REALTY	100	BBB	UNRATED
19-Jan-07	EUROPEAN INVESTMENT BANK	850	UNRATED	AAA
19-Jan-07	CANADIAN IMPERIAL BANK OF COM	100	AA	A
19-Jan-07	CANADIAN IMPERIAL BANK OF COM	50	AA	A
19-Jan-07	THE BANK OF NOVA SCOTIA	10	AA	AA
22-Jan-07	PROVINCE OF ONTARIO	500	AA	AA
23-Jan-07	CANADIAN IMPERIAL BANK OF COM	900	AA	A
23-Jan-07	FINANCEMENT QUEBEC	220	UNRATED	UNRATED
24-Jan-07	PROVINCE DE QUEBEC	500	A	A
24-Jan-07	CITIBANK CANADA	7	AA	AA
24-Jan-07	ROYAL BANK OF CANADA	3	UNRATED	AA
25-Jan-07	TEXTRON FINANCIAL CANADA	60	A	A
26-Jan-07	BANK OF IRELAND (GOVERNOR AND	100	UNRATED	A
29-Jan-07	PROVINCE OF ONTARIO	150	AA	AA
29-Jan-07	FARM CREDIT CDA (FKA FARM CRE	10	UNRATED	UNRATED
29-Jan-07	AURORA TR-PRV ONT	25	AAA	UNRATED

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31-Jan-07	PROVINCE OF ONTARIO	25	AA	AA
31-Jan-07	PROVINCE OF ONTARIO	150	AA	AA
31-Jan-07	CITIGROUP FINANCE CANADA INC	100	AA	AA
31-Jan-07	CITIGROUP FINANCE CANADA INC	100	AA	AA
01-Feb-07	ASIAN DEVELOPMENT BANK	300	UNRATED	AAA
01-Feb-07	KAUPTHING BK HF	500	UNRATED	UNRATED
01-Feb-07	CITIGROUP FINANCE CANADA INC	100	AA	AA
02-Feb-07	PROVINCE OF ONTARIO	200	AA	AA
02-Feb-07	FARM CREDIT CDA (FKA FARM CRE	3	UNRATED	UNRATED
02-Feb-07	FARM CREDIT CDA (FKA FARM CRE	4	AAA	UNRATED
02-Feb-07	BUSINESS DEVELOPMENT BANK OF	10	UNRATED	UNRATED
05-Feb-07	PROVINCE OF ONTARIO	500	AA	AA
05-Feb-07	CANADIAN IMPERIAL BANK OF COM	50	AA	UNRATED
06-Feb-07	BANK NEDERLANDSE GEMEENTEN	500	UNRATED	AAA
07-Feb-07	PROVINCE DE QUEBEC	500	A	A
07-Feb-07	COMET TRUST	20	AAA	UNRATED
08-Feb-07	GE CAPITAL CANADA FUNDING COM	200	AAA	AAA
08-Feb-07	KOMMUNALBANKEN AS	300	UNRATED	AAA
08-Feb-07	PROV OF MANITOBA	710	A	AA
09-Feb-07	LANDWIRTSCHAFTLICHE RENTEBANK	500	UNRATED	AAA
09-Feb-07	RABOBANK NEDERLAND	300	AAA	AAA
09-Feb-07	BMW US CAPITAL,LLC	100	UNRATED	UNRATED
09-Feb-07	FINANCEMENT QUEBEC	200	UNRATED	A
12-Feb-07	BUSINESS DEVELOPMENT BANK OF	70	AAA	AAA
13-Feb-07	CMHC - INSURED MTG	275	AAA	AAA
13-Feb-07	PROVINCE OF NEW BRUNSWICK	583	UNRATED	AA
13-Feb-07	BUSINESS DEVELOPMENT BANK OF	120	AAA	AAA
14-Feb-07	KREDITANSTALT FUR WIEDERAUFBA	300	UNRATED	AAA
14-Feb-07	FINANCEMENT QUEBEC	281	UNRATED	UNRATED
15-Feb-07	MORGAN STANLEY	1,250	AA	A
15-Feb-07	MORGAN STANLEY	900	AA	A
15-Feb-07	MORGAN STANLEY	350	AA	A
15-Feb-07	WHITEHALL TRUST	45	AAA	UNRATED
16-Feb-07	SILVERSTONE TRUST	100	AAA	UNRATED
20-Feb-07	PROVINCE OF ONTARIO	500	AA	AA
20-Feb-07	NRW.BANK	250	UNRATED	AA
20-Feb-07	PROVINCE OF ONTARIO	80	AA	AA
21-Feb-07	DEXIA MUNICIPAL AGENCY	200	UNRATED	AAA
21-Feb-07	BELL ALIANT REGIONAL COMMUNIC	400	BBB	BBB
21-Feb-07	BELL ALIANT REGIONAL COMMUNIC	300	BBB	BBB
21-Feb-07	BELL ALIANT REGIONAL COMMUNIC	300	BBB	BBB
21-Feb-07	SUN LIFE FIN CORP	250	AA	AA
21-Feb-07	EXPORT DEVELOPMENT CDA	21	AAA	AAA
21-Feb-07	FARM CREDIT CDA (FKA FARM CRE	5	UNRATED	UNRATED
21-Feb-07	FARM CREDIT CDA (FKA FARM CRE	7	UNRATED	UNRATED
21-Feb-07	BUSINESS DEVELOPMENT BANK OF	191	AAA	AAA
22-Feb-07	CITIGROUP FINANCE CANADA INC	100	AA	AA
23-Feb-07	PROVINCE OF NEW BRUNSWICK	300	A	AA

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23-Feb-07	CANADIAN IMPERIAL BANK OF COM	195	AA	A
23-Feb-07	PROVINCE OF ONTARIO	30	AA	AA
26-Feb-07	CANADIAN IMPERIAL BANK OF COM	57	AA	A
26-Feb-07	CANADIAN IMPERIAL BANK OF COM	50	AA	A
27-Feb-07	PROV OF SASKATCHEWAN	400	AA	AA
27-Feb-07	SHAW COMMUNICATIONS INC	400	BBB	BB
28-Feb-07	BUSINESS DEVELOPMENT BANK OF	20	AAA	AAA
01-Mar-07	CREDIT AGRICOLE S.A.	100	UNRATED	AA
01-Mar-07	AB SVENSK EXPORTKREDIT	300	UNRATED	AA
02-Mar-07	CITIGROUP FINANCE CANADA INC	150	AA	AA
02-Mar-07	CITIGROUP FINANCE CANADA INC	100	AA	AA
02-Mar-07	ACCESS JUSTICE DURHAM LTD.	214	UNRATED	UNRATED
02-Mar-07	FARM CREDIT CDA (FKA FARM CRE	25	AAA	AAA
05-Mar-07	CITIGROUP FINANCE CANADA INC	100	AA	AA
06-Mar-07	JOHN DEERE CREDIT INC.	150	A	A
06-Mar-07	CANADIAN IMPERIAL BANK OF COM	600	AA	A
07-Mar-07	ENCANA CORPORATION	500	A	A
07-Mar-07	EUROPEAN INVESTMENT BANK	104	UNRATED	AAA
07-Mar-07	NEW YORK LIFE GLOBAL FUNDING	400	UNRATED	AA
07-Mar-07	BANK OF MONTREAL	1,767	UNRATED	AA
07-Mar-07	NEDERLANDSE WATERSCHAPSBANK	250	UNRATED	AAA
08-Mar-07	TELUS CORPORATION	300	A	BBB
08-Mar-07	TELUS CORPORATION	700	A	BBB
08-Mar-07	HYDRO ONE INC.	400	A	A
08-Mar-07	BANK OF MONTREAL	6	AA	UNRATED
08-Mar-07	SITKA TRUST	13	AAA	UNRATED
08-Mar-07	BRICK WAREHOUSE LP	83	UNRATED	UNRATED
09-Mar-07	IRON MOUNTAIN INC.	175	UNRATED	B
12-Mar-07	DANSKE BANK A/S	55	UNRATED	UNRATED
12-Mar-07	SWEDBANK	25	UNRATED	UNRATED
13-Mar-07	CANADA HOUSING TRUST	7,700	AAA	AAA
13-Mar-07	NATIONAL BANK OF CANADA	10	AA	A
14-Mar-07	BRITISH COLUMBIA FERRY SERVIC	250	A	A
14-Mar-07	ROYAL BANK OF CANADA	5	AA	AA
14-Mar-07	GEMINI TRST	25	AAA	UNRATED
14-Mar-07	PLANET TRUST	20	AAA	UNRATED
14-Mar-07	EUROFIMA	200	UNRATED	AAA
14-Mar-07	EUROPEAN INVESTMENT BANK	52	UNRATED	AAA
15-Mar-07	ROYAL BANK OF CANADA	2	AA	AA
16-Mar-07	HONDA CANADA FINANCE INC	100	A	UNRATED
16-Mar-07	BEAR STEARNS COMPANIES	220	A	A
16-Mar-07	RABOBANK NEDERLAND	250	UNRATED	AAA
19-Mar-07	CANADIAN WESTERN BANK	75	UNRATED	UNRATED
19-Mar-07	CANADIAN WESTERN BANK	125	UNRATED	UNRATED
20-Mar-07	MAPLE NHA MORTGAGE TRUST	50	AAA	UNRATED
20-Mar-07	LEHMAN BROS. HLDGS, INC.	180	A	A
20-Mar-07	COMMERZBANK AG	150	UNRATED	A
20-Mar-07	CANADIAN IMPERIAL BANK OF COM	236	UNRATED	A

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20-Mar-07	ROYAL BANK OF CANADA	5	AA	AA
20-Mar-07	ROYAL BANK OF CANADA	5	UNRATED	AA
20-Mar-07	CANADIAN IMPERIAL BANK OF COM	50	AA	UNRATED
20-Mar-07	CANADIAN IMPERIAL BANK OF COM	50	AA	UNRATED
20-Mar-07	CANADIAN IMPERIAL BANK OF COM	50	UNRATED	UNRATED
20-Mar-07	CANADIAN IMPERIAL BANK OF COM	50	UNRATED	UNRATED
20-Mar-07	TORONTO DOMINION BANK	40	AA	AA
20-Mar-07	CROWN IN THE RIGHT OF ALBERTA	50	UNRATED	AAA
21-Mar-07	SUNCOR ENERGY INC	600	A	A
21-Mar-07	ROYAL BANK OF CANADA	25	UNRATED	AA
22-Mar-07	GE CAPITAL CANADA FUNDING COM	500	AAA	AAA
23-Mar-07	GE CAPITAL CANADA FUNDING COM	200	AAA	AAA
23-Mar-07	BUSINESS DEVELOPMENT BANK OF	60	AAA	AAA
23-Mar-07	BUSINESS DEVELOPMENT BANK OF	30	AAA	AAA
26-Mar-07	BANK OF MONTREAL	5	AA	AA
26-Mar-07	BANK OF MONTREAL	5	AA	AA
27-Mar-07	MERRILL LYNCH AND CO., INC.	400	AA	AA
27-Mar-07	JOHN DEERE CREDIT INC.	100	A	A
27-Mar-07	GE CAPITAL CANADA FUNDING COM	350	AAA	AAA
27-Mar-07	INTER AMERICAN DEVELOPMENT BA	117	UNRATED	AAA
27-Mar-07	ROYAL BANK OF CANADA	10	UNRATED	UNRATED
27-Mar-07	BUSINESS DEVELOPMENT BANK OF	20	AAA	AAA
28-Mar-07	BANK NEDERLANDSE GEMEENTEN	73	UNRATED	AAA
28-Mar-07	TEXTRON FINANCIAL CANADA	80	A	A
28-Mar-07	THE BANK OF NOVA SCOTIA	562	AA	AA
29-Mar-07	BANK OF MONTREAL	10	AA	AA
29-Mar-07	CANADIAN IMPERIAL BANK OF COM	100	AA	A
29-Mar-07	CANADIAN IMPERIAL BANK OF COM	190	AA	A
30-Mar-07	FIRST CAPITAL REALTY	100	BBB	UNRATED
30-Mar-07	BUSINESS DEVELOPMENT BANK OF	10	AAA	AAA
02-Apr-07	ROYAL BANK OF CANADA	530	AA	AA
03-Apr-07	HSBC BANK CANADA	400	AA	AA
03-Apr-07	BUSINESS DEVELOPMENT BANK OF	10	AAA	AAA
04-Apr-07	BUSINESS DEVELOPMENT BANK OF	20	AAA	AAA
04-Apr-07	LAND NORDRHEIN-WESTFALEN	300	UNRATED	AA
04-Apr-07	COMPAGNIE DE FINANCEMENT FONC	500	UNRATED	AA
04-Apr-07	CANADIAN IMPERIAL BANK OF COM	10	AA	A
05-Apr-07	SNS BANK NV	150	UNRATED	A
05-Apr-07	THE BANK OF NOVA SCOTIA	50	AA	AA
05-Apr-07	THE BANK OF NOVA SCOTIA	50	AA	UNRATED
09-Apr-07	PEARSON INTERNATIONAL FUEL FA	110	A	UNRATED
10-Apr-07	PROV OF MANITOBA	400	A	AA
11-Apr-07	GTAA	450	A	A
11-Apr-07	JOHN DEERE CREDIT INC.	125	A	A
11-Apr-07	TOYOTA CREDIT CANADA INC.	200	AAA	AAA
11-Apr-07	TORONTO DOMINION BANK	300	UNRATED	AA
11-Apr-07	HSBC BANK CANADA	50	AA	AA
12-Apr-07	THE GOLDMAN SACHS GROUP, INC.	500	A	A

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12-Apr-07	ST. GEORGE BANK LIMITED	250	UNRATED	A
12-Apr-07	LAND BRANDENBURG	100	UNRATED	AA
12-Apr-07	HSBC BANK CANADA	50	AA	AA
16-Apr-07	ROYAL BANK OF CANADA	6	AA	AA
16-Apr-07	PROV OF MANITOBA	0	UNRATED	UNRATED
16-Apr-07	BANK OF IRELAND (GOVERNOR AND	500	UNRATED	A
16-Apr-07	PROV OF MANITOBA	12	UNRATED	UNRATED
17-Apr-07	ROYAL BANK OF CANADA	1	AA	AA
17-Apr-07	FARM CREDIT CDA (FKA FARM CRE	5	AAA	UNRATED
17-Apr-07	COMPAGNIE DE FINANCEMENT FONC	500	AAA	AAA
17-Apr-07	FARM CREDIT CDA (FKA FARM CRE	5	AAA	UNRATED
17-Apr-07	THE BANK OF NOVA SCOTIA	15	AA	AA
18-Apr-07	CITY OF MONTREAL	100	UNRATED	A
18-Apr-07	PROVINCE OF ONTARIO	500	AA	AA
19-Apr-07	OSIFA	300	AA	AA
19-Apr-07	HSBC FIN CORP LTD (FKA HOUSEH	300	AA	AA
19-Apr-07	PROV OF MANITOBA	30	A	AA
20-Apr-07	BROOKFIELD ASSET MGMT	250	A	A
23-Apr-07	PROVINCE OF ONTARIO	600	AA	AA
23-Apr-07	ROYAL BANK OF CANADA	1,000	AA	A
23-Apr-07	THE BANK OF NOVA SCOTIA	502	AA	AA
24-Apr-07	PROVINCE OF NOVA SCOTIA	20	UNRATED	UNRATED
25-Apr-07	PROVINCE OF BRITISH COLUMBIA	500	AA	AA
25-Apr-07	EUROFIMA	100	UNRATED	AAA
25-Apr-07	CITIGROUP FINANCE CANADA INC	100	AA	AA
25-Apr-07	OTTAWA MACDONALD-CARTIER	200	A	A
26-Apr-07	TORONTO DOMINION BANK	155	AA	AA
26-Apr-07	FARM CREDIT CDA (FKA FARM CRE	10	UNRATED	UNRATED
27-Apr-07	THE BANK OF NOVA SCOTIA	563	AA	AA
27-Apr-07	CANADIAN IMPERIAL BANK OF COM	920	AA	A
30-Apr-07	NAV CANADA	250	AA	AA
30-Apr-07	HSBC FIN CORP LTD (FKA HOUSEH	150	AA	AA
30-Apr-07	LAND NORDRHEIN-WESTFALEN	150	UNRATED	AA
30-Apr-07	PROVINCE OF ONTARIO	--	UNRATED	UNRATED
30-Apr-07	PROVINCE DE QUEBEC	--	UNRATED	UNRATED
02-May-07	BANK OF MONTREAL	1,500	AA	AA
02-May-07	INTER-AMERICAN DEVELOPMENT BA	700	AAA	AAA
02-May-07	ROYAL BANK OF CANADA	950	AA	AA
03-May-07	MACQUARIE BANK LIMITED	200	UNRATED	A
04-May-07	TORONTO COMM. HOUSING CO	250	UNRATED	AA
04-May-07	TRANSPower FINANCE LTD	125	UNRATED	AA
04-May-07	CANADIAN IMPERIAL BANK OF COM	500	AA	A
05-May-07	RABOBANK NEDERLAND	75	UNRATED	AAA
07-May-07	CITIGROUP FINANCE CANADA INC	50	AA	AA
08-May-07	PROVINCE OF NEWFOUNDLAND AND	350	A	A
08-May-07	GTAA	350	A	A
09-May-07	ROYAL BANK OF CANADA	5	AA	AA
09-May-07	KREDITANSTALT FUR WIEDERAUFBA	300	UNRATED	AAA

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09-May-07	BANK OF MONTREAL	2,212	UNRATED	AA
10-May-07	PROVINCE DE QUEBEC	500	A	A
10-May-07	CANADIAN IMPERIAL BANK OF COM	10	AA	A
10-May-07	PROVINCE DE QUEBEC	50	A	A
10-May-07	BANK OF MONTREAL	750	AA	AA
10-May-07	BANK OF MONTREAL	750	AA	AA
11-May-07	CITIGROUP FINANCE CANADA INC	200	AA	AA
11-May-07	CITIGROUP, INC.	500	AA	AA
11-May-07	CAISSE DES DEPOTS ET CONSIGNA	300	UNRATED	AAA
11-May-07	ALGONQUIN CREDIT CARD TRUST C	398	AAA	AAA
11-May-07	ALGONQUIN CREDIT CARD TRUST C	50	A	A
11-May-07	ALGONQUIN CREDIT CARD TRUST C	52	BBB	BBB
14-May-07	HSBC BANK CANADA	100	AA	AA
14-May-07	HSBC BANK CANADA	225	AA	AA
15-May-07	REGION OF YORK	75	UNRATED	AAA
15-May-07	REGION OF YORK	8	UNRATED	AAA
15-May-07	REGION OF YORK	9	UNRATED	AAA
15-May-07	REGION OF YORK	9	UNRATED	AAA
15-May-07	DEXIA MUNICIPAL AGENCY	500	UNRATED	AAA
16-May-07	HONDA CANADA FINANCE INC	225	A	UNRATED
16-May-07	GMAC OF CANADA LTD.	300	BBB	BB
16-May-07	GMAC OF CANADA LTD.	500	BBB	BB
16-May-07	MERRILL LYNCH AND CO., INC.	500	A	A
16-May-07	UNIVERSITY OF WESTERN ON	190	UNRATED	AA
16-May-07	NIBC BANK NV	50	UNRATED	A
16-May-07	MERRILL LYNCH CANADA INC.	9	AA	AA
17-May-07	407 INTERNATIONAL INC.	75	A	A
17-May-07	407 INTERNATIONAL INC.	300	BBB	BBB
17-May-07	THE BANK OF NOVA SCOTIA	15	AA	AA
18-May-07	TOYOTA CREDIT CANADA INC.	200	UNRATED	AAA
18-May-07	KREDITANSTALT FUR WIEDERAUFBA	116	UNRATED	AAA
22-May-07	AMERICAN INTERNATIONAL GROUP	400	UNRATED	AA
22-May-07	PROVINCE OF ONTARIO	28	AA	AA
23-May-07	PROV OF MANITOBA	300	A	AA
23-May-07	BANK OF AMERICA	500	A	AA
23-May-07	PROVINCE DE QUEBEC	50	A	A
24-May-07	PRICOA GLOBAL FUNDING 1	400	UNRATED	AA
24-May-07	SUN LIFE FIN CORP	400	A	A
24-May-07	FARM CREDIT CDA (FKA FARM CRE	7	AAA	AAA
24-May-07	FARM CREDIT CDA (FKA FARM CRE	350	UNRATED	UNRATED
24-May-07	CATERPILLAR FIN SER LTD	600	A	A
24-May-07	YORK REGION DISTRICT SCHOOL B	87	UNRATED	UNRATED
25-May-07	FARM CREDIT CDA (FKA FARM CRE	15	UNRATED	UNRATED
25-May-07	THE BANK OF NOVA SCOTIA	10	AA	UNRATED
28-May-07	CANADIAN IMPERIAL BANK OF COM	180	AA	A
28-May-07	CANADIAN IMPERIAL BANK OF COM	50	AA	A
29-May-07	ALBERTA CAP FIN AUTH.	400	AAA	AAA
30-May-07	PROVINCE OF ONTARIO	600	AA	AA

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30-May-07	BANK NEDERLANDSE GEMEENTEN	300	UNRATED	AAA
31-May-07	HSBC BANK CANADA	300	AA	AA
31-May-07	ROYAL BANK OF CANADA	750	AA	AA
01-Jun-07	CITIGROUP FINANCE CANADA INC	100	AA	UNRATED
01-Jun-07	PROV OF MANITOBA	200	A	AA
01-Jun-07	PROV OF MANITOBA	--	UNRATED	UNRATED
04-Jun-07	PROVINCE OF BRITISH COLUMBIA	230	AA	UNRATED
05-Jun-07	IRISH BANK RESOLUTION CORPORA	100	A	UNRATED
05-Jun-07	ASIAN DEVELOPMENT BANK	300	UNRATED	AAA
05-Jun-07	THE BANK OF NOVA SCOTIA	750	AA	AA
06-Jun-07	HBOS TREAS. SERVICES PLC	500	UNRATED	A
06-Jun-07	LAURENTIAN BANK OF CANADA	125	BBB	BBB
06-Jun-07	THE REGIONAL MUNICIPALITY OF	0	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	0	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	0	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	0	UNRATED	AAA
06-Jun-07	THE REGIONAL MUNICIPALITY OF	0	UNRATED	AAA
06-Jun-07	PROVINCE OF BRITISH COLUMBIA	500	UNRATED	AAA
06-Jun-07	PROV OF MANITOBA	25	A	AA
06-Jun-07	TORONTO DOMINION BANK	200	AA	AA
07-Jun-07	IRISH BANK RESOLUTION CORPORA	175	UNRATED	UNRATED
11-Jun-07	DEUTSCHE BANK AG	500	UNRATED	AA
11-Jun-07	THE BANK OF NOVA SCOTIA	100	AA	AA
13-Jun-07	PROVINCE OF ONTARIO	600	AA	AA
13-Jun-07	PROVINCE DE QUEBEC	500	A	A
13-Jun-07	BUSINESS DEVELOPMENT BANK OF	100	UNRATED	UNRATED
13-Jun-07	ONT SCHOOL BOARD	212	AA	AA
13-Jun-07	CANADIAN IMPERIAL BANK OF COM	405	AA	A
13-Jun-07	LAURENTIAN BANK OF CANADA	5	BBB	BBB
13-Jun-07	CITIGROUP FINANCE CANADA INC	75	AA	AA
14-Jun-07	GREAT-WEST LIFECO INC.	1,000	A	A
15-Jun-07	PROVINCE OF NEW BRUNSWICK	300	A	AA
18-Jun-07	WELLS FARGO FINANCIAL CORPORA	300	AA	AA
18-Jun-07	WELLS FARGO FINANCIAL CORPORA	400	AA	AA
18-Jun-07	BANK OF MONTREAL	1,200	AA	A
18-Jun-07	BUSINESS DEVELOPMENT BANK OF	100	UNRATED	UNRATED
19-Jun-07	JOHN DEERE CREDIT INC.	125	A	A
19-Jun-07	PROVINCE DE QUEBEC	55	A	A

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20-Jun-07	CANADA HOUSING TRUST	9,000	AAA	AAA
20-Jun-07	CANADIAN IMPERIAL BANK OF COM	505	AA	A
20-Jun-07	CITIGROUP FINANCE CANADA INC	100	AA	AA
20-Jun-07	KAUPTHING BK HF	150	UNRATED	A
20-Jun-07	PROVINCE DE QUEBEC	100	UNRATED	A
20-Jun-07	FARM CREDIT CDA (FKA FARM CRE	10	AAA	AAA
21-Jun-07	BANK OF MONTREAL	2,152	AA	A
21-Jun-07	NATIONAL BANK OF CANADA	100	AA	UNRATED
21-Jun-07	NATIONAL BANK OF CANADA	100	AA	UNRATED
21-Jun-07	NATIONAL BANK OF CANADA	375	AA	UNRATED
21-Jun-07	PROV OF MANITOBA	25	A	AA
21-Jun-07	NATIONAL BANK OF CANADA	75	AA	UNRATED
21-Jun-07	GLOUCESTER CREDIT CARD TRU	84	UNRATED	UNRATED
22-Jun-07	FORTISBC INC	105	BBB	UNRATED
22-Jun-07	HSBC BANK CANADA	150	AA	AA
26-Jun-07	PROVINCE OF BRITISH COLUMBIA	200	UNRATED	UNRATED
27-Jun-07	PROVINCE OF NEWFOUNDLAND AND	300	A	A
27-Jun-07	PROVINCE OF ONTARIO	500	AA	AA
28-Jun-07	CITY OF TOR	200	AA	AA
28-Jun-07	BANK OF IRELAND (GOVERNOR AND	150	AA	A
28-Jun-07	BANK OF IRELAND (GOVERNOR AND	100	AA	A
28-Jun-07	MACQUARIE BANK LIMITED	300	UNRATED	A
28-Jun-07	GLOUCESTER CREDIT CARD TRU	516	UNRATED	UNRATED
29-Jun-07	BMW JAPAN FINANCE CORP.	50	UNRATED	A
29-Jun-07	CENTRAL 1 CREDIT UNION	200	A	A
03-Jul-07	KINGSWAY FINANCIAL SERVI	100	BBB	BBB
04-Jul-07	MACQUARIE BANK LIMITED	100	UNRATED	A
04-Jul-07	HBOS TREAS. SERVICES PLC	350	UNRATED	AA
05-Jul-07	SCHLUMBERGER CANADA LIMITED	250	UNRATED	A
05-Jul-07	GLITNIR BANKI HF	100	UNRATED	A
09-Jul-07	PROVINCE OF ONTARIO	600	AA	AA
09-Jul-07	KREDITANSTALT FUR WIEDERAUFBA	500	UNRATED	AAA
09-Jul-07	PROV OF MANITOBA	100	UNRATED	AA
09-Jul-07	IRISH BANK RESOLUTION CORPORA	300	UNRATED	UNRATED
09-Jul-07	CITY OF TOR	100	AA	AA
09-Jul-07	MANULIFE BK OF CANADA	10	AA	AA
10-Jul-07	MACQUARIE BANK LIMITED	105	UNRATED	A
10-Jul-07	AFRICAN DEVELOPMENT BANK	400	UNRATED	AAA
12-Jul-07	BANK OF MONTREAL	650	AA	A
12-Jul-07	NORDIC INVESTMENT BANK	300	UNRATED	AAA
12-Jul-07	BANK OF MONTREAL	1,500	AA	A
13-Jul-07	PROV OF MANITOBA	250	A	AA
13-Jul-07	DEXIA MUNICIPAL AGENCY	100	UNRATED	AAA
16-Jul-07	TORONTO DOMINION BANK	1,800	AA	A
16-Jul-07	CITIGROUP FINANCE CANADA INC	200	AA	UNRATED
18-Jul-07	TOYOTA CREDIT CANADA INC.	500	AAA	AAA
18-Jul-07	BANK OF MONTREAL	75	AA	A
18-Jul-07	BANK OF MONTREAL	75	AA	A

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19-Jul-07	PROVINCE DE QUEBEC	500	A	A
19-Jul-07	PROVINCE DE QUEBEC	100	UNRATED	A
20-Jul-07	PROV OF MANITOBA	100	A	AA
24-Jul-07	JOHN DEERE CREDIT INC.	50	A	A
25-Jul-07	PROVINCE OF ONTARIO	600	AA	AA
25-Jul-07	SASKATCHEWAN WHEAT POOL	200	UNRATED	BB
25-Jul-07	BANK OF MONTREAL	781	UNRATED	UNRATED
25-Jul-07	PROVINCE DE QUEBEC	100	UNRATED	A
25-Jul-07	FARM CREDIT CDA (FKA FARM CRE	10	AAA	AAA
26-Jul-07	PROVINCE OF ONTARIO	75	AA	AA
31-Jul-07	GE CAPITAL CANADA FUNDING COM	850	AAA	AAA
01-Aug-07	BUSINESS DEVELOPMENT BANK OF	100	AAA	AAA
02-Aug-07	PROVINCE OF ONTARIO	600	AA	AA
02-Aug-07	HYDRO-QUEBEC	500	A	A
03-Aug-07	LANDWIRTSCHAFTLICHE RENTEBANK	300	UNRATED	AAA
08-Aug-07	GE CAPITAL CANADA FUNDING COM	400	AAA	AAA
08-Aug-07	GE CAPITAL CANADA FUNDING COM	700	AAA	AAA
08-Aug-07	GE CAPITAL CANADA FUNDING COM	650	AAA	AAA
09-Aug-07	FARM CREDIT CDA (FKA FARM CRE	5	AAA	UNRATED
13-Aug-07	NEWFOUNDLAND POWER	70	A	UNRATED
13-Aug-07	THE BANK OF NOVA SCOTIA	10	AA	AA
15-Aug-07	CANADIAN IMPERIAL BANK OF COM	200	AA	A
15-Aug-07	ROYAL BANK OF CANADA	500	AA	AA
22-Aug-07	PROVINCE DE QUEBEC	500	A	A
23-Aug-07	PROVINCE OF ONTARIO	600	AA	AA
24-Aug-07	ALBERTA TREASURY BRANCHES	200	AAA	AAA
27-Aug-07	PROV OF SASKATCHEWAN	200	AA	AA
28-Aug-07	PROVINCE DE QUEBEC	500	A	A
28-Aug-07	TEXTRON FINANCIAL CANADA	80	A	A
29-Aug-07	PROVINCE OF ONTARIO	600	AA	AA
29-Aug-07	BANK OF MONTREAL	750	AA	A
30-Aug-07	RIOCAN REAL ESTATE INVES	120	BBB	BBB
30-Aug-07	NATIONAL AUSTRALIA BANK LTD	125	UNRATED	AA
04-Sep-07	PROV OF MANITOBA	15	UNRATED	UNRATED
05-Sep-07	PROVINCE OF BRITISH COLUMBIA	500	AA	AA
05-Sep-07	PROVINCE OF ONTARIO	600	AA	AA
05-Sep-07	PROV OF MANITOBA	250	A	AA
05-Sep-07	CANADIAN IMPERIAL BANK OF COM	650	AA	A
06-Sep-07	PROVINCE OF NEW BRUNSWICK	300	A	AA
06-Sep-07	WELLS FARGO FINANCIAL CORPORA	700	AA	AA
06-Sep-07	THE BANK OF NOVA SCOTIA	750	AA	AA
06-Sep-07	ROYAL BANK OF CANADA	1,000	AA	AA
07-Sep-07	BANK OF AMERICA	400	AA	AA
12-Sep-07	BCIMC REALTY CORP	250	AA	UNRATED
12-Sep-07	BCIMC REALTY CORP	200	AA	UNRATED
12-Sep-07	CITY OF VANCOUVER	125	AA	AA
14-Sep-07	PROVINCE OF ONTARIO	600	AA	AA
14-Sep-07	FARM CREDIT CDA (FKA FARM CRE	200	AAA	AAA

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19-Sep-07	HONDA CANADA FINANCE INC	600	A	UNRATED
19-Sep-07	BANK OF MONTREAL	800	AA	A
20-Sep-07	CANADA HOUSING TRUST	9,500	AAA	AAA
21-Sep-07	ROYAL BANK OF CANADA	550	AA	AA
21-Sep-07	ROYAL BANK OF CANADA	400	AA	AA
21-Sep-07	ROYAL BANK OF CANADA	1,500	AA	AA
21-Sep-07	ROYAL BANK OF CANADA	450	AA	AA
24-Sep-07	PROVINCE DE QUEBEC	500	A	A
26-Sep-07	CANADIAN TIRE CORPORATION, LI	300	A	BBB
26-Sep-07	ROYAL BANK OF SCOTLAND PLC TH	600	UNRATED	A
27-Sep-07	PROVINCE OF ONTARIO	500	AA	AA
27-Sep-07	FORTISBC ENERGY INC	250	A	UNRATED
01-Oct-07	407 INTERNATIONAL INC.	625	A	A
01-Oct-07	PROV OF MANITOBA	15	A	AA
02-Oct-07	PROVINCE OF ONTARIO	600	AA	AA
02-Oct-07	HYDRO-QUEBEC	500	A	A
03-Oct-07	SUMMIT TRUST	100	BBB	UNRATED
04-Oct-07	MUNICIPAL FINANCE AUTHOR	500	UNRATED	AA
04-Oct-07	CITY OF MONTREAL	215	UNRATED	A
04-Oct-07	CHIP MORTGAGE TRUST	150	UNRATED	UNRATED
05-Oct-07	ROYAL BANK OF SCOTLAND PLC TH	135	UNRATED	AA
09-Oct-07	HSBC BANK CANADA	600	AA	AA
09-Oct-07	AEROPORT DE MONTREAL	300	A	UNRATED
10-Oct-07	TORONTO DOMINION BANK	2,500	AA	A
11-Oct-07	WOODBIDGE FIN CORP	300	A	UNRATED
11-Oct-07	INTERNATIONAL FINANCE CORPORA	500	UNRATED	AAA
12-Oct-07	COMMONWEALTH BANK OF AUSTRALI	300	AA	AA
12-Oct-07	ROYAL BANK OF SCOTLAND PLC TH	25	UNRATED	AA
15-Oct-07	HYDRO ONE INC.	300	A	A
15-Oct-07	JOHN DEERE CREDIT INC.	225	A	A
15-Oct-07	THE BANK OF NOVA SCOTIA	500	AA	AA
16-Oct-07	PROVINCE DE QUEBEC	500	A	A
16-Oct-07	THE BANK OF NOVA SCOTIA	400	AA	AA
17-Oct-07	PROVINCE OF ONTARIO	600	AA	AA
17-Oct-07	GE CAPITAL CANADA FUNDING COM	300	UNRATED	AAA
17-Oct-07	GE CAPITAL CANADA FUNDING COM	900	UNRATED	AAA
17-Oct-07	CANADIAN IMPERIAL BANK OF COM	1,500	AA	A
18-Oct-07	SHERRITT INTERNATIONAL C	225	BB	UNRATED
18-Oct-07	ALBERTA CAP FIN AUTH.	10	AAA	AAA
22-Oct-07	CITIGROUP FINANCE CANADA INC	200	AA	AA
24-Oct-07	THE BANK OF NOVA SCOTIA	1,000	AA	A
24-Oct-07	TOYOTA CREDIT CANADA INC.	110	AAA	AAA
24-Oct-07	ROYAL OFFICE FINANCE LP	1,238	UNRATED	AAA
25-Oct-07	MUNICIPAL FINANCE AUTHOR	310	UNRATED	AA
26-Oct-07	PROV OF MANITOBA	10	A	AA
29-Oct-07	CU INC.	35	A	A
29-Oct-07	CU INC.	220	A	A
30-Oct-07	BANK OF MONTREAL	688	AA	A

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01-Nov-07	PROVINCE OF ONTARIO	600	AA	AA
01-Nov-07	CRAFT	450	AAA	UNRATED
01-Nov-07	CRAFT	200	AAA	UNRATED
02-Nov-07	THE REGIONAL MUNICIPALITY OF	2	UNRATED	AAA
02-Nov-07	THE REGIONAL MUNICIPALITY OF	2	UNRATED	AAA
02-Nov-07	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
02-Nov-07	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
02-Nov-07	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
02-Nov-07	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
02-Nov-07	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
02-Nov-07	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
02-Nov-07	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
02-Nov-07	THE REGIONAL MUNICIPALITY OF	6	UNRATED	AAA
02-Nov-07	CRAFT	250	AAA	UNRATED
06-Nov-07	CITY OF TOR	200	AA	AA
06-Nov-07	ALBERTA CAP FIN AUTH.	10	AAA	AAA
07-Nov-07	PROVINCE DE QUEBEC	500	A	A
08-Nov-07	TOR. HYDRO CORP.	250	A	A
08-Nov-07	VANCOUVER INTERNATIONAL AIRPO	200	AA	AA
13-Nov-07	THE BANK OF NOVA SCOTIA	120	AA	AA
14-Nov-07	REGION OF YORK	75	UNRATED	AAA
14-Nov-07	REGION OF YORK	8	UNRATED	AAA
14-Nov-07	REGION OF YORK	9	UNRATED	AAA
14-Nov-07	REGION OF YORK	9	UNRATED	AAA
15-Nov-07	PROVINCE OF NEW BRUNSWICK	300	A	AA
15-Nov-07	TORONTO DOMINION BANK	1,500	AA	AA
15-Nov-07	TORONTO DOMINION BANK	500	AA	AA
20-Nov-07	INTL BK FOR RECONSTR & DEV	850	UNRATED	AAA
23-Nov-07	HONDA CANADA FINANCE INC	450	A	UNRATED
23-Nov-07	HONDA CANADA FINANCE INC	50	A	UNRATED
23-Nov-07	ALBERTA CAP FIN AUTH.	10	UNRATED	UNRATED
28-Nov-07	PROVINCE OF ONTARIO	600	AA	AA
28-Nov-07	ALBERTA CAP FIN AUTH.	300	AAA	AAA
28-Nov-07	ENBRIDGE GAS DISTRIBUTION INC	200	A	A
30-Nov-07	PROVINCE DE QUEBEC	500	A	A
03-Dec-07	PROVINCE OF ONTARIO	50	AA	AA
03-Dec-07	FINANCEMENT QUEBEC	200	UNRATED	UNRATED
03-Dec-07	PROVINCE OF ONTARIO	650	AA	AA
04-Dec-07	PROVINCE OF ONTARIO	600	AA	AA
05-Dec-07	HYDRO-QUEBEC	500	A	A
05-Dec-07	ALBERTA TREASURY BRANCHES	200	AAA	AAA
06-Dec-07	PROVINCE OF ONTARIO	200	AA	AA
10-Dec-07	FINANCEMENT QUEBEC	200	UNRATED	UNRATED
12-Dec-07	BANK OF MONTREAL	250	AA	A
12-Dec-07	HOLCIM FINANCE CDA INC	300	UNRATED	BBB
13-Dec-07	CANADA HOUSING TRUST	9,500	AAA	AAA
13-Dec-07	PROVINCE DE QUEBEC	500	A	A
13-Dec-07	CANADIAN NATURAL RESOURCES LT	400	BBB	BBB

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13-Dec-07	ALBERTA CAP FIN AUTH.	10	UNRATED	UNRATED
17-Dec-07	PROVINCE OF ONTARIO	600	AA	AA
21-Dec-07	ALBERTA CAP FIN AUTH.	10	UNRATED	UNRATED
27-Dec-07	PROVINCE OF ONTARIO	75	UNRATED	UNRATED
02-Jan-08	PROVINCE OF ONTARIO	100	AA	AA
08-Jan-08	BRITISH COLUMBIA FERRY SERVIC	200	A	A
09-Jan-08	GE CAPITAL CANADA FUNDING COM	350	UNRATED	AAA
09-Jan-08	GE CAPITAL CANADA FUNDING COM	450	UNRATED	AAA
10-Jan-08	PROVINCE OF ONTARIO	600	AA	AA
11-Jan-08	AFRICAN DEVELOPMENT BANK	300	AAA	AAA
15-Jan-08	PROV OF MANITOBA	250	A	AA
15-Jan-08	ENCANA CORPORATION	750	A	A
15-Jan-08	NBC ASSET TRUST	400	A	BBB
16-Jan-08	BANK OF MONTREAL	1,500	AAA	AAA
16-Jan-08	BANK OF IRELAND (GOVERNOR AND	125	UNRATED	A
17-Jan-08	PROVINCE DE QUEBEC	500	A	A
17-Jan-08	CITY OF OTTAWA	25	AA	AA
17-Jan-08	CITY OF OTTAWA	75	AA	AA
18-Jan-08	JOHN DEERE CREDIT INC.	150	A	A
18-Jan-08	FINANCEMENT QUEBEC	200	UNRATED	UNRATED
18-Jan-08	PROVINCE OF ONTARIO	200	AA	AA
18-Jan-08	ROYAL BANK OF CANADA	9	AA	AA
19-Jan-08	ROYAL BANK OF CANADA	45	AA	AA
21-Jan-08	ROYAL BANK OF CANADA	260	AA	AA
21-Jan-08	ALBERTA CAP FIN AUTH.	10	UNRATED	UNRATED
22-Jan-08	407 INTERNATIONAL INC.	250	A	A
23-Jan-08	PROVINCE OF ONTARIO	50	AA	AA
24-Jan-08	THE BANK OF NOVA SCOTIA	300	AA	A
24-Jan-08	407 INTERNATIONAL INC.	300	BBB	BBB
24-Jan-08	PROVINCE OF ONTARIO	100	AA	AA
25-Jan-08	SUN LIFE FIN CORP	400	A	A
28-Jan-08	EPCOR UTILITIES INC.	200	A	BBB
28-Jan-08	THE BANK OF NOVA SCOTIA	110	AA	AA
28-Jan-08	ALBERTA CAP FIN AUTH.	10	AAA	UNRATED
29-Jan-08	BANK OF MONTREAL	525	AA	A
31-Jan-08	ALBERTA TREASURY BRANCHES	200	AAA	AAA
01-Feb-08	THE BANK OF NOVA SCOTIA	255	AA	AA
04-Feb-08	GLACIER CREDIT CARD TR	600	AAA	AAA
04-Feb-08	GLACIER CREDIT CARD TR	35	A	A
04-Feb-08	ROYAL BANK OF CANADA	105	AA	AA
04-Feb-08	BANK OF MONTREAL	211	AAA	AAA
04-Feb-08	BANK OF MONTREAL	114	AAA	AAA
05-Feb-08	TOYOTA CREDIT CANADA INC.	100	AAA	AAA
05-Feb-08	PROVINCE OF ONTARIO	100	AA	AA
07-Feb-08	FORTISBC ENERGY INC	250	BBB	UNRATED
07-Feb-08	NATIONAL AUSTRALIA BANK LTD	80	UNRATED	AA
08-Feb-08	TORONTO DOMINION BANK	1,500	AA	AA
08-Feb-08	TORONTO DOMINION BANK	315	AA	AA

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11-Feb-08	BANK OF MONTREAL	50	AA	A
12-Feb-08	GE CAPITAL CANADA FUNDING COM	150	UNRATED	AAA
12-Feb-08	THE BANK OF NOVA SCOTIA	1,700	AA	AA
12-Feb-08	ALBERTA CAP FIN AUTH.	10	UNRATED	UNRATED
13-Feb-08	HYDRO-QUEBEC	500	A	A
13-Feb-08	ALBERTA CAP FIN AUTH.	10	UNRATED	UNRATED
13-Feb-08	METRO LIFE GLB FDG	50	UNRATED	AA
13-Feb-08	CANADIAN IMPERIAL BANK OF COM	85	AA	A
14-Feb-08	PROVINCE OF ONTARIO	1,500	AA	AA
14-Feb-08	CANADIAN IMPERIAL BANK OF COM	40	AA	A
15-Feb-08	WELLS FARGO FINANCIAL CORPORA	500	AA	AA
15-Feb-08	DEH CHO BRIDGE CORP LTD	165	UNRATED	UNRATED
20-Feb-08	CANADIAN IMPERIAL BANK OF COM	5	AA	A
21-Feb-08	PROVINCE OF ONTARIO	500	AA	AA
21-Feb-08	BANK OF MONTREAL	17	AA	UNRATED
22-Feb-08	WESTPAC BANKING CORPORATION	75	UNRATED	AA
22-Feb-08	PROV OF MANITOBA	10	UNRATED	UNRATED
25-Feb-08	BANK OF MONTREAL	5	AA	A
27-Feb-08	FINANCEMENT QUEBEC	125	UNRATED	UNRATED
27-Feb-08	HYDRO ONE INC.	250	A	A
27-Feb-08	HYDRO ONE INC.	300	A	A
27-Feb-08	GE CAPITAL CANADA FUNDING COM	50	UNRATED	AAA
28-Feb-08	ROYAL BANK OF CANADA	6	AA	AA
28-Feb-08	BANK OF MONTREAL	15	AA	AA
04-Mar-08	CANADIAN IMPERIAL BANK OF COM	1,000	AA	A
05-Mar-08	PROVINCE OF ONTARIO	600	AA	AA
05-Mar-08	ROYAL BANK OF CANADA	1,000	AA	A
05-Mar-08	BANK OF MONTREAL	25	AA	A
05-Mar-08	BANK OF MONTREAL	15	AA	A
07-Mar-08	RABOBANK NEDERLAND	75	UNRATED	AAA
10-Mar-08	ROYAL BANK OF CANADA	135	AA	AA
11-Mar-08	BANK OF MONTREAL	10	AA	A
11-Mar-08	BANK OF MONTREAL	5	AA	A
17-Mar-08	XCEED MORTGAGE CORPORATION	84	AAA	UNRATED
19-Mar-08	CANADA HOUSING TRUST	9,000	AAA	AAA
19-Mar-08	THE BANK OF NOVA SCOTIA	1,700	AA	A
19-Mar-08	CANADA HOUSING TRUST	2,000	AAA	AAA
19-Mar-08	ROYAL BANK OF CANADA	525	AA	AA
19-Mar-08	ROYAL BANK OF CANADA	475	AA	AA
20-Mar-08	TORONTO DOMINION BANK	300	AA	AA
25-Mar-08	PROVINCE DE QUEBEC	500	A	A
25-Mar-08	PROV OF SASKATCHEWAN	250	AA	AA
25-Mar-08	BANK OF MONTREAL	900	AA	A
25-Mar-08	CROWN IN THE RIGHT OF ALBERTA	50	AAA	AAA
25-Mar-08	HSBC BANK CANADA	300	AA	AA
25-Mar-08	PROV OF MANITOBA	10	UNRATED	AA
26-Mar-08	PROV OF MANITOBA	250	A	AA
26-Mar-08	TORONTO DOMINION BANK	500	AA	A

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26-Mar-08	BANK OF MONTREAL	139	AAA	AAA
27-Mar-08	MARITIME ELECTRIC CO LTD	60	UNRATED	A
28-Mar-08	RELIANCE LP	330	BBB	BBB
28-Mar-08	RELIANCE LP	50	BBB	BBB
31-Mar-08	PROVINCE OF ONTARIO	600	AA	AA
31-Mar-08	ROYAL BANK OF CANADA	7	AA	AA
02-Apr-08	PROVINCE DE QUEBEC	500	A	A
02-Apr-08	THE BANK OF NOVA SCOTIA	1,300	AA	AA
02-Apr-08	PROVINCE OF ONTARIO	1,017	AA	AA
03-Apr-08	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
04-Apr-08	HSBC FIN CORP LTD (FKA HOUSEH	300	AA	AA
04-Apr-08	TELUS CORPORATION	500	A	BBB
04-Apr-08	ALBERTA CAP FIN AUTH.	10	AAA	AAA
07-Apr-08	AMEX EXPRESS CANADA CREDIT CO	500	A	A
07-Apr-08	HYDRO-QUEBEC	--	UNRATED	UNRATED
07-Apr-08	PROVINCE OF ONTARIO	--	UNRATED	UNRATED
07-Apr-08	PROVINCE DE QUEBEC	--	UNRATED	UNRATED
08-Apr-08	MASTER CREDIT CARD TRUST	525	AAA	UNRATED
08-Apr-08	FORTISAB INC	100	A	A
08-Apr-08	CANADIAN CREDIT CARD TR	400	AAA	AAA
08-Apr-08	MASTER CREDIT CARD TRUST	12	A	UNRATED
08-Apr-08	MASTER CREDIT CARD TRUST	12	BBB	UNRATED
08-Apr-08	CANADIAN CREDIT CARD TR	12	A	A
08-Apr-08	CANADIAN CREDIT CARD TR	12	BBB	BBB
10-Apr-08	EPCOR UTILITIES INC.	200	A	BBB
10-Apr-08	EPCOR UTILITIES INC.	175	A	BBB
11-Apr-08	PROVINCE OF ONTARIO	50	AA	AA
11-Apr-08	CANADIAN IMPERIAL BANK OF COM	15	AA	A
14-Apr-08	GTAA	500	A	A
15-Apr-08	MUNICIPAL FINANCE AUTHOR	440	UNRATED	AAA
15-Apr-08	TORONTO DOMINION BANK	1,350	AA	AA
15-Apr-08	ROYAL BANK OF CANADA	550	AA	AA
16-Apr-08	JOHN DEERE CREDIT INC.	100	A	A
17-Apr-08	BANK OF MONTREAL	411	AAA	AAA
17-Apr-08	TORONTO DOMINION BANK	225	AA	AA
18-Apr-08	BANK OF MONTREAL	850	AA	A
18-Apr-08	GOLD CR CARD TR	500	AAA	UNRATED
18-Apr-08	GOLD CR CARD TR	500	AAA	UNRATED
18-Apr-08	GOLD CR CARD TR	24	BBB	UNRATED
18-Apr-08	GOLD CR CARD TR	24	BBB	UNRATED
21-Apr-08	RBC CAP TR	500	A	A
22-Apr-08	HYDRO-QUEBEC	500	A	A
23-Apr-08	UNION GAS LIMITED	200	A	BBB
23-Apr-08	EPCOR UTILITIES INC.	25	A	BBB
24-Apr-08	BANK OF MONTREAL	275	AAA	AAA
25-Apr-08	PROVINCE OF NEW BRUNSWICK	300	A	AA
25-Apr-08	PROV OF MANITOBA	250	A	AA
28-Apr-08	PROVINCE OF ONTARIO	600	AA	AA

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28-Apr-08	PROVINCE DE QUEBEC	500	A	A
28-Apr-08	NATIONAL BANK OF CANADA	500	A	A
29-Apr-08	BANK OF MONTREAL	2,363	UNRATED	A
29-Apr-08	BANK OF MONTREAL	2,531	UNRATED	A
30-Apr-08	TORONTO DOMINION BANK	175	AA	AA
30-Apr-08	MUNICIPAL FINANCE AUTHOR	19	UNRATED	AAA
01-May-08	MERRILL LYNCH CANADA INC.	300	AA	A
01-May-08	HONDA CANADA FINANCE INC	400	A	UNRATED
01-May-08	HONDA CANADA FINANCE INC	350	A	UNRATED
02-May-08	THE BANK OF NOVA SCOTIA	1,000	AA	AA
02-May-08	OMERS REALTY CORP	400	AAA	AAA
02-May-08	OMERS REALTY CORP	200	AAA	AAA
05-May-08	BANK OF MONTREAL	348	AAA	AAA
05-May-08	PROVINCE OF ONTARIO	25	AA	AA
05-May-08	FINANCEMENT QUEBEC	61	A	A
06-May-08	CHIP MORTGAGE TRUST	165	AAA	UNRATED
06-May-08	THE BANK OF NOVA SCOTIA	480	AA	AA
06-May-08	PROV OF MANITOBA	10	A	UNRATED
07-May-08	ALBERTA TREASURY BRANCHES	200	AAA	AAA
07-May-08	PROVINCE OF BRITISH COLUMBIA	300	AA	AAA
07-May-08	PROVINCE DE QUEBEC	1,007	A	A
08-May-08	FORTISBC ENERGY INC	250	A	UNRATED
08-May-08	FINNING INTERNATIONAL INC	250	A	BBB
08-May-08	FINNING INTERNATIONAL INC	350	A	BBB
09-May-08	PROVINCE OF ONTARIO	600	AA	AA
09-May-08	THE BANK OF NOVA SCOTIA	600	AA	AA
09-May-08	BANK OF MONTREAL	207	AAA	AAA
12-May-08	BANK OF MONTREAL	15	AA	A
13-May-08	HYDRO-QUEBEC	500	A	A
13-May-08	TOYOTA CREDIT CANADA INC.	100	AAA	AAA
13-May-08	BANK OF MONTREAL	17	AA	A
14-May-08	CITIGROUP FINANCE CANADA INC	400	AA	AA
14-May-08	PROV OF MANITOBA	200	A	AA
15-May-08	SUNCOR ENERGY INC	700	A	A
15-May-08	FINANCEMENT QUEBEC	40	UNRATED	UNRATED
15-May-08	TORONTO DOMINION BANK	190	AA	AA
15-May-08	PROVINCE OF BRITISH COLUMBIA	50	UNRATED	AAA
16-May-08	PROVINCE OF ONTARIO	1,001	AA	AA
20-May-08	PROVINCE OF NEW BRUNSWICK	300	A	AA
21-May-08	FINANCEMENT QUEBEC	500	A	A
21-May-08	CU INC.	125	A	A
21-May-08	CU INC.	200	A	A
22-May-08	ALTALINK, L.P.	100	A	A
23-May-08	CANADIAN PACIFIC RAILWAY COMP	375	BBB	BBB
27-May-08	PROVINCE OF ONTARIO	600	AA	AA
27-May-08	CANADIAN IMPERIAL BANK OF COM	10	AA	A
27-May-08	BANK OF MONTREAL	8	AA	A
27-May-08	PROV OF MANITOBA	175	A	AA

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28-May-08	SHOPPERS DRUG MART CORPORATIO	450	A	BBB
28-May-08	GLOUCESTER CREDIT CARD TRU	400	AAA	AAA
28-May-08	CITIGROUP FINANCE CANADA INC	6	AA	AA
28-May-08	GLOUCESTER CREDIT CARD TRU	52	BBB	BBB
02-Jun-08	ROYAL BANK OF CANADA	1,000	AA	A
02-Jun-08	BANK OF MONTREAL	20	AA	A
03-Jun-08	CANADIAN IMPERIAL BANK OF COM	550	AA	A
03-Jun-08	CANADIAN IMPERIAL BANK OF COM	600	AA	A
03-Jun-08	PROVINCE OF ONTARIO	83	AA	AA
03-Jun-08	PROVINCE OF ONTARIO	120	AA	AA
04-Jun-08	TORONTO DOMINION BANK	170	AA	AA
05-Jun-08	BANK OF MONTREAL	1,100	AA	A
05-Jun-08	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
05-Jun-08	THE REGIONAL MUNICIPALITY OF	1	UNRATED	AAA
05-Jun-08	THE REGIONAL MUNICIPALITY OF	2	UNRATED	AAA
05-Jun-08	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
05-Jun-08	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
05-Jun-08	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
05-Jun-08	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
05-Jun-08	THE REGIONAL MUNICIPALITY OF	1	UNRATED	AAA
05-Jun-08	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AA
05-Jun-08	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
05-Jun-08	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
05-Jun-08	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
05-Jun-08	HSBC BANK CANADA	100	AA	AA
06-Jun-08	CANADIAN HYDRO DEV, INC	56	BBB	UNRATED
06-Jun-08	CANADIAN HYDRO DEV, INC	20	BBB	UNRATED
09-Jun-08	PROVINCE OF ONTARIO	30	AA	AA
10-Jun-08	SHERRITT INTERNATIONAL C	275	BBB	UNRATED
10-Jun-08	PROVINCE OF ONTARIO	25	AA	AA
10-Jun-08	PROVINCE OF BRITISH COLUMBIA	200	UNRATED	AAA
11-Jun-08	PROVINCE DE QUEBEC	500	A	AA
11-Jun-08	CITY OF MONTREAL	250	A	A
11-Jun-08	CANADIAN IMPERIAL BANK OF COM	115	AA	A
11-Jun-08	PROVINCE OF ONTARIO	25	AA	AA
12-Jun-08	THE CITY OF WINNIPEG	100	AA	AA
12-Jun-08	ENMAX CORP	300	A	BBB
13-Jun-08	CANADIAN IMPERIAL BANK OF COM	10	AA	A
16-Jun-08	PROVINCE OF ONTARIO	600	AA	AA
16-Jun-08	CITY OF TOR	300	AA	AA
16-Jun-08	CANADIAN IMPERIAL BANK OF COM	120	AA	A
16-Jun-08	BANK OF MONTREAL	7	AA	A
16-Jun-08	BANK OF MONTREAL	10	AA	A
16-Jun-08	BANK OF MONTREAL	18	AA	UNRATED
17-Jun-08	THE BANK OF NOVA SCOTIA	793	AA	AA
17-Jun-08	THE BANK OF NOVA SCOTIA	267	AA	AA
18-Jun-08	CANADA HOUSING TRUST	2,000	AAA	AAA
18-Jun-08	CANADA HOUSING TRUST	9,000	AAA	AAA

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18-Jun-08	CANADA HOUSING TRUST	1,500	AAA	AAA
18-Jun-08	BANK OF MONTREAL	12	UNRATED	UNRATED
18-Jun-08	BANK OF MONTREAL	10	UNRATED	UNRATED
19-Jun-08	THOMSON REUTERS CORPORATION	600	A	A
19-Jun-08	THOMSON REUTERS CORPORATION	600	A	A
19-Jun-08	MANULIFE FINANCIAL CORPORATIO	550	AA	AA
19-Jun-08	MANULIFE FINANCIAL CORPORATIO	400	AA	AA
19-Jun-08	BANK OF MONTREAL	786	UNRATED	A
20-Jun-08	PROVINCE OF ONTARIO	600	AA	AA
20-Jun-08	SUN LIFE FIN CORP	350	A	A
20-Jun-08	CANADIAN WESTERN BANK	50	UNRATED	UNRATED
20-Jun-08	PROVINCE DE QUEBEC	529	UNRATED	UNRATED
20-Jun-08	BANK OF MONTREAL	8	AA	A
23-Jun-08	GREAT-WEST LIFECO INC.	500	A	A
23-Jun-08	CANADIAN IMPERIAL BANK OF COM	13	UNRATED	UNRATED
24-Jun-08	THE BANK OF NOVA SCOTIA	430	AA	AA
24-Jun-08	BANK OF MONTREAL	10	AA	A
25-Jun-08	TORONTO DOMINION BANK	375	AA	A
25-Jun-08	TORONTO DOMINION BANK	650	AA	A
25-Jun-08	NBC ASSET TRUST	350	A	BBB
25-Jun-08	CANADIAN IMPERIAL BANK OF COM	280	AA	A
25-Jun-08	PROVINCE OF BRITISH COLUMBIA	20	UNRATED	UNRATED
25-Jun-08	BROADWAY CREDIT CARD TR	250	AAA	UNRATED
25-Jun-08	BROADWAY CREDIT CARD TR	14	A	UNRATED
25-Jun-08	BROADWAY CREDIT CARD TR	14	BBB	UNRATED
25-Jun-08	BROADWAY CREDIT CARD TR	525	AAA	UNRATED
25-Jun-08	BROADWAY CREDIT CARD TR	29	A	UNRATED
25-Jun-08	BROADWAY CREDIT CARD TR	29	BBB	UNRATED
25-Jun-08	THE BANK OF NOVA SCOTIA	250	AA	AA
25-Jun-08	BANK OF MONTREAL	30	AA	A
26-Jun-08	PROVINCE OF ONTARIO	600	AA	AA
26-Jun-08	THE BANK OF NOVA SCOTIA	500	AA	AA
26-Jun-08	THE BANK OF NOVA SCOTIA	335	AA	AA
26-Jun-08	BANK OF MONTREAL	11	AA	A
27-Jun-08	PROV OF MANITOBA	50	A	UNRATED
27-Jun-08	PROV OF MANITOBA	10	UNRATED	UNRATED
27-Jun-08	CANADIAN IMPERIAL BANK OF COM	10	AA	A
30-Jun-08	PROV OF MANITOBA	--	UNRATED	UNRATED
03-Jul-08	BANK OF MONTREAL	5	AA	A
07-Jul-08	PROVINCE OF ONTARIO	500	AA	AA
08-Jul-08	BANK OF MONTREAL	20	AA	UNRATED
09-Jul-08	BANK OF MONTREAL	300	AA	A
09-Jul-08	BANK OF MONTREAL	700	AA	A
10-Jul-08	ROYAL BANK OF CANADA	12	AA	AA
11-Jul-08	WESTCOAST ENERGY INC	250	A	BBB
14-Jul-08	PROVINCE OF NOVA SCOTIA	250	A	A
14-Jul-08	ROYAL BANK OF CANADA	925	AA	AA
14-Jul-08	ROYAL BANK OF CANADA	100	AA	AA

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14-Jul-08	BANK OF MONTREAL	17	AA	A
16-Jul-08	BANK OF MONTREAL	11	AA	A
17-Jul-08	BANK OF MONTREAL	353	AAA	AAA
18-Jul-08	BANK OF MONTREAL	5	AA	A
21-Jul-08	ATHABASCA OIL CORPORATION	400	UNRATED	UNRATED
21-Jul-08	BANK OF MONTREAL	16	AA	A
23-Jul-08	MASTER CREDIT CARD TRUST	1,000	AAA	UNRATED
23-Jul-08	MASTER CREDIT CARD TRUST	24	BBB	UNRATED
23-Jul-08	MASTER CREDIT CARD TRUST	24	A	UNRATED
24-Jul-08	PROVINCE OF ONTARIO	600	AA	AA
24-Jul-08	ROYAL BANK OF CANADA	180	AA	AA
29-Jul-08	BANK OF MONTREAL	10	AA	A
31-Jul-08	GE CAPITAL CANADA FUNDING COM	300	UNRATED	AAA
31-Jul-08	GE CAPITAL CANADA FUNDING COM	700	UNRATED	AAA
07-Aug-08	THE BANK OF NOVA SCOTIA	300	AA	AA
07-Aug-08	NORTHWESTCONNECT GENERAL PART	266	A	A
07-Aug-08	BANK OF MONTREAL	6	AA	A
08-Aug-08	BANK OF MONTREAL	9	AA	A
13-Aug-08	TRANSCANADA PIPELINES LTD.	500	A	A
14-Aug-08	BANK OF MONTREAL	5	AA	A
15-Aug-08	BANK OF MONTREAL	10	AA	A
18-Aug-08	WESTCOAST ENERGY INC	50	A	BBB
19-Aug-08	OSIFA	300	AA	AA
26-Aug-08	PROVINCE OF ONTARIO	600	AA	AA
26-Aug-08	UNION GAS LIMITED	300	A	BBB
27-Aug-08	HYDRO-QUEBEC	500	A	A
27-Aug-08	BANK OF MONTREAL	525	AA	A
27-Aug-08	BANK OF MONTREAL	550	AA	A
28-Aug-08	HSBC BANK CANADA	500	AA	AA
28-Aug-08	PROVINCE OF ONTARIO	1,578	AA	AA
29-Aug-08	PROV OF MANITOBA	20	A	UNRATED
03-Sep-08	CITIGROUP FINANCE CANADA INC	9	AA	AA
05-Sep-08	TD CAPITAL TRUST	1,000	A	A
05-Sep-08	BANK OF MONTREAL	10	AA	A
09-Sep-08	HONDA CANADA FINANCE INC	550	A	UNRATED
09-Sep-08	HONDA CANADA FINANCE INC	100	A	UNRATED
09-Sep-08	THE BANK OF NOVA SCOTIA	500	AA	AA
11-Sep-08	PROVINCE OF ONTARIO	50	AA	AA
11-Sep-08	PROVINCE OF ONTARIO	100	AA	AA
11-Sep-08	JOHN DEERE CREDIT INC.	375	A	A
11-Sep-08	CITIGROUP FINANCE CANADA INC	300	AA	UNRATED
11-Sep-08	CITIGROUP FINANCE CANADA INC	60	AA	UNRATED
11-Sep-08	BANK OF MONTREAL	916	UNRATED	A
11-Sep-08	CITIGROUP FINANCE CANADA INC	8	AA	AA
12-Sep-08	WESTPAC BANKING CORPORATION	200	UNRATED	AA
15-Sep-08	SANTANDER INT'L DEBT SA	200	UNRATED	AA
17-Sep-08	CANADA HOUSING TRUST	8,000	AAA	AAA
17-Sep-08	CANADA HOUSING TRUST	2,000	AAA	AAA

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23-Sep-08	BANK OF MONTREAL	644	AAA	AAA
23-Sep-08	CANADIAN IMPERIAL BANK OF COM	75	AA	A
30-Sep-08	THE BANK OF NOVA SCOTIA	950	AA	A
30-Sep-08	PORT MANN BRIDGE	--	UNRATED	UNRATED
01-Oct-08	FINANCEMENT QUEBEC	600	UNRATED	UNRATED
06-Oct-08	TORONTO DOMINION BANK	180	AA	AA
07-Oct-08	PROVINCE OF ONTARIO	600	AA	AA
08-Oct-08	GAZ METRO INC	150	A	A
14-Oct-08	THE BANK OF NOVA SCOTIA	500	AA	AA
16-Oct-08	PROV OF MANITOBA	15	UNRATED	UNRATED
17-Oct-08	GE CAPITAL CANADA FUNDING COM	50	UNRATED	AAA
20-Oct-08	FINANCEMENT QUEBEC	100	A	A
28-Oct-08	PROVINCE DE QUEBEC	500	A	A
28-Oct-08	FINANCEMENT QUEBEC	40	A	A
30-Oct-08	BANK OF MONTREAL	156	AA	A
30-Oct-08	BANK OF MONTREAL	250	AA	A
04-Nov-08	PROVINCE OF ONTARIO	600	AA	AA
04-Nov-08	PROVINCE DE QUEBEC	161	A	A
05-Nov-08	PROVINCE OF NEW BRUNSWICK	300	A	AA
05-Nov-08	HYDRO ONE INC.	400	A	A
05-Nov-08	THE BANK OF NOVA SCOTIA	500	AA	AA
05-Nov-08	PROVINCE DE QUEBEC	161	A	A
06-Nov-08	ENBRIDGE GAS DISTRIBUTION INC	200	A	A
12-Nov-08	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
12-Nov-08	PROVINCE OF ONTARIO	1,000	AA	AA
13-Nov-08	MUNICIPAL FINANCE AUTHOR	400	UNRATED	AAA
13-Nov-08	ENBRIDGE PIPELINES INC	300	A	A
14-Nov-08	HYDRO ONE INC.	100	A	A
14-Nov-08	BANK OF MONTREAL	345	AAA	AAA
14-Nov-08	407 INTERNATIONAL INC.	--	UNRATED	UNRATED
17-Nov-08	CITY OF MONTREAL	200	UNRATED	A
20-Nov-08	CANADA HOUSING TRUST	2,000	AAA	AAA
20-Nov-08	FINANCEMENT QUEBEC	62	UNRATED	A
21-Nov-08	PROVINCE OF ONTARIO	600	AA	AA
21-Nov-08	BANK OF MONTREAL	535	AAA	AAA
26-Nov-08	PROVINCE OF ONTARIO	250	AA	AA
01-Dec-08	PROVINCE OF NOVA SCOTIA	200	A	A
02-Dec-08	PSP CAPITAL INC.	600	AAA	AAA
03-Dec-08	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
03-Dec-08	GTAA	325	A	A
09-Dec-08	PROVINCE OF ONTARIO	600	AA	AA
09-Dec-08	NOVA SCOTIA PW.,INC.	150	A	BBB
10-Dec-08	FINANCEMENT QUEBEC	500	A	A
10-Dec-08	PROVINCE DE QUEBEC	90	A	A
10-Dec-08	PROVINCE DE QUEBEC	130	A	A
11-Dec-08	CANADA HOUSING TRUST	8,000	AAA	AAA
11-Dec-08	PROVINCE OF ONTARIO	700	AA	AA
11-Dec-08	PROVINCE OF NEW BRUNSWICK	200	A	AA

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12-Dec-08	BMO CAPITAL TRUST	450	A	A
15-Dec-08	PROVINCE DE QUEBEC	104	A	A
16-Dec-08	PROVINCE DE QUEBEC	500	A	A
16-Dec-08	BRITISH COLUMBIA FERRY SERVIC	140	A	A
18-Dec-08	BANK OF MONTREAL	6	AA	AA
18-Dec-08	PROVINCE OF ONTARIO	234	AA	AA
06-Jan-09	PROVINCE OF NEW BRUNSWICK	120	A	AA
07-Jan-09	PROVINCE OF ONTARIO	315	AA	AA
08-Jan-09	HYDRO ONE INC.	100	A	A
08-Jan-09	HSBC FRANCE	2,432	UNRATED	AA
09-Jan-09	PROVINCE OF ONTARIO	600	AA	AA
09-Jan-09	HYDRO ONE INC.	200	A	A
12-Jan-09	HYDRO-QUEBEC	500	A	A
12-Jan-09	PROVINCE OF ONTARIO	50	AA	AA
13-Jan-09	PROVINCE OF ONTARIO	2,453	AA	AA
14-Jan-09	SHOPPERS DRUG MART CORPORATIO	250	A	BBB
14-Jan-09	SHOPPERS DRUG MART CORPORATIO	250	A	BBB
14-Jan-09	TD CAPITAL TRUST	550	A	A
14-Jan-09	TD CAPITAL TRUST	450	A	A
14-Jan-09	BANK OF MONTREAL	15	AA	A
15-Jan-09	PROVINCE OF NEW BRUNSWICK	300	A	AA
15-Jan-09	407 INTERNATIONAL INC.	300	A	A
15-Jan-09	407 INTERNATIONAL INC.	200	A	A
15-Jan-09	NOVA SCOTIA PW.,INC.	50	A	BBB
16-Jan-09	THE BANK OF NOVA SCOTIA	1,000	AA	A
20-Jan-09	FINANCEMENT QUEBEC	25	UNRATED	A
26-Jan-09	HYDRO-QUEBEC	500	A	A
29-Jan-09	PROVINCE DE QUEBEC	500	A	A
30-Jan-09	BROOKFIELD POWER CORP (FKA BR	300	BBB	BBB
03-Feb-09	PROVINCE OF ONTARIO	600	AA	AA
04-Feb-09	CONSUMERS' WATERHEATER OP TR	60	A	A
04-Feb-09	CONSUMERS' WATERHEATER OP TR	270	A	A
09-Feb-09	CITY OF MONTREAL	200	UNRATED	A
09-Feb-09	BANK OF MONTREAL	19	AA	A
10-Feb-09	FORTISAB INC	100	A	A
11-Feb-09	TRANSCANADA PIPELINES LTD.	300	A	A
11-Feb-09	TRANSCANADA PIPELINES LTD.	400	A	A
12-Feb-09	FINANCEMENT QUEBEC	125	UNRATED	A
12-Feb-09	BANK OF MONTREAL	18	AA	A
12-Feb-09	BANK OF MONTREAL	3	AA	A
18-Feb-09	CANADA HOUSING TRUST	2,500	AAA	AAA
18-Feb-09	CANADA HOUSING TRUST	2,200	AAA	AAA
18-Feb-09	PROVINCE OF ONTARIO	600	AA	AA
18-Feb-09	PROVINCE OF ONTARIO	150	AA	AA
19-Feb-09	FORTISBC ENERGY INC	100	A	UNRATED
20-Feb-09	FINANCEMENT QUEBEC	75	A	A
23-Feb-09	PROVINCE DE QUEBEC	235	A	A
24-Feb-09	PSP CAPITAL INC.	400	AAA	AAA

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26-Feb-09	HYDRO ONE INC.	300	A	A
26-Feb-09	BANK OF MONTREAL	23	AA	A
02-Mar-09	PROV OF PEI	100	A	A
02-Mar-09	FINANCEMENT QUEBEC	70	A	A
03-Mar-09	CU INC.	120	A	A
03-Mar-09	CU INC.	150	A	A
04-Mar-09	CIBC CAPITAL TRUST	1,300	A	A
04-Mar-09	CIBC CAPITAL TRUST	300	A	A
10-Mar-09	PROVINCE OF ONTARIO	600	AA	AA
10-Mar-09	PROVINCE OF ONTARIO	150	AA	AA
10-Mar-09	CITY OF MONTREAL	270	UNRATED	A
10-Mar-09	ROYAL BANK OF CANADA	5	UNRATED	UNRATED
10-Mar-09	BANK OF MONTREAL	20	AA	A
12-Mar-09	PROVINCE OF BRITISH COLUMBIA	200	AA	AAA
12-Mar-09	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
17-Mar-09	CANADA HOUSING TRUST	7,000	AAA	AAA
17-Mar-09	CANADA HOUSING TRUST	2,000	AAA	AAA
17-Mar-09	BANK OF MONTREAL	11	UNRATED	UNRATED
17-Mar-09	BANK OF MONTREAL	20	AA	A
24-Mar-09	INDUSTRIAL ALLIANCE INS	100	A	A
24-Mar-09	NIAGARA HEALTH SYSTEM	134	UNRATED	A
24-Mar-09	SHAW COMMUNICATIONS INC	600	BBB	BBB
25-Mar-09	CAPITAL DESJARDINS INC.	500	AA	A
26-Mar-09	PROVINCE DE QUEBEC	500	A	A
26-Mar-09	THOMSON REUTERS CORPORATION	750	A	A
26-Mar-09	SUN LIFE FIN CORP	500	A	A
30-Mar-09	RIOCAN REAL ESTATE INVES	180	BBB	BBB
30-Mar-09	PROVINCE OF ONTARIO	150	AA	AA
31-Mar-09	MANULIFE FINANCIAL CORPORATIO	600	AA	AA
01-Apr-09	PROVINCE OF BRITISH COLUMBIA	300	AA	AAA
01-Apr-09	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
01-Apr-09	PROVINCE OF NEW BRUNSWICK	300	A	AA
01-Apr-09	FINANCEMENT QUEBEC	500	A	A
01-Apr-09	FINANCEMENT QUEBEC	55	A	A
02-Apr-09	PROVINCE OF ONTARIO	600	AA	AA
02-Apr-09	PROVINCE OF ONTARIO	250	AA	AA
02-Apr-09	IGM FINANCIAL INC	375	A	A
02-Apr-09	VANCOUVER CITY SAVINGS CREDIT	100	UNRATED	UNRATED
03-Apr-09	ENMAX CORP	250	A	BBB
06-Apr-09	PROVINCE DE QUEBEC	500	A	A
06-Apr-09	CALLOWAY REIT	150	BBB	UNRATED
07-Apr-09	FINANCEMENT QUEBEC	75	A	A
08-Apr-09	THE BANK OF NOVA SCOTIA	1,000	AA	A
09-Apr-09	AEROPLAN CDA	175	BBB	BBB
09-Apr-09	BROOKFIELD POWER CORP (FKA BR	100	BBB	BBB
09-Apr-09	OSIFA	--	UNRATED	UNRATED
14-Apr-09	MUNICIPAL FINANCE AUTHOR	340	UNRATED	AAA
14-Apr-09	PROVINCE OF ONTARIO	600	AA	AA

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14-Apr-09	NAV CANADA	250	AA	AA
14-Apr-09	NAV CANADA	350	AA	AA
15-Apr-09	PROVINCE OF NEW BRUNSWICK	300	A	AA
15-Apr-09	POWER CORPORATION OF CANADA	250	A	A
15-Apr-09	POWER CORPORATION OF CANADA	150	A	A
16-Apr-09	REGION OF YORK	200	UNRATED	AAA
16-Apr-09	PROVINCE DE QUEBEC	10	A	A
16-Apr-09	JOHN DEERE CREDIT INC.	200	A	A
20-Apr-09	AEROPLAN CDA	25	BBB	BBB
21-Apr-09	PROVINCE DE QUEBEC	500	A	A
22-Apr-09	PROVINCE OF ONTARIO	400	AA	AA
22-Apr-09	PROVINCE OF ONTARIO	600	AA	AA
24-Apr-09	FINANCEMENT QUEBEC	500	A	A
24-Apr-09	ALTAGAS LIMITED	200	BBB	BBB
24-Apr-09	RELIANCE LP	100	UNRATED	BBB
27-Apr-09	PROVINCE OF NEW BRUNSWICK	300	A	AA
27-Apr-09	PROVINCE DE QUEBEC	220	A	A
28-Apr-09	PROVINCE OF ONTARIO	600	AA	AA
28-Apr-09	OMERS REALTY CORP	180	AAA	AAA
28-Apr-09	OMERS REALTY CORP	170	AAA	AAA
30-Apr-09	BNS CAPITAL TRUST	650	A	A
30-Apr-09	PROVINCE DE QUEBEC	150	A	A
30-Apr-09	PROVINCE OF ONTARIO	--	UNRATED	UNRATED
30-Apr-09	PROVINCE DE QUEBEC	--	UNRATED	UNRATED
30-Apr-09	HYDRO-QUEBEC	--	UNRATED	UNRATED
30-Apr-09	FINANCEMENT QUEBEC	--	UNRATED	UNRATED
04-May-09	PROVINCE OF ONTARIO	600	AA	AA
04-May-09	PROVINCE OF ONTARIO	150	AA	AA
05-May-09	PROVINCE DE QUEBEC	500	A	A
05-May-09	LOBLAW COMPANIES LIMITED	350	BBB	BBB
06-May-09	MTS INC	100	BBB	BBB
06-May-09	MTS INC	250	BBB	BBB
06-May-09	ROYAL BANK OF CANADA	185	AA	AA
07-May-09	SOCIETE DE TRANSPORT DE MONTR	300	UNRATED	A
11-May-09	ALTALINK, L.P.	100	A	A
12-May-09	PROVINCE DE QUEBEC	500	A	A
12-May-09	BELL ALIANT REGIONAL COMMUNIC	350	BBB	BBB
12-May-09	ALBERTA CAP FIN AUTH.	550	AAA	AAA
13-May-09	MUNICIPAL FINANCE AUTHOR	440	AAA	UNRATED
13-May-09	ENBRIDGE INC	400	A	A
13-May-09	EMPIRE LIFE INS CO	200	A	UNRATED
13-May-09	INTER AMERICAN DEVELOPMENT BA	2,349	UNRATED	AAA
13-May-09	THE BANK OF NOVA SCOTIA	100	AA	AA
13-May-09	REGION OF YORK	4	UNRATED	AAA
13-May-09	REGION OF YORK	4	UNRATED	AAA
13-May-09	REGION OF YORK	4	UNRATED	AAA
13-May-09	REGION OF YORK	4	UNRATED	AAA
13-May-09	REGION OF YORK	4	UNRATED	AAA

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13-May-09	REGION OF YORK	4	UNRATED	AAA
13-May-09	REGION OF YORK	4	UNRATED	AAA
13-May-09	REGION OF YORK	4	UNRATED	AAA
13-May-09	REGION OF YORK	4	UNRATED	AAA
13-May-09	REGION OF YORK	4	UNRATED	AAA
13-May-09	HSBC HOLDINGS PLC	1,158	UNRATED	AA
14-May-09	GTAA	300	A	A
14-May-09	TELUS CORPORATION	700	A	UNRATED
20-May-09	CANADA HOUSING TRUST	2,500	AAA	AAA
20-May-09	CANADA HOUSING TRUST	3,100	AAA	AAA
20-May-09	FINANCEMENT QUEBEC	30	A	A
21-May-09	PROVINCE OF BRITISH COLUMBIA	300	AA	AAA
21-May-09	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
21-May-09	ROGERS COMMUNICATIONS PARTNER	1,000	UNRATED	BBB
21-May-09	NEWFOUNDLAND POWER	65	A	UNRATED
26-May-09	CITY OF VANCOUVER	150	AA	AA
26-May-09	TRANSALTA CORPORATION	200	BBB	BBB
26-May-09	CAPITAL DESJARDINS INC.	500	AA	A
26-May-09	FINANCEMENT QUEBEC	10	A	A
27-May-09	BROOKFIELD ASSET MGMT	500	A	A
27-May-09	CANADIAN TIRE CORPORATION, LI	200	A	BBB
27-May-09	CATERPILLAR FIN SER LTD	500	A	A
28-May-09	MANULIFE FINANCIAL CORPORATIO	1,000	AA	AA
28-May-09	FORTISBC INC	105	BBB	UNRATED
29-May-09	PROV OF MANITOBA	300	A	AA
29-May-09	PROVINCE OF NEW BRUNSWICK	300	A	AA
01-Jun-09	THE BANK OF NOVA SCOTIA	1,000	AA	AA
01-Jun-09	FINANCEMENT QUEBEC	100	A	UNRATED
03-Jun-09	COGECO CABLE	300	BBB	BBB
03-Jun-09	PROVINCE DE QUEBEC	500	A	A
03-Jun-09	NATIONAL BANK OF CANADA	275	AA	A
03-Jun-09	HSBC BANK CANADA	130	AA	AA
04-Jun-09	CROWN IN THE RIGHT OF ALBERTA	50	AAA	AAA
04-Jun-09	CROWN IN THE RIGHT OF ALBERTA	50	AAA	AAA
04-Jun-09	PETRO-CANADA CENTRE	370	UNRATED	UNRATED
05-Jun-09	FINANCEMENT QUEBEC	19	A	A
08-Jun-09	ORNGE ISSUER TRUST	275	UNRATED	AA
09-Jun-09	PROVINCE OF ONTARIO	4,400	AA	AA
09-Jun-09	FINANCEMENT QUEBEC	30	A	A
10-Jun-09	PROVINCE DE QUEBEC	500	A	A
10-Jun-09	MANULIFE BK OF CANADA	150	AA	AA
11-Jun-09	THE BANK OF NOVA SCOTIA	100	AA	AA
15-Jun-09	GAZ METRO INC	100	A	A
16-Jun-09	CANADA HOUSING TRUST	8,000	AAA	AAA
17-Jun-09	CALLOWAY REIT	75	BBB	UNRATED
17-Jun-09	HYDRO-QUEBEC	1,000	A	A
17-Jun-09	PROVINCE OF ONTARIO	275	AA	AA
18-Jun-09	YELLOW MEDIA INC.	260	BBB	BBB

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18-Jun-09	METRO LIFE GLB FDG	200	UNRATED	AA
19-Jun-09	PROVINCE OF ONTARIO	600	AA	AA
22-Jun-09	ALTAGAS LIMITED	100	BBB	BBB
22-Jun-09	THE BANK OF NOVA SCOTIA	205	AA	AA
23-Jun-09	CITY OF VANCOUVER	125	AA	AA
23-Jun-09	BELL CANADA	1,000	A	BBB
23-Jun-09	ALBERTA CAP FIN AUTH.	107	AAA	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	1	UNRATED	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	2	UNRATED	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	2	UNRATED	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	2	UNRATED	AAA
24-Jun-09	THE REGIONAL MUNICIPALITY OF	2	UNRATED	AAA
24-Jun-09	FORD CREDIT CANADA LIMITED	342	UNRATED	UNRATED
24-Jun-09	FORD CREDIT CANADA LIMITED	136	AAA	UNRATED
24-Jun-09	FORD CREDIT CANADA LIMITED	118	AAA	AAA
25-Jun-09	PROVINCE OF ONTARIO	1,000	AA	AA
25-Jun-09	FORTIS INC	200	BBB	A
25-Jun-09	SUN LIFE FIN CORP	300	AA	A
25-Jun-09	CITY OF OTTAWA	8	UNRATED	AA
25-Jun-09	CITY OF OTTAWA	9	UNRATED	AA
25-Jun-09	CITY OF OTTAWA	9	UNRATED	AA
25-Jun-09	CITY OF OTTAWA	9	UNRATED	AA
25-Jun-09	CITY OF OTTAWA	10	UNRATED	AA
25-Jun-09	CITY OF OTTAWA	10	UNRATED	AA
25-Jun-09	CITY OF OTTAWA	11	UNRATED	AA
25-Jun-09	CITY OF OTTAWA	11	UNRATED	AA
25-Jun-09	CITY OF OTTAWA	11	UNRATED	AA
25-Jun-09	CITY OF OTTAWA	12	UNRATED	AA
25-Jun-09	THE BANK OF NOVA SCOTIA	100	AA	AA
25-Jun-09	SASKATCHEWAN WHEAT POOL	300	BBB	BB
26-Jun-09	SNC-LAVALIN GROUP INC.	350	BBB	BBB
26-Jun-09	YELLOW MEDIA INC.	90	BBB	BBB
30-Jun-09	PROV OF MANITOBA	--	UNRATED	UNRATED
06-Jul-09	MANULIFE FINANCIAL CAPIT	1,000	A	AA
07-Jul-09	PROVINCE OF ONTARIO	600	AA	AA
07-Jul-09	YELLOW MEDIA INC.	130	BBB	BBB
07-Jul-09	YELLOW MEDIA INC.	35	BBB	BBB
10-Jul-09	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA

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13-Jul-09	HYDRO ONE INC.	300	A	A
13-Jul-09	THE BANK OF NOVA SCOTIA	1,000	AA	AA
21-Jul-09	POWELL RIVER ENERGY INC	95	A	UNRATED
22-Jul-09	NOVA SCOTIA PW.,INC.	200	A	BBB
22-Jul-09	JOHN DEERE CREDIT INC.	300	A	A
22-Jul-09	PROV OF MANITOBA	10	A	AA
27-Jul-09	PROVINCE OF ONTARIO	600	AA	AA
29-Jul-09	PROVINCE DE QUEBEC	500	A	A
29-Jul-09	COMMONWEALTH BANK OF AUSTRALI	155	UNRATED	AAA
04-Aug-09	OSIFA	--	UNRATED	UNRATED
05-Aug-09	PROVINCE OF ONTARIO	600	AA	AA
05-Aug-09	FINANCEMENT QUEBEC	35	A	A
11-Aug-09	FINANCEMENT QUEBEC	30	A	A
11-Aug-09	PLENARY HEALTH NORTH BAY	252	A	A
13-Aug-09	FAIRFAX FIN HOLDINGS LTD	400	BBB	BBB
19-Aug-09	CANADA HOUSING TRUST	2,400	AAA	AAA
19-Aug-09	CANADA HOUSING TRUST	750	AAA	AAA
19-Aug-09	MARITIMES AND NORTHEAST PIPEL	180	A	A
19-Aug-09	SOCIETE GENERALE	1,952	UNRATED	A
19-Aug-09	TQM INC	75	A	BBB
20-Aug-09	BAYTEX ENERGY LTD	150	UNRATED	B
26-Aug-09	INTACT FINANCIAL CORP(FKA ING	250	A	UNRATED
26-Aug-09	PROVINCE OF ONTARIO	750	AA	AA
26-Aug-09	PROVINCE OF ONTARIO	150	AA	AA
26-Aug-09	CAMECO CORP	500	A	BBB
27-Aug-09	PROV OF MANITOBA	250	A	AA
27-Aug-09	AEROPLAN CDA	150	BBB	BBB
27-Aug-09	ALBERTA CAP FIN AUTH.	550	AAA	AAA
28-Aug-09	ENBRIDGE INC	400	A	A
28-Aug-09	ENBRIDGE INC	200	A	A
31-Aug-09	PROVINCE DE QUEBEC	500	A	A
02-Sep-09	GE CAPITAL CANADA FUNDING COM	700	UNRATED	AA
08-Sep-09	TD CAPITAL TRUST	750	A	A
09-Sep-09	CANADIAN IMPERIAL BANK OF COM	1,000	AA	A
10-Sep-09	CCDCAISSE CENTRALE DESJARDINS	250	AA	AA
10-Sep-09	CCDCAISSE CENTRALE DESJARDINS	250	AA	AA
10-Sep-09	CITIGROUP FINANCE CANADA INC	350	A	A
11-Sep-09	HSBC BANK CANADA	200	AA	AA
14-Sep-09	HYDRO-QUEBEC	760	A	A
15-Sep-09	PROV OF PEI	100	A	A
16-Sep-09	CANADA HOUSING TRUST	7,000	AAA	AAA
17-Sep-09	PROVINCE DE QUEBEC	500	A	A
17-Sep-09	FINANCEMENT QUEBEC	250	A	A
21-Sep-09	CITY OF TOR	400	AA	AA
21-Sep-09	CROWN IN THE RIGHT OF ALBERTA	600	AAA	AAA
22-Sep-09	PROVINCE OF NEW BRUNSWICK	300	A	AA
23-Sep-09	CITY OF MONTREAL	60	UNRATED	A
24-Sep-09	THE CITY OF WINNIPEG	5	UNRATED	AAA

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24-Sep-09	THE CITY OF WINNIPEG	5	UNRATED	AAA
24-Sep-09	THE CITY OF WINNIPEG	5	UNRATED	AAA
24-Sep-09	THE CITY OF WINNIPEG	5	UNRATED	AAA
24-Sep-09	THE CITY OF WINNIPEG	5	UNRATED	AA
24-Sep-09	THE CITY OF WINNIPEG	5	UNRATED	AA
24-Sep-09	THE CITY OF WINNIPEG	5	UNRATED	AA
24-Sep-09	THE CITY OF WINNIPEG	5	UNRATED	AA
24-Sep-09	THE CITY OF WINNIPEG	5	UNRATED	AA
24-Sep-09	THE CITY OF WINNIPEG	5	UNRATED	AA
25-Sep-09	PROVINCE DE QUEBEC	500	A	A
28-Sep-09	SHAW COMMUNICATIONS INC	1,250	BBB	BBB
29-Sep-09	PROVINCE OF ONTARIO	750	AA	AA
29-Sep-09	PROVINCE OF ONTARIO	250	AA	AA
29-Sep-09	CANADIAN IMPERIAL BANK OF COM	125	AA	A
29-Sep-09	CANADIAN IMPERIAL BANK OF COM	200	AA	A
30-Sep-09	AMEX EXPRESS CANADA CREDIT CO	800	A	BBB
30-Sep-09	AMEX EXPRESS CANADA CREDIT CO	150	A	BBB
02-Oct-09	GTAA	300	A	A
02-Oct-09	COMMONWEALTH BANK OF AUSTRALI	300	UNRATED	UNRATED
05-Oct-09	MUNICIPAL FINANCE AUTHOR	290	UNRATED	AAA
05-Oct-09	CENTRAL 1 CREDIT UNION	150	A	A
06-Oct-09	PROVINCE OF ONTARIO	750	AA	AA
06-Oct-09	PROVINCE OF ONTARIO	150	AA	AA
07-Oct-09	CROWN IN THE RIGHT OF ALBERTA	500	AAA	AAA
07-Oct-09	REGION OF YORK	200	UNRATED	AAA
13-Oct-09	MANULIFE BK OF CANADA	100	UNRATED	UNRATED
14-Oct-09	OSIFA	--	UNRATED	UNRATED
15-Oct-09	EMERA INC.	250	BBB	BBB
16-Oct-09	SUPERIOR PLUS INC	150	BB	BB
19-Oct-09	PROV OF MANITOBA	200	A	AA
19-Oct-09	CHIP MORTGAGE TRUST	150	AAA	UNRATED
20-Oct-09	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
27-Oct-09	WELLS FARGO FINANCIAL CORPORA	1,000	AA	AA
27-Oct-09	FORTISAB INC	125	A	A
28-Oct-09	RIOCAN REAL ESTATE INVES	150	BBB	BBB
28-Oct-09	ROGERS COMMUNICATIONS PARTNER	500	UNRATED	BBB
28-Oct-09	ROGERS COMMUNICATIONS PARTNER	500	UNRATED	BBB
29-Oct-09	ROYAL BANK OF CANADA	750	AAA	AAA
04-Nov-09	SHAW COMMUNICATIONS INC	650	BBB	BBB
05-Nov-09	ENBRIDGE PIPELINES INC	300	A	A
05-Nov-09	ENBRIDGE PIPELINES INC	200	A	A
06-Nov-09	HYDRO-QUEBEC	500	A	A
06-Nov-09	TOR. HYDRO CORP.	250	A	A
09-Nov-09	CITIGROUP FINANCE CANADA INC	400	A	A
09-Nov-09	GREAT-WEST LIFECO INC.	200	AA	A
12-Nov-09	PROVINCE DE QUEBEC	500	A	A
12-Nov-09	CANADIAN PACIFIC RAILWAY COMP	400	BBB	BBB
12-Nov-09	TRANSALTA CORPORATION	400	BBB	BBB

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13-Nov-09	FIRST CAPITAL REALTY	125	BBB	UNRATED
13-Nov-09	THE BANK OF NOVA SCOTIA	1,500	AA	AA
16-Nov-09	PROVINCE OF ONTARIO	750	AA	AA
16-Nov-09	HYDRO ONE INC.	250	A	A
16-Nov-09	CANADIAN IMPERIAL BANK OF COM	1,000	AA	A
17-Nov-09	PROVINCE OF ONTARIO	200	AA	AA
17-Nov-09	SUN LIFE CAPITAL TRUST	500	A	A
17-Nov-09	WINNIPEG AIRPORT AUTHORITY	125	UNRATED	A
17-Nov-09	WINNIPEG AIRPORT AUTHORITY	175	UNRATED	A
18-Nov-09	CANADA HOUSING TRUST	1,475	AAA	AAA
18-Nov-09	CANADA HOUSING TRUST	1,500	AAA	AAA
18-Nov-09	PROVINCE OF NOVA SCOTIA	500	A	A
18-Nov-09	INTACT FINANCIAL CORP(FKA ING	150	A	UNRATED
18-Nov-09	YELLOW MEDIA INC.	300	BBB	BBB
18-Nov-09	CASCADES INC.	200	UNRATED	B
19-Nov-09	PROVINCE OF BRITISH COLUMBIA	500	AA	AA
19-Nov-09	EPCOR UTILITIES INC.	200	A	BBB
19-Nov-09	WESTPAC BANKING CORPORATION	400	UNRATED	AA
23-Nov-09	FIRST PLACE	310	UNRATED	UNRATED
25-Nov-09	BROOKFIELD POWER CORP (FKA BR	300	BBB	BBB
25-Nov-09	EMERA INC.	225	BBB	BBB
25-Nov-09	PROVINCE OF ONTARIO	2,770	UNRATED	AA
25-Nov-09	CNH CAPITAL CANADA WHOLESATE	300	AAA	UNRATED
25-Nov-09	CNH CAPITAL CANADA WHOLESATE	25	A	UNRATED
25-Nov-09	CNH CAPITAL CDA TRUST	300	UNRATED	UNRATED
26-Nov-09	PROVINCE OF NOVA SCOTIA	250	A	A
30-Nov-09	PROVINCE DE QUEBEC	500	A	A
01-Dec-09	TELUS CORPORATION	1,000	A	BBB
01-Dec-09	CCDCAISSE CENTRALE DESJARDINS	500	AA	AA
01-Dec-09	FINANCEMENT QUEBEC	300	A	A
01-Dec-09	ALBERTA CAP FIN AUTH.	600	UNRATED	UNRATED
02-Dec-09	PROVINCE OF ONTARIO	600	AA	AA
02-Dec-09	PROVINCE OF ONTARIO	250	AA	AA
02-Dec-09	PROV OF MANITOBA	84	A	AA
07-Dec-09	PROVINCE OF NOVA SCOTIA	400	A	A
07-Dec-09	HYDRO-QUEBEC	500	A	A
07-Dec-09	PROVINCE OF ONTARIO	25	AA	AA
08-Dec-09	KREDITANSTALT FUR WIEDERAUFBA	350	UNRATED	AAA
09-Dec-09	CROWN IN THE RIGHT OF ALBERTA	250	AAA	AAA
09-Dec-09	CROWN IN THE RIGHT OF ALBERTA	350	AAA	AAA
09-Dec-09	PROVINCE DE QUEBEC	30	A	A
09-Dec-09	MTS INC	200	BBB	BBB
09-Dec-09	HOSPITAL FOR SICK CHILDREN (T	200	UNRATED	AA
10-Dec-09	ALLIANCE PIPE LIMITED PART	120	BBB	UNRATED
10-Dec-09	ALTALINK, L.P.	150	BBB	BBB
11-Dec-09	CANADA HOUSING TRUST	6,500	AAA	AAA
11-Dec-09	CI FINANCIAL CORP	250	A	BBB
11-Dec-09	CI FINANCIAL CORP	200	A	BBB

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11-Dec-09	CI FINANCIAL CORP	100	A	BBB
14-Dec-09	FINANCEMENT QUEBEC	282	A	A
16-Dec-09	PROVINCE OF ONTARIO	600	AA	AA
16-Dec-09	PROVINCE OF ONTARIO	250	AA	AA
17-Dec-09	CBC	136	AAA	UNRATED
17-Dec-09	CHS CAMH PARTNERSHIP	86	UNRATED	A
18-Dec-09	CDN WHEAT BOARD	34	UNRATED	UNRATED
18-Dec-09	GREAT-WEST LIFE CO INC.	144	AA	A
06-Jan-10	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
07-Jan-10	VIDEOTRON LTD	300	BB	BB
08-Jan-10	PROVINCE OF ONTARIO	200	AA	A
08-Jan-10	PROVINCE OF ONTARIO	700	AA	AA
08-Jan-10	METRO LIFE GLB FDG	300	UNRATED	AA
11-Jan-10	PROV OF MANITOBA	25	A	AA
12-Jan-10	CDP FIN INC.	1,000	AAA	AAA
12-Jan-10	CDP FIN INC.	1,000	AAA	AAA
12-Jan-10	CANADIAN CAPITAL AUTO RE	1,263	AAA	UNRATED
13-Jan-10	PROVINCE DE QUEBEC	500	A	A
13-Jan-10	INTER PIPELINE (CORRIDOR) INC	150	A	A
13-Jan-10	PROV OF MANITOBA	618	UNRATED	AA
13-Jan-10	AUSTRALIA AND NEW ZEALAND BAN	250	UNRATED	UNRATED
13-Jan-10	OSIFA	--	UNRATED	UNRATED
14-Jan-10	THE BANK OF NOVA SCOTIA	100	AA	AA
14-Jan-10	FIRST CAPITAL REALTY	125	BBB	UNRATED
15-Jan-10	PROVINCE OF ONTARIO	750	AA	AA
15-Jan-10	FORD CREDIT CANADA LIMITED	272	AAA	AAA
15-Jan-10	FORD CREDIT CANADA LIMITED	124	AAA	AAA
15-Jan-10	FORD CREDIT CANADA LIMITED	121	AAA	AAA
19-Jan-10	CITY OF MONTREAL	350	UNRATED	A
19-Jan-10	HYDRO ONE INC.	500	A	A
20-Jan-10	PROVINCE DE QUEBEC	500	A	A
20-Jan-10	CROWN IN THE RIGHT OF ALBERTA	500	AAA	AAA
20-Jan-10	CROWN IN THE RIGHT OF ALBERTA	100	AAA	AAA
20-Jan-10	ROYAL BANK OF CANADA	1,750	AA	AA
21-Jan-10	AEROPLAN CDA	200	BBB	BBB
25-Jan-10	JOHN DEERE CREDIT INC.	150	A	A
25-Jan-10	BANK OF MONTREAL	1,000	AA	AA
25-Jan-10	PROVINCE OF ONTARIO	100	AA	AA
26-Jan-10	BCIMC REALTY CORP	200	AA	UNRATED
27-Jan-10	H AND R REIT	115	BBB	UNRATED
27-Jan-10	H AND R REIT	115	BBB	UNRATED
27-Jan-10	RABOBANK NEDERLAND	300	AAA	AAA
27-Jan-10	CANADIAN IMPERIAL BANK OF COM	2,132	AAA	AAA
29-Jan-10	PROVINCE OF ONTARIO	3,196	AA	AA
29-Jan-10	ALBERTA CAP FIN AUTH.	625	AAA	AAA
31-Jan-10	POWERSTREAM INC.	--	UNRATED	UNRATED
02-Feb-10	PROVINCE DE QUEBEC	298	A	A
03-Feb-10	COMMONWEALTH BANK OF AUSTRALI	250	AA	AA

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04-Feb-10	CORUS ENTERTAINMENT INC	500	BBB	BB
04-Feb-10	MANULIFE BK OF CANADA	120	UNRATED	UNRATED
08-Feb-10	NATIONAL BANK OF CANADA	500	AA	A
11-Feb-10	PROV OF MANITOBA	300	A	AA
11-Feb-10	CCDCAISSE CENTRALE DESJARDINS	175	AA	AA
11-Feb-10	CCDCAISSE CENTRALE DESJARDINS	125	AA	AA
11-Feb-10	CONSUMERS' WATERHEATER OP TR	240	A	A
12-Feb-10	CCDCAISSE CENTRALE DESJARDINS	100	AA	AA
17-Feb-10	CANADA HOUSING TRUST	580	AAA	AAA
17-Feb-10	CANADA HOUSING TRUST	2,250	AAA	AAA
17-Feb-10	TORONTO COMM. HOUSING CO	200	UNRATED	AA
17-Feb-10	PROV OF MANITOBA	50	A	AA
18-Feb-10	FINANCEMENT QUEBEC	500	A	A
18-Feb-10	PROVINCE OF ONTARIO	750	AA	AA
18-Feb-10	PROV OF MANITOBA	50	A	AA
19-Feb-10	PROVINCE OF NOVA SCOTIA	250	A	A
23-Feb-10	PROVINCE OF NEW BRUNSWICK	300	A	AA
24-Feb-10	FINANCEMENT QUEBEC	184	A	A
24-Feb-10	PROV OF MANITOBA	20	A	AA
25-Feb-10	HYDRO-QUEBEC	500	A	A
25-Feb-10	FINANCEMENT QUEBEC	55	A	A
25-Feb-10	CANADIAN IMPERIAL BANK OF COM	1,500	AA	A
26-Feb-10	CANADIAN CAPITAL AUTO RE	256	AAA	UNRATED
26-Feb-10	CANADIAN CAPITAL AUTO RE	298	AAA	UNRATED
26-Feb-10	CANADIAN CAPITAL AUTO RE	124	AAA	UNRATED
28-Feb-10	POWERSTREAM INC.	--	UNRATED	UNRATED
02-Mar-10	BROOKFIELD ASSET MGMT	300	A	A
03-Mar-10	ENBRIDGE INC	500	A	A
03-Mar-10	CITIGROUP FINANCE CANADA INC	250	A	A
04-Mar-10	PROVINCE OF ONTARIO	750	AA	AA
04-Mar-10	PROVINCE OF ONTARIO	250	AA	AA
04-Mar-10	NATIONAL BANK OF CANADA	225	AA	A
04-Mar-10	NATIONAL BANK OF CANADA	775	AA	A
05-Mar-10	CO-OPERATORS FINANCIAL SERVIC	150	BBB	BBB
08-Mar-10	FINANCEMENT QUEBEC	253	A	A
08-Mar-10	ROYAL BANK OF CANADA	850	AAA	AAA
09-Mar-10	HUSKY ENERGY INC	300	A	BBB
09-Mar-10	HUSKY ENERGY INC	400	A	BBB
09-Mar-10	GARDA SECURITY GROUP INC.THE	75	UNRATED	B
09-Mar-10	OSIFA	--	UNRATED	UNRATED
10-Mar-10	PROVINCE OF ONTARIO	600	AA	AA
10-Mar-10	PROV OF MANITOBA	250	A	A
10-Mar-10	MANULIFE BK OF CANADA	100	AA	AA
10-Mar-10	HYDRO ONE INC.	300	A	A
10-Mar-10	HYDRO ONE INC.	200	A	A
15-Mar-10	CITY OF VANCOUVER	125	AA	AA
17-Mar-10	PROV OF PEI	100	A	A
17-Mar-10	INTACT FINANCIAL CORP(FKA ING	100	A	UNRATED

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18-Mar-10	CANADA HOUSING TRUST	6,000	AAA	AAA
22-Mar-10	ALTAGAS LIMITED	200	BBB	BBB
22-Mar-10	THE BANK OF NOVA SCOTIA	1,000	AA	AA
22-Mar-10	ALTALINK, L.P.	125	A	A
24-Mar-10	BMW CANADA INC.	750	UNRATED	A
24-Mar-10	HSBC BANK CANADA	250	AA	AA
24-Mar-10	CAISSE DES DEPOTS ET CONSIGNA	50	UNRATED	AAA
25-Mar-10	THE CITY OF WINNIPEG	60	UNRATED	AA
25-Mar-10	TOR. HYDRO CORP.	245	A	A
25-Mar-10	TOR. HYDRO CORP.	245	A	A
25-Mar-10	CANADIAN SWIFT MASTER AUTO RE	1,700	AAA	UNRATED
26-Mar-10	NORTH AMERICAN ENERGY PARTNER	225	UNRATED	B
29-Mar-10	PROVINCE OF NEW BRUNSWICK	300	A	AA
31-Mar-10	MUNICIPAL FINANCE AUTHOR	205	UNRATED	AAA
31-Mar-10	ENBRIDGE PIPELINES INC	350	A	A
31-Mar-10	ENBRIDGE PIPELINES INC	300	A	A
31-Mar-10	CANADIAN IMPERIAL BANK OF COM	110	AA	A
31-Mar-10	VANCOUVER CITY SAVINGS CREDIT	50	UNRATED	UNRATED
01-Apr-10	COMMONWEALTH BANK OF AUSTRALI	100	AA	AA
01-Apr-10	COMMONWEALTH BANK OF AUSTRALI	400	AA	AA
01-Apr-10	ALBERTA CAP FIN AUTH.	200	AAA	AAA
01-Apr-10	RTL - WESTCAN LP	130	BB	B
06-Apr-10	PROVINCE DE QUEBEC	500	A	A
06-Apr-10	FIRST CAPITAL REALTY	75	BBB	UNRATED
06-Apr-10	KIMCO NORTH TRUST III	150	UNRATED	BBB
06-Apr-10	AEROPORT DE MONTREAL	150	A	UNRATED
07-Apr-10	NATIONAL BANK OF CANADA	150	AA	A
07-Apr-10	NIF-T	300	AAA	UNRATED
07-Apr-10	CITY OF OTTAWA	3	UNRATED	AA
07-Apr-10	CITY OF OTTAWA	5	UNRATED	AA
07-Apr-10	CITY OF OTTAWA	4	UNRATED	AA
07-Apr-10	CITY OF OTTAWA	4	UNRATED	AA
07-Apr-10	CITY OF OTTAWA	4	UNRATED	AA
07-Apr-10	CITY OF OTTAWA	4	UNRATED	AA
07-Apr-10	CITY OF OTTAWA	5	UNRATED	AA
07-Apr-10	CITY OF OTTAWA	5	UNRATED	AA
07-Apr-10	CITY OF OTTAWA	5	UNRATED	AA
07-Apr-10	CITY OF OTTAWA	5	UNRATED	AA
07-Apr-10	CITY OF OTTAWA	37	UNRATED	AA
07-Apr-10	ROYAL BANK OF CANADA	1,506	AAA	AAA
08-Apr-10	PROVINCE OF BRITISH COLUMBIA	600	AA	AAA
13-Apr-10	PROVINCE DE QUEBEC	500	A	A
13-Apr-10	THE BANK OF NOVA SCOTIA	250	AA	AA
14-Apr-10	THE BANK OF NOVA SCOTIA	140	AA	AA
14-Apr-10	VANCOUVER FRASER PORT AUTHORI	100	UNRATED	AA
15-Apr-10	PROVINCE OF NEW BRUNSWICK	400	A	AA
15-Apr-10	CENTRAL 1 CREDIT UNION	225	A	A
16-Apr-10	THE BANK OF NOVA SCOTIA	1,000	AA	AA

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19-Apr-10	PROVINCE OF ONTARIO	750	AA	AA
20-Apr-10	PROVINCE OF BRITISH COLUMBIA	1,497	AA	AAA
21-Apr-10	CITY OF TOR	400	AA	AA
21-Apr-10	BANK OF MONTREAL	1,250	AA	A
22-Apr-10	PROVINCE OF NEW BRUNSWICK	300	A	AA
22-Apr-10	GREEN TIMBERS LP	182	UNRATED	A
23-Apr-10	MAPLE LEAF FOODS INC.	75	UNRATED	UNRATED
26-Apr-10	PROVINCE DE QUEBEC	500	A	A
26-Apr-10	PROVINCE OF ONTARIO	600	AA	AA
26-Apr-10	NAV CANADA	250	AA	AA
27-Apr-10	CANADIAN IMPERIAL BANK OF COM	1,100	AA	A
28-Apr-10	PROV OF MANITOBA	250	A	AA
28-Apr-10	NATIONAL BANK OF CANADA	900	AA	A
29-Apr-10	PROVINCE OF ONTARIO	600	AA	AA
29-Apr-10	FINANCEMENT QUEBEC	246	A	A
30-Apr-10	CAPITAL DESJARDINS INC.	900	AA	A
30-Apr-10	PROVINCE OF ONTARIO	--	UNRATED	UNRATED
30-Apr-10	PROVINCE DE QUEBEC	--	UNRATED	UNRATED
04-May-10	FIRST NATIONAL FINANCIAL INCO	175	BBB	UNRATED
10-May-10	FORD CREDIT CANADA LIMITED	100	AAA	UNRATED
10-May-10	FORD CREDIT CANADA LIMITED	200	AAA	UNRATED
11-May-10	PROVINCE OF ONTARIO	600	AA	AA
11-May-10	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
12-May-10	PROVINCE DE QUEBEC	500	A	A
12-May-10	PROV OF MANITOBA	50	A	AA
12-May-10	WOODBIDGE FIN CORP	325	AAA	UNRATED
12-May-10	GOLD CR CARD TR	900	AAA	UNRATED
13-May-10	PROVINCE OF ONTARIO	750	AA	AA
13-May-10	PROVINCE OF NEW BRUNSWICK	500	A	AA
14-May-10	CARDS II TRUST	800	AAA	UNRATED
14-May-10	CARDS II TRUST	260	AAA	UNRATED
17-May-10	TOR. HYDRO CORP.	200	A	A
17-May-10	TORONTO DOMINION BANK	600	AA	AA
18-May-10	CANADA HOUSING TRUST	2,800	AAA	AAA
18-May-10	CANADA HOUSING TRUST	2,300	AAA	AAA
18-May-10	HSBC BANK CANADA	500	AA	AA
19-May-10	ACCES RECHERCHE MONTREAL	60	A	UNRATED
19-May-10	ACCES RECHERCHE MONTREAL	334	A	UNRATED
27-May-10	PROVINCE OF ONTARIO	600	AA	AA
27-May-10	PROVINCE DE QUEBEC	500	A	A
27-May-10	TIM HORTONS USA INC	200	A	UNRATED
31-May-10	POWERSTREAM INC.	--	UNRATED	UNRATED
01-Jun-10	PROVINCE OF ONTARIO	600	AA	AA
01-Jun-10	CALLOWAY REIT	100	BBB	UNRATED
02-Jun-10	SOBEYS INC.	150	BBB	BBB
02-Jun-10	GTAA	400	A	A
02-Jun-10	FIRST CAPITAL REALTY	50	BBB	UNRATED
02-Jun-10	BANK OF MONTREAL	2,080	AAA	AAA

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03-Jun-10	PROVINCE DE QUEBEC	500	A	A
03-Jun-10	CCDCAISSE CENTRALE DESJARDINS	500	AA	AA
03-Jun-10	GE CAPITAL CANADA FUNDING COM	500	UNRATED	AA
03-Jun-10	THE BANK OF NOVA SCOTIA	1,250	AA	AA
07-Jun-10	ALBERTA CAP FIN AUTH.	600	AAA	AAA
08-Jun-10	BANK OF MONTREAL	500	AA	A
08-Jun-10	THE REGIONAL MUNICIPALITY OF	2	UNRATED	AAA
08-Jun-10	THE REGIONAL MUNICIPALITY OF	2	UNRATED	AAA
08-Jun-10	THE REGIONAL MUNICIPALITY OF	2	UNRATED	AAA
08-Jun-10	THE REGIONAL MUNICIPALITY OF	2	UNRATED	AAA
08-Jun-10	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
08-Jun-10	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
08-Jun-10	THE REGIONAL MUNICIPALITY OF	3	UNRATED	AAA
08-Jun-10	THE REGIONAL MUNICIPALITY OF	2	UNRATED	AAA
08-Jun-10	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
08-Jun-10	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
08-Jun-10	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
08-Jun-10	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
08-Jun-10	THE REGIONAL MUNICIPALITY OF	6	UNRATED	AAA
09-Jun-10	PROVINCE DE QUEBEC	500	A	A
09-Jun-10	ROYAL BANK OF CANADA	1,500	AA	A
09-Jun-10	PROVINCE OF ONTARIO	2,611	AA	AA
10-Jun-10	PROVINCE OF ONTARIO	600	AA	AA
10-Jun-10	NOVA SCOTIA PW.,INC.	300	A	BBB
11-Jun-10	PROVINCE OF NOVA SCOTIA	400	A	A
11-Jun-10	407 INTERNATIONAL INC.	500	A	A
11-Jun-10	407 INTERNATIONAL INC.	300	A	A
15-Jun-10	FINANCEMENT QUEBEC	500	A	A
15-Jun-10	CANADA HOUSING TRUST	5,500	AAA	AAA
15-Jun-10	LOBLAW COMPANIES LIMITED	350	BBB	BBB
16-Jun-10	REGIONAL MUNICIPALITY OF PEEL	300	UNRATED	AAA
16-Jun-10	JOHN DEERE CREDIT INC.	150	A	A
16-Jun-10	CHIP MORTGAGE TRUST	125	AAA	UNRATED
16-Jun-10	GOV'T OF YUKON	100	UNRATED	AA
17-Jun-10	REGION OF YORK	200	UNRATED	AAA
17-Jun-10	ENBRIDGE INCOME FUND	100	BBB	UNRATED
17-Jun-10	FAIRFAX FIN HOLDINGS LTD	275	BBB	BBB
17-Jun-10	CSS (FSCC) PARTNERSHIP	190	A	A
18-Jun-10	GENWORTH	275	AA	A
18-Jun-10	CANADIAN IMPERIAL BANK OF COM	150	AA	A
21-Jun-10	BANK OF MONTREAL	1,023	AA	A
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	1	UNRATED	AAA
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	0	UNRATED	AAA
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	1	UNRATED	AAA
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	1	UNRATED	AAA
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	1	UNRATED	AAA
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	0	UNRATED	AAA

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21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	1	UNRATED	AAA
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	0	UNRATED	AAA
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	1	UNRATED	AAA
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	0	UNRATED	AAA
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	1	UNRATED	AAA
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	0	UNRATED	AAA
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	1	UNRATED	AAA
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	0	UNRATED	AAA
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	1	UNRATED	AAA
21-Jun-10	REGIONAL MUNICIPALITY OF PEEL	0	UNRATED	AAA
24-Jun-10	MANULIFE BK OF CANADA	60	AA	AA
25-Jun-10	CANADIAN IMPERIAL BANK OF COM	1,295	AAA	AAA
28-Jun-10	WESTCOAST ENERGY INC	250	A	BBB
29-Jun-10	CANADIAN CREDIT CARD TR	550	AAA	AAA
30-Jun-10	LAURENTIAN BANK OF CANADA	100	BBB	BBB
30-Jun-10	PROVINCE OF ONTARIO	--	UNRATED	UNRATED
30-Jun-10	PROVINCE OF ONTARIO	--	UNRATED	UNRATED
30-Jun-10	PROVINCE OF ONTARIO	--	UNRATED	UNRATED
30-Jun-10	PROVINCE OF ONTARIO	--	UNRATED	UNRATED
30-Jun-10	PROVINCE OF ONTARIO	--	UNRATED	UNRATED
30-Jun-10	PROV OF MANITOBA	--	UNRATED	UNRATED
02-Jul-10	NEDERLANDSE WATERSCHAPSBANK	200	UNRATED	AAA
07-Jul-10	FIRST CAPITAL REALTY	50	BBB	UNRATED
07-Jul-10	CANADA POST	500	AAA	AAA
07-Jul-10	CANADA POST	500	AAA	AAA
08-Jul-10	PROVINCE OF ONTARIO	750	AA	AA
08-Jul-10	SNC LAVALIN	764	A	A
08-Jul-10	TORONTO DOMINION BANK	800	AA	AA
08-Jul-10	BANK NEDERLANDSE GEMEENTEN	200	UNRATED	AAA
09-Jul-10	NATIONAL AUSTRALIA BANK LTD	400	AA	AA
09-Jul-10	MCGILL UNIVERSITY HEALTH CENT	266	A	UNRATED
09-Jul-10	HSBC BANK PLC	1,958	UNRATED	AA
12-Jul-10	CANADIAN IMPERIAL BANK OF COM	1,000	AA	A
13-Jul-10	PROVINCE DE QUEBEC	500	A	A
13-Jul-10	ROYAL BANK OF CANADA	500	AA	AA
13-Jul-10	PROVINCE OF NOVA SCOTIA	774	A	A
14-Jul-10	PROVINCE OF ONTARIO	600	AA	AA
15-Jul-10	THE BANK OF NOVA SCOTIA	2,595	UNRATED	UNRATED
19-Jul-10	SOCIETE DE TRANSPORT DE MONTR	200	UNRATED	A
20-Jul-10	PROVINCE OF ONTARIO	750	AA	AA
20-Jul-10	UNION GAS LIMITED	250	A	BBB
20-Jul-10	TELUS CORPORATION	1,000	A	BBB
20-Jul-10	PROV OF MANITOBA	100	A	AA
20-Jul-10	MELFORD INTER. TERM	--	UNRATED	UNRATED
21-Jul-10	PROV OF SASKATCHEWAN	300	AA	AA
21-Jul-10	TQM INC	100	A	BBB
21-Jul-10	TORONTO DOMINION BANK	103	UNRATED	UNRATED
21-Jul-10	TORONTO DOMINION BANK	575	UNRATED	UNRATED

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22-Jul-10	PROVINCE DE QUEBEC	1,555	UNRATED	A
22-Jul-10	TORONTO DOMINION BANK	2,074	AAA	UNRATED
27-Jul-10	PROVINCE DE QUEBEC	500	A	A
27-Jul-10	AIR CANADA	300	UNRATED	B
27-Jul-10	PROV OF MANITOBA	350	A	AA
27-Jul-10	CITY OF OTTAWA	61	UNRATED	AA
28-Jul-10	PROVINCE OF ONTARIO	750	AA	AA
28-Jul-10	CITY OF OTTAWA	5	UNRATED	AA
28-Jul-10	CITY OF OTTAWA	5	UNRATED	AA
28-Jul-10	CITY OF OTTAWA	6	UNRATED	AA
28-Jul-10	CITY OF OTTAWA	6	UNRATED	AA
28-Jul-10	CITY OF OTTAWA	6	UNRATED	AA
28-Jul-10	CITY OF OTTAWA	6	UNRATED	AA
28-Jul-10	CITY OF OTTAWA	7	UNRATED	AA
28-Jul-10	CITY OF OTTAWA	7	UNRATED	AA
28-Jul-10	CITY OF OTTAWA	7	UNRATED	AA
28-Jul-10	CITY OF OTTAWA	8	UNRATED	A
31-Jul-10	ALBERTA CAP FIN AUTH.	--	UNRATED	UNRATED
03-Aug-10	HSBC BANK CANADA	100	AA	UNRATED
09-Aug-10	GREAT-WEST LIFE CO INC.	500	AA	A
10-Aug-10	NATIONAL BANK OF CANADA	225	AA	A
11-Aug-10	ROGERS COMMUNICATIONS PARTNER	800	UNRATED	BBB
11-Aug-10	FORD CREDIT CANADA LIMITED	550	BB	B
12-Aug-10	CITY OF TOR	200	AA	AA
17-Aug-10	MANULIFE FINANCIAL CORPORATIO	900	A	A
17-Aug-10	CITIGROUP FINANCE CANADA INC	25	UNRATED	UNRATED
17-Aug-10	CARDS II TRUST	600	AAA	UNRATED
18-Aug-10	CANADA HOUSING TRUST	2,250	AAA	AAA
18-Aug-10	CANADA HOUSING TRUST	1,300	AAA	AAA
18-Aug-10	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
18-Aug-10	FIRST CAPITAL REALTY	50	BBB	UNRATED
18-Aug-10	CANADIAN IMPERIAL BANK OF COM	250	AA	A
19-Aug-10	PROVINCE OF NEW BRUNSWICK	300	A	AA
19-Aug-10	PROVINCE DE QUEBEC	500	A	A
19-Aug-10	MERRILL LYNCH CANADA INC.	50	UNRATED	A
23-Aug-10	HYDRO-QUEBEC	500	A	A
23-Aug-10	FINANCEMENT QUEBEC	500	A	A
25-Aug-10	PROV OF PEI	100	A	A
25-Aug-10	PROVINCE OF ONTARIO	750	AA	AA
31-Aug-10	PROV OF SASKATCHEWAN	200	AA	AA
31-Aug-10	PROVINCE OF ONTARIO	600	AA	AA
01-Sep-10	ENBRIDGE PIPELINES INC	250	A	A
02-Sep-10	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
07-Sep-10	BANK OF MONTREAL	900	AA	A
07-Sep-10	BANK OF MONTREAL	350	AA	A
07-Sep-10	H AND R REIT	125	BBB	UNRATED
08-Sep-10	PROVINCE DE QUEBEC	500	A	A
08-Sep-10	BELL ALIANT REGIONAL COMMUNIC	350	BBB	BBB

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08-Sep-10	HYDRO ONE INC.	250	A	A
08-Sep-10	HYDRO ONE INC.	250	A	A
09-Sep-10	PROVINCE OF ONTARIO	600	AA	AA
09-Sep-10	OSIFA	--	UNRATED	UNRATED
13-Sep-10	RIOCAN REAL ESTATE INVES	103	BBB	BBB
15-Sep-10	ARMTEC HOLDINGS LIMITED	150	BB	B
16-Sep-10	CANADA HOUSING TRUST	6,250	AAA	AAA
16-Sep-10	THOMSON REUTERS CORPORATION	750	A	A
17-Sep-10	PROVINCE OF ONTARIO	750	AA	AA
20-Sep-10	PROVINCE OF BRITISH COLUMBIA	600	AA	AAA
20-Sep-10	PROVINCE OF ONTARIO	280	AA	AA
21-Sep-10	PROVINCE DE QUEBEC	500	A	A
21-Sep-10	FORD CREDIT CANADA LIMITED	329	AAA	AAA
21-Sep-10	FORD CREDIT CANADA LIMITED	147	AAA	AAA
21-Sep-10	FORD CREDIT CANADA LIMITED	147	AAA	AAA
22-Sep-10	ROGERS COMMUNICATIONS PARTNER	900	UNRATED	BBB
23-Sep-10	ENBRIDGE INC	200	A	A
23-Sep-10	ENBRIDGE INC	100	A	A
23-Sep-10	CALLOWAY REIT	100	BBB	UNRATED
24-Sep-10	ALBERTA CAP FIN AUTH.	520	UNRATED	UNRATED
27-Sep-10	PROVINCE OF ONTARIO	750	AA	AA
27-Sep-10	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
28-Sep-10	CROWN IN THE RIGHT OF ALBERTA	150	AAA	AAA
28-Sep-10	PROVINCE DE QUEBEC	500	A	A
29-Sep-10	MUNICIPAL FINANCE AUTHOR	230	UNRATED	AAA
29-Sep-10	PROV OF MANITOBA	300	A	AA
29-Sep-10	LLOYDS TSB BANK PLC	350	AA	A
29-Sep-10	HSBC BANK CANADA	1,000	AA	AA
30-Sep-10	MOLSON COORS BREWING COMPANY	500	BBB	BBB
30-Sep-10	CCDCAISSE CENTRALE DESJARDINS	600	AA	AA
30-Sep-10	POWERSTREAM INC.	--	UNRATED	UNRATED
30-Sep-10	PROVINCE OF ONTARIO	130	AA	AA
05-Oct-10	PROVINCE DE QUEBEC	500	A	A
05-Oct-10	KFW BANKENGRUPPE-KFW GROUP	100	UNRATED	AAA
05-Oct-10	CANADIAN IMPERIAL BANK OF COM	250	AA	A
06-Oct-10	HSBC BANK CANADA	50	AA	UNRATED
06-Oct-10	WESTPAC BANKING CORPORATION	275	AA	AA
07-Oct-10	PROVINCE OF NOVA SCOTIA	300	A	A
07-Oct-10	PROVINCE OF ONTARIO	750	AA	AA
07-Oct-10	BROOKFIELD POWER CORP (FKA BR	450	BBB	BBB
14-Oct-10	HYDRO-QUEBEC	500	A	A
15-Oct-10	ROYAL BANK OF CANADA	600	AAA	AAA
18-Oct-10	PROVINCE OF ONTARIO	750	AA	AA
20-Oct-10	PROV OF MANITOBA	250	A	AA
20-Oct-10	PROVINCE DE QUEBEC	500	A	A
20-Oct-10	BROOKFIELD ASSET MGMT	350	A	A
20-Oct-10	CANADIAN IMPERIAL BANK OF COM	1,500	AA	A
20-Oct-10	FIRST CAPITAL REALTY	50	BBB	UNRATED

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20-Oct-10	ALBERTA CAP FIN AUTH.	500	AA	AAA
21-Oct-10	PROVINCE OF ONTARIO	1,000	AA	AA
22-Oct-10	FORTISAB INC	125	A	A
22-Oct-10	ROYAL BANK OF CANADA	1,500	AA	A
25-Oct-10	LAURENTIAN BANK OF CANADA	250	BBB	BBB
26-Oct-10	SOUTH COAST BRITISH COLUMBIA	300	AA	UNRATED
27-Oct-10	FINANCEMENT QUEBEC	100	A	A
27-Oct-10	THE GOLDMAN SACHS GROUP, INC.	500	A	A
27-Oct-10	TORONTO DOMINION BANK	1,000	AA	A
01-Nov-10	LIVINGSTON INTL INC	135	UNRATED	UNRATED
01-Nov-10	PROVINCE OF ONTARIO	100	AA	AA
02-Nov-10	FINANCEMENT QUEBEC	200	A	A
02-Nov-10	HALIFAX INTL AIRPORT AUTHORIT	135	UNRATED	A
03-Nov-10	FINANCEMENT QUEBEC	100	A	A
04-Nov-10	PROVINCE OF ONTARIO	600	AA	AA
04-Nov-10	PROVINCE OF ONTARIO	56	AA	AA
04-Nov-10	GATEWAY CASINOS AND ENTERTAIN	170	UNRATED	BB
05-Nov-10	MANULIFE BK OF CANADA	165	A	AA
08-Nov-10	ENBRIDGE INCOME FUND	100	BBB	UNRATED
08-Nov-10	VW CREDIT CANADA, INC.	550	UNRATED	A
09-Nov-10	ALTALINK, L.P.	150	A	A
09-Nov-10	CAPITAL POWER LP	300	BBB	BBB
10-Nov-10	COGECO CABLE	200	BBB	BBB
10-Nov-10	BANK OF MONTREAL	450	AA	A
15-Nov-10	CU INC.	125	A	A
16-Nov-10	PROVINCE DE QUEBEC	250	A	A
17-Nov-10	CANADA HOUSING TRUST	2,000	AAA	AAA
17-Nov-10	CANADA HOUSING TRUST	2,150	AAA	AAA
17-Nov-10	ENBRIDGE GAS DISTRIBUTION INC	200	A	A
17-Nov-10	ENBRIDGE GAS DISTRIBUTION INC	200	A	A
18-Nov-10	CAPITAL DESJARDINS INC.	700	AA	A
18-Nov-10	CNH CAPITAL CDA TRUST	169	AAA	UNRATED
18-Nov-10	CNH CAPITAL CDA TRUST	186	AAA	UNRATED
18-Nov-10	CNH CAPITAL CDA TRUST	9	A	UNRATED
19-Nov-10	PROVINCE DE QUEBEC	500	A	A
19-Nov-10	FORTISBC INC	100	A	UNRATED
22-Nov-10	AUSTRALIA AND NEW ZEALAND BAN	100	UNRATED	AA
23-Nov-10	407 INTERNATIONAL INC.	300	BBB	BBB
23-Nov-10	407 INTERNATIONAL INC.	400	A	A
23-Nov-10	GLACIER CREDIT CARD TR	250	AAA	AAA
23-Nov-10	GLACIER CREDIT CARD TR	15	A	A
23-Nov-10	ALTAGAS LIMITED	175	BBB	BBB
23-Nov-10	CANADIAN WESTERN BANK	300	BBB	UNRATED
24-Nov-10	PROVINCE DE QUEBEC	250	A	A
24-Nov-10	CARA OPERATIONS	200	B	BB
25-Nov-10	TIM HORTONS USA INC	100	A	UNRATED
29-Nov-10	PROVINCE OF BRITISH COLUMBIA	600	AA	AAA
29-Nov-10	WESTCOAST ENERGY INC	250	A	BBB

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29-Nov-10	BELL CANADA	1,000	A	BBB
30-Nov-10	PSP CAPITAL INC.	700	AAA	AAA
30-Nov-10	PARAMOUNT RESOURCES LTD	300	UNRATED	B
30-Nov-10	PLENARY HEALTH HAMILTON LP	115	A	A
30-Nov-10	PLENARY HEALTH HAMILTON LP	255	A	A
30-Nov-10	CATERPILLAR FIN SER LTD	200	A	A
30-Nov-10	OSIFA	--	UNRATED	UNRATED
01-Dec-10	FORTISBC ENERGY INC	100	BBB	UNRATED
02-Dec-10	SHAW COMMUNICATIONS INC	500	BBB	BBB
02-Dec-10	SHAW COMMUNICATIONS INC	400	BBB	BBB
06-Dec-10	PROVINCE OF NEW BRUNSWICK	300	A	AA
06-Dec-10	IGM FINANCIAL INC	200	A	A
07-Dec-10	PROVINCE OF ONTARIO	750	AA	AA
07-Dec-10	BANK OF MONTREAL	500	AA	A
07-Dec-10	BANK OF MONTREAL	1,500	AA	A
07-Dec-10	CI FINANCIAL CORP	300	A	BBB
08-Dec-10	EAGLE CREDIT CARD TRUST	233	AAA	UNRATED
08-Dec-10	EAGLE CREDIT CARD TRUST	326	AAA	UNRATED
08-Dec-10	ANHEUSER-BUSCH	600	UNRATED	BBB
08-Dec-10	PROVINCE OF ONTARIO	1,264	AA	AA
09-Dec-10	PROVINCE DE QUEBEC	500	A	A
09-Dec-10	TERANET HOLDINGS LP	475	BBB	BBB
09-Dec-10	TERANET HOLDINGS LP	450	BBB	BBB
09-Dec-10	TERANET HOLDINGS LP	450	BBB	BBB
09-Dec-10	TERANET HOLDINGS LP	200	BBB	BBB
13-Dec-10	GENWORTH	150	AA	A
14-Dec-10	PROVINCE OF ONTARIO	600	AA	AA
15-Dec-10	QUEBECOR MEDIA INC.	325	BB	B
15-Dec-10	OSIFA	--	UNRATED	UNRATED
16-Dec-10	CANADA HOUSING TRUST	6,000	AAA	AAA
16-Dec-10	MAPLE LEAF FOODS INC.	31	UNRATED	UNRATED
16-Dec-10	MAPLE LEAF FOODS INC.	7	UNRATED	UNRATED
16-Dec-10	MAPLE LEAF FOODS INC.	214	UNRATED	UNRATED
04-Jan-11	ROYAL BANK OF SCOTLAND PLC TH	500	UNRATED	A
04-Jan-11	ROYAL BANK OF SCOTLAND PLC TH	1,499	UNRATED	A
04-Jan-11	MAPLE LEAF FOODS INC.	103	UNRATED	UNRATED
05-Jan-11	METRO LIFE GLB FDG	300	UNRATED	AA
06-Jan-11	BANK NEDERLANDSE GEMEENTEN	100	UNRATED	AAA
06-Jan-11	BARCLAYS BANK PLC	1,245	UNRATED	AA
06-Jan-11	BARCLAYS BANK PLC	747	UNRATED	AA
06-Jan-11	ROYAL BANK OF CANADA	1,300	AA	AA
06-Jan-11	THE BANK OF NOVA SCOTIA	498	AA	AA
06-Jan-11	THE BANK OF NOVA SCOTIA	747	UNRATED	AA
07-Jan-11	PROVINCE OF ONTARIO	750	AA	AA
07-Jan-11	ROYAL BANK OF CANADA	450	AA	AA
10-Jan-11	JOHN DEERE CREDIT INC.	200	A	A
10-Jan-11	PROVINCE OF ONTARIO	50	AA	AA
10-Jan-11	PROV OF MANITOBA	250	A	AA

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11-Jan-11	PROVINCE OF ONTARIO	105	AA	AA
11-Jan-11	CANADIAN IMPERIAL BANK OF COM	1,000	AA	A
11-Jan-11	PROVINCE OF ONTARIO	386	UNRATED	AA
12-Jan-11	ROYAL BANK OF CANADA	281	AAA	AAA
12-Jan-11	ROYAL BANK OF CANADA	492	AAA	AAA
12-Jan-11	CCDCAISSE CENTRALE DESJARDINS	100	AA	AA
13-Jan-11	PROVINCE DE QUEBEC	500	A	A
14-Jan-11	HYDRO ONE INC.	250	A	A
17-Jan-11	RIOCAN REAL ESTATE INVES	225	BBB	BBB
17-Jan-11	FIRST CAPITAL REALTY	150	BBB	UNRATED
18-Jan-11	FINANCEMENT QUEBEC	600	A	A
18-Jan-11	BANK OF MONTREAL	1,489	AAA	AAA
19-Jan-11	PROVINCE OF ONTARIO	600	AA	AA
19-Jan-11	HYDRO-QUEBEC	500	A	A
19-Jan-11	CADILLAC FAIRVIEW FINANCE TRU	1,250	AAA	AAA
19-Jan-11	HYDRO ONE INC.	50	A	A
19-Jan-11	CADILLAC FAIRVIEW FINANCE TRU	750	AAA	AAA
20-Jan-11	H AND R REIT	180	BBB	UNRATED
20-Jan-11	CANADIAN IMPERIAL BANK OF COM	1,995	AAA	AAA
21-Jan-11	PROV OF MANITOBA	250	A	AA
24-Jan-11	VW CREDIT CANADA, INC.	250	UNRATED	A
24-Jan-11	VW CREDIT CANADA, INC.	250	UNRATED	A
24-Jan-11	NATIONAL BANK OF CANADA	1,000	AAA	UNRATED
25-Jan-11	PROVINCE DE QUEBEC	500	A	A
25-Jan-11	PLENARY PROPERTIES LTAP LP	167	A	A
25-Jan-11	PLENARY PROPERTIES LTAP LP	840	A	A
27-Jan-11	BANK OF MONTREAL	400	AA	A
27-Jan-11	MORGAN STANLEY	400	A	A
27-Jan-11	PARAMOUNT RESOURCES LTD	70	UNRATED	B
27-Jan-11	BANK OF MONTREAL	600	AA	A
28-Jan-11	PROVINCE OF ONTARIO	600	AA	AA
28-Jan-11	INTER PIPELINE FUND	325	BBB	BBB
31-Jan-11	PROV OF MANITOBA	80	A	AA
01-Feb-11	PROVINCE OF NEW BRUNSWICK	165	A	AA
01-Feb-11	PROVINCE OF NEW BRUNSWICK	300	A	AA
01-Feb-11	GE CAPITAL CANADA FUNDING COM	250	UNRATED	AA
01-Feb-11	GE CAPITAL CANADA FUNDING COM	200	UNRATED	AA
01-Feb-11	GE CAPITAL CANADA FUNDING COM	400	UNRATED	AA
01-Feb-11	AUSTRALIA AND NEW ZEALAND BAN	100	UNRATED	AA
02-Feb-11	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
03-Feb-11	PROVINCE DE QUEBEC	500	A	A
03-Feb-11	VERMILION ENERGY INC	225	BB	BB
03-Feb-11	ROYAL BANK OF CANADA	700	AA	AA
04-Feb-11	PROVINCE OF ONTARIO	600	AA	AA
08-Feb-11	PROVINCE DE QUEBEC	500	A	A
08-Feb-11	CCDCAISSE CENTRALE DESJARDINS	500	AA	AA
08-Feb-11	HYDRO-QUEBEC	53	A	A
08-Feb-11	PROV OF MANITOBA	50	A	AA

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09-Feb-11	LAURENTIAN BANK OF CANADA	100	BBB	BBB
10-Feb-11	VITERRA INC.	200	BBB	BBB
10-Feb-11	TORONTO DOMINION BANK	500	AAA	AAA
10-Feb-11	TOYOTA CREDIT CANADA INC.	300	UNRATED	AA
10-Feb-11	BAYTEX ENERGY LTD	149	UNRATED	BB
11-Feb-11	PROVINCE OF ONTARIO	1,000	AA	AA
14-Feb-11	SHAW COMMUNICATIONS INC	400	BBB	BBB
14-Feb-11	LAURENTIAN BANK OF CANADA	75	BBB	BBB
15-Feb-11	NAV CANADA	250	AA	AA
15-Feb-11	CANADIAN CAPITAL AUTO REC ASS	300	AAA	UNRATED
15-Feb-11	CANADIAN CAPITAL AUTO REC ASS	208	AAA	UNRATED
15-Feb-11	CANADIAN CAPITAL AUTO REC ASS	216	AAA	UNRATED
16-Feb-11	CANADA HOUSING TRUST	2,500	AAA	AAA
16-Feb-11	CANADA HOUSING TRUST	2,500	AAA	AAA
16-Feb-11	PROVINCE DE QUEBEC	500	A	A
16-Feb-11	MERRILL LYNCH CDA FINANCE CO.	650	UNRATED	A
16-Feb-11	THE BANK OF NOVA SCOTIA	1,500	AA	AA
17-Feb-11	GTAA	600	A	A
17-Feb-11	RABOBANK NEDERLAND	100	UNRATED	UNRATED
22-Feb-11	HYDRO-QUEBEC	300	A	A
23-Feb-11	PROVINCE OF ONTARIO	750	AA	AA
23-Feb-11	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
23-Feb-11	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
23-Feb-11	THE REGIONAL MUNICIPALITY OF	4	UNRATED	AAA
23-Feb-11	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
23-Feb-11	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
23-Feb-11	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
23-Feb-11	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
23-Feb-11	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
23-Feb-11	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
23-Feb-11	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
23-Feb-11	THE REGIONAL MUNICIPALITY OF	6	UNRATED	AAA
24-Feb-11	FORD CREDIT CANADA LIMITED	264	AAA	AAA
24-Feb-11	FORD CREDIT CANADA LIMITED	134	AAA	AAA
24-Feb-11	FORD CREDIT CANADA LIMITED	135	AAA	AAA
28-Feb-11	PROVINCE OF ONTARIO	20	AA	AA
01-Mar-11	AON FINANCE NS1 ULC	375	UNRATED	BBB
01-Mar-11	CANADIAN IMPERIAL BANK OF COM	1,000	AA	UNRATED
02-Mar-11	PROVINCE OF NOVA SCOTIA	400	A	A
02-Mar-11	BANK OF MONTREAL	1,500	AA	A
03-Mar-11	THE BANK OF NOVA SCOTIA	130	AA	AA
04-Mar-11	PROVINCE OF ONTARIO	600	AA	AA
08-Mar-11	SKYLINK AVIATION INC	110	B	B
08-Mar-11	FORD CREDIT CANADA LIMITED	500	BB	BB
08-Mar-11	ROGERS COMMUNICATIONS PARTNER	1,450	UNRATED	BBB
08-Mar-11	ROGERS COMMUNICATIONS PARTNER	400	UNRATED	BBB
08-Mar-11	REGIONAL MUNICIPALITY OF PEEL	200	UNRATED	AAA
08-Mar-11	FENGATE CAP MGMT LTD	212	A	A
09-Mar-11	BELL CANADA	1,000	A	BBB

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09-Mar-11	CITY OF MONTREAL	350	UNRATED	A
10-Mar-11	AVIS BUDGET CAR RENTAL LLC	200	AAA	UNRATED
10-Mar-11	PERPETUAL ENERGY INC.	150	UNRATED	B
10-Mar-11	PRECISION DRILLING CORP.	200	UNRATED	BB
10-Mar-11	HYDRO-QUEBEC	25	A	A
11-Mar-11	HYDRO-QUEBEC	63	A	A
14-Mar-11	HYDRO-QUEBEC	142	A	A
16-Mar-11	PROV OF PEI	100	A	A
17-Mar-11	CANADA HOUSING TRUST	6,250	AAA	AAA
17-Mar-11	CCDCAISSE CENTRALE DESJARDINS	987	UNRATED	AAA
17-Mar-11	BANK OF MONTREAL	1,050	AA	A
21-Mar-11	ALTAGAS LIMITED	200	BBB	BBB
22-Mar-11	HYDRO-QUEBEC	16	A	A
22-Mar-11	FIRST CAPITAL REALTY	110	BBB	UNRATED
23-Mar-11	PROVINCE DE QUEBEC	500	A	A
23-Mar-11	ROYAL BANK OF CANADA	1,100	AAA	AAA
23-Mar-11	WELLS FARGO FINANCIAL CORPORA	500	AA	AA
23-Mar-11	BMW CANADA INC.	400	UNRATED	A
23-Mar-11	BMW CANADA INC.	175	UNRATED	A
24-Mar-11	CANADA SAFEWAY LIMITED	300	BBB	BBB
24-Mar-11	PEMBINA PIPELINE CORPORATION	250	BBB	BBB
25-Mar-11	PROV OF MANITOBA	400	A	AA
28-Mar-11	MUNICIPAL FINANCE AUTHORITY	225	UNRATED	AAA
28-Mar-11	ROYAL BANK OF CANADA	300	AA	AA
29-Mar-11	HSBC HOLDINGS PLC	2,438	UNRATED	AA
29-Mar-11	CANADIAN IMPERIAL BANK OF COM	100	AA	A
29-Mar-11	ROYAL BANK OF CANADA	300	AA	AA
30-Mar-11	PROVINCE DE QUEBEC	500	A	A
30-Mar-11	TERANET HOLDINGS LP	250	BBB	BBB
30-Mar-11	TERANET HOLDINGS LP	275	BBB	BBB
31-Mar-11	PROVINCE OF ONTARIO	750	AA	AA
31-Mar-11	ONTARIO INC	300	A	UNRATED
31-Mar-11	ARROW LAKES POWER CORP	350	A	UNRATED
31-Mar-11	OSIFA	--	UNRATED	UNRATED
01-Apr-11	NATIONAL AUSTRALIA BANK LTD	100	AA	AA
01-Apr-11	BANK OF MONTREAL	2,411	UNRATED	A
05-Apr-11	LLOYDS TSB BANK PLC	500	AA	A
05-Apr-11	JOHN DEERE CREDIT INC.	150	A	A
05-Apr-11	PROVINCE OF ONTARIO	150	AA	AA
05-Apr-11	PROVINCE OF ONTARIO	200	AA	AA
06-Apr-11	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
07-Apr-11	DAIMLERCHRYSLER CANADA F	250	A	BBB
07-Apr-11	DAIMLERCHRYSLER CANADA F	500	A	BBB
07-Apr-11	ROYAL BANK OF CANADA	300	AA	AA
08-Apr-11	TRIDENT EXPLORATION CORP	175	UNRATED	B
11-Apr-11	PROV OF MANITOBA	100	A	AA
11-Apr-11	CANADIAN IMPERIAL BANK OF COM	220	AA	A
12-Apr-11	PROVINCE OF ONTARIO	750	AA	AA

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12-Apr-11	ROYAL BANK OF CANADA	275	AA	AA
12-Apr-11	TASEKO MINES LTD.	192	UNRATED	B
13-Apr-11	CAPITAL POWER LP	300	BBB	BBB
13-Apr-11	ROYAL BANK OF CANADA	1,500	AA	AA
13-Apr-11	CROWN IN THE RIGHT OF ALBERTA	30	AAA	AAA
14-Apr-11	AUSTRALIA AND NEW ZEALAND BAN	250	UNRATED	AA
15-Apr-11	CANADIAN WESTERN BANK	250	A	UNRATED
18-Apr-11	COMMONWEALTH BANK OF AUSTRALI	100	UNRATED	AA
19-Apr-11	PROVINCE OF ONTARIO	600	AA	AA
19-Apr-11	MASTER CREDIT CARD TRUST	800	AAA	UNRATED
19-Apr-11	MASTER CREDIT CARD TRUST	400	AAA	UNRATED
19-Apr-11	PROV OF MANITOBA	718	UNRATED	AA
20-Apr-11	BELL ALIANT REGIONAL COMMUNIC	300	BBB	BBB
20-Apr-11	ENERSOURCE CORPORATION	110	A	A
20-Apr-11	ENERSOURCE CORPORATION	210	A	A
20-Apr-11	GOLD CR CARD TR	1,200	AAA	UNRATED
20-Apr-11	NATIONAL BANK OF CANADA	750	AA	A
20-Apr-11	PROVINCE OF BRITISH COLUMBIA	100	UNRATED	AAA
26-Apr-11	PROVINCE DE QUEBEC	500	A	A
26-Apr-11	THE GOLDMAN SACHS GROUP, INC.	500	A	A
26-Apr-11	TORONTO DOMINION BANK	100	AAA	AAA
26-Apr-11	TORONTO DOMINION BANK	300	AAA	AAA
26-Apr-11	TORONTO DOMINION BANK	100	AAA	AAA
26-Apr-11	BANK OF MONTREAL	477	UNRATED	A
26-Apr-11	BANK OF MONTREAL	572	UNRATED	A
26-Apr-11	DATA AND AUDIO VISUAL ENTERPR	195	UNRATED	UNRATED
28-Apr-11	PROVINCE OF ONTARIO	750	AA	AA
29-Apr-11	HOME CAPITAL GROUP	150	UNRATED	BBB
30-Apr-11	PROVINCE DE QUEBEC	--	UNRATED	UNRATED
30-Apr-11	PROVINCE OF ONTARIO	--	UNRATED	UNRATED
03-May-11	PROVINCE OF ONTARIO	2,861	AA	AA
03-May-11	KOREA GAS CORPORATION	300	UNRATED	A
04-May-11	CADILLAC FAIRVIEW FINANCE TRU	600	AAA	AAA
10-May-11	PROV OF MANITOBA	400	A	AA
10-May-11	CANADIAN IMPERIAL BANK OF COM	250	AA	A
11-May-11	PROVINCE OF ONTARIO	600	AA	AA
11-May-11	XPLORNET COMMUNICATIONS INC	230	UNRATED	UNRATED
11-May-11	PROVINCE OF BRITISH COLUMBIA	1,442	AA	AAA
12-May-11	LOWER MATTAGAMI ENERGY LIMITE	225	A	UNRATED
12-May-11	LOWER MATTAGAMI ENERGY LIMITE	250	A	UNRATED
13-May-11	MUNICIPAL FINANCE AUTHOR	515	UNRATED	AAA
16-May-11	BELL CANADA	500	A	BBB
16-May-11	BELL CANADA	500	A	BBB
17-May-11	PROVINCE DE QUEBEC	500	A	A
17-May-11	CARDS II TRUST	600	AAA	UNRATED
17-May-11	HSBC BANK PLC	1,459	UNRATED	AA
17-May-11	HSBC BANK PLC	1,459	UNRATED	AA
18-May-11	CANADA HOUSING TRUST	2,500	AAA	AAA

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18-May-11	CANADA HOUSING TRUST	2,250	AAA	AAA
18-May-11	PROVINCE OF ONTARIO	600	AA	AA
18-May-11	PROVINCE OF ONTARIO	940	AA	AA
18-May-11	KOMMUNALBANKEN AS	275	UNRATED	AA
18-May-11	ROYAL BANK OF CANADA	875	AA	AA
18-May-11	CROWN IN THE RIGHT OF ALBERTA	30	AAA	AAA
18-May-11	CROWN IN THE RIGHT OF ALBERTA	1,300	AAA	AAA
19-May-11	FINANCEMENT QUEBEC	500	A	A
19-May-11	TELUS CORPORATION	600	A	BBB
19-May-11	FAIRFAX FIN HOLDINGS LTD	400	BBB	BBB
19-May-11	PROV OF MANITOBA	400	A	AA
19-May-11	SAVANNA ENERGY SERVICES CORP	125	B	B
20-May-11	CONNACHER OIL AND GAS LIMITED	350	UNRATED	BB
20-May-11	CONNACHER OIL AND GAS LIMITED	535	UNRATED	BB
24-May-11	PROVINCE OF ONTARIO	900	AA	AA
25-May-11	FLINT ENERGY SERVICES LT	175	UNRATED	BB
25-May-11	CANADIAN IMPERIAL BANK OF COM	185	AA	UNRATED
26-May-11	PROVINCE OF NOVA SCOTIA	300	A	A
27-May-11	NEDERLANDSE FINANCIERINGS-MAA	100	UNRATED	AAA
27-May-11	CANADIAN IMPERIAL BANK OF COM	500	AA	UNRATED
27-May-11	PROVINCE OF ONTARIO	100	AA	AA
30-May-11	GARDA SECURITY GROUP INC.THE	50	UNRATED	B
31-May-11	PROVINCE OF ONTARIO	600	AA	AA
31-May-11	PROV OF MANITOBA	300	A	AA
01-Jun-11	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
01-Jun-11	AMEX EXPRESS CANADA CREDIT CO	325	A	BBB
01-Jun-11	AMEX EXPRESS CANADA CREDIT CO	400	A	BBB
02-Jun-11	CITY OF TOR	350	AA	AA
03-Jun-11	FIRST CAPITAL REALTY	65	BBB	UNRATED
07-Jun-11	HEALTH MONTREAL COLLECTIVE LI	1,371	BBB	UNRATED
08-Jun-11	PROVINCE DE QUEBEC	500	A	A
08-Jun-11	METRO LIFE GLB FDG	325	UNRATED	UNRATED
09-Jun-11	PROVINCE OF ONTARIO	750	AA	AA
10-Jun-11	KGHM INTERNATIONAL LTD.	489	UNRATED	BB
13-Jun-11	PROVINCE DE QUEBEC	500	A	A
13-Jun-11	PROV OF MANITOBA	210	A	AA
14-Jun-11	CANADIAN SATELLITE	131	UNRATED	UNRATED
14-Jun-11	ENERFLEX LTD	40	UNRATED	UNRATED
14-Jun-11	ENERFLEX LTD	51	UNRATED	UNRATED
14-Jun-11	SYDNEY AIRPORT FINANCE COMPAN	225	UNRATED	BBB
15-Jun-11	CANADA HOUSING TRUST	6,000	AAA	AAA
15-Jun-11	SOUTH COAST BRITISH COLUMBIA	200	AA	UNRATED
16-Jun-11	UNION GAS LIMITED	300	A	BBB
16-Jun-11	VIDEOTRON LTD	300	BB	BB
17-Jun-11	CANADIAN CAPITAL AUTO REC ASS	230	AAA	UNRATED
17-Jun-11	CANADIAN CAPITAL AUTO REC ASS	165	AAA	UNRATED
17-Jun-11	CANADIAN CAPITAL AUTO REC ASS	129	AAA	UNRATED
17-Jun-11	CANADIAN CAPITAL AUTO REC ASS	11	AA	UNRATED

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17-Jun-11	CANADIAN CAPITAL AUTO REC ASS	6	A	UNRATED
20-Jun-11	PROVINCE DE QUEBEC	500	A	A
21-Jun-11	REGION OF YORK	250	UNRATED	AAA
22-Jun-11	PROVINCE OF ONTARIO	750	AA	AA
23-Jun-11	HYDRO-QUEBEC	980	A	A
23-Jun-11	PROVINCE OF ONTARIO	100	AA	AA
27-Jun-11	CITY OF OTTAWA	150	UNRATED	AA
28-Jun-11	PROVINCE OF NOVA SCOTIA	300	A	A
28-Jun-11	HSBC BANK PLC	1,228	UNRATED	UNRATED
29-Jun-11	INTACT FINANCIAL CORP(FKA ING	100	A	UNRATED
04-Jul-11	PROVINCE DE QUEBEC	233	A	A
06-Jul-11	PROVINCE OF ONTARIO	600	AA	AA
07-Jul-11	PROVINCE OF ONTARIO	959	AA	AA
07-Jul-11	CANADIAN IMPERIAL BANK OF COM	80	AA	UNRATED
07-Jul-11	TORONTO DOMINION BANK	480	UNRATED	AA
07-Jul-11	TORONTO DOMINION BANK	719	UNRATED	AA
07-Jul-11	TORONTO DOMINION BANK	1,199	UNRATED	AA
11-Jul-11	PROVINCE OF ONTARIO	750	AA	AA
12-Jul-11	TORONTO DOMINION BANK	100	AAA	AAA
12-Jul-11	TORONTO DOMINION BANK	500	AAA	AAA
13-Jul-11	PROVINCE DE QUEBEC	500	A	A
13-Jul-11	ROYAL BANK OF CANADA	1,199	UNRATED	AA
13-Jul-11	ROYAL BANK OF CANADA	336	AA	AA
14-Jul-11	CANADIAN IMPERIAL BANK OF COM	560	AA	UNRATED
14-Jul-11	PROVINCE OF ONTARIO	100	AA	AA
18-Jul-11	THE BANK OF NOVA SCOTIA	1,500	AA	UNRATED
20-Jul-11	ALGONQUIN POWER	135	BBB	BBB
20-Jul-11	FIFTH AVENUE LP	350	A	UNRATED
21-Jul-11	ROYAL BANK OF CANADA	1,250	AA	AA
25-Jul-11	FINANCEMENT QUEBEC	295	A	A
26-Jul-11	ROYAL BANK OF CANADA	350	AAA	AAA
26-Jul-11	INTER PIPELINE FUND	200	BBB	BBB
26-Jul-11	PROV OF PEI	100	A	A
26-Jul-11	THE BANK OF NOVA SCOTIA	1,886	AAA	AAA
26-Jul-11	HOSPITAL INFRASTRUCTURE PARTN	543	A	A
27-Jul-11	BANK OF MONTREAL	300	AA	A
27-Jul-11	BANK OF MONTREAL	1,000	AA	A
27-Jul-11	TORONTO DOMINION BANK	1,750	AA	AA
28-Jul-11	KRUGER PRODUCTS LTD	175	BB	B
28-Jul-11	NORANDA OPERATING TR	90	BB	UNRATED
31-Jul-11	OSIFA	--	UNRATED	UNRATED
02-Aug-11	FINANCEMENT QUEBEC	15	A	A
03-Aug-11	PROVINCE DE QUEBEC	500	A	A
08-Aug-11	FINANCEMENT QUEBEC	50	A	A
09-Aug-11	FINANCEMENT QUEBEC	26	A	A
10-Aug-11	FINANCEMENT QUEBEC	25	A	A
11-Aug-11	THE BANK OF NOVA SCOTIA	280	AA	UNRATED
11-Aug-11	FINANCEMENT QUEBEC	50	A	A

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12-Aug-11	PROVINCE OF ONTARIO	750	AA	AA
12-Aug-11	INTACT FINANCIAL CORP(FKA ING	300	A	UNRATED
12-Aug-11	CROWN IN THE RIGHT OF ALBERTA	500	AAA	AAA
12-Aug-11	PROVINCE DE QUEBEC	500	A	A
15-Aug-11	CALLOWAY REIT	90	BBB	UNRATED
15-Aug-11	KINROSS GOLD CORPORATION	245	UNRATED	BBB
15-Aug-11	KINROSS GOLD CORPORATION	490	UNRATED	BBB
15-Aug-11	KINROSS GOLD CORPORATION	245	UNRATED	BBB
16-Aug-11	ENBRIDGE INC	350	A	A
17-Aug-11	CANADA HOUSING TRUST	2,500	AAA	AAA
17-Aug-11	CANADA HOUSING TRUST	2,500	AAA	AAA
17-Aug-11	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
17-Aug-11	SUN LIFE FIN CORP	300	AA	A
17-Aug-11	THE BANK OF NOVA SCOTIA	1,000	UNRATED	UNRATED
17-Aug-11	PROVINCE OF ONTARIO	350	AA	AA
18-Aug-11	PROVINCE DE QUEBEC	1,386	UNRATED	A
24-Aug-11	ROYAL BANK OF CANADA	275	AA	AA
31-Aug-11	PROVINCE DE QUEBEC	500	A	A
01-Sep-11	PROVINCE OF ONTARIO	750	AA	AA
06-Sep-11	ENBRIDGE GAS DISTRIBUTION INC	100	A	A
07-Sep-11	PROVINCE DE QUEBEC	500	A	A
07-Sep-11	TORONTO DOMINION BANK	2,957	AAA	UNRATED
07-Sep-11	TORONTO DOMINION BANK	1,971	AAA	UNRATED
08-Sep-11	PROVINCE OF ONTARIO	750	AA	AA
08-Sep-11	DAIMLERCHRYSLER CANADA F	150	A	UNRATED
08-Sep-11	DAIMLERCHRYSLER CANADA F	475	A	BBB
13-Sep-11	PROVINCE OF ONTARIO	750	AA	AA
13-Sep-11	CANADIAN IMPERIAL BANK OF COM	1,973	AAA	UNRATED
14-Sep-11	PROVINCE DE QUEBEC	500	A	A
14-Sep-11	FORD CREDIT CANADA LIMITED	172	UNRATED	AAA
14-Sep-11	PROVINCE OF ONTARIO	1,980	AA	AA
14-Sep-11	FORD CREDIT CANADA LIMITED	206	AAA	UNRATED
14-Sep-11	FORD CREDIT CANADA LIMITED	120	AAA	UNRATED
16-Sep-11	PROVINCE OF BRITISH COLUMBIA	735	AA	AAA
16-Sep-11	TORONTO DOMINION BANK	725	AA	UNRATED
16-Sep-11	CANADIAN IMPERIAL BANK OF COM	190	AA	A
19-Sep-11	FINANCEMENT QUEBEC	110	A	A
20-Sep-11	CANADA HOUSING TRUST	5,000	AAA	AAA
20-Sep-11	PLENARY HEALTH CARE PARTNERSH	482	A	A
20-Sep-11	PLENARY HEALTH CARE PARTNERSH	375	A	A
20-Sep-11	PLENARY HEALTH CARE PARTNERSH	149	A	A
21-Sep-11	HYDRO ONE INC.	300	A	A
21-Sep-11	ROYAL BANK OF CANADA	106	AA	UNRATED
22-Sep-11	THE REGIONAL MUNICIPALITY OF	106	UNRATED	AAA
22-Sep-11	THE REGIONAL MUNICIPALITY OF	1	UNRATED	AAA
22-Sep-11	THE REGIONAL MUNICIPALITY OF	1	UNRATED	AAA
22-Sep-11	THE REGIONAL MUNICIPALITY OF	1	UNRATED	AAA
22-Sep-11	THE REGIONAL MUNICIPALITY OF	1	UNRATED	AAA

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22-Sep-11	THE REGIONAL MUNICIPALITY OF	1	UNRATED	AAA
22-Sep-11	THE REGIONAL MUNICIPALITY OF	1	UNRATED	AAA
22-Sep-11	THE REGIONAL MUNICIPALITY OF	1	UNRATED	AAA
22-Sep-11	THE REGIONAL MUNICIPALITY OF	1	UNRATED	AAA
22-Sep-11	THE REGIONAL MUNICIPALITY OF	1	UNRATED	AAA
22-Sep-11	THE REGIONAL MUNICIPALITY OF	1	UNRATED	AAA
23-Sep-11	PROVINCE DE QUEBEC	500	A	A
26-Sep-11	PROVINCE OF ONTARIO	750	AA	AA
27-Sep-11	HYDRO-QUEBEC	500	A	A
27-Sep-11	MTS INC	200	BBB	BBB
27-Sep-11	AMEX EXPRESS CANADA CREDIT CO	200	A	BBB
28-Sep-11	REGIONAL MUNICIPALITY OF PEEL	200	UNRATED	AAA
04-Oct-11	MUNICIPAL FINANCE AUTHOR	105	UNRATED	AAA
05-Oct-11	CITY OF OTTAWA	7	UNRATED	AA
05-Oct-11	CITY OF OTTAWA	7	UNRATED	AA
05-Oct-11	CITY OF OTTAWA	7	UNRATED	AA
05-Oct-11	CITY OF OTTAWA	7	UNRATED	AA
05-Oct-11	CITY OF OTTAWA	7	UNRATED	AA
05-Oct-11	CITY OF OTTAWA	8	UNRATED	AA
05-Oct-11	CITY OF OTTAWA	8	UNRATED	AA
05-Oct-11	CITY OF OTTAWA	8	UNRATED	AA
05-Oct-11	CITY OF OTTAWA	8	UNRATED	AA
05-Oct-11	CITY OF OTTAWA	8	UNRATED	AA
06-Oct-11	PROVINCE DE QUEBEC	500	A	A
06-Oct-11	JOHN DEERE CREDIT INC.	200	A	UNRATED
06-Oct-11	PROV OF MANITOBA	150	A	AA
07-Oct-11	PROV OF MANITOBA	300	A	AA
11-Oct-11	PROVINCE OF NEW BRUNSWICK	300	A	AA
12-Oct-11	PROVINCE OF ONTARIO	750	AA	AA
12-Oct-11	PROVINCE OF BRITISH COLUMBIA	600	AA	AAA
12-Oct-11	PROVINCE DE QUEBEC	300	A	A
12-Oct-11	ALTAGAS LIMITED	200	BBB	BBB
12-Oct-11	BANK OF MONTREAL	900	AA	A
12-Oct-11	TORONTO DOMINION BANK	350	AAA	AAA
12-Oct-11	TORONTO DOMINION BANK	17	AAA	AAA
12-Oct-11	TORONTO DOMINION BANK	60	AAA	AAA
12-Oct-11	TORONTO DOMINION BANK	50	AAA	AAA
12-Oct-11	TORONTO DOMINION BANK	20	AAA	AAA
12-Oct-11	TORONTO DOMINION BANK	105	AAA	AAA
12-Oct-11	TORONTO DOMINION BANK	30	AAA	AAA
12-Oct-11	NATIONAL BANK OF CANADA	500	AA	UNRATED
13-Oct-11	THE CITY OF WINNIPEG	50	UNRATED	AA
14-Oct-11	PROVINCE OF NOVA SCOTIA	250	A	A
14-Oct-11	FORTISAB INC	125	A	A
14-Oct-11	NATIONAL BANK OF CANADA	1,426	AAA	AAA
14-Oct-11	TORONTO DOMINION BANK	1,528	UNRATED	AA
17-Oct-11	HSBC BANK PLC	1,753	UNRATED	AA
18-Oct-11	PROVINCE OF ONTARIO	1,000	AA	AA

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18-Oct-11	FINANCEMENT QUEBEC	500	A	A
18-Oct-11	BANK OF MONTREAL	450	AA	A
18-Oct-11	ROYAL BANK OF CANADA	400	UNRATED	UNRATED
18-Oct-11	CANADIAN IMPERIAL BANK OF COM	75	AA	UNRATED
19-Oct-11	CU INC.	500	A	A
19-Oct-11	CU INC.	200	A	A
19-Oct-11	THE GOLDMAN SACHS GROUP, INC.	510	UNRATED	A
20-Oct-11	GEORGE WESTON LIMITED	350	BBB	BBB
21-Oct-11	PROVINCE DE QUEBEC	500	A	A
24-Oct-11	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
24-Oct-11	BANK OF MONTREAL	140	AA	A
25-Oct-11	WESTCOAST ENERGY INC	150	A	BBB
25-Oct-11	WESTCOAST ENERGY INC	150	A	BBB
26-Oct-11	BANK OF MONTREAL	2,012	AAA	UNRATED
27-Oct-11	H AND R REIT	100	BBB	UNRATED
28-Oct-11	SHERRITT INTERNATIONAL C	400	BB	UNRATED
28-Oct-11	THE BANK OF NOVA SCOTIA	1,987	AAA	UNRATED
31-Oct-11	CANADIAN WESTERN BANK	150	A	UNRATED
02-Nov-11	REGION OF YORK	100	UNRATED	AAA
02-Nov-11	REGION OF YORK	200	UNRATED	AAA
02-Nov-11	CENTRE HOSPITALIER DE L'UNIVE	149	UNRATED	UNRATED
02-Nov-11	CNH CAPITAL CDA TRUST	207	AAA	UNRATED
02-Nov-11	CNH CAPITAL CDA TRUST	233	AAA	UNRATED
02-Nov-11	CNH CAPITAL CDA TRUST	11	A	UNRATED
03-Nov-11	PROVINCE OF ONTARIO	750	AA	AA
03-Nov-11	HYDRO-QUEBEC	500	A	A
03-Nov-11	ALTALINK, L.P.	275	A	A
03-Nov-11	CANADIAN IMPERIAL BANK OF COM	1,250	AA	UNRATED
08-Nov-11	PROVINCE DE QUEBEC	500	A	A
08-Nov-11	THE BANK OF NOVA SCOTIA	310	AA	UNRATED
08-Nov-11	FORD CREDIT CANADA LIMITED	450	BB	UNRATED
08-Nov-11	CARA OPERATIONS	76	B	UNRATED
08-Nov-11	NEWALTA CORP	125	BB	UNRATED
09-Nov-11	TRANSCANADA PIPELINES LTD.	500	A	A
09-Nov-11	TRANSCANADA PIPELINES LTD.	250	A	A
14-Nov-11	407 INTERNATIONAL INC.	350	A	A
14-Nov-11	HSBC HOLDINGS PLC	916	UNRATED	AA
14-Nov-11	HSBC HOLDINGS PLC	763	UNRATED	AA
15-Nov-11	PROVINCE OF ONTARIO	750	AA	AA
15-Nov-11	TOR. HYDRO CORP.	300	A	A
15-Nov-11	MANUFACTURERS LIFE INSURANCE	550	A	A
16-Nov-11	CANADA HOUSING TRUST	2,000	AAA	AA
16-Nov-11	CANADA HOUSING TRUST	1,750	AAA	AAA
16-Nov-11	CITY OF VANCOUVER	140	AA	AA
17-Nov-11	GE CAPITAL CANADA FUNDING COM	500	UNRATED	AA
17-Nov-11	VERESEN INC	150	BBB	BBB
18-Nov-11	ROYAL BANK OF CANADA	185	AA	UNRATED
22-Nov-11	ENBRIDGE INC	250	A	A

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22-Nov-11	PROVINCE OF NEW BRUNSWICK	300	A	AA
22-Nov-11	CITY OF TOR	200	AA	AA
22-Nov-11	CITY OF TOR	100	AA	AA
23-Nov-11	PEARSON INTERNATIONAL FUEL FA	85	UNRATED	UNRATED
24-Nov-11	ALBERTA INVESTMENT MANAGEMENT	790	AAA	AAA
28-Nov-11	PROVINCE OF NOVA SCOTIA	250	A	A
28-Nov-11	THE BANK OF NOVA SCOTIA	1,300	AA	AA
29-Nov-11	PROVINCE DE QUEBEC	500	A	A
29-Nov-11	PROVINCE OF ONTARIO	1,000	AA	AA
29-Nov-11	GTAA	400	A	A
29-Nov-11	CANADIAN PACIFIC RAILWAY COMP	125	BBB	BBB
30-Nov-11	PROVINCE OF BRITISH COLUMBIA	400	AA	AAA
30-Nov-11	PROVINCE OF BRITISH COLUMBIA	200	AA	AAA
01-Dec-11	PROVINCE DE QUEBEC	500	A	A
01-Dec-11	PROV OF MANITOBA	300	A	AA
02-Dec-11	PROVINCE OF ONTARIO	600	AA	AA
02-Dec-11	UNIVERSITY OF TORONTO	100	AA	AA
05-Dec-11	ROYAL BANK OF CANADA	1,500	AA	AA
05-Dec-11	CANADIAN IMPERIAL BANK OF COM	2,034	AAA	AAA
06-Dec-11	FORTISBC ENERGY INC	100	A	UNRATED
07-Dec-11	INDUSTRIAL ALLIANCE INS	200	A	A
08-Dec-11	CAPITAL DESJARDINS INC.	500	AA	A
08-Dec-11	EMERA INC.	250	BBB	BBB
09-Dec-11	PROVINCE DE QUEBEC	500	A	A
12-Dec-11	INDUSTRIAL ALLIANCE INS	50	A	A
12-Dec-11	NATIONAL BANK OF CANADA	650	AA	UNRATED
12-Dec-11	LLOYDS TSB BANK PLC	387	UNRATED	BBB
13-Dec-11	ALGOMA POWER INC.	52	UNRATED	UNRATED
14-Dec-11	CANADA HOUSING TRUST	5,500	AAA	AAA
14-Dec-11	PROVINCE OF BRITISH COLUMBIA	250	AA	AA
14-Dec-11	PROVINCE OF BRITISH COLUMBIA	250	AA	AAA
15-Dec-11	ENBRIDGE INCOME FUND	125	BBB	UNRATED
15-Dec-11	JPMORGAN CHASE BANK NATIONAL	1,295	UNRATED	A
16-Dec-11	BROOKFIELD OFFICE PROP CDA LP	405	UNRATED	UNRATED
19-Dec-11	PROVINCE OF ONTARIO	1,000	AA	AA
19-Dec-11	HYDRO ONE INC.	100	A	A
20-Dec-11	PROVINCE DE QUEBEC	300	A	A
20-Dec-11	FINANCEMENT QUEBEC	299	A	A
22-Dec-11	MINTO DEVELOPMENTS INC.	100	UNRATED	UNRATED
01-Jan-12	OSIFA	--	UNRATED	UNRATED
01-Jan-12	OSIFA	--	UNRATED	UNRATED
01-Jan-12	DOMINUS/CITYZEN BRAMPTON SWQR	--	UNRATED	UNRATED
05-Jan-12	THE BANK OF NOVA SCOTIA	1,274	UNRATED	AA
05-Jan-12	THE BANK OF NOVA SCOTIA	1,019	UNRATED	AA
05-Jan-12	THE BANK OF NOVA SCOTIA	510	UNRATED	AA
05-Jan-12	PROVINCE OF NEW BRUNSWICK	100	A	UNRATED
06-Jan-12	BANK OF MONTREAL	1,540	UNRATED	A
06-Jan-12	NATIONAL BANK OF CANADA	125	AA	UNRATED

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09-Jan-12	PROVINCE OF NOVA SCOTIA	250	A	A
10-Jan-12	PROVINCE OF ONTARIO	750	AA	AA
10-Jan-12	PROVINCE DE QUEBEC	500	A	A
10-Jan-12	HYDRO ONE INC.	300	A	A
10-Jan-12	FINANCEMENT QUEBEC	100	A	A
10-Jan-12	DAIMLERCHRYSLER CANADA F	125	UNRATED	UNRATED
10-Jan-12	FINANCEMENT QUEBEC	50	A	A
10-Jan-12	ROYAL BANK OF CANADA	1,100	AA	AA
10-Jan-12	CANADIAN IMPERIAL BANK OF COM	1,000	AA	A
10-Jan-12	HSBC BANK CANADA	1,000	AA	UNRATED
11-Jan-12	PROV OF MANITOBA	300	A	AA
11-Jan-12	ROYAL BANK OF CANADA	350	AA	UNRATED
12-Jan-12	BROOKFIELD OFFICE PROP CDA LP	200	BBB	BBB
12-Jan-12	TORONTO DOMINION BANK	200	AAA	AAA
12-Jan-12	TORONTO DOMINION BANK	90	AAA	AAA
12-Jan-12	TORONTO DOMINION BANK	20	AAA	AAA
12-Jan-12	TORONTO DOMINION BANK	40	AAA	AAA
13-Jan-12	CANADIAN WESTERN BANK	250	A	UNRATED
17-Jan-12	PROVINCE OF ONTARIO	1,250	AA	AA
17-Jan-12	MASTER CREDIT CARD TRUST	1,000	AAA	UNRATED
17-Jan-12	FINANCEMENT QUEBEC	50	A	A
17-Jan-12	CROWN IN THE RIGHT OF ALBERTA	100	AAA	AAA
17-Jan-12	CANADIAN CAPITAL AUTO RE	115	AAA	UNRATED
19-Jan-12	FINANCEMENT QUEBEC	500	A	A
19-Jan-12	RIOCAN REAL ESTATE INVES	150	BBB	BBB
19-Jan-12	CANADIAN CAPITAL AUTO REC ASS	11	AA	UNRATED
19-Jan-12	CANADIAN CAPITAL AUTO RE	183	AAA	UNRATED
19-Jan-12	CANADIAN CAPITAL AUTO RE	208	AAA	UNRATED
19-Jan-12	BANK OF MONTREAL	155	AA	A
19-Jan-12	BANK OF MONTREAL	900	AA	A
19-Jan-12	CANADIAN CAPITAL AUTO REC ASS	4	A	UNRATED
19-Jan-12	CANADIAN CAPITAL AUTO REC ASS	183	AAA	UNRATED
19-Jan-12	CANADIAN CAPITAL AUTO REC ASS	208	AAA	UNRATED
19-Jan-12	CANADIAN CAPITAL AUTO REC ASS	115	AAA	UNRATED
20-Jan-12	PROVINCE OF ONTARIO	750	AA	AA
20-Jan-12	THE BANK OF NOVA SCOTIA	2,535	AAA	AAA
20-Jan-12	WESTERN ENERGY SERVICES CORP	175	UNRATED	B
23-Jan-12	PROVINCE OF NOVA SCOTIA	196	A	A
23-Jan-12	GE CAPITAL CANADA FUNDING COM	200	UNRATED	AA
23-Jan-12	GE CAPITAL CANADA FUNDING COM	750	UNRATED	AA
23-Jan-12	JOHN DEERE CREDIT INC.	200	A	UNRATED
23-Jan-12	BANK OF MONTREAL	2,016	AAA	AAA
24-Jan-12	CASH STORE FINANCIAL SERVICES	133	UNRATED	B
25-Jan-12	NATIONAL BANK OF CANADA	1,000	AA	A
25-Jan-12	PETROBAKKEN ENERGY LTD	905	UNRATED	CCC
26-Jan-12	PROVINCE OF ONTARIO	600	AA	AA
26-Jan-12	PROVINCE OF NEW BRUNSWICK	100	A	AA
26-Jan-12	PROVINCE OF NEW BRUNSWICK	300	A	AA

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26-Jan-12	PROV OF SASKATCHEWAN	300	AA	AA
26-Jan-12	FINANCEMENT QUEBEC	500	A	A
26-Jan-12	RABOBANK NEDERLAND	100	UNRATED	AA
27-Jan-12	GARDA SECURITY GROUP INC.THE	50	UNRATED	B
30-Jan-12	VOLKSWAGEN AG	100	UNRATED	UNRATED
31-Jan-12	PROV OF MANITOBA	300	A	AA
31-Jan-12	BROOKFIELD RENEWABLE ENERGY P	400	BBB	BBB
31-Jan-12	BBIA LP	--	UNRATED	UNRATED
01-Feb-12	FORD CREDIT CANADA LIMITED	500	BB	BB
02-Feb-12	PROVINCE DE QUEBEC	500	A	A
02-Feb-12	WELLS FARGO FINANCIAL CORPORA	1,500	AA	A
02-Feb-12	PROVINCE DE QUEBEC	300	A	A
02-Feb-12	BMW CANADA INC.	200	UNRATED	UNRATED
02-Feb-12	BMW CANADA INC.	250	UNRATED	UNRATED
02-Feb-12	UNIVERSITY OF TORONTO	100	AA	AA
02-Feb-12	SOUTH COAST BRITISH COLUMBIA	100	AA	UNRATED
03-Feb-12	PROVINCE OF ONTARIO	1,000	AA	AA
03-Feb-12	IBM CANADA LIMITED	500	UNRATED	A
06-Feb-12	NATIONAL BANK OF CANADA	598	UNRATED	AAA
08-Feb-12	PROVINCE DE QUEBEC	500	A	A
08-Feb-12	PROVINCE OF ONTARIO	600	AA	AA
08-Feb-12	LAURENTIAN BANK OF CANADA	200	BBB	BBB
08-Feb-12	HSBC USA INC.	1,494	UNRATED	A
09-Feb-12	COGECO CABLE	200	BBB	BBB
09-Feb-12	LONE PINE RESOURCES CANADA LT	199	UNRATED	B
13-Feb-12	PSP CAPITAL INC.	350	AAA	AAA
13-Feb-12	PSP CAPITAL INC.	900	AAA	AAA
14-Feb-12	PROVINCE DE QUEBEC	500	A	A
14-Feb-12	CAPITAL POWER LP	250	BBB	BBB
14-Feb-12	MANUFACTURERS LIFE INSURANCE	500	A	A
15-Feb-12	CANADA HOUSING TRUST	3,000	AAA	AAA
15-Feb-12	CANADA HOUSING TRUST	2,500	AAA	AAA
15-Feb-12	HONDA CANADA FINANCE INC	300	A	UNRATED
15-Feb-12	TOYOTA CREDIT CANADA INC.	400	AA	AA
15-Feb-12	CANADIAN IMPERIAL BANK OF COM	50	AA	UNRATED
16-Feb-12	BP PLC	500	UNRATED	UNRATED
16-Feb-12	CANADIAN IMPERIAL BANK OF COM	382	AA	UNRATED
21-Feb-12	ENBRIDGE INCOME FUND	300	BBB	UNRATED
21-Feb-12	ENBRIDGE INCOME FUND	200	BBB	UNRATED
22-Feb-12	PROVINCE OF ONTARIO	1,000	AA	AA
22-Feb-12	PROVINCE OF ONTARIO	350	UNRATED	UNRATED
22-Feb-12	THE BANK OF NOVA SCOTIA	1,500	AA	AA
23-Feb-12	EPCOR UTILITIES INC.	300	A	BBB
24-Feb-12	RABOBANK NEDERLAND	100	UNRATED	AA
24-Feb-12	BANRO CORPORATION	175	UNRATED	UNRATED
28-Feb-12	SUN LIFE FIN CORP	800	A	A
28-Feb-12	CCDCAISSE CENTRALE DESJARDINS	1,494	AAA	UNRATED
28-Feb-12	NATIONAL BANK OF CANADA	230	AA	UNRATED

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28-Feb-12	TRANSURBAN FINANCE COMPANY PT	250	UNRATED	A
29-Feb-12	AUSTRALIA AND NEW ZEALAND BAN	100	UNRATED	AA
29-Feb-12	VIDEOTRON LTD	791	BB	BB
29-Feb-12	PROV OF MANITOBA	593	UNRATED	UNRATED
01-Mar-12	NOVA SCOTIA PW.,INC.	250	A	BBB
01-Mar-12	BCIMC REALTY CORP	500	AA	UNRATED
01-Mar-12	CREDIT SUISSE (GUERNSEY) LTD	1,971	UNRATED	UNRATED
01-Mar-12	WELLS FARGO AND COMPANY	2,464	UNRATED	A
02-Mar-12	HSBC USA INC.	741	UNRATED	A
05-Mar-12	TORONTO DOMINION BANK	2,982	AAA	UNRATED
07-Mar-12	PROVINCE OF ONTARIO	900	AA	AA
07-Mar-12	PROVINCE OF ONTARIO	500	AA	AA
07-Mar-12	ROYAL BANK OF CANADA	1,249	UNRATED	UNRATED
08-Mar-12	PROVINCE DE QUEBEC	500	A	A
08-Mar-12	VERESEN INC	300	BBB	UNRATED
08-Mar-12	VERESEN INC	50	BBB	UNRATED
13-Mar-12	TRANSPower NEW ZEALAND LIMITE	250	UNRATED	AA
14-Mar-12	THE BANK OF NOVA SCOTIA	625	AA	UNRATED
15-Mar-12	CANADA HOUSING TRUST	5,000	AAA	AAA
15-Mar-12	THE BANK OF NOVA SCOTIA	1,239	AAA	UNRATED
15-Mar-12	THE BANK OF NOVA SCOTIA	1,487	AAA	UNRATED
15-Mar-12	THE BANK OF NOVA SCOTIA	248	AAA	UNRATED
19-Mar-12	BANK OF AMERICA	1,233	UNRATED	A
21-Mar-12	PROVINCE OF NOVA SCOTIA	200	A	A
22-Mar-12	SOCIETE GENERALE	462	UNRATED	UNRATED
27-Mar-12	HSBC HOLDINGS PLC	1,989	UNRATED	UNRATED
28-Mar-12	FIRST CAPITAL REALTY	175	BBB	UNRATED
29-Mar-12	PROVINCE DE QUEBEC	500	A	A
29-Mar-12	H AND R REIT	175	BBB	UNRATED
02-Apr-12	NATIONAL BANK OF CANADA	1,000	A	A
03-Apr-12	MUNICIPAL FINANCE AUTHOR	125	UNRATED	AAA
03-Apr-12	BROOKFIELD ASSET MGMT	425	A	A
04-Apr-12	METRO LIFE GLB FDG	350	UNRATED	UNRATED
10-Apr-12	ALTAGAS LIMITED	200	BBB	BBB
10-Apr-12	BROOKFIELD OFFICE PROP CDA LP	150	BBB	BBB
10-Apr-12	ROYAL BANK OF CANADA	1,500	AA	UNRATED
11-Apr-12	PROVINCE OF ONTARIO	600	AA	AA
11-Apr-12	CITY OF MONTREAL	210	UNRATED	A
11-Apr-12	CITY OF MONTREAL	165	UNRATED	A
12-Apr-12	PROVINCE DE QUEBEC	500	A	A
12-Apr-12	RUSSEL METALS INC.	300	UNRATED	UNRATED
16-Apr-12	LOWER MATTAGAMI ENERGY LIMITE	225	A	UNRATED
18-Apr-12	PROVINCE OF ONTARIO	600	AA	AA
18-Apr-12	PROVINCE OF BRITISH COLUMBIA	1,238	A	A
18-Apr-12	PROVINCE OF BRITISH COLUMBIA	248	A	A
19-Apr-12	FINANCEMENT QUEBEC	500	A	A
20-Apr-12	407 INTERNATIONAL INC.	400	A	A
20-Apr-12	INTERNATIONAL BANK FOR RECONS	400	UNRATED	UNRATED

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24-Apr-12	PROVINCE DE QUEBEC	500	A	A
24-Apr-12	BROOKFIELD OFFICE PROP CDA LP	120	UNRATED	UNRATED
26-Apr-12	CANADIAN CREDIT CARD TR	330	AAA	AAA
30-Apr-12	PROVINCE OF ONTARIO	750	AA	AA
30-Apr-12	TELESAT CANADA	691	UNRATED	B
30-Apr-12	PROVINCE OF ONTARIO	--	UNRATED	UNRATED
30-Apr-12	PROVINCE DE QUEBEC	--	UNRATED	UNRATED
01-May-12	PROVINCE DE QUEBEC	500	A	A
01-May-12	OSIFA	--	UNRATED	UNRATED
01-May-12	OSIFA	--	UNRATED	UNRATED
02-May-12	ROYAL BANK OF CANADA	1,000	AA	AA
03-May-12	PROVINCE DE QUEBEC	500	A	A
03-May-12	THE BANK OF NOVA SCOTIA	1,000	AA	AA
08-May-12	CITY OF TOR	300	AA	AA
08-May-12	CAPITAL CITY LINK GENERAL PAR	535	A	A
09-May-12	PROVINCE OF NOVA SCOTIA	323	A	A
09-May-12	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
09-May-12	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
09-May-12	THE REGIONAL MUNICIPALITY OF	5	UNRATED	AAA
09-May-12	THE REGIONAL MUNICIPALITY OF	6	UNRATED	AAA
09-May-12	THE REGIONAL MUNICIPALITY OF	6	UNRATED	AAA
09-May-12	THE REGIONAL MUNICIPALITY OF	6	UNRATED	AAA
09-May-12	THE REGIONAL MUNICIPALITY OF	6	UNRATED	AAA
09-May-12	THE REGIONAL MUNICIPALITY OF	6	UNRATED	AAA
09-May-12	THE REGIONAL MUNICIPALITY OF	6	UNRATED	AAA
09-May-12	THE REGIONAL MUNICIPALITY OF	6	UNRATED	AAA
10-May-12	PROVINCE OF ONTARIO	600	AA	AA
14-May-12	AEROPLAN CDA	250	BBB	BBB
15-May-12	407 EAST DEVELOPMENT GROUP GE	451	A	A
15-May-12	407 EAST DEVELOPMENT GROUP GE	120	A	A
15-May-12	FORD CREDIT CANADA LIMITED	187	AAA	AAA
15-May-12	FORD CREDIT CANADA LIMITED	214	AAA	AAA
15-May-12	FORD CREDIT CANADA LIMITED	102	AAA	AAA
15-May-12	DAIMLER AG	175	UNRATED	A
15-May-12	REGION OF YORK	150	UNRATED	AAA
16-May-12	CANADA HOUSING TRUST	2,000	AAA	AAA
16-May-12	CANADA HOUSING TRUST	2,500	AAA	AAA
16-May-12	HYDRO ONE INC.	300	A	A
16-May-12	HYDRO ONE INC.	125	A	A
16-May-12	KELLOGG CANADA INC.	300	UNRATED	BBB
17-May-12	CANADIAN IMPERIAL BANK OF COM	1,000	AA	UNRATED
17-May-12	HSBC BANK CANADA	1,000	AA	UNRATED
18-May-12	ALLIED NEVADA GOLD CORP	400	UNRATED	B
23-May-12	INTER PIPELINE FUND	400	BBB	BBB
23-May-12	CATERPILLAR FIN SER LTD	300	UNRATED	UNRATED
23-May-12	CATERPILLAR FIN SER LTD	450	UNRATED	UNRATED
23-May-12	VW CREDIT CANADA, INC.	225	UNRATED	UNRATED
23-May-12	VW CREDIT CANADA, INC.	225	UNRATED	UNRATED

FortisBC - Testimony

Sep-12

24-May-12	PROVINCE OF ONTARIO	750	AA	AA
24-May-12	CROWN IN THE RIGHT OF ALBERTA	500	AAA	AAA
24-May-12	GLACIER CREDIT CARD TR	200	AAA	AAA
25-May-12	FIRST CAPITAL REALTY	100	BBB	UNRATED
29-May-12	PROVINCE OF BRITISH COLUMBIA	500	AA	AAA
29-May-12	PROVINCE OF BRITISH COLUMBIA	200	AA	AAA
29-May-12	PROV OF MANITOBA	300	A	AA
30-May-12	PROVINCE OF ONTARIO	750	AA	AA
30-May-12	ROGERS CABLE INC.	500	UNRATED	BBB
30-May-12	ROGERS CABLE INC.	600	UNRATED	BBB
30-May-12	CENTRE STREET TRUST	250	A	UNRATED
30-May-12	CENTRE STREET TRUST	250	A	UNRATED
31-May-12	ALTALINK INVESTMENTS, L.P.	200	BBB	BBB
31-May-12	KREDITANSTALT FUR WIEDERAUFBA	500	UNRATED	AAA
04-Jun-12	CROWN IN THE RIGHT OF ALBERTA	500	AAA	AAA
05-Jun-12	407 INTERNATIONAL INC.	--	UNRATED	UNRATED
06-Jun-12	GE CAPITAL CANADA FUNDING COM	200	UNRATED	AA
06-Jun-12	GE CAPITAL CANADA FUNDING COM	350	UNRATED	AA
06-Jun-12	XPLORNET COMMUNICATIONS INC	75	UNRATED	UNRATED
07-Jun-12	PROVINCE DE QUEBEC	500	A	A
07-Jun-12	PROVINCE OF ONTARIO	750	AA	AA
07-Jun-12	NORBORD INC.	169	BB	BB
08-Jun-12	FINNING INTERNATIONAL INC	150	A	BBB
08-Jun-12	SP LP & SP 1 LP	650	A	UNRATED
12-Jun-12	INTACT FINANCIAL CORP(FKA ING	200	A	UNRATED
12-Jun-12	COMINAR REAL ESTATE INVESTMEN	125	BBB	UNRATED
12-Jun-12	HYDRO-QUEBEC	1,026	UNRATED	A
13-Jun-12	CANADA HOUSING TRUST	5,000	AAA	AAA
13-Jun-12	PROVINCE OF NEW BRUNSWICK	300	A	A
13-Jun-12	BELL CANADA	1,000	A	BBB
13-Jun-12	LAURENTIAN BANK OF CANADA	83	BBB	BBB
14-Jun-12	CANADIAN NATURAL RESOURCES LT	500	BBB	BBB
14-Jun-12	CROWN IN THE RIGHT OF ALBERTA	616	AAA	AAA
19-Jun-12	PROV OF PEI	200	A	A
20-Jun-12	PROVINCE DE QUEBEC	500	A	A
21-Jun-12	RIOCAN REAL ESTATE INVES	150	BBB	BBB
21-Jun-12	BAA AIRPORTS LTD	400	UNRATED	A
21-Jun-12	APT PIPELINES LIMITED	300	UNRATED	UNRATED
22-Jun-12	PROVINCE OF ONTARIO	750	AA	AA
25-Jun-12	THE CITY OF WINNIPEG	50	UNRATED	AA
26-Jun-12	ALTALINK, L.P.	300	A	A
26-Jun-12	PROVINCE OF ONTARIO	750	AA	AA
26-Jun-12	BCIMC REALTY CORP	250	AA	UNRATED
26-Jun-12	BCIMC REALTY CORP	250	AA	UNRATED
27-Jun-12	JOHN DEERE CREDIT INC.	250	A	A
27-Jun-12	OPB FINANCE TRUST	350	AA	AAA
27-Jun-12	OPB FINANCE TRUST	150	AA	AAA
06-Jul-12	THE BANK OF NOVA SCOTIA	1,000	AA	AA

FortisBC - Testimony

Sep-12

09-Jul-12	BANK NEDERLANDSE GEMEENTEN	125	AAA	AAA
09-Jul-12	BANK OF MONTREAL	1,000	AA	A

Canadian Economic Outlook

BMO Capital Markets Economics

July 6, 2012

	2011				2012				2013				2010	2011	2012	2013
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
PRODUCTION (quarter/quarter % change : a.r.)																
Real GDP (chain-weighted)	3.6	-1.0	4.5	1.9	1.9	1.8	1.6	1.9	1.9	2.1	2.3	2.4	3.2	2.4	2.0	2.0
Final Sales	0.5	-3.5	7.7	3.1	0.7	1.6	1.8	2.0	1.8	2.0	2.2	2.6	2.6	2.2	2.2	2.0
Final Domestic Demand	2.3	2.2	1.7	1.6	1.3	1.9	1.7	1.9	1.9	2.0	2.1	2.3	4.5	3.0	1.7	2.0
Consumer Spending	1.3	2.1	2.1	2.8	0.9	1.7	1.8	2.2	2.0	2.0	2.1	2.2	3.3	2.4	1.8	2.0
durables	-4.1	3.5	-0.4	9.2	-0.4	0.5	1.3	1.5	1.6	1.9	2.0	2.2	4.4	1.8	2.1	1.6
nondurables	1.6	0.3	3.7	0.1	-3.8	2.0	1.6	2.1	1.8	2.0	2.0	2.0	1.8	1.6	0.2	1.9
services	2.5	2.9	1.7	2.6	2.8	1.8	2.0	2.3	2.1	2.0	2.2	2.3	3.5	3.0	2.3	2.1
Government Spending	-1.3	-2.2	-1.7	-3.2	-2.1	-1.9	-1.0	-0.7	0.0	0.4	0.6	0.5	4.7	0.1	-2.0	-0.2
Business Investment	14.6	13.8	1.9	4.9	4.9	8.6	6.8	5.5	4.5	5.0	6.0	7.0	7.3	13.1	6.0	5.7
non-residential construction	15.8	0.9	17.4	13.4	5.7	10.0	7.5	6.0	5.0	5.0	6.0	7.0	2.8	13.7	9.2	6.0
machinery and equipment	13.4	28.8	-12.1	-3.7	4.0	7.0	6.0	5.0	4.0	5.0	6.0	7.0	11.8	12.5	2.6	5.2
Residential Construction	5.4	2.1	10.5	3.0	12.3	5.0	2.0	3.0	2.5	2.0	0.5	1.0	10.2	2.3	6.4	2.2
Exports	4.2	-4.9	15.5	7.2	2.5	3.1	4.3	4.3	3.6	3.9	4.0	4.7	6.4	4.6	4.9	4.0
Imports	10.5	14.3	-3.9	2.3	4.4	4.0	4.0	4.0	3.6	3.7	3.8	3.8	13.1	7.0	3.4	3.8
(billions of chained 2002 dollars : a.r.)																
Inventory Change	13.1	21.7	11.2	5.3	9.4	10.3	9.8	9.5	9.8	10.0	10.5	9.8	8.9	12.8	9.7	10.0
Contribution to GDP Growth	3.2	2.2	-2.6	-1.5	1.0	0.2	-0.2	-0.1	0.1	0.1	0.1	-0.2	0.6	0.2	-0.2	0.0
Net Exports	-136.9	-163.0	-140.1	-135.4	-139.1	-141.5	-142.6	-143.6	-144.9	-146.0	-147.1	-147.4	-124.4	-143.9	-141.7	-146.3
Contribution to GDP Growth	-1.9	-5.7	5.9	1.5	-0.6	-0.3	0.1	0.1	-0.0	0.0	0.0	0.3	-1.9	-0.8	0.5	0.0
(billions of dollars : a.r.)																
Nominal GDP	1,695	1,705	1,729	1,754	1,765	1,781	1,796	1,813	1,831	1,851	1,870	1,890	1,625	1,721	1,789	1,860
(% chng : a.r.)	8.3	2.2	5.8	6.1	2.5	3.7	3.3	3.9	4.1	4.3	4.2	4.4	6.3	5.9	4.0	4.0
INFLATION (quarter/quarter % change : a.r.)																
GDP Price Index	4.6	2.9	1.3	4.2	0.6	1.9	1.6	2.0	2.2	2.1	1.8	1.9	2.9	3.4	1.9	2.0
CPI All Items	3.3	3.4	1.0	2.9	2.1	0.5	0.8	2.5	2.0	2.3	2.3	2.0	1.8	2.9	1.8	2.0
Excl. Food & Energy	1.7	1.6	0.9	1.9	2.0	2.2	1.3	2.4	1.7	2.4	2.4	2.0	1.3	1.6	1.8	2.0
Food Prices	5.6	5.3	4.6	2.6	1.7	1.1	2.3	1.7	1.7	1.9	1.9	1.9	1.4	3.8	2.4	1.8
Energy Prices	12.4	13.8	-4.9	11.7	3.9	-13.1	-6.5	5.7	5.7	2.4	2.4	2.4	6.6	12.3	0.2	1.6
Services	1.3	3.7	3.0	1.1	1.5	3.9	2.2	2.4	2.4	2.4	2.4	2.4	2.0	2.5	2.3	2.5
(year/year % change)																
CPI All Items	2.6	3.4	3.0	2.7	2.3	1.6	1.6	1.5	1.5	1.9	2.3	2.2				
BoC Core	1.3	1.6	1.9	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.2	2.1	1.7	1.7	2.0	2.1
FINANCIAL (average for the quarter : %)																
Overnight Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.25	1.50	0.60	1.00	1.00	1.19
3-Month T-Bill	0.95	0.95	0.88	0.86	0.88	0.95	0.86	0.86	0.86	0.86	1.12	1.38	0.56	0.91	0.89	1.06
90-Day BAs	1.26	1.26	1.22	1.20	1.20	1.24	1.21	1.21	1.21	1.21	1.46	1.72	0.83	1.23	1.21	1.40
10 Year Bond Yield	3.31	3.16	2.53	2.13	2.04	1.91	1.74	1.78	1.97	2.29	2.64	3.02	3.24	2.78	1.87	2.48
Canada/US spread: (bps)																
90 day	82	90	86	84	81	86	77	77	77	77	103	129	42	86	80	97
10 year	-15	-5	10	9	0	8	8	9	10	13	17	23	2	0	6	15
FOREIGN TRADE (billions of dollars : a.r.)																
Current Account Balance	-43.4	-63.7	-47.8	-38.7	-41.1	-46.0	-45.4	-43.5	-44.1	-44.0	-43.7	-42.2	-50.9	-48.4	-44.0	-43.5
(% of GDP)	-2.6	-3.7	-2.8	-2.2	-2.3	-2.6	-2.5	-2.4	-2.4	-2.4	-2.3	-2.2	-3.1	-2.8	-2.5	-2.3
Merchandise Balance	4.8	-13.4	3.0	14.9	9.6	3.1	3.9	5.5	5.7	6.0	6.5	8.0	-9.0	2.3	5.5	6.6
Non-Merchandise Balance	-48.2	-50.3	-50.8	-53.6	-50.6	-49.2	-49.3	-49.0	-49.8	-50.1	-50.2	-50.2	-41.9	-50.7	-49.5	-50.1
(average for the quarter)																
Exchange Rate (US\$/C\$)	101.4	103.4	102.1	97.8	99.9	99.0	97.6	97.7	97.2	98.4	99.7	101.1	97.1	101.2	98.5	99.1
Exchange Rate (C\$/US\$)	0.986	0.967	0.979	1.023	1.001	1.010	1.025	1.024	1.028	1.016	1.003	0.989	1.030	0.989	1.015	1.009
Exchange Rate (¥/C\$)	83.4	84.3	79.3	75.6	79.2	79.3	79.0	78.8	79.4	82.8	86.4	90.1	85.2	80.7	79.1	84.7
Exchange Rate (C\$/Euro)	1.35	1.39	1.38	1.38	1.31	1.30	1.30	1.29	1.30	1.31	1.32	1.33	1.37	1.38	1.30	1.32
INCOMES (billions of dollars : a.r.)																
Corporate Profits Before Tax	203.4	201.2	209.8	220.2	214.4	215.8	213.6	215.7	218.1	220.4	222.1	224.6	180.7	208.6	214.9	221.3
Corporate Profits After Tax	152.6	144.2	151.2	161.9	156.3	157.7	155.5	157.6	159.9	162.2	163.9	166.5	124.2	152.4	156.8	163.1
(year/year % change)																
Corporate Profits Before Tax	13.3	16.5	18.4	13.7	5.4	7.3	1.9	-2.0	1.7	2.1	3.9	4.1	21.2	15.4	3.0	3.0
Personal Income	4.9	4.1	3.9	3.3	3.2	3.3	3.6	3.5	3.8	3.7	3.8	3.9	4.2	4.0	3.4	3.8
Real Disposable Income	3.3	-0.5	1.4	0.8	0.6	1.1	1.7	1.8	2.1	1.6	1.6	1.6	3.6	1.3	1.3	1.7
(average for the quarter : %)																
Savings Rate	4.3	3.9	3.3	3.1	2.9	3.1	3.2	3.3	3.0	2.7	2.7	2.8	4.8	3.6	3.1	2.8
OTHER INDICATORS (quarter average)																
Unemployment Rate (%)	7.7	7.5	7.2	7.4	7.4	7.2	7.2	7.1	7.0	7.0	7.0	6.9	8.0	7.5	7.2	7.0
Housing Starts (000s, a.r.)	177	192	205	199	206	218	190	183	188	186	184	183	191	193	200	185
Existing Home Sales (y/y % ch)	-7.9	-0.8	13.2	7.3	3.3	6.7	0.0	-5.5	-5.9	-5.7	-1.1	1.1	-3.9	2.4	1.0	-3.0
Home Prices (y/y % ch, CREA)	7.7	8.7	8.3	3.9	1.0	-0.2	0.2	0.1	-2.0	-0.8	0.2	0.7	6.9	7.1	0.3	-0.5
Motor Vehicle Sales (mlns, a.r.)	1.61	1.61	1.59	1.68	1.77	1.69	1.61	1.63	1.64	1.66	1.65	1.67	1.59	1.62	1.68	1.65
(quarter/quarter % change : a.r.)																
Employment Growth	2.2	1.6	1.2	-0.3	0.9	2.8	0.7	1.3	1.2	1.1	1.1	1.2	1.4	1.5	1.1	1.2
Industrial Production	7.0	-5.4	8.4	2.7	-1.0	3.5	3.0	2.2	3.0	2.7	2.4	2.0	4.9	3.5	2.1	2.7
Federal Budget Balance (% of FY GDP)													-2.1	-1.5	-1.2	-0.6

Note: Outlined areas represent forecast periods

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Attachment 13.4

NATIONAL ENERGY BOARD

IN THE MATTER OF the *National Energy Board Act*, R.S.C. 1985,
c. N-7, as amended, (*Act*) and the Regulations made under it; and

IN THE MATTER OF an Application by TransCanada PipeLines
Limited (TransCanada) pursuant for orders pursuant to Part IV of the
National Energy Board Act for approval of tolls for 2004.

WRITTEN REPLY EVIDENCE

OF

A. LAWRENCE KOLBE

FOR

TRANSCANADA PIPELINES LIMITED

The Brattle Group
44 Brattle Street
Cambridge, Massachusetts 02138
617.864.7900

November 2004

WRITTEN REPLY EVIDENCE OF
A. LAWRENCE KOLBE

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*book ratio significantly above 1.0 indicates that investors have earned a return that is above a fair and reasonable rate of return.*⁷

The Booth Evidence does not explain how regulators can fail when (1) they do not achieve a particular value (i.e., the company's book value) for a quantity (i.e., the stock's market value) (2) over which that same Evidence says regulators have no control.⁸

In point of fact, Section IV and Appendix D show below that the Booth Evidence's interpretation of the mechanism and impact of financial risk is fundamentally flawed. The next part of this section shows that the Booth Evidence's interpretation of the market-to-book ratio is equally flawed. Regulators do not "fail" when the regulated company does not display a particular market-to-book ratio.

B. INVALIDITY OF MARKET-TO-BOOK RATIO AS A TEST OF FAIR RETURN

Q8. Why do you say the Booth Evidence's interpretation of the market-to-book ratio is "fatally flawed"?

A8. There are two reasons. First, the Booth Evidence has not worked through the logical implications of its position. Underlying the Booth Evidence on the meaning of the market-to-book ratio is a simple model of stock price formation. If that model were valid and the Booth Evidence were right in what it said, the implied true cost of equity of rate-regulated investments would be far too low, in many cases lower than the benchmark, 30-

⁷ Booth Evidence, p. 65. Italicized emphasis in the original.

⁸ The Booth Responses to TCPL Information Request Nos. 9 and 12 do not resolve this conundrum.

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1 year Government bond interest rate used in the Board's formula rate of return on equity.
2 That is a plainly unreasonable outcome from an economic point of view. (It also would
3 seem to be in conflict with the Board's rate of return on equity formula, which is accepted
4 "as is" in this proceeding.)

5 Second, the stock market has taught us in the last 20 years that the market-to-book
6 ratio is *not* a reliable test of whether rate-regulated investments' returns are reasonable.
7 That is, the simple model on which the Booth Evidence's market-to-book ratio
8 conclusions rest is inconsistent with the way the market actually behaves. That
9 inconsistency is highlighted by the unreasonable values for the costs of equity implied by
10 the Booth Evidence's statements.

11 **1. Implied Cost of Equity Values Far Too Low, Often Less Than the**
12 **Board's Benchmark Interest Rate**

13 **Q9. Please address these two reasons in turn, starting with why you say the Booth**
14 **Evidence's interpretation of the market-to-book ratio implies a true cost of equity**
15 **that is "plainly unreasonable."**

16 A9. As noted earlier, the Booth Evidence holds that regulation has failed if market-to-book
17 ratios are significantly above one. At pp. 92-94, it discusses market-to-book ratios well
18 above one for utility holding companies and for individual purchases of rate-regulated
19 assets. Based on these data, it concludes that "this means that utility allowed ROEs and

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common equity ratios in Canada are excessive and rates include equity charges that are more than fair and reasonable.”⁹

The market-to-book ratios to which this passage refers appear in Schedule 20 of the Booth Evidence and in a discussion on p. 93. Most of these market-to-book ratios currently exceed 1.5, and some exceed 2.0. Suppose the range of values to which the Booth Evidence refers in the just-quoted statement were from 1.5 to 2.0.¹⁰ What would that mean for the true cost of equity of rate-regulated investments, if the Booth Evidence were right about the market-to-book ratio? Asked another way, what allowed rate of return would be needed to bring down the market-to-book ratio to a value of 1.0, given starting values from 1.5 to 2.0, if the Booth Evidence were right?

Q10. What are the answers to these questions?

A10. The answers depend on whether, and if so, when, investors expect regulators to stop “failing,” in the Booth Evidence’s characterization. That is, they depend on when regulators will get the market-to-book ratio back down to one. Suppose the Booth Evidence’s positions were right, and consider a simple case. Specifically, suppose the

⁹ Booth Evidence, p. 94. The Booth Evidence in this passage cites the 1984 cost of capital book I co-authored, in support of its position. My reply evidence specifically addresses that citation later in this section. Briefly, the stock market has taught me that the statements in the book rested on an invalid model of stock market prices.

¹⁰ The Booth Evidence identifies PNG as anomalous at pp. 92-93. Excluding PNG, the average ratio of the companies that underlie the Booth Evidence’s Schedule 20 have a market-to-book ratio of 1.8 in 2002, the last year shown, with a range of 1.4 to 2.4. (Source: zip file referred to in Booth Response to TCPL Information Request No. 1.) To the extent these ratios are for holding companies rather than rate-regulated assets, these values may overstate the regulated market-to-book ratios. However, the Booth Evidence estimates an equity market-to-book ratio of 1.96 for a purchase of regulated assets on p. 93. On balance, the 1.5 to 2.0 range does not seem to be an unfair characterization of the values the Booth Evidence references in its statements about market-to-book ratios.

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market expects regulators *never* to set rates of return low enough to reduce the market-to-book ratio from its initial value, let alone low enough to bring the market-to-book ratio down to one. Suppose also that the company's estimated cost of equity is the Board's formula value, 9.56 percent, which is also its allowed return on equity. Assume investors expect that to be the allowed cost of equity forever, and that all of the earnings are paid out as dividends every year, with depreciation reinvested to keep the rate base constant.

What is the true cost of equity, in this hypothetical world? The Booth Evidence's answer in this case is given by its Equation (7) on p. 63, which in words is:¹¹

$$\frac{\text{Market Value}}{\text{Book Value}} = \frac{\text{Rate of Return on Book Value}}{\text{Cost of Capital}}$$

This equation can be rearranged to read:

$$\text{Cost of Capital} = \frac{\text{Rate of Return on Book Value}}{(\text{Market Value} / \text{Book Value})}$$

Thus the Booth Evidence's answer in this case is 9.56 percent divided by the market-to-book ratio. At a perpetual market-to-book ratio of 1.5, the Booth Evidence would put the true cost of equity at $(9.56 \text{ percent} / 1.5) = 6.37 \text{ percent}$. At a perpetual market-to-book ratio of 2.0, it would put the true cost of equity at $(9.56 \text{ percent} / 2.0) = 4.78 \text{ percent}$. Note that the latter value is lower than the 5.68 percent 30-year long Canada yield used to set the Board's formula rate of return on equity.

¹¹ The Booth Evidence at p. 92 cites an equivalent equation from the 1984 book I co-authored. Again, I address this issue below.

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Q11. What happens under the Booth Evidence's assumptions if investors instead do expect the market-to-book ratio to come down to one someday, rather than to stay constant forever?

A11. The implied true cost of equity is even *lower*. The reason is that investors now expect that at some point the stock will suffer a loss equal to the difference between the initial market-to-book ratio and a value of 1.0. Therefore, the discount rate that equates the forecasted cash flows with the loss to the initial market price has to be lower than before.

Suppose we modify the above example to assume that investors expect that there will be a loss from the market-to-book ratio's falling to 1.0 from the initial value of 1.5 or 2.0. Assume this loss is delayed as long as possible and comes all at once, at the end of some specific number of years. What is the implied cost of equity that goes with each particular number of years and initial market-to-book ratio, under the Booth Evidence's assumptions about the market-to-book ratio? Figure R-1 has the answer.¹² It plots two curves for the true cost of equity, for companies with initial market-to-book ratios of 1.5 and 2.0, respectively. It adds dotted lines for the Board's 9.56 percent formula rate of return on equity and for the 5.68 percent 30-year long Canada bond yield used in its calculation.

¹² As in the earlier example, this figure assumes the estimated cost of equity is the Board's formula value, that it is unchanging, and that this is the allowed rate of return. All earnings are paid out as dividends, and depreciation is reinvested to maintain book value at a constant level.

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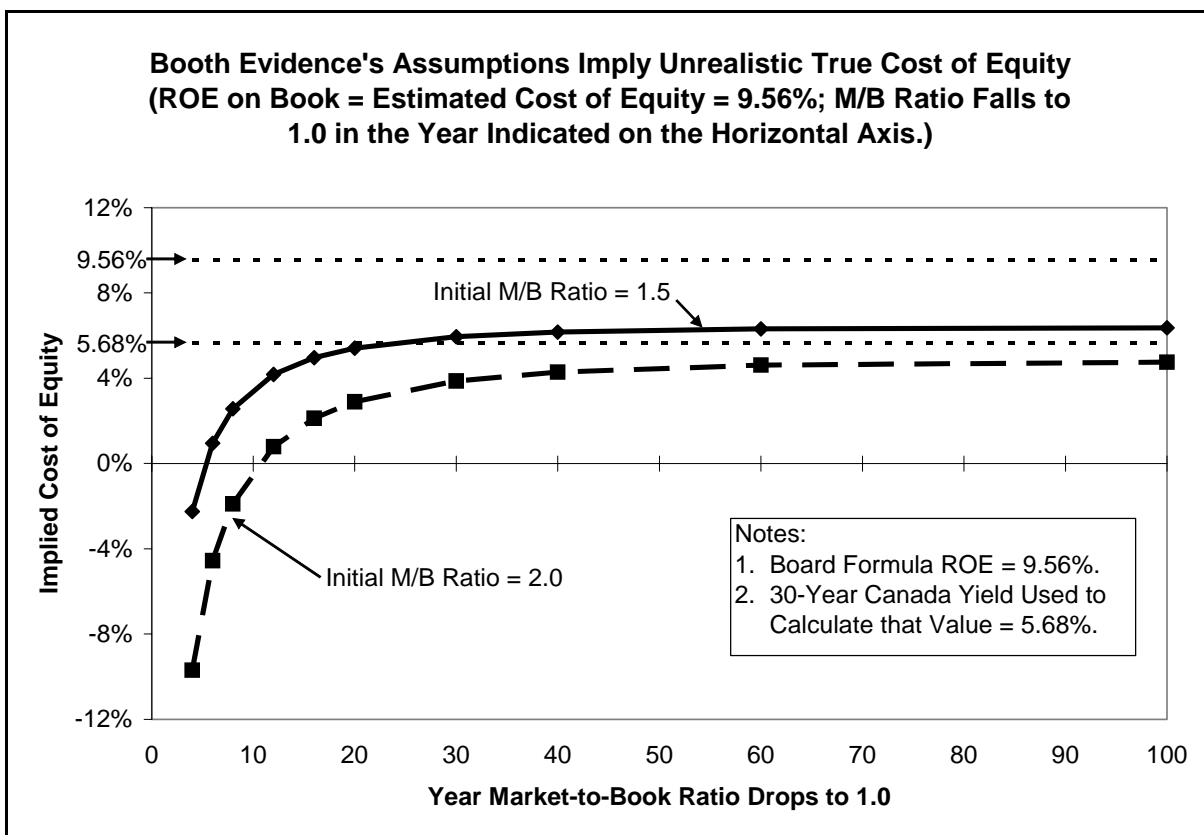


Figure R-1

If the Booth Evidence were right about the market-to-book ratio, it would take a delay of nearly 30 years in the capital loss from the market-to-book ratio's falling to 1.0 before the true cost of equity of a particular company or investment with a market-to-book ratio of 1.5 would be even as high as 5.68 percent, the long-term risk-free interest rate. At a market-to-book ratio of 2.0, it would take a delay of over 10 years in the capital loss merely to get a *positive* value for the implied true cost of equity.

Q12. How sensitive are these values to the assumption that all earnings are paid out, with no reinvestment and therefore no growth?

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1 A12. Positive growth rates through the date of the capital loss shift the curves in Figure R-1 up
2 somewhat. Negative growth rates (as for a pipeline serving a declining source of gas)
3 shift them down somewhat. The basic message is unaffected.

4 **Q13. What if the target market-to-book ratio is slightly above 1.0, rather than 1.0**
5 **exactly?**

6 A13. In that case the lines in Figure R-1 will go up somewhat on the left side, but are
7 unchanged on the right side. (The reason is that the loss is not as great in this case, but
8 that matters less and less as the loss is pushed further into the future.) Again, the basic
9 message is unaffected.

10 **Q14. Please sum up what this discussion implies about the assumptions that underlie the**
11 **Booth Evidence's view that regulation "fails" if it permits the market-to-book ratio**
12 **to exceed one significantly.**

13 A14. For the Booth Evidence's assertions on the meaning of the market-to-book ratio to be
14 right, the actual costs of equity of rate-regulated companies would have to be absurdly
15 low, and possibly negative. This means regulators who reject the Booth Evidence's view
16 on the market-to-book ratio are right to do so.

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2. **Market-to-Book Ratio Test Inconsistent with the Way the Market Behaves**

Q15. Please turn to the second reason that you say that the Booth Evidence's interpretation of the market-to-book ratio is "fatally flawed," the lessons the stock market has taught us in the last 20 years. What did you have in mind?

A15. In support of its view on the market-to-book ratio, p. 92 of the Booth Evidence quotes a book I co-authored that was published in 1984. Even at that time, there were a number of caveats concerning use of the market-to-book ratio to test utility rates. Since that time, however, the market has behaved in ways that are plainly inconsistent with the simple pricing model on which the market-to-book ratio test rests. It is now clear that the market-to-book ratio test does not work.

Q16. Before you address the changes since your book was published, please identify the "caveats" concerning use of the market-to-book ratio test that existed even in 1984.

A16. First, even when we were able to believe in the validity of the market-to-book ratio test, we knew that the test could work only for companies that consisted entirely of regulated businesses with a rate base equal to net book value. The test never was believed to work for unregulated businesses. The pattern of cash flows over the life of an unregulated investment is quite different from that of an investment regulated on a net book-value rate base.¹³ In a competitive equilibrium with inflation, that means market values will

¹³ See, for example, Stewart C. Myers, A. Lawrence Kolbe and William B. Tye, "Inflation and Rate of Return Regulation," *Research in Transportation Economics*, Volume II. Greenwich, CT: JAI Press, Inc., 1985.

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1 generally exceed book values for unregulated firms. The deviations may be even greater
2 in the actual world.

3 Second, even for (1) a pure-play utility with a rate base equal to net book value,
4 with (2) a true market asset pricing model that would yield a market-to-book ratio of one
5 for such a utility in equilibrium, the regulatory process may act with a lag that leaves
6 market-to-book ratios substantially different from one for long periods of time.

7 Third, even for (1) a pure-play utility with a rate base equal to net book value,
8 with (2) a true market asset pricing model that would yield a market-to-book ratio of one
9 for such a utility in equilibrium, regulators could not try consciously to target a market-to-
10 book ratio of one in setting the allowed rate of return. The reason is that once investors
11 discovered this policy (whether through public pronouncements or analysis of the results
12 of confidential deliberations), investors would take it into account in pricing the stock.
13 That would change the market-to-book ratio, thereby contaminating the information
14 regulators would need to implement the policy. Regulation that consciously tries to set
15 an allowed rate of return that makes the market-to-book ratio equal one is circular. This
16 circularity existed even when we could still believe in the market-to-book test, and even
17 for companies in circumstances that we would have believed would make market-to-book
18 test valid.

19 **Q17. Please now identify the actions of the market that have led you to conclude that the**
20 **market-to-book ratio test “does not work.”**

21 A17. The stock market has taught us that the true, unknown, model or models that drive stock
22 prices is (are) more complicated than the simple models that give rise to the market-to-

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1 book test. That means we can no longer trust that the market-to-book test would actually
2 work even for a pure-play utility regulated entirely on a rate base equal to net book value,
3 in equilibrium.

4 Specifically, the stock market forced me to change my view of the value of the
5 market-to-book ratio for a steady-state, pure play utility with a book-value rate base when
6 it crashed in October 1987.¹⁴ The stock market bubble of the late 1990s and 2000 has
7 only reinforced this conclusion.

8 In an attempt to explain how the market's level could change so much in such a
9 short period, Prof. Stewart C. Myers wrote a paper¹⁵ that argues that the stock market is
10 good at getting relative prices right, because a great deal of money can be made in
11 riskless arbitrage if securities are mispriced relative to one another. However, the stock
12 market is not able to get absolute prices right, except in a “fuzzy” way.¹⁶

13 The market-to-book ratio purports to be a test of absolute value for utilities. If the
14 stock market can get relative prices right, and if any stock has a reliable test for its

¹⁴ For the record, I am not claiming an epiphany. It took several years for me to understand the implications of the crash in the context of rate regulation.

¹⁵ Stewart C. Myers, “Fuzzy Efficiency,” *Institutional Investor*, December 1988.

¹⁶ Nobel laureate Paul A. Samuelson expressed a related view in a letter to Profs. Robert Shiller and John Campbell:

Modern markets show considerable *micro* efficiency (for the reason that the minority who spot aberrations from micro efficiency can make money from those occurrences and, in doing so, they tend to wipe out any persistent inefficiencies). In no contradiction to the previous sentence, I had hypothesized considerable *macro* inefficiencies, in the sense of long waves in the time series of aggregate indexes of security prices below and above various definitions of fundamental values. ... Long swings are long in time but *that* doesn’t get them corrected with increasing confidence on the part of observing scientist.

Quoted from Robert J. Shiller, *Irrational Exuberance*, New York: Broadway Books (2001), p. 243, emphases in the original.

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absolute value, then all stocks will be priced right relative to it, and all stocks will be priced right in absolute value, too. If this were true, the stock market wouldn't have crashed in October 1987, nor would the turn-of-the-century “tech bubble” have happened. Since those events did happen, the supposed test of absolute value for utilities, i.e., the market-to-book ratio test, must not be valid. The unknown “true” model(s) of stock market prices in practice must be richer and more complicated than assumed in the simple derivation of the market-to-book test.

Q18. Do you have any other comments about the Booth Evidence’s use of the market-to-book ratio?

A18. Just one. Footnote 29 on p. 63 of the Booth Evidence refers to his use of a simple model to derive the (incorrect) conclusion that a market-to-book ratio of one signals an allowed rate of return on equity equal to the cost of capital and adds,

It is then in the interests of the regulated firm to make observing this market to book ratio as difficult as possible. This is what I refer to as looking through a dirty window, where there is no incentive for the utility to clean the window. It may not be an accident that there are so few pure regulated utilities left.

I read this passage as suggesting that utilities may be deliberately adding unregulated investments for the purpose of making it harder to assess the adequacy of their market-to-book ratios. If this is in fact the passage’s intent, I would note that alternative explanations exist. For example, utility managers may believe the unregulated investments are worthwhile on their own merits. They may even believe that allowed

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returns on regulated investments are inadequate, so that they have a duty to their shareholders to shift their investment focus to unregulated opportunities.

Q19. What do you believe regulators should do about the market-to-book ratio?

A19. I believe regulators should focus on setting the allowed return according to the best evidence available and leave the market-to-book ratio to whatever (currently incompletely understood) forces drive the stock prices of the individual sample companies and the market as a whole. They definitely should *not* take a market-to-book ratio significantly above one as an indication that they have “failed.”

III. FLAWED COMMENTS ON THE MAINLINE’S RISK

Q20. What topics does this section address?

A20. The Booth Evidence makes a number of statements regarding the Mainline’s risk, some quite general and others specific. There are numerous economic flaws in these statements. This section addresses the principal flaws that fall within the scope of my and Dr. Vilbert’s direct evidence. The section also addresses the Booth Evidence’s numerical examples, which purport to show that the Mainline’s long-term risk has a *de minimis* impact on the current fair deemed equity ratio even under an allegedly “*huge* increase in risk.”¹⁷ This section shows instead that these examples wrongly measure risk by looking

¹⁷ Booth Evidence, p. 26, italicized emphasis in the original. As will be seen, the actual hypothesized increase in risk is only about 40 percent of the amount the Booth Evidence claims it is. That is, because it assumes the risk of the equity return increases so its cost of capital is 15 percent, but the risk of depreciation is unchanged, so its cost of capital is 10 percent. The weighted average of these two varies (continued...)

**NATIONAL ENERGY BOARD
OFFICE NATIONAL DE L'ÉNERGIE**



**Hearing Order RH-2-2004
Ordonnance d'audience RH-2-2004**

TransCanada PipeLines Limited (TransCanada)

2004 Mainline Tolls and Tariff Application (2004 Tolls Application)

PHASE II

VOLUME 15

**Hearing held at
L'audience tenue à**

**National Energy Board
444 Seventh Avenue SW
Calgary, Alberta**

**January 20, 2005
le 20 janvier 2005**

**International Reporting Inc.
Ottawa, Ontario
(613) 748-6043**

Canada

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participant à l'audience publique.

Imprimé au Canada

**HEARING ORDER/ORDONNANCE D'AUDIENCE
RH-2-2004**

**IN THE MATTER OF TransCanada applied to the
National Energy Board
pursuant to Part IV of the *National Energy Board Act*
for approval of tolls to be charged for service on the
TransCanada Mainline
between 1 January and 31 December 2004**

HEARING LOCATION/LIEU DE L'AUDIENCE

Hearing held at Calgary (Alberta), Thursday, January 20, 2005

Audience tenue à Calgary (Alberta) Jeudi, le 20 janvier 2005

BOARD PANEL/COMITÉ D'AUDIENCE DE L'OFFICE

G. Caron	Chairman/Président
J.S. Bulger	Member/Membre
D. Emes	Member/Membre

APPEARANCES/COMPARUTIONS

Applicant/Demandeur

TransCanada PipeLines Limited

- Mr. C.K. Yates

- Ms. W.M. Moreland

Associations

Canadian Association of Petroleum Producers

- Mr. N.J. Schultz

Industrial Gas Users Association

- Mr. P.L. Fournier

Companies/Compagnies

BP Canada Energy Company

- Mr. B. Troicuk

Coral Energy Canada Inc.

- Mr. M.P. Stauff

Nexen Marketing

- Ms. S. Young

Governments/Gouvernements

Minister of Energy for Ontario

- Mr. J.C. Turchin

- Mr. E. Sweet

Procureur général du Québec

National Energy Board/Office national de l'énergie

- Ms. M. Fowke

- Ms. R. Zanin

ERRATA

Volume 1, November 29, 2004:

Paragraph No.

Should read:

309

"... and they're pertinently occurred
in the recoverable, ... "

"... and they're prudently incurred and recoverable,
..."

351

"...shippers, they can achieve those ..."

"... shippers that can achieve those ... "

456

"... an expression of return of capital ..."

"... an expression of return on capital ..."

595

"... test that we're looking to past."

"... test that we're looking to pass."

Volume 3, December 01, 2004:

3205

"... GTN acquisition with our free cash
flow through the sale of assets and
through ..."

"... GTN acquisition with our free cash flow,
through the sale of assets and through ..."

3820

"... essentially, that we see subsidization."

"... essentially, that we cease subsidization."

Volume 5, December 07, 2004

5900

"... then we would be talking about --
using our example, we would be ..."

"... then we would be talking about -- using
your example, we would be ..."

Volume 6, December 08, 2004

7362

"... seem to be a positive friend
trend, how can you ..."

"... seem to be a positive trend, how can you ..."

ERRATA

Volume 6, December 08, 2004: (Continued)

<u>Paragraph No.</u>	<u>Should read:</u>
8222 "... is the NPB of after-tax ..."	"... is the NPV of after-tax ..."
8223 "We're hurdle rate."	"Our hurdle rate."
8281 "... over the long term, its expandability; ..."	"... over the long term, its expandability; ..."
"... the Baja pipeline, and its expandability."	"... the Baja pipeline, and its expandability."
8282 "Is when the business development ..."	"When the business development ..."
8288 "GTN was stand-alone NPB of the ..."	"GTN was stand-alone NPV of the ..."
8921 "... but our view is under the MPA, ..."	"... but our view is under the NPA, ..."
8924 "... and have been in Ottawa and other places. I'm suggesting that those rights aren't ..."	"and have been in Ottawa and other places suggesting that those rights aren't ..."

Volume 7, December 13, 2004:

9184 "It's not an energy plan, so ..."	"It's not an energy plant, so ..."
9188 "... somewhere between 700 and a million dollars per ..."	"... somewhere between 700 and 800 million dollars per ..."

ERRATA

Volume 7, December 13, 2004: (Continued)

<u>Paragraph No.</u>	<u>Should read:</u>
9311 "We only have one balance sheet that we need to finesse."	"We only have one balance sheet that we need to finance."
9312 "... structure so that rating agencies can't comment on that."	"... structure so that rating agencies can comment on that."
9315 "... reporting level which would go to IBITDA level or ..."	"... reporting level which would go to EBITDA level or ..."
10278 "So a combination of an increasing dividend divided by a decreasing yield gets you your stock price."	"So a combination of an increasing dividend and a decreasing yield gets you your stock price."

Volume 8, December 14, 2004:

10698 "And if you look at our pipelines across the border and ..."	"And if you look at our pipelines crossing the border and ..."
10703 "... speak to those imperative risk assessments."	"... speak to those comparative risk assessments."
11155 "I can invest in the one that is and have certainty at ..."	"I can invest in the one that does not have certainty at ..."
11329 "... that we're moving this thing forward very far."	"... that we're not moving this thing forward very far."

ERRATA

Volume 9, December 15, 2004:

Paragraph No.

Should read:

12255

"... that's attracted to their system ..."

"... that's attached to their system ..."

12691

"... from continuing operations from
132 to 166."

"... from continuing operations from \$1.32 to
\$1.66."

Volume 10, December 16, 2004:

13424

"... if the cost of equity, in this case ..."

"... if the cost of capital, in this case ..."

13498

"... would match what we're seeing
in the real word, is that ..."

"... would match what we're seeing in the real
world, is that ..."

14104

"... the starting place was an NEB
return on ..."

"... the starting place was an EUB return on ..."

Volume 11, December 17, 2004:

14241

"... essentially fixed cost obligations
and flowing revenue requirements ..."

"... essentially fixed cost obligations and floating
revenue requirements ..."

Volume 14, January 19, 2005:

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A. Jamal, Sworn

P.R. Carpenter, Resumed

TCPL Panel 2:

C.R. Frew, Resumed

D.K. Ferguson, Resumed

W.A. Langford, Resumed

G.J.W. Zwick, Resumed

A. Jamal, Resumed

P.R. Carpenter, Resumed

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Volume 14, January 19, 2005: (Continued)

Paragraph No.

Should read:

18976

"... Chicago price base is relative to
Henry hub ..."

"... Chicago price basis relative to Henry hub, ..."

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A. Jamal, Resumed

P.R. Carpenter, Resumed

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UNDERTAKINGS/ENGAGEMENTS

No.	Description	Paragraph/Paragraphe No
U-19	Provide an Update to Table 6: Supply Fundamentals (1990 vs. 2003) of the business Risk evidence, page 35 of 83, to reflect actual 2003 data. Also update the similar table contained in the throughput study.	19830
U20	Specify the pipelines to which TransCanada compares the Mainline to in its evidence that have specific provisions concerning eventual terminal negative salvage.	20110
U21	Update TransCanada's response to NEB 1.9(a) and (b) to reflect most recent data. Also quantify the share that relinquished capacity in the last year that was not subsequently re-contracted represents relative to each pipelines' capacity. If possible, present the information in such a way that allows a distance-volume assessment, as well as a volumes only assessment.	20130

--- Upon commencing at 8:30 a.m./L'audience débute à 8h30

19401. **THE CHAIRMAN:** Good morning, everyone. Bonjour à tous.

19402. Are there any preliminary matters this morning?

19403. **THE CHAIRMAN:** Ms. Fowke...?

19404. **MS. FOWKE:** Thank you, Mr. Chairman.

19405. I have one, and I just thought I should put this on the record 'cause it's a fairly significant change to the transcript. And that is in Volume 11 at paragraph 14340.

19406. I think I said -- I had talked in the earlier -- at paragraph 14335 about ATWACC at "5.9 or approximately 6 percent". And then at 14340, it shows that I said 9.5 percent. If indeed I said that, I did mean 5.9 percent.

19407. And I've checked it with my friend, Mr. Yates, and that was the understanding of the witnesses when they answered that question.

19408. Thank you, Mr. Chairman.

19409. **THE CHAIRMAN:** Thank you, Ms. Fowke.

19410. Mr. Yates...?

--- (A short pause/Courte pause)

19411. **MR. YATES:** I have some filings to make, Mr. Chairman.

19412. The first is a response to an undertaking. It is Undertaking U-17, which was given by Mr. Zwick to Mr. Schultz at Transcript Volume 13, paragraph 16867, to describe the allocation methodology of Alaskan gas.

--- (Document distributed/Document distribué)

19413. **THE CLERK:** That will be B-76.

--- **EXHIBIT NO./PIÈCE NO. B-76:**

Response to Undertaking U-17 given by Mr. Zwick to Mr. Schultz at Transcript Volume 13, paragraph 16867

19414. **MR. YATES:** Mr. Chairman, it looks as though we might have the possibility of Panel 3 starting later today.

Preliminary matters
Filing of exhibits by C.K. Yates

19415. And what I'd like to do in anticipation of that is distribute and, I think, file for purposes of clarity, an errata sheet for each of Dr. Kolbe and Dr. Vilbert and one additional document that was omitted from the previous filing.

19416. So the -- what I propose as the next exhibit is a document that is called "Errata for Kolbe Written Evidence, Kolbe Reply Evidence, and Information Requests".

--- (Document distributed/Document distribué)

19417. **THE CLERK:** B-77.

--- **EXHIBIT NO./PIÈCE NO. B-77:**

Document entitled "Errata for Kolbe Written Evidence, Kolbe Reply Evidence, and Information Requests"

19418. **MR. YATES:** The next document would be one entitled "Errata for Amended Written Evidence and Information Requests of Michael J. Vilbert".

--- (Document distributed/Document distribué)

19419. **THE CLERK:** B-78.

--- **EXHIBIT NO./PIÈCE NO. B-78:**

Document entitled "Errata for Amended Written Evidence and Information Requests of Michael J. Vilbert"

19420. **MR. YATES:** And lastly, Mr. Chairman, it was discovered in the preparation process that a table in a response to a Board information request was inadvertently omitted.

19421. And the response is NEB IR 2.13. The omission was Table 2, and I'd like to file that table now.

--- (Document distributed/Document distribué)

19422. **THE CLERK:** B-78. Sorry, that's B-79.

--- **EXHIBIT NO./PIÈCE NO. B-79:**

Table 2 in response to NEB IR 2.13

19423. **MR. YATES:** I should say, Mr. Chairman, that this B-79 relates to a response that was provided by Dr. Vilbert.

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19424. Thank you.
19425. **THE CHAIRMAN:** Thank you, Mr. Yates.
19426. Are there any other preliminary matters?
19427. Mr. Schultz...?
19428. **MR. SCHULTZ:** Thank you, Mr. Chairman.
19429. I have two very brief points of clarification with regard to the undertaking responses filed yesterday, and I've discussed those with my friends, and also the witnesses are aware of what I'm going to be asking, so this won't take too long.
19430. And I'm going to borrow my learned friend's podium for one instant here while I do that.
19431. I'm grateful, Mr. Chairman.

C.R. FREW: Resumed

D. FERGUSON: Resumed

P.R. CARPENTER: Resumed

A. JAMAL: Resumed

W.A. LANGFORD: Resumed

G.J.W. ZWICK: Resumed

--- RE-EXAMINATION BY/INTERROGATOIRE PAR MR. SCHULTZ:

19432. **MR. SCHULTZ:** Mr. Zwick, you provided an undertaking response, Exhibit No. B-74. This is the response to Undertaking U-15.
19433. And there are some Mainline flow figures that are shown there in a line identified under the heading "Mainline" with the notation in the line of flow. And I simply wanted to confirm that the flow that is shown there is flow from the western end of the Mainline.
19434. Would that be right?
19435. **MR. ZWICK:** Yes, that's correct.
19436. The information from this table is the same information that appears in the response to CAPP 2(q), with the exception of the 2003/2004 figure, which has been adjusted to reflect the year-end actual.
19437. **MR. SCHULTZ:** Thank you, sir.

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19438. And, Mr. Ferguson, you provided a response in Exhibit B-75, which is Undertaking U-16. And you show some contract figures which take us out to -- out into 2006, where we see figures for January 2006 and April 2006. And my understanding of what you presented here for the years in question is the information as it's known today with respect to the contract profile of the Mainline, but, of course, that doesn't reflect what may or may not occur with renewals as one goes out further in time.

19439. Would that be right?

19440. **MR. FERGUSON:** Yes, that's correct.

19441. So particularly for the January and April 2006 time frames, we would not yet have received any renewal notification for contracts that are up for renewals, so we simply assumed that they're not renewed for purposes of this presentation.

19442. **MR. SCHULTZ:** Thank you, sir. Thank you, Mr. Chairman.

19443. **THE CHAIRMAN:** Thank you, Mr. Schultz.

19444. Mr. Turchin...?

19445. **MR. TURCHIN:** Thank you.

--- EXAMINATION BY/INTERROGATOIRE PAR MR. TURCHIN:

19446. **MR. TURCHIN:** Good morning, Mr. Chairman. I hope it's not too late to say "Happy New Year" to you and to my colleagues on Panel 2.

19447. My name is John Turchin, gentlemen. I have questions on behalf of the Minister of Energy for the Province of Ontario.

19448. Mr. Chairman, with me, as he was in Panel 1, is my colleague Mr. Sweet at the advisor table. Mr. Sweet is Senior Advisor, Gas Supply Matters to the Minister of Energy for the Province Ontario.

19449. Gentlemen, we'll begin with the Relative Business Risk Analysis of Pipelines, which begins in Exhibit 40 at page 58. So if we could turn that up, please.

--- (A short pause/Courte pause)

19450. **MR. TURCHIN:** You have that, gentlemen?

19451. **MR. FREW:** Yes, we do.

19452. **MR. TURCHIN:** Now, beginning at page 58 is a discussion about the purpose of the comparative risk section of the evidence. You say that at line 2. And

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there's a discussion at page 59 of the things that TransCanada did in conducting its analysis.

19453. And then I wanted to take you to page 61 where you describe in a little bit more detail the methodology used in the analysis.

19454. Do you see that, Mr. Frew? Top of page 61.

19455. **MR. FREW:** That would be response to Question 83?

19456. **MR. TURCHIN:** Yes, sir.

19457. **MR. FREW:** Yes.

19458. **MR. TURCHIN:** Now, at line 3 we see that the first task was to select the specific pipelines, and then we see further down that the next task was collecting business risk information.

19459. Another task was sorting that information into five important risk categories, and then establishing the weighting system to reflect relative importance, and then rating each pipeline ultimately on a scale of 0 to 4, and then ultimately determining the specific business risk index for each pipeline.

19460. Do you see that, Mr. Frew?

19461. **MR. FREW:** Yes, I do.

19462. **MR. STAUFF:** And by the specific business risk for each pipeline, this is the ultimate score that, in accordance with your analysis, would fall somewhere between 0 and 4 at the end of the day?

19463. **MR. FREW:** That's correct, yes.

19464. **MR. TURCHIN:** And your analysis, I believe, had TransCanada in at 2.90.

19465. **MR. FREW:** That's correct.

19466. **MR. TURCHIN:** Now, I understand from your discussion with Mr. Stauff yesterday that this analysis that we've gone through in an abbreviated fashion was developed as a joint effort of a number of people, and I wanted to be clear on who in particular were involved in the development of this analysis.

19467. Mr. Ferguson, were you involved?

19468. **MR. FERGUSON:** Yes, I was.

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19469. **MR. TURCHIN:** And Mr. Frew, were you involved?
19470. **MR. FREW:** Yes, I was.
19471. **MR. TURCHIN:** Dr. Carpenter, did the group include you?
19472. **DR. CARPENTER:** Yes, it did.
19473. **MR. TURCHIN:** Dr. Langford...?
19474. **DR. LANGFORD:** Yes.
19475. **MR. TURCHIN:** Mr. Zwick...?
19476. **MR. ZWICK:** Yes.
19477. **MR. TURCHIN:** And Mr. Jamal...?
19478. **MR. JAMAL:** A very minor role.
19479. **MR. TURCHIN:** Mr. Frew, who else was included in the effort that put
the business risk analysis together?
19480. **MR. FREW:** I can't probably give you everyone that was involved.
There was a fairly large group.
19481. I believe Céline Bélanger, Vice-President of Regulatory, was involved;
Klaus Exner, Regulatory expert in our group; Alex Harris provided a significant amount
of information. I'm trying to think of other people. Jim Bartlett also was heavily
involved.
19482. **MR. TURCHIN:** Was Mr. Girling?
19483. **MR. FREW:** He may have been in one or two of the meetings.
19484. We had numerous meetings discussing the methodology and the rankings.
19485. **MR. TURCHIN:** Was there any other outside expert, aside from
Dr. Carpenter, who was involved? By outside expert, I mean outside the company.
19486. **MR. FREW:** Offhand, I am not sure that I could say positively yes or no
to that. I don't think that there was a major -- a review done externally.
19487. **MR. TURCHIN:** Now, when lawyers work together in groups on a joint
work product, we sometimes say -- designate someone to "hold the pen" and the person

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who holds the pen, in effect, has lead responsibility for the documentation and inevitably has an important role in the final product.

19488. Was there someone in this group who was designated as the individual who would "hold the pen" for the purposes of this work?

19489. **MR. FREW:** In the complete group that we just listed? Yes.

19490. **MR. TURCHIN:** And who was that?

19491. **MR. FREW:** I think it would be Mr. Alex Harris who probably did the majority of the pen holding.

19492. **MR. TURCHIN:** Now, Mr. Frew, if we could ---

19493. **MR. FREW:** I wouldn't confuse that with accountability, if that's an issue.

19494. **MR. TURCHIN:** I appreciate the clarification.

19495. And it's quite evident from the questions of others that this group is knowledgeable about the work that was done, and I wasn't going to suggest that you didn't have the right people here. So I take your point. I appreciate it.

19496. Mr. Frew, if we can just turn to page 65. And I'm at Answer 92, which is line 8. And there there's a statement that, as part of this methodology,

"TransCanada conducted a qualitative analysis of the business risks, in order to derive a numerical, relative business... [index] ranking of the pipelines."

19497. Was there any individual or individuals in particular who were responsible for the conduct of the qualitative analysis of the pipelines?

19498. **MR. FREW:** Well, no.

19499. The numbers that were chosen were actually consensus numbers so that there was a significant amount of debate, and numbers moved from one category to another after we had beat each other up in that method.

19500. **MR. TURCHIN:** And we have the results in the evidence here before us?

19501. **MR. FREW:** Yes.

19502. **MR. TURCHIN:** Okay.

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19503. If we turn just back a leaf to page 62, lines 6 and 7 -- beginning at line 5,
 you say:

*"Research was conducted to evaluate the business risks to which
each pipeline is currently exposed, and factors which mitigate
those risks."*

19504. And then:

*"An exhaustive assessment of business risks is not possible without
insider knowledge."*

19505. Do you see that, Mr. Frew?

19506. **MR. FREW:** Yes, I do.

19507. **MR. TURCHIN:** Are you saying that the assessment of business risks of
 the nine companies included in your analysis was not an exhaustive one because you
 don't have insider knowledge of those companies?

--- (A short pause/Courte pause)

19508. **MR. FREW:** Maybe a poor choice of words there.

19509. We did a fairly exhaustive assessment, but I guess we couldn't say that we
 could profess that we have intimate knowledge of the inner secrets of the companies
 involved. They may have issues that relate to integrity, as an example, or operating
 problems or some other strategy that they have, and we're not probably as intimately
 familiar with their methods of handling issues, and therefore, you know, in that kind of a
 detail, we probably couldn't say it's exhaustive to that extent.

19510. But it was a pretty rigorous review and over quite a bit of public
 information. We got as much public information as we could get our hands on in a
 review, plus added that together with our history and knowledge of the industry.

19511. **MR. TURCHIN:** Well, whether the choice of words was poor or not, you
 seem to acknowledge a limitation in the analysis, which was that in respect of the nine
 companies you looked at, the analysis was not entirely exhaustive because it was carried
 out without insider knowledge.

19512. Would that be true?

19513. **MR. FREW:** That's fair enough, yes.

19514. **MR. TURCHIN:** For the same analysis, you conducted an assessment of
 the business risks of the TransCanada Mainline.

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19515. Would it be fair to say that you do have insider knowledge of the risks of the TransCanada Mainline?
19516. **MR. FREW:** I would agree with that, yes.
19517. We have fairly intimate knowledge on some of these other pipelines because we're owners in some of the other pipelines, so I wouldn't say that it's all of the pipes that we don't have -- you know, there's a different level of knowledge in each, but certainly within our own pipeline, we would have more -- and we would have insider knowledge, yes.
19518. **MR. TURCHIN:** Well, let's identify the pipelines.
19519. If we go to page 76, you've got your list of TransCanada Mainline and then the nine that were part of your sample. Let's identify those that you have which you have referred to as insider knowledge of and those that you do not.
19520. So the first one, Mr. Frew, do you have insider knowledge of TransCanada Mainline? I think you've acknowledged ---
19521. **MR. FREW:** Yes, we would, yes.
19522. **MR. TURCHIN:** --- that obviously you do.
19523. **MR. FREW:** Yeah.
19524. **MR. TURCHIN:** Great Lakes Gas Transmission?
19525. **MR. FREW:** I think we could probably comfortably say that we have pretty detailed knowledge as a significant owner of that pipeline, yes.
19526. **MR. TURCHIN:** Vector?
19527. **MR. FREW:** No.
19528. **MR. TURCHIN:** Portland?
19529. **MR. FREW:** Yes.
19530. **MR. TURCHIN:** Enbridge?
19531. **MR. FREW:** No.
19532. **MR. TURCHIN:** Northern Border?

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19533. **MR. FREW:** There would be, in our company, insider knowledge on Northern Border.
19534. **MR. TURCHIN:** Gas Transmission Northwest?
19535. **MR. FREW:** Yes, there would.
19536. **MR. TURCHIN:** Iroquois?
19537. **MR. FREW:** Yes, there would.
19538. **MR. TURCHIN:** Maritimes & Northeast?
19539. **MR. FREW:** Uhm, indirectly.
19540. We're a, through Portland, part owner in the M&NE facilities, the southern end of the facilities, so a piece of that pipeline. And we're pretty intimately familiar with their rate design and other factors because it directly impacts the Portland pipeline itself.
19541. **MR. TURCHIN:** Would that be a yes or a maybe or a no?
- (Laughter/Rires)
19542. **MR. FREW:** I'd put it as a maybe, yeah.
19543. **MR. TURCHIN:** And Alliance?
19544. **MR. FREW:** No.
19545. **MR. TURCHIN:** Mr. Frew, how can the Board be certain that your business risk analysis compares apples to apples when we see that of the ten pipelines included in the sample, some of them, those undertaken in the analysis, have insider knowledge of and some of them they don't?
19546. **MR. FREW:** Well, that's true, but I do believe that we have the ability to, from the parameters that we've chosen, adequately rank of the relative ranking of those criteria that we've used.
19547. We're here to be probed on the analysis, so fire away.
19548. **DR. LANGFORD:** The issue would be, Mr. Turchin, whether or not there are facts that are not available to us through publicly available data or our knowledge of the industry that are important and relevant in affecting their business risk, and we are simply saying that that possibility exists.

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19549. I would observe at the same time that there may be a risk that somehow we are unaware of. On the other hand, there may be possibilities for these pipes to mitigate a risk that we are unaware of. So the fact that you have a gap there does not operate in only one direction.
19550. **MR. TURCHIN:** Fair point, Dr. Langford, and I don't dispute that.
19551. My issue is with the -- with the rigor of the analysis and whether there can be a great degree of confidence in the results when the information base with one group is different than the information base with respect to another. That's -- that's the issue.
19552. **DR. LANGFORD:** And that's correct, and it's a question of how material one thinks that -- that difference is.
19553. **MR. TURCHIN:** So would it be fair to say it's a limitation that you acknowledge, but one that, in your view, won't produce a material change in the rankings?
19554. **DR. LANGFORD:** I believe that -- that would be my view.
19555. **MR. TURCHIN:** But it is a limitation?
19556. **DR. LANGFORD:** Yes. It's a question of materiality.
19557. **MR. TURCHIN:** If we can turn to ---
19558. **MR. FERGUSON:** Mr. Turchin, if I might, I would point out that this is a limitation that I think was known to TransCanada and known to the Board.
19559. In excerpts from the decision that we were provided at the start of this piece of evidence, I think if you go back and look through that, at the time one of the issues TransCanada had raised with this type of analysis was that the arguments you're making now could be made, because it's subjective and -- and the knowledge of each pipeline is best provided by each pipeline.
19560. And at least what I would understand the Board's message to be is that doesn't mean that an analysis can't be done and that it wouldn't be helpful and relevant, and that's why you see it here before you now.
19561. **DR. LANGFORD:** Perhaps it's also an interesting point that the ranking that exists for TransCanada, the 2.9, I don't think that there is anything that produces that ranking that is of an insider -- insider knowledge -- has an insider knowledge aspect to it.
19562. I think that what produces that 2.9 is all publicly available, that anyone could get and assess from the record at hearings or in other public documents.

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19563. So in our particular case, I don't think there was something that we said: Oh, wow, here's a piece of insider knowledge that we have that we have used to increase our risk from 2.6 to 2.9. I don't think there's anything like that in there, and my colleagues could correct me in I'm wrong on that.
19564. **MR. TURCHIN:** Thank you, Dr. Langford.
19565. Can we turn to page 63, lines 3 to 10?
19566. Now, Mr. Frew, I'll just -- I'll just come to you on this. Lines 3 to 10 indicates that your analysis divides risk into two types: Short term and long term. Who decided that there would be no medium-term risk included in the analysis?
19567. **MR. FREW:** Uhm, again, I think it would be a consensus of the group. I don't know exactly.
19568. We did talk about it, because it was -- when we reviewed past Board decisions and recommendations, they actually had short, medium, and long term. So it was a conscious decision on our part. Because we couldn't establish the criteria that would tell us what's, you know, the break point between short and medium and medium and long. The only thing that really made sense to us was a point in time at which there's a -- a filing and a change in the approved structure, if you want, for the pipeline. So we used that as the differentiation between, you know, what's in place today, fixed, known to everybody, and the next settlement or rate case timeframe.
19569. And to us that distinguished between those kinds of issues that in the short term you could or couldn't react to and in the long run you could.
19570. **MR. TURCHIN:** Mr. Frew, you mentioned previous Board decisions identifying risks in terms of being short, medium, and long. We spent so much time with Panel 1 dealing with analysis that S&P conducted of the business prospects of TransCanada. And as I prepared for this, it seemed to me somewhere in the back of my mind that they also talked about near-term risks or short-term risks and medium risks.
19571. So I dug out the last attachment to Mr. Lackenbauer's evidence, and I wonder if we could just look at that. It's Schedule 4. And this is the updated S&P report of October 13, 2004. And the Exhibit number is Mr. Lackenbauer's evidence at B-58, which was the final filing. There were a flurry of them there, and this is the one revised November 30, 2004.
19572. **MR. FREW:** So could you repeat again which of the attachments that we're looking at in this -- in his evidence?
19573. **MR. TURCHIN:** Certainly.
19574. We'll go right from the top. B-58 ---

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19575. **MR. FREW:** Yeah.

19576. **MR. TURCHIN:** --- his evidence of November 30, 2004. At the back there are a series of schedules. And we're looking at Schedule 4.

--- (A short pause/Courte pause)

19577. **MR. TURCHIN:** Are you there, Mr. Frew?

19578. **MR. FREW:** I'm getting close.

19579. **MR. TURCHIN:** Okay.

--- (A short pause/Courte pause)

19580. **MR. FREW:** Okay. We're with you now, Mr. Turchin.

19581. **MR. TURCHIN:** Now, this is a document entitled "Standard & Poor's Research: TransCanada PipeLines", publication date of October 13, 2004.

19582. And if we just flip over through it to page 6 of 13, and the pages are numbered in the top right-hand corner. And on page 6 there's a paragraph "Business Profile". And in the middle of that paragraph there's a sentence that reads as follows:

"As throughput capacity on its primary competitor, the Alliance pipeline, is limited to 1.8 billion cubic feet (bcf) per day. Standard & Poor's expects TransCanada's competitive position will remain unchanged in the near and medium term."

19583. Do you see that, Mr. Frew?

19584. **MR. FREW:** Yes, I do.

19585. **MR. TURCHIN:** And it seems to me, in the context of competitive risk, pipeline versus pipeline risk, Standard & Poor's is looking at that not simply in a short term and a long term, but they're adding a medium-term component to that.

19586. Would you agree?

19587. **MR. FREW:** Yeah, there's medium. I don't see any long term.

19588. **MR. YATES:** Well, Mr. Chairman -- precisely.

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19589. I'm not very comfortable with where Mr. Turchin might be going in asking this panel about an attachment to a previous witness's evidence that relates to hearsay, written hearsay, from somebody who isn't here; but we may get there later.

19590. But if he is going to put questions to the witnesses, I would respectfully request that he do so appropriately, and where the terms are "near" and "medium term", but long term doesn't appear, I would suggest that to suggest to these witnesses that Standard & Poor's is talking about long-term risk is not an appropriate way to put the question.

19591. **MR. TURCHIN:** Well, perhaps, Mr. Chairman, I can rephrase the question and we'll take it from there.

19592. Mr. Frew, at page 6, can we agree that the Standard & Poor's report appears to consider the competitive position of the pipeline in both a near and medium term?

19593. **MR. FREW:** They talk about -- here in the medium term, they talk just specifically about Alliance.

19594. And, you know, our business risk profiles include a lot of things other than just pipe-on-pipe competition, so I'm not so sure that I can conclude the same thing that they would conclude from this document.

19595. **MR. TURCHIN:** It was not the conclusions relating to their analysis that my questions were directed to; it's the distinction between how they look at the business profile of the company and how your business risk analysis has done so.

19596. They seem to include medium term as a measuring point in their analysis, where you do not. And it's that distinction that I was getting to; that is, it is a methodology issue, not a result issue.

19597. **DR. CARPENTER:** Well, with all due respect, Mr. Turchin, we don't know what they mean by "medium term" at all.

19598. **MR. TURCHIN:** Well, I'll grant you that, Dr. Carpenter.

19599. Let's turn over the page to page 7. Maybe we can get some sense of it.

19600. Under "Markets", the fifth line from the bottom in that paragraph, there's a discussion of reserves, and then they say:

"While these reserves (sic) hold the potential for future reserve additions, they are unlikely to be explored and exploited in the near and medium term."

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19601. Do you see that, Dr. Carpenter?

19602. **DR. CARPENTER:** I see that.

19603. **MR. TURCHIN:** All right.

19604. So can we conclude from that that "medium term" means a term that will end before these reserves are explored and exploited?

19605. **DR. CARPENTER:** No. Now, let's look at the words.

--- (A short pause/Courte pause)

19606. **DR. LANGFORD:** We'd be hesitant to form any conclusions here, Mr. Turchin, in terms of what they mean by "medium term".

19607. I mean, I don't know whether they mean three years or 13 years. We just simply don't know.

19607. **MR. TURCHIN:** Okay.

19608. But will you acknowledge that their point of reference appears to include methodology that involves medium risks and the company's business risk analysis does not?

19609. **DR. CARPENTER:** I don't think where you get the methodology issue. They use the term in describing market and supply factors affecting TransCanada, but they're not -- I don't see a methodology here.

19610. I mean, I recall the discussions we had in developing this framework about, you know, should we include a medium term, and I guess one of my recommendations was that -- that it wasn't particularly helpful because you get into this debate about what -- you know, what is the time frame associated with the medium term and can you say anything meaningful about it as distinct from what is a clear economic concept of a long-term risk, where investment decisions are at stake, and short-term, which you can describe in terms of year-on-year variability or the terms of regulatory or other settlements that lock things in for a short period of time.

19611. That, to us, seemed to be a very clean distinction. And it was exactly because of this kind of difficulty of describing what medium term really was that we got away from that.

19612. **MR. FREW:** Maybe you should make one thing very clear.

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19613. We have not left the medium term out of our analysis. We go from short to long, and so there is medium term, however you want to define it, included in our analysis.

19614. **MR. TURCHIN:** No, I understand that.

19615. My next question was to see if you would acknowledge that what you have done through your methodology is simply lump medium-term risks in with long-term term, and I think your answer is "yes".

19616. **MR. FREW:** Well, no, I think it's -- the problem that we had was that if somebody has a five- or six-year settlement, that would be considered short-term, in our analysis, of their risks, that time frame. If they had a one-year forward-looking cost of service, it's one year.

19617. And that's where you run into the difficulty, is when you actually get to the practical detail of trying to do the analysis on the comparison. You find that trying to define a time frame for the difference between short, medium and long is a meaningless exercise.

19618. **MR. TURCHIN:** All right.

19619. Mr. Frew, I understand how the -- how your analysis has drawn the distinction between short-term risks and long-term risks, and I understand that short-term risks you've identified as generally one year but longer if there is a settlement that goes for a longer period.

19620. Are we in agreement on that?

19621. **MR. FREW:** That's correct.

19622. **MR. TURCHIN:** All right.

19623. Insofar as TransCanada is concerned, since there is no settlement for 2004, which is the year we're dealing with, we can agree that the time period for short-term risk is one year vis-a-vis TransCanada.

19624. Is that true?

19625. **MR. FREW:** That's correct, yes.

19626. **MR. TURCHIN:** Okay.

19627. Now, Dr. Langford, can we turn to your throughput study at page 20?

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19628. Now, this is Appendix 1 to the Business Risk Evidence that we've just been in. And my focus is page 20.

19629. And my focus here is what -- in the context of throughput methodology, what the company is using in terms of short term and long term. And at lines 5 and 6, we see:

"WCSB supply is considered in two time frames; over the short term and over the long term."

19630. And then the reference to "Short Term Supply":

"The WCSB activity forecast is the key development (sic) of the level of supply that can be generated over the next few years."

19631. Now, here "few years" to me has got to mean more than one, and the question is: How many years are involved in the phrase "over the next few years"?

19632. **DR. LANGFORD:** What we are seeing with the distinction we make and, actually, the methodology that we use to forecast gas supply reflects exactly the kind of problem that Mr. Frew was referring to a moment ago.

19633. What we do is we have what is a short-term model. We call it a short-term model for this purpose. It is an activity-based model where we try to forecast actual levels of drilling based on industry cash flows; based on a whole lot of different input parameters. And we are comfortable that in the next one or two years, that we can forecast drilling levels within some reasonable range.

19634. Once we get out -- we return this model out for five years or six years. But the farther we go with an activity-based model, the less comfortable we are with the results. So at some point, we switch over and ask the question: We only have a certain ultimate potential, and that's all we can produce, and we have to meld the results we would get from the long-term ultimate potential model with the short-term activity model. So we actually overlap them.

19635. So in Years 3, 4, 5, 6, 7, we overlap both model results, and we try to meld them and use some judgment to nicely mesh the results from the activity model into the long-term ultimate potential supply cost model.

19636. And if you were to say to me: Well, what is exactly the year when the short-term model becomes really not very useful and the long-term model kicks in, I don't think I have an answer to that. We're confident in the short-term model for the next, say, two years, and after that, it's just a question of degree.

19637. So once again, you end up with this debate about: Well, where do you draw this line between short term and long term or between short term and medium term,

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and there's no precise answer. And that's why, in fact, we use both models really jointly and try to use some judgment in terms of when we put more emphasis on the activity model and when we start to put more emphasis on the long-term model.

19638. **MR. TURCHIN:** Dr. Langford, that's certainly helpful background.

19639. The phrase used at page 20 of the throughput study is the phrase "over the next few years", and it's used in this document. Can you identify -- I'm just going to ask you again, because I'd like you to identify for me the number of years that are meant by the phrase "the next few years".

19640. **DR. LANGFORD:** I thought that what I was saying was that, for the next two years, we place quite a high emphasis on the activity model in terms of the price forecast, and then after that, less and less weight on it. It does not go to zero after the second year, so there's a little bit of a decay there.

19641. We're quite confident for the first year or two. We're a little less confident in activity levels for the next year or two, et cetera. And so it's not an on/off switch, where we say: The drilling model is used for two years, then we throw it out the window, and then we adopt the long-term model in Years 3, 4, 5, et cetera. That's just not the way it works.

19642. **MR. TURCHIN:** How long does the short-term supply model have legs?

19643. **DR. LANGFORD:** I would say that it's a question of degree, that the farther out you go the less confidence you have.

19644. And the principle behind this is that if you drill more at a point in time you'll get more deliverability, but at some point you have to have regard for what the resource base looks like. You can't sort of extend that argument forever.

19645. So, again, it's not a question of it has legs for two years and has no legs after that. We -- we probably rely on it fairly significantly for the first two to three years, and then after that we start to put a little less emphasis on those results.

19646. We talked the other day, Mr. Turchin, about modelling in terms of North American context, and I think I said at that point that we have all these models and at the end of the day you have the model outputs. However, you have to use a substantial amount of judgment based on the model outputs, and it's never just a question of taking the model outputs and that being the end of the story.

19647. **MR. TURCHIN:** Thank you, Dr. Langford.

19648. Gentlemen, if we can turn back to the Business Risk Evidence that we were in a little bit earlier, and this time page 76 of 82.

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19649. Now, here we have Table 8, which is the summary comparison of the Mainline and the other pipelines. And this, I take it, Mr. Frew, is sort of the table summary of the numerical values that resulted from the business risk analysis that produced the business risk index.

19650. Do I have that correct, sir?

19651. **MR. FREW:** That's correct.

19652. **MR. TURCHIN:** And we see that leading the pack in terms of numbers is TransCanada at 2.90, and then we see the others going down. And there's a reference at -- at line 2 and line 3 under the table that:

"TransCanada has similar overall business risk to Enbridge, Great Lakes, Vector and Portland."

19653. And if we look at the table, we see that what you've done is take essentially the top five, beginning with your company at 2.9, and then going right through the others and ending up at Enbridge and saying that that group of five have similar overall business risks.

19654. Do I have that correct, sir?

--- (A short pause/Courte pause)

19655. **MR. FREW:** We had this kind of debate, I think, with Mr. Schultz.

19656. **MR. TURCHIN:** That's right.

19657. **MR. FREW:** You know, we -- we concluded that we could put together a risk analysis that categorized components into four, you know, 0, 1 -- I guess it's five, but different sectors, if you want.

19658. And so it probably makes sense with that logic to say there might be four or five major groupings within the outcomes that you could conclude everyone fell into. For instance: a low, medium, and a sort of a high and a very high risk category.

19659. But from our perspective -- and I think what we're trying to do here is suggest that although you can run numbers that show precision, there will always be debate about the exact numbers and, therefore, it probably makes more sense to suggest that they're in a similar grouping than just to say that 2.3 is definitely in a 25 percent higher than 2 -- or lower than 2.9.

19660. So I think that's all we're trying to convey, is that from an overall perspective they're similar but, you know, you get to them for different reasons, and we're prepared to talk about that.

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19661. **DR. CARPENTER:** I mean, I don't think we should get too hung up on the -- on the use of the term "similar" and the language.
19662. We present the results, they're tabulated, you can look at them on the scales that we've -- that we've shown and you can make your own judgment as to whether they're -- they're similar or not.
19663. **MR. TURCHIN:** Well, Mr. Lackenbauer, in his evidence, comparing, for example, Enbridge and the Mainline used slightly different terminology. He said that -- that they have comparable risks. That's page 2 of his evidence.
19664. Do similar risks and comparable risks mean the same thing, Dr. Carpenter?
19665. **DR. CARPENTER:** Well, all of these are comparable. That's why they're here.
19666. **MR. TURCHIN:** Can -- but in terms of having comparable risks?
19667. **DR. CARPENTER:** To me comparable means able to be compared. Unless you can suggest another definition for me.
19668. **MR. TURCHIN:** But this doesn't deal with whether they can be compared, this deals, in part, with whether at the end of the day the overall risks are similar.
19669. What does "similar" mean?
19670. **DR. CARPENTER:** "Similar" means they fall within a logical grouping.
19671. And what I'm saying to you is I wouldn't get too hung up on the language. We've got the numbers here, they're plotted, and you can look at them and make a determination for yourself.
19672. **DR. LANGFORD:** Mr. Turchin, at the risk of getting offside with other panel members, whether it's this panel or Panel 1 or whatever, as Dr. Carpenter says, the numbers are what they are.
19673. From the perspective of this analysis, I don't think 2.3 is similar to 2.9. So I'm not sure what -- what Mr. Lackenbauer was referring to precisely or what similar or comparable means to him, but 2.3 and 2.9, I would not use the term "similar" in the context of the analysis that we have here.
19674. **MR. TURCHIN:** Well, that's -- that's the difficulty I'm having, because what we have here is a scale that goes from 0 to 4.0. We have a group of pipelines

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headed by TransCanada at 2.9, another group that -- that comes in at 2.3. That's a 60-point spread, which 60 points at a 4.0 is 15 percent. And it seems to me that that doesn't result in any material difference in terms of overall business risk of these companies. You've said they're all, in terms of overall business risks, they are similar.

19675. So it seems that the business risk analysis have a flex -- has a flex in it of at least 15 percent where it doesn't produce results that are materially different.

19676. **DR. LANGFORD:** I don't agree with that.

19677. I think that in terms of what this analysis does, I think we would make the concession that is there a significant difference between 2.9 in TransCanada's case and 2.85 in Great Lakes' case and maybe even 2.75 in Vector's case. I think we'd be fooling ourselves if we think a difference of .05 is really all that meaningful, given the judgments that go into these analyses. I don't think that's the conclusion you can make with respect to the 2.3.

19678. I think, clearly, the way I understand our analysis is that there would be a significant difference in our assessment arriving at a 2.3 number than a 2.9 number.

19679. **MR. FERGUSON:** Mr. Turchin, you know, we need to be careful that -- when we're trying to put some language around here for simplification of discussion, that doesn't mean that the analysis underlying that discussion is irrelevant.

19680. I mean, I would note that if you start at the -- first of all, look at the total size of the scale of the pipelines that are listed here. The 0 to 4 becomes 0 to 3. So you can logically break that into 0 to 1, 1 to 2, and 2 to 3. That's pretty much the way that we broke the discussion here. That's one way you could do that.

19681. Another way to do it would be to say: Are there logical break points in the -- in the rankings here where there seems to be a grouping of there's those in this little bunch and those in that little bunch. Well, Alliance pretty clearly is sitting at the low end of the spectrum relative to everybody else.

19682. There's some grouping in and around 2. Where you draw the upper bound of that and whether you put Enbridge in the middle group or the high group is subjective. And so, yeah. I mean, certainly if you think it's more reasonable to put Enbridge in with the middle pack then I don't think we'd dispute that.

19683. We're just trying to -- we're trying in the evidence to find a way to simplify the discussion somewhat to see is there a way for us to speak about -- about these pipelines that are similarly bunched.

19684. **DR. LANGFORD:** We were hoping that the analysis could advance the debate a bit from talking in terms of whether risks are similar to being a bit more precise.

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19685. And I think that's what this table reflects, is the ability to be a little more precise about it and also to be transparent so that people can go and revisit the ratings and the rankings and the weightings that we have and -- and come to their own conclusion.

19686. **MR. TURCHIN:** Dr. Carpenter, in -- in comparing the relative business risks of pipelines, at page 16 of your analysis, your evidence, you say -- I will quote it to you. You will remember it. Mr. Stauff took you to it as well:

"... the presence or absence of long-term contractual commitments is the single most important piece of evidence that describes the relative business risk among pipelines."

19687. And I take that to -- to be your view still, sir?

19688. **DR. CARPENTER:** Yes.

19689. **MR. TURCHIN:** And then for -- for good measure, in your discussion with Mr. Schultz earlier this week, in transcript Volume 12 at paragraph 16423. Perhaps you can turn that up, sir.

--- (A short pause/Courte pause)

19690. **DR. CARPENTER:** Okay, I'm there.

19691. **MR. TURCHIN:** Paragraph 16423 -- this is in cross-examination by Mr. Schultz -- and you say:

"And that's why I keep coming back to contracts, because contracts are the commercial means whereby parties try to mitigate their risks with these kinds of investments. And so the distinction between contracts among pipelines is a huge element in business risk in this kind of regulated environment."

19692. Do you see that, sir?

19693. **DR. CARPENTER:** I do.

19694. **MR. TURCHIN:** Now, here you say it's a huge element. Previously you say it's the single most important piece of evidence. You seem to be saying consistently you believe it's the most important criteria that deals with the relative business risk of these enterprises.

19695. Is that true, sir?

19696. **DR. CARPENTER:** That's true.

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19697. **MR. TURCHIN:** Now, if we can go back to the Business Risk Evidence and turn past the throughput study, which was Appendix 1, and move to Appendix 2.

19698. **DR. CARPENTER:** Okay.

19699. **MR. TURCHIN:** In page 1, Dr. Carpenter, Appendix 2 is headed "Company Profiles".

19700. We're at page 1 of 23, TransCanada Mainline. On the left-hand column, there are a series of entries. The third, under "Profile", is entitled "Contract Profile".

19701. Do you see that, sir?

19702. **DR. CARPENTER:** Yes.

19703. **MR. TURCHIN:** And then in the box to the right of that there is a statement at the bottom of the box that says:

"Average contract term has decreased from 8.4 years in 1994 to 3.1 years in 2004."

19704. Do you see that, sir?

19705. **DR. CARPENTER:** Yes.

19706. **MR. TURCHIN:** Okay.

19707. Now, if we just go a little bit deeper into the document and turn to page 8. And here, Dr. Carpenter, we have the profile of Enbridge Pipelines. And, again, we'll go down the column on the left headed "Profile" to the third entry, "Contract Profile".

19708. And we see here the following:

"No long-term contracts. Each month it accepts nominations for the following month."

19709. Do you see that, sir?

19710. **DR. CARPENTER:** I do.

19710. **MR. TURCHIN:** Now, the business risk analysis that we were just through, at page 76, concluded that TransCanada and Enbridge have similar overall business risks.

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19711. You've testified that the single most important factor in comparing companies' business risk is contract profile. And we have two companies; we have TransCanada's is 3.1 years, which is 37 months, roughly, and Enbridge is one month. So on the single most important feature, TransCanada's contract profile is 37 times as long as that as Enbridge.
19712. How can they end up with the same relative business risk?
19713. **DR. CARPENTER:** Well, I didn't say that contracts -- while contracts are hugely important, I didn't say that they were the only factor.
19714. And in fact, if you look at the ranking that Enbridge was given for long-term revenue and cost risk, which is where the contract stuff typically shows up, they were ranked a 3, and in part, that's because of the importance of supply risk that both Enbridge and TransCanada face.
19715. So it is, in my view, the -- contracts are the most important element, but not the only element.
19716. **MR. TURCHIN:** But they are the No. 1 element. You acknowledge that?
19717. **DR. CARPENTER:** I said they were the most important. And I think I also said they were hugely important.
19718. **MR. TURCHIN:** You did.
19719. **DR. CARPENTER:** I'll add more hyperbole, probably, as I go along, but I consider them to be the most important. They're not the only factor.
19720. **MR. TURCHIN:** Dr. Langford...?
19721. **DR. LANGFORD:** Certainly, Mr. Turchin, supply -- in cases where there are ironclad contracts -- and we would argue that MN&E fits into that category -- supply issues become less important because the contracts, in a sense, trump most of the other risk elements.
19722. In cases where there are no contracts or are not long-term contracts, that to me is precisely where you would end up looking at supply very critically. And when we look at supply in terms of TransCanada's supply, we see a basin that we believe will peak out and start to decline.
19723. In Enbridge's case, if we look at forecasts for crude oil production, taking CAPP's forecast, for example, of September 14th, we see an increase of a million barrels a day between 2005 and 2015; so very different supply positions, we believe, and that

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does factor into the business risk index, particularly in cases where there are no long-term contracts.

19724. **MR. TURCHIN:** Thank you, Dr. Langford.

19725. Let's turn to page 61 of the Business Risk Evidence.

19726. Now, Mr. Frew, at page 61, there's Question and Answer 84:

"What pipelines were included in your sample?"

and you say:

"Nine pipelines were compared to the Mainline ..."

and you list them.

19727. And the first three are Canadian. We can group them that way, I think, sir.
And the last six are U.S.-based pipelines.

19728. Is that right?

19729. **MR. FREW:** Well, Maritimes is both and Alliance is both.

19730. And Enbridge, actually, has pipe on both sides of the border.

19731. **MR. TURCHIN:** But ---

19732. **MR. FREW:** So those first ones that you said were Canadian have both a
U.S. and a Canadian component.

19733. **MR. TURCHIN:** All right.

19734. Would it be fair to say or accurate to say that the first three of the nine are
the only ones that actually operate within Canada?

19735. Is that right?

19736. They also, as you point out, have operations in the States?

19737. **MR. FREW:** That would be correct, yes.

19738. **MR. TURCHIN:** Thank you for that clarification.

19739. **MR. FERGUSON:** Vector does have a little tag-in from St. Clair ---

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19740. **MR. TURCHIN:** We're getting into ---

19741. **MR. FERGUSON:** We understand where you're going, though,
generally.

19742. **MR. TURCHIN:** We're just getting into a level of detail that really
wasn't necessary. You'll see why, because -- because my next question relates to
NEB IR 1.10(b).

19743. **MR. FREW:** Could you give me an exhibit number for that?

19744. **MR. TURCHIN:** Yes, certainly. It's Exhibit B-43.

--- (A short pause/Courte pause)

19745. **MR. TURCHIN:** So Exhibit B-43, NEB IR 1.10(b) to the company.

19746. **MR. FREW:** Yeah.

*"Request: Please provide an analysis for Westcoast comparable to
that provided for [the] others"?*

19747. **MR. TURCHIN:** That's correct, Mr. Frew.

19748. **MR. FREW:** Yes.

19749. **MR. TURCHIN:** You have that?

19750. Now, here the NEB requested that the company provide an analysis of
Westcoast as it had for the others included in the sample. And you created a profile of
Westcoast and a table of comparative business risk rankings revised to include
Westcoast.

19751. And then if we turn over to the second page of that undertaking, Mr. Frew,
under the Profile, "Contract Profile"?

19752. **MR. FREW:** Yes.

19753. **MR. TURCHIN:** We see a reference to contracting. And it's the second
sentence there, in particular:

*"By 2006, 83% of contracts on the northern mainline expire and
66% of contracts on the southern mainline expire."*

19754. Do you see that, sir?

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19755. **MR. FREW:** Yes, I do.
19756. **MR. TURCHIN:** Is that a fairly severe contract expiry profile, sir?
19757. **MR. FREW:** Yeah, it's almost as bad as ours.
19758. **MR. TURCHIN:** And then if we go to the attachment to the IR, you've modified, or perhaps created, your comparative business risk rankings, revised them to include Westcoast.
19759. And we see the analysis done, and if we go past page 1, past page 2, to page 3, and we turn right to the bottom of that, we see the result of applying your business risk analysis to Westcoast.
19760. See that, Mr. Frew?
19761. **MR. FREW:** Yes, I do.
19762. **MR. TURCHIN:** And then we see the short-term risk and the long-term risks.
19763. And you identify, under long-term risk, contracts are fairly short, exposed to WCSB decline and new competition, competes with other systems for growth.
19764. Now, at the top of the page, in reference to TransCanada under "Long-Term Revenue", you had said -- if we just flip forward, you'd said regulatory policies on competitive policies uncertain, and that this was one of the features of the long-term risk that TransCanada had.
19765. Wouldn't Westcoast be exposed to the same features of what you characterize as regulatory uncertainty since it's regulated by the same regulator?
19766. **MR. FREW:** I think broadly I would agree with you; but because it's a different type of system and it really has a large component of its rate base on the gathering side, it's a slightly different beast than we are.
19767. **MR. TURCHIN:** Having applied the business risk analysis, you come up, as the Board asks you to, with a business risk index for Westcoast of 2.45, sir?
19768. Do you see that?
19769. **MR. FREW:** Yes, I do.
19770. **MR. TURCHIN:** And then if we turn back to your table at page 76, and if we take the Westcoast number and plug Westcoast in and its business risk number in

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the right spot, can we agree that it goes above Enbridge and below Portland? So it comes in at 2.45; Enbridge being 2.30 and Portland being 2.55?

19771. **MR. FREW:** Yes, it would; yes

19772. **MR. TURCHIN:** And in Answer 108 on that page, you have stated that:

"TransCanada has similar overall business to Enbridge, Great Lakes, Vector and Portland."

19773. Since Westcoast is now within that grouping, can we agree that it is your view that TransCanada has similar overall business risk to Westcoast?

--- (A short pause/Courte pause)

19774. **MR. FREW:** Well, on the basis of that it falls in the same range; but, again -- I guess the panel is really having a bit of a problem zeroing in and saying that even though the numbers are different, we're saying they're all similar.

19775. There is differences, and we distinguish that they're -- we think we have a higher business rating than they do.

19776. I mean, we would prefer, I think as a panel, to speak to the actual numbers than to try and suggest that similar has a certain range.

19777. **MR. TURCHIN:** But Mr. Frew, your evidence, at page (sic) 108, makes precisely that conclusion; whether the overall business risks of a group of companies is similar or not. You've identified -- and -- you've identified the application of your business risk index to lead you to that conclusion. We've identified that Westcoast falls within the boundary of companies that you say have similar overall business risk.

19778. It seems to me simply a matter of little more than logic that the same conclusion must be made in respect of Westcoast. You must believe it has similar overall business risks to the Mainline.

19779. **MR. FREW:** And that's fine.

19780. If you wish to conclude that from your logic, that's fine.

19781. We -- you know, I would say that your logic isn't wrong, but we ourselves are having a little difficulty agreeing that similar would have that broad a range today. We're having that difficulty.

19782. **DR. CARPENTER:** In my opinion, the conclusions are contained in the numerical rankings.

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19783. The conclusions are not contained in the way in which it's characterized in the first sentence of 108.

19784. **MR. TURCHIN:** Well, let's turn to Enbridge and let's go to another witness. And it was Mr. Lackenbauer. The very start of his evidence, at page 2, lines 16 to 18, he specifically identifies Enbridge, and he says:

"A higher equity ratio would also make the Mainline more comparable to the common equity ratio of the Enbridge oil transmission operations which have 'comparable risks'."

19785. **DR. CARPENTER:** Yes; able to be compared.

19786. **MR. TURCHIN:** Similar risks.

19787. **DR. CARPENTER:** I didn't hear that in the sentence you read.

19788. **MR. TURCHIN:** But it's the language used at the bottom of the table:

"... similar overall business risks"

19789. Anything can be compared, Dr. Carpenter. We could compare Apple computer business risk to that of the Mainline or any other enterprise in any part of the world. That's not what -- we can't reasonably say that's what Dr. -- or Mr. Lackenbauer was discussing.

19790. **DR. LANGFORD:** Mr. Turchin ---

19791. **MR. YATES:** Mr. Chairman, if Mr. Turchin wants to talk about the comparison of, shall I say, the views of Mr. Lackenbauer in the context of the views expressed by the company, then, again, I would submit that the question should be put fairly.

19792. That issue is one which has been identified by the Board. It was the subject of an information request, NEB 1.14. Information requests are intended to facilitate the process, including cross-examination, and if Mr. Turchin wants to talk about this particular question, it's my respectful submission that he should put it to the witnesses in the context of the evidence that is on the record, which is NEB 1.14.

19793. **DR. LANGFORD:** Mr. Turchin, I don't think we disagree at all about when you slot Westcoast into the table.

19794. And if we are saying that Enbridge and TransCanada are similar, then it follows that Westcoast and TransCanada are similar; agree with that.

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19795. What we really would like to say, however, is that similar -- I don't know what precisely "similar" means. What I do know is what the numbers in the table mean. And certainly a difference between 2.3 and 2.9 is a significant difference in terms of business risk, as we see it.

19796. Again, I mean, that is the advantage of being specific as opposed to using words like "medium term", "long term", "similar", "comparable", whatever.

19797. **MR. TURCHIN:** Dr. Langford, that -- that is helpful.

19798. Mr. Chairman, I don't need to pursue the line further. I think we've been around it in some depth, and I'll move on, with your permission, to a new area, sir.

19799. **THE CHAIRMAN:** Yes. Thank you, Mr. Turchin.

19800. **MR. TURCHIN:** Gentlemen, let's -- let's go back to -- into the Business Risk Evidence a little bit, to -- to page 11.

19801. And here we turn to what I hope is a simple matter of fact. At the bottom of page 11, I draw your attention to line 16. And towards the end of line 16, there is the statement:

"... it is principally the long-term perspective which causes TransCanada to conclude that its business risk has increased to a level which requires an increase in the allowed equity component of the capital structure."

19802. Do you see that, Mr. Frew?

19803. **MR. FREW:** Yes, I do.

19804. **MR. TURCHIN:** And my question is a simple one: Has increased from when to when?

--- (A short pause/Courte pause)

19805. **MR. FREW:** Well, my -- my take on that would be that the initial reference point isn't all that significant, but it's -- you know, in total we have now got to the point where we're very uncomfortable with the risk reward relationship that we're in.

19806. It has grown over a period of years, you know, since the company was -- since its inception, I guess. It's gone up and down. But today, you know, you could -- we're not suggesting that we're referencing back to any point in time, but we're saying from here forward how do we feel today?

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19807. **MR. TURCHIN:** Did the increase occur entirely after the year 1999, for example? So is it 2000 and beyond?
19808. **MR. FREW:** Well, no.
19809. I don't think we're saying that there's any particular timeframe that you reference a change in business risk to. We're describing what the business risk is today looking forward. That's what we're asking for. We're saying: Here's our business risk as we look forward.
19810. **MR. TURCHIN:** But ---
19811. **MR. FREW:** We're trying to identify the risk as we look forward into the future.
19812. **MR. TURCHIN:** Well, I understand that, Mr. Frew, and that's certainly clear from other parts of your evidence, but this is not a future-looking statement; this is a reference to the past. Indeed it uses -- we'll remember our grammar -- the past tense, "has increased". Something has happened.
19813. We know where we are today. And the question is: When did that past begin? Can you give us a year?
19814. **MR. FREW:** No, I don't think so.
19815. I mean -- you know, if you look at all of the various components of business risk and if you want to say there was a certain point in time at which we had a 1.0 and moved from there, we haven't done that. We've done a relative ranking.
19816. **MR. TURCHIN:** Thank you, Mr. Frew.
19817. If we can move forward in the Business Risk Evidence to page 34.
19818. Gentlemen, at page 34 there's a table, Table 6, entitled "Supply Fundamentals (1990 vs. 2003)". And then the far right of the column, dealing with the year 2003, has an asterisk by it.
19819. And then if we read down the bottom of the table, the asterisk is noted as follows: "TransCanada's estimate".
19820. And my question is whether the actual figures for 2003 are available now, sir? They may possibly be somewhere else in the record, but I haven't found them. And my question is: Do you have actuals for 2003 for that table?
19821. **MR. JAMAL:** I think for the most part we would have them.

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19822. **MR. TURCHIN:** Would you undertake to produce those, Mr. Jamal,
 for us?

19823. **MR. JAMAL:** Yes, I could.

19824. **MR. TURCHIN:** And for a point of reference in this, Dr. Langford, you
 can confirm if I'm right on this, but my reading is that this same table is in your
 throughput study at page 12 of 36, where it's identified as Table 4.1.

19825. I believe it is the identical table. And that the undertaking, Mr. Jamal,
 would be to update the table in the Business Risk Evidence at page 34 and also in the
 table at the throughput study at page 12.

19826. Am I right on that, Dr. Langford?

19827. **DR. LANGFORD:** I believe that's true, yes.

19828. **MR. TURCHIN:** Okay. Thank you.

19829. **DR. LANGFORD:** We'll do that.

19830. **THE CLERK:** U-19.

--- UNDERTAKING NO./ENGAGEMENT NO. U-19:

*Provide an Update to Table 6: Supply Fundamentals (1990 vs. 2003) of the
business Risk evidence, page 35 of 83, to reflect actual 2003 data.
Also update the similar table contained in the throughput study.*

19831. **MR. TURCHIN:** And then page 46. Question 62 deals with discussion
 about -- you use the quote "the regulator will provide".

19832. And then beginning at line 20 there's a statement:

*"... there is no guarantee that the regulator will continue to employ
a traditional cost of service model which, to date, has resulted in
the Mainline not bearing the impact of underutilization caused by
risk realization."*

19833. Do you see that, Mr. Frew?

19834. **MR. FREW:** Yes, I do.

19835. **MR. TURCHIN:** Has there ever been a guarantee that the regulator
 would continue to employ a traditional cost of service model? Has there ever been that
 kind of guarantee?

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19836. **MR. FREW:** I don't think so, no.

19837. **MR. TURCHIN:** So this is not a changed circumstance that you're talking about? The guarantee has never been there?

19838. **MR. FREW:** Well, I think -- I think that's correct.

19839. **DR. LANGFORD:** Yes, we would agree with that.

19840. But what has changed, of course, is that we believe the supply picture has changed over time, as has the competitive position.

19841. **MR. TURCHIN:** I understand that.

19842. My question related to the use of the Board of the cost of service model, Dr. Langford.

19843. **DR. LANGFORD:** Yes.

19844. But, I mean, it's the implication of that is what changes. If -- if there are no substantial supply risks and no significant competition, now or prospectively, there are no real implications of it. It's only when there are issues with respect to supply, competition, et cetera that this becomes important.

19845. And I think that's really the way it should be understood in that context.

19846. **MR. TURCHIN:** And over the page, if we turn to the next page, which is page 48, there's a little bit more elaboration on this issue of cost recovery and what the regulator can do.

19847. And then at line 21 there's a statement:

"... it would be entirely imprudent to assume that in the long run the regulator will allow recovery of the entire investment in the Mainline facilities."

19848. Do you see that, Dr. Langford?

19849. **DR. LANGFORD:** Yes.

19850. **MR. TURCHIN:** Has there ever been a pipeline regulated by the National Energy Board that has failed to recover its invested capital?

--- (A short pause/Courte pause)

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19851. **MR. FREW:** We don't know the answer to that.

--- (A short pause/Courte pause)

19852. **MR. FREW:** Again, I would point out that our analysis is a prospective one.

19853. **MR. TURCHIN:** Dr. Carpenter, let's turn to another area, and that concerns demand for natural gas in North America.

19854. Now, I don't think you need to -- to turn up your Reply Evidence, but -- but in that Reply Evidence, from pages 2 to 8, you set out your views, and what you say is the uncertainty of demand growth in North America for natural gas.

19855. Now, Dr. Carpenter, you are an economist. Is it true that economics is sometimes referred to as the dismal science?

19856. **DR. CARPENTER:** Yes. I can testify to that, yes.

--- (Laughter/Rires)

19857. **MR. TURCHIN:** All right.

19858. Because, as I read your Reply Evidence on natural gas demand in North America, I was reminded of that phrase.

19859. I want you to turn to Exhibit B-73. Now, this contains the company's response to National Energy Board IR 4, and it was filed earlier this week by Board counsel.

19860. **DR. CARPENTER:** You're past our electronic capability.

19861. Is this the -- is this NEB 4.1?

19862. **MR. TURCHIN:** It is, sir.

19863. **DR. CARPENTER:** It talks about FFO interest coverage ratios?

19864. You think economics is a dismal science, I sat here for three days talking about junior subordinated debentures.

--- (Laughter/Rires)

19865. **MR. TURCHIN:** Yes, yes.

19866. **DR. CARPENTER:** I've learned more about that than I ever want

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to know.

19867. **MR. TURCHIN:** New depths to the word "dismal".

19868. But, gratefully, we are not at NEB 4.1.

19869. **DR. CARPENTER:** Oh, good.

19870. **MR. TURCHIN:** We will move deeper into the document, and it will be much less dismal, I assure you.

19871. Four point four (4.4), NEB 4.4.

19872. **DR. CARPENTER:** That's where all of these presentations are attached.

19873. **MR. TURCHIN:** That's right. That's right.

19874. **DR. CARPENTER:** Okay, I'm there.

19875. **MR. TURCHIN:** So, Dr. Carpenter, do you have 4.4?

19876. **DR. CARPENTER:** Yes.

19877. **MR. TURCHIN:** All right.

19878. And then the reference is:

"... provide all copies of all presentations made by TransCanada to financial analysts or the financial community since June 2004."

19879. And the response is:

"Please refer to Attachments 1 through 4 ..."

19880. And then there are four of them. We're going to go to the fourth one, but I'll just go through what's there so that you're aware.

19881. That Attachment 1 is a presentation made to what's identified as an investor meeting in September 2004.

19882. And Attachment 2 is a presentation made by Mr. Kvisle to a BMO Nesbitt Burns 2004 Pipelines & Energy Conference, November 10, 2004.

19883. And we want to go deeper in. Attachment 3 is an investor meeting November 2004.

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19884. And it's the fourth one that I want you to arrive at, Dr. Carpenter. And it's entitled "Scotia Capital - Electron Day December 1, 2004". And it has the name of Alex Pourbaix, Executive Vice-president, Power for TransCanada.

19885. You are there, sir?

19886. **DR. CARPENTER:** Yes.

19887. **MR. TURCHIN:** And if we turn past the title page, we have the forward-looking information statement.

19888. And then at page 3 we see a slide that says:

"The demand for natural gas and power will continue to grow ..."

19889. I take it you don't dispute that statement, sir?

19890. **DR. CARPENTER:** No, that's a statement about expected value.

19891. My evidence goes to the uncertainty in the expected value.

19892. **MR. TURCHIN:** And if we go to page 5 of 24 (sic), we see here a slide entitled "North American Gas Demand" and a chart that has bcf per day on the left and then a time frame beginning in '03 and running out to 2015.

19893. Do you see that, Dr. Carpenter?

19894. **DR. CARPENTER:** I do.

19895. **MR. TURCHIN:** And can we agree that this document shows gas demand clearly increasing in each of the three main market demand segments; namely power, industrial and residential/commercial, to the period running to 2015?

19896. **DR. CARPENTER:** Yes, we can.

19897. Again, that's a depiction of an expectation. It's not a depiction of uncertainty, and risk is about uncertainty.

19898. **MR. TURCHIN:** Dr. Carpenter, do you believe the information in this chart is accurate?

19899. **DR. CARPENTER:** My understanding is that it's a forecast, so accurate in the sense that it represents TransCanada's forecast.

19900. I haven't -- I mean, I haven't compared to see whether the chart actually depicts correctly their own forecast, but I'm happy to take that assumption.

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19901. **MR. ZWICK:** And Dr. -- sorry.
19902. **MR. TURCHIN:** I don't need that.
19903. I wanted to see if you agreed with their forecast, based on your analysis of
 this chart.
19904. **DR. CARPENTER:** I don't have my own forecast. I try to stay out of
 the forecasting business.
19905. But I have -- in my evidence, I have put forward forecasts by EIA and
 others who are in the forecasting business. I haven't actually checked to see how this
 compares to, for example, the EIA forecast that I have included.
19906. Dr. Langford tells me it's lower; but it is what it is.
19907. **MR. ZWICK:** I can confirm that -- that this is, in fact, TransCanada's
 forecast.
19908. The figures that appear in that chart are consistent with the figures that
 appear in NEB 2.17, which provides the details of aggregate North American demand.
 And I can also confirm that the TransCanada forecast is slightly lower than the EIA
 forecast during that period.
19909. **MR. TURCHIN:** Thank you, Mr. Zwick.
19910. And I understand the company believes -- or you can tell me the company
 believes that this is an accurate forecast at this time of North American gas demand?
19911. **MR. ZWICK:** It is our current best estimate, yeah.
19912. **MR. TURCHIN:** Thank you, sir.
19913. Now, Dr. Langford ---
19914. **DR. CARPENTER:** Actually, before we finish this, Mr. Turchin, I
 wouldn't mind -- if I could elaborate just briefly.
19915. You made a comment about the presentation being a bit dismal in my
 Reply Evidence and I'll -- I take the criticism ---
19916. **MR. TURCHIN:** Tongue in cheek, sir.

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19917. **DR. CARPENTER:** But there's actually -- and I wish I had put it in. Using of the same information, I had developed a picture that shows the EIA forecast marching over time for the last five years.
19918. And if you look at it, every single forecast shows this airplane-take-off-like growth and demand every year, but every year the forecast is made, it's getting delayed by a year. And it's remarkable, because the starting point seems to be the same every single year and it just marches right across the page.
19919. So while everybody believes that demand is going to take off and grow, the last five years has stagnated, basically, and in part, that's because of what's happened to prices and ---
19920. **MR. TURCHIN:** Thank you, sir.
19921. **DR. CARPENTER:** That's a reflection of the uncertainty.
19922. **DR. LANGFORD:** I would just add to that, Mr. Turchin, that to some extent the same has been true of TransCanada's forecast; that we have revised downward our long-term forecast of North American gas demand over the last couple of years, which just goes to show that all the expected numbers that we look at, whether they be supply or demand, they're nothing more than forecasts; a great deal of uncertainty around them.
19923. **MR. TURCHIN:** I understand that, Dr. Langford.
19924. **MR. ZWICK:** And the information related to that is spelled out in the response to NEB 2.17.
19925. **MR. TURCHIN:** Dr. Langford, this is a series of questions that I think are primarily related to you, and it begins with the company's response to CAPP IR 35(a).
19926. Now, there are actually two responses to this. One was in Exhibit B-41 and then a revision to the response in Exhibit B-46; B-46, the revised response, on October 8th. So the suggestion would be: Let's go to the revised response, CAPP 35(a).
- (A short pause/Courte pause)
19927. **MR. TURCHIN:** Are you with me, Dr. Langford?
19928. **DR. LANGFORD:** Yes.
19929. **MR. TURCHIN:** Thank you, sir.
19930. CAPP 35(a) requested a response of TransCanada -- excuse me.

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19931. Requested that the company

"... provide a copy of the TransCanada Corporation application to Alaska under the Alaska Stranded Gas Development Act for the Alaska Highway pipeline project and the plans to seek right-of-way access across state lands."

and then -- that's 35(a).

19932. And then in the response, there is a document included here that begins with a cover letter, Dr. Langford, which is dated June 1, 2004 and addressed to the Commissioner of Revenue for the State of Alaska.

19933. Do you see that, sir?

19934. **DR. LANGFORD:** I see the letter, yes.

19935. **MR. TURCHIN:** And then, in the first paragraph, there's a statement that:

"TransCanada Corporation and its wholly owned subsidiary, Alaska Northwest Natural Gas Transportation Company, are pleased to submit the attached application under the State's Stranded Gas Development Act to construct and own the Alaska segment of the Alaska Highway Natural Gas Pipeline. TransCanada and its various subsidiaries have been working diligently and relentlessly for more than 25 years to commercialize the Alaska North Slope natural gas by connecting it to markets in the U.S. lower-48."

19936. And you see that as well, Dr. Langford?

19937. **DR. LANGFORD:** I do.

19938. **MR. TURCHIN:** And then the next paragraph begins:

"Given the tight natural gas supply and demand situation in North America, TransCanada believes the market conditions are right to advance the pipeline."

19939. Do you see that as well, Dr. Langford?

19940. **DR. LANGFORD:** I do.

19941. **MR. TURCHIN:** And then if we flip over into the application document itself, we have a cover page for it and then a listing of the Table of Contents, beginning

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with "Project Qualification", "Sponsor Qualification", the "Proposed Project Plan", including "Work Accomplished to Further the Project", and then some figures and appendices.

19942. And then if we turn to page 7, sir -- are you still looking? Page 7?

19943. **DR. LANGFORD:** I see it.

19944. **MR. TURCHIN:** Okay.

19945. Here there's -- in the second line under "Description of the Project", there's a statement:

"TransCanada proposes to construct a 1,710-mile natural gas pipeline from Prudhoe Bay, Alaska to a major pipeline infrastructure system in Alberta Canada."

19946. Do you see that, sir?

19947. **DR. LANGFORD:** I do.

19948. **MR. TURCHIN:** And then in the paragraph below that, the last sentence:

"TransCanada's proposed pipeline route is the certificated ANGTS route that has been sanctioned by both the U.S. Congress and Canadian Parliament."

19949. Do you see that, sir?

19950. **DR. LANGFORD:** Yes.

19951. **MR. TURCHIN:** And then over the page, we see the figure, Figure 1, the actual proposed pipeline system and its connections.

19952. Do you see that, sir?

19953. **DR. LANGFORD:** Yes.

19954. **MR. TURCHIN:** And then if we go deeper into the document, Page 10, we hit the "Sponsor Qualification".

19955. And if we turn to page 15, we see "Proposed Project Plan" and a title "Work Accomplished to Further the Project".

19956. And then we see the statement:

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"TransCanada, directly and through its subsidiaries, has expended thousands of person-years and hundreds of millions of dollars to advance the Alaska Highway Pipeline project."

19957. Do you see that, Dr. Langford?

19958. **DR. LANGFORD:** I do.

19959. **MR. TURCHIN:** And then at page 19, we see, in the middle of that page, an analysis undertaken by the company to demonstrate the benefits of integrating Alaskan gas with the existing infrastructure system rather than a stand-alone bullet pipeline, and there are ten points listed there, Dr. Langford?

19960. **DR. LANGFORD:** Yes, I see them.

19961. **MR. TURCHIN:** And then at page 24, we see "Proposed Project Schedule", and under that, TransCanada says it

"... has prepared a plan to develop successfully an NPS 48 pipeline system over a period of approximately seven years following the execution of commercial arrangements with shippers."

19962. And then attached to that we have the Figure 2, "Proposed Development Activity Schedule".

19963. Do you see that, Dr. Langford?

19964. **DR. LANGFORD:** I do.

19965. **MR. TURCHIN:** Now, Dr. Langford, the case before this Board is for the year 2004. The application related to Alaskan gas was filed in June of 2004. It contains a degree of precision and specificity and planning and estimation that seems to be extremely soundly done, a strong presentation.

19966. You indicated in your discussion with Mr. Schultz that Alaskan gas has been put into your forecasts and taken out for some 25 years. Isn't this the year, and with this case and at this time, the time that it should be in more than any other?

19967. The application has been filed, sir, and in the very year that this Board is dealing with.

19968. **DR. LANGFORD:** This not an application by the owners of the gas to develop a project and move the gas. It's not our gas, and it's not our project, in the sense that the -- development of the gas.

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19969. We are trying, as we have done for many, many years, everything we can to initiate people to enter into discussions, to come to commercial agreements so that this project can move forward.
19970. It's a bit like pushing on a string here. We can do whatever we want, but it is not up to us when the project starts. And I think I used this terminology in GCOC at the EUB, but I said that we've been ready to dance for many, many years and we just can't get the band to start playing, and this is just a continuation of that process.
19971. **MR. TURCHIN:** But isn't this a very important and significant step, sir?
19972. **MR. FREW:** Mr. Turchin, one of the key things in this proposed project schedule is that it's seven years following the execution of commercial arrangements with shippers.
19973. We, unfortunately, think we're nowhere close to that event, so the starting point is still unknown.
19974. **MR. TURCHIN:** But -- and I understand that, Mr. Frew, but the difficulty that I have is that these events in the throughput study, having excluded Alaskan gas from consideration, are given no probability, they're given no value at a time where there certainly seems to be some value in terms of this.
19975. **DR. LANGFORD:** So ---
19976. **MR. TURCHIN:** And this is the part that I have difficulty with, the exclusion of Alaskan gas from the throughput study.
19977. **DR. LANGFORD:** And I would make the point, as well, that whether or not you believe that the prospect of a commercial agreement has been enhanced over the last few years, or the last few months, you still have to cross the bridge of saying: Is it more likely that that gas is going to flow on the Mainline? Because that's what the throughput study is all about.
19978. And I would argue that over the last months, and particularly recently, there are issues about the producers perhaps pursuing another alternative; in fact, fairly vigorously. And you have to make the assumption that this project is now going to happen, after some 25 years, that it's going to happen in a particular timeframe, so that you can put it into the analysis and get some sensible results. Because, as I've said before, that you get very different results, depending on when you stick it in.
19979. And then, you finally have to make the assumption that some or all of that gas is going to flow on the Mainline when we have the sponsors out there -- or not the sponsors, the producers out there trying to perhaps do something differently. And it is the combination of all those factors that come to bear when you make a decision as to whether you want to put it in your throughput study.

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19980. And, as I said before, it is not -- it ought not to be given any weight. It has to be given some weight. It does represent an upside. In a world where Alaska gas flows, and flows on our pipe, there are positive impacts on Mainline flow.
19981. The issue is ought it to be in a base case forecast, given all these certainties, and ought it to be in a plausible range of outcomes around that? And we made the determination that we don't believe that it does at this point.
19982. **MR. TURCHIN:** At the end of the day, whose determination was it to not include Alaskan gas in the throughput study filed in this proceeding? Who makes that determination, sir?
19983. **DR. LANGFORD:** I think it's the corporation as a whole that makes that decision.
19984. **MR. FREW:** Mr. Turchin, we agree there are upside scenarios. There are also downside scenarios.
19985. **MR. TURCHIN:** Mr. Frew, can we -- can we turn up one more document? And this time it's Exhibit B-67, B-67.
19986. This was a response to Undertaking U-8, which was given to Board counsel.
19987. **DR. LANGFORD:** Mr. Turchin, would you mind if I made one more comment, because you referred to a whole host of elements in that IR, and one in particular was a list of, I think, ten factors as to why we thought there was an advantage to using our facilities.
19988. And I would just make the point that we also believed that in the Alliance case that there were advantages to using NGTL infrastructure and starting the pipe ex-Alberta, and the fact that those advantages we believe existed did not cause that to happen.
19989. **MR. TURCHIN:** Dr. Langford, what would you need to put Alaskan gas into your throughput study? What information would you need?
19990. **DR. LANGFORD:** Now, this is dangerous ground because we're speculating, and I hesitate to do it, but I would say that certainly a commercial agreement.
19991. And then we would have, as Mr. Kvisle has said, and others, that after a commercial agreement, seven or eight years' timeframe is what people would normally expect in terms of completion, which is still a long way out. I think that would cause us to put it into a base case.

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19992. And, indeed, for Mackenzie Delta, that's precisely what we have done. Mackenzie Delta did not appear in all of our cases going back to fair return or going back to the depreciation hearing.

19993. And as soon as there was a commercial agreement struck, we put it in. And it now is in all our cases, is in all three throughput cases that we provided as evidence in this particular hearing.

19994. I'm not saying that there couldn't be another set of circumstances that would cause us to put it in. That's one that would.

19995. I think a further fundamental change in gas markets or security -- North American security developments. Those are things that could cause us to put it in as well.

19996. **MR. TURCHIN:** Mr. Frew, this may be to you, and it concerns the Exhibit B-67 that I referred you to a moment ago.

19997. Have you got that, sir?

19998. **MR. FREW:** Is that the Standard & Poor's?

19999. **MR. TURCHIN:** That's correct, sir.

20000. **MR. FREW:** Yes. Yes, I do.

20001. **MR. TURCHIN:** Now, this was the undertaking to provide a copy of the latest S&P report. And so this one bears the date, top left-hand corner, December 1, 2004.

20002. Do you see that, Mr. Frew?

20003. **MR. FREW:** Yes, I do.

20004. **MR. TURCHIN:** And it's a summary report for TransCanada PipeLines Limited, and it has a rationale indicating the ratings reflect the pipeline's consolidated business and financial profile.

20005. And then there are four bullet points and a paragraph underneath the bullet points. And there's a sentence, as follows, in the middle of that paragraph:

"Recently acquired pipelines in Canada and U.S., notably TransCanada's acquisition of the remaining 50% of Foothills Pipe Lines Ltd. in 2003, and the 2004 acquisition of the Gas Transmission Northwest Corp. pipeline, also position the company to participate in the future development of frontier and

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*nonconventional gas reserves in Alaska, the Northwest Territories,
and western Canada."*

20006. And what struck me, when I read this, the most recent S&P report, was that it specifically mentions Alaskan gas. It's a review of the company's business profile; and, from an S&P perspective, this is a matter that's of significant enough interest that they identify it in their report.

20007. And so it strikes me as extremely unusual that it can be relevant to S&P, relevant enough that it's identified on their summary report at page 1, but not a relevant enough probability for the company, as it forecasts any number of cases going in the future, to include it in at least one of them.

20008. Can you respond, Mr. Frew?

--- (A short pause/Courte pause)

20009. **MR. FREW:** I'm not sure I can add anything other than what Mr. Langford has actually told you.

20010. If there's some translation to the acquisition of pipe that's already in the ground to increasing the likelihood of Alaskan gas coming on, I have a hard time actually linking those two together. But Mr. Langford may have something additional to add.

20011. I would guess what the direction that S&P is saying is because we now have greater ownership of significant infrastructure out of the basin, there's more likelihood that people will come and talk to us. Again, all we -- all we could emphasize is that from our perspective we have been working on this for 25-some years. It still hasn't happened yet. So, you know, if one is to look at the history and extrapolate that, as a lot of people want to do with a lot of the information we have, it doesn't look good, but we're hoping that that will change.

20012. But from a probability perspective and sticking it in the forecast, I think Mr. Langford has given as complete an answer as I can give.

20013. **MR. TURCHIN:** I have no further questions on this matter and no further questions at all, gentlemen.

20014. Thank you, Mr. Chairman.

20015. **THE CHAIRMAN:** Thank you, Mr. Turchin.

20016. It's now 10:20, so I think we're going to take our morning break now, and we'll reconvene at just after 10:40.

--- Upon recessing at 10:20/L'audience est suspendue à 10h20

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--- Upon resuming at 10:40 a.m./L'audience est reprise à 10h40

20017. **THE CHAIRMAN:** Ms. Zanin, would you proceed, please?

20018. **MS. ZANIN:** Thank you, Mr. Chairman. It actually is nice to stand up!

C.R. FREW: Resumed

D. FERGUSON: Resumed

P.R. CARPENTER: Resumed

A. JAMAL: Resumed

W.A. LANGFORD: Resumed

G.J.W. ZWICK: Resumed

--- **EXAMINATION BY/INTERROGATOIRE PAR MS. ZANIN:**

20019. **MS. ZANIN:** I'd like to begin my questions by asking you, Dr. Carpenter, if you could cast your mind back to a discussion that the Chairman was having with Panel 1, specifically with Mr. Lackenbauer and Mr. Murphy.

20020. The exchange I'm thinking of can be found at Volume 10, paragraph 14159.

--- (A short pause/Courte pause)

20021. **DR. CARPENTER:** Sorry, the reference again? 141 ---

20022. **MS. ZANIN:** --- 59.

20023. **DR. CARPENTER:** Sounds like "pie". Okay.

20024. **MS. ZANIN:** All right.

20025. The Chairman was having a discussion with Mr. Lackenbauer and Mr. Murphy on the circumstance which affect the likelihood of negotiated settlements before the FERC. And Mr. Murphy stated -- and I think this is the second sentence in, actually.

"The statistics would indicate that most of the outcomes are in fact negotiated, and there is ample opportunity for shippers to bring a pipeline company in for rate review under Section 5. That's been the policy for years. But, in fact, it doesn't happen that often."

20026. Would you please describe for me the process whereby a shipper could bring in a pipeline company for a rate review under Section 5?

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20027. **DR. CARPENTER:** Well, as I understand it -- and Mr. Frew, who may have some practical experience, can weigh in if I've got this wrong -- but basically you would file -- a shipper would file a complaint which would contain, presumably, sufficient information or argument to support the complaint, and then the FERC would decide whether or not to set that for hearing.
20028. In a Section 5 case, the -- of course the burden would be on the party making -- filing the complaint.
20029. **MR. FREW:** I think that's an important item; that is, that the burden of proof is on the applicant, and therefore, you can't just complain about one piece of rate structure, if you want, and say: I want to review the whole thing.
20030. You have to supply all of the information that supports a compete review of all of the costs and all of the other issues that need to be done and, as a result, it's a very expensive process; it's a very time consuming process, and very few of them have occurred.
20031. Normally, there's a settlement, I think, that would probably overtake a Section 5. Although, it is a common threat, if you wish, that's used. But it's the burden of proof that's required, so normally when the pipeline has to supply all of the information, it's a tremendous amount of work.
20032. The work is then on the Applicant, which makes it very difficult.
20033. **DR. CARPENTER:** And just to add a further point, I think what -- we're starting to see more and more rate cases show up now in the U.S.
20034. And one thing that's happened over the last few years is that as a result of settlements, there have been terms of the settlements which require the pipeline to come back and file a rate case, and I think that's starting -- those things are starting to kick in now.
20035. **MS. ZANIN:** So in instances where there isn't a settlement that calls upon the pipe -- or rather, the pipeline company, I suppose, to bring back its rate case, how often would it occur that a shipper might bring back an application -- or might bring -- sorry -- an application pursuant to Section 5?
20036. **DR. CARPENTER:** I think it's pretty rare, as Mr. Murphy was indicating, and that more -- the more likely scenario is that the group of shippers who had entered into a settlement with a pipeline, as a part of their prior settlement, would have required the pipeline to come back at some point in the future with a rate case.
20037. And again, I think we're starting to see some of that coming forward.
20038. **MS. ZANIN:** All right.

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20039. **DR. CARPENTER:** And in that circumstance, the burden of proof is on the pipeline. It becomes a Section 4 rate case.

20040. **MS. ZANIN:** Oh, thank you.

20041. And typically, how long does it take, after a shipper files a Section 5 rate case, for the revised rates to actually take effect?

20042. **DR. CARPENTER:** Well, it really depends on how contested the issues are and, you know, the -- what the hearing process is like. It could range from a year to several years, probably.

20043. **MR. FREW:** I think an average time frame would probably be about 18 months.

20044. But it does take a long time frame, and there's several steps in terms of potential settlements as well before you actually have a contested hearing, but...

20045. And the other significant thing is that in -- in a Section 5, the rates go into effect prospectively; in other words, once the decision is complete.

20046. **MS. ZANIN:** Thank you.

20047. Now, gentlemen, as a general rule, would you agree with me that mitigable risks should not be included in the assessment of business risk?

20048. **DR. CARPENTER:** Mitigable risks, as I understood the question -- well, I wouldn't necessarily agree with that. I think you need to make an assessment both of the magnitude and effect of the risk and -- you know, mitigation is not sort of a 0-1 probability. It's not just a 0-1 effect. There may be a likelihood that something is mitigable. And so I think you have to take that into account, as well.

20049. How effective are the mitigation measures? Again, it's a prospective analysis.

20050. **MS. ZANIN:** So should cost of capital, then, compensate for risks that cannot be dealt with in some other fashion by the company?

20051. **DR. CARPENTER:** No.

20052. But again, they're prospective, so you have to have a view as to how easy and the likelihood that they will be mitigated through some other means.

20053. **MS. ZANIN:** All right. Thank you, sir.

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20054. I'd like you to turn to the Application at Tab 3, Business Risk, page 16 which, for the record, is Exhibit B-40.
20055. Actually, Dr. Carpenter -- I'm sorry -- if you could just put that reference aside. I'd just like to rephrase the question that I just asked you one more time.
20056. Now, should the cost of capital compensate for risks that can be dealt with in some other fashion by this company? And I believe that's the question that you actually did answer.
20057. **DR. CARPENTER:** I think we need to be careful about what we mean by "deal with".
20058. If deal with a -- dealing with a particular risk involves taking a hit in some fashion in earnings or throughput or -- then you do need to take that into account.
20059. If dealing with it means able to eliminate it, then on a prospective basis, you have to have a view as to how probable it is that that risk could be eliminated through some other means; in other words, how real a risk is it.
20060. **MS. ZANIN:** Okay, thank you. That clears it up for me.
20061. All right. Now, back to Appendix B-3 at page 16. Now, at lines 15 through 21 of Exhibit B-40, you state that through a combination of stakeholder opposition to TCPL initiatives and regulatory decisions, it has been denied the tools to compete for volume. For example, it has been refused pricing discretion, term differentiated rates and contract renewal policies that would encourage volumes to remain on the system.
20062. Do you see that reference? It's actually Question 26.
20063. **MR. FREW:** Yes, we see that.
20064. **MS. ZANIN:** Okay. Thank you.
20065. Now, can you please tell me what is meant by the term "pricing discretion", Mr. Frew?
20066. **MR. FREW:** That would be the ability to discount or to ask for a rate that's higher than the rate that's in the tariff.
20067. **MS. ZANIN:** And has TransCanada ever applied to the Board for the ability to implement such a provision?
- (A short pause/Courte pause)

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20068. **MR. FREW:** I'm not sure that there's very many instances, if any, that we can think of. There may be one.
20069. This is most likely more referring as well, though, to feedback that it's been getting from its shippers as well. I'm not sure if this says explicitly that it's been refused by the National Energy Board.
20070. There certainly has been a number of discussions with the shipper groups and usually a pretty negative response to that issue.
20071. **MS. ZANIN:** I guess I'm just wondering if there has ever been an application made to the Board in which you have applied for this particular -- this particular provision, pricing discretion, as you have described it.
20072. **MR. YATES:** Excuse me, Mr. Chairman. I wonder if I might have some clarity, in respect to the question, as to whether it relates to pricing discretion on other than interruptible transportation.
20073. **MS. ZANIN:** Actually, on any type of pricing discretion.
20074. **MR. FREW:** I think the only one that we can think of offhand is the IT bid floor. But, again, I think that this is through a combination of stakeholder opposition to initiatives and regulatory decisions, so it's kind of a combination.
20075. I don't believe there has been any recent requests for that type of -- where we've asked for that type of discretion and been refused it.
20076. **MS. ZANIN:** All right. Thank you, sir.
20077. Has TransCanada sought any of these tools that are viewed as mitigating the risks of competition?
20078. We've already discussed pricing discretion, but term differentiated rates and contract renewals, since the advent of increased competition from Alliance and Vector.
20079. **MR. FREW:** We don't think since Alliance that there has been any NEB filing that's asked that.
20080. There's certainly been a number of discussions with stakeholders that -- I think the White Paper was a good example of that, where there was a discussion about a lot of terms and conditions of contracts that didn't receive a very positive review from the stakeholders.
20081. **MS. ZANIN:** Thank you.

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20082. My last question is -- on this topic is if you were to be compensated through increased cost of capital for the risk factors that these tools are designed to address, and if at some point in the future you obtained approval for these very tools, would you expect to see TransCanada's cost of capital reduced as a result of the approval of any or all of these tools?
20083. **MR. FREW:** So I think we would say that, other things being equal, we would probably agree with that statement, if one could quantify the starting point and the end point with some precision, which may be very difficult.
20084. But other things being equal, that would be -- that would be the conclusion we would come up with.
20085. **MS. ZANIN:** Thank you, Mr. Frew.
20086. I'd like you to turn, gentlemen, to the Application, Tab B-3, Business Risk, page 31 which, again, is Exhibit B-40. And the line I'm looking at is line 9, which starts at Question 42, and runs through line 21.
20087. And there TransCanada states that its current depreciation rates make no provision for future liabilities associated with negative salvage required for future terminal -- sorry -- required for the terminal retirement of assets due to economic forces.
20088. Do you see that?
20089. **MR. FREW:** Yes, I do.
20090. **MS. ZANIN:** Thank you.
20091. And I think TransCanada also notes that it hasn't fully evaluated the range of potential cost exposure but states that it is clear that costs will be incurred.
20092. And do you see that as well?
20093. **MR. FREW:** Yes, I do.
20094. **MS. ZANIN:** And finally, TransCanada notes that the lack of provision for negative salvage puts the Mainline at a greater long-term risk relative to its competitors, which do not have such provisions.
20095. Am I understanding that correctly?
20096. Oh, I'm sorry, let me say that one more time.

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20097. And finally, TransCanada notes that the lack of provision for negative salvage puts the Mainline at greater long-term risk relative to its competitors, which do have such provisions.
20098. Am I understanding that correctly now?
20099. **MR. FREW:** Yes.
20100. **MS. ZANIN:** Thank you.
20101. **MR. FREW:** That helped significantly.
20102. **MS. ZANIN:** It would defeat the purpose, wouldn't it? Sorry about that.
20103. Now, of the pipelines to which TransCanada is comparing itself in the entirety of its evidence, which ones have specific provisions for -- provisions concerning eventual terminal negative salvage?
20104. **MR. FREW:** I don't think we can tell you exactly.
20105. We know there are a few. We think ATCO has, although it wasn't compared in this particular analysis. And there are some pipes in the U.S. that have that component in their rates. I think A&R might have. But, again, we didn't compare ourselves to them.
20106. **MS. ZANIN:** Can you, please, undertake to file a list of companies that have provisions concerning eventual terminal negative salvage?
20107. **MR. FREW:** Yes, we will do that.
20108. **MS. ZANIN:** And, madam clerk, I believe we need an undertaking number for that.
20109. **THE CLERK:** That will be U-20.
20110. **MS. ZANIN:** Thank you.

--- UNDERTAKING NO./ENGAGEMENT NO. U-20:

Specify the pipelines to which TransCanada compares the Mainline to in its evidence that have specific provisions concerning eventual terminal negative salvage.

20111. **MS. ZANIN:** Now, gentlemen, in the evidence I understand that TransCanada states that historical regulatory treatment of deferred income taxes places

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the Mainline at greater long-term -- sorry. At a long-term competitive disadvantage relative to its American competitors.

20112. Do you recall that?

20113. **MR. FREW:** Yes, I do.

20114. **MS. ZANIN:** Now, can you, please, tell me, are there any steps that TransCanada could take to mitigate their risk regarding deferred income taxes over the long term?

--- (A short pause/Courte pause)

20115. **MR. FREW:** We're not coming up with anything.

20116. Those are real dollars that are owed, and they have to be paid at some point in time and they are a function of the -- just a calculation of the taxes at the time.

20117. So without a change in law or tax, I think it would be very difficult for us to shift that or to change that.

20118. **MS. ZANIN:** Thank you.

20119. I don't think you need to turn this reference up, but in response to NEB 1.9(a) and (b) you indicate the amount of firm capacity that has not been renewed effective November 1st, 2004.

20120. When we look at that in relation to the capacity of the pipelines, it appears that a larger portion of the total capacity on Foothills and Westcoast was relinquished without being subsequently recontracted than has occurred on the Mainline.

20121. Would you agree with that statement?

--- (A short pause/Courte pause)

20122. **MR. FERGUSON:** Uh-hum, I think the challenge that we have in that -- making that simple comparison is when you look at -- at the total on the Mainline from a volume perspective, what's lost in that is the distance or billing determinate, as in gigajoule kilometres, that would go along with that volume.

20123. And so while the Mainline may appear to have lost proportionately less on a volume basis, it has lost significant overall billing determinates or revenues. And so I think it would -- to have a more fair comparison, I think it would need to be put in those terms.

20124. **MS. ZANIN:** Thank you.

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20125. Can you, please, undertake to file an updated response to NEB 1.9(a) and (b) using the most recent information available and using contracts which are at least one year in duration?

20126. Oh, and could you also address the issues that you just discussed with me in giving your response to that?

20127. **MR. FERGUSON:** We can do our best.

20128. The only hesitation I have is I'm not sure how able we'll be to get the billing determinates for Westcoast, but we can do our best.

20129. **MS. ZANIN:** Thank you.

20130. **THE CLERK:** U-21.

--- UNDERTAKING NO./ENGAGEMENT NO. U-21:

Update TransCanada's response to NEB 1.9(a) and (b) to reflect most recent data. Also quantify the share that relinquished capacity in the last year that was not subsequently re-contracted represents relative to each pipelines' capacity. If possible, present the information in such a way that allows a distance-volume assessment, as well as a volumes only assessment.

20131. **MS. ZANIN:** Now, gentlemen, under your swing pipeline hypothesis, wouldn't you expect other pipelines out of the Western Canadian Sedimentary Basin to be fully recontracted before incremental firm load goes to the Mainline?

--- (A short pause/Courte pause)

20132. **MR. ZWICK:** No, not necessarily.

20133. It would -- the swing pipeline methodology would relate to the ultimate flow of gas on the systems, and that can occur under a number of services, whether it's longer-term or shorter-term arrangements.

20134. So it's related to the flow of gas as opposed to the contracting.

20135. **MS. ZANIN:** Sir, taking into account only long-term contracts -- I think I've got that right. Taking into account only long-term contracts, wouldn't you then expect other pipelines out of the WCB (sic) to be fully recontracted before incremental firm service goes -- returns, rather, back to the Mainline?

20136. **MR. FREW:** I think that would only apply if you're talking about a producer wanting to contract out of the basin.

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20137. And assuming that it's only producers that contract the capacity out of the basin, then that's probably more correct. But the different pipes coming out of the basin go into totally different market areas, and they're all going to respond slightly differently.
20138. So part of the value, I think, in not contracting firm for people inside the basin is having the optionality to shift from delivery point to delivery point or market to market. So you're making an assumption that all future gas will be contracted long term, and I don't think that that is something that we see happening.
20139. **MS. ZANIN:** Thank you.
20140. And actually this is my last question. I don't think you need to refer to this, but in your response to NEB IR 3.2 you state that the Alaskan pipeline may be built in such a way as to not utilize TransCanada's existing infrastructure.
20141. Assuming an Alaskan pipeline is built as a bullet line, aside from the fact that the Alaskan gas wouldn't -- sorry. Aside from the fact that Alaskan gas would avoid the Mainline entirely, what would you foresee as the impact on the Mainline flows?
20142. **DR. LANGFORD:** One point I would make is that it depends on the capacity of the pipe that is built in relation to how much Alaskan gas is flowing.
20143. It depends on whether there would be any interconnects into that pipe. And we've referred to it as a bullet, but if there was possibly an interconnect into that pipe then it could, presumably, take additional volumes of gas from the basin if it were not full. That would have a negative impact.
20144. But, I mean, if there was 4 bcf a day of Alaskan gas flowing and 4 bcf a day of capacity, I'm not sure that that would have any significant impacts.
20145. **MR. FREW:** It depends on where that pipe ends up, I think. That's part of the problem.
20146. **MR. ZWICK:** Yeah. It's likely that that gas will end up in one of the existing markets that's served by existing infrastructure.
20147. So it may have some impact in those market areas, which would have a residual effect on flows into those markets from Western Canada.
20148. **MS. ZANIN:** Thank you.
20149. That concludes my questions.
20150. **THE CHAIRMAN:** Thank you, Ms. Zanin.

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Examination by Member Bulger**

20151. **MS. ZANIN:** Thank you, Mr. Chairman.

20152. **THE CHAIRMAN:** Dr. Bulger, please.

--- **EXAMINATION BY/INTERROGATOIRE PAR MEMBER BULGER:**

20153. **MEMBER BULGER:** Gentlemen, can I get you to turn to page 72 of your Business Risk Evidence? This is where you have a list of the -- of the long-term risks. It starts on 71 and goes over to 72.

20154. Do you have that, Mr. Frew?

20155. **MR. FREW:** Page 71 is it?

20156. **MEMBER BULGER:** It's the list that starts on 71 and goes on to 72.

20157. **MR. FREW:** Yes, I do.

20158. **MEMBER BULGER:** And just to follow up on a question that Ms. Zanin asked you, on page 72, in that list there's tax policy deferred or flow-through tax treatment?

20159. **MR. FREW:** Yes.

20160. **MEMBER BULGER:** And that -- that decision, as to whether it was flow through or deferred, would that have been the company's decision?

20161. **MR. FREW:** I think initially that would have been the company's decision. And it's my understanding once you've elected it you can't change that.

--- (A short pause/Courte pause)

20162. **MR. FREW:** So Mr. Ferguson may have something to add to that.

20163. **MR. FERGUSON:** As I understand it, Dr. Bulger, there was discussion about the appropriate treatment, and I had understood that there were actually some regulatory decisions that had the Mainline going from flow-through to normalized back to flow-through taxes in the past.

20164. But that's not from personal experience, just from anecdotal discussions is where that would come from, from me.

20165. **MEMBER BULGER:** I don't quite understand your response, sir.

20166. Are you saying that the NEB told you to change your tax treatment or that you applied for it and it was approved? I don't quite get it.

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20167. **MR. FERGUSON:** Well, I'm not sure which, but I did understand that it was one of those situations. Again, that comes from just anecdotal discussions. I don't know that for certain.
20168. **MEMBER BULGER:** Well, let's take one of your cases, then, Dr. Carpenter.
20169. If it had been the company that came to the Board and said that they wanted to change their tax treatment, would this item belong in this list?
20170. **DR. CARPENTER:** Well, I think it's on the list.
20171. I think the question would then be how much -- how much weight do you give to it and what were the circumstances at the time that the company elected that, were there other factors involved, had things changed, and was the company blocked in some way subsequently from altering the policy.
20172. So I guess -- I think you need to know a little bit more about it before you could render a conclusion. I think it's on the list, but it would depend on what kind of weight you would give to it.
20173. **MEMBER BULGER:** Thank you, sir.
20174. I have another question on the same -- the same lines. You've talked about greenfield pipelines and the fact that such pipelines often start out with long-term contracts and that by the end of the term of the long-term contracts the pipelines are, to a large extent, depreciated. And as I understood your testimony, you cited the case of Alliance and -- and Maritimes.
20175. And I remember when I was -- when I started out at one of my first jobs, I was looking at the book of contracts that my employer had with TransCanada PipeLines, and I was quite impressed by the fact that some of them went to 1995.
20176. And I was sort of wondering, and this is -- maybe it's more a philosophical question than anything else. But when you look back, do you think that it was the correct decision not to have ended up at the end of those long-term contracts in the position that you describe for, let's say, Maritimes and Alliance?
20177. Is my question clear?
- (A short pause/Courte pause)
20178. **MR. FREW:** I'm not sure if I understand precisely the point, but I do think that in the period, say, from 1990 forward, there was significant expansion on the TransCanada system at the same time as there was potential expiries.

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20179. And my guess would be at the time that the view was that there wasn't going to be competition, significant competition, from other pipes and that as a matter of almost public policy it was the right thing to do, to expand.

20180. You know, being with the company for quite a period of time during different eras, certainly it was one of the prospectus of the company that it was almost an obligation or part of the company's responsibility to maintain and expand the Canadian business. So I don't think there was that same kind of precise thought as to: Well, what is this going to mean 25 years down the road in the event that we find ourselves in the kind of scenario that we're in today, with competitive environment from other pipes and - and decline in the basin.

20181. So those periods of time were all during a growth period for the company and for the Western Canadian Sedimentary Basin. I mean, we're right now to the point where the basin is mature and the pipeline is entering a much more mature phase, but the actual facilities that have been added aren't that mature. So that we're out of sync a little bit with the addition of large amounts of capital with the maturity of the basin and the environment we're working in.

20182. Did that help at all?

20183. **MEMBER BULGER:** As I understand your response, you're saying that -- that at the time, you were operating in a different environment, and perhaps with a hundred percent foresight you would have been able to foresee the situation, but it wasn't evident to the players who were there at the time.

20184. **MR. FREW:** I think that would probably be a more eloquent summary of my discussion, yes.

20185. **MEMBER BULGER:** Thank you very much, sir, for your help.

20186. **THE CHAIRMAN:** Thank you, Dr. Bulger.

--- EXAMINATION BY/INTERROGATOIRE PAR THE CHAIRMAN:

20187. **THE CHAIRMAN:** I do have a few questions in one area.

20188. I'd like to seek a little bit of clarification on the risk of the economic life determination being wrong. And there was a discussion yesterday around Transcript 18137. I will not refer to that specific area, but just for record, I read that and reread that, and I'm still not clear as to one aspect.

20189. As -- and my question is addressed to the panel. I don't know who will feel in the best position to respond. But as I understand the company's view, there is concurrence with the fact that, as the situation evolves, the company is prepared to come

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to the Board regularly and apply for revised depreciation rates as the situation evolves and you get better information about the future.

20190. Is that an accurate reflection?

20191. **MR. FREW:** That's correct, yes.

20192. **THE CHAIRMAN:** And this is in fact in keeping with some encouragement, I think, you received from the Board in past cases where it is deemed by the Board to be an appropriate method to adjust those rates of depreciation as the world becomes different?

20193. **MR. FREW:** Yes, I recall sort of a suggestion that every three to five years we should be updating the studies.

20194. **THE CHAIRMAN:** Now, yesterday and before during these proceeding, there has been clear statements made on your part that even as you accept that as a methodology of handling future uncertainty, there is, as we look at it today, still a risk of the economic life determination being wrong.

20195. I think that's abundantly clear from what has been said so far.

20196. **MR. FREW:** That's correct, yes.

20197. **THE CHAIRMAN:** All right.

20198. What I'd like to explore a bit with you is if you try to imagine the future, in the future, if that risk materialized, you would discover in the future that the economic life appears to be wrong.

20199. And I wonder if you could describe the scene or a scenario that would exemplify that in the future you would discover: All right, I think we're wrong. I wonder if you could help me understand how that risk materialization occurs, because I'm having some difficulty reconciling that with the possibility of regular adjustments to depreciation rates in the future.

20200. **MR. FREW:** I think one example that might clarify it would certainly be if we found ourselves in the low case scenario where we see significant and rapid decline in the supply in Western Canada.

20201. And the difficult part that we have is that within the next few years, it's hard to tell whether you're on the curve that goes this way or the one that goes down more rapidly in a year or two. And if all of a sudden -- the only way you can really tell for sure is through history, so -- again, this goes back to Mr. Langford's short-term analysis.

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20202. We have to make sure that we're monitoring that very, very closely. We've tried to identify what milestones or what criteria we should be monitoring that would give us some kind of an early flag that we're on one of those scenarios that we don't want to be on.
20203. One of the key ones is the supply coming out of the Western Canadian Sedimentary Basin. If it starts to decline more rapidly than we expect in our base case, we'll no doubt be knocking on the door here saying: We think we are in a problem because our depreciation rate isn't fast enough and it tends to compound itself, that if it has a very rapid decline, we may be in a position where we become uneconomic. If there is an attempt to match the depreciation with the economic life, that that could put us at a point where, let's just say for example, our toll went above \$2 or something and then it made it very clear that the gas would go into the market either through a different route or to a different market. That, in combination with, perhaps, LNG coming in, could mean that the market is still being served and there's no reason for gas to go through our pipe.
20204. So that's the kind of situation that we could find ourselves in. I don't know how likely that is, but there's a certain risk that we just get it wrong and we don't have time to react properly to it.
20205. **MR. FERGUSON:** And if I just might add slightly to that just so we're being clear, I think a lot of where the issue comes from is that we have a compounding effect in that, first of all, there's less volume and there's, therefore, been upward pressure on toll.
20206. And then to, in addition, be looking to increase the depreciation rate means directionally you've got both an increase in toll from a reduction in volume and an increase in toll from an increase in recovery of depreciation.
20207. So I think it's -- it's not just the incremental cost, but the double effect of that along with a reduced volume over which you spread those increased costs.
20208. **THE CHAIRMAN:** Thank you. Those answers are helpful.
20209. I wonder also if you could comment on the extent to which future discovery of those changes relative to today's assumptions would be sudden or gradual. In other words, would you have -- to what extent do you anticipate you'd have early warning signs of something needed to be adjusted as the reality, perhaps, either suddenly or gradually unfold differently from today's assumptions.
20210. I don't know if you have any comment to make on the rate of change in terms of those aspects of reality that are germane to determination of depreciation rates and economic life, of course.
20211. **MR. FREW:** Certainly events of infrastructure change are easily identifiable. So that's the first thing; that if there's a new piece of pipe built that bypasses

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ours or something or, you know, major new LNG facilities, those we could identify. Where the uncertainty arises, I think, is more in monitoring the Western Basin and the ultimate reserves that are there.

20212. And Mr. Langford, I don't think if you want to speak about that, but that's a more gradual situation. And -- perhaps you can add something to that.

20213. **DR. LANGFORD:** I would say, sir, and we've said in the past, that we don't think that one month or one year's data on WCS supply parameters is all that useful to forecasting a long-term trend, and so we would be inclined to think that it would take more than a year or maybe more than a year or two to be confident that we are on a new path.

20214. And it is sometimes difficult to sort out short-term variability from the emergence of the realization of the long-term risk.

20215. **MR. FREW:** I think it's safe enough to say, though, that we are -- I wouldn't say comfortable, but confident that the basin is mature and there's more downside than there is upside in terms of our analysis of the basin.

20216. And Bill, you could maybe add to that.

20217. But that's part of the concern, is that we're now tilted to the point where we think there's more downside and that we may get it wrong in evaluating, you know, the decline than there is on the upside potential.

20218. **DR. CARPENTER:** And Mr. Chairman, if I could just add one comment, that even if you could identify a discrete event like a bypass, identifying what its impact would be on the Mainline carries some uncertainty, so it's not as clear as you might think, I think.

20219. **THE CHAIRMAN:** So if I could pick up then, Dr. Langford, on your comment. As I understand it, and you'll correct me if I'm wrong, that changes, at least in terms of the supply picture, are more likely to be gradual than sudden. I don't know if I characterize properly ---

20220. **DR. LANGFORD:** You could.

20221. I think there are instances where something could happen suddenly that would change your view. The development of an entirely new play that is not incorporated in people's estimates of ultimate potential and it had -- could have really huge impacts on deliverability, so people have to say: Wow, you know, we dismissed that.

20222. Yeah. And I mean, that's always a possibility. I think barring something like that -- or barring some sort of disaster -- for example, perhaps something happens

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environmentally such that coal bed methane is just not going to be acceptable to people and all of a sudden you have drastic revision in your CBM numbers.

20223. But in terms of the normal process of conventional supply, I think it's most likely to be a gradual evolution, and one will, at some point, decide on whether it is more likely that you are on the low path versus the base path or whatever.

20224. **MR. JAMAL:** I would just add a perspective here and a slight deviation from what Dr. Langford said, but the three cases we have presented reflect high gas prices; close to \$5.00.

20225. And when we look at our models and look at slightly lower gas prices, we have a significant change over a short period of time. And I think what the -- some of the statements made that we have 15,000 gas wells and it will not be a precipitous decline, I would take the view -- and I think we're all sort of experts in gas price forecasting, and we've seen how the gas prices have changed over the last few years, and the forecasts have changed.

20226. Because of the high supply costs, we are now into full cycle economics. Our supply costs now are upwards of \$3.50; up to \$4.00 in some cases. So in the event that the gas prices do come down by a dollar, I think there will be a significant decrease in activity levels, and commensurate with that will be decline in supply.

20227. **THE CHAIRMAN:** Thank you, Mr. Jamal.

20228. **DR. LANGFORD:** Of course, it raises the question: If gas prices fall is that a temporary event or ...

20229. **THE CHAIRMAN:** No, that's helpful.

20230. And I guess the last aspect of my question in this area is the following -- I should say at the start that I'm mindful of the exchange, Dr. Carpenter, you had with Ms. Zanin, that even if a risk is mitigable, that doesn't mean that it does not inform the assessment of business risk. So I'm mindful of that.

20231. But I'm trying to then reconcile the fact that some of those uncertainties about the economic life are in fact things that will happen gradually as opposed to suddenly. I realize -- I recognize from the testimony that some of it might be, in fact, sudden surprises or at least something which happens or unfolds faster than the slower trends.

20232. And I wonder if, when we take into account the risks related to economic life determination being wrong, it is relevant, when we approach that, to take into account the fact that the company is prepared to apply regularly for updates to its depreciation rates.

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20233. **DR. CARPENTER:** Well, the way I would put it is this way -- and perhaps I was the source of the transcript confusion yesterday.
20234. I hope not, but -- let's take a hypothetical that we were -- that in the future, the company was in a position that it could regularly update its depreciation rate and that it regularly got it right with the Board's approval. And let's assume that that's the process starting today.
20235. I think the view -- the right conceptual answer is even in that circumstance, risk has not been mitigated for an investor in Mainline securities today. And that's because while the depreciation rate is right so that the return on capital can be assured to be coming in over the economic life, that doesn't eliminate future uncertainty associated with it today.
20236. And that gets back to the point that I was trying to make that you don't compensate for risk in the depreciation rate; you compensate for risk in the rate of return.
20237. **THE CHAIRMAN:** Just one, I think possibly last, follow-up, Dr. Carpenter.
20238. So assume that today an investor assesses the current situation as has been described by TransCanada in this proceeding.
20239. Assume, alternatively, that the same investor in a different world would take stock of the same situation except the company, or the Board, would have required that depreciation is going to be looked at only every ten years, as opposed to, say, two, three, four years, as I think is the current.
20240. In today's assessment, the alternative scenario, is it in fact more risky than the basic scenario?
20241. **DR. CARPENTER:** Yes, I think it's more risky.
20242. **THE CHAIRMAN:** Thank you. Okay.
20243. I think now I've acquired the understanding I needed on this question.
20244. Ms. Moreland, those are all the questions of the Board. Do you have any redirect for the panel?
20245. **MS. MORELAND:** We have no re-examination. Thank you, Mr. Chairman.
20246. **THE CHAIRMAN:** Thank you, Ms. Moreland.

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20247. The Board would like to thank the panel for your contribution to the record of this case, and you are now excused.

--- (A short pause/Courte pause)

20248. **MR. YATES:** I wonder, Mr. Chairman, if we might take our noon break a little early in order to allow for the -- this panel to pack up and the next one to get unpacked.

20249. **THE CHAIRMAN:** Would the usual ten minutes be enough, Mr. Yates, or ---

20250. **MR. YATES:** Let's call it 15.

20251. **THE CHAIRMAN:** Fifteen (15) minutes; deal.

20252. **MR. YATES:** Thank you.

20253. **THE CHAIRMAN:** We'll be back at quarter to twelve.

--- Upon recessing at 11:30 a.m./L'audience est suspendue à 11h30

--- Upon resuming at 11:45 a.m./L'audience est reprise à 11h45

20254. **THE CHAIRMAN:** Mr. Yates...?

20255. **MR. YATES:** Thank you, Mr. Chairman.

20256. Seated at the witness table now is the third panel of witnesses being presented by TransCanada. The title for this panel in Exhibit B-52 is "Deemed Capital Structure and Fair Return".

20257. The panel consists of Dr. A. Lawrence Kolbe, who is seated farther from the Board, and Dr. Michael J. Vilbert, closer to the Board. Both are principals of the Brattle Group.

20258. Could we start by having the witnesses affirmed, please.

DR. MICHAEL J. VILBERT: Affirmed
DR. A. LAWRENCE KOLBE: Affirmed

--- **EXAMINATION BY/INTERROGATOIRE PAR MR. YATES:**

20259. **MR. YATES:** Dr. Kolbe, if I could start with you.

20260. Your Written Evidence, as revised July 29th, is included in Exhibit B-40 as Appendix B-7. Your Reply Evidence dated November 2004 is Appendix E in the

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TransCanada Reply Evidence that has been marked as Exhibit B-54. The information request responses that relate to your evidence are included in the list that appears on page 5 of 5 of the Witness Panel Responsibilities document that was filed by TransCanada and has been marked -- or is included in Exhibit B-52.

20261. And were those documents, all of those documents, prepared by you or under your direction and control?

20262. **DR. KOLBE:** Yes.

20263. **MR. YATES:** Dr. Kolbe, this morning I filed a document which is called "Errata for Kolbe Written Evidence, Kolbe Reply Evidence, and Information Requests". It's been marked as Exhibit B-77.

20264. Was that document prepared by you?

20265. **DR. KOLBE:** Yes, it was.

20266. **MR. YATES:** Do you have any corrections or additions to make to any of your evidence other than those that appear in Exhibit B-77?

20267. **DR. KOLBE:** No, I don't.

20268. **MR. YATES:** So your Written Evidence, Reply Evidence, and Responses to Information Requests, all as corrected by Exhibit B-77, are accurate to the best of your knowledge and belief?

20269. **DR. KOLBE:** Yes, they are.

20270. **MR. YATES:** And do you accept and adopt those documents as your testimony in this proceeding?

20271. **DR. KOLBE:** Yes, I do.

20272. **MR. YATES:** And can you confirm for us, Dr. Kolbe, that your qualifications appear as Appendix A to your Written Evidence in Exhibit B-40?

20273. **DR. KOLBE:** Yes, they do.

20274. **MR. YATES:** And that you provided expert testimony on cost of capital to -- well, you have provided it to various tribunals and courts, as detailed in that appendix, and that includes being accepted as an expert by the National Energy Board when you appeared as a witness for TransCanada in the RH-4-2001 proceeding?

20275. **DR. KOLBE:** Yes, that's correct.

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20276. **MR. YATES:** Thank you.
20277. Mr. Chairman, Dr. Kolbe has been accepted as an expert before. I wouldn't propose to go further with his qualifications, unless you want me to.
20278. **THE CHAIRMAN:** That's fine, Mr. Yates.
20279. **MR. YATES:** Thank you, Mr. Chairman.
20280. Dr. Vilbert, your Written Evidence, as revised July 29th, 2004, is included in Exhibit B-40 as Appendix B-8. The information request responses that relate to your evidence are included in the list that appears on page 5 of 5 of the Witness Panel Responsibilities document that was filed in Exhibit B-52. Were those documents prepared by you or under your direction and control?
20281. **DR. VILBERT:** Yes, they were.
20282. **MR. YATES:** This morning I filed a document entitled "Errata for Amended Written Evidence and Information Requests of Michael J. Vilbert", which is Exhibit B -- has been marked as Exhibit B-78.
20283. Was that document prepared by you?
20284. **DR. VILBERT:** Yes, sir.
20285. **MR. YATES:** And also filed this morning was Exhibit B-79, which is Table 2 in the response to NEB IR 2.13.
20286. Was that document prepared by you as well?
20287. **DR. VILBERT:** Yes, it was.
20288. **MR. YATES:** And are your Written Evidence and your responses to information requests, as corrected by Exhibit B-78 and as supplemented by Exhibit B-79, accurate to the best of your knowledge and belief?
20289. **DR. VILBERT:** Yes, they are.
20290. **MR. YATES:** And do you accept and adopt those documents in this proceeding -- as your evidence in this proceeding?
20291. **DR. VILBERT:** I do.
20292. **MR. YATES:** And can you also confirm that your qualifications appear as Appendix A to your Written Evidence in Exhibit B-40?

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20293. **DR. VILBERT:** Yes, they do.

20294. **MR. YATES:** And that you have provided expert testimony on cost of capital to various tribunals and courts, including to the National Energy Board in the RH-4-2001 proceeding?

20295. **DR. VILBERT:** Yes, sir, that's correct.

20296. **MR. YATES:** Mr. Chairman, I would take the same position with respect to Dr. Vilbert as with Dr. Kolbe, and he has been accepted as an expert in the past.

20297. **THE CHAIRMAN:** We accept your position, Mr. Yates.

20298. **MR. YATES:** Thank you, Mr. Chairman.

20299. That is all I have by way of examination in-chief. The panel is available for cross-examination.

20300. **THE CHAIRMAN:** Thank you, Mr. Yates.

20301. Mr. Schultz...?

20302. **MR. SCHULTZ:** Thank you, Mr. Chairman.

--- EXAMINATION BY/INTERROGATOIRE PAR MR. SCHULTZ:

20303. **MR. SCHULTZ:** Good morning, gentlemen. My name is Nick Schultz. I have some questions for you on behalf of the Canadian Association of Petroleum Producers, and I intend to be quite brief. My questions are quite short.

20304. The first arises from an information request from the National Energy Board in which information from the Ibbotson Yearbook was requested. This was NEB 1.44. We don't need to look it up, but the Ibbotson material for 2003, as well as 2004, was provided in the Stikeman Reading Room, and I did avail myself of the opportunity to look at the material, and I simply wished to confirm some numbers. I raised this with Panel 1 and was told I should raise it with you folks. So perhaps you're forewarned and forearmed.

20305. **DR. KOLBE:** I'm sorry. I'm not sure we have the Ibbotson document in question.

20306. If you want to confirm numbers, could we ask that somebody, I hope on our staff, can provide that to us now.

20307. **MR. SCHULTZ:** I understand the material is somewhere in the room here. It is the SBBI Valuation Edition 2003 Yearbook published by Ibbotson and

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Associates, and the same thing for 2004. And what I'm interested in is page 162, Table 9-1 of the 2003 yearbook, and the same table from the 2004 yearbook. And the page reference there is page 166.

20308. And these relate to the equity risk premia by country with a start point of 1970. In the case of the 2003 yearbook it goes to 2001, and in the case of the 2004 yearbook it goes to 2002.

20309. **DR. VILBERT:** We have those pages.

20310. **MR. SCHULTZ:** Okay. Thank you.

20311. And I just wish to confirm that in local currency the 2003 equity risk premium for Canada for the period that I just mentioned is 3.17 percent, and for the U.S. is 5.28 percent?

20312. Is that correct?

20313. **DR. VILBERT:** Yes, that's correct.

20314. **MR. SCHULTZ:** Thank you.

20315. And for the next yearbook edition, 2004, where the period is 1970 to 2002, again in local currency, the equity risk premium for Canada is 2.48 percent and for the U.S. 4.28 percent?

20316. Is that correct?

20317. **DR. VILBERT:** Yes, that's correct.

20318. There is something I'd like to point out to you, though, about these numbers in direct reference to your comments. If you -- if you look on page 162, right below the numbers on the table there at the bottom of the page, there's a paragraph that I'd just like to note, and perhaps read to you. It says:

"It is also interesting to compare the historical U.S. equity risk premium in the table above to the results obtained using the full history of available U.S. market data. The figure 5.28 percent is substantially lower than the U.S. equity risk premium calculated over a longer time horizon in Chapter 5."

20319. It says:

"This illustrates another danger in using international data. Using a limited data window (1970 to present) can significantly understate or overstate the expected equity risk premium. Again,

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as was addressed in Chapter 5, longer periods of time are preferable in estimating the future equity risk premium from historical data. For many international markets, long-term data is not available."

20320. So what this is just showing you is that if you -- the market risk premium based upon realized rates of return can vary substantially, depending on the period of time you select to estimate the market risk premium.

20321. **MR. SCHULTZ:** Thank you.

20322. My next set of questions is for you, Dr. Vilbert. You filed evidence as part of the January Application and then amended it as part of the July revision; correct?

20323. **DR. VILBERT:** Yes.

20324. **MR. SCHULTZ:** And when I look specifically at the tables that are filed as part of your evidence -- these are the tables that have an MJV designation and then a number, and they comprise a substantial volume of material following the text in your evidence -- I noted that the tables that appear to be amended in July were MJV-8, MJV-12, MJV-19, and MJV-22.

20325. Would that be a complete list of the amended tables? And I'm referring here to the tables and not necessarily any work papers that might support the particular table.

20326. **DR. VILBERT:** I'm just taking a moment to check to confirm.

--- (A short pause/Courte pause)

20327. **DR. VILBERT:** You did say 19; correct?

20328. **MR. SCHULTZ:** Yes. I said 8, 12, 19 and 22.

20329. **DR. VILBERT:** Yes, those appear to be the tables that were changed.

20330. **MR. SCHULTZ:** Thank you.

20331. And those are the tables in which you now show what the capital structure would be given the results of your various calculations and assuming the NEB 9.56 ROE for 2004.

20332. Is that right?

20333. **DR. VILBERT:** Yes, sir; that's correct.

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20334. **MR. SCHULTZ:** Okay. Thank you.
20335. And previously those tables were the tables that showed what the ROE would have been given the results of your other tables and assuming a 40 percent regulated equity ratio.
20336. Is that right?
20337. **DR. VILBERT:** Yes, that's correct.
20338. **MR. SCHULTZ:** Okay. Thank you.
20339. Now, I'd like to just confirm the steps in your procedure, if we can. Once you've determined your sample companies -- and my focus isn't on how you determine your samples but what you do once you have your samples.
20340. One thing you do, if I understand correctly, is determine the market value capital structures; correct?
20341. **DR. VILBERT:** Yes, that's correct.
20342. **MR. SCHULTZ:** And you do that over a period of years and then you utilize an average of some period of years in your subsequent determinations?
20343. **DR. VILBERT:** Yes. It's a five-year average for the risk positioning models and a one-year average for the DCF model.
20344. **MR. SCHULTZ:** Thank you.
20345. You then estimate the cost of common equity for the sample companies using two techniques -- two basic techniques: a DCF technique and then a CAPM technique where you also have the ECAPM feature as part of that evaluation?
20346. **DR. VILBERT:** Yes, that's correct.
20347. **MR. SCHULTZ:** Okay. Thank you.
20348. If there are any preferred shares, you then estimate the cost of the preferred shares?
20349. **DR. VILBERT:** Yes.
20350. **MR. SCHULTZ:** Thank you.
20351. You also estimate a market cost of debt for your sample companies?

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20352. **DR. VILBERT:** Yes. The estimation is based upon the company's bond rating.
20353. **MR. SCHULTZ:** All right. Thank you.
20354. You determine what tax rate you should use for the period that you're looking at.
20355. Is that right?
20356. **DR. VILBERT:** The tax rate comes from TransCanada.
20357. They tell me what their tax rate is that they're going to file in their evidence, and that's the tax rate I use in my calculations.
20358. **MR. SCHULTZ:** All right. Thank you.
20359. You then combine the cost of equity and the market cost of debt with the market value capital structures to arrive at the overall after-tax cost of capital.
20360. Is that right?
20361. **DR. VILBERT:** Yes, that's correct.
20362. **MR. SCHULTZ:** Okay. Thank you.
20363. And that figure, that overall after-tax cost of capital, can be referred to as an ATWACC figure?
20364. **DR. VILBERT:** Yes, for a short -- an acronym.
20365. **MR. SCHULTZ:** Thank you.
20366. Once you have your overall after-tax cost of capital, you are then in a position to determine what the capital structure for your subject company or subject business would be at a given ROE, as you have done in the July revision.
20367. Is that correct?
20368. **DR. VILBERT:** Yes.
20369. **MR. SCHULTZ:** Thank you.
20370. Or you can use the overall after-tax cost of capital to determine what the cost of equity would be at a given capital structure, as you did in the January Application.

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20371. Is that correct?
20372. **DR. VILBERT:** Yes, that's correct.
20373. **MR. SCHULTZ:** Okay. Thank you.
20374. And the latter that I've just described, namely, using the overall after-tax cost of capital to determine an estimate of the cost of equity at a given capital structure, is the procedure you used in the RH-4-2001 proceeding to arrive at a recommended Mainline return on equity at the 40 percent equity and 60 percent debt capital structure TransCanada applied for in RH-4-2001.
20375. Is that correct?
20376. **DR. VILBERT:** Almost. I use the procedures you described, but what I do is to investigate what -- the information that the sample is giving me, and I then give what the sample would say is the return on equity in the RH-4-2001 -- what the sample information is telling me given a particular deemed capital structure.
20377. Dr. Kolbe uses that information, then, to determine the recommendation for the Mainline. I did not determine the recommendation for the Mainline.
20378. **MR. SCHULTZ:** And thank you for that clarification. I understand that your procedures provide you with a range of results which you then provide to Dr. Kolbe.
20379. Is that fair?
20380. **DR. VILBERT:** Yes.
20381. Based upon what the sample information is telling us based on the market data that we use, I then give that information to Dr. Kolbe who then compares those results and analyzes the risk of the Mainline to determine his recommendations on the cost of capital or, in this proceeding, the deemed equity component that's consistent with the NEB's ROE formula.
20382. **MR. SCHULTZ:** Thank you.
20383. And thank you, gentlemen; those are my questions.
20384. Thank you, Mr. Chairman.
20385. **THE CHAIRMAN:** Thank you, Mr. Schultz.
20386. Mr. Staft...?
20387. **MR. STAFT:** Thank you, Mr. Chairman.

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--- EXAMINATION BY/INTERROGATOIRE PAR MR. STAFT:

20388. **MR. STAFT:** Good afternoon, gentlemen.

20389. **DR. VILBERT:** Good morning.

20390. **DR. KOLBE:** Good afternoon.

20391. **DR. VILBERT:** Or good afternoon. It's five minutes after.

20392. **MR. STAFT:** I checked before I said that.

20393. I had a couple of areas I wanted to talk with you about. The first one is -- well, it relates to your -- Dr. Kolbe's Reply Evidence, Exhibit B-54, Appendix E, I think I heard Mr. Yates say this morning.

20394. **DR. KOLBE:** Appendix D, you said?

20395. **MR. STAFT:** Whichever your Reply Evidence is.

20396. **DR. KOLBE:** Oh, I'm sorry. You aren't talking about my appendix numbers; you're talking about the exhibit numbers?

20397. **MR. STAFT:** Right. Yes, sorry.

20398. **DR. KOLBE:** I apologize. Now I understand.

20399. **MR. STAFT:** And -- sorry.

20400. And in particular, I'm interested in your discussion of market-to-book ratio test where you're responding to Dr. Booth, in a general way, on that; and in particular, the section starting on page 15 going through to about page 18. The section is numbered 2, and it's headed "Market-to-Book Ratio Test Inconsistent with the Way the Market Behaves", and then there's quite a lengthy discussion of that.

20401. **DR. KOLBE:** Yes, I have that.

20402. **MR. STAFT:** Okay.

20403. And maybe even more particular, I'm looking at Question 17 -- Question and Answer 17 on page 17, and the sentence that begins at line 13.

20404. The paragraph that begins at line 13 there, it says:

*"The market-to-book ratio purports to be a test of absolute value
for utilities. If the stock market can get relative prices right, and if*

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any stock has a reliable test for its absolute value, then all stocks will be priced right relative to it, and all stocks will be priced right in absolute value, too. If this were true, the stock market wouldn't have crashed in October 1987, nor would the turn-of-the-century 'tech bubble' would happened. Since those events did happen, the supposed test of absolute value for utilities, i.e., the market-to-book ratio test, must not be valid."

20405. And I wonder if I could begin maybe by sort of paraphrasing that argument so you can, first of all, tell me if I've got it right and then we can discuss it.

20406. As I understand the argument, premise one would be that the market corrections that you refer to, the October 1987 crash and the tech bubble fiasco, show us that equity markets don't get the absolute values right for most stocks in the broad stock market.

20407. The second premise is that, however, stock markets do get relative values right.

20408. And then combining those two premises, it follows that if the market misprices a basket of stocks like Nortel and General Motors and Exxon for some reason, but the market also maintains an appropriate relationship between the prices of those stocks and the price of a utility stock, then it seems to follow mathematically that the market must also be mispricing the utility stock.

20409. Is that a fair summary of what's going on here?

20410. **DR. KOLBE:** That's the basic idea, except I would just expand it to say that '87, it wasn't just a basket of tech stocks that had the problem; it was the whole market that crashed without any evidence of fundamental news that would lead to such a change in price.

20411. **MR. STAUFF:** Right.

20412. **DR. KOLBE:** It wasn't just -- it wasn't just the tech stocks in '87, is all I'm saying.

20413. **MR. STAUFF:** Right. Okay.

20414. It wasn't just the tech stocks in 2000, either, was it?

20415. **DR. KOLBE:** No; but you had mentioned the tech stocks and I called it the tech bubble, and that's the -- you know, that's the popular press shorthand for it.

20416. **MR. STAUFF:** Right.

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20417. So going back to Premise No. 2, which was the -- sorry, did you need to add something? -- Premise No. 2, which was that in fact the stock market gets the relative values correct or much more nearly correct.
20418. Can I take it that that's because there's -- and I think you discuss this, but there's an arbitrage activity going on between, for example, on the one hand, Nortel and TransCanada, or General Motors and, you know, some utility stock, or Exxon and some utility stock, and it's that arbitraging that keeps, maintains the right relative valuation in the market?
20419. **DR. KOLBE:** That's the idea.
20420. Suppose a bundle of a high risk stock and a low risk stock that ended up with a precise sort of middle risk value were priced very differently from a stock that had the middle risk itself, then you can make money by selling one and buying the other. And there are a lot of people out there who are looking for things that are mispriced relative to each other and making money in that kind of way. So that's the idea.
20421. **MR. STAUFF:** And when people engage in that kind of arbitrage activity, could I describe that as being a matter of investors correctly evaluating the relative profitability of firms?
20422. **DR. KOLBE:** Well, it's more -- it's -- depends on what you mean by "profitability".
20423. **MR. STAUFF:** Well, I guess the -- more generally, the returns that they're going to get from the stock.
20424. **DR. KOLBE:** Yes, I think that's more appropriate.
20425. When you buy a stock, you're looking at more than just book profitability. You're looking at the whole series of returns you get both through dividends and capital gains.
20426. **MR. STAUFF:** Both of which are related to profitability, though, I would have thought.
20427. **DR. KOLBE:** Yes, but profitability sometimes has an accounting flavour.
20428. If you want to define it as market profitability, I'm happy to do that, but it's -- it's not just current profitability; it's prospects; it's growth options; it's options to abandon. It's -- it's not -- it's a lot more -- ultimately, it all shows up if it all gets realized on the accounting books, but that may be a long time in the future. It's the entire future that's considered.

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20429. **MR. STAFT:** Right.
20430. So expected returns or earnings or ---
20431. **DR. KOLBE:** Expected returns, I would put it; expected returns on the stock.
20432. **MR. STAFT:** Okay.
20433. Well, from the underlying business as well?
20434. **DR. KOLBE:** Or from options to expand that underlying business in profitable ways.
20435. **MR. STAFT:** Sure. Okay.
20436. And I'm curious about how exactly that works, what capability market analysts or market investors have to do that as between companies that are very dissimilar in their business.
20437. Can you comment on that?
20438. **DR. KOLBE:** Well, there are -- there are many -- well, I guess I'll say two things. The first is a preface.
20439. My view is that nobody knows currently the true driver of stock prices. Right? We don't have a -- we don't understand the model that explains stock prices. There's a gap in our knowledge. That gap affects everybody. And, accordingly, nobody - - if nobody knows the true model, nobody is going to be able to do a perfect job of this. So I'll say that as -- as a preface.
20440. With that preface, there are a great many professional fund managers who -- whose own compensation and whose fund performance depends on their ability to exploit mispricings among various securities. And there are investment banks who -- who provide information to people and to their own staff to make decisions.
20441. There are just a great deal of analytical talent in the nations and in -- all nations' financial markets that are trying to -- trying to do just that, trying to find stocks that will appreciate more than -- than others, which would lead them to sell the ones, if they already have them in a portfolio, and buy the alternatives.
20442. **MR. STAFT:** Okay.
20443. And I can understand that in a context where we're looking at, say, Exxon and BP or Ford and General Motors. Because an analyst could look at Exxon and BP and say, you know, one of them is just better at finding oil and gas than the other on some

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historical basis or has lower costs, or something like that. Two automobile manufacturing companies, the analyst may say that one of them just makes better cars or, again, has a lower cost structure, or something.

20444. So I can -- and make a market call that's really just relative as between those two stocks when they're in the same business, but I have more difficulty seeing what exactly it is people would be looking at if they were comparing Exxon with ATCO, for example. You know, it seems to me the drivers of the valuation and of the returns are just so completely different, it would be difficult to compare them.

20445. **DR. KOLBE:** Well, I've never worked in an investment bank, but -- but I have the -- I have every-day -- my own understanding just from talking to people who advise me on my own investments that this happens through division of labour. This happens often in the economy.

20446. I happen to have an account with Charles Schwab. They have analysts and have access to other analysts that look at different sectors. And they -- at the over-arching level they try to decide what sectors are under-valued relative to others. And then they have specialists in the sectors who try to decide within the sector what stocks are under-valued relative to others.

20447. And so they will -- they will first, perhaps, make a sectoral allocation and then make individual allocations within the sectors. And if the sector has a big run-up, sometimes they call me up and say: You should sell your stocks in this sector because we think they're doing fine. We think you should redeploy to Sector X.

20448. So it takes place not with one person knowing everything, but through a division of labour and specialization and with, I imagine, some sort of committee of people at the large fund managers or large investment houses talking about sectoral outlooks and things of that sort.

20449. But, as I say, there's -- you know, I don't know what the employment on -- in the nation's financial markets are. I know that it's a very high-paying profession, and there's lots of talent attracted to it.

20450. **DR. VILBERT:** Plus there's tremendous amounts of information published by the specialists that Dr. Kolbe mentioned earlier that's spread around to investors everywhere, and you get that information and can make your own judgments if you're an individual investment -- investor; or if you're a portfolio manager, you have access to this kind of information and you make judgments about what you expect the relative risk return trade-off to be for these types of securities. And those hundreds of thousands of judgments on a daily basis result in the level of prices that you see and the relative price structure.

20451. **MR. STAUFF:** Can you give me an idea of what kinds of -- this may be outside your gentlemen's area of expertise, but I was talking about the factors I thought

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people would look at if they were looking at two oil companies. What kind of factors would people be looking at if they were looking at oil companies versus utilities?

20452. **DR. KOLBE:** Well, I'm not sure the same analyst follows oil companies and follows utilities. Maybe they do.

20453. If you're an individual, I can't tell you what different individuals do, but in a large -- there are specialized funds that specialize in sectors. There are -- I have a friend who works for one of these companies, and he talks about certain people, and certain groups follow certain sectors and they meet together. They go through the process I described for you.

20454. And so you don't need to know, as one person, whether Exxon or Pacific Gas & Electric is the better investment. You need to know whether you think oil companies or utilities are going to do better. And then you go to the oil company specialist and you say: What do you think we should buy in the oil sector? Then you go to the utility specialist and say: What do you think we should buy in the utility sector?

20455. **MR. STAUFF:** Sorry. I thought we were talking about --

20456. **DR. KOLBE:** Did I misspeak this?

20457. And others will say: We think we should -- oil has had a good run-up. We don't think it's going to move anymore. We should start unloading.

20458. **MR. STAUFF:** Sorry. Well, I thought we were talking about recommendations or arbitrage opportunities between sectors. And it seems to me that someone who is going to recommend a move from oil companies into PG&E, or utilities, in order to make that judgment would have to have -- would also have to make judgments about the expected returns in both sectors.

20459. **DR. KOLBE:** Well, it's returns relative to risk, first of all, which -- which is important. You wouldn't expect the same expected returns for low risk as for high risk.

20460. **MR. STAUFF:** Sure. Fair enough.

20461. **DR. KOLBE:** But the sense -- what I'm trying to convey is that the process at -- you know, at the professional level, at the -- when you have a lot of money to manage, who are the people frankly most likely to be able to keep close attention to this because the transactions costs will be low and their own compensation depends on how well they do. You know, this is their day job, not their weekend review job.

20462. These people will work in teams and will have specialists. And the group in some fashion will decide on the -- on whether they should be buying or selling a given sector. And then the specialists in the sector will be deciding if they're buying, or even

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perhaps if they're selling; if they're not selling all of it, which individual stocks to buy or sell.

20463. That's -- that's the concept I have in mind.

20464. **DR. VILBERT:** You might consider, just as an example, Value Line Investment Service, which I'm sure you're familiar with, it publishes weekly a list of industry sectors, and they rank them in order of expected performance over the next year. And that rank will change weekly, although it doesn't change very much, but it does change over the year. And you can get that information every week from Value Line.

20465. So, presumably, by looking at that, if you were in one of the low-ranking sectors, you might consider changing to a -- to a sector that looks as if it's going to perform, or is expected perform by Value Line at least, better in the future.

20466. And, as I said earlier, those kind of decisions are made literally hundreds of thousands of times a day by investors buying and selling securities on the stock markets.

20467. **MR. STAUFF:** Does it follow from your argument, the argument that I summarized and that we've been talking about, that if two or three large sectors of the economy, for example, become, for some reason, over-valued in the market that it will -- that fact will drag, say, utilities into a position where they are over-valued as well because of this maintenance of the correct relationship between the sectors?

20468. **DR. KOLBE:** All else equal, yes.

20469. The dragging would take the form. You're saying the over-valuing is only in one sector. The dragging would take the form of the -- well, it could take several forms. There's both an income effect in that if I'm feeling richer I will invest more. And if the stocks have run up and I'm somewhere over-valued, I might take some of my profits and now want to diversify them into other areas. That buying will bring it up.

20470. The other mechanism is just -- again, if one sector is -- if there's a constant arbitrage among the sectors and one is extra high, it will make the others look relatively more attractive than they did before it became extra high.

20471. Maybe that's another way of saying the same thing, but without the income effect. There's an income effect and then there's an allocation effect I guess is what I'm trying to say, and the allocation effect will occur independently of the income effect.

20472. This is -- again, this is all and all else equal. I'm not saying that every investor does this, but the market as a whole, that's the direction it would go. As long as there are active participants trying to -- trying to make money by choosing which stocks are and which sectors are the best investments.

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20473. **MR. STAFT:** Okay.

20474. Is there -- looking back to the 1987 crash, as you described it, and the more recent problems, is there -- have you investigated or done research on whether -- what kind of linkage was maintained between the broad stock market and utility stocks, for example? Did you see that -- did we see that dragging-up effect of what I take was an over-valuation of the stock market?

20475. **DR. KOLBE:** I haven't looked on the upside.

20476. On the downside something very interesting happened, which relates to -- I have looked at that, and it relates to the material in Appendix C of my -- that's my Appendix C of my original evidence as revised. I don't think Appendix C actually changed at all, unless there was a typo.

20477. Bonds are -- utilities, as I mentioned there, that are regulated on a net book value rate base are unusually sensitive to bonds. And one of the things that happened in October '87 as the stock market crashed is that the bond market had a very good month; precisely because people said: Oh, my gosh, I'm getting into something safer.

20478. And utility stocks were a blend of those two effects because of the breadth of the crash and people generally viewing stocks themselves as a sector and saying: I want out of there and into bonds. Utilities were sort of pivoted at that moment. They didn't fall nearly as much as the rest of the market because their performance was related both to the performance of the stock market and, to an atypical degree, to the performance of the bond market.

20479. This is -- this is, you know, another way of saying this is -- that the capitalized pricing model is, you know, too simple. The real driver is more complicated than the CAPM but that's a different topic.

20480. If we had the true model, I would have expected the utility stocks to behave in line with the rest, according to the true model. That is the model of the entire market stocks and bonds combined, not just estimated on stocks, as we normally do.

20481. **MR. STAFT:** So at the end of the day the answer was that you haven't -- sorry. That you haven't really done specific research on whether that linkage effect actually happened in -- well, apart from the example you gave me?

20482. **DR. KOLBE:** Well, I'm not quite sure how I'd do that. I mean, the October month itself is very dramatic.

20483. You can see ---

20484. **MR. STAFT:** Right.

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20485. **DR. KOLBE:** --- exactly what happens.
20486. The problem with measuring it more -- in more subtle times is the following: In order to measure the linkage you describe. That is, are utilities being pulled up when the market as a whole is over-valued? You'd certainly expect the answer to be yes, but how would you test?
20487. In order to test, you'd need to know what utilities' stock prices would be if the market wasn't over-valued; right. And I don't know -- since we don't have the true model of stock prices, we don't know how to do that model.
20488. What we can see is that when utilities behave in a very unusual way, we can say: Oh, gosh, isn't that interesting? But I can think of no reason why utilities wouldn't have been pulled up when the market as a whole was over-valued. I see no logical reason they wouldn't.
20489. But if -- and if markets get relative prices right, which, you know, there seems to be a good conceptual reason to believe they do, based on the amount of money to be made through that process, you would certainly expect them to be pulled up.
20490. But I don't know how you'd test unless you had the true model of stocks. And if you had the true model of stocks, well, you'd -- you know, you'd be a very wealthy person and/or a very famous person, because there's surely a Nobel Prize in that.
20491. **MR. STAUFF:** What about in the 2000/2001 period? Do you know, offhand, if utility stocks -- as the broad stock market went up, did utility stocks go up to the same degree?
20492. **DR. KOLBE:** Well, I wouldn't expect them to go up to the same degree, in any case, because utility betas are less than 1. They haven't fallen as much as the tech sectors did, either, and you wouldn't expect that.
20493. We have this anomalous result now where in recent years utility betas have gone to 0. That's in part, perhaps, because they weren't weighted towards the tech sector. It's also in part on a broad basis, because the industry went through some surprising event -- and unique events itself as it's -- as generally competition has expanded from -- from levels known previously.
20494. And when there are sectorial changes in regulated industries, there seems to be a tendency of the betas to fall during the period of institutional change and then to rebound.
20495. So we can't be quite sure why they went to 0, but that suggests that on average -- at least they didn't fall in a correlated way with the market.

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20496. **MR. STAUFF:** In other words, they just -- when you say the beta went to 0, they didn't move much. Is that a ---
20497. **DR. KOLBE:** I don't know exactly ---
20498. **MR. STAUFF:** --- layman's shorthand way to say it?
20499. **DR. KOLBE:** I have not looked at what the levels are.
20500. Whatever their movements were, it was not in a highly correlated way with the market. That's all you know from the beta zero.
20501. I haven't looked at the individual stocks -- well, I think PG&E's stock fell out of bed and Southern California Edison's -- well, Edison International's stock fell out of bed. But, as I say, that was for unique reasons.
20502. **DR. VILBERT:** The issue with the beta, I think, is that during the period of time when the market was on a rapid increase, due in part to the tech stocks and the outlook for the tech stocks that seem to be unlimited, the utility stocks, in many cases, were going up, but not nearly as fast; but they were also, as Dr. Kolbe mentioned, going through a period of deregulation and other things that had nothing to do with the direction of the market. And, in fact, some companies got quite -- really hurt in that period of time.
20503. As a result, the stock price movements were no longer as related to the market as they had been in the past, resulting in zero beta's estimated. Which is not to say that they weren't moving; it's just that they weren't -- no longer moving in a way that was correlated with the way that the market was going. They were on some kind of other path during that period of time.
20504. **MR. STAUFF:** Would another explanation of that simply be, though, that the market actually is able to value utility stocks more accurately than it can value other stocks, so that what was happening was the techs and everybody else was doing crazy things while the utilities were not?
20505. Wouldn't that be an explanation for the delinkage or the partial delinkage?
20506. **DR. KOLBE:** Well, it's certainly -- you know, this is related to the point of betas as well. It's certainly true that it's easier to value a utility stock than many of these tech stocks. That's obviously true.
20507. But that doesn't mean that the market price of a utility stock will tend, on average, to book value in the way we used to think it would under rate regulation. Relative valuation is not absolute valuation.
20508. And in a world where relative prices are -- or absolute prices are way off, you -- it's very hard to believe that absolute prices could be right for one sector. In fact, I

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can't -- I find it impossible to believe that absolute prices could be right for one sector and not -- and terribly off for the rest of the market.

20509. The tech bubble is confirmation that we don't understand stock market prices. But the '87 crash was not just a small series of -- or a small number of sectors, it was -- it was the entire market. And if there was a lot of money to be made by arbitrage among different sectors, as there surely was, the absolute value of all sectors must have been wrong if the absolute value of the market as a whole was wrong.

20510. **MR. STAUFF:** In '87 when the stock market crashed, do you recall, offhand, how long it took to come back to its pre-crash levels?

20511. **DR. KOLBE:** It wasn't down as long as it has been this time, but I can't -- I want to say a year or two. I just -- I haven't looked at that in a while. I can't say confidently.

20512. **MR. STAUFF:** Okay.

20513. **DR. KOLBE:** You know, they're public data.

20514. We could look it up, but I don't know those numbers off the top of my head.

20515. **MR. STAUFF:** Well, in your mind, was that a case of the market, in fact, having been over-valued before and then crashed down to where it should have been and then come back to an over-valued level, or what happened there?

20516. Was it a blip below where it should have been and then back up to where you would expect it to be?

20517. **DR. KOLBE:** Well, you know, that's a fair enough point.

20518. I've been speaking of over-value because, of course, we have the -- the, you know, Year 2000 market in our minds freshly.

20519. It could be that the absolute value mistake was to pull things way down. We don't know because we don't know the true model of stock prices.

20520. But, yeah, conceivably the market was -- I guess I'd say the fact that it didn't come -- suppose it came back up two years later and was at the exact level. As of October '87, you would have expected it to be higher at that point; right? -- two years in the future. If you were sitting in October '87 and forecasting October '89, you would forecast the market to be above that of October '87. Why? Because stocks embody positive expected rates of return when they're priced.

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20521. So if it came back to the October '87 level, that's still less than you thought it was going to be in -- as of -- in October '89. As of October '89, you would have expected it to be higher.

20522. So I'm not so sure in the '87 case we can truly be confident as to whether it was -- if it was over-valued and then over-corrected and then came back right, or was it valued about right and then under-valued and then just took four or five years to get back to correct value. I can't tell you. I can't tell you without the true model of stock market prices.

20523. **MR. STAUFF:** Okay.

20524. There was one sentence I just wanted to ask you about, which actually relates to what you just told me. I'm looking at page 18.

20525. **DR. KOLBE:** Yes.

20526. **MR. STAUFF:** Line 5, where you say:

"The unknown 'true' model(s) of stock market prices in practice must be richer and more complicated than assumed in a simple derivation of the market-to-book test."

20527. And I was -- well, would you agree with me that the models that people use, however ineffectively over time, for valuing Exxon and General Motors and Microsoft, and just competitive companies in the general economy, doesn't have anything to do with a market-to-book test?

20528. Do they?

20529. **DR. KOLBE:** Well, I'm -- I don't think I agree with that. Maybe you could clarify what you have in mind.

20530. **MR. STAUFF:** Well, say you're looking at an oil company, say a small oil company in Alberta, and you're trying to forecast its earnings out over time. Then I would think that you wouldn't be looking at the -- necessarily or very much at the amount of money they actually went and invested in drilling wells. What you'd be interested in would be, first of all, what they found with the wells they drilled; and, secondly, what the oil price is going to be.

20531. So if you -- the valuation for the company flows from your expectation of earnings, those factors have nothing to do with the amount of capital the company really put in in the first place, so your valuation wouldn't really be related to invested capital.

20532. Is that fair?

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20533. **DR. KOLBE:** Yes, I understand your comment now.
20534. My answer is: I agree in part and disagree in part.
20535. I agree that you wouldn't look at book value or invested capital for valuing an oil company. However, the standard tool that's still in use because we don't have anything better is the present value formula. You know, that's the textbook way to value most baseline investments, options aside. And the present value formula and a particular -- is the fundamental model used in the market-to-book test as well. So those two parts are related.
20536. What I'm saying is that the present value formula is our best way to look at the value of an incremental investment, but I no longer have confidence that you can estimate the value of stock prices reliably with the present value model. I think what's really going on is more complicated than that.
20537. **MR. STAUFF:** But you -- sorry. You agreed with me, at least, in terms of the valuation of the stock having nothing to do with invested capital?
20538. **DR. KOLBE:** Right. It's ---
20539. **MR. STAUFF:** That part, anyway.
20540. **DR. KOLBE:** Yeah.
20541. Rate regulation is what gives the book part of the market-to-book meaning in a way that doesn't happen for unregulated companies.
20542. **MR. STAUFF:** Right.
20543. And in other sectors, another example would be, for example, Microsoft, where ---
20544. **DR. KOLBE:** Sure.
20545. **MR. STAUFF:** --- a significant part of the value of the business is really intellectual capital that they didn't spend nearly that much money on?
20546. **DR. KOLBE:** Absolutely; I agree with you.
20547. **MR. STAUFF:** Is that a fair way to do it?
20548. And, in fact, in a case where there's a significant amount of intellectual capital in the firm's value, then you're -- if you just went out and observed the market-to-book ratio, it would have nothing to do with anything, but it would be very high -- or it would be pretty high?

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20549. **DR. KOLBE:** Yes. Yeah, no, that's absolutely right.
20550. There are examples in -- really in Myers, or there used to be, anyway, in which you have two companies, one of which is -- or maybe it's just another paper. Somewhere I've seen an example that Professor Myers prepared where he takes the same company and he has one company buy factories and the other invest in pharmaceutical R&D. You know, the pharmaceutical investments are expensed and the factory investments are capitalized and the book rates of return and the market value to book value -- the market values are identical, but the book values are very different.
20551. It's rate regulation that gives meaning to the book part of the market-to-book test. It's not that part that's failed, in my judgment; it's our understanding of the market part. And that is a general failure, in my view.
20552. **MR. STAUFF:** You mentioned, I think -- well, again, I was -- sorry. I'm going slower than I should just because I'm trying to think this through.
20553. It seems to me you told me -- you told us that what you are losing confidence in is the present value approach to valuing assets.
20554. Is that correct?
20555. **DR. KOLBE:** To valuing a stock. I don't know -- I no longer believe that we have a good handle on what it is that let's us price a stock.
20556. I will mention as an example of part why I don't believe that, is there is an emerging field of research in economics that focuses on behavioural issues, for example, rather than assuming the rationale economic man that does research and experiments in how people actually behave.
20557. One of the drivers of that research, as I understand it, is things where the stock market doesn't appear to be priced rationally. Now, maybe it's perfectly rational, and if we knew the true model, we'd all understand it and we'd say: Ah-ha, I agree. But we don't know that true model and there are real puzzles out there now. And the economic profession is attempting to understand those puzzles, but we're a long way from the answer yet.
20558. **MR. STAUFF:** Well, okay.
20559. Would you say, though, that, as far as we know, the present value approach to valuing stocks, as you -- for example, would reflect rational behaviour by investors?

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20560. **DR. KOLBE:** Well, the present value formula, if you're using your price of stocks, assumes the stock is priced rationally and that it is priced according to that formula.
20561. **MR. STAUFF:** Just so we're clear, so we're not miscommunicating here, when you say "the present value formula", what I think you mean is that an asset will be priced in the market assuming rational behaviour by investors at the present value of the income stream that's expected to come from the asset.
20562. Is that a way of ---
20563. **DR. KOLBE:** It's good that you clarified. I was thinking of the formula itself.
20564. **MR. STAUFF:** Sorry, which formula?
20565. **DR. KOLBE:** The present value formula, in which value equals the present discounted values of future expected cash flows.
20566. **MR. STAUFF:** Right.
20567. **DR. KOLBE:** That's the formula.
20568. That's the model of stock prices that underlies the market-to-book test. And what I'm saying is I don't think that formula accurately describes market value anymore. It's -- the textbook formula is the best we've got till something better comes along, in most cases, but I don't think it works well enough for people to draw firm conclusions from it about what's going to actually happen to the market price of the stock, either as a result of an incremental investment or as the result of a regulatory decision or what the market price of a stock tells you about a regulatory decision.
20569. And I cite as evidence not only the things we've been talking about, but the -- you know, this is Section 2 of this part. There's also Section 1, in which I show just what the implications of really believing the market-to-book ratio is at the levels that Professor Booth has used mean for the implied cost of capital. I think that section confirms my view that this -- along with the market-to-book ratios he cites, that this test can't be used anymore. We don't understand what's driving market prices.
20570. **MR. STAUFF:** It seems like a -- forgive me for saying this, but it seems like a pretty bold claim to be saying that present value definition of an asset's value is just fundamentally flawed.
20571. Are there other practitioners out there who have that view?

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20572. **DR. KOLBE:** Well, there's -- I quote a quote from Professor Samuelson that's in a book by Robert Shiller. He is sort of the lead person in the view that there's something fundamentally wrong in our understanding of stock prices.
20573. In fact, the title of the book, if we can find it -- yeah. You see at the bottom of page 17, in Footnote 16, I quote a view from Professor Samuelson about relative prices that reinforces my interpretation of Professor Myers' article on that.
20574. It's M-Y-E-R-S, by the way, for the transcript.
20575. And you notice that the title of the book is Irrational Exuberance. Professor Shiller and others are associated with a body of literature, but he's the lead one, basically saying there's something fundamentally wrong in our understanding of -- in this area.
20576. **DR. VILBERT:** He talks -- that body of literature talks in particular about the fact that stock prices themselves vary much more than do the forecasts of cash flows.
20577. And so the question would be then: How can it be that the stock prices are varying that much when the cash flows are not? It would suggest that there's something else going on in this pricing model, which is what Dr. Kolbe is talking about, than just a pure discounted cash flow valuation of the securities.
20578. **DR. KOLBE:** But it's a genuinely hard problem because any test of stock market rationality is a joint test of rational pricing and the model you're using to say what rational pricing would be.
20579. So if you get a failure, you don't know if the failure is in your model or in the market. And different people have different views of that and there's a literature on -- on rational versus irrational bubbles, if you believe that.
20580. So it's an active area of research, but the stock market prices are a genuine puzzle with strongly-held views on all kinds of sides. I don't have -- you know, my view has been restricted to my particular area, which is to say when you look at things like the '87 crash, when you look at graphs of the sort that I put in in Part 1 of -- of this section of my rebuttal evidence, I would submit that regulators should not try to base their decisions on utility market book ratios. It tells me that much. You know, it tells me that. I'm very confident of that.
20581. **MR. STAFT:** Does the present value formula work in the bond market?
20582. **DR. KOLBE:** It seems to work much better in bond markets.
20583. The standard model used in bond markets and people -- now, with that said, there's a question of what it is that drives the interest rates you get when you use that

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market are -- you know, is a rich topic in itself; but, yes. The question of irrational exuberance, et cetera, doesn't seem to have popped out in bond markets so much.

20584. **MR. STAUFF:** And would that, in your view, or could that, in your view, be simply because the parameters for performing the calculations are known a lot more precisely than they are for stocks?

20585. **DR. KOLBE:** Probably. Yeah, I think so.

20586. Again, it's hard to know for sure if you don't know what the true model is, because maybe there's something more subtle going on.

20587. **MR. STAUFF:** You don't have any thoughts on what that might be, though?

20588. **DR. KOLBE:** If I could figure out what the true model of stocks are, I would first get rich and then I would publish and win a Nobel Prize, but I would get rich first.

--- (Laughter/Rires)

20589. **MR. STAUFF:** Assuming you're not already rich, Dr. Kolbe.

20590. **DR. KOLBE:** Well, my wife and my children take care of that for me.

--- (Laughter/Rires)

20591. **MR. STAUFF:** Okay.

20592. Anyway, the model works for bonds, you think?

20593. **DR. KOLBE:** We think.

20594. **MR. STAUFF:** Pretty close?

20595. **DR. KOLBE:** Yes. It hasn't given rise to the same sorts of weird things.

20596. With one -- there is one caveat to that, I suppose, and that is we don't have a good model of liquidity, and liquidity clearly matters for bonds, and the present value formula doesn't help you with that. So bonds also have elements of misunderstanding.

20597. I mean, I'm thinking in terms of the crisis in, I think '98, or thereabouts, where long-term capital management, which was, you know, run by Nobel Prize winners, or at least one -- no, two Nobel Prize winners. And got hammered because of a change in relative liquidity.

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20598. So it works with a caveat for bonds. It isn't a complete model for bonds either.
20599. **MR. STAUFF:** For equities, it seems to me that the fundamental practical difficulty people have is that taking a real -- a very long-run view on most of the parameters -- or sort of trying to figure out what the income stream is -- what the expected income stream is from an oil company or from Microsoft or from Tim Horton's Donuts, or any typical unregulated firm, it's just very -- a very uncertain -- very difficult to do to come up with anything; and, secondly, a huge amount of uncertainty associated with it, relative to the -- to the bond market.
20600. Is that fair? Doesn't that add a lot of variability into the evaluations?
20601. **DR. KOLBE:** It does. It's -- I mean, that's certainly a major factor. It's not the only thing.
20602. **MR. STAUFF:** Right.
20603. And your -- and the appropriate discount rate is more questionable as well; would you say?
20604. **DR. KOLBE:** That as well; and whether you should be using a present value formula at all; and whether, even if you have a stock where you think the present value formula should work perfectly, the answer of the present value formula is going to equal the price of the stock. Because maybe the present value formula is fundamentally wrong. It doesn't seem to be.
20605. It's hard to explain what's happened in the market using the present value formula. In fact, there are people who think it's, and I'm really among them, that it's impossible to explain it using the present value formula. Something more complicated must be going on. And, as I say, there is a literature on this.
20606. **MR. STAUFF:** But -- sorry. What I thought I was suggesting is that one of the things that may be going on is that people just make mistakes about what the appropriate discount rate is and what the -- what the future growth prospects and income stream are.
20607. Say -- take Nortel, for example, right?
20608. **DR. KOLBE:** Right.
20609. **MR. STAUFF:** It goes to \$120, or some enormous multiple of -- of its book value and its earnings, for that matter. Doesn't that just look like a mistake by somebody in their expectations of what the earnings are going to be?
20610. **DR. KOLBE:** Well, I haven't studied Nortel particularly.

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20611. Let's take the -- let's take the Internet stocks, right? At one point one of my colleagues sat down and tried to figure out what you would have to believe about future growth and cash flows to make the Internet stock prices rational, and he concluded you couldn't. There was -- there was no set of variables that you could use that didn't involve nonsense, things like negative costs of equity, that made Internet stock pricing rational at the height of the tech bubble.
20612. So it may not be that you're forecasting the cash flows wrong; it may just be that, for whatever reason, the market is valuing them in a way that's -- now, when he said rational, he meant in accord with sort of present value formulas or option prices or other standard techniques, that they're just priced in ways that make no sense according to the standard techniques.
20613. And, you know, there are people who will -- who will cling to the techniques and say they must be right and, therefore, they must have just somehow thought that these guys were going to end up owning the world. But I find that less plausible, that the market as a whole would believe such a thing and that things were just priced in a way that was based on something fundamentally different from the present value formula or standard techniques.
20614. Whatever that -- whatever the true model of prices was, it wasn't that.
20615. **DR. VILBERT:** You could look right now at Google and -- you know, it was issued at somewhere around, I think, \$120 a share, something like that.
20616. And it's, I believe, the last time I had looked, it had doubled. It's hard to believe that that price can be justified by the kind of things that Dr. Kolbe and I would consider to be rational. We can't explain Google's stock price.
20617. **MR. STAUFF:** All right.
20618. So we've got two possible explanations of what's going on here: One is people are just making a mistake or -- well, let me back up.
20619. Is one of the theoretical options that people have talked about on this something like people just believe in momentum and invest on the theory that other people are going to do that too, regardless of what the fundamental value is and then if it all turns out to be sort of a ponzi scheme at the end of the day and it collapses and everybody gets killed, but...
20620. **DR. KOLBE:** Yeah, there is a literature on rational bubbles.
20621. And one of the stories of rational bubbles is that you know it's crazy. Everybody knows it's crazy, but you believe you're going to be smart enough to sell ---
20622. **MR. STAUFF:** Right.

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20623. **DR. KOLBE:** --- before the market catches on that it's crazy and decides it's run up enough. And, you know, there's -- you can go back a lot further than 1987.
20624. As I understand it, there was a famous mania for -- and I haven't studied this, but I have seen it referred to a number of times enough that I feel I can raise it in this forum -- for tulip bulbs sometime in the 1600s in Holland. And they started to fetch fabulous prices. And, of course, the next growing season came along and farmers, recognizing this, flooded the market with tulip bulbs, and the whole thing collapsed.
20625. So it's clear that there are these manias and bubbles in particular sectors. '87 was a lot broader than that. So it's not -- it's not just a bubble in a particular sector. And the stuff that Professor Shiller looks at is a lot broader than that as well.
20626. There's clearly a real puzzle here. And while -- until someone sorts it out and comes up and says: Ah-ha, here's the model, assuming they let the rest of us know, we're sort of stuck with the old ones. But the question, then, is: How much reliance do you put on them for purposes of, in this case, rate regulation? And when you combine it with things like the implications of the graphs in Part 1 of this discussion, I would submit that the Board should simply say market-to-book ratios are beyond our ability to -- to use as policy tools.
20627. We should simply do the best we can independent of what the market-to-book ratio is because it can't be trusted.
20628. **MR. STAUFF:** Is your view that -- or your feeling, you may not have a strong opinion on this, but is it your view that there probably is some rational basis underlying these tulip-bulb type phenomena or Internet stocks in 1999 that we just don't know about, or -- it seems to me the competing theory is that people are just crazy sometimes.
20629. **DR. KOLBE:** Yeah, it's very hard to know.
20630. I mean, part of the reason for going to the behavioural economics aspect -- you know, it's almost like the question of: Is the stock market priced rationally as a joint test of behaviour of the market and your model? Maybe the economist model of what constitutes rational behaviour is far too narrow. And if we had a better model of what rational behaviour is than economists have used as a simplification in their analyses, then we would -- we would find that the stock market was priced perfectly rationally, it's just that we didn't understand what rational meant.
20631. This is -- you know, maybe a quarter of a century from now -- maybe if a genius comes along five years from now, we'll have a much better handle on this. But at the moment we're just in a place where we just don't know really -- you know, there isn't another game in town. We've got the stock market, we've got the present value formula, we've got to do the best we can. The question is: How much weight do you put on

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particular interpretations of that data? And my submission would be that no weight should be placed on the market-to-book test. I mean, that's the one area that I have thought about and that I am opining on here.

20632. **MR. STAUFF:** But in the absence of some theory about what a rational basis for all of this would be, isn't the theory that people are just crazy sometimes kind of the best theory going?

20633. **DR. KOLBE:** Well, I -- you know, I can't -- I can't answer that. I don't think anybody can.

20634. I mean, what are the alternatives? The two alternatives in this context are: You believe the market-to-book ratios, and therefore you believe that the cost of equity of the companies in question is perhaps negative, perhaps below the long-term bond rate. I mean, if you look at the graphs I have earlier in my rebuttal, that would be the implication.

20635. And you base your decision on that and say: Well, fine, we should set a deemed equity ratio so that the overall return is as if the cost of equity was below the bond rate. I'm not sure you could even do that, but we'll set a deemed equity ratio at 1 percent because we believe the market-to-book test and that's what it takes to make that market value rational.

20636. Or you can say: We've got a series of models by people like Dr. Vilbert that give numbers of expected rates of return. We have the market evidence that Panel 1 talked about -- about what rates of return they're seeing in real people bidding these things and really trying to decide on them, and we're going to place greater weight on that and disregard the market-to-book test.

20637. You can't, I would submit, simultaneously adopt both, and I would suggest you adopt the cost of capital models and that evidence of Panel 1 about real world investments and just put the market-to-book test on a shelf until we get a true model of the market and could maybe apply it again in some future day.

20638. **MR. STAUFF:** Sorry, my question, though -- my suggestion was that given that you don't have an alternative theory, the people are -- are crazy or people move in herds, or something like that, while not proven, has to be the best alternative out there.

20639. **DR. KOLBE:** Well, I can't say that ---

20640. **MR. STAUFF:** The best existing alternative ---

20641. **DR. KOLBE:** I can't say that.

20642. There is, as I say, quite ... literature on this, and I would not purport to be up to date on that literature. I read papers in it from time to time, but I haven't studied the

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whole literature, and I wouldn't feel professionally qualified to say what the leading explanations are in that literature at the moment.

20643. **MR. STAUFF:** The leading rational explanations, you mean?

20644. **DR. KOLBE:** I don't know if they're rational or irrational. The leading explanation might be exactly what you say.

20645. But I don't feel qualified -- you know, there are a lot of smart people thinking about this. I haven't read everything they've done. It's certainly possible they've come up with something -- a third or fourth or fifth option to the ones we've discussed here, and one of those is the leading current explanation.

20646. **MR. STAUFF:** You keep wanting to bring me back to utilities, and I was actually thinking more about just stocks in the general economy. It does seem to me that if -- well, if people are making -- if the explanation is that people are making mistakes about the parameters that feed into a stock valuation like that Nortel is going to own the world within ten years or -- I'm sure there's lots of less extreme examples than that, it seems to me that the potential for people to make those mistakes is much less if they are looking at a tightly regulated cost of service utility than it would be in just about any other industry.

20647. Would you agree with that?

20648. **DR. KOLBE:** Well, I think I have to take you to the graph to answer that. I've been mentioning it.

20649. Take a look at Figure R-1 on page 13 -- because this is for utilities; right? This isn't for Nortel or flybnight.com or any exotic stock.

20650. These are the kind of numbers that Professor Booth reports for utilities, and he reports a number of market-to-book ratios, and for reasons I discuss, I chose to look at a range of 1.5 to 2.0.

20651. **MR. STAUFF:** I'm sorry, Dr. Kolbe. Could I get that reference again?

20652. **DR. KOLBE:** Yes. It's page 13 of my Reply Evidence, Figure R-1.

20653. **MR. STAUFF:** Okay.

20654. **DR. KOLBE:** Now, this assumes -- this figure assumes a plain vanilla utility; right? Absolutely standard regulated on net book value. You reinvest depreciation, so the rate base stays constant. You pay out everything as dividends. I talk a little bit about how you vary those assumptions, but that's what the figure assumes.

20655. It assumes the model -- the cost of capital model people estimate gives an answer of 9.56, and people allow a 9.56. And at some point, regulators wake up and say:

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Oh, my gosh, the market-to-book ratio is 1.5 or the market-to-book ratio is 2.0. 9.56 is too high. We need to bring the allowed rate of return down to the cost of equity, which is the premise of the market-to-book test and what should be done with the market-to-book test for a utility.

20656. And suppose for the first case that investors believe that the regulators are not going to catch on that the market-to-book ratio is too high for a hundred years, and the end of Year 100, they'll say: Oh, my gosh, what was 2 has to become 1, or what was 1.5 has to become 1, so you have a loss of 50 percent of your stock price or a third of your stock price at that point.

20657. In that case, the economically rational discount rate that equates that series of cash flows to the initial price is shown, for the market-to-book ratio of 2, by the far right end of the graph on the dashed line, which is below 5.68 percent which is the long-term bond rate in that case. And for a 1.5 ratio, it's slightly above the long-term bond rate.

20658. Suppose instead that regulators -- that investors believe that regulators aren't going to wake up for ten years. On the last day of Year 10, they're going to say: Oh, my gosh, and drive the market-to-book ratio down to 1. If you go on the graph to the horizontal axis, a place labelled "10", which is the first tick mark to the right on the graph, you will see for a market-to-book ratio of 2, that means the cost of equity of that utility -- remember, this is a utility, standard regulation -- is below zero. And the cost of equity at a 1.5 market-to-book ratio -- for a utility of 1.5 market-to-book ratio is about halfway between zero and the long-term bond rate.

20659. So if you accept that the market-to-book test means something, then here we have an example of what it must mean for plain vanilla utilities, plain regulation, perfectly specified model. So if in this simple model of regulation, using the formulas Professor Booth puts forward and the numbers for market-to-book ratios he puts forward, we see what I would submit are nonsense results for the implied cost of equity that would make a market-to-book ratio equal to 1.

20660. So whatever this is doing, if you have market-to-book ratios of 1.5 or 2.0 for rate regulated companies, I would submit that itself proves to you that the market-to-book test shouldn't be used, because implied cost of equity is -- that would be used if it were valid and followed is ridiculous. And this is for utilities.

20661. **MR. STAUFF:** Fine.

20662. The question that I thought I asked you, though, or that -- maybe I'll ask it again in a slightly different way. You're way over my head with this graph, I'm afraid. My question was simpler than that.

20663. If I assume that somebody's trying to value a utility stock according to the present value formula -- never mind. I'm not even talking about market-to-book ratios at

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this point; I'm just talking about the exercise of an analyst sitting there in his office trying to make a recommendation on stock price and he employs the present value formula.

20664. What I was suggesting was that someone who is in that position has pretty sound data on which to base his calculations and his recommendation relative to the case in most unregulated businesses, just because of the stability and predictability of the cash flows that arise from rate regulation.

20665. Isn't that at least something you can agree?

20666. **DR. KOLBE:** Yes, I agree with that.

20667. The question is: What does that mean? At least the question I -- I went beyond that to say: Here's a case where that's absolutely true. I've assumed that ---

20668. **MR. STAFT:** Okay.

20669. **DR. KOLBE:** --- in this graph. I've assumed people are forecasting perfectly what they can expect regulators to do.

20670. And then I say: What does that mean? If the present value formula is perfectly valid, if investors know exactly what regulators are going to do for up to a hundred years, what does that mean if you see a market-to-book ratio of 1.5 or 2.0? And the answer is: It's not just that regulators have the allowed rate of return too high a little bit. It's regulators have the allowed rate of return massively too high and that maybe they should be giving a negative rate of return on equity. That's what a market-to-book -- that market-to-book test's validity would imply.

20671. I draw the conclusion from that, that even in a case where you're forecasting everything perfectly, if you'd see a market-to-book ratio of 2.0 for a utility, you better say: Well, the market-to-book doesn't work. That's the message of this graph for me.

20672. **MR. STAFT:** In a case where the analyst was looking at a utility stock and trying to value it, and he had -- he or she had a very high degree of certainty about what the earnings were going to be from the stock because he knows what the invested capital is, he knows what the allowed return is, say he knows that because of the particular regulatory regime, he knows that the actual return is going to be essentially the allowed return, how is that different from a bond analyst trying to value a bond using the present value formula that I think you agreed was actually effective to properly price bonds?

20673. **DR. KOLBE:** The key difference is when the bond -- when the bond person does it, they do what I've done here. They take the value of the bond as the starting point and derive the implied interest rate for the present value; right?

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20674. I mean, that's how -- you know what the cash flow payments -- the promised cash flow payments are; right?
20675. **MR. STAUFF:** Right.
20676. **DR. KOLBE:** You know the current market price and you derive the yield to maturity as an estimate of the cost of capital, if it's a treasury bond, or the cost of capital plus a default premium if it's a corporate bond, and that gets you the rate of return.
20677. That's exactly what I've done in this graph. And I've said: What is the cost of capital that gives you the price that you see if the market-to-book ratio is 2?
20678. And the answer is: Always below the long-term risk-free rate, and in some cases if investors -- people don't expect regulators to make the adjustment -- or expect a faster adjustment than over the next ten years negative; right?
20679. And so where I'm going with it is, when you do it with the bond, you get an answer that seems logical; right? You get -- the 5.68 percent comes out of that kind of calculation. Equities are riskier than bonds. We know utility bonds have promised yields in -- north of 5.68.
20680. This calculation -- the same calculation you do for a bond, for a utility with a market-to-book ratio of 2, this graph says, would give you a negative cost of equity.
20681. That's the problem. That's why I'm saying the formula doesn't work anymore for -- in the way we thought it did when we originally used to think that the market-to-book test would work. We were thinking that stocks were like bonds, utilities were like bonds, that they would be priced the same time way, and that if you did this reverse calculation that I've just described, you'd get an answer that made sense relative to the relative risks of utility stocks, bonds, and other stocks.
20682. This graph shows that you don't get an answer that makes sense. You get an answer that makes no sense. If you start with a utility with a market-to-book ratio of 2 and investors expect that to be corrected any time in the next ten years, it says: I think the cost of equity of that utility is negative.
20683. If they expect it to be corrected a hundred years from now, it says: The cost of equity of that utility is below the long-term Treasury bond rate, as estimated in the Commission's formula.
20684. So I -- I say the problem is either that we're all wrong and the cost -- equity's safer than debt and maybe people should pay a premium -- pay money for the privilege of owning equities or the model's wrong. I say the model's wrong. I don't believe the answer I get when I apply the model to a market-to-book ratio of 2.

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20685. **MR. STAUFF:** So are you -- is the suggestion here that, relative to the bond case -- say you had a bond with a market-to-book value of -- market-to-book ratio of 2.
20686. **DR. KOLBE:** Okay.
20687. **MR. STAUFF:** What would that imply?
20688. **DR. KOLBE:** It would mean interest rates would come down a long way since that bond was first issued.
20689. If it -- pathological cases aside, such as, you know, negative interest rates, negative inflation, deflation, the kinds of things that, you know, were in the headlines in the U.S. a couple of years ago but we seem to have bounced back from. As long as baseline interest rates are positive, the market-to-book ratio of 2 would tell you that the bond is of a long enough term and its interest rate was far enough above current rates so that in order to get an interest rate equal to today's current rates, based on the coupon of the bond -- you know, and, again, putting aside junk bonds, for example -- but they'd be priced lower, so -- so forget -- strike that.
20690. In order to get a rate as low as today's rates, when you're getting so much coupon, you have to pay twice the amount you're going to get back when the bond is redeemed. So you invest \$2,000 now. You get interest, say, at -- you know, suppose it was issued in the early '80s and it still has a long way to run, the interest of, say, 16 percent -- today's rates are 6 percent. In order to get the value of the bond to yield 6 percent, given its remaining time to run, you have to pay a price of 2.
20691. That's exactly what I do here, but instead of getting 6 percent, I get numbers below the risk-free rate.
20692. **DR. VILBERT:** Another way of thinking of what Dr. Kolbe just said is that you know if you have a bond at a 2-to-1 ratio, that at the end you're only going to get back half of your money that you invest initially.
20693. So that means you have to get -- in other words, if the bond is a thousand dollar coupon bond and it sells 2 to 1, it would mean it would be worth \$2,000 today, you're going to have a capital loss of a thousand dollars when that bond matures because you're only going to get the thousand dollar face value back.
20694. What that means, then, is in the interim, before the bond matures, you have to get enough interest to give you -- to cover your capital loss at the end and to give you a reasonable rate of return on your investment over the time period from the time you buy it to maturity. So the interest rate's going to be very high to make that work.
20695. **DR. KOLBE:** The coupon rate has to be very high relative to today's interest rates.

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Examination by M.P. Stauff

20696. And that's, in essence, the market-to-book test for utilities; right?
20697. You're saying: The allowed rate of return is too high relative to the cost of equity. That's the whole idea. It's the same analogy.
20698. What I'm saying is: When you look at today's cost of equity, the Board's formula rate of return as a benchmark, and a market-to-book of 2, how -- how much too high does that coupon rate have to be relative to the discount rate to make this a rational price?
20699. Well, the answer is: A discount rate if -- with a market-to-book of 2, if regulators never catch on, the discount rate has to be below the 30-year treasury rate, as used in the Commission's formula -- or in the Board's formula. And if it's -- if it's going to catch on in the next ten years, it has to be negative.
20700. That, I would submit, is not reasonable, given that equities are riskier than stocks. So something's wrong. And I would submit that's what's wrong is that you can't use the market-to-book ratio or the present value formula to price utility stocks and then for discount rates the way you do with bonds, and that means the market-to-book test is no good.
20701. **MR. STAUFF:** But the puzzle I'm having is what -- what conceivable thing could be going wrong as between the case where it works for bonds and it doesn't work for utility stock?
20702. I mean, what -- I mean, my logic will be to tighten down the utility stock example to the point where the utility stock looks exactly like a bond; right?
20703. **DR. KOLBE:** But that's exactly what I've done.
20704. **MR. STAUFF:** If it works for the bond, why doesn't it work for the utility stock given, you know, some amount of play in the numbers and stuff because they're not exactly the same, but they kind of look the same?
20705. **DR. KOLBE:** If I knew the answer to that, as I say, I'd be both wealthy and famous. We don't know why stock prices are what they are.
20706. If you believe in the market-to-book test -- I'll say the following: If you believe in the market-to-book test and if you believe that 1.5 to 2.0, if you observe that, then it's time to sell all your stocks; right? It's time to get out of stocks and into bonds because it says there's something fundamentally wrong, the expected yield on your utilities stocks. And even if you expect investors never -- regulators never to catch on, it is going to be below the risk-view rate on the -- on the bonds. And if -- if you expect them to catch on, it's going to be a lot lower.

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20707. So if you believe -- I can't tell you why it doesn't work. That's my fundamental problem. I don't know what drives stock prices. But I can see, both from the things we discussed originally and from this graph, that it manifestly does not work the way -- for utility stocks the way it does for bonds.

20708. If it did, we'd get -- we'd get sensible numbers out of this. We wouldn't see market-to-book ratios so high.

20709. **MR. STAUFF:** Okay. Thank you for that, I think.

20710. Mr. Chairman, Ms. Fowke told me a couple of days ago, I think, that today the Board would really, really like to finish precisely at 1:30, and I was about to move to another area anyway. This might be a -- if we want to be finished in two minutes, this might be a good place to stop.

20711. **THE CHAIRMAN:** Yes, Mr. Stauff.

20712. I think the information that Board counsel communicated two days ago is accurate, and it applies to both today and tomorrow as well.

20713. **MR. STAUFF:** Right.

20714. **THE CHAIRMAN:** It is not possible for the Board to sit beyond 1:30, for a couple of reasons.

20715. So we would -- if there is anything that can be done between today and tomorrow's session in terms of parties' coordination or communication or disclosure of documents, the Board would be grateful so that we have some chance tomorrow of excusing the witnesses before the weekend. But if we cannot, we'll have to accept that and resume on Monday morning.

20716. So we'll accept your offer, Mr. Stauff, to end this session at this time.

20717. Although we have one or two minutes, I will check for any administrative matter, if there is any to be addressed.

--- (No Response/Pas de réponse)

20718. **THE CHAIRMAN:** I detect none, so we'll adjourn until tomorrow morning at 8:30. Thank you.

--- Upon adjourning at 1:20 p.m./L'audience est ajournée à 13h29

**NATIONAL ENERGY BOARD
OFFICE NATIONAL DE L'ÉNERGIE**



**Hearing Order RH-2-2004
Ordonnance d'audience RH-2-2004**

TransCanada PipeLines Limited (TransCanada)

2004 Mainline Tolls and Tariff Application (2004 Tolls Application)

PHASE II

VOLUME 16

**Hearing held at
L'audience tenue à**

**National Energy Board
444 Seventh Avenue SW
Calgary, Alberta**

**January 21, 2005
le 21 janvier 2005**

**International Reporting Inc.
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**HEARING ORDER/ORDONNANCE D'AUDIENCE
RH-2-2004**

IN THE MATTER OF TransCanada applied to the
National Energy Board
pursuant to Part IV of the *National Energy Board Act*
for approval of tolls to be charged for service on the
TransCanada Mainline
between 1 January and 31 December 2004

HEARING LOCATION/LIEU DE L'AUDIENCE

Hearing held at Calgary (Alberta), Friday, January 21, 2005

Audience tenue à Calgary (Alberta) Vendredi, le 21 janvier 2005

BOARD PANEL/COMITÉ D'AUDIENCE DE L'OFFICE

G. Caron	Chairman/Président
J.S. Bulger	Member/Membre
D. Emes	Member/Membre

APPEARANCES/COMPARUTIONS

Applicant/Demandeur

TransCanada PipeLines Limited

- Mr. C.K. Yates

- Ms. W.M. Moreland

Associations

Canadian Association of Petroleum Producers

- Mr. N.J. Schultz

Industrial Gas Users Association

- Mr. P.L. Fournier

Companies/Compagnies

BP Canada Energy Company

- Mr. B. Troicuk

Coral Energy Canada Inc.

- Mr. M.P. Stauff

Nexen Marketing

- Ms. S. Young

Governments/Gouvernements

Minister of Energy for Ontario

- Mr. J.C. Turchin

- Mr. E. Sweet

Procureur général du Québec

National Energy Board/Office national de l'énergie

- Ms. M. Fowke

- Ms. R. Zanin

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U-22	To provide results using the capital structures estimated over the same period as the Canadian sample beta estimates.	21163

Preliminary matters
Filing of exhibits by C.K. Yates

--- Upon commencing at 8:30 a.m./L'audience débute à 8h30

20719. **THE CHAIRMAN:** Good morning. Bonjour.

20720. Are there any preliminary matters this morning?

20721. Mr. Yates...?

20722. **MR. YATES:** Thank you, Mr. Chairman.

20723. I have one filing to make. It's the response of TransCanada to Undertaking U-18, which was given by Mr. Zwick to Mr. Staft at Transcript Volume 14, paragraph 19227, with respect to monthly gas pricing information.

--- (Document distributed/Document distribué)

20724. **THE CLERK:** That will be B-80.

--- **EXHIBIT NO./PIÈCE NO. B -80:**

*Response of TransCanada to Undertaking U-18 given by Mr. Zwick to Mr. Staft
at Transcript Volume 14, paragraph 19227*

20725. **MR. YATES:** That's all I have, Mr. Chairman. Thank you.

20726. **THE CHAIRMAN:** Thank you, Mr. Yates.

20727. Any other preliminary matters?

--- (No Response/Pas de réponse)

20728. **THE CHAIRMAN:** I see none, so Mr. Staft.

20729. **MR. STAFT:** Thank you, Mr. Chairman.

A.L. KOLBE: Resumed

M.J. VILBERT: Resumed

--- **EXAMINATION BY/INTERROGATOIRE PAR MR. STAFT:**

20730. **MR. STAFT:** Good morning, gentlemen.

20731. **DR. KOLBE:** Good morning.

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20732. **MR. STAUFF:** I wanted to take just a few minutes to finish off the discussion we were having yesterday, and then I just have one other area that I wanted to discuss with you.
20733. Dr. Kolbe, I went back and looked again at your Reply Evidence that we were talking about yesterday -- for the record, that's Exhibit B-54, Appendix E -- as it relates to the point that you were explaining to me yesterday when we -- when we broke.
20734. And, in fact, in that section, you discuss two kinds of cases going to the same basic argument. Like, there's a simpler analysis at page 11 and then the more complex one that we were discussing yesterday with the graphs, and so on.
20735. Anyway, if I can sort of distil the point you were making, what you were saying, I think, is that the observed market-to-book ratios are just too high to be explained as a cost of capital estimation error if we apply the conventional present value theory.
20736. So for example, if the Board was -- say that if you assume that the ROE formula overestimates the cost of equity by 150 basis point, say, so that the correct number is 8, then, according to the present value analysis, that wouldn't come anywhere close to generating a two times market-to-book ratio, or even a one and-a-half times.
20737. Is that kind of a more simplified summary of the general point that we're talking about here?
20738. **DR. KOLBE:** Yes, that's a basic idea.
20739. It's as though you bought a bond at twice its principal redemption payment and calculated the interest payment and discovered that the interest payment was negative.
20740. **MR. STAUFF:** Right.
20741. **DR. KOLBE:** Would you say: Gee, is there something funny going on here?
20742. Probably yes, you'd say, maybe this is a convertible bond, but whatever it is, the normal formula we're assuming when we -- when we try to figure out what's going on with that bond, obviously, isn't working.
20743. **MR. STAUFF:** Right.
20744. So in order to explain the observed market-to-book ratios, there has to be something going on besides a conventional present value analysis?

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20745. **DR. KOLBE:** Well, or the conventional present value analysis just doesn't describe stock prices.
20746. **MR. STAUFF:** Right, yeah. So either it -- yeah.
20747. Something else is happening anyway?
20748. **DR. KOLBE:** Yes.
20749. **MR. STAUFF:** Including that case in my general description.
20750. And when we talked yesterday, we were sort of speculating about what that might be, and I -- one option would be that investors are just crazy, as I think I described it yesterday, or possibly they are, in fact, acting rationally but in accordance with some premises or principles that we don't understand.
20751. I don't think we need to decide that issue. So if we say -- how about I just describe that as apparent -- apparent irrational exuberance is this effect that we're talking about. Just as a tag.
20752. **DR. KOLBE:** Well, we can define terms any way you want.
20753. My one concern about that term is that it suggests that maybe it -- the connotation is that it couldn't be that there's just a much richer model that's completely rational. It's just a puzzle, and the nature of the puzzle may have to do with irrationality, or it may have to do with rationality, as you say.
20754. **MR. STAUFF:** Right.
20755. **DR. KOLBE:** I'm just a little hesitant to pick a label that sort of assumes one of those over the other to describe it.
20756. **MR. STAUFF:** Okay.
20757. I didn't mean to -- to me it doesn't make any difference ---
20758. **DR. KOLBE:** Okay.
20759. **MR. STAUFF:** --- for my purposes here.
20760. So we can call it "Factor X".
20761. **DR. KOLBE:** Call it -- yeah. Or "the puzzle"; whatever.
20762. **MR. STAUFF:** There's Factor X in addition to the present value theory.

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20763. **DR. KOLBE:** Well, it's not necessarily in -- I'm sorry -- but it's not necessarily in addition to the present value thing. It may be ---
20764. **MR. STAUFF:** Or in some ---
20765. **DR. KOLBE:** --- the present value thing.
20766. It may be this present value formula is just wrong ---
20767. **MR. STAUFF:** Sure.
20768. **DR. KOLBE:** --- as the descriptor of stock prices.
20769. **MR. STAUFF:** Sure. Okay.
20770. And it -- it seems to me, if I accept that there's this "Factor X" out there at work in the market, I think the point you made is that if that's -- if I accept that, then a program of trying to fix the ROE by tinkering with the allowed return until you generate a market-to-book ratio of 1 doesn't make any sense.
20771. I think that's the point ---
20772. **DR. KOLBE:** Yes, I agree with that.
20773. **MR. STAUFF:** Right.
20774. And to be -- when I read Dr. Booth's evidence, quite a while ago, I didn't understand him to be suggesting a program like that.
20775. Is that -- do you have a different -- did you have a different understanding of what he was saying in his testimony?
20776. **DR. KOLBE:** Well, I think there are multiple things that don't make sense.
20777. The one you described doesn't make sense, and I do understand him not to be recommending that.
20778. **MR. STAUFF:** Okay.
20779. **DR. KOLBE:** But I would also submit that what doesn't make sense is what he is recommending, which is that you draw inferences about how the allowed rates of return -- allowed rate of return compares to the cost of capital based on the market-to-book ratio.

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20780. So I agree that he doesn't recommend the thing you just said, but he does recommend something else I disagree with.
20781. **MR. STAUFF:** Right. Right. Okay.
20782. So we're -- I guess what I -- what I'd like to do is briefly describe two possible explanations of what's going on here for you and then ask you to comment on either the reasonableness of the explanations or whatever else you feel like.
20783. It seems to me, though, that one possible explanation of what's going on here, one possible explanation of high observed market-to-book ratios is that the conventional present value theory isn't so much wrong as incomplete. So that part of the observed excess of the market-to-book ratio above 1 is caused by that effect, and part of it is caused by Factor X. So that's one, one possible hypothesis.
20784. And the other one that I was thinking of was that -- well, which would be consistent with the view that, in fact, the prevailing cost of capital estimates are correct, or even too low, as I gather you gentlemen would say.
20785. If you make that assumption then, basically, all of the difference between the observed market-to-book ratio and what it would be under the conventional analysis is attributable to Factor X.
20786. Could you -- do you have a view on which of those two hypotheses is more plausible?
20787. **DR. KOLBE:** Well, before I answer that, just let me comment on one thing in your statement.
20788. **MR. STAUFF:** Sure.
20789. **DR. KOLBE:** You indicated that we thought the current cost of capital was too low. You didn't define whether you meant overall cost of capital or cost of equity.
20790. I just want to make clear on the record that we are absolutely accepting the Board's formula return on equity in our revised evidence and not challenging that in any way and wouldn't purport to do that.
20791. I do think the current -- the allowed overall return is too low.
20792. **MR. STAUFF:** That's what I meant, actually. I was just shorthanding that.

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20793. **DR. KOLBE:** I just wanted to make -- I know this has been a matter of some concern in this hearing, and I want to make sure that we aren't, in any way, implying a challenge to the formula, because we aren't.
20794. With regard to the question of is it -- let me see if I can say back your two statements to make sure I have them.
20795. **MR. STAUFF:** Sure.
20796. **DR. KOLBE:** One is that stock prices are the sum of the present value formula and something else, and part of the explanation of the high market-to-book ratios is excessive returns, and part is something else versus stock prices are entirely something else, just present value formula.
20797. You know, it's sort of like Newton's theory of gravity versus general relativity, it's an approximation, but it turns out not to work in whatever conditions we have today. And who knows what it means. And your question is: Can I distinguish between these two hypotheses and come down on one side or the other, and the answer is "I can't".
20798. **MR. STAUFF:** Okay.
20799. **DR. KOLBE:** I don't know -- if you really give credence to the present value formula for stocks, I have a tough time figuring out what X could be, and I don't know how much -- you know, X would have -- would have to be responsible for a big part of the excess; right?
20800. And, in fact, in my -- in my view, if you look at the overall return, and you really believe the present value formula, I would say the market-to-book ratio on the regulated part is below 1 and X is responsible for not only the entire excess over 1, but the deficit. Because I think the overall return is too low, and I think there's not only our evidence but the evidence of Panel 1 in this hearing supporting that.
20801. I don't think you get very far, given that, in trying to say: Well is it -- you know, is it the sum of various components and we don't know one part or is it just we don't know the whole thing?
20802. Either could be right. It could be that there's just a fundamentally different pricing mechanism. It could be that there are elements of value that we just don't understand, that we don't add in. But I can't distinguish -- you know, given the -- given the order of magnitude of these market-to-book ratios, I can't distinguish between those two hypotheses. Whatever it is, it's huge relative to the assumption you make when you use the market-to-book test.
20803. And that's why I say the market-to-book test is -- you know, that's one of the two reasons I say that the market-to-book test is just no longer useful, and until we

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understand what's going on better is just going to have to be put aside as a regulatory tool, both for the purpose of trying to set return, which has always been a problem, and for the purpose of drawing inferences about return, which is the use Professor Booth makes of it.

20804. **MR. STAUFF:** Okay. Thank you, sir.

20805. The second area that I wanted to talk about is one where I'm not so much sceptical about your position as I think I just don't understand it, so I was hoping we could talk about it a little bit. And it's something that did come up, I think, when we were talking about these matters at the EUB.

20806. And my references for it is page 68 of Dr. Kolbe's Direct Evidence, which is Exhibit B-40, Appendix B-7, if I'm not mistaken.

20807. **DR. KOLBE:** The section headed "Risk of Long-Run Underrecovery of Return of and on Capital"?

20808. **MR. STAUFF:** Right.

20809. **DR. KOLBE:** Okay. I'm there.

20810. **MR. STAUFF:** And just to describe it, generally what's going on in this section, as I understand it, is you're saying -- you're identifying the potential for -- well, an asymmetrical risk of non-recovery in the long run.

20811. And then over on page 69, you identified two effects on the returns that investors require. I'm looking at page -- well, line 7. Then there's two bullets.

20812. First of all -- well, first of all, it says:

"It means -- It means some sort of premium over and above the cost of capital times the equity rate base is warranted in principle, even though it is not practical to ask for it and the Mainline is not doing so here."

20813. And then the second bullet is:

"It means the Mainline's cost of capital at any given equity ratio is itself higher, since the odds of premature truncation would be greater if economic times are bad and lesser if times are good, which in turn means that the Mainline's required deemed equity ratio at the RH-2-94 formula rate of return on equity is higher."

20814. And the question I have -- the problem that I'm having is that I just don't understand the second bullet. I don't understand why the result follows from the

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observation that the odds of premature truncation will be greater if economic times are bad and lesser if times are good.

20815. Can you help me with that?

20816. I think I asked you about this at the EUB, and I don't think I got it at that point, either, so I was hoping to try one more time.

20817. **DR. KOLBE:** Sure.

20818. The basic point, just to put it in context, is there's more chance of downside than upside. There's a -- there's a risk of a substantial under-recovery. There's no opportunity for substantial over-recovery.

20819. I was here yesterday when they were talking about you discover the basin is much shorter than you think it's going to be and you have to recover your capital over a shorter period on a smaller volume and rates go up and that cuts demand and that leads into the so-called death spiral.

20820. That's the idea. There is some risk of that out there.

20821. **MR. STAUFF:** Right.

20822. **DR. KOLBE:** That is akin to default on a corporate bond or default on a junk bond. It's an easy one to think about.

20823. So if you get a junk bond that promises you 12 percent, you know you aren't guaranteed that 12 percent. You can't get more than 12, but you can get less. So the expected rate of return on your bond -- right? -- is less than 12 percent. Say it's 9; right?

20824. **MR. STAUFF:** Right.

20825. **DR. KOLBE:** And so you have a 3 percentage point default premium and a 9 percentage point expected rate of return.

20826. Now, the expected rate the return, by definition, is the cost of capital. That is the definition of the cost of the capital. So the bond's yield consists of a 9 percent expected rate of return cost of capital on the bond, plus a 3 percentage point default premium because it's a junk bond.

20827. The first bullet says TransCanada is not asking for the 3 percent ---

20828. **MR. STAUFF:** Right.

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20829. **DR. KOLBE:** --- in its allowed rate of return. It's asking for the -- let me just say it's asking for the deemed equity ratio that would be the equivalent of the Board's formula of giving you the 9.

20830. **MR. STAUFF:** Sure.

20831. **DR. KOLBE:** If I can put this -- put aside, for ease of speaking, the issue of accepting the deemed -- or the formula rate of return and just accept that I do that, I'm just going to talk about required rate the return now because it's going to cut the discussion -- the length of the discussion markedly to do so.

20832. **MR. STAUFF:** I think that would be helpful, yeah.

20833. **DR. KOLBE:** Okay.

20834. So the cost of capital is 9 percent on this bond. Now, why is it 9 percent on the bond and not, say, 5 and-a-half percent, if that's what government bonds pay; right?

20835. **MR. STAUFF:** Right.

20836. **DR. KOLBE:** The answer is: Because the bonds' odds of default are greater if economic times are bad and lesser if economic times are good. Because that's the kind of risk that affects beta, and it affects the cost of capital. It's the degree of the -- to which the bond co-varies with the economy and cannot -- and its risks cannot be diversified in large portfolios.

20837. So if the economy crashes, whoever issued the bond is going to have a tougher time making the payments. If the economy booms, all else equal, it's going to have an easier time making the payments because the company will be bringing in more money, et cetera.

20838. So the cost of capital of the bond exceeds the treasury's cost of capital because the odds of the loss co-vary with the economy, so the expected loss co-varies with the economy in a way that doesn't happen for treasuries. And that's the idea of the second bullet point.

20839. If the United States continues to spend itself -- spend far beyond its means, if it continues to have a huge trade deficit five years from now, ten years from now, the economy is in tatters, demand for, you know, industrial production is down, demand for gas is down, gas prices are down because demand is down, there will be less exploration, there will be less -- it will make sense to close in marginal wells more quickly, et cetera. The odds of bad things happening are higher.

20840. Conversely, if the United States brings things under control and the economy is booming and gas -- and demand soars and gas prices soar, then more

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exploration makes sense, continued production out of marginal wells make sense, the odds of premature truncation are lower.

20841. So the general notion is that the risk co-varies with the economy, so it affects the cost of capital, just as the cost of capital of the junk bond is above the cost of capital of the Treasury bond, because its risk -- the risk of default co-varies with the economy.

20842. **MR. STAUFF:** Okay.

20843. So the -- because the risk will go up and down with the business cycle, say, are you saying that there's more uncertainty about -- I'm trying to put it in terms of uncertainty. I guess I'm having a little trouble seeing why that doesn't just factor into the size of the default premium.

20844. **DR. KOLBE:** Well, suppose the default -- suppose you have a different -- let me imagine a different portfolio than the junk bond and let's less change the numbers a little bit so it's easier.

20845. Let's suppose there was a 12 percent return and the odds of default originally -- or let's suppose there was a 20 percent rate of return promised and a 10 percent rate of return expected; okay?

20846. **MR. STAUFF:** Okay. A serious risk of default there.

20847. **DR. KOLBE:** Yeah.

20848. There's a 50/50 chance that you'll get nothing and 50/50 chance you'll get your 20.

20849. **MR. STAUFF:** Okay.

20850. **DR. KOLBE:** Okay?

20851. And so -- and then you go -- but that number is 10 and the government number is 5, and why is that? Why is it 10?

20852. Our hypothesis is that it's 10 because default risk co-varies with the economy because the -- the odds of default go up in bad times, so the expected cashflow goes down, so -- and that's what beta measures -- right? -- is the co-variance of the rate of return on the investment with the economy.

20853. Now, suppose instead you took a portfolio and you constructed a government bond portfolio, and suppose government bonds are yielding 5 percent, but you say: I'll tell you what I'm going to do, I'm going to toss a coin at the time of maturity

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and -- or at some point, and if it comes up heads, you get paid off, and if it come up tails, I take all the money.

20854. **MR. STAUFF:** Okay.

20855. **DR. KOLBE:** Okay?

20856. So I now have a government -- I now have a portfolio of government bonds with exactly the same default risk. But they don't -- their return doesn't co-vary with the economy because the government bonds are going to be paid -- you know, default is not an issue, it's just the coin toss. And coin tosses aren't correlated with economy, either. It's going to up come up heads without regard to whether the stock market is up or down.

20857. The expected rate of return on that portfolio, to make it fair, would have to be 10 percent, not 20 percent, because the -- or the promised rate of return would have to be 10 percent, so you have a 50/50 chance of earning 10 or 0, which gives you the 5 you need. And the reason is because the coin toss isn't correlated with the economy, whereas the junk bond default is correlated with the economy. That's the distinction.

20858. And so -- you know, the cost of capital depends on some level of sensitivity to one or more risk factors, and in the capital asset pricing model it's one risk factor, the overall market, and in other models, there are multiple risk factors. But it's this inability to get rid of the risk by mere diversification.

20859. Suppose you had a thousand of these junk bonds; right? Well, the odds that they will all default together are high because they all -- if the economy is down, they will all default at once -- or a lot of them will default -- a lot more will default; and if the economy is up, a lot fewer will default. You can't get rid of that risk just by holding -- holding the thousand company's junk bonds.

20860. But if you held a thousand of these portfolios involving the double or nothing on the treasury security -- or not double or nothing, the payoff or zero, then you could predict your payoff quite remarkably. You'd be pretty sure you'd come out almost 5 percent, plus or minus a small amount, because you're going to toss a thousand coins, and the average payoff is going to be pretty close to 50 percent on those thousand coin tosses.

20861. So you can diversify the coin toss, but you can't diversify the junk bond, because they're all going to move together just by holding a lot of them. And it's the kinds of risks you can't diversify that require compensation on the cost of capital.

20862. So things that are correlated with the economy influence not only default risk; that is, kinds of asymmetry that are correlated with the economy influence not only default risk, but also the cost of capital. That's the idea here.

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20863. **MR. STAUFF:** Thank you, sir. That's very helpful.
20864. Actually, I think I'm getting closer to -- to grasping the concept.
20865. Does the same effect arise in a -- in an investment-grade corporate bond?
20866. **DR. KOLBE:** Yes.
20867. **MR. STAUFF:** Say TransCanada's bonds.
20868. **DR. KOLBE:** Yes, it does.
20869. **MR. STAUFF:** Okay.
20870. So can you give me any idea of -- I'll talk about the bond case first and then -- and then equity --- but say a very long-term TransCanada bond had a 100-basis point premium to Treasury's, can you -- is there any way of telling how much of that premium is default premium and how much is to boost your cost of capital that you've described?
20871. **DR. KOLBE:** Well, in principle, you could do studies of default rates and get a sort of an estimate of it, but it would be very tough.
20872. Now, you could also try to estimate the beta on the bond, for example, and estimate its cost of capital using the capital asset pricing model, just as you do a stock.
20873. But there's -- there's no way to be definitive about it. You can try to get an idea.
20874. The normal -- the normal practice of using yields in calculating weighted average costs of capital really rests on two points: One, as long as you're not dealing with junk, the default premium's likely to be small. Because, as you say, if it's 1 percentage point, the default premium is some fraction of that 1 percentage point because part of it is the cost of capital effect.
20875. And, second, the default premium is -- is paid for by equity holders. Right. The cost of equity would be higher if there was zero chance of default, if there weren't limited liability, if equity holders had to dip into their own pockets.
20876. An example where you can see that is the first time I got involved in anything to do with rate regulation involved oil pipelines in the United States back in the 1978, '79, '80 period. And for reasons having to do with a consent decree with the U.S. Department of Justice signed two or three weeks after Pearl Harbour, those bonds were all -- those companies were all financed 90 -- somewhere between 90 and 100 percent with debt, with very little equity, but the debt of those companies was ordinary -- was financed at ordinary rates. They had had high-grade debt. And the reason it had high-

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grade debt is because it was guaranteed by their parents, which were much larger entities; typically large integrated oil companies.

20877. And since the cost of debt was low -- was so low, why would that happen? Well, because the default risk was virtually zero because those companies whole assets stood behind it. That meant that the equity absorbed that residual risk. Right?

20878. If the thing tanks, and there were oil pipelines that were, for example, constructed and empty for several years because of some change in the market or action of another company, the equity had to make the payments anyway. You couldn't declare bankruptcy.

20879. So the fair rate of return on equity on these companies was very high, sometimes in the triple digits if you calculated it on the standard basis, and it's because the equity did not have the valuable option to default.

20880. So when you calculate an overall weighted average cost of capital and you look from companies in the industry, they all have limited liability, you know, by and large, one way or another, either directly or through the way the corporation is set up ultimately.

20881. And so the option to default comes out of -- is paid for by equity holders in the form of the default premium. And the cost of equity is slightly smaller.

20882. It's -- you know, this is -- the point is it's basically noise within our ability to estimate the cost of capital as long as you're dealing with investment grade debt. That's the standard practice.

20883. Now, you could probably do somewhat better than that. It's not necessarily the case that the two offset exactly. So you'd have to -- you know, you could do some -- some work to try to refine it. But I don't know how accurate that work could be, given how hard it is to estimate the cost of capital in the first place. It's sort of working on an issue that just -- you know, you sort of start off in a big empty room. You say: Well, I'm going to move myself about a little bit for this default premium. But the big empty room problem is that it's hard to estimate the cost of capital in the first place. So, you know, putting the chair in a whole different place doesn't change much.

20884. **MR. STAUFF:** Okay.

20885. Actually, thank you, gentlemen. That's all the questions I have.

20886. **DR. KOLBE:** All right.

20887. **MR. STAUFF:** Thank you, Mr. Chairman.

20888. **THE CHAIRMAN:** Thank you, Mr. Stauff.

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--- (A short pause/Courte pause)

20889. **THE CHAIRMAN:** Mr. Turchin...?

20890. **MR. TURCHIN:** Good morning, Mr. Chairman.

20891. Good morning, Dr. Kolbe. Good morning, Dr. Vilbert.

20892. **DR. KOLBE:** Good morning.

20893. **DR. VILBERT:** Good morning.

--- **EXAMINATION BY/INTERROGATOIRE PAR MR. TURCHIN:**

20894. **MR. TURCHIN:** Yesterday, after cross-examination by Mr. Stauff concluded, we had a brief discussion, and I discovered that one of you gentlemen was a Republican and one of you was a Democrat, and I wish I was entitled to explore those differences, but I know that we can't and we won't, but I was intrigued by it.

20895. Instead ---

20896. **DR. KOLBE:** For the record, I'm actually a registered Independent. My wife is a Democrat.

--- (Laughter/Rires)

20897. **MR. TURCHIN:** Always one for precision, sir.

20898. But what we will do is turn to your direct evidence, Dr. Kolbe, Exhibit B-40, and page 1.

20899. Now, Dr. Kolbe, if we look at lines 12 to 14, we see in summary fashion a description of what your task was in terms of what TransCanada asked you to do in this case. And I see that you were asked to identify the deemed capital structure that provides a fair return on equity for the company's Mainline natural gas transmission system, which you refer to as the Mainline.

20900. Do you see that, sir?

20901. **DR. KOLBE:** Yes, I do.

20902. **MR. TURCHIN:** And then if we go into your evidence a little bit deeper, to page 6 -- are you there, Dr. Kolbe?

20903. **DR. KOLBE:** Yes, I am.

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20904. **MR. TURCHIN:** All right.

20905. At line 10, there's a heading: "Recommendations for the Mainline". And you say your conclusion --

"... conclusions regarding the Mainline's deemed equity ratio consider the risk evidence of the Company and of my Brattle colleague, Dr. [Paul R.] Carpenter. They also consider the capital structure analyses for benchmark sample companies of Dr. Vilbert."

20906. Dealing with the first reference, the risk evidence of the company, does your recommendation in this case rely on the relative business risk analysis undertaken by the company and filed as part of their business risk analysis?

20907. **DR. KOLBE:** Among other things, yes.

20908. **MR. TURCHIN:** All right.

20909. Does your recommendation rely on the throughput study prepared by the company for this proceeding?

20910. **DR. KOLBE:** Yes, among other things.

20911. It relies -- there isn't a one-to-one sort of plug-in relationship. It relies on the totality of their evidence.

20912. **MR. TURCHIN:** But you acknowledge that you took the throughput study into account in forming your opinion?

20913. **DR. KOLBE:** Yes, generally.

20914. **MR. TURCHIN:** And you took the company's relative business risk analysis into account in forming your opinion as well?

20915. **DR. KOLBE:** Yes, I did.

20916. **MR. TURCHIN:** Okay.

20917. Now, Dr. Kolbe, can we agree that the Mainline remains today a low-risk business?

20918. **DR. KOLBE:** Well, relative to the average business in the economy, yes.

20919. **MR. TURCHIN:** Okay.

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20920. **DR. KOLBE:** It's below average. I don't know how you define "low".
 It's below-average risk.

20921. **MR. TURCHIN:** Well, let me just take you to something that
 Mr. Lackenbauer said in his evidence in his assessment of the company.

20922. And we're at Volume 3 of the transcript, paragraph 4031.

20923. **DR. KOLBE:** Can you give me just a second?

20924. **MR. TURCHIN:** Yeah.

20925. **DR. KOLBE:** And what was the paragraph?

20926. **MR. TURCHIN:** 4031, sir.

--- (A short pause/Courte pause)

20927. **DR. KOLBE:** Okay, I'm there.

20928. **MR. TURCHIN:** Now, at paragraph 4031 Mr. Lackenbauer says -- this
 is in response to the cross-examination of Mr. Schultz:

"I think it's important, Mr. Schultz, to just -- for everybody to recognize, if they don't explicitly, that under no circumstances here, or in RH-4-2001, and I think I made the same comments in that proceeding, is anybody sitting here saying this is a highly risky or a risky business, it is a relatively low-risk business."

20929. And he says:

"The risks have changed."

20930. The statement "it is a relatively low-risk business", are you in agreement
 with that?

20931. **DR. KOLBE:** In the sense I just said.

20932. It's certainly below the average in the economy.

20933. **MR. TURCHIN:** Dr. Kolbe, if -- if you can turn to the RH-4-2001
 decision, if you have that available to you, sir.

20934. **DR. KOLBE:** I'm not sure.

20935. Is that on this magic stick that I have? Does anyone know?

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20936. **MR. YATES:** Yes.
20937. **DR. KOLBE:** I have a paper copy. How fabulous.
20938. **MR. TURCHIN:** Even better.
20939. **DR. KOLBE:** It's easier to read.
20940. **MR. TURCHIN:** We'll be looking to, first, page 37.
20941. **DR. KOLBE:** Thirty-seven you said?
20942. **MR. TURCHIN:** Yes, sir.
20943. **DR. KOLBE:** I'm there.
20944. **MR. TURCHIN:** Dr. Kolbe, the first paragraph at page 37 summarizes what TransCanada sought in the RH-4-2001 decision. And the first sentence deals with their request that the Board adopt the ATWACC methodology.
20945. And then the second sentence states:
- "TransCanada sponsored the evidence of Drs. Kolbe and Vilbert, who relied on the ATWACC methodology and recommended an ATWACC of 7.5% for the Mainline."*
20946. So your view at that time was that the cost of capital for the Mainline was represented by an ATWACC of 7.5 percent?
20947. **DR. KOLBE:** Yes, originally.
20948. You will recall that in the November update it went down to seven and a quarter.
20949. **MR. TURCHIN:** And then if we turn a little bit deeper into the decision, to page 45.
20950. **DR. KOLBE:** Yes, I'm there.
20951. **MR. TURCHIN:** At the bottom of page 45 the Board sets out the relationship between an ATWACC expressed as a percent and how that might be converted into an equivalency in terms of the ROE and the deemed equity ratio.

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20952. And so in the case TransCanada had made an alternate proposal for an ROE of 12.5 percent on a common equity ratio of 40 percent, and it was derived from an equivalent to its ATWACC proposal.

"Specifically, an ATWACC of 7.5% is equivalent to an ROE of 12.52% percent on a 40% common equity ratio ..."

20953. Do you see that, sir?

20954. **DR. KOLBE:** Yes, I do.

20955. **MR. TURCHIN:** Now, when the company filed its application for this case, in January 1 of 2004, my understanding is that it sought a return of equity of 11 percent on a deemed equity of 40 percent.

20956. Can you confirm that, sir?

20957. **DR. KOLBE:** Yes, that's my memory.

20958. **MR. TURCHIN:** And can you confirm that that gives rise to an ATWACC equivalent of 6.9 percent?

20959. **DR. KOLBE:** Yes, I believe that's true.

20960. **MR. TURCHIN:** Can you confirm, then, that during the period 2001 to 2004, the ATWACC for the company, by your estimation, has dropped from 7.5 percent, then during 2001, 7.25 percent, and then to the start of 2004 to 6.9 percent?

20961. **DR. KOLBE:** Yes.

20962. I have one little caveat. I didn't estimate an ATWACC for -- well, it isn't worth doing.

20963. Yes, that's the implications of the recommendation as the company made them.

20964. **MR. TURCHIN:** What I want to be clear on, if we can, is to understand -- it's your opinion that the cost of capital for the company has dropped from 2001 to 2004.

20965. Is that your opinion, sir?

20966. **DR. KOLBE:** Yes.

20967. **MR. TURCHIN:** Is that your opinion, as well, Dr. Vilbert?

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20968. **DR. VILBERT:** Yes.
20969. **MR. TURCHIN:** Dr. Kolbe, if we could turn to page 7 of your evidence.
20970. **DR. KOLBE:** I'm there.
20971. **MR. TURCHIN:** Now, at lines 13 to 16, you summarize a range of deemed equity for the Mainline that you believe is appropriate. Your range runs from 45 percent to 55 percent. And you indicate that the top end of the range may even be higher, but for the purposes of your work here, you will treat the top of the range as 55 percent.
20972. So we're at a recommendation that you bring forward for a deemed common equity ratio based on the 9.56 -- and I understand that, sir -- of between 45 and 55 percent.
20973. That's true?
20974. **DR. KOLBE:** That's the range, yes.
20975. **MR. TURCHIN:** And you understand that the top end of the range at 55 percent is some 22 points higher than the company's current deemed equity level?
20976. **DR. KOLBE:** Yes. That's my understanding.
20977. **MR. TURCHIN:** And are you aware that the decision of this Board to set the deemed equity level of the Mainline at 33 percent for '01 and '02 was upheld by the Federal Court of Appeal in April of 2004?
20978. **DR. KOLBE:** Well, I'm not entirely sure what was upheld and what wasn't. I'm not an attorney. I know that the end result was that the 33 didn't change, but I don't know what -- how that end result was reached with regard to what's upheld and what isn't upheld.
20979. **MR. TURCHIN:** All right.
20980. You acknowledge that the end result with the decision of the Federal Court of Appeal in April of 2004 was that the deemed equity level for that period was 33 percent?
20981. **DR. KOLBE:** I do.
20982. **MR. TURCHIN:** All right.
20983. Given that the deemed equity level is at 33 percent now, given that the Board's finding of that has been reviewed by an appellate court and 33 percent continues

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to apply, is there any realistic expectation that a deemed equity level of 55 percent remains even close to appropriate for the Mainline, sir?

20984. **DR. KOLBE:** Well, I guess it -- it depends on what you mean by "appropriate". If you mean legally appropriate, I'm not qualified to say. If you mean economically appropriate, absolutely.

20985. I think -- the -- if I were asked to pick a recommended deemed equity ratio, I'd put it at the middle of my range. I'd say 50 percent. That would give an ATWACC -- an overall return of slightly less than 6.9, I believe.

20986. I think that rate of return is consistent with the cost of capital evidence that Dr. Vilbert has provided me. It's consistent with the Business Risk Evidence, as I read it, from the company. It's consistent with the comparable benchmarks that the Panel 1 group talked about from the old-world-investments. I think a 6.9 percent overall after-tax return is appropriate for this company at this time. I think that would be a logical outcome.

20987. Now, would the Board approve it? I have to infer from TransCanada's decision to ask only for 40 is that they don't think that it's likely that the Board will move that far that fast.

20988. But do I think as a matter of economics the Board should move that far?
Yes.

20989. If the Board asked me what I would recommend, based purely on the cost of capital part, not anything else, I would recommend that the Board disregard TransCanada's request for 40 and grant 50, because I believe that's what the economic data show.

20990. **MR. TURCHIN:** You've put the range up to as high as 55 percent, and you actually say it could be a little bit higher. You've said and confirmed that you believe this is a relatively low risk company. You continue to believe that a company you yourself characterize as relatively low risk can reasonably have a deemed equity ratio of 55 percent?

20991. **DR. KOLBE:** At the -- well, two things. One, first, my characterization of "relatively low risk" was defined as below average risk in the economy.

20992. Second -- and I think the ATWACC of the average corporation exceeds 6.9 percent at the moment.

20993. Secondly, absolutely. I believe that the ATWACC is -- is on the order of - the required overall fair return on the company is on the order of 6.9 percent, plus or minus, perhaps, a quarter percentage point. That's the range. That's what the plus or minus 5 percentage points in deemed equity ratio translates into at the current level of the

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various numbers; that is, a quarter percentage point on overall after-tax return translates into 5 percentage points on deemed equity ratio, as I say in my evidence, and that's why I give ranges of plus or minus 5 percent.

20994. I don't think you can estimate the overall cost of capital more accurately than to plus or minus a quarter of a percentage point, and that's the basis of my range. It could be at the top of my range. It could also be at the bottom of my range. My best estimate is in the middle.

20995. But that's my estimate. I think that's what the data show. I think that's confirmed independently by the evidence that Panel 1 put in.

20996. **MR. TURCHIN:** Dr. Kolbe, can we turn to page 71 of your evidence?

20997. **DR. KOLBE:** Yes, I'm there.

20998. **MR. TURCHIN:** All right.

20999. And I'm at Question and Answer 59, line 9. You say here:

"Even without premature truncation risk, the Mainline's uncertainty has increased due to the gas supply outlook and the greater competition the Mainline now faces."

21000. Do you see that, sir?

21001. **DR. KOLBE:** I do.

21002. **MR. TURCHIN:** And then at the top of the next page, at line 4, you say:

"...the Mainline's overall cost of capital is materially higher today than it would have been had its operating environment been unchanged from that when the Board's RH-2-94 formula rate of return on equity was first adopted."

21003. In your discussion on the previous page about the Mainline's risk increasing, are you looking back to the RH-2-94 and considering the movement of risk since that period?

21004. **DR. KOLBE:** Not in a -- not in a mechanical way.

21005. The main -- that is, I'm not trying to trace steps through; I'm contrasting the operating environment without realized competition, without the various factors discussed -- the supply outlook, the other factors discussed by other company witnesses -- to the situation when the outlook for the basin, which was much better -- Alliance didn't exist, all the other changes that have happened.

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21006. But I'm not trying to sort of trace a step-by-step analysis; I'm comparing two snapshots.

21007. **MR. TURCHIN:** Okay.

21008. At page 71, "the Mainline's uncertainty has increased due to" -- and then the two developments you cite.

21009. What's the time period that applies within which the increase you cite occurred?

21010. **DR. KOLBE:** Well, since I'm comparing two snapshots, it's the difference between the dates of the two snapshots.

21011. **MR. TURCHIN:** And those dates are...?

21012. **DR. KOLBE:** Today and the time the formula return was first issued.

21013. **MR. TURCHIN:** RH-2-94, which you refer to ---

21014. **DR. KOLBE:** Yes

21015. **MR. TURCHIN:** --- at the top of page 72?

21016. **DR. KOLBE:** Yeah, those are the two snapshots that I refer to at this section.

21017. **MR. TURCHIN:** Dr. Kolbe, if we can just turn back into your evidence to page 63. Now, at line 10, you say ---

21018. **DR. KOLBE:** I'm sorry what -- page 53?

21019. **MR. TURCHIN:** No, page 63.

21020. **DR. KOLBE:** I'm sorry; I'm in the wrong place.

21021. Okay, I'm there now.

21022. **MR. TURCHIN:** Okay.

21023. Now, at page 63 you say in your evidence:

"...no one knows for sure how to pick the 'optimal' equity ratio for a firm, either through an explicit model or through qualitative judgment."

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21024. And then you set out the basis for the difficulty.
21025. Are you saying here that setting the deemed equity ratio is a difficult judgment; no one can be absolutely sure when someone's got it right?
21026. **DR. KOLBE:** Well, in part.
21027. What I'm saying here is -- it has bearing on that. But here what I'm saying is that if you -- if you look at how the value of a firm varies with equity ratio, it turns out it's pretty flat. There's a lot of evidence, which I discuss extensively, that real firms do not behave as if fine tuning the debt ratio makes a big difference. You see wide ranges within a given industry. You see profitable firms tending to have less debt rather than more.
21028. That's in part -- that's in part the reason that I end up with a 10 percentage point range in my recommendation for equity ratio, because within in that range -- I'm sorry, I take that back. That's actually quite a different phenomenon.
21029. But it is true that the -- that the overall value of the firm, and therefore the overall cost of capital used to calculate that value, is insensitive to the equity ratio over a wide range.
21030. I'm realizing, as I answer, that the issue of selecting a deemed equity ratio relates more towards picking the overall cost of capital and the overall fair return than it does to finding the outcome of capital structure, actually, as I think about this.
21031. So I may have been too quick to say: Yes, it's related.
21032. The level -- the question of picking the deemed equity ratio has to do with the height -- in this context, has to do with the height of the overall cost of capital curve, not with how the overall cost of capital curve at a given height changes with capital structure.
21033. So I withdraw my earlier answer, saying: Yes, this related to the topic you originally raised, which is picking a deemed equity ratio. I was mistaken in that.
21034. Picking a deemed equity ratio goes to the height of the curve, not to its precise shape, and this is talking about the shape.
21035. **MR. TURCHIN:** Dr. Kolbe, let's go back to -- to page 6 of your evidence.
21036. **DR. KOLBE:** I apologize for getting confused on that point.
21037. **MR. TURCHIN:** That's all right, sir. Now ---

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21038. **DR. KOLBE:** Yes, I'm there.

21039. **MR. TURCHIN:** Now, Dr. Kolbe, at lines 13 and 14, having discussed the recommendations for the Mainline and the inputs that you used, amongst other things, to get you to your recommendation, you say:

"... I find that the Company's request for a 40 percent equity ratio lies below the level I would recommend."

21040. Do you see that, sir?

21041. **DR. KOLBE:** Yes, I do.

21042. **MR. TURCHIN:** And can we agree that the company has chosen not to accept your recommendation in this case?

21043. **DR. KOLBE:** Well, I've -- I've read a lot of transcript on that, and I don't think that's an accurate way to say it.

21044. I think -- you know, the company can speak for itself, but the things I've read suggest that it isn't that they think I'm wrong, it's that they've decided, as a practical matter, not to ask for it at this time.

21045. My reading is that they agree with the overall approximately 6.9 percent, plus or minus after-tax return, that that's confirmed by their evidence. And that would imply a deemed equity ratio on the order of 50 percent.

21046. So they agree with my conclusions, or maybe they find my conclusions support their views. You know, I don't know which is -- I don't know that one has primacy over the other, but our views are the same on the right overall return. But the company has chosen deliberately not to ask for that for reasons that they're in a better position to tell you than I. But it's not that they disagree with me, as I read the record.

21047. **MR. TURCHIN:** But we can agree that the company has chosen not to act on your recommendation in this case?

21048. **DR. KOLBE:** Yes, I think that's fair.

21049. **MR. TURCHIN:** Gentlemen, those are my questions.

21050. Thank you, Mr. Chairman.

21051. **THE CHAIRMAN:** Thank you, Mr. Turchin.

--- (A short pause/Courte pause)

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21052. **THE CHAIRMAN:** Ms. Fowke, please.

21053. **MS. FOWKE:** Thank you, Mr. Chairman.

--- **EXAMINATION BY/INTERROGATOIRE PAR MS. FOWKE:**

21054. **MS. FOWKE:** Good morning, gentlemen.

21055. I think we can all be rationally exuberant at how fast this is moving along
 this morning.

--- (Laughter/Rires)

21056. **DR. KOLBE:** Yes, I certainly agree with that.

21057. Good morning.

21058. **MS. FOWKE:** Gentlemen, I provided a couple of excerpts from some
 texts to you through your counsel, and I'm hoping that you have copies. I provided
 copies to the members, and there are copies at the back of the room if anybody's looking
 for them.

21059. I'd like to turn, first, to the text by Charles F. Phillips, Jr., The Regulation
 of Public Utilities Theory and Practice, 1993 Public Utilities Reports, Inc.

21060. And I'm going to -- I've provided starting on page 397, just because the
 paragraph I'd like to refer to starts on that page, but I would actually ask you to flip to
 page 398. And about the fifth line down there's a sentence that starts:

"The comparable earnings approach ..."

21061. Do you see that?

21062. **DR. KOLBE:** Yes, I do.

21063. **MS. FOWKE:** Okay. And that states:

*"The comparable earnings approach, further, requires that
comparisons be made with both regulated and nonregulated
activities (sic), if the results are to have any validity, for two basic
reasons. First, the alternatives confronting investors include both
regulated and nonregulated enterprises."*

21064. And I'm just going to skip down a couple of sentences.

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"Second, returns of regulated firms must always be used with extreme caution. At best, they reflect what the informed judgments of regulatory commissions have permitted such utilities to earn and may not be indicative of what could be (sic) earned in the competitive market."

21065. Do you see that, sir?

21066. **DR. KOLBE:** Yes, I do.

21067. **MS. FOWKE:** Thank you.

21068. And then I just would like to flip to your text -- your 1984 text, Dr. Kolbe. And this is the text, The Cost of Capital Estimating the Rate of Return for Public Utilities, A. Lawrence Kolbe and James A. Read, Jr., R-E-A-D, Jr., and George R. Hall. And it's the MIT Press, Cambridge, 1984.

21069. And I'd like you to turn to page 51, the first page that I provided. At the bottom there's a paragraph that starts

"If book rates ..."

21070. Do you see that?

21071. **DR. KOLBE:** Yes, I do.

21072. **MS. FOWKE:** And you're talking about the problems with the comparable earnings method, which you refer to as the CE method in this text I'm going to read.

21073. And you state, starting at page -- sorry -- line 2 of that paragraph:

"... it might seem natural to try to redeem the CE method by relying on a sample of regulated companies, especially since this may be a good way to select a sample of comparable risk. But this approach creates a different pitfall for the CE method: circularity.

Suppose that one regulatory commission makes a mistake in setting the allowed rate of return for a company under its jurisdiction. If another regulatory commission relies on the book rate of return of this company as evidence of the required rate of return, it will copy the mistake. This process could go on ad infinitum. Thus the data used in the comparable-earnings method [will] become contaminated by the very use of the method when the comparable-risk sample consists of companies subject to rate-

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of-return regulation. In this case, the CE method fails the test of logical consistency in a different way."

21074. Do you see that, sir?
21075. **DR. KOLBE:** Yes, I do.
21076. **MS. FOWKE:** Thank you.
21077. Dr. Kolbe, if the -- sorry. The samples -- the company in Dr. Vilbert's samples are all regulated companies, or have a substantial portion of their income derived from the regulated activities, do they not?
21078. **DR. KOLBE:** Yes, they do.
21079. **MS. FOWKE:** Given the quotes that I've just read you, why would you consider it appropriate for the Board to consider a sample of only regulated activities -- utilities, and not one which also includes unregulated companies?
21080. **DR. KOLBE:** The problems just described have to go to the comparable-earnings method in using accounting rates of return to measure the rate of return. That is its book income over book assets, or book equity.
21081. The methods Dr. Vilbert uses are not book-based methods, they're market-based methods. And the market-based methods avoid the problem because you're either measuring risk directly from the sensitivity of the stock to the market or using the market dividend yield as an input to the DCF method.
21082. All else equal, if, for example, a utility commission makes a mistake, of the sort we talked about in the book, for the comparable-earnings method, and say they got the rate of return too low, in a comparable-earnings method another regulatory commission would take that number, whatever came out of that, and said: Ah-ha, they allowed 5 percent, they earned 5 percent, 5 percent must be right.
21083. But in a market-based method, the market price adjusts. The book value doesn't adjust in the comparable-earnings method. But in a market-based method, the market price adjusts to reflect however imperfectly or however -- "imperfect" isn't the right word. In whatever fashion, whether or not we understand it well, to reflect any discrepancy between allowed and required return.
21084. So, for example, if the -- if the return were too low, you'd expect to see the stock price fall. That would increase its degree of market leverage. All else equal, you'd tend to see higher betas. With the DCF method, the stock price would fall; you'd see a higher dividend yield. And you'd get a -- you'd be able to get feedback through the market price that reduced or eliminated the circularity. That doesn't happen with the comparable-earnings method.

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21085. **DR. VILBERT:** Plus the market price will adjust to things that are happening in the economy, as opposed to what's just happening in the company; whereas the book rate of return doesn't change at all.

21086. **MS. FOWKE:** Thank you, gentlemen.

21087. I don't think you need to turn it up, but, just for the record, in Tables MJV-2 and 13 the percentage of revenue from regulated activities for each of the Canadian and U.S. sample companies is listed.

21088. And would you agree with me that companies in the U.S. sample have a larger percentage of their total revenue from unregulated activities as opposed to the Canadian sample?

21089. **DR. VILBERT:** I actually thought it was the other way around. Let me just ...

--- (A short pause/Courte pause)

21090. **MS. FOWKE:** My point is the U.S. has more unregulated activity is what I was trying to say, in case I inverted that.

--- (A short pause/Courte pause)

21091. **DR. VILBERT:** It's the whole sample that's -- for the whole sample, that's correct. I have a subsample of my gas LDC sample that I restrict to have very high percentages. It's what I call the clean sample.

21092. **MS. FOWKE:** Right.

21093. Looking at the whole samples, if we -- based solely on the fact that the Canadian sample is closer to what could be considered a peer play, wouldn't you expect the estimates of the Canadian sample to be more reflective of the cost of capital of the Mainline as opposed to the U.S. sample?

21094. **DR. VILBERT:** No.

21095. There's a couple of reasons for that. Ordinarily, I would have said yes, but in this particular case I'm forced to say no. And it comes from a couple of reasons: First, the Canadian sample consists of companies in several different industries: the gas industry, the electric industry; there's revenues from petroleum, gas distribution. And so to the extent that you would expect those industries to have slightly different costs of capital, you now have a sample that is not pure in that sense.

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21096. The second difficulty with the Canadian sample today is that the estimates for the relative risk, the beta estimates that I use in my risk-positioning analysis, which is to say the capital asset pricing model and the ECAPM, are betas that are from a period earlier than today.

21097. I was forced into that because there are no good source of betas in Canada right now. I tried to calculate them myself, which is what I would normally do, and I have some graphs in my testimony that show the outcome of that, which is that the average beta for the Canadian sample right now is very close to 0; implying, if you believe the capital asset pricing model, that these are risk-free assets. I don't believe that any of those companies are risk free.

21098. And so I was forced, as I say, to use this other method of estimating beta, which then makes the Canadian sample -- and perhaps turning up that graph would be useful right at the moment. Let me find it for you.

--- (A short pause/Courte pause)

21099. **DR. VILBERT:** Yes. It's on page 49 of my Written Evidence.

21100. What this graph depicts is the Canadian sample companies, their average beta for that sample of companies over the period November of 1988 through the time of this testimony was filed. And what you'll see, if you look at the solid line, you'll see that that number actually goes below 0 on the far right-hand corner of the exhibit.

21101. The dotted line is the effort I was making to try to use a two-factor model to capture some interest sensitivity. And you can see that one is also, on the far right-hand side, very low, but a bit above in the last few years.

21102. The period prior to the decline that starts about November of '98, May of '99, somewhere in that time period, I would say they average somewhere between .4 and .5, or an average of about .45.

21103. The betas I get today are, like I said, close to 0. I was forced into something else. I used the betas that I used in May of 2000 before this Board, and those betas are averaging about .4. So they're at the bottom edge of what I would consider to be a reasonable estimate.

21104. Which is a long-winded way of saying that currently the estimates from the Canadian sample are more likely to be underestimated than the American sample, U.S. sample, which is using current betas.

21105. **MS. FOWKE:** Thank you, sir.

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21106. Dr. Kolbe, I don't think you'll need to turn this up, but, if you do, it's in your evidence at page B-28, which is Exhibit B-40, tab 7, and then Appendix B to your evidence.
21107. You were responding to a question as to whether the use of market value weights to calculate the deemed equity ratio for rate-regulated companies would be circular or locked in excessive return. And you indicate that the measured beta of a regulated company sample will be lower when its market-to-book ratio is above 1, that when its market to ratio -- sorry -- market-to-book ratio equals 1, all else being equal.
21108. Do you recall that?
21109. **DR. KOLBE:** Could you -- I'm at the page. I don't see the statement.
21110. **MS. FOWKE:** Sure. It's B-28, lines 13 forward.
21111. Just -- my point was that I think the argument that you were making was that circularity concerns were addressed as the beta and market-book ratio move in opposite directions.
21112. Is that correct?
21113. **DR. KOLBE:** Yes, basically.
21114. If the -- if the -- the market-to-book ratio here -- if you assume the amount of debt stays fixed and the market value of the debt stays fixed, then the market value capital structure will vary with the market-to-book ratio. That's the assumption in this statement when I say "all else equal".
21115. The real driver is the market value capital structure, not the market-to-book ratio, just to be clear.
21116. So if the market -- if the market value capital structure of equity goes up, the financial risk equity holders are exposed to goes down, for reasons discussed at length in my testimony, which I won't try to summarize, but I showed that, using the condo example, if you recall.
21117. And for that reason, the cost of equity will go down at a higher -- at a higher -- for the same overall cost of capital, higher equity ratio, there's a lower cost of the equity, and that's why the overall cost of capital stays the same.
21118. **MS. FOWKE:** All right.
21119. And you refer to the real driver as being the market value capital structure, and I believe that we get -- the numbers that were used in your analysis were found at Dr. Vilbert's Table MJV-4, Workpaper #1.

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21120. **DR. KOLBE:** Well, let's find out.
21121. **MS. FOWKE:** Sorry. So if we look at Table MJV-4 in Dr. Vilbert's evidence -- and that's Tab 8 -- Tab B-8, Vilbert, of Exhibit B-40. And at back, if we look at table -- Workpaper #1 to Table No. MJV-4, the Canadian Utility Sample?
21122. **DR. KOLBE:** Yes, I see it.
21123. **MS. FOWKE:** And you see that the -- those figures are based on a five-year market value average ending in the second quarter of 2003.
21124. Is that correct?
21125. **DR. VILBERT:** Yes, that's correct.
21126. **MS. FOWKE:** Thank you, Dr. Vilbert.
21127. **DR. KOLBE:** That's the Column 8. Column 1 is -- for the DCF model is a different calculation.
21128. **MR. FREW:** Right. And the average is Column 8.
21129. The only -- the numbers are actually set out in Table MJV-4. It's just that Table MJV-4 didn't cite the time frame and that's what I'm looking at.
21130. So the time frame is in the Workpaper # 1?
21131. **DR. KOLBE:** Yes. I'm just, as accused earlier, of being very precise.
21132. I'm just saying that there's a different number used for the DCF capital structure than for the risk positioning capital structure in terms of market weights.
21133. **MS. FOWKE:** Fair enough.
21134. And we appreciate your precision. Thank you.
21135. So the time frame for that was -- was from 1998 to the second quarter 2003. And then if we could just flip to the Workpaper #1 to MJV-10.
21136. And this is just the quantification of what I believe you were just talking about, Dr. Vilbert, in the chart -- in the table that you took me to, and that is that the -- I'm just looking at the title to that, and that is that the time frame that you've used, for the reasons that you've set out, for the beta was April 1995 to May 2000.
21137. Is that correct?

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21138. **DR. VILBERT:** Yes, that's correct.
21139. **MS. FOWKE:** And I just want to know, Dr. Kolbe, how can you ensure that circularity concerns have been addressed in this instance, since your beta estimates were derived at a different time than the market value capital structure estimates?
21140. **DR. KOLBE:** It's a perfectly fair question and one we've talked about quite a bit and made an explicit decision in this area.
21141. And we weren't sure if anyone would think to raise it, but you did, and fortunately we thought of -- before you -- before you even had a chance to raise it, of why we did it.
21142. I still have on my screen Dr. Vilbert's page 49, which is relevant here because that's the beta graph that you mentioned the tables rely on.
21143. One of the things that's in my -- this answer is going to take a while, because it's a complicated question. I can't -- but it is one we gave a great deal of thought to.
21144. One of the things that happens as markets become more competitive is that -- regulated markets become more competitive, is that the risk of all parts of the company go up; both the parts that have been unbundled and deregulated and the parts that remain regulated. And that's because competition doesn't stay nicely in the room where you told it to go. It sneaks out and affects other parts of the market.
21145. And, you know, a clear example is the fact that the wires business of Pacific Gas & Electric is what went bankrupt after the power market was deregulated. But the same thing happened in telecommunications; it happened earlier in natural gas deregulation in the U.S. The still-regulated parts get riskier.
21146. Second, the measured betas go down rather than up when that happens, for reasons that are not entirely clear; but empirically, that happens regularly. So part of my explanation for why these betas are going down is, for example, restructuring in the electric industry.
21147. The end result of all this -- and I would think the same would happen for gas transmission, given the greater competition that TransCanada would face if we had a pure play of natural gas transmission stocks like the Mainline.
21148. So the -- the graph you see before you on Dr. Vilbert's chart has a double whammy in it. Not only are the betas going down; there's good reason to believe the true risk is going up, so that eventually, when it all sorts out and we're in the new world and the transition is complete, we will find the still-regulated parts of rate regulated

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companies that have been exposed to greater competition are riskier than they were before competition came in.

21149. And there are lots of sort of sound reasons for that; but for now, I'll just say that's both what -- that's what both theory and evidence suggest will happen.

21150. So when you look at the Canadian sample, the first thing that happens is Dr. Vilbert chooses betas from a period when -- before the real impact of restructuring had hit, ending in May of 2004, but when the downward path had already started, to a degree, and we expect the path to be upward. That says that the beta he's going in with is below our best estimate of what the current market is.

21151. The capital structures at the time versus the capital structures used in his evidence, the equity ratios were slightly lower, on average, but not a lot; a little bit lower than they are today.

21152. And so our thought was that, since we believe the fundamental risk is higher, that the best estimate we can make for the Canadian sample now would take today's capital structures, which aren't very much higher, less than, for example, the 5 percentage points that we talk about translating into a quarter percentage point at ATWACC, with the betas from the prior period, and this, we believe, gives us an underestimate of the overall cost of capital of the Canadian sample today, given that -- and so this is -- this is the number we decided to use, even though you are quite right that there is not a precise match between the capital structure and the beta calculation, which is something we ordinarily pay a great deal of attention to and try to take care of.

21153. And we did an explicit violation of that this time because we thought it would give us a -- less of an underestimate on the Canadian sample than we would have had otherwise.

21154. **MS. FOWKE:** Thank you, Dr. Kolbe.

21155. And had you used capital structures that matched your beta estimates, could you tell me how your results would have changed?

21156. **DR. VILBERT:** We actually tested that ourselves to see how much of a difference it would make, and they are lower.

21157. As my -- I don't have the document with me today, but as my recollection is, it's 10 to 15 basis points in ATWACC in the overall cost of capital. So it's not very big.

21158. In my -- in terms of my analysis, it might have resulted in a -- in terms of ATWACC, a one-quarter percent less estimate of the overall cost of capital for the samples. That would have been the most it would be. It might not even be that, in some cases, because when I look at these numbers, I am forced to round, anyway, to a one-

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quarter percent. And when you do that, sometimes the 10 or 15 percent basis points disappears, anyway.

21159. **MR. FREW:** Dr. Vilbert, would you undertake to file those calculations with us?

21160. **DR. VILBERT:** Surely.

21161. **MS. FOWKE:** Thank you.

21162. If I could get an undertaking number, please?

21163. **THE CLERK:** U-22.

21164. **MS. FOWKE:** Thank you.

--- UNDERTAKING/ENGAGEMENT NO. U-22:

To provide results using the capital structures estimated over the same period as the Canadian sample beta estimates.

21165. **DR. KOLBE:** And just to be clear, those numbers are lower and we're happy to provide them, but for the reasons I stated, our interpretation of that would be that it would be even further below today's cost of capital for these companies than the numbers as stated for the reasons I said.

21166. **MS. FOWKE:** We understand your caveat on those numbers. Thank you very much.

21167. **DR. KOLBE:** Okay.

21168. **MS. FOWKE:** Dr. Vilbert, in your risk positioning analysis, you use both short- and long-term risk-free rates.

21169. Is that right?

21170. **DR. VILBERT:** Yes, that's correct.

21171. **MS. FOWKE:** And I'm wondering if you could comment on the relative weight that you assign to short- and long-term benchmarks, whether you view one as more meaningful or reliable and, if so, which one?

21172. **DR. VILBERT:** For this evidence, I relied almost exclusively on the long-term risk-free rate.

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21173. The reason for that is that the short-term risk-free rates have been driven down to extraordinarily low levels, both in the United States and in Canada, relative to historical averages.

21174. So what you see is what I call a yield spread between government's debt instruments, whether they be Treasury bills or Treasury bonds, and corporates. And that yield spread is extraordinarily high relative to historical averages for treasury bills.

21175. The result of that is if you base your risk-free rate on that extraordinarily low estimate, it draws all your estimates down to the point that, in many cases, your cost of equity estimated using the short-term model is less than the corresponding company's cost of debt; an outcome I don't believe is reasonable. And so for that reason, I gave no weight, essentially, to the short-term results.

21176. **MS. FOWKE:** Thank you.

21177. And I'd just like to talk about your DCF evidence for a moment.
Dr. Vilbert, maybe it would be easier if you just turned up page 5 of your evidence. And this is Tab B-8 in Exhibit B-40, page 5.

21178. **DR. VILBERT:** I'm there.

21179. **MS. FOWKE:** And I'm looking at lines 9 to 13. And in your evidence you stated:

"For both samples, the results of the DCF model are more variable and are less reliable than those based upon the risk-positioning model; however, I provide results using the DCF method because it is a method that has been used extensively in the past. In addition, the DCF model results serve as a check on the results from the equity risk-positioning approach, but I rely primarily on the risk-positioning model."

21180. Do you see that?

21181. **DR. VILBERT:** Yes, I do.

21182. **MS. FOWKE:** And I was just wondering: What use would you have the Board use of the DCF evidence that you filed?

21183. **DR. VILBERT:** For the Canadian sample, I don't give it any weight in my analysis; although, I would comment that it does not suffer from the problems that the Canadian risk-positioning evidence does, which is that I was forced into a historical measure of the relative risk.

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21184. However, it has a number of other problems that make it, in my mind, not so reliable right now.

21185. For the gas LDC sample, what you discover, if you look at the numbers, is that while higher than the estimates from the risk-positioning numbers, they're very consistent company to company. The forecasts of the growth rates are all fairly close. There are many analysts providing estimates of five-year growth. And by "many" I mean, you know, four to eight, which is generally a lot of analysts following a company. And the results when you use either the simple DCF or the preferred method, which I call the two-stage, multistage DCF method, gives you results that are, from company to company, fairly consistent.

21186. So I use the gas LDC sample as a check on the outcome of the risk-positioning numbers. The DCF numbers for the gas LDC are slightly higher, which gives me confidence that I have not, in the process of estimating the risk-positioning cost of capital for the gas LDC companies, overestimated their cost of capital.

21187. **MS. FOWKE:** Dr. Vilbert, if I could take you to page 36, line 17 of your evidence. And --

21188. **DR. VILBERT:** I'm sorry. I'm going to give up on the computer and go to the paper; it's easier.

21189. **MS. FOWKE:** I'm with you.

21190. **DR. VILBERT:** Thirty-six?

21191. **MS. FOWKE:** Yes. Page 36, line 17.

21192. **DR. VILBERT:** Yeah.

21193. **MS. FOWKE:** And you said:

"The DCF approach is conceptually sound if its assumptions are met, but can run into difficulty in practice because those assumptions are so strong, and it is (sic) so unlikely to correspond to reality."

21194. Then if we sort of flip through the next couple of pages, you discuss how a key assumption of the DCF model is future growth rates.

21195. And then on page 38 at line 12, you're talking about -- that the -- forecasting future growth rates require subjective judgment, unless the company or industry in question is stable.

21196. And at line 14 you state:

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"This is a problem ... because it is hard to imagine that today's energy industry would accurately be described as stable."

21197. Have you followed all of that?

21198. **DR. VILBERT:** Yes.

21199. **MS. FOWKE:** Given the questionable reliability of the DCF tests, such as you've laid out in your evidence, how meaningful would any check using the DCF test be, in your view?

21200. **DR. VILBERT:** Well, it is for these reasons that I did not put much weight on the DCF model. And, as I say, I used it primarily as a check for the results of the gas LDC risk-positioning models.

21201. However, I will point out that -- and I believe I state in my evidence that of all the segments of the energy industry right now, the gas LDC segment is probably the most stable.

21202. And if you look at the companies I selected, I went through a great deal of effort to select only those companies that were -- I'll use the word "clean". And by that I mean had no other confounding effects, such as dividend cuts or low bond ratings or mergers and acquisitions or a number of other things that might affect the cost of capital.

21203. The result of all of that effort in this sample would be, if you look at the DCF results, you'll see that they are pretty consistent company to company and in a range that would seem reasonable to me.

21204. So because of all of that, I thought that the gas LDC sample should not be discarded totally. But, as I say, I relied on it only as a check on my gas -- for my gas LDC for a check on the risk-positioning results. It gave me confidence that I had, as I said, had not overestimated in the risk-positioning methodology.

21205. **MS. FOWKE:** Thank you, Dr. Vilbert.

21206. Dr. Kolbe, just one last area that I'd like to discuss with the two of you, and that is the -- the recently enacted U.S. tax dividend reduction.

21207. And you noted in your evidence that this was to automatically expire at the end of 2008, and you stated that this wasn't a sufficient time horizon to support a material reduction in the required rate of return for direct investment in long-lived assets such as pipelines. And you stated that -- for the record, you stated that in Footnote 9 of your evidence, which is Tab 7 to B-40. And it was amended -- sorry. The footnote on page 9, not Footnote 9. The footnote on page 9. And it's Exhibit B-40, that was amended by B-77.

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21208. Do you recall that issue?
21209. **DR. KOLBE:** Yes, I do.
21210. **MS. FOWKE:** Thank you.
21211. In your view, is there certainty in the market that the dividend tax rates in the U.S. will return to 2002 levels in 2009, or at least to levels that are -- that are higher than the Canadian dividend tax credit -- tax rates?
21212. **DR. KOLBE:** No.
21213. And there's not even certainty that they won't be reversed before 2008 because of the budget deficits.
21214. **MS. FOWKE:** Given this uncertainty -- given this uncertainty, why do you consider the time horizon to be an insufficient time horizon to be considered by the market to support a material reduction in the required rate of return on investment of assets such as pipelines?
21215. **DR. KOLBE:** Well, if you're -- if you're talking a -- say a 35- or 40-year investment, the remaining life, if nothing changes, is four years.
21216. Or, you know, on the order of an eighth to a tenth of the life of the investment. It could be shorter, as well as longer.
21217. I haven't followed this closely, but my casual reading of the news suggests that the president wanted to make the tax cuts permanent. And in fact this was not well received, even by members of his own party, because of the deficits. Or at least by some members of his own party.
21218. And certainly the deficits in the United States are a problem that one way or another is going to have to get addressed. And that's going to put extra pressure on not renewing these and perhaps ending them early.
21219. So all of that suggests that investors can be anything but confident that this benefit, which will last, as we say, for an eighth to a tenth of the life of a long-life investment, will be permanent.
21220. That's the logic. That's the basis of my statement.
21221. **MS. FOWKE:** Okay.
21222. A moment, please, Mr. Chairman.

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Examination by M. Fowke**

--- (A short pause/Courte pause)

21223. **MS. FOWKE:** Thank you, Mr. Chairman. Those are all of our questions.

21224. Thank you so much, gentlemen.

21225. Mr. Chairman, I neglected to get exhibit numbers for the two documents
that I referred to earlier. If we could just get exhibit numbers for those.

21226. **THE CHAIRMAN:** It's not too late, Ms. Fowke.

21227. **MS. FOWKE:** Thank you.

21228. The first document is the text by Charles F. Phillips, Jr.

21229. **THE CLERK:** A-33.

--- **EXHIBIT NO./PIÈCE NO. A-33:**

*Excerpt from "The Regulation of Public Utilities, Theory and Practice by Charles
F. Phillips, Jr."*

21230. **MS. FOWKE:** And the second document is the text by Dr. Kolbe,
James A. Read, with George R. Hall.

21231. **THE CLERK:** A-34.

--- **EXHIBIT NO./PIÈCE NO. A-34:**

*Excerpt from "The Cost of Capital, Estimating the Rate of Return for Public
Utilities" by A. Lawrence Kolbe and James A. Read, Jr. with George R. Hall*

21232. **MS. FOWKE:** Thank you so much.

21233. Thank you, sir.

21234. **THE CHAIRMAN:** Thank you, Ms. Fowke.

--- (A short pause/Courte pause)

--- **EXAMINATION BY/INTERROGATOIRE PAR MEMBER EMES:**

21235. **MEMBER EMES:** I really hesitate to ask this question, but it is
something that I'm just unclear on.

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Examination by Member Emes**

21236. Dr. Kolbe, in your discussions with Mr. Stauff, I understood you to be suggesting that doing the net present value of the cash flows does not really explain stock prices.
21237. Did I get that right?
21238. **DR. KOLBE:** Yes, that seems to be true.
21239. **MEMBER EMES:** Okay.
21240. Though when I look at the discounted cash flow methodology, Dr. Vilbert said that this is a conceptually sound model; and yet the DCF method, as part of it, looks at the discounted cash flow of the dividend stream to look at stock price.
21241. So I'm struggling with how those two fit together.
21242. **DR. KOLBE:** Well, it's an absolutely fair question and -- and I don't have a good answer for you.
21243. The problem we face is that in the absence of a good understanding of stock prices we, nonetheless, have to make decisions. Business people have to decide whether to invest; regulatory boards have to decide what rates of return to allow.
21244. And there's a family of models that have evolved for that. The present value model is certainly basic to it. The capital asset pricing model and the so-called dividend discount, or DCF, model for the cost of capital side; which, as you correctly point out, is just the inverse of the present value formula, is another standard model.
21245. The theory that underlies those is known to be a simplification of reality, but we don't know where to go. We don't have anything better.
21246. The question I ask in the market-to-book test is: Are these things fatal for the cost of capital? Well, maybe, but we have confirmatory evidence on the cost of capital side in the form of the Panel 1 evidence. What are real people -- what returns are real people in competitive situations willing to accept when making investments? And those numbers seem to come out pretty close to the numbers we get using the standard models.
21247. And then we come to the question of: What real market-to-book ratios do we see? Does it matter there? Do we have any kind of confirmation?
21248. And the real market-to-book ratios -- you know, if you bought a bond with a -- that was selling for \$2,000, it was going to be redeemed in ten years for \$1,000, you'd get a negative interest rate on that. All right. And that's -- that's what we see with utility stocks, if you believe the market-to-book ratio.

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21249. So I don't have a great answer for what the right thing is because I don't know, but I know the market-to-book ratio seems to be, on the evidence, more affected by this than the cost of capital estimation models. I can't give you a clean answer as to why.

21250. But this is one of the things that makes us nervous about the DCF model in addition to the things that are already in the evidence.

21251. **MEMBER EMES:** Thank you very much.

21252. **THE CHAIRMAN:** Thank you, Ms. Emes.

--- **EXAMINATION BY/INTERROGATOIRE PAR THE CHAIRMAN:**

21253. **THE CHAIRMAN:** Dr. Kolbe, I only have one very general question, so I don't think this should be too hard to tackle.

21254. Yesterday, in conversation with Mr. Stauft, on a few occasions you said that we don't have the true model of stock market prices.

21255. My question is whether you believe that this is even less so today than it has ever been. In other words, do you believe that sometime in the past, say three or five years ago, the tools we have to model the stock market were, at least to some views -- and right now you seem to feel that they're of limited value. At least I infer that from what you said.

21256. So if you could comment on the extent to which a true model of stock market prices has existed and the situation is evolving in such a way that it's more difficult than ever to get information from the model.

21257. **DR. KOLBE:** Well, the short answer is: I can't tell. I mean, you can -- it could be that what's happening is that, for whatever reason, the greater access to information, the ability of computers and faster trading, or whatever other reasons, people are doing things now and behaving in ways that we didn't expect before and didn't see before and the old models used to work.

21258. Running counter to that is the story of the tulip bulbs in Holland in 1600 -- right? -- where there was something that, clearly, if you stopped to think about it, you would say: Wait a minute. Next year there are going to be a lot of tulip bulbs because farmers are going to say: Fine, I can give you those, so why am I paying so much for them today? Yet it's well documented, apparently. I've seen it a number of places that this mania did occur.

21259. So that would suggest that we didn't have a fundamental -- you know, the models didn't work so well. Because if we had applied those models to 1600, we would

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never have said that you would price tulip bulbs at, you know, thousands of times replacement cost.

21260. So it's -- you can't tell for sure, but I suspect the problem is more fundamental. I suspect stocks are driven by either behavioural models or evaluation models that we just don't know yet. And they always have been, we've just always worked with the tools we had.

21261. I also mentioned this emerging area in economics of behavioural economics because there has been a lot of dissatisfaction for a long time with the so-called rational man. And I apologize for the gender bias, but that is what it's called.

21262. Model of economics, people have always known that's a simplification, and now we're finally starting to do serious research about what might be true instead.

21263. **THE CHAIRMAN:** So this evolution, Dr. Kolbe, has it had an impact -- or what impact, if any, has it had in the methodology you've used in making your recommendations in this proceeding?

21264. **DR. KOLBE:** Well, the one thing that gives me comfort in all of this is the empirical capital asset pricing model, because that is fundamentally based on empirical research of what's happened.

21265. If you look at study after study, they have found that expected returns on stocks are positively related to beta, but not as positively related as the capital asset pricing model predicts; that is, that there's -- that the slope of the line is less. There's a positive intercept over the risk-free rate if you graph the line. And instead of running between the risk-free rate and the expected return on the market, it runs from the risk-free rate plus to the expected return on the market.

21266. You don't need a theory to explain that. That's just an outcome. That's an empirical result that's been found in study after study. And one of the reasons we like the empirical capital asset pricing model is because it can be viewed as an atheoretical model, just taking into account regularities that have been discovered in the market by actual tests.

21267. And so -- you know, we tend to use that model more than other people do, and the reason is because it give us some comfort in this absence of -- you know, in addition to just the fact that that's the way it has turned out. It also gives us some comfort, given this shortfall in the theory, that we've captured something real here; something that's been found in the market.

21268. **THE CHAIRMAN:** Thank you, Dr. Kolbe.

21269. Perhaps one final sub-question for Dr. Vilbert.

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21270. On the question you've -- you've described for us, Dr. Vilbert, on the difficulty you've had with the betas for Canadian companies. It might be there in your evidence, but if you could summarize for me whether this difficulty stems from either the imperfections of predictive models on the stock price side or is it more a data availability question, or is it both or maybe even something else?

21271. **DR. VILBERT:** I don't think it's a data availability question, because we had the data to calculate the betas up through today.

21272. What happens is, both the Financial Post analyst and my own calculations result in these 0 betas that I mentioned. We have hypothesized why that's happening, and your guess is probably as good as mine, but there are -- you know, we had the tech bubble and Nortel and a number of other things that could have affected the correlation between the returns on these companies and the stock market.

21273. However, the one piece of -- I think, I find good news is that if you look at weekly betas, also published by the Financial Post analyst, what you discover is weekly betas are now starting to come back up to what would be more normal levels. And in fact, the most recent 52-week betas are approximately the same as the betas that I use in my analysis. Although, there are issues with estimating betas on a weekly basis -- statistical issues that make them less reliable.

21274. But the good news is, it's -- the relationship is re-establishing itself to the one we used to have to rely on.

21275. So a long-winded answer: I don't think it's a data problem. It just happens to be the last few -- five years or so we've had some unusual circumstances.

21276. **DR. KOLBE:** And if I could just add one comment.

21277. In addition to the sort of tech bubble, so called, there is this transition issue that I mentioned before; that is, when industries go through restructurings, empirically their betas go down because the news about the restructuring tends to be much more important to the value of their shares than the news about the market. So they tend to decouple, we call it, from the market. So these transition periods tend to lead the lower betas independently of the tech bubble for restructured industries.

21278. **THE CHAIRMAN:** So is it fair to characterize the current environment as a transition period?

21279. I gather from your just last comment that even trying -- I'm trying to link everything you've been saying so far in terms of the difficulties in using models that predict the stock market prices, the Canadian beta situation.

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21280. I'm sure you'll tell me that nobody knows, but are there several smart and informed people observing that this may be a transition and we might find in the future, in X years, that predictive models have greater informative value?
21281. **DR. KOLBE:** Well, they're -- they're two -- I hear two questions there, and I'll answer them both; one with respect to beta.
21282. It does seem to be the case that after a period of these things going down, they eventually rebound to levels that tend to be higher than they were before; at least they'd have higher overall risks than they did before, which is part of the basis of my conclusion that the still regulated parts get riskier as you go through the transition.
21283. Headlines also tell me that. If you read the California Energy Press, obviously, the still regulated parts got riskier there, and I testified that was going to happen and nobody believed me. So -- you know, it's always hard before the fact to see -- to believe what actually might happen, but the experience is it does happen.
21284. The other question has to do -- that I heard has to do with models and when will we finally get a handle on how to really estimate the cost of capital; when will we finally get a handle on what drives stock prices.
21285. And -- you know, my own prediction is that at sort of the rate of current research, without some fundamental break-through, we're at least a decade away, I would think, to sort of materially better handle, because some of this behavioural modelling, and so forth, is very much in its infancy.
21286. A lot of it has to do with experiments. You know, the physicists have done experiments for years, economists are starting to do them, in which they design things to infer how people price different risks, et cetera.
21287. Then, of course, you have the problem of does -- do the college students who take these tests correspond to the investment bankers, because the investment bankers are too busy making money to go take the test for you.
21288. So it's going to take a while to get to a better understanding, barring a stroke of genius which, of course, can always happen.
21289. **DR. VILBERT:** There is a competing model that you might have heard of called -- it's by two professors, Fama and French. And that's a model that instead of having just the market be a factor that determines the rate of return, includes at least three, and the most recent version of it I saw had four, and perhaps five, factors, that they claim are a superior way to explain returns.
21290. The problem, of course, is it's comparable to the ECAPM that Dr. Kolbe mentioned a moment ago in that there's no theory underlying why these factors matter. They just seem to matter over a long period of time.

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21291. **DR. KOLBE:** And there have been theories proposed, but the factors weren't devised from X&E theory as much as discovered.
21292. And the problem with a large dataset is that in a large dataset, there will be a certain number of factors that matter by accident, and then there will be a certain number of factors that matter in repeated samples by accident if the dataset's large enough. And the dataset of stock returns is huge. So it's very hard to know.
21293. **THE CHAIRMAN:** That's very helpful, Dr. Kolbe and Dr. Vilbert.
21294. While you spoke, it also helped me clarify, perhaps, my ultimate question about the word "transition".
21295. Aside from the possibility of predictive models improving over time, and you say it might be a decade in the future, could it be, and is it likely to be, a situation also where today, in this environment, it is the market which is in transition that makes those tools less effective, and that can we expect that a transition, if it is one that we have now today, would evolve in such a way that the same tools, in two years, three years from now, would again be more effective, as perhaps they were X years ago?
21296. My question is about whether the difficulties we face are about not the tool itself becoming misadapted to fundamentals but, perhaps, the market realities being in a turbulent state that requires some time to sort itself out and then coming back, perhaps, to a more predictable environment.
21297. I guess that was part of the original question -- part of my question.
21298. **DR. KOLBE:** I see.
21299. Yes, the transition I spoke of had to do with the industry. You're speaking of a transition in the market itself.
21300. Well, again, you're quite right, I'm going to say I don't know.
21301. It -- it could be. It could be that you have these periods where stocks are irrationally priced and then people who do it that way get beaten up enough in the market that they come back to fundamental value. Or it could be that it's all just more complicated than we understand and that ultimately we will understand.
21302. **THE CHAIRMAN:** Thank you, Dr. Kolbe.
21303. **DR. KOLBE:** Thank you, sir.
21304. **THE CHAIRMAN:** Mr. Yates, those are all the questions of the Board. Do you have any re-examination?

**Closing remarks
Chairman**

21305. **MR. YATES:** No, thank you, Mr. Chairman.

21306. **THE CHAIRMAN:** Thank you, Mr. Yates.

21307. So Dr. Kolbe, Dr. Vilbert, we'd like to thank you for your contribution to the record of this proceeding. You are now excused. It means that you are not required to come back on Monday; but feel free to stay in Alberta for a few more days. We have consistently good weather here.

--- (Laughter/Rires)

21308. **THE CHAIRMAN:** And we hear that there's lots of good powdery snow on the slopes of the Rocky Mountains.

21309. **DR. KOLBE:** Well, thank you very much, Mr. Chairman.

21310. We actually are staying over at least through tomorrow and I know on to Sunday.

21311. **THE CHAIRMAN:** Excellent choice.

21312. **MR. YATES:** Mr. Chairman, I'll just comment that Dr. Kolbe spent some time period in his youth living in Moose Jaw, so he is familiar with the Canadian weather.

21313. **THE CHAIRMAN:** Thank you, Mr. Yates.

21314. Ms. Fowke, could we talk a bit about what next week looks like?

21315. **MS. FOWKE:** Yes. Thank you, sir.

21316. We've had some discussions among the counsel, and we've agreed, subject to the Panel approval, that the next -- assuming Mr. Yates has nothing more to put in, that his witnesses are all done, the next witness panel is CAPP. And we've agreed amongst counsel that that could start on Tuesday, if the Board is amenable to that suggestion.

21317. And then what we've suggested is that no matter how short Panel 1 -- the cross-examination of CAPP Panel 1 is, that we would not proceed to Panel 2 until Wednesday and start Panel 2 Wednesday morning.

21318. **THE CHAIRMAN:** Ms. Fowke, just to clarify, you said that this is the result of agreement amongst parties?

21319. **MS. FOWKE:** Yes; we've had discussion amongst all counsel, unless somebody has something to add.

**Closing remarks
Chairman**

--- (A short pause/Courte pause)

21320. **THE CHAIRMAN:** So the Board will accept the mutual agreement among parties.

21321. Before we adjourn, let's check for any administrative matters.

21322. I see none so -- oh, Mr. Yates...? Sorry.

21323. **MR. YATES:** I should probably comment for the record, Mr. Chairman, that there are a number of undertakings that remain outstanding, and TransCanada will seek to have all those filed at the outset on Tuesday.

21324. **THE CHAIRMAN:** Thank you, Mr. Yates.

21325. That being the case, we will adjourn until next Tuesday, 25th of January, at 8:30 a.m.

21326. Have a great weekend, everyone.

--- Upon adjourning at 10:25 a.m./L'audience est ajournée à 10h25

Attachment 14.2e

	Open	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Equity	\$400.0	\$380.0	\$360.0	\$340.0	\$320.0	\$300.0	\$280.0	\$260.0	\$240.0	\$220.0	\$200.0	\$180.0	\$160.0	\$140.0	\$120.0	\$100.0	\$80.0	\$60.0	\$40.0	\$20.0	\$0.0
Depreciation Rate (Straight Line)		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Allowed ROE		9.0%	9.5%	10.0%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%
Regulated Earnings		\$36.0	\$36.1	\$36.0	\$35.7	\$33.6	\$31.5	\$29.4	\$27.3	\$25.2	\$23.1	\$21.0	\$18.9	\$16.8	\$14.7	\$12.6	\$10.5	\$8.4	\$6.3	\$4.2	\$2.1
Depreciation		\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0
Cash Flow from Reg Earnings + Depreciation		\$56.0	\$56.1	\$56.0	\$55.7	\$53.6	\$51.5	\$49.4	\$47.3	\$45.2	\$43.1	\$41.0	\$38.9	\$36.8	\$34.7	\$32.6	\$30.5	\$28.4	\$26.3	\$24.2	\$22.1
PV Cash Flow from Reg Earnings + Depreciation		\$426.1																			
Assumptions:																					
Initial Rate Base	\$1,000																				
Deemed Equity	40.0%																				
Initial Equity	\$400																				
All cash flow paid to investors - nothing retained for reinvestment																					