NEWFOUNDLAND BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

TESTIMONY ON THE COST OF CAPITAL AND CAPITAL STRUCTURE IN REGARD TO THE 2003 NEWFOUNDLAND & LABRADOR HYDRO APPLICATION

TESTIMONY OF DR. BASIL A. KALYMON ON BEHALF OF THE CONSUMER ADVOCATE

August 14, 2003

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Q. Please state your name, address and affiliation.

A. I am Dr. Basil A. Kalymon, Professor of Finance at the Richard Ivey School of Business, University of Western Ontario. My office is located at 1151 Richmond Street North, London, Ontario.

Q. Please describe your qualifications and previous experience.

A. I have spent over thirty years as a professor of finance and management sciences at the University of California, Los Angeles, Harvard University, University of Toronto and the University of Western Ontario. During that time, I have also conducted my own consulting practice under Kalymon Consulting Ltd. I hold a B.Sc. degree in Statistics from the University of Toronto and a PhD. degree in Administrative Sciences from Yale University.

My consulting experience in regulatory matters includes the preparation of cost of capital evidence for electric utility, gas distribution, pipeline, telephone, transportation and insurance hearings. I have also prepared tariff design testimony for oil and gas pipelines, studies of regulated price structure in the energy sector and acquisition analysis in the utility sector. In the past twenty years, I have presented evidence on the cost of capital and capital structure at over thirty regulatory hearings in Canada. In addition to my previous appearances at this Board, I have testified on cost of capital and regulatory economics before the National Energy Board, the Ontario Energy Board, the Public Utilities Commission of Prince Edward Island, the Nova Scotia Board of Commissioners

of Public Utilities, the Alberta Public Utilities Board, the New Brunswick Board of Commissioners of Public Utilities , the Ontario Automobile Insurance Board, the Ontario Telephone Services Commission and the U.S. Federal Energy Regulatory Commission. A resume is included as Appendix A.

Q. Please indicate the matters to be dealt with in your testimony.

A. I will be addressing the issues of

- current financial structure,
- cost of debt and guarantee fees ,
- rate of return on common equity, and
- target financial structure and returns on common equity.

Financial theory, applied in the context of current capital market conditions and comparable practices for Canadian privately owned utilities, will be used to arrive at a recommended target capital structure and cost of capital to be included in the cost of service charged by Newfoundland & Labrador Hydro. (Hydro) in the regulated utility operation.

In dealing with these issues, my testimony will be organized as follows:

I. Discussion of general economic conditions.
II. Discussion of the business risk and appropriate capital structure.
III. Discussion of the current cost of debt.
IV. Determination of the appropriate return on common equity including the following tests:

Risk Premium

Adjusted Comparable Earnings

DCF

V. Summary of the rate of return and capital structure recommendations.

I. GENERAL ECONOMIC CONDITIONS

Q. Why are general economic conditions relevant to the determination of the cost of capital?

A. The cost of capital in financial markets is determined primarily by three factors:

(1) The level of inflation in the economy.

(2) The level of returns available to risk-free investment.

(3) The level of risk to which the investor is exposed.

Each of these factors is generally acknowledged to influence the terms and conditions on which capital is provided. Thus, if the returns available to investors are to be determined, they must be placed within the context of the general economic conditions which influence all of the above three factors.

Q. What is your assessment of the current economic conditions?

A. The economy of Canada has shown continuous, though variable, growth over the past five years. The key factors of inflation and interest rates which effect the cost of capital remain stable at levels well below those of past decades. Since equity markets have experience substantial volatility in the past two years, investors in the capital markets

have sought the shelter of relatively lower risk investments and have reduced their expectations for returns from such investments.

The Canadian economy continues to grow at moderate levels. As shown in Schedule 1A (Column 2) , the real GDP grew in the range of 1.9% to 5.5% annually from 1998 to 2002 and has shown moderate growth of 2.4% in the first quarter of 2003. General expectations are for the moderate levels of growth to continue in the near term.

Corporate profits, after some exceptional years of growth in 1999 and 2000 of 27.8% and 23.8% respectively (Schedule 1A, Column 8), had a substantial slowdown in 2001. After declining by 7.0% profit growth recovered to a level of 4.6% in 2002 and shows continued growth in the first quarter of 2003. While profit growth is continuing, the levels of growth are much reduced from the buoyant performance of the more recent past.

Unemployment rates have been rising gradually from the low of 6.8% achieved in 2000 to 7.7% 2002 (Schedule 1A, Column 9). With the most recent unemployment rate of 7.4%, there is little pressure on wage increases. Wage settlements have stayed in the range of 2.0% to 3.2% over the past four years, with a reversal of the previous upward trend in 2002. Such increases place only a low level of inflationary pressure on the economy.

With the more moderate levels of both economic growth and unemployment levels, the rate of inflation in Canada has remained at moderate levels now for over a decade. The

annual inflation rates as measured by the Consumer Price Index have been in the range of 0.2% to 2.7% during the 1992 to 2002 period (Schedule 1A, Column 6). While showing a slight upward trend in recent years, the levels of inflation remain low by the standards of the previous decades. As inflation has a direct impact on the return expectations of investor, the stability of inflation at such lower levels has brought lowered expected rates of return. The stated commitment of the Bank of Canada to maintain inflation rates below 3% has been realized and this increases the Bank's credibility with the capital markets.

The elimination of budgetary deficits at both the Federal and Provincial levels has provided for a significantly more benign environment for the operation of monetary policy by the Bank of Canada. In addition, over the past three years, a balance of payment surplus has emerged in Canada.. As shown in Schedule 1A Column 10, the balance of payments which started the decade at a deficit of $23 billion in 1990, have been in the surplus range of $23 to $30.7 billion in 2000 to 2002. These surpluses, in conjunction with the strict monetary policy of the central bank, have resulted in the substantial strengthening of the Canadian dollar against the US dollar to the level of 72 cents from the previous lows of 62 cents. This implies the likelihood of a persistence of lower inflation in the economy as a substantial portion of consumer goods in Canada are imported from the US.

Q. What is your assessment of the current overall conditions in capital markets?

A. The capital markets saw a major reduction in financing requirements during the past three years relative to the peak requirements of 1999. This can be seen in Schedule 2 (Column

9) which indicates that the total levels of security issues dropped to a level of $38.4 billion in 2002 after being in the range of $59.9 billion and $101.9 billion in the previous three years. This reduction in financing pressure on the capital markets was primarily the result of the substantial repayment of Federal government borrowing which reached $20 billion in 2000 and continued at substantially reduced levels over the past two years. In addition, provincial governments substantially reduced their borrowing needs. Thus , the substantial budgetary surpluses of the both levels of government provided major relief to borrowing pressure in the capital markets which must result in the lowering of yield expectations by investors.

In fact, the trend in interest rates was toward maintaining the substantially reduced levels of long-term interest rates which have evolved in the past six years with further reductions in 2002 and 2003. As can be seen in Schedule 3A, Column 4, the Canada 10 yr bond rate has been in the range of 4.37% to 6.44% over every month from May 1998 to June 2003. While some fluctuation is evident, the trend over the past four years has been for a further reduction in interest rates. The current 10yr Canada bond rate of 5.06% (Aug. 14, 2003) and corresponding 30yr Canada rate of 5.53% are clearly near the bottom of the rates for the 1998-2002 period. Long-term bond rates can be seen as having stabilized at low historic levels which is consistent with the low levels of inflation in the economy. With the inflation rate at 2.6% (June 2003) and the 10 yr Canada bond rate at 5.06% the indicated real rate is 2.46%, a level below that of the past two decades but not significantly different from very long term averages. This indicates a substantial level of investor confidence of future inflation levels and lower effective inflation risk premiums being demanded.

At the same time, short-term interest rates are currently at very low levels in comparison to the past two decades. As can be seen in Schedule 3A, Column 3, the Treasury Bill rate in June 2003 was 3.07%. This level is above the low point of 1.95% reached in December 2001, but substantially below the rates of 1998-2000 . Since short-term interest rates are more sensitive to the level of economic activity, recent economic growth resulted in some tightening of money market conditions by the central bank. While showing some upward volatility, the low levels achieved by investors in the money markets again enforce the lower level of expectations for returns which rational investors must adopt.

Equity markets have been highly volatile in recent years and have shown substantial losses in the past two years after showing extraordinary gains in 2000. Valuations of earnings as based on the price performance of the TSE 300 Index rose from a Price/Earnings multiple of 33.80 in May of 1998 to a low of 20.5 in February 2001 (Schedule 3A, Column 9). Subsequently, the market valuation became highly erratic, as corporate earnings plunged and the reported earnings of the TSX index fell into a negative range during late 2001 and early 2002. Currently, with renewed profitablility for TSX index companies, the price earnings ratio as of May 2003 is, once again, at a moderate level of 24.78.

Investors in equity have not achieved very high returns in recent years. In fact, the TSX Index showed total returns of only 3.24% over the 1997-2002 year period (Schedule 4A, Column 5). In fact, the investor returns for the past twenty years have been moderate and

have shown an average return of 9.52% for the 1992 to 2002 period. Investors continue to show a high degree of willingness to place a high value on earnings and dividend yields have remained low in a range from 1.05% to 2.05% (Schedule 3A, Column 8) over the past four years. Clearly, with the low level of interest rates, investors in equity are showing lower dividend return expectations.

II. RISK AND CAPITAL STRUCTURE

Q. How do the business risks of Hydro compare to those of other regulated Canadian utilities?

A. The main business risks of Hydro are related to the general economic conditions of the Province. The continued growth experienced by the provincial economy in recent years is a source of business strength to Hydro as it reduces the risk of substantial reductions in overall demand or in the ability of customers to pay for electricity supplies. Based on continued development of off-shore oil resources and new mine developments, the personal income growth has been sustained. The provincial economy promises to have continued growth at above average levels given further development of Voisey Bay, White Rose and Terra Nova together with continuation of a base level of fishery activity. Nevertheless, investors would continue to recognize the generally smaller and less diversified economic base of the province as creating risks somewhat greater than that of utilities operating in larger and more diversified provinces.

With regard to competition, Hydro operates under a mandate which provides an essential monopoly on large scale generation with some move toward increased use of purchased

power from independent operators. In contrast with most North American jurisdictions, Hydro is operating without interconnections to potential competitive sources for the bulk of its territory. Again, this lowers the business risk of Hydro relative to most North American electricity generators.

In terms of forecasting risk, Hydro essentially avoids most of the short-term risks associated with input fuel costs, water levels, demand volumes or the impact of rural rate changes through the continued operation of the Rate Stabilization Program (RSP). As a consequence of the adjustment mechanism imposed by the RSP, any deviations resulting from changes in such factors are borne by the customers of Hydro through the operation of the RSP. While Hydro is faced with the need to finance any shortfalls in revenue, full recovery together with carrying costs are provided by the RSP mechanism. This mechanism effectively shields Hydro from earnings instability due to the major factors which are beyond Hydro control. Such comprehensive recovery mechanisms would be viewed very favourably by utility investors and would place Hydro at lower risk to most electrical utilities in North America particularly those in highly deregulated jurisdictions.

With respect to long-term demand risk, Hydro is highly dependent on a restricted number of customers, primarily Newfoundland Power. However, Newfoundland Power (NP) is a captive client with mostly a domestic and commercial sector base. Consequently, Hydro is effectively exposed to the fluctuations imposed mostly by the domestic and commercial clients of NP. While industrial sales expose Hydro to major fluctuation possibilities in demand, these are limited to less than 20% of total sales. Finally, overall

demand for Hydro has been very stable and growing over the past decade and has not imposed any significant volatility on Hydro operations.

With respect to capital project risks, Hydro is operating in a relatively slow growth market. While new capacity has been brought on stream during 2002, its capital budget plans do not project any major new expansion of its rate base and relatively moderate levels of expenditures. The use of purchased power to expand capacity further transfers some construction and operating risks for generation to third parties. Thus , construction and expansion risks would be seen by investors as minimal.

With respect to regulatory risk, Hydro continues in its transition from the previous status to being fully regulated by this Board based on revisions introduced in the Electric Power Control Act and the Public Utilities Act. While altered form of regulation is always a potential source of risk to investors, the regulatory environment of this Board is well established and well known to investors. Based on previous experiences, in particular with the regulation of Newfoundland Power, investors would not see the change in regulatory status as imposing any risks that differ with that of any jurisdiction in Canada. In fact, the mandated transition may well provide for new protection of the financial integrity of Hydro, which is specifically provided in the Act reducing regulatory risk.

On balance of factors, it would be my overall assessment that the business risks of Hydro has not changed materially from the last hearing and are similar to that of other electrical utilities such as New Brunswick Power, Nova Scotia Power and Newfoundland Power which enjoy effective regulatory monopolies within smaller and less diversified

economies. The business risks of electrical utilities in Ontario and Alberta are currently substantially higher due to the level of competition which is being mandated in these markets.

Q. How does the capital structure risk of Hydro compare with other regulated utilities?

A. The capital structure risk of Hydro must be discussed within the context of its Provincial ownership and the Provincial guarantees of its debt. The current actual financial structure would not be financially viable in the absence of the provincial guarantee. At the same time, with a Provincial guarantee, the capital structure of Hydro is somewhat arbitrary since the provincial guarantee implies viability in the capital markets based on the financial strength of the province.

Based on the capital structures of publicly-owned electric utilities , as shown in Schedule 34-4, Hydro's proposed structure for 2002 is not dissimilar from that of other publicly owned electric utilities. It may be noted that the range of debt proportions in capital structures range from 61.41% for Saskatchewan Power to 100%+ for New Brunswick Power in 2002. Similarly, interest coverage ratios for publicly owned utilities vary widely from 1.08 for New Brunswick Power to 2.03 for Saskatchewan Power with a median of 1.43 in 2003.

The Hydro proposed capital structure for the 2002 test year for is as follows:

Debt	86.13%
Employee Benefits	1.72%
Equity	12.15%

Based on the proposed capital structure and the returns on rate base, Hydro would have an effective Debt to Equity Ratio of 7.08 and an Interest Coverage Ratio of 1.20 for 2004. Debt to Common Equity Ratios shown in Schedule 7 for privately owned utilities show a mean level of 1.32 and median of 1.46 in 2002. More specifically, for the electric utilities such as Canadian Utilities, Fortis and TransAlta the Debt to Equity Ratio ranges from 0.85 to 1.53. At the same time, Schedule 14 shows that the Interest Coverage Ratios for the sample of utilities had a mean of 2.73 and median of 2.28 for 2002, with the electric utilities ranging from 1.72 for TransAlta, 2.19 for Fortis and 3.77 for Canadian Utilities.. All of these utilities have investment grade bond ratings. These comparisons clearly indicate that Hydro would not achieve an investment grade bond rating in the absence of the Provincial debt guarantee.

The current mandate for the regulation of Hydro requires that it be treated similarly to a privately owned utility. Thus, it is important to establish the capital structure which would be appropriate for Hydro in the absence of a Provincial guarantee. Based on the business risks of Hydro and the capital structures of comparable electrical utilities, it would be my assessment that Hydro would require a 40% Equity component to achieve an investment grade on its debt in the absence of Provincial guarantees. This level of equity is currently substantially above the 12.15% Equity for the 2004 year proposed by Hydro and the 20% Equity target proposed by Hydro for the medium term as recommended by this Board in the previous hearing.

Given that the Provincial guarantee is in place, it would be my recommendation to the Board that the capital structure of Hydro be allowed to gradually evolve over a number

of years to the stand-alone level of 40% Equity and 60% Debt which would permit Hydro to achieve an investment grade rating on its bonds. However, the assessment of the appropriate levels of return on the rate base needs to recognize both the actual capital structure in place and the returns generated to the Province through the guarantee fee.

Based on the above observations, the capital structure risk of Hydro continues to be very high based on the actual capital structure in place but with the presence of the Provincial guarantee the financial risk to bond investors is limited to that of the Provincial credit level. Given that the guarantee provides implicit equity support beyond the levels recorded on the balance sheet of Hydro, my analysis of the appropriate returns on the rate base shall assume a deemed capital structure of 40% Equity and 60% Debt. Under such an assumption, the overall risk of Hydro would be comparable to that of the average utility and somewhat below that of Newfoundland Power in particular.

Q. Could you comment on the appropriate level of the Provincial guarantee fee?

A. The appropriate level of the Provincial guarantee fee can be assessed based on the value provided by the guarantee to Hydro. In the absence of the guarantee, the capital structure of Hydro would not be financially viable. At the same time, the guarantee fee paid to the Province can be recognized as a form of compensation for the implicit equity which is being provided. Thus, the guarantee fee can be analyzed by considering the total level of compensation which would be appropriate for the Province based on a deemed capital structure which is financially viable.

Assuming a deemed capital structure of 60% Debt and 40% Equity, Hydro would be able to achieve an investment grade for its bond without the Provincial guarantee. Thus, for this 60% of the rate base, the Provincial guarantee can be seen simply as enhancing the credit from a corporate BBB rating to a Provincial BBB rating. Thus, the value of the guarantee on this 60% Debt component can be seen as approximately 50 basis points based on the yield spread between similar rated corporate and provincial bonds.

With respect to the remaining 40% Equity component of the deemed capital structure, the Province is entitled to earn a return on equity similar to that of other companies of similar risk. The appropriate level of such a return will be discussed below and the appropriate level is shown to be 8.50% to 9.00% under current market conditions for a mid-range target of 8.75%. The actual guarantee fee of the Province of 100 basis points on the actual total debt of Hydro can then be seen as providing some compensation for the effective equity risk involved. Analysis of the required return on rate base is as follows:

	Structure	Cost	Fee	Total
Debt				
Funded	86.13%	7.04%		6.063%
Pre-funded	(26.13%)			
Deemed	60.00%		0.5%	0.300%
Equity				
Funded	12.15%	8.75%		1.063%
Guaranteed	26.13%		1.71%	0.447%
Empl. Benefits	1.72%	0%		0%
Deemed	40.00%			
Total Rate Base	100.00%			7.873%

The above calculation indicates that the target return on rate base for Hydro in the future should be limited to the level of 7.873%. Such a return on rate base would provide an interest coverage ratio of 1.30 [=(7.873/6.063] excluding the guarantee fees. The level of return on rate base proposed by Hydro is 8.440% and exceeds the above estimated required return on rate base. The main reason for the difference is the proposed return on equity which, when combined with the existing 100 basis point provincial guarantee fee, results in a return on rate base which is excessive. If the recommended 7.873% return on rate base is awarded, the return would provide for fair compensation to the Province based on market investor requirements for risks comparable to that of Hydro.

III. COST OF DEBT AND GUARANTEE FEE

Q. What is the current cost of long-term debt to Hydro?

A. As of August 14, the trading yield of long-term bonds of the Province of Newfoundland was 5.83%. This yield represents a spread of around 50 basis points over Canada bonds of similar duration. Given the Provincial guarantee on the Hydro bonds, this would represent the current cost of long-term bonds to Hydro. In addition, the Provincial guarantee fee of 100 basis points would also be incurred.

Q. Is the guarantee fee charged by the Province appropriate?

A. Based on the analysis provided in the previous section, the guarantee fee of the Province is not excessive if recognition is given to the fact that a portion of the fee is providing compensation for the the implicit equity investment. Consequently, the return allowed on the equity must be lowered to reflect an appropriate overall return on rate base as discussed above. The level of the guarantee fee also needs to be reviewed on the basis of the actual equity in Hydro. If the actual level of equity in Hydro were to increase to a level of 40%, as recommended in the long-term, the level of the guarantee fee would need to be reduced to a level of 50 basis points.

Q. What is the current cost of short-term funds to Hydro?

A. The current cost of R1 rated commercial paper of 3 months was 2.70% as of August 14.

IV. COST OF COMMON EQUITY

Q. What conclusions have you reached concerning the cost of equity capital to Hydro regulated utility operations?

A. Based on the assumption of a deemed capital structure of 40% Equity and 60% Debt and applying the tests outlined below, the current cost of equity capital to Hydro is 8.50% to 9.00%.

Without reviewing all of the principles which should apply, I would simply note that I have used procedures consistent with those of previous hearings before this and other Boards in respect to privately owned regulated firms. These procedures measure the current cost of capital and thus reflect the principles which must be recognized in regulatory awards. These principles are:

- fairness to both shareholders and customers,
- financial integrity of the company, and
- ability to attract capital.

The application of these principles leads to the reliance on the cost of equity as the basic standard which satisfies all three requirements.

Q. What methods did you use to arrive at your determination of an appropriate rate of return on equity?

A. Given the uncertainties of the equity market and an inability to observe directly the yields required by investors, I believe that no single test can be used exclusively to determine

the appropriate rate of return on equity. The tests applied should, however, be based on legitimate financial principles (including considerations of recent developments) and demonstrable financial data. While professional judgement is necessary, the measures taken must be consistent with theory, and unbiased consistency requires some degree of continuity in the methods and data used.

Given their extensive application in regulatory proceedings, their well established properties and acceptability to regulatory Boards, I continue to apply the following methods:

- risk premium method,
- adjusted comparable earnings test, and
- discounted cash flow (DCF) approach.

Each method is used to measure the cost of equity capital for Hydro, suitably adjusted for current financial markets. In addition, given the Boards use of adjustment formulas based on the spread required over 30 year Canada bonds by equity investors, I have modified my approach to be based on 30 year bond rates and have expressed the findings of each equity test in terms of the appropriate spread to be allowed.

The methods rely on a database containing:

- Broad indicators of economic conditions (Schedule 1).
- Activity levels in capital markets (Schedule 2).
- Series of trends in interest rates (Schedule 3).

- Performance indicators for stocks listed on the Toronto Stock Exchange (Schedules 4-5).
- Financial structure and performance of the major Canadian privately-owned utilities, including telephone, electric utilities and pipelines (Schedules 6-17)
- Financial structure and performance for a sample of low-risk Canadian industrial companies (Schedules 18-29).
- Financial ratings of selected utilities (Schedule 30).
- Bond yield requirements by ratings (Schedule 31).
- Schedule of Key Ratios for Hydro (Schedule 32)
- Long-term study of international equity and bond performance (Schedule 33)..
- Key financial ratios for publicly owned electric utilities (Schedule 34).
- Findings of Canadian regulatory boards in recent hearings (Schedule 35).

The data for the sample of low-risk industrials and utilities cover the 1992 to 2002 period.

RISK PREMIUM METHOD

Q. What is your conclusion on the required rate of return on equity of average risk as indicated by the risk premium test?

A. The approach used in my analysis was to study the historical risk premiums achieved by different classes of stock investments on the Toronto Stock Exchange (TSX) over

the yields on long-term Canada Bonds over the 1982 to 2002 period. While some studies of risk premiums extend over longer periods of time, I have consistently based the risk premium test on the most recent 20 years of performance. Such a period, both smoothes the volatility of the markets over several business cycles and represents the most recent experience which is likely to be influencing shareholder expectations. However, I have added further discussion below of long-term studies of international market performance to enhance insight into the extremely volatile markets of recent years.

The data for the Canadian markets are shown in Schedules 4 and 5. The analysis is based on the Return Indexes of the TSX Index, and by industry classes for those stocks which enter into the TSX Index. These companies and their weightings were chosen to be representative of the entire population of stocks traded on the Toronto Stock Exchange. The Returns Index is a combination of the prices and dividends paid, producing a measure of total returns to investors.

The historical experience of equity investors, as compared to bond-holders, is one of the basis for formulating risk premium expectations. This experience is analyzed in Schedules 4A and 4B. The average realized rate of return (as measured by the geometric means) for investors in the portfolio of stocks contained in the TSX Index was 10.38% for the 1982 to 2002 period. In the most recent 10 -year return measurements, the TSX showed the lower average performance of 9.52%.

If adjusted for the inflation which has occurred, the realized real returns for the TSX Index averaged 6.42% over the 1982 to 2002 period. Again, the most recent 10 -year real returns was at a level of 7.86%, levels well below those of the period ending in 2000.

By comparison with the nominal returns on equity, the investors in long-term (30 -year) Canada Bonds have experienced an average (geometric mean) return of 13.48% for the 1982 to 2002 period. (These results assume a one-year holding period for the bonds). As a consequence, the realized average risk premium of the TSX Index over long-term Canada Bonds was a negative 3.86% % (geometric average) or 1.86 % (arithmetic average) (as shown in Column 11 of Schedule 4A) for the 1982 - 2002 period. These results indicate that equity investors in Canada have not been achieving any premiums over 30 year Canada bond investments. Such a result is highly inconsistent with risk theory but can occur with highly fluctuating markets.

This result is the consequence of the significant capital gains achieved by bond holders over the past twenty years with the long-term trend in declining bond yields. In the application of adjustment formulas for return on equity, the assumption which is being made is that the observed yield on bonds will be achieved and no consideration is given to any expected capital gain or loss from bond investments. Thus, the return on equity achieved over the observed yield is a relevant measure of possible return expectations. If the capital gain component of bonds is removed, then the achieved risk premiums of the TSX Index over long-term Canada bonds would rise to 0.81% (geometric average) or 2.79% (arithmetic average) as shown in Shedule 4A, Column 10. Such achieved risk

premiums are much lower than often assumed share performance expectations which have been measured from long periods which include falling bond prices.

The real rates on Canada bonds has now declined to well below the average for the past twenty years. With inflation at 2.6% and 30 year Canada bond rates currently at 5.53%, the real rate of interest is at 2.93%. The twenty year average real yield on 30 year Canada bonds (Schedule 4B, Column 6) has been 5.58%. This would suggest that bond investors cannot expect further declines in bond rates unless substantial further reductions occur in the levels of inflation in the economy. Alternatively, this implies that bond investors cannot expect a continuation of the capital gains enjoyed over the past twenty years. In fact, bond investors are somewhat at risk of capital losses if interest rates rise to the real rates of the past twenty years.

Given that equity investment is more risky than investment in bonds, my conclusion is that investors in stocks with risks comparable to those of the average company traded on the TSX should expect a risk premium in the range of 2.00% to 2.50% over the current 30 year Canada bonds rate of 5.53%. This result is based primarily on the assumption that the capital gains experienced by bond holders over the past twenty years are unsustainable into the future and that equity holders can then expect results which more closely approximate premiums achieved over observed yields in the past.

Given the current 10 year Canada Bond yield of 5.53%, and a risk premium of 2.00% to 2.50%, the indicated cost of equity if based on average market risk would be:

Cost of Equity: 7.53% to 8.03%

(Average Risk)

Q. What further adjustment would you make to the above determined cost of equity for the risk level of Hydro?

A. The risk associated with the average stock, as represented by the TSX Composite Index, may not reflect the risk level as related to investments in Hydro. Further analyses were conducted, using the industry groupings of the TSX Index to determine if any significant differences in risk and yields could be determined. The results of these analyses are shown in Schedule 5 .

The rates of return achieved over different 5-year and 10 -year holding periods are shown for each industry group return index, using averages of annual monthly highs and lows. In addition, to indicate the degree of volatility to which investors are exposed by alternative investments, the variance and the "Beta" value of the industry group's annual returns were measured for the 1982 to 2002 period.

Of particular relevance is the behaviour of the returns for those indices which relate to the utility sectors. Namely, the indices for Pipelines and Utilities constitute a comparable volatility risk group for Hydro operations. Measured by either variance or Beta, the Pipeline index shows a somewhat greater stability (lower variance) and lower Beta measure than the TSX Composite. However, with the inclusion of BCE in the Utilities index and the high volatility of that company, the Utilities index shows above average volatility.

Over the 1982 to 2002 holding period, the realized returns of the industry groups were compared by risk classification. The average rates of return (based on geometric mean) achieved by risk rankings were as follows:

	Average Variance Based	Average Variance	Average Beta Based	Beta Value
Highest Four	4.97%	773.24	12.35%	1.03
Middle Six	11.26%	354.73	10.09%	0.66
Lowest Four	13.68%	231.01	8.05%	0.36
TSE	10.38 %	226.14		1.00

The above results indicate that the lowest risk sectors outperformed the higher risk sectors when measured by variance with a contrary performance if risk is measured by beta. These results are mixed with respect to expectations which should require higher returns for the higher risk investments. In particular, it can be noted that the Pipeline and Utilities indicies substantially outperformed the average risk investment, contrary to the generally accepted lower risk of such investment.

Based on the above results, given the contradictory performance of the higher risk sectors relative to the low-risk sectors, I have concluded that no further adjustment is warranted for the lower risk of Hydro utility operations relative to the TSX Composite Index. Thus,

the required risk premium for Hydro with respect to the Canada bond rate of 5.53% is in the range of 2.00% to 2.50%, with the result that:

Cost of Equity (Hydro) 7.53% to 8.03%

Indicated Risk Premium: 2.00% to 2.50% .
(Over 30 year Canada Bond yield of 5.53%)

Q. Does the long- term study of equity results support the conclusion reached above with respect to the risk premiums expected by low risk investors in utilities?

A. Yes. The Dimson study results which are shown in Schedule 33 indicate that over a very long time, the performance of equity investment over bond returns has been in the order of 4.60% when all available international markets are considered. This level of risk premium is clearly unwarranted for investments of lower risk such as the regulated utilities.

Adjusting the required risk premium for the observed Beta factor of the Utility Sample of 0.35 (See Schedule 17) would indicate a required risk premium of 1.61%. This value is supportive of the lower end of the results found from the analysis of the most recent 20 year performance of the TSX Index relative to long term bonds. No justification of higher equity risk premiums for low risk investments such as the regulated activities of Hydro can be justified.

COMPARABLE EARNINGS TEST

Q. Could you comment on the time period which you consider appropriate for the application of the comparable earnings approach?

A. Yes. Consistent application on a year-to-year basis of the comparable earnings test requires that both high and low profit years must be considered if systematic selection bias is to be avoided. Furthermore, the time periods considered should be as current as possible and of sufficient duration to capture both high and low profit years. Under current conditions, I have used the most recently available sample data for the past 10 years ending in 2002.

The average rates of return on book values experienced in the past decade may serve as a partial basis for expectations on future book rates of return. The market reaction to such book return expectations is measured by the market-to-book ratios related to these returns. These returns on book equity must also be evaluated under current equity market conditions if current costs of equity are to be assessed

Q. What company samples have you used to apply the comparable earnings test?

A. I have considered two different samples of companies for application of the comparable earnings test:

- A sample of Canadian industrials of low risk.
- A sample of major privately-owned Canadian utilities.

The selection process used for the sample base of companies and ratio definitions is documented in Appendix B.

Q. Based on the comparable earnings of the low-risk industrial sample, what is your conclusion on the cost of equity capital to Hydro?

A The returns on average common equity for the low-risk industrials are shown in Schedule 21. The selection process used screens out companies with unstable return patterns. We see that, for this highly selected low-risk group of industrials, the average return achieved for the 1993 to 2002 period had a mean of 12.14% and a median of 10.68%. The returns peaked in 2002, following lower than average results in 2001.

Schedule 18 shows the market-to-book ratios of this industrial sample has also peaked in 2002 with the 1993 to 2002 period showing a mean level of 1.31. Based on current prices, the market-to-book ratio has risen to a mean level of 2.13. This indicates that the market is highly receptive to the levels of return on equity which these firms are achieving and has thus priced the equity at a substantial premium to book value. This can also be viewed as an indication that the returns on book value of the sample of companies exceeds the expected returns of investors.

It must be concluded that shareholders today do not require the historically achieved levels of book returns and are pricing equities in a way which will result in much lower achieved investor returns.

The theory of adjustment of book returns for observed market-to-book ratios to determine the required investor rate of return is outlined in Appendix D, and formula (9), based on the reinvestment of earnings, has been chosen.

Using this market-to-book adjustment of returns, assuming industrial profits achieve levels of the past decade and based on current market values, the following results were obtained:

	Period	Returns on Average Common Equity	Market-To-Book Ratio (Current)	Dividend Payout Ratio	Returns Adjusted For Current Market Book Ratio
Means	1998-02	12.00 %	2.13	0.31	10.03%
	1993-02	12.14 %	2.13	0.33	10.01%
Medians	1998-02	10.72 %	1.90	0.31	9.15%
	1993-02	10.68 %	1.90	0.33	9.01 %

Based on the above results, the cost of equity indicated by the low risk industrial sample would be:

Cost of Equity (Low-risk Industrial) 9.01% to 10.03%

The relatively lower risk of utilities based on measures of the "Beta" factor would suggest that the industrial sample is somewhat riskier than that of the sample of utilities. From Schedule 17 the mean beta value for the utilities is shown as 0.35 while in Schedule 29 it can be observed that the beta value for the industrial company sample is 0.60. Additionally, it must be noted that the dividend payout ratio of the industrial sample is substantially lower than the payout ratio of the utility sample. From Schedule 15 and Schedules 27 respectively it can be noted that the median ten year payout ratio for

utilities was 0.71 while the same ratio for the industrial sample was a median value of only 0.33. Since investors must rely on more distant dividends for their returns, this again suggests that this industrial sample is of higher risk.

Thus, based on the apparent higher risk of this industrial sample, I have adjusted the required return downward by 75 basis points for the lower risk of regulated utility investments. Thus, given that Hydro is comparable in risk to the average regulated company, the results based on the industrial sample are:

Cost of Equity (Hydro)	8.26% to 9.28%
Indicated Risk Premium: (Over 30 year Canada Bond yield of 5.53%)	2.73% to 3.75%

Q. Based on the comparable earnings of the utilities sample, what is your conclusion on the cost of equity capital to Hydro?

A. The returns on common equity for the sample of utilities are shown in Schedule 9. While the utilities shown have both regulated and unregulated activities, the returns on common equity are significantly impacted by the returns allowed by regulatory boards as shown in Schedule 35 and thus, might be open to the possibility of circular reasoning. However, consideration of the results achieved by this sample, when combined with market-to-book ratios, is directly relevant.

If the returns granted by a board are above or below the levels of returns required by the providers of equity capital, this will be quickly be reflected in the market value and result in a market-to-book ratio above or below 1.00 , respectively.

The returns earned on common equity for the sample of utilities peaked in 1997 and have been declining. The mean return for the sample was 11.70% for 2002 with a median return of 11.90%. These returns are below the 1993-2002 results which showed a mean of 12.55% and median of 12.46%. Comparison of the results for 2002 of the sample with the allowed regulatory rates of return in Schedule 35 indicate that on average the companies are clearly earning returns in excess of those allowed on regulated activities with some notable volatility across the sample.

The market response to the utilities sample's level of returns can be seen from Schedule 6. Consistently, for every year of the ten years from 1993 to 2002, the market-to-book ratio means and medians have been significantly above 1.00 and have, in fact shown a mean value of 1.61. It is of particular note that the current market-to-book ratios for the sample has a mean value of 1.94 and median of 1.85. These high market to book ratios prevail despite the lower returns achieved in 2002. It must be concluded that investors find the achieved returns highly attractive and well in excess of required returns. While non-regulated activities do affect these results, nevertheless, investors are clearly indicating that the achieved results for the utilities are well above levels required for the level of risks involved.

Again, based on the same adjustment procedure followed for the low-risk industrial sample, the cost of equity capital is as follows:

	Period	Returns on Average Common Equity	Market-To-Book Ratio (Current)	Dividend Payout Ratio	Returns Adjusted For Current Market Book Ratio
Means	1998-02	13.15%	1.94	0.64	9.07%
	1993-02	12.55 %	1.79	0.71	8.23%
Medians	1998-02	12.77 %	1.85	0.64	9.01%
	1993-02	12.46 %	1.85	0.71	8.40%

Based on these results, investors in the utilities sample are indicating that, for a market-to-book ratio of 1.00, the current required return on equity is given by the range of 8.23% to 9.07%.

It might be further pointed out that Fortis, the only company in the sample regulated by this Board and of very comparable risk to that of Hydro, had a rate of return on equity of 11.87% in 2003 and is trading at a market-to-book ratio of 1.52. This indicates that a return of 11.97% is well above the required yield by investors. Applying the same adjustment formula to the Fortis results, based on average payout ratios, indicates a required return of only 9.07%. It is notable that Fortis results include both regulated and unregulated activities which makes Fortis riskier than Hydro.

Given that the sample of utilities has substantial amounts of non-regulated activities, I would conclude that the indicated level of required returns is in excess of that of the regulated activities of the sample. An adjustment of 25 basis points for the higher risk of the sample relative to regulated activities of Hydro results in the following:

Cost of Equity: 7.98% to 8.82%

(Hydro)

Indicated Risk Premium: 2.45% to 3.29% .

(Over 30 year Canada Bond yield of 5.53%)

The market is indicating that the awarded levels of return on regulated activities exceed the average returns required by investors and are not keeping pace with the lower cost of capital which has emerged.

Q. Can you comment on the use of the comparable earnings test without any adjustment for market-to-book ratios?

A. As can be noted from the above results the market valuations for both low-risk industrials and the utilities sample well exceed the book values of these companies. The use of a comparable earnings test without adjustment for market-to-book ratios would lead to significant over-statements of the current cost of equity capital. The allowance of such unadjusted returns would lead to over-compensation of current equity shareholders of the regulated utilities by the provision of earnings well above the cost of equity. Provision of returns above cost violates the fairness principle for customers of regulated companies.

The use of unadjusted comparable earnings results should be rejected and the significance of the distortions in such an approach should be recognized. The best indicator of such distortion is the market-to-book ratio which provides a measure of the extent of this distortion and the levels of currently required returns. When the market value

significantly exceeds book values, the returns to existing shareholders will exceed the allowed returns while the returns to new shareholders will fall short of the allowed returns. This effect is illustrated numerically in Appendix E. In effect, the regulator will be permitting existing shareholders not only to earn above their required return but to enhance the return above the allowed regulatory return through sale of shares at above book values. Any significant reliance on the unadjusted comparable earnings test would lead to such a result.

DISCOUNTED CASH FLOW (DCF) APPROACH

Q. Based on the DCF approach applied to the utility sample, what is your conclusion about the cost of equity capital to Hydro?

A. The DCF approach can be applied directly to the observed performance of the utility sample. This sample of companies most closely fits the requirements of the DCF model that earnings and dividends will exhibit relatively stable levels of correlated growth. Given the inconsistent patterns of earnings and dividend growth in the past decade and the lower significance of dividend yields, the DCF model results have become somewhat less reliable indicators.

The dividend yields of the sample of utilities is shown in Schedule 10. Dividend yields for the sample have generally declined over the past decade and are currently at a median level of 3.65% . Such current yields are well below the 1993-2002 median

level of 4.76%. Declines in dividend yields have followed the trends in bond yields with investors accepting lower yields.

The growth rates achieved by earnings, dividends and book values on a per share basis by the utility sample are shown in Schedules 11,12 and 13 , and are summarized below together with the sustainable growth rates based on the observed rates of returns and retention and from Schedules 9 and 15:

	Period	Dividend Growth	Earnings Growth	Book Value Growth	Sustainable Growth
Means	1998-02	4.19%	15.01%	6.22%	4.73%
	1993-02	4.44%	12.14%	5.71%	3.64%
Medians	1998-02	3.32%	11.85%	6.97%	4.60%
	1993-02	3.38%	9.32%	5.80%	3.61%

Changes in earnings per share for the utility sample have been highly unstable due to several major restructurings which have occurred in the sample and are clearly not well correlated with the growth in dividends which is the basis of the DCF model. Dividend payout ratios have fallen somewhat over the decade indicating that corporate free cash flow growth has fallen behind reported earnings growth. From the above table it is clear that dividend growth appears to have been most consistent with the level of sustainable growth. (Sustainable growth is the measured by the rate of return on equity times the percentage of the earnings retained.)

Based on the above growth rates excluding outliers and relying on the actual levels of dividend growth and measures of sustainable growth, it is my conclusion that investors in the utility sample can anticipate future growth in dividends in the range of 4.00% to

5.00%. Combining this assessment with currently indicated dividend yields provided the following results:

	Current Indicated Dividend Yield		Expected Dividend Growth Rate	Cost of Equity
Mean	3.81%	+	4.00% to 5.00 %	= 7.81% to 8.81%.
Median	3.65%	+	4.00% to 5.00 %	= 7.65% to 8.65%.

Again, with the utility sample being of somewhat higher risk than the regulated activities of Hydro, an adjustment of 25 basis points to these results is required and provides the DCF based assessment of :

Cost of Equity: 7.40% to 8.56%
(Hydro)
Indicated Risk Premium: 1.87% to 3.03%
(Over 30 year Canada Bond yield of 5.53%)

Q. Based on the DCF approach applied to the sample of low-risk industrials, what is your conclusion about the cost of equity capital to Hydro?

A. The performance of industrial firms tends to be more unstable and may violate the stability assumptions of the DCF approach. However, any concern over regulatory circularity is avoided by the use of the low-risk industrial sample. The same method applied for the utility sample has been applied to the low-risk industrials.

The rates of growth achieved by earnings, dividends and book values on a per share basis by the low-risk industrial sample are shown in Schedules 23, 24 and 25 and are summarized below together with the sustainable growth rates based on the observed rates of returns and retention and from Schedules 21 and 27:, respectively, and are summarized below:

	Period	Dividend Growth	Earnings Growth	Book Value Growth	Sustainable Growth
Means	1998-02	16.59%	17.17%	8.11%	8.28%
	1993-02	15.17%	25.97%	8.71%	8.13%
Medians	1998-02	4.04%	9.68%	7.50%	7.40%
	1993-02	4.69%	18.41%	8.15%	7.14%

The above results are highly erratic and highly influenced by outlier events. Again, sustainable growth appears to be the most stable indicator of the future potential and actual dividend growth, excluding severe outliers has been quite limited.

Relying mainly on the level of sustainable growth due to the erratic performance of other indicators, I estimate that the currently expected future growth in dividends is in the range of 7.50% to 8.50%.

Combining the estimated growth in dividends of 7.50% to 8.50% with the current dividend yield provides the following assessment:

	Current Indicated Dividend Yield		Expected Dividend Growth Rate	Cost of Equity
Mean	1.61%	+	7.50% to 8.50 %	= 9.11% to 10.11%
Median	1.30%	+	7.50 % to 8.50%	= 8.80% to 9.80%.

Again, since the industrial sample is higher in risk than the utilities a downward adjustment is required for the lower risk of Hydro regulated activities of 75 basis points as discussed above. This provides the DCF-based assessment of :

Cost of Equity: 8.05% to 9.36%

(Hydro)

Indicated Risk Premium: 2.52% to 3.83% .

(Over 30 year Canada Bond yield of 5.53%)

MARKET PRESSURE

Q. What provision would you recommend for the market pressure?

A. Hydro is a Provincially owned company and does not have any shares traded in the capital market. Furthermore, there is no envisioned issue of shares at the present time. In addition, there is no substantial expansion of the system envisioned over the near term future. Under such conditions, there is no actual market pressure. However, for consistency with the treatment accorded privately owned utilities, a provision of 50 basis points has been included in the return allowance.

V. SUMMARY OF THE RATE OF RETURN ON EQUITY ASSESSMENT

Q. Could you summarize your conclusions with regard to the cost of equity to Hydro?

A. The results of my application of the alternative tests of the cost of equity to Hydro can be summarized as follows:

Risk Premium Test:

Cost of Equity 7.53% to 8.03%

Indicated Risk Premium: 2.00% to 2.50%

Comparable Earnings Test:

Low –risk Industrials:

Cost of Equity 8.26% to 9.28%

Indicated Risk Premium: 2.73% to 3.75%

Utility Sample:

Cost of Equity: 7.98% to 8.82%

Indicated Risk Premium: 2.45% to 3.29%

DCF Test:

Low risk Industrials

Cost of Equity: 8.05% to 9.36%

Indicated Risk Premium: 2.52% to 3.83%

Utility Sample:

Cost of Equity: 7.40% to 8.56%

Indicated Risk Premium: 1.87% to 3.03%

With the now well established trends in the bond market yields and the general instability in the low risk industrial sample results, I have placed the greatest reliance on the risk

premium test and the results of the utility sample. My conclusion is that the risk premium which would reflect the cost of equity to Hydro regulated operations is in the range of 2.00% to 3.25% before consideration of market pressure and 2.50% to 3.75% with a 50 basis point allowance.

Given that the current yield on 30 year Canada bonds is 5.53%, I would recommend that Hydro be allowed a return on equity in the range of 8.50% and 9.00% on a deemed equity component of 40%. As discussed above, this level of equity return would imply that a target return on rate base of 7.873% would be appropriate over the medium term. (This target return on rate base includes a provision for the debt guarantee fee paid to the Province.)

Q. Does this complete you written testimony?

A. Yes.

APPENDIX A

PROFESSIONAL QUALIFICATIONS OF DR. BASIL A. KALYMON

PROFESSIONAL QUALIFICATIONS

BASIL A. KALYMON

Background

Basil Kalymon is a professor of finance at the Richard Ivey School of Business, University of Western Ontario . He holds an Honours B.Sc. degree in Statistics from the University of Toronto and a Ph.D. in Administrative Sciences from Yale University. His academic honours include fellowships from the University of Toronto, Yale and the Ford Foundation. He has served for over thirty years on the faculties of the Graduate School of Management at UCLA, the Graduate School of Business at Harvard and the Rotman School of Management at the University of Toronto prior to his current appointment. His career has included an appointment as Associate Dean and member of the Government Council of the University of Toronto.

He has also conducted an independent consulting practice with a broad range of clients in Canada and the US. Dr. Kalymon's expertise is in the areas of financial planning, treasury, policy analysis, economic analysis and regulation. His experience has included extensive exposure in the regulatory, energy, mining, real estate and financial sectors. He has served on the boards of a trust company, a mortgage investment corporation, real estate ventures and a medical technology company.

Professional Experience

Financial Analysis/Regulation

Examined the impact of the pipeline expansion on the domestic and export tariffs of a pipeline. A large computer model was customized to model the financial aspects of the pipeline and it was used to analyze different volume, cost and revenue scenarios. Arising out of the review was the development of alternative toll structures to ensure that the risk associated with the total expansion was aligned with the parties receiving the benefits.

Provided input into the development of cost of capital testimony for a number of major Canadian utilities. Responsibilities included development of approaches to deal with inflation, deferred taxes and divisional structure. The material was used in testimony and cross-examination.

Conducted a review of pricing and marketing practices with regard to natural gas for a major Canadian utility. The study made policy recommendations with regard to future directions and trends

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Directed a tariff design study for a major petroleum pipeline in Canada. The recommendations of the study led to a change in the company's policy on surcharging special services.

Developed and presented expert testimony on tariff levelling issues for the Ministry of Energy of Ontario with regard to the tolls application of Trans Quebec and Maritimes Pipeline. The study included issues of customer cross-subsidization and questions of inter-generational equity. This testimony was submitted to the hearing of the National Energy Board as intervenor's direct evidence.

Developed and presented expert testimony over many years on cost of capital for the Ministry of Energy of Ontario with regard to the tolls application of Trans-Canada PipeLines. This testimony was submitted to annual hearings of the National Energy Board as intervenor's direct evidence.

Developed expert testimony on cost of capital for the Ontario Energy Board with regard to the tolls application of Consumer's Gas Company and provided expert advice for cross-examination of company witnesses.

Developed and presented tariff levelling evidence for Interprovincial pipeline for submission to the National Energy Board in support of a facilities application for developing a new service. The issues considered included consideration of competitive market pricing and the smoothing of tariffs for volume build-up.

Developed and presented expert testimony on cost of capital for the Ministry of Energy of Ontario with regard to the tolls application of Trans Quebec and Maritimes Pipeline. Also provided expert advice with regard to economic issues raised by the application and assisted in the cross-examination of company witnesses.

Conducted a review of regulatory procedure and toll design practices of the major gas distributors and electrical utilities in Manitoba, Ontario and Quebec. This review was part of study on the competitive position of natural gas in Eastern markets. The study was under-taken jointly for the Department of Energy, Mines and Resources, Federal Government and the Ministry of Energy and Mineral Resources, Province of Alberta as background information for gas pricing negotiations.

Testified on the cost of capital and capital structure of the Maritime Electric Company. Written evidence was submitted on behalf of the Public Utilities Board of Prince Edward Island

Testified on the cost of capital and capital structure of Newfoundland Light and Power. Written evidence was submitted on behalf of the Board of Commissioners of Public Utilities of Newfoundland and Labrador.

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Developed and presented expert testimony with regard to the National Energy Board hearing on Availability of Services on the TransCanada PipeLines system. Matters included the financing of take-or-pay obligations and tariff design.

Testified on the cost of capital and capital structure of Alberta Government Telephones. Written evidence was submitted on behalf of the company and presented at the Alberta Public Utilities Board hearings.

Conducted a review of tariff practices and methodology for pricing services in a major multi-product oil pipeline. An extensive report was developed which formed the basis for the company's restructuring of product surcharges and was included as a submission to fulfil the requirements imposed by a regulatory agency.

Developed a model for assessing the financial impact of a transfer of an electrical utility to Territorial government control for the Energy, Mines and Resources Secretariat.

Expert testimony was developed in regard to the capital structure, cost of capital, investment returns and underwriting margins of the Ontario automobile insurance industry. The testimony was presented on behalf of the Ontario Automobile Insurance board and the methodology developed formed the basis of the Board's decision.

Testimony was developed and presented with respect to the cost of capital and capital structure of Maritime Telephone and Telegraph. This evidence was presented on behalf of the board of Commissioners of Public Utilities of Nova Scotia.

Testimony was developed and presented with respect to the cost of capital structure of Newfoundland Telephone. This evidence was presented on behalf of the Board of Commissioners of Public Utilities of Newfoundland and Labrador.

Testimony was developed and presented with respect to the cost of capital and capital structure of Island Telephone. This evidence was presented on behalf of the Public Utilities Board of Prince Edward Island.

Developed and presented testimony on the financial targets and use of CPI adjustments appropriate for Nova Scotia Power Corporation. The evidence was presented on behalf of the Board of Commissioners of Nova Scotia.

Testimony on the rate design for NGL Facilities was developed on behalf of Interprovincial Pipelines and submitted to the National Energy Board.

Testimony on the Surcharges for alternative petroleum streams on the Trans Alaska Pipeline was developed on behalf of ARCO Alaska and submitted to the U.S. Federal Energy Regulatory Commission in Washington.

Testimony on the cost of capital, capital structure and debt defeasance in relationship to the first application after privatization of Nova Scotia Power was developed on behalf of the Nova Scotia Board of Commissioners of Public Utilities.

BASIL A. KALYMON

Testimony on the issue of adjustments by the quality bank for alternative petroleum streams on the Trans Alaska Pipeline System was developed on behalf of Conoco Inc. and submitted to the U.S. Federal Energy Regulatory Commission in Washington.

Prepared testimony on the cost of capital, capital structure and rate increases of Newfoundland Light & Power on behalf of the Consumer Advocate and submitted to the Board of Commissioners of Public Utilities of Newfoundland and Labrador.

Developed and presented testimony with respect to the rate structure and rate base on the reversal of the Montreal Extension on behalf of Interprovincial Pipelines. This analysis was submitted to a National Energy Board hearing.

Prepared a report with respect to the structure of the auto leasing industry on behalf of the Canadian Motor Vehicle Manufacturers Association.

Prepared a report on profit margins and volumes in the securities lending operations of a major Canadian trust company.

Prepared testimony on the cost of capital, capital structure and rate increases of Newfoundland Hydro on behalf of the Consumer Advocate and submitted to the Board of Commissioners of Public Utilities of Newfoundland and Labrador with regard to the initial hearing under revised regulatory legislation.

Conducted a review of risk management practices for Sherrit International , an international corporation with activities in mining, utilities and energy. An assessment of hedging practices for foreign exchange was provided with recommendation for future risk management policies and procedures.

Selected Publications

Invited speaker at numerous conferences and meetings including the Financial Executives Institute, Prospectors and Developers Conference and the International Association of Energy Economists.

The Management of Canadian Resources: Concepts and Cases. Text published by McGraw-Hill Publishers.

Profits in the Real Estate Industry, Fraser Institute.

"Methods of Large Project Assessment Given Uncertainty in Future Energy Pricing", in Management Science.

"Flow-Through Share Financing", Centre for Resource Studies, Queen's University.

"Global Innovation and the Impact on Canada's Financial Market", book published by John Wiley & Sons.

Professional Associations

Institute of Management Sciences, Administrative Sciences Association of Canada

APPENDIX B

SAMPLE SELECTION FOR SCHEDULES 6-29 UTILITIES AND INDUSTRIALS

SAMPLE SELECTION FOR SCEDULES 6 – 17: UTILITIES

- A sample of regulated utilities and pipeline was selected from the Financial Post Datagroup online database using the industry codes:

  - 55 Utilities
  - 50 Telecommunication Services
  - 10 Energy

- Firms chosen must have at least twelve years of data ending in 2002 available in the Financial Post database

SAMPLE SELECTION FOR SCEDULES 18 – 29: LOW RISK INDUSTRIALS

- A sample of non-regulated companies was selected from the Financial Post Datagroup online database using the industry codes:

  - 20 Industrials
  - 25 Consumer Discretionary
  - 30 Consumer Staples
  - 35 Healthcare
  - 15 Materials

- The firms selected from these groups have the lowest ten-year variance in return on average common equity over the 1991 to 2001 period and that met the following criteria:

  - trading of more than 1 million share in 2001; and
  - at least eleven years of data availability ending 2001.

  The selection was based on 2001 data

- Dorel Industries Inc. has been excluded because it has been de-listed
- DuPont was excluded since it was acquired by the parent.
- Bombardier and Noranda were excluded due to extreme negative volatility in 2002 earnings.

DEFINITIONS OF RATIOS AND FORMULAE IN SCHEDULES 6 -29

1. Market-to-Book Ratio:

   = Average Market Value in Year
   Average Book Value in Year

   = (Fiscal High Price/Share + Fiscal Low Price/Share)/2
   (Book Value/Share Yr-end Yr(n) + Book Values/Shares Yr-end (N-1))/2

2. Debt to Equity Ratio:

   = Long Term Debt + Debt (net of current portion)
   Common Equity + Minority Interest

3. Preferred to Equity Ratio:

   = Book Value of Preferred Stock
   Total Shareholders' Equity

4. Return on Average Common Equity:

   = Net Income Before Discontinued Operations – Preferred Dividend Requirement
   (Common Equity (yr x) + Common Equity (yr x-1))/2

5. Dividend Yield:

   = Dividends per Common Share * 100%
   Average Market Value in Year

6. Change in Earnings per Share:

   = % change in eps year over year, not calculated if values are negative

7. Change in Dividends per Share:

   = % change in dividends year over year

8. Change in Book Value per Share:

   = % change in book value per share year over year, not calculated if values are negative

9. Debt Interest Coverage Ratio:

$$= \frac{\text{Operating Income – Depreciation + Investment and other income}}{\text{Interest Expense}}$$

10. Dividend Payout:

$$= \frac{\text{Common Dividends Declared * 100}}{\text{Net Income before discontinued operations – Preferred Dividends}}$$

11. Debt Interest and Preferred Dividend Coverage Ratio

$$= \frac{\text{Operating Income – Depreciation + Investment and Other Income}}{\text{Interest Expense + Preferred Dividend Requirement}}$$

12. Deferred Taxes as a Percentage of Total Invested Capital:

$$= \frac{\text{Deferred Income Taxes (Balance Sheet)}}{\text{Total Assets – Current Liabilities}}$$

13. Averages are for the data in the rows.

14. Compound growths are a measure of the growth of the data in rows.

15. Compound averages are the geometric average of the data in the rows. If a data element is less than – 100%, it is set to -100% to eliminate the imaginary component in the calculation.

16. Means are simple averages of the data in the column, including the average and compound average columns.

17. Medians are the middle values in the column, or the average of the middle values.

18. Current figures for Market-to-Book ratio are defined by:

$$\frac{\text{Current Market Price per Share}}{\text{Previous Year-end Book Value per Share}}$$

APPENDIX C

STATISTICAL MEASURES OF RISK

STATISTICAL MEASURES OF RISK

Variance was defined by the statistical relationship:

$$\text{Variance} = 1/N \sum_{T=1}^{N} (R_T - R)^2$$ where

R_T = Return in year t.
R = Average return.
T = Index of year.
N = Number of years

Similarly, the "Beta: measure of volality which derives from capital asset pricing theory is defined as:

$$\text{Beta} = \frac{\text{Covariance } (R^M, R)}{\text{Variance R}}$$

Where R^M = Return on Composite Index
R = Return on Group Index

These measures provide indications of the degree of risk of alternative industry groups relative to the composite or average stock.

APPENDIX D

RELATIONSHIP BETWEEN INVESTORS' REQUIRED RETURN AND THE RETURN ON BOOK VALUE AND THE MARKET-TO BOOK RATIO

RELATIONSHIP BETWEEN INVESTORS' REQUIRED RETURN AND THE RETURN ON BOOK VALUE AND THE MARKET-TO BOOK RATIO

Assume the following:

k = investor's return requirement

D = dividends per share

E = earnings per share

P = market price of the security

B = book value per share

b = rate of earnings retention, RE/E

r = initial rate of return on book equity

RE = per-share retained earnings

g = expected growth in per-share earnings

From DCF theory:

$$k = D/P + g \qquad (1)$$

From the definition of the rate of return on book equity:

$$r = E/B = D/B + RE/B = D/B(1-b) \qquad (2)$$

Now, assume that all re-investments in the firm are allowed to earn only the investors' required return.

Then, it follows that:

$$g = bk \qquad (3)$$

Substituting (3) in equation (1), we get:

$$k = D/P + bk \qquad (4)$$

or equivalently, by solving (4), we get:

$$k = D/P(1-b) \qquad (5)$$

Now, taking the ratio of r to k from (2) to (5), we see that:

$$r/k = D/B(1-b) \ / \ D/P(1-b) \qquad (6)$$

Finally, solving for k in (6), we see that:

$$k = r / (P/B) \qquad (7)$$

Alternatively, if in equation (3) we assume that investors expect that all re-investments in the firm continue to earn the currently observed return on book equity and growth is limited to re-investment of earnings then we obtain:

$$g = br \qquad (8)$$

and by a process of algebraic determination we get

$$k = (r + br(P/B-1))/(P/B) \qquad (9)$$

APPENDIX E

ILLUSTRATIONS OF THE EFFECT OF MARKET-TOBOOK RATIOS ON REALIZED RATES OF RETURN

MAINTENANCE OF ALLOWED RATES OF RETURN
BY MARKET-TO-BOOK RATIO OF 1.O

(1)	Utility Allowed Rate of Return		= 9.0%
(2)	Market-to-Book Ratio of Utility		= 1.00
(3)	Initial Number of Shares Outstanding		=1,000
(4)	Initial Book Value per Share		= $50
(5)	Total Initial Book Value	[(3)*(4)]	= $50,000
(6)	Additional Number of Shares Issued		= 40
(7)	Selling Price per Additional Shares	[(2)*(4)]	= $50
(8)	Total Additional Book Value	[(6)*(7)]	= $2,000
(9)	Total New Book Value	[(5) + (8)]	= $52,000
(10)	New Book Value per Share	[(9)/((3) + (6))]	= $50
(11)	Initial Earnings per Share	[(4)*(1)]	= $4.50
(12)	New Earnings per Share	[(10)*(1)]	= $4.50
(13)	Rate of Return to Initial Investors	[(12)/(4)]	= 9.0%
(14)	Rate of Return to New Investors	[(12)/(7)]	= 9.0%

EXCESS RETURNS GENERATED BY EXCESSIVE MARKET-TO-BOOK RATIOS

(1)	Utility Allowed Rate of Return		= 11.0%
(2)	Market-to-Book Ratio of Utility		= 2.00
(3)	Initial Number of Shares Outstanding		=1,000
(4)	Initial Book Value per Share		= $50
(5)	Total Initial Book Value	[(3)*(4)]	= $50,000
(6)	Additional Number of Shares Issued		= 40
(7)	Selling Price per Additional Shares	[(2)*(4)]	= $100
(8)	Total Additional Book Value	[(6)*(7)]	= $4,000
(9)	Total New Book Value	[(5) + (8)]	= $54,000
(10)	New Book Value per Share	[(9)/((3) + (6))]	= $51.92
(11)	Initial Earnings per Share	[(4)*(1)]	= $5.50
(12)	New Earnings per Share	[(10)*(1)]	= $5.71
(13)	Rate of Return to Initial Investors	[(12)/(4)]	= 11.41%
(14)	Rate of Return to New Investors	[(12)/(7)]	= 5.71%

SCHEDULES

GENERAL ECONOMIC CONDITIONS **SCHEDULE 1A**

(Rates of change, seasonally adjusted %)

Year Quarter Month	GDP Constant Prices	Monetary Aggregates M1	Monetary Aggregates M2+	CPI Excluding Food, Energy and Indirect Taxes Year to Year	CPI All Items	Wage Settlements Excluding Total COLA (Total)	Corporate Profits Before Tax (% change)	Unemployment Rate (%)	Balance of Payments Current Account ($millions)	Canada 10 Yr Benchmark Gov't Bonds
Column 1	2	3	4	5	6	7	8	9	10	11
1990	0.2	1.4	11.8	3.5	4.8	6.1	(23.2)	8.1	(23,135)	10.34
1991	(2.1)	2.6	8.6	2.8	5.6	3.4	(25.9)	10.3	(25,629)	8.32
1992	0.9	7.0	5.8	1.8	1.5	2.0	1.4	11.2	(25,360)	7.86
1993	2.3	9.5	4.2	2.1	1.8	0.5	18.5	11.4	(28,093)	6.57
1994	4.8	13.2	1.9	1.8	0.2	0.2	55.7	10.4	(17,730)	9.07
1995	2.8	6.6	3.8	2.3	2.2	0.8	16.4	9.4	(6,099)	7.11
1996	1.6	12.2	4.4	1.7	1.6	0.6	4.2	9.6	4,600	6.37
1997	4.2	16.9	0.8	1.9	1.6	1.4	9.4	9.1	(11,397)	5.61
1998	4.1	10.3	(1.1)	1.3	0.9	1.7	(1.5)	8.3	(11,363)	4.89
1999	5.5	7.6	3.6	1.4	1.7	2.0	27.8	7.6	2,570	6.18
2000	5.3	14.7	5.8	1.3	2.7	2.5	23.8	6.8	30,713	5.35
2001	1.9	12.1	6.5	2.1	2.6	3.2	(7.0)	7.2	26,864	5.44
2002	3.3	12.0	7.3	2.3	2.2	2.7	4.6	7.7	23,366	4.88
Annual Rates										
1999 II	4.8	7.2	3.6	2.0	3.0	2.5	7.1	7.9	(855)	5.46
III	5.8	6.6	6.3	1.8	2.7	2.1	13.0	7.5	4,420	5.77
IV	6.8	9.9	4.5	0.9	2.4	2.2	6.7	7.0	1,703	6.18
2000 I	5.7	20.5	7.8	0.6	2.8	2.3	2.9	6.8	3,900	6.03
II	1.2	22.0	6.6	1.3	1.7	2.5	3.7	6.7	5,893	5.93
III	5.3	14.8	5.7	1.8	4.0	2.4	4.7	6.9	11,033	5.75
IV	1.7	8.4	2.9	2.5	4.2	3.0	4.7	6.9	9,887	5.35
2001 I	1.3	11.2	7.2	1.7	1.4	3.9	(2.0)	6.9	9,464	5.41
II	1.1	9.8	8.0	2.9	4.7	3.1	(4.5)	7.0	7,976	5.73
III	(0.7)	11.4	5.9	2.1	0.3	3.2	(12.1)	7.2	6,201	5.32
IV	3.8	21.2	12.2	0.7	(1.8)	3.0	(9.1)	7.6	3,223	5.44
2002 I	5.8	10.3	7.6	2.9	3.4	2.9	10.4	7.8	4,361	5.79
II	3.8	7.1	4.3	3.0	3.6	2.6	9.9	7.6	5,625	5.37
III	2.7	14.4	7.3	2.8	4.3	2.7	4.5	7.6	7,961	4.92
IV	1.6	6.5	3.1	2.3	4.0	3.0	1.8	7.6	5,419	4.88
2003 I	2.4	1.2	3.6	4.1	5.7	2.9	8.0	7.4	6,079	5.13
II	-	-	-	-	-	-	-	-	-	-
Monthly Rates										
2002 A	-	0.9	0.5	0.4	0.5	-	-	7.5	-	5.14
S	-	0.6	0.3	0.1	0.1	-	-	7.7	-	4.92
O	-	1.0	0.5	0.2	0.5	-	-	7.6	-	5.16
N	-	(0.1)	0.1	0.4	0.4	-	-	7.5	-	5.18
D	-	(0.2)	(0.5)	(0.2)	(0.1)	-	-	7.5	-	4.88
2003 J	-	0.8	1.0	0.8	1.1	-	-	7.4	-	5.02
F	-	(0.3)	-	0.2	0.4	-	-	7.4	-	4.93
M	-	(0.3)	0.4	-	(0.1)	-	-	7.3	-	5.13
A	-	0.7	-	(0.4)	(0.7)	-	-	7.5	-	4.90
M	-	-	-	-	-	-	-	7.8	-	4.50
J	-	-	-	-	-	-	-	-	-	
J	-	-	-	-	-	-	-	-	-	-
A	-	-	-	-	-	-	-	-	-	-
	A2 - (11)	A2 - (1)	A2 - (4)	A2 - (18)	A2 - (17)	H9 (V43270	H1 - (D14806)	A2 - (14)	J1 (D59832)	A2 - (26)

Source: Bank of Canada Review Spring 2003 and Banking and Financial Statistics June 2003

SCHEDULE 1B

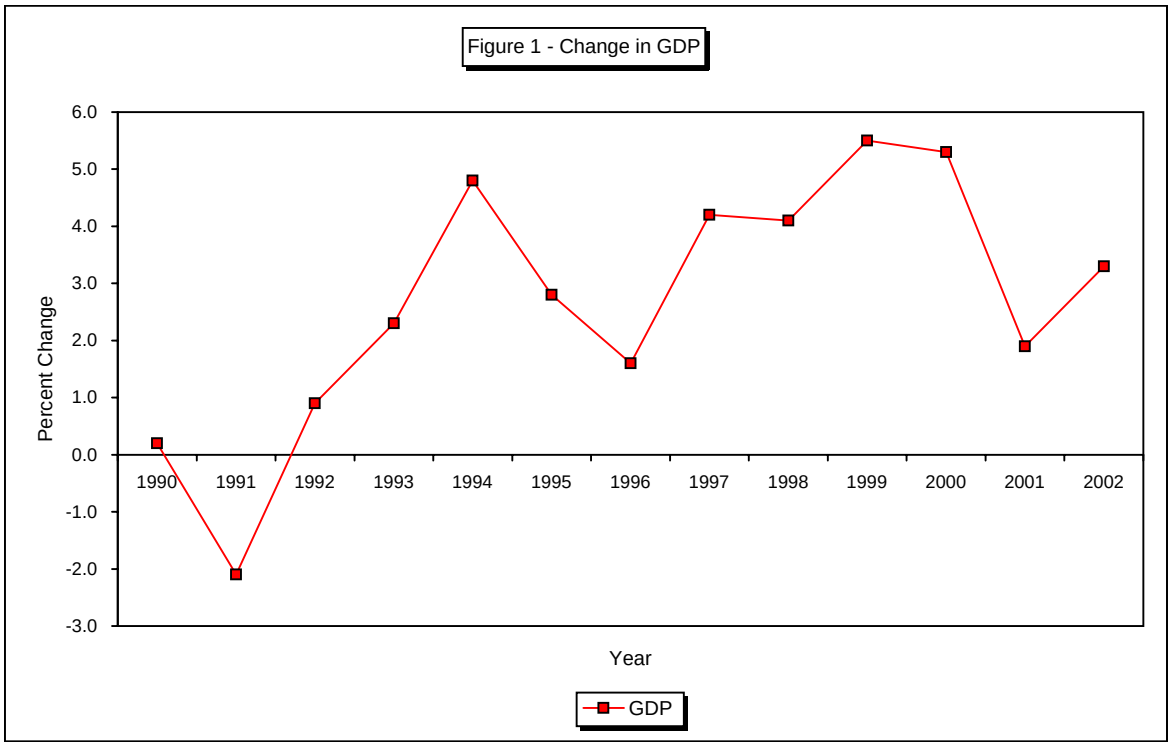
Figure 1 - Change in GDP
6.0
5.0
4.0
3.0
2.0
1.0
0.0
-1.0
-2.0
-3.0
Percent Change
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Year
GDP

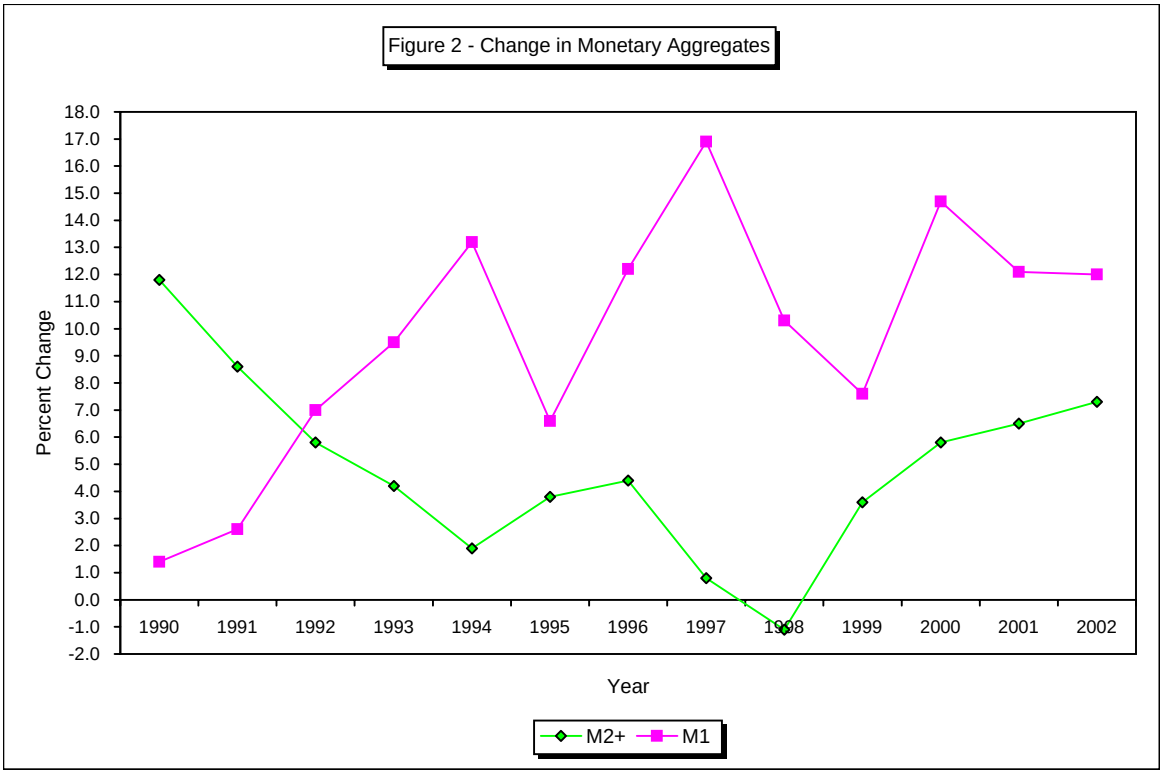
Figure 2 - Change in Monetary Aggregates
18.0
17.0
16.0
15.0
14.0
13.0
12.0
11.0
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
-1.0
-2.0
Percent Change
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Year
M2+
M1

SCHEDULE 1C

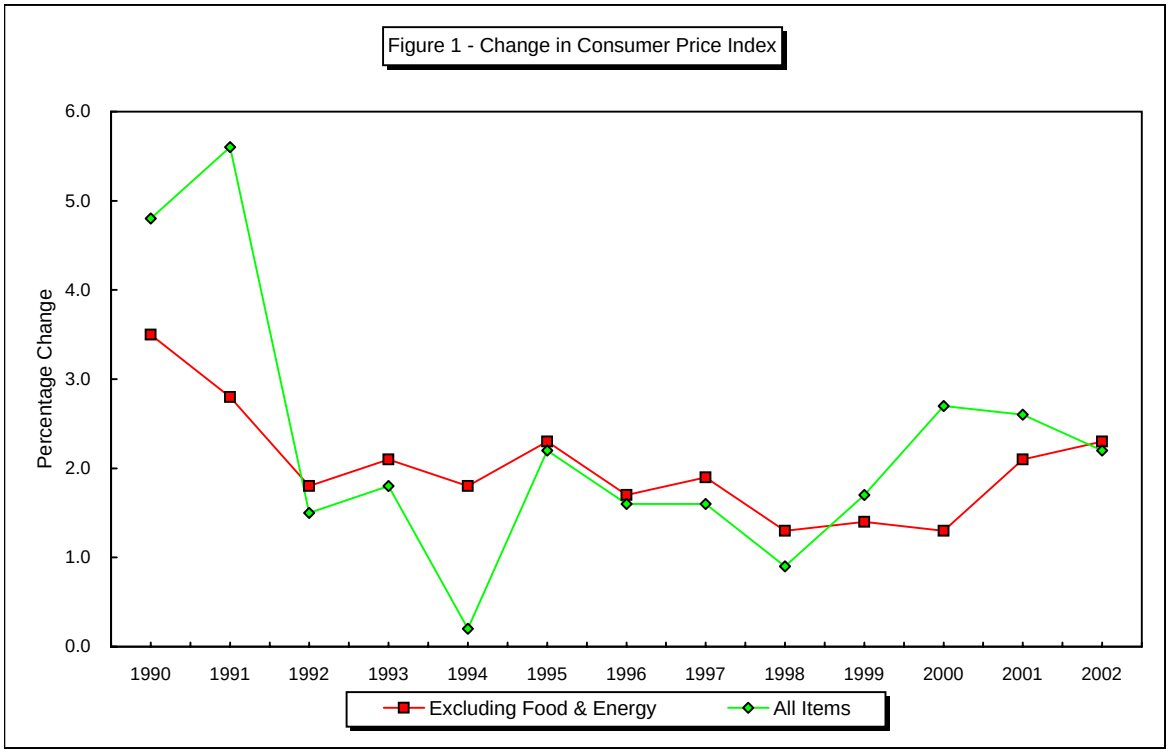
Figure 1 - Change in Consumer Price Index
Percentage Change
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Excluding Food & Energy
All Items

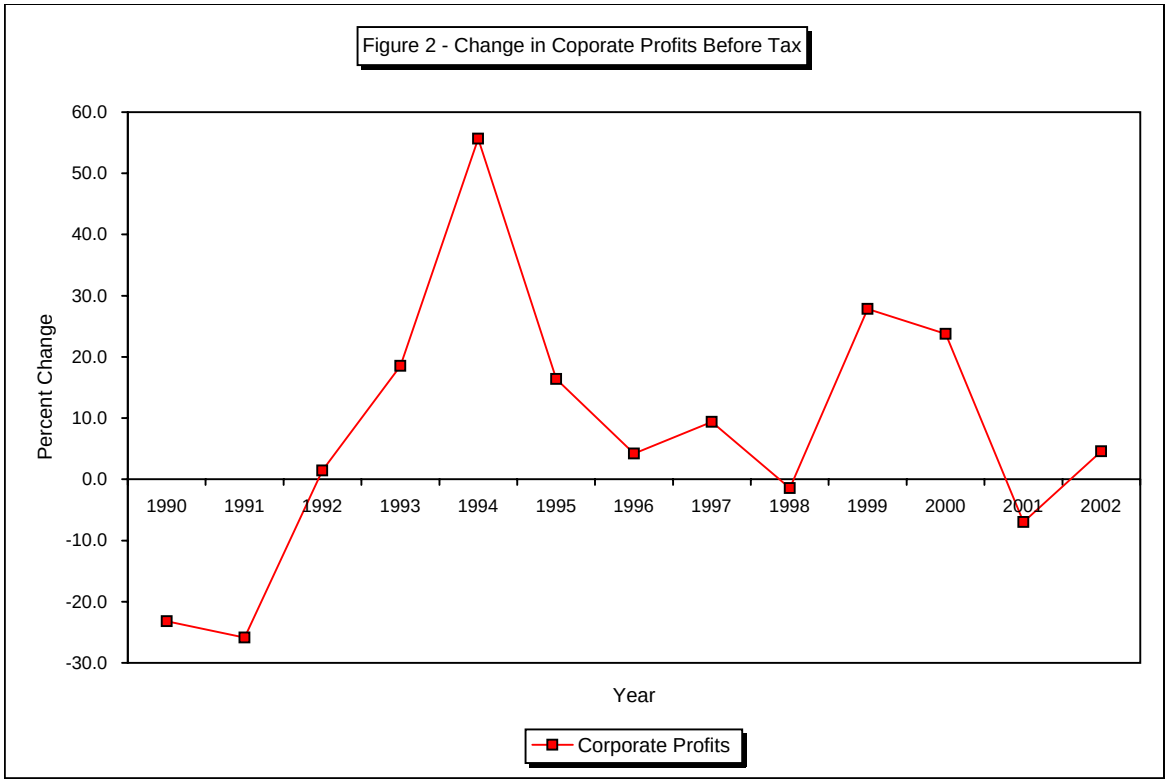
Figure 2 - Change in Coporate Profits Before Tax
Percent Change
60.0
50.0
40.0
30.0
20.0
10.0
0.0
-10.0
-20.0
-30.0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Year
Corporate Profits

SECURITY ISSUES **SCHEDULE 2**

(Millions $Cdn.)

Year Quarter	Gov't of Canada Bonds	Gov't of Canada Total	Provincial Bonds	Municipal Bonds	Corporations		Total	Total Including Short Term	Of Which Placed In	
					Bonds	Preferred & Common			U.S.	Other
Column 1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
1982	13,975	19,000	14,913	753	5,116	6,732	41,737	51,371	2,924	9,203
1983	13,013	26,313	12,997	773	2,527	10,026	39,452	58,229	1,769	4,170
1984	14,902	25,552	11,448	933	2,131	9,189	38,744	52,848	189	4,867
1985	21,442	31,167	10,461	496	5,683	11,458	50,010	62,370	1,668	9,208
1986	10,641	20,941	15,527	864	11,572	15,319	53,985	78,107	1,908	16,184
1987	19,606	24,106	10,014	465	7,329	13,953	51,470	67,499	1,246	6,766
1988	10,264	31,164	9,755	1,314	11,643	3,438	37,392	71,242	2,885	5,916
1989	(2,651)	22,799	10,216	1,041	17,127	13,056	40,547	74,364	4,186	5,125
1990	7,015	21,865	11,448	972	7,058	5,923	34,259	53,517	7,539	372
1991	19,520	31,720	30,491	1,528	6,478	11,542	72,276	74,640	6,847	11,268
1992	13,088	24,938	22,289	625	2,020	11,183	53,495	53,394	10,093	3,871
1993	22,053	28,503	32,617	546	9,868	20,833	90,204	110,457	25,800	8,397
1994	34,101	27,751	17,907	126	5,629	15,673	75,586	73,881	10,665	11,574
1995	25,695	26,843	14,439	215	19,890	10,571	70,163	78,364	18,984	6,407
1996	33,364	8,181	3,831	153	21,209	21,435	80,136	66,859	25,197	1,544
1997	18,439	(8,107)	3,061	200	39,611	22,834	92,121	94,977	14,644	7,254
1998	9,895	(10,682)	7,860	(14)	34,276	15,285	77,132	89,690	27,121	9,473
1999	2,214	7,573	5,127	(200)	38,225	18,492	78,833	101,940	6,322	(1,531)
2000	(4,958)	(20,008)	477	(390)	23,023	21,232	53,177	59,936	11,103	(12,485)
2001	(17,089)	(789)	4,891	120	56,521	16,965	70,003	71,076	41,930	(9,373)
2002	(8,485)	865	(904)	448	9,360	16,114	39,801	38,466	9,594	(15,642)
Annual Rates										
1999 III	(13,562)	(5,470)	656	(246)	7,729	7,586	7,177	17,605	4,578	(6,994)
IV	11,923	11,356	(453)	112	3,937	3,171	22,162	28,560	2,870	(2,715)
2000 I	(9,343)	(3,243)	(2,366)	(241)	5,583	6,399	4,102	22,024	6,496	(1,007)
II	5,976	(5,874)	3,859	(191)	9,579	5,334	25,563	20,025	(1,120)	(3,013)
III	(3,708)	(11,658)	2,970	84	7,109	3,973	17,436	9,299	5,680	(5,015)
IV	2,117	767	(3,986)	(42)	752	5,526	6,076	8,588	47	(3,450)
2001 I	(6,631)	3,369	(1,217)	(384)	14,849	2,950	12,950	14,991	10,483	(4,957)
II	(4,538)	(9,138)	6,063	(43)	13,731	4,230	23,597	14,198	12,438	(2,982)
III	(3,421)	(2,821)	984	79	8,126	2,224	7,095	8,649	2,005	(537)
IV	(2,499)	7,801	(939)	468	19,815	7,561	26,361	33,238	17,004	(897)
2002 I	4,827	4,027	(2,377)	(392)	11,859	2,684	21,398	15,652	3,508	(1,735)
II	(5,980)	2,720	(4,913)	683	745	6,498	2,401	13,160	6,145	(9,214)
III	(4,023)	(4,723)	3,038	(274)	(1,141)	3,433	6,056	2,885	(1,589)	(1,615)
IV	(3,309)	(1,159)	3,348	431	(2,103)	3,499	9,946	6,769	1,530	(3,078)
2003 I	676	926	(4,735)	(379)	5,921	2,475	7,553	768	(5,662)	(6,494)
II	(3,180)	(280)	(3,677)	-	3,872	649	-	-	-	-
Source:	Statistics Canada and Bank of Canada Banking and Financial Statistics June 2003									
Column:	F4 (B3045)	F4 (B3045) + F5 (B3163)	F4 (B3048)	F4 (B3051)	F4 (B3054)	F4 (B3104)	F4 (B3101)	F4 (B3100)	F4 (B3139)	F4 (B3140)

INTEREST RATES, DIVIDEND YIELDS **SCHEDULE 3A**

Year Month		Bank Rate	Treasury Bills 3-Month	Canada 10 Yr Benchmark Gov't Bonds	Bond Yield Average Scotia McLeod Long-term Provincial	Bond Yield Average Scotia McLeod Long-term Corporate	Corporate Paper 1 Month	TSE Composite Dividend Yield	TSE Composite Price/Earning Ratio	U.S.A. Federal Funds Rate	U.S.A. Treasury Bills 3 Month	U.S.A. Gov't Bonds 5-Year	U.S.A. Long Term Bonds Ind. AAA (Moody)
Column 1		2	3	4	5	6	7	8	9	10	11	12	13
1998	M	5.00	4.75	5.34	5.85	6.06	4.91	1.41	33.80	5.45	5.03	5.57	6.69
	J	5.00	4.87	5.35	5.82	6.01	4.96	1.46	32.53	5.42	4.99	5.48	6.53
	J	5.00	4.94	5.47	5.94	6.13	5.00	1.58	29.63	5.54	4.96	5.52	6.55
	A	6.00	4.91	5.67	6.30	6.50	5.05	1.97	23.29	5.48	4.94	5.11	6.52
	S	5.25	4.91	4.95	5.83	6.29	5.52	1.90	23.91	5.58	4.74	4.23	6.40
	O	5.50	4.71	5.00	5.92	6.42	5.34	1.72	25.29	4.95	4.08	4.18	6.37
	N	5.25	4.78	5.18	5.85	6.26	5.05	1.69	27.27	4.54	4.44	4.63	6.41
	D	5.25	4.66	4.89	5.67	6.06	5.08	1.66	28.49	4.48	4.42	4.55	6.22
1999	J	5.25	4.68	4.89	5.63	6.07	5.03	1.60	26.25	4.66	4.34	4.57	6.24
	F	5.25	4.87	5.26	5.79	6.21	5.04	1.70	23.65	4.75	4.45	5.12	6.40
	M	5.00	4.63	5.05	5.70	6.11	4.83	1.61	25.91	4.84	4.48	5.12	6.62
	A	5.00	4.60	5.14	5.75	6.19	4.82	1.51	30.25	4.79	4.28	5.16	6.64
	M	4.75	4.48	5.42	6.04	6.43	4.64	1.56	32.07	4.74	4.51	5.49	6.93
	J	4.75	4.56	5.46	6.12	6.59	4.78	1.52	33.35	4.95	4.59	5.67	7.23
	J	4.75	4.71	5.62	6.30	6.76	4.76	1.51	34.01	5.01	4.6	5.70	7.19
	A	4.75	4.68	5.55	6.25	6.68	4.77	1.54	34.85	5.02	4.76	5.63	7.40
	S	4.75	4.66	5.77	6.43	6.94	4.70	1.54	28.13	5.27	4.73	5.86	7.39
	O	4.75	4.87	6.26	6.88	7.41	4.75	1.49	29.66	5.18	4.88	6.13	7.55
	N	5.00	4.73	6.02	6.58	7.09	4.88	1.45	36.76	5.52	5.07	6.02	7.36
	D	5.00	4.85	6.18	6.75	7.22	5.27	1.31	40.02	5.01	5.23	6.32	7.55
2000	J	5.00	5.05	6.44	6.78	7.31	5.09	1.30	34.11	5.43	5.34	6.62	7.78
	F	5.25	4.96	6.19	6.53	7.06	5.17	1.17	32.30	5.72	5.57	6.66	7.68
	M	5.50	5.27	6.03	6.55	7.04	5.35	1.13	33.08	6.01	5.72	6.46	7.68
	A	5.50	5.43	6.10	6.62	7.19	5.40	1.15	28.34	5.97	5.67	6.40	7.64
	M	6.00	5.67	6.00	6.60	7.24	5.83	1.19	27.80	6.53	5.92	6.54	7.99
	J	6.00	5.53	5.93	6.55	7.21	5.84	1.07	30.25	6.53	5.74	6.28	7.67
	J	6.00	5.61	5.86	6.45	7.09	5.81	1.05	30.28	6.50	5.96	6.16	7.65
	A	6.00	5.58	5.77	6.43	7.04	5.81	0.98	37.92	6.53	6.09	6.07	7.55
	S	6.00	5.56	5.75	6.43	7.07	5.80	1.06	34.36	6.50	6.00	5.89	7.62
	O	6.00	5.61	5.72	6.41	7.14	5.84	1.14	27.53	6.51	6.11	5.74	7.55
	N	6.00	5.62	5.54	6.28	7.11	5.83	1.30	24.93	6.50	6.17	5.51	7.45
	D	6.00	5.49	5.35	6.18	7.04	5.81	1.26	23.03	6.48	5.75	4.99	7.21
2001	J	5.75	5.11	5.39	6.29	7.06	5.51	1.23	23.67	5.94	5.15	4.85	7.15
	F	5.75	4.87	5.36	6.19	6.98	5.21	1.45	20.50	5.50	4.88	4.70	7.10
	M	5.25	4.58	5.41	6.34	7.11	4.91	1.55	19.72	5.00	4.42	4.68	6.98
	A	5.00	4.43	5.66	6.54	7.23	4.74	1.50	23.49	4.42	3.87	4.88	7.20
	M	4.75	4.34	5.96	6.67	7.36	4.53	1.50	26.90	3.98	3.62	5.07	7.29
	J	4.75	4.30	5.73	6.50	7.15	4.48	1.58	26.31	3.91	3.49	4.82	7.18
	J	4.50	4.07	5.76	6.57	7.25	4.29	1.61	25.99	3.81	3.51	4.74	7.13
	A	4.25	3.80	5.36	6.26	6.93	4.03	1.69	-	3.52	3.36	4.43	7.02
	S	3.75	3.05	5.32	6.42	7.20	3.43	1.78	-	2.99	2.64	3.91	7.17
	O	3.00	2.34	4.86	5.90	6.73	2.72	1.73	-	2.55	2.16	3.66	7.03
	N	2.50	2.07	5.36	6.21	7.06	2.27	1.59	-	1.95	1.87	4.33	6.97
	D	2.50	1.95	5.44	6.29	7.05	2.18	1.54	-	1.77	1.69	4.55	6.77
2002	J	2.25	1.96	5.42	6.23	6.88	2.05	1.57	-	1.78	1.65	4.37	6.55
	F	2.25	2.05	5.31	6.20	6.87	2.08	1.62	-	1.75	1.73	4.22	6.51
	M	2.25	2.30	5.79	6.51	7.15	2.12	1.57	-	1.70	1.79	4.85	6.81
	A	2.50	2.37	5.64	6.36	7.02	2.30	1.61	-	1.70	1.72	4.53	6.76
	M	2.50	2.60	5.49	6.23	6.97	2.50	1.66	-	1.78	1.73	4.41	6.75
	J	2.75	2.70	5.37	6.18	6.99	2.58	1.77	-	1.75	1.70	3.99	6.63
	J	3.00	2.81	5.23	6.13	7.19	2.78	1.94	-	1.72	1.68	3.53	6.53
	A	3.00	2.96	5.14	6.00	6.99	2.95	1.83	69.81	1.76	1.62	3.31	6.37
	S	3.00	2.86	4.92	5.83	6.84	2.79	2.00	66.12	1.72	1.63	2.83	6.15
	O	3.00	2.73	5.16	6.05	7.17	2.77	1.94	56.40	1.79	1.58	2.87	6.32
	N	3.00	2.71	5.18	5.99	6.96	2.78	1.86	59.82	1.27	1.23	3.34	6.31
	D	3.00	2.63	4.88	5.81	6.73	2.79	1.90	42.41	1.23	1.19	2.92	6.21
2003	J	3.00	2.83	5.02	5.92	6.85	2.78	1.93	33.53	1.24	1.17	3.07	6.17
	F	3.00	2.88	4.93	5.88	6.81	2.87	1.96	33.80	1.24	1.17	2.75	5.95
	M	3.25	3.14	5.13	6.02	7.06	3.10	2.05	27.54	1.22	1.13	2.94	5.89
	A	3.50	3.19	4.90	5.82	6.70	3.28	2.00	28.26	1.28	1.07	2.85	5.74
	M	3.50	3.16	4.50	5.52	6.35	3.26	1.91	24.78	1.24	0.92	2.35	5.22
	J	3.50	3.07	4.37	5.41	6.22	3.20	1.87	25.21	1.21	0.90	2.32	4.97
	J												
	A												
	S												
	O												

Source: Bank of Canada, Statistics Canada and US Federal Reserve

SCHEDULE 3B

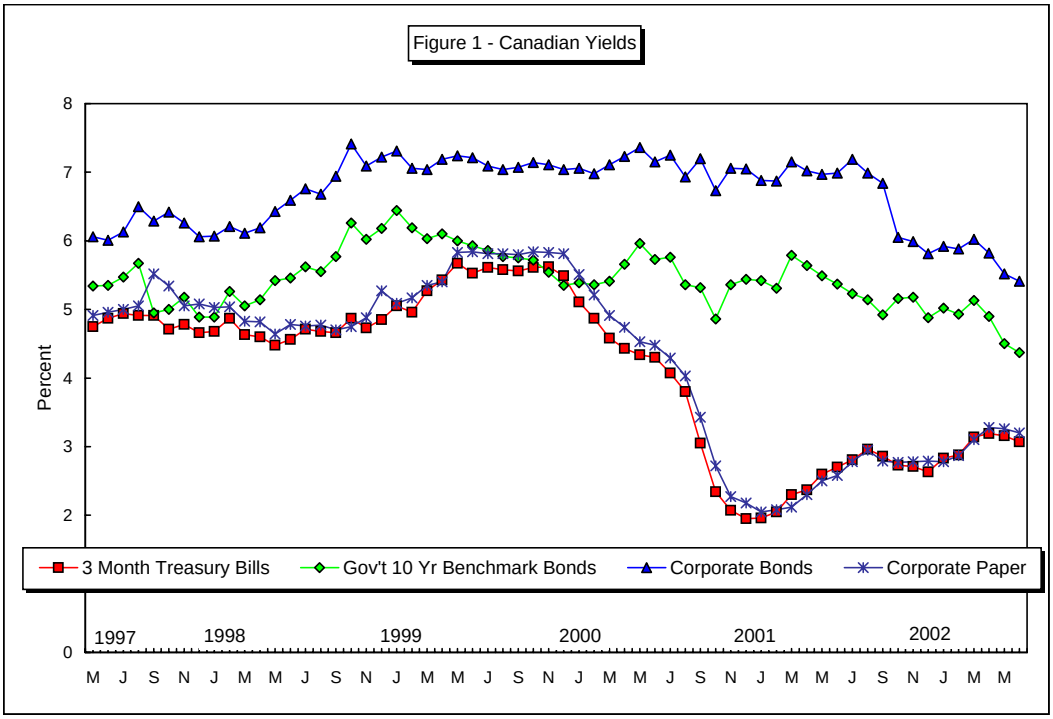
Figure 1 - Canadian Yields
Percent
8
7
6
5
4
3
2
0
3 Month Treasury Bills
Gov't 10 Yr Benchmark Bonds
Corporate Bonds
Corporate Paper
1997
1998
1999
2000
2001
2002
M J S N J M M J S N J M M J S N J M M J S N J M M J S N J M M

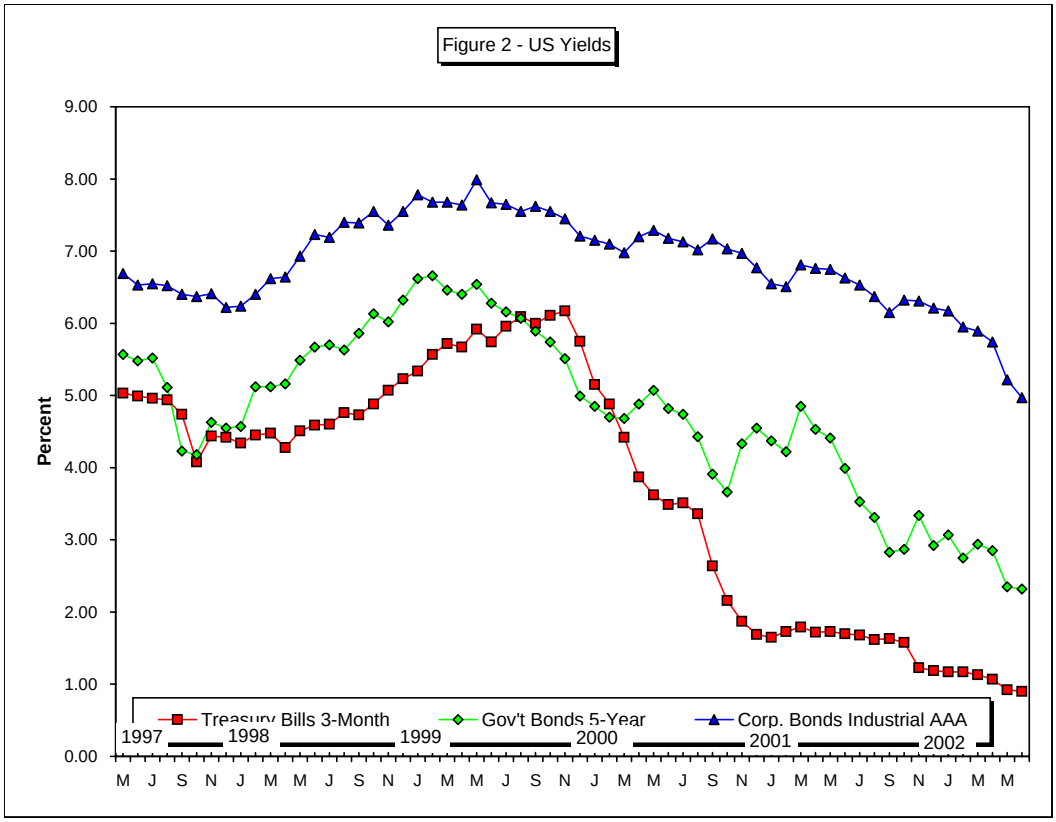
Figure 2 - US Yields
Percent
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
Treasury Bills 3-Month
Gov't Bonds 5-Year
Corp. Bonds Industrial AAA
1997
1998
1999
2000
2001
2002
M J S N J M M J S N J M M J S N J M M J S N J M M J S N J M M

SCHEDULE 4A

	1	2	3	4	5	6	7	8	9	10	11	12	13
							30 Year Rates			PREMIUM			
	**********TSE 300 COMPOSITE RETURN INDEX**********						LONG TERM CANADA BONDS			TSE/BONDS		TREASURY	PREMIUM
YEAR	HIGH	LOW	AVG.	1 YR	5 YR	10 YR	YIELDS	INDEX	1 YR RETURN			BILLS	TSE/
										1 YR	1 YR	1 YR	TREASURY
				%	%	%	%		%	YIELDS	RETURNS	YIELDS	BILLS
1982	2,562.85	1,745.70	2,154.28				14.84	100.00					
1983	3,472.33	2,663.29	3,067.81	42.41			12.05	122.41	34.46	30.36	7.94	9.64	32.76
1984	3,389.25	2,973.02	3,181.14	3.69			13.08	113.11	5.49	(9.39)	(1.79)	11.88	(8.18)
1985	4,238.78	3,669.57	3,954.18	24.30			11.34	129.68	25.98	12.96	(1.68)	10.02	14.28
1986	4,618.32	4,159.78	4,389.05	11.00			9.34	154.88	28.77	1.66	(17.78)	9.22	1.78
1987	6,156.23	4,589.86	5,373.05	22.42	20.06		9.76	148.96	5.93	12.66	16.49	9.04	13.37
1988	5,431.68	4,737.55	5,084.62	(5.37)	10.63		10.05	145.05	7.42	(15.41)	(12.79)	9.96	(15.32)
1989	6,592.58	5,745.48	6,169.03	21.33	14.16		9.66	150.25	13.25	11.67	8.08	11.78	9.55
1990	6,162.06	5,268.72	5,715.39	(7.35)	7.65		10.64	137.64	2.24	(17.99)	(9.60)	12.44	(19.79)
1991	6,291.90	5,654.56	5,973.23	4.51	6.36		9.76	148.83	17.90	(5.25)	(13.39)	8.92	(4.41)
1992	6,452.51	6,052.93	6,252.72	4.68	3.08	11.24	8.69	165.07	19.60	(4.01)	(14.92)	6.66	(1.98)
1993	8,220.23	6,124.83	7,172.53	14.71	7.12	8.86	7.86	179.58	16.66	6.85	(1.95)	5.55	9.16
1994	8,670.34	7,748.33	8,209.34	14.46	5.88	9.94	8.65	165.67	0.90	5.81	13.55	6.54	7.92
1995	9,397.97	7,830.41	8,614.19	4.93	8.55	8.10	8.47	168.61	10.25	(3.54)	(5.32)	7.24	(2.31)
1996	12,217.32	9,861.55	11,039.44	28.15	13.07	9.66	7.78	181.25	15.27	20.38	12.88	4.89	23.27
1997	14,513.63	11,961.20	13,237.42	19.91	16.18	9.44	6.70	204.06	19.29	13.21	0.62	4.04	15.87
1998	15,938.75	11,560.18	13,749.47	3.87	13.90	10.46	5.57	233.76	20.12	(1.70)	(16.25)	5.04	(1.17)
1999	17,960.99	13,306.03	15,633.51	13.70	13.75	9.74	5.72	229.37	3.84	7.98	9.86	5.15	8.56
2000	24,204.48	18,129.75	21,167.12	35.40	19.70	13.99	5.74	228.99	5.57	29.66	29.82	5.89	29.50
2001	20,160.56	14,954.42	17,557.49	(17.05)	9.72	11.38	5.77	228.08	5.37	(22.82)	(22.42)	3.93	(20.98)
2002	17,308.41	13,745.73	15,527.07	(11.56)	3.24	9.52	5.69	230.42	6.71	(17.25)	(18.28)	3.00	(14.57)
GEOM AVG													
(1982-2002)				10.38			9.36		13.48	0.81	(3.86)	8.06	1.74
(1992-2002)				9.52			8.37		13.34	1.98	(3.20)	7.27	2.95
ARITH AVG													
(1982-2002)				11.41			8.91		13.25	2.79	(1.85)	7.54	3.87
(1992-2002)				10.65			6.97		10.40	3.86	0.25	5.13	5.53
VARIANCE													
(1982-2002)				226.14			6.38		84.85	218.67	189.07	7.88	225.57
(1992-2002)				238.44			1.61		43.19	229.87	246.91	1.44	223.75

Source: TSX Review April 2003 and Statistics Canada

SCHEDULE 4B

	1	2	3	4	5	6	7	8	9	10	11	12	13
YEAR	**CONSUMER PRICE** INDEX		**REALIZED REAL RETURNS** ON TSE 300			**EXPECTED REAL YIELD** ON LONG TERM CANADA BONDS			***REALIZED REAL YIELD*** ON LONG TERM CANADA BONDS			EXPECTD REAL YIELD ON TREASURY BILLS	
	AVERAGE (1992=100)	CHANGE %	1 YR %	5 YR AVG	10 YR AVG	1 YR %	5 YR AVG	10 YR AVG	1 YR %	5 YR AVG	10 YR AVG	1 YR %	5 YR AVG
1982	65.34												
1983	69.10	5.75	36.65			6.30			28.71			3.89	
1984	72.10	4.34	(0.65)			8.74			1.15			7.54	
1985	75.00	4.02	20.28			7.32			21.96			6.00	
1986	78.10	4.13	6.86			5.21			24.64			5.09	
1987	81.50	4.35	18.07	16.24		5.40	6.59		1.58	15.61		4.69	5.44
1988	84.80	4.05	(9.42)	7.03		6.00	6.53		3.37	10.54		5.91	5.84
1989	89.00	4.95	16.37	10.43		4.71	5.73		8.29	11.97		6.82	5.70
1990	93.30	4.83	(12.18)	3.94		5.81	5.42		(2.59)	7.06		7.61	6.02
1991	98.50	5.57	(1.06)	2.36	4.81	4.19	5.22	5.76	12.32	4.60		3.35	5.68
1992	100.00	1.52	3.16	(0.63)	7.81	7.16	5.57	6.08	18.07	7.90	11.75	5.14	5.76
1993	101.80	1.80	12.91	3.84	5.43	6.06	5.59	6.06	14.86	10.19	10.37	3.75	5.33
1994	102.00	0.20	14.26	3.42	6.92	8.45	6.34	6.03	0.70	8.67	10.32	6.34	5.24
1995	104.20	2.16	2.77	6.41	5.17	6.32	6.44	5.93	8.10	10.81	8.94	5.09	4.73
1996	105.90	1.63	26.52	11.92	7.14	6.15	6.83	6.02	13.64	11.07	7.83	3.25	4.71
1997	107.60	1.61	18.30	14.95	7.16	5.10	6.42	5.99	17.69	11.00	9.45	2.43	4.17
1998	108.60	0.93	2.94	12.96	8.40	4.64	6.13	5.86	19.19	11.86	11.03	4.11	4.24
1999	110.50	1.75	11.95	12.50	7.96	3.97	5.23	5.78	2.09	12.14	10.41	3.40	3.66
2000	113.50	2.71	32.68	18.48	12.44	3.02	4.58	5.51	2.86	11.09	10.95	3.18	3.27
2001	116.40	2.56	(19.61)	9.25	10.59	3.21	3.99	5.41	2.81	8.93	10.00	1.38	2.90
2002	119.00	2.23	(13.80)	2.83	8.89	3.45	3.66	5.04	4.48	6.29	8.64	0.77	2.57
GEOM AVG													
(1982-2002)		3.46	6.42			5.58			10.01			4.60	
(1992-2002)		2.50	7.86			5.40			9.77			3.80	
ARITH AVG													
(1982-2002)		3.06	8.35			5.56			10.20			4.49	
(1992-2002)		1.76	8.89			5.04			8.64			3.37	
VARIANCE													
(1982-2002)		2.56	223.04			2.44			79.90			3.40	
(1992-2002)		0.51	241.96			2.68			44.77			2.41	

Source: Statistics Canada

SCHEDULE 5

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
YEAR	TSE 300 COMPOSITE AVERAGE (RETURN)	METALS & MINERALS	GOLDS	OIL & GAS	PAPER & FOREST PRODUCTS	CONSUMER PRODUCTS	INDUSTR. PRODUCTS	REAL ESTATE & CONSTRUC.	TRANS/ ENVIRO SERVICES	PIPE-LINES	UTILITIES	COMM. & MEDIA BILLS	MERCHAND.	FINANCIAL SERVICES	CON GLOMERATES
1982	2154.28	1767.15	3072.31	2767.13	1873.67	2601.04	1578.55	4264.70	2429.00	2082.04	2024.20	2593.32	2050.13	1796.21	2223.79
1983	3067.81	2792.55	5476.51	3369.74	2787.35	4236.97	2460.62	5207.27	3645.40	2691.99	3017.10	3740.29	3173.95	2676.73	3537.92
1984	3181.14	2498.60	4804.50	3384.32	3048.13	4779.01	2418.30	6944.73	3848.87	3140.67	3689.16	4874.90	3245.20	2816.19	4237.23
1985	3954.18	2492.41	4978.68	3581.41	3256.24	6170.86	2824.31	8903.69	5016.87	3777.62	4703.61	6646.46	4295.20	3638.51	5543.33
1986	4389.05	2791.07	5961.41	3002.55	4848.04	7741.18	3188.13	11865.23	6226.30	3350.54	4880.77	8992.52	5845.24	4138.36	6704.27
1987	5373.05	3715.95	10653.45	4419.13	7430.55	8181.43	3213.38	14870.76	10601.25	4456.37	5352.17	9855.15	5761.21	4436.71	9036.66
1988	5084.62	3861.62	7912.21	4202.78	6531.42	7336.99	3168.58	16071.73	10483.23	4855.68	5534.53	10914.81	5924.69	4559.92	8523.74
1989	6169.03	5164.47	8522.41	4878.23	6971.34	9235.55	3416.94	20379.31	11896.87	6393.81	6367.78	13647.86	7432.67	5954.30	10133.32
1990	5715.39	4483.85	8746.62	5099.82	6046.80	8712.31	3006.60	13448.78	12154.51	7228.94	6440.54	10255.50	6839.35	5412.99	8626.90
1991	5973.23	4763.14	6713.63	4352.95	6273.55	10398.39	3229.88	10936.04	8413.24	7838.17	7741.04	11119.75	7784.91	6564.60	8509.32
1992	6252.72	4839.07	6769.35	4041.82	6010.27	12203.51	3566.49	6828.48	6228.92	8011.57	8408.63	12366.12	7285.58	6815.58	7661.77
1993	7172.53	5239.22	11032.24	5435.35	7124.69	13432.27	4261.19	4256.95	5619.26	9224.88	9354.61	13736.33	7630.16	7655.28	9023.99
1994	8209.34	6520.64	13827.45	5730.00	8311.14	14290.71	4891.10	4074.07	6405.19	10018.76	10220.75	15487.91	7358.57	8878.31	10883.83
1995	8614.19	7800.11	13403.26	5606.88	9383.73	15977.35	5573.30	2615.48	7056.14	10349.52	10636.73	14785.95	7625.74	9686.48	10667.86
1996	11039.44	9255.42	17207.55	7369.81	8658.08	19441.38	6903.84	2781.39	8308.53	12832.45	13582.80	17765.57	8738.73	13946.79	15088.11
1997	13237.42	8408.67	12277.49	9165.95	9561.85	22525.32	8664.42	3820.47	11585.97	17921.55	18523.07	22242.51	11166.33	21628.47	18815.52
1998	13749.47	6078.34	8410.92	7277.25	8343.27	25042.54	9236.35	3703.95	11134.51	20071.66	25019.93	27159.76	11952.60	26406.64	20601.20
1999	15633.51	6927.28	8231.25	7107.40	9131.04	32775.41	14439.45	3198.75	8811.16	17060.66	36425.18	33353.86	10900.34	24600.54	19428.63
2000	21167.12	6936.69	5954.60	9493.09	11125.17	38762.07	22834.00	3185.84	7809.37	17070.92	55461.13	39217.20	10516.83	29939.26	22569.90
2001	17557.49	7952.11	7017.57	11945.69	10079.78	40162.65	11813.52	3890.36	10094.97	22358.46	51496.60	33006.65	12833.65	35511.99	30793.07
2002	15527.07	6318.65	9508.17	13301.91	11488.75	36877.36	5502.05	4014.27	11134.49	26956.94	39696.69	28446.58	15536.73	36343.05	33588.55
RETURNS %															
1982-1987	20.06	16.03	28.23	9.81	31.72	25.76	15.28	28.38	34.27	16.44	21.47	30.61	22.96	19.82	32.37
1987-1992	3.08	5.42	(8.67)	(1.77)	(4.15)	8.33	2.11	(14.41)	(10.09)	12.45	9.46	4.64	4.81	8.97	(3.25)
1992-1997	16.18	11.68	12.65	17.79	9.73	13.04	19.43	(10.97)	13.22	17.47	17.11	12.46	8.92	25.98	19.68
1997-2002	3.24	(5.55)	(4.98)	7.73	3.74	10.36	(8.68)	0.99	(0.79)	8.51	16.47	5.04	6.83	10.94	12.29
1982-1992	11.24	10.60	8.22	3.86	12.36	16.72	8.49	4.82	9.87	14.43	15.30	16.91	13.52	14.27	13.17
1984-1994	9.94	10.07	11.15	5.41	10.55	11.58	7.30	(5.19)	5.23	12.30	10.73	12.25	8.53	12.17	9.89
1986-1996	9.66	12.74	11.18	9.39	5.97	9.65	8.03	(13.50)	2.93	14.37	10.78	7.05	4.10	12.92	8.45
1988-1998	10.46	4.64	0.61	5.64	2.48	13.06	11.29	(13.65)	0.60	15.25	16.28	9.54	7.27	19.20	9.23
1990-2000	13.99	4.46	(3.77)	6.41	6.29	16.10	22.48	(13.41)	(4.33)	8.97	24.02	14.35	4.40	18.65	10.09
1992-2002	9.52	2.70	3.46	12.65	6.69	11.69	4.43	(5.17)	5.98	12.90	16.79	8.69	7.87	18.22	15.93
GEOM AVG															
(1982-2002)	10.38	6.58	5.81	8.17	9.49	14.18	6.44	(0.30)	7.91	13.66	16.04	12.72	10.66	16.23	14.54
(1992-2002)	9.52	2.70	3.46	12.65	6.69	11.69	4.43	(5.17)	5.98	12.90	16.79	8.69	7.87	18.22	15.93
ARITH AVG															
(1982-2002)	11.41	8.35	10.36	9.72	11.10	15.21	10.69	3.05	10.66	14.58	17.61	14.19	11.84	17.41	16.02
(1992-2002)	10.65	4.23	7.70	14.14	7.39	12.16	11.70	(2.58)	7.50	13.93	19.15	9.75	8.50	19.44	16.80
VARIANCE															
(1982-2002)	226.14	388.81	1078.80	341.68	382.21	250.14	772.57	625.40	616.20	202.89	361.03	308.49	280.57	288.64	346.19
(1992-2002)	238.44	290.35	898.98	315.96	142.21	101.76	1242.51	478.22	324.59	227.36	526.69	215.61	137.91	303.78	204.25
BETA															
(1982-2002)	1.00	0.71	0.62	0.53	0.71	0.78	1.52	0.44	0.53	0.13	0.95	0.85	0.35	0.70	0.70
(1992-2002)	1.00	0.24	(0.55)	0.35	0.27	0.47	2.00	(0.02)	(0.27)	(0.24)	1.17	0.78	(0.29)	0.48	0.09

Source: TSX Reviews, figures are the average between the highest and lowest value taken in the 12 calender months form the TSX Review: TSE300 total return index

SCHEDULE 6

MARKET TO BOOK RATIO

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002	Current 08-Aug-03
Enbridge Inc.	2.28	2.33	2.13	2.35	2.71	2.40	1.91	2.06	2.70	2.39	2.36	2.33	2.70
TransCanada Corp.-1	0.00	1.39	1.06	1.33	1.82	1.68	1.45	1.34	1.48	1.64	1.12	1.32	2.10
BCE Inc.	1.89	1.94	5.12	4.40	3.43	2.71	1.78	1.37	1.51	1.30	3.36	2.55	2.40
ATCO Ltd.	1.45	1.62	1.43	1.58	1.60	1.47	1.19	1.04	1.00	1.07	1.54	1.34	1.40
Terasen Inc.- 2	1.71	1.71	1.64	1.83	2.19	1.77	1.39	1.19	1.26	1.16	1.82	1.58	1.80
Canadian Utilities Limited	2.00	2.01	1.77	1.88	2.13	1.87	1.65	1.41	1.51	1.52	1.96	1.78	1.90
TransAlta Corporation	1.39	1.77	1.38	1.59	2.09	1.91	1.60	1.45	1.56	1.53	1.64	1.63	1.50
Fortis Inc.	1.52	1.43	1.19	1.31	1.61	1.47	1.26	1.10	1.18	1.22	1.41	1.33	1.70
MEAN	1.53	1.77	1.97	2.03	2.20	1.91	1.53	1.37	1.52	1.48	1.90	1.73	1.94
MEDIAN	1.61	1.74	1.54	1.71	2.11	1.82	1.53	1.36	1.49	1.41	1.73	1.61	1.85

1 - formerly TransCanada Pipelines Ltd.

2 - formerly BC Gas Inc.

Source: Financial Post datagroup (online)

SCHEDULE 7

LONG TERM DEBT TO COMMON EQUITY RATIO

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Enbridge Inc.	1.42	1.95	2.02	2.13	2.33	1.86	2.11	1.91	5.09	1.56	1.97	2.24
TransCanada Corp. -1	1.60	1.78	1.85	2.11	2.14	1.87	1.82	1.98	2.09	1.87	1.90	1.91
BCE Inc.	0.90	0.69	0.70	0.47	0.70	0.81	0.77	0.84	0.81	0.79	0.69	0.75
ATCO Ltd.	1.20	1.30	1.46	1.47	1.64	1.73	1.78	1.11	0.83	0.88	1.41	1.34
Terasen Inc. - 2	1.56	2.30	1.93	1.43	1.36	1.50	1.46	1.29	1.36	1.34	1.72	1.55
Canadian Utilities Limited	1.50	1.54	1.59	1.58	1.71	1.73	1.76	1.68	1.35	1.37	1.58	1.58
TransAlta Corporation	0.85	0.88	0.85	0.79	0.73	1.12	1.24	1.17	1.04	1.12	0.82	0.98
Fortis Inc.	1.53	1.67	1.67	1.47	1.42	1.33	1.41	0.97	0.96	0.97	1.55	1.34
MEAN	1.32	1.51	1.51	1.43	1.50	1.49	1.54	1.37	1.69	1.24	1.46	1.46
MEDIAN	1.46	1.61	1.63	1.47	1.53	1.62	1.61	1.23	1.20	1.23	1.57	1.45

1 - formerly TransCanada Pipelines Ltd.

2 - formerly BC Gas Inc.

Source: Financial Post datagroup (online)

SCHEDULE 8

PREFERRED TO EQUITY RATIO

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Enbridge Inc.	0.03	0.04	0.05	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.05	0.02
TransCanada Corp. -1	0.06	0.06	0.06	0.11	0.13	0.12	0.13	0.19	0.19	0.20	0.08	0.12
BCE Inc.	0.12	0.08	0.07	0.10	0.12	0.17	0.12	0.11	0.11	0.11	0.10	0.11
ATCO Ltd.	0.13	0.14	0.00	0.00	0.00	0.00	0.00	0.37	0.39	0.42	0.05	0.15
Terasen Inc. - 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canadian Utilities Limited	0.21	0.17	0.18	0.18	0.17	0.14	0.15	0.35	0.39	0.40	0.18	0.23
TransAlta Corporation	0.00	0.00	0.05	0.11	0.13	0.14	0.15	0.19	0.23	0.27	0.06	0.13
Fortis Inc.	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.29	0.20	0.21	0.02	0.09
MEAN	0.07	0.06	0.05	0.07	0.08	0.08	0.07	0.19	0.19	0.20	0.07	0.11
MEDIAN	0.04	0.05	0.05	0.07	0.09	0.07	0.07	0.19	0.20	0.21	0.06	0.12

1 - formerly TransCanada Pipelines Ltd.

2 - formerly BC Gas Inc.

Source: Financial Post datagroup (online)

SCHEDULE 9

RETURN ON COMMON EQUITY

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002	Variance
Enbridge Inc.	10.11	14.9	15.65	13.35	13.25	14.04	14.47	16.91	9.59	17.53	13.45	13.98	6.69
TransCanada Corp. -1	11.93	10.89	8.44	7.42	7.04	11.25	12.33	13.20	12.86	14.01	9.14	10.94	6.12
BCE Inc.	13.6	14.79	4.99	38.14	44.93	14.38	10.47	6.89	10.96	0.63	23.29	15.98	203.71
ATCO Ltd.	16.66	14.35	14.39	14.13	13.74	13.75	13.70	11.81	12.00	11.72	14.65	13.63	2.24
Terasen Inc. - 2	9.59	10.26	15.16	13.35	12.09	8.34	17.59	8.51	7.24	10.82	12.09	11.30	10.73
Canadian Utilities Limited	17.56	14.96	15.44	14.54	14.75	14.87	14.86	14.12	13.71	13.37	15.45	14.82	1.31
TransAlta Corporation	2.31	7.23	7.60	3.82	15.19	11.50	11.58	11.88	12.49	12.57	7.23	9.62	17.48
Fortis Inc.	11.87	12.25	9.71	8.56	7.16	9.43	9.61	10.74	10.71	11.84	9.91	10.19	2.59
MEAN	11.70	12.45	11.42	14.16	16.02	12.20	13.08	11.76	11.20	11.56	13.15	12.55	31.36
MEDIAN	11.90	13.30	12.05	13.35	13.50	12.63	13.02	11.85	11.48	12.21	12.77	12.46	6.41

1 - formerly TransCanada Pipelines Ltd.

2 - formerly BC Gas Inc.

Source: Financial Post datagroup (online)

SCHEDULE 10

DIVIDEND YIELD (%)

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002	Current 08-Aug-03
Enbridge Inc.	3.36	3.52	3.79	3.68	3.46	4.05	5.51	6.68	6.54	7.22	3.56	4.78	3.30
TransCanada Corp. -1	4.66	5.00	5.91	6.46	4.24	4.28	5.10	5.75	5.10	4.53	5.25	5.10	4.30
BCE Inc.	3.99	3.14	1.07	1.41	2.52	3.42	4.69	6.13	5.57	6.04	2.43	3.80	4.00
ATCO Ltd.	2.44	2.20	2.44	2.13	1.97	1.95	2.50	2.18	1.88	1.68	2.24	2.14	2.60
Terasen Inc. - 2	3.76	3.95	4.45	4.49	3.66	4.05	4.98	6.18	5.93	5.85	4.06	4.73	3.60
Canadian Utilities Limited	3.60	3.74	4.37	4.21	3.78	4.35	4.96	6.07	5.89	6.03	3.94	4.70	3.70
TransAlta Corporation	4.92	4.06	5.59	5.35	4.52	5.16	6.22	7.03	6.67	6.97	4.89	5.65	5.50
Fortis Inc.	4.04	4.57	5.73	5.26	4.32	4.77	5.61	6.47	6.03	5.84	4.78	5.26	3.50
MEAN	3.85	3.77	4.17	4.12	3.56	4.00	4.95	5.81	5.45	5.52	3.89	4.52	3.81
MEDIAN	3.88	3.85	4.41	4.35	3.72	4.17	5.04	6.16	5.91	5.94	4.00	4.76	3.65

1 - formerly TransCanada Pipelines Ltd.

2 - formerly BC Gas Inc.

Source: Financial Post datagroup (online)

SCHEDULE 11

CHANGE IN EARNINGS PER SHARE (%)

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Enbridge Inc.	(20.53)	3.54	32.98	15.41	5.08	8.62	26.09	111.01	(46.31)	6.84	7.30	14.27
TransCanada Corp. -1	10.64	30.56	11.34	25.97	(58.38)	0.00	5.71	9.37	(1.23)	32.85	4.03	6.68
BCE Inc.	(26.37)	131.75	(84.91)	18.10	235.07	24.12	52.47	(36.65)	1576.19	(95.01)	54.73	179.48
ATCO Ltd.	30.86	10.29	12.80	13.51	10.45	11.20	29.57	7.51	10.19	7.53	15.58	14.39
Terasen Inc. - 2	10.86	(22.18)	33.96	14.59	45.67	(49.80)	118.10	19.59	(32.17)	175.00	16.58	31.36
Canadian Utilities Limited	28.61	4.18	13.61	5.33	5.26	6.34	13.08	6.76	7.25	3.50	11.40	9.39
TransAlta Corporation	(66.00)	(4.76)	84.21	(64.81)	42.11	0.00	0.00	(3.39)	1.72	(1.69)	(1.85)	(1.26)
Fortis Inc.	9.89	30.15	21.43	5.66	(10.92)	0.85	(6.72)	2.85	(3.91)	0.39	11.24	4.97
MEAN	(2.76)	22.94	15.68	4.22	34.29	0.17	29.79	14.63	188.97	16.18	14.87	32.41
MEDIAN	10.26	7.23	17.52	14.05	7.86	3.60	19.58	7.14	0.24	5.17	11.32	11.83

1 - formerly TransCanada Pipelines Ltd.
2 - formerly BC Gas Inc.

Source: Financial Post datagroup (online)

SCHEDULE 12

CHANGE IN DIVIDENDS PER SHARE (%)

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Enbridge Inc.	8.57	10.24	6.28	6.70	5.66	4.43	1.50	0.00	0.00	0.00	7.49	4.34
TransCanada Corp. -1	11.11	12.50	(28.57)	(5.08)	0.00	7.27	7.84	8.51	9.30	10.26	(2.01)	3.31
BCE Inc.	0.00	(3.23)	(8.82)	0.00	0.00	0.00	0.00	1.12	1.51	1.53	(2.41)	(0.79)
ATCO Ltd.	11.53	13.04	15.00	17.65	21.43	7.69	44.44	33.33	12.50	0.00	15.73	17.66
Terasen Inc. - 2	8.46	6.12	5.15	6.88	11.79	8.33	0.00	0.00	0.00	0.00	7.68	4.67
Canadian Utilities Limited	4.26	4.44	4.65	4.88	5.13	5.41	1.37	1.39	1.41	1.43	4.67	3.44
TransAlta Corporation	0.00	0.00	0.00	1.52	0.51	0.00	0.00	0.00	0.00	0.00	0.41	0.20
Fortis Inc.	3.74	1.63	1.66	0.56	2.27	1.73	2.37	4.32	5.19	3.36	1.97	2.68
MEAN	5.96	5.59	(0.58)	4.14	5.85	4.36	7.19	6.08	3.74	2.07	4.19	4.44
MEDIAN	6.36	5.28	3.16	3.20	3.70	4.92	1.44	1.26	1.46	0.72	3.32	3.38

1 - formerly TransCanada Pipelines Ltd.

2 - formerly BC Gas Inc.

Source: Financial Post datagroup (online)

SCHEDULE 13

CHANGE IN BOOK VALUE PER SHARE (%)

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Enbridge Inc.	18.66	10.97	9.09	4.66	8.54	10.78	14.93	63.63	(5.17)	0.65	10.38	13.67
TransCanada Corp. -1	5.22	3.43	5.61	(9.61)	(26.32)	5.77	8.33	6.29	6.93	8.01	(4.33)	1.37
BCE Inc.	(36.08)	(2.75)	(20.66)	34.78	46.34	(22.94)	3.45	(1.89)	4.07	(13.34)	4.33	(0.90)
ATCO Ltd.	14.29	10.82	10.75	10.16	11.08	9.59	13.05	8.99	10.29	5.18	11.42	10.42
Terasen Inc. - 2	28.71	4.42	9.16	6.11	2.47	(1.56)	11.55	1.63	(0.32)	4.66	10.17	6.68
Canadian Utilities Limited	11.17	7.67	7.65	6.39	7.08	5.18	7.31	4.85	4.95	4.31	7.99	6.66
TransAlta Corporation	1.60	1.83	7.01	(0.82)	9.77	0.44	2.18	1.76	2.47	2.06	3.88	2.83
Fortis Inc.	13.44	7.45	6.09	0.75	2.02	2.99	2.69	3.83	5.23	4.88	5.95	4.94
MEAN	7.13	5.48	4.34	6.55	7.62	1.28	7.94	11.14	3.56	2.05	6.22	5.71
MEDIAN	12.31	5.94	7.33	5.39	7.81	4.09	7.82	4.34	4.51	4.49	6.97	5.80

1 - formerly TransCanada Pipelines Ltd.

2 - formerly BC Gas Inc.

Source: Financial Post datagroup (online)

SCHEDULE 14

INTEREST COVERAGE RATIO

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Enbridge Inc.	2.05	2.12	1.93	1.91	1.87	2.26	2.17	1.77	1.16	2.78	1.98	2.00
TransCanada Corp. -1	2.36	2.17	1.77	1.61	1.39	1.87	2.01	1.87	1.80	1.88	1.86	1.87
BCE Inc.	4.58	3.56	3.01	6.90	5.69	3.94	3.13	2.53	2.89	1.11	4.75	3.73
ATCO Ltd.	3.32	2.87	2.84	2.79	2.67	2.64	2.46	2.75	3.27	3.12	2.90	2.87
Terasen Inc. - 2	1.87	1.80	1.96	2.09	2.11	1.90	2.10	1.60	1.51	1.77	1.97	1.87
Canadian Utilities Limited	3.77	3.08	3.13	3.03	2.97	2.86	2.66	2.91	3.24	3.14	3.20	3.08
TransAlta Corporation	1.72	2.95	3.42	2.55	4.08	2.96	2.97	3.11	3.56	3.66	2.94	3.10
Fortis Inc.	2.19	2.16	1.91	2.20	2.01	2.27	2.21	2.42	2.70	2.86	2.09	2.29
MEAN	2.73	2.59	2.50	2.89	2.85	2.59	2.46	2.37	2.52	2.54	2.71	2.60
MEDIAN	2.28	2.52	2.40	2.38	2.39	2.46	2.46	2.48	2.80	2.82	2.50	2.58

1 - formerly TransCanada Pipelines Ltd.

2 - formerly BC Gas Inc.

Source: Financial Post datagroup (online)

SCHEDULE 15

DIVIDEND PAYOUT RATIO

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Enbridge Inc.	0.47	0.52	0.54	0.68	0.70	0.68	0.70	0.89	1.84	0.99	0.58	0.80
TransCanada Corp. -1	0.62	0.67	0.52	20.68	1.25	0.65	0.63	0.64	0.65	0.61	4.75	2.69
BCE Inc.	0.44	1.98	2.27	0.18	0.21	0.66	0.81	1.20	0.78	(1.38)	1.02	0.72
ATCO Ltd.	0.20	0.24	0.24	0.24	0.23	0.21	0.20	0.19	0.16	0.15	0.23	0.21
Terasen Inc. - 2	0.53	0.55	0.42	0.55	0.59	0.77	0.36	0.77	0.93	0.66	0.53	0.61
Canadian Utilities Limited	0.44	0.54	0.54	0.58	0.57	0.58	0.57	0.69	0.73	0.77	0.53	0.60
TransAlta Corporation	0.90	0.80	0.36	0.91	0.78	0.87	0.88	0.88	0.86	0.88	0.75	0.81
Fortis Inc.	0.55	0.54	0.72	0.82	0.85	0.75	0.75	0.73	0.75	0.68	0.70	0.71
MEAN	0.52	0.73	0.70	3.08	0.65	0.65	0.61	0.75	0.84	0.42	1.14	0.89
MEDIAN	0.50	0.55	0.53	0.63	0.65	0.67	0.67	0.75	0.77	0.67	0.64	0.71

1 - formerly TransCanada Pipelines Ltd.

2 - formerly BC Gas Inc.

Source: Financial Post datagroup (online)

SCHEDULE 16

DEFERRED TAXES AS A PERCENTAGE OF TOTAL INVESTED CAPITAL

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Enbridge Inc.	7.43	7.29	8.11	3.07	5.39	7.06	7.86	8.70	8.77	25.19	6.26	8.89
TransCanada Corp. -1	1.28	0.26	0.00	0.00	0.71	1.95	1.93	1.49	1.70	0.98	0.45	1.03
BCE Inc.	0.24	2.18	1.79	2.49	2.43	1.59	6.40	6.26	6.80	7.21	1.83	3.74
ATCO Ltd.	4.08	4.01	3.56	3.65	3.06	2.49	0.93	1.73	1.13	0.93	3.67	2.56
Terasen Inc. - 2	1.28	1.99	1.96	2.01	2.26	2.06	2.19	2.60	2.91	2.94	1.90	2.22
Canadian Utilities Limited	4.30	4.29	3.83	4.00	3.36	2.77	1.06	0.69	0.00	0.03	3.96	2.43
TransAlta Corporation	6.13	6.63	6.29	1.43	1.58	2.17	1.06	1.17	1.01	1.06	4.41	2.85
Fortis Inc.	14.74	1.59	1.15	2.16	2.38	2.51	2.57	2.23	2.69	1.34	4.40	3.34
MEAN	4.94	3.53	3.34	2.35	2.65	2.83	3.00	3.11	3.13	4.96	3.36	3.38
MEDIAN	4.19	3.09	2.76	2.32	2.41	2.33	2.06	1.98	2.20	1.20	3.81	2.71

1 - formerly TransCanada Pipelines Ltd.

2 - formerly BC Gas Inc.

Source: Financial Post datagroup (online)

BETA VALUES (SPTSX Market Based)

Enbridge Inc.	0.22
TransCanada Corp. -1	0.48
BCE Inc.	0.51
ATCO Ltd.	0.03
Terasen Inc. - 2	0.26
Canadian Utilities Limited	0.43
TransAlta Corporation	0.79
Fortis Inc.	0.33
MEAN	0.35
MEDIAN	0.31

1 - formerly TransCanada Pipelines Ltd.

2 - formerly BC Gas Inc.

Source: Financial Post Datagroup (on-line), 52 weeks ending August 8, 2003

SCHEDULE 18

MARKET TO BOOK RATIO

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	1993-2002	Current 08-Aug-03
Alcan Inc.	1.30	1.43	1.36	1.30	1.11	1.46	1.43	1.41	1.16	0.84	1.30	1.28	1.20
Astral Media Inc.	1.24	1.53	1.58	1.20	1.15	0.99	0.75	0.73	0.89	0.98	1.34	1.10	2.10
CCL Industries Inc.	0.82	0.45	0.46	0.70	0.84	0.92	0.80	0.77	0.66	0.69	0.65	0.71	1.50
CHUM Limited	1.49	1.91	1.58	1.42	1.78	1.27	0.81	0.77	0.88	1.05	1.64	1.30	2.10
Cameco Corporation	0.71	0.68	0.44	0.61	0.76	1.17	1.62	1.11	0.77	0.69	0.64	0.86	1.50
Canada Bread Company, Limited	1.06	0.91	0.74	1.03	1.48	1.50	1.10	1.25	1.46	1.59	1.04	1.21	1.90
Canadian Tire Corporation, Limited	0.87	0.79	0.96	1.55	1.54	1.14	0.85	0.69	0.70	0.77	1.14	0.99	1.50
The Jean Coutu Group (PJC) Inc.	3.13	2.89	2.54	2.41	2.38	2.06	1.37	1.08	1.15	1.33	2.67	2.03	0.78
Transcontinental Inc. - 1	1.42	1.10	0.99	1.05	0.96	0.86	0.86	0.74	0.76	0.81	1.10	0.95	2.20
Hudson's Bay Company	0.20	0.31	0.33	0.43	0.64	0.72	0.45	0.52	0.62	0.84	0.38	0.50	0.30
IPSCO Inc.	0.65	0.60	0.66	1.07	1.31	1.06	0.80	0.67	0.70	0.75	0.86	0.83	0.50
Lassonde Industries Inc.	0.97	0.74	0.71	0.96	1.16	1.22	1.16	1.02	0.97	1.08	0.91	1.00	1.60
Leon's Furniture Limited	1.63	1.37	1.47	1.60	1.61	1.58	1.25	1.23	1.42	1.62	1.53	1.48	2.30
Loblaw Companies Limited	2.68	2.71	2.55	2.45	2.38	2.36	1.61	1.32	1.22	1.26	2.55	2.05	4.20
MAAX Inc.	1.01	0.67	0.83	1.08	1.46	1.83	1.34	1.30	1.88	2.05	1.01	1.35	1.50
Rothmans Inc.	3.74	2.75	2.72	3.47	4.36	3.55	2.97	2.94	2.58	2.28	3.41	3.14	6.40
SNC-Lavalin Group Inc.	1.96	1.65	1.07	1.10	1.13	1.60	1.54	1.09	0.91	0.80	1.38	1.29	3.30
Torstar Corporation	1.96	1.68	1.49	1.20	1.50	1.52	1.32	0.98	1.16	1.09	1.57	1.39	3.20
Uni-Sélect Inc.	1.47	1.18	1.19	1.89	1.80	1.42	1.08	1.09	1.25	1.47	1.51	1.38	2.40
MEAN	1.49	1.33	1.24	1.40	1.54	1.49	1.22	1.09	1.11	1.16	1.40	1.31	2.13
MEDIAN	1.30	1.18	1.07	1.20	1.46	1.42	1.16	1.08	0.97	1.05	1.30	1.28	1.90

1 - formerly G.T.C. Transcontinental Group Ltd.

Source: Financial Post datagroup (online)

* Used Class A Stocks

SCHEDULE 19

LONG TERM DEBT TO COMMON EQUITY RATIO

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Alcan Inc.	0.37	0.33	0.35	0.18	0.28	0.25	0.28	0.38	0.51	0.56	0.30	0.35
Astral Media Inc.	0.00	0.00	0.31	0.42	0.10	0.02	0.02	0.02	0.01	0.06	0.17	0.10
CCL Industries Inc.	1.16	0.92	0.90	0.86	0.90	0.72	0.42	0.55	0.24	0.26	0.95	0.69
CHUM Limited	0.93	0.11	0.13	0.16	0.01	0.00	0.00	0.00	0.00	0.00	0.27	0.13
Cameco Corporation	0.12	0.18	0.15	0.17	0.28	0.08	0.14	0.16	0.07	0.06	0.18	0.14
Canada Bread Company, Limited	0.87	0.14	0.00	0.06	0.12	0.13	0.21	0.24	0.22	0.00	0.24	0.20
Canadian Tire Corporation, Limited	0.53	0.69	0.76	0.78	0.65	0.29	0.32	0.41	0.40	0.39	0.68	0.52
The Jean Coutu Group (PJC) Inc.	0.26	0.34	0.15	0.24	0.32	0.18	0.22	0.19	0.34	0.11	0.26	0.24
Transcontinental Inc. - 1	0.52	0.55	0.84	0.68	0.59	0.38	0.44	0.68	0.47	0.67	0.64	0.58
Hudson's Bay Company	0.16	0.27	0.29	0.31	0.63	0.72	0.59	0.77	0.64	0.67	0.33	0.51
IPSCO Inc.	0.35	0.44	0.39	0.38	0.41	0.45	0.49	0.40	0.51	0.10	0.39	0.39
Lassonde Industries Inc.	0.20	0.16	0.11	0.16	0.22	0.26	0.31	0.17	0.20	0.33	0.17	0.21
Leon's Furniture Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00
Loblaw Companies Limited	0.83	0.93	0.76	0.68	0.53	0.62	0.57	0.57	0.65	0.79	0.75	0.69
MAAX Inc.	0.50	0.29	0.38	0.40	0.11	0.51	0.30	0.52	0.17	0.00	0.34	0.32
Rothmans Inc.	1.07	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.16
SNC-Lavalin Group Inc.	1.26	2.65	3.05	2.35	0.13	0.13	0.24	0.26	0.04	0.21	1.89	1.03
Torstar Corporation	0.70	0.95	0.75	0.95	0.55	0.25	0.82	0.59	0.41	0.35	0.78	0.63
Uni-Sélect Inc.	0.00	0.00	0.01	0.05	0.03	0.01	0.01	0.02	0.02	0.08	0.02	0.02
MEAN	0.52	0.50	0.49	0.46	0.31	0.26	0.28	0.31	0.26	0.25	0.46	0.36
MEDIAN	0.50	0.33	0.31	0.31	0.28	0.25	0.28	0.26	0.22	0.11	0.33	0.36

1 - formerly G.T.C. Transcontinental Group Ltd.

Source: Financial Post datagroup (online)

SCHEDULE 20

PREFERRED TO EQUITY RATIO

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Alcan Inc.	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.07	0.08	0.08	0.02	0.04
Astral Media Inc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCL Industries Inc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHUM Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cameco Corporation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canada Bread Company, Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canadian Tire Corporation, Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
The Jean Coutu Group (PJC) Inc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transcontinental Inc. - 1	0.00	0.00	0.00	0.09	0.09	0.11	0.12	0.12	0.13	0.00	0.04	0.07
Hudson's Bay Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IPSCO Inc.	0.09	0.10	0.10	0.11	0.19	0.00	0.00	0.00	0.00	0.00	0.12	0.06
Lassonde Industries Inc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Leon's Furniture Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loblaw Companies Limited	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.08	0.09	0.00	0.02
MAAX Inc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rothmans Inc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SNC-Lavalin Group Inc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Torstar Corporation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00
Uni-Sélect Inc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.01
MEDIAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

1 - formerly G.T.C. Transcontinental Group Ltd.

Source: Financial Post datagroup (online)

SCHEDULE 21

RETURN ON COMMON EQUITY

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002	Variance
Alcan Inc.	4.32	(0.03)	8.53	8.40	7.61	9.61	8.62	11.81	1.78	(2.92)	5.77	5.77	22.72
Astral Media Inc.	10.04	7.00	4.26	6.38	7.84	6.79	6.18	3.81	6.99	6.75	7.10	6.60	3.03
CCL Industries Inc.	4.36	4.44	4.75	9.44	8.69	9.65	10.28	9.45	8.64	1.98	6.34	7.17	8.75
CHUM Limited	5.48	7.14	11.40	8.07	11.44	8.50	5.53	5.51	4.74	8.74	8.71	7.65	5.89
Cameco Corporation	2.51	3.10	(4.71)	3.72	2.43	5.27	10.11	8.10	6.80	6.40	1.41	4.37	16.60
Canada Bread Company, Limited	13.92	8.57	7.39	2.73	1.25	14.22	12.81	12.56	14.46	15.62	6.77	10.35	26.24
Canadian Tire Corporation, Limited	11.87	11.53	10.56	11.20	13.04	11.44	10.39	10.18	9.72	6.89	11.64	10.68	2.69
The Jean Coutu Group (PJC) Inc.	16.65	15.73	14.92	15.70	15.54	15.33	16.20	15.16	16.98	10.06	15.71	15.23	3.71
Transcontinental Inc. - 1	18.87	14.69	13.70	11.36	11.16	10.64	0.79	9.28	8.13	9.34	13.96	10.80	22.32
Hudson's Bay Company	3.97	2.48	5.02	4.04	2.11	(5.12)	2.02	1.95	10.88	10.08	3.52	3.74	20.21
IPSCO Inc.	0.95	3.09	5.62	9.26	11.23	15.33	11.03	11.82	9.15	6.24	6.03	8.37	19.12
Lassonde Industries Inc.	12.75	10.89	11.07	9.85	8.52	12.44	13.43	14.04	14.90	13.34	10.62	12.12	3.98
Leon's Furniture Limited	17.09	17.28	19.28	21.14	16.70	15.12	13.40	14.05	15.37	16.96	18.30	16.64	5.45
Loblaw Companies Limited	18.93	16.82	15.69	13.68	12.78	15.33	14.22	13.32	12.36	9.64	15.58	14.28	6.65
MAAX Inc.	13.49	8.56	9.54	8.69	13.30	16.41	15.82	8.49	18.06	13.74	10.72	12.61	12.79
Rothmans Inc.	45.17	40.08	38.57	41.72	38.42	37.15	40.19	39.73	45.18	40.09	40.79	40.63	7.26
SNC-Lavalin Group Inc.	38.95	6.60	6.67	10.75	14.33	14.47	15.76	13.84	13.13	8.86	15.46	14.34	85.65
Torstar Corporation	21.28	0.50	12.46	13.56	13.10	13.27	10.72	6.70	7.86	(1.67)	12.18	9.78	45.35
Uni-Sélect Inc.	16.70	16.11	15.19	18.71	20.64	20.71	19.91	21.42	24.67	21.79	17.47	19.58	8.56
MEAN	14.59	10.24	11.05	12.02	12.11	12.98	12.50	12.17	13.15	10.63	12.00	12.14	17.21
MEDIAN	13.49	8.56	10.56	9.85	11.44	13.27	11.03	11.81	10.88	9.34	10.72	10.68	8.75

1 - formerly G.T.C. Transcontinental Group Ltd.

Source: Financial Post datagroup (online)

SCHEDULE 22

DIVIDEND YIELD (%)

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002	Current 31-Jul-03
Alcan Inc.	1.82	1.59	1.63	1.87	2.32	1.79	1.87	1.49	1.25	1.51	1.85	1.72	1.70
Astral Media Inc.	0.67	0.67	0.94	1.35	1.59	2.11	2.35	2.18	1.76	2.11	1.04	1.57	0.60
CCL Industries Inc.	1.95	2.93	3.10	2.07	1.62	1.68	2.12	2.35	2.85	2.91	2.33	2.36	1.80
CHUM Limited	0.39	0.36	0.54	0.58	0.51	0.97	0.94	1.05	0.85	0.77	0.48	0.70	0.20
Cameco Corporation	1.36	1.50	2.34	1.63	1.37	1.00	0.79	1.23	1.89	2.19	1.64	1.53	1.30
Canada Bread Company, Limited	1.13	1.53	1.99	1.44	1.00	1.02	1.57	1.52	1.46	1.51	1.42	1.42	1.00
Canadian Tire Corporation, Limited	1.39	1.71	1.54	1.02	1.08	1.51	2.13	2.81	2.90	2.62	1.35	1.87	1.20
The Jean Coutu Group (PJC) Inc.	0.72	0.60	0.75	0.73	0.69	0.83	1.16	1.19	1.56	1.04	0.70	0.93	0.80
Transcontinental Inc. - 1	0.75	1.01	1.13	0.96	1.15	1.11	1.16	1.36	1.25	1.78	1.00	1.17	0.70
Hudson's Bay Company	3.36	2.21	2.29	1.91	2.84	2.33	3.50	4.01	3.32	2.27	2.52	2.80	3.90
IPSCO Inc.	0.98	2.57	2.41	1.72	1.40	0.93	1.41	1.85	1.94	2.03	1.82	1.72	1.50
Lassonde Industries Inc.	1.92	2.21	2.18	1.76	1.56	1.58	1.84	2.13	1.83	1.83	1.93	1.88	1.80
Leon's Furniture Limited	3.43	1.82	1.89	5.19	4.07	1.27	5.61	1.72	1.25	1.29	3.28	2.75	1.70
Loblaw Companies Limited	0.84	0.80	0.83	0.59	0.67	0.73	0.96	1.17	1.14	1.13	0.75	0.89	0.90
MAAX Inc.	0.78	1.15	1.24	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.37	0.80
Rothmans Inc.	22.55	4.64	5.68	4.21	11.30	3.48	4.65	13.01	4.82	22.80	9.68	9.71	6.00
SNC-Lavalin Group Inc.	1.09	1.33	1.92	1.96	1.71	1.34	1.26	1.60	1.51	1.56	1.60	1.53	1.00
Torstar Corporation	2.48	3.01	2.91	3.57	2.75	2.50	3.14	4.01	3.45	3.65	2.94	3.15	2.40
Uni-Sélect Inc.	1.25	1.57	1.85	1.23	1.21	1.54	2.05	1.98	1.67	0.88	1.42	1.52	1.30
MEAN	2.57	1.75	1.96	1.80	2.04	1.46	2.03	2.46	1.93	2.84	2.02	2.08	1.61
MEDIAN	1.25	1.57	1.89	1.63	1.40	1.34	1.84	1.72	1.67	1.78	1.60	1.57	1.30

1 - formerly G.T.C. Transcontinental Group Ltd.

Source: Financial Post datagroup (online)

SCHEDULE 23

CHANGE IN EARNINGS PER SHARE (%)

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Alcan Inc.	-	(100.41)	18.93	20.47	(15.35)	16.09	(24.35)	576.47	162.96	10.00	(15.27)	66.48
Astral Media Inc.	77.10	95.52	(33.00)	8.70	19.48	5.48	52.08	(41.46)	20.59	(11.11)	33.56	19.34
CCL Industries Inc.	(7.14)	0.00	(48.53)	11.48	5.17	2.65	15.31	15.29	347.37	(86.13)	(7.80)	25.55
CHUM Limited	(19.87)	(32.29)	53.79	(24.87)	42.96	62.65	3.75	21.21	(43.10)	(17.14)	3.95	4.71
Cameco Corporation	(17.82)	164.33	(226.61)	63.16	(49.67)	(41.92)	33.33	25.00	11.43	833.33	(13.32)	79.46
Canada Bread Company, Limited	85.57	21.25	175.86	107.14	(90.41)	24.79	12.50	(1.89)	3.92	27.50	59.88	36.62
Canadian Tire Corporation, Limited	13.78	19.05	0.00	(9.57)	16.76	18.54	9.42	6.15	44.44	12.50	8.00	13.11
The Jean Coutu Group (PJC) Inc.	26.53	20.10	15.58	17.67	11.11	22.73	2.33	90.27	(38.92)	(39.19)	18.20	12.82
Transcontinental Inc. - 1	54.74	15.85	34.43	16.19	15.38	1416.67	(91.78)	21.67	(3.23)	44.19	27.32	152.41
Hudson's Bay Company	64.71	(46.88)	36.75	112.73	137.41	(340.98)	3.39	(81.73)	18.75	17.24	60.95	(7.86)
IPSCO Inc.	(71.64)	(41.74)	(31.55)	(38.91)	(15.46)	58.92	1.99	41.34	49.95	44.90	(39.86)	(0.22)
Lassonde Industries Inc.	17.73	8.46	20.37	24.14	(26.27)	1.72	5.45	5.77	22.35	25.00	8.89	10.47
Leon's Furniture Limited	7.69	1.11	0.56	36.64	21.30	21.35	2.30	2.35	3.66	55.45	13.46	15.24
Loblaw Companies Limited	29.41	19.30	24.82	29.25	20.45	22.22	19.40	19.88	40.90	21.59	24.65	24.72
MAAX Inc.	65.22	(1.08)	19.23	(11.36)	29.41	29.52	138.64	(46.34)	60.78	88.24	20.28	37.23
Rothmans Inc.	28.24	12.50	(1.64)	(4.45)	11.46	4.92	(4.90)	3.61	5.98	15.94	9.22	7.17
SNC-Lavalin Group Inc.	634.55	7.84	(34.62)	(20.41)	16.67	6.33	17.91	14.92	61.94	68.75	120.81	77.39
Torstar Corporation	-	(96.43)	(7.44)	(1.63)	6.49	50.00	62.11	(12.84)	554.17	(11.54)	(19.80)	54.29
Uni-Sélect Inc.	17.70	18.95	(9.52)	5.00	16.28	21.99	10.16	2.40	(99.86)	45.00	9.68	2.81
MEAN	52.97	4.50	0.39	17.97	9.11	73.88	14.16	34.85	64.43	60.24	16.99	33.25
MEDIAN	26.53	8.46	0.56	11.48	15.38	21.35	9.42	6.15	20.59	21.59	9.68	19.34

1 - formerly G.T.C. Transcontinental Group Ltd.

Source: Financial Post datagroup (online)

SCHEDULE 24

CHANGE IN DIVIDENDS PER SHARE (%)

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Alcan Inc.	0.00	0.00	0.00	0.00	0.00	0.00	33.33	50.00	0.00	(33.33)	0.00	5.00
Astral Media Inc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	2.00
CCL Industries Inc.	6.25	0.00	3.23	10.71	0.00	0.00	0.00	0.00	0.00	0.00	4.04	2.02
CHUM Limited	0.00	0.00	0.00	0.00	0.00	29.41	0.00	0.00	0.00	0.00	0.00	2.94
Cameco Corporation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canada Bread Company, Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canadian Tire Corporation, Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
The Jean Coutu Group (PJC) Inc.	26.32	18.75	39.13	15.00	25.00	23.08	8.33	0.00	0.00	0.00	24.84	15.56
Transcontinental Inc. - 1	20.00	0.00	25.00	0.00	33.33	0.00	0.00	0.00	(31.43)	0.00	15.67	4.69
Hudson's Bay Company	0.00	0.00	0.00	(50.00)	0.00	0.00	(21.74)	0.00	15.00	0.00	(10.00)	(5.67)
IPSCO Inc.	(60.00)	0.00	0.00	0.00	56.25	0.00	0.00	0.00	0.00	0.00	(0.75)	(0.38)
Lassonde Industries Inc.	12.50	14.29	0.00	0.00	0.00	0.00	7.69	36.84	0.00	0.00	5.36	7.13
Leon's Furniture Limited	145.00	0.00	(62.62)	37.18	254.55	(68.57)	250.00	33.33	(3.23)	3.33	74.82	58.90
Loblaw Companies Limited	20.00	14.29	59.09	10.00	33.33	25.00	12.50	23.08	8.33	0.00	27.34	20.56
MAAX Inc.	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	10.00
Rothmans Inc.	409.80	15.91	10.00	(73.91)	283.33	0.00	(55.56)	237.50	(81.82)	450.00	129.03	119.53
SNC-Lavalin Group Inc.	25.00	16.67	0.00	20.00	0.00	30.44	17.95	39.29	21.74	27.78	12.33	19.89
Torstar Corporation	0.00	0.00	0.00	2.65	8.65	15.56	7.14	0.00	0.00	0.00	2.26	3.40
Uni-Sélect Inc.	12.00	(4.76)	5.00	23.08	16.07	16.67	20.00	25.00	100.00	14.29	10.28	22.74
MEAN	32.47	9.22	4.15	(0.28)	37.40	3.77	14.72	23.42	1.50	25.37	16.59	15.17
MEDIAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.04	4.69

1 - formerly G.T.C. Transcontinental Group Ltd.

Source: Financial Post datagroup (online)

SCHEDULE 25

CHANGE IN BOOK VALUE PER SHARE (%)

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Alcan Inc.	(2.11)	(3.57)	13.16	3.95	10.67	4.17	3.67	3.47	4.88	(4.09)	4.42	3.42
Astral Media Inc.	9.24	38.13	2.87	29.32	5.42	4.52	(11.37)	(1.18)	12.10	4.07	17.00	9.31
CCL Industries Inc.	(20.66)	8.49	5.97	1.38	14.79	9.55	7.44	3.00	9.91	0.64	1.99	4.05
CHUM Limited	4.59	5.50	10.82	6.70	5.42	7.37	3.73	4.33	3.13	7.75	6.61	5.93
Cameco Corporation	1.17	1.63	(5.69)	2.48	1.05	10.34	7.99	5.87	4.35	4.18	0.13	3.34
Canada Bread Company, Limited	13.36	6.67	1.85	0.27	(0.92)	12.98	10.76	11.53	12.08	12.90	4.25	8.15
Canadian Tire Corporation, Limited	10.87	9.85	7.96	6.26	2.55	5.01	7.44	7.45	(2.76)	4.13	7.50	5.88
The Jean Coutu Group (PJC) Inc.	0.00	13.24	32.84	15.49	13.83	18.00	15.93	14.01	15.82	8.25	15.08	14.74
Transcontinental Inc. - 1	27.20	6.01	14.45	8.37	14.45	11.51	(1.37)	8.23	6.36	27.27	14.10	12.25
Hudson's Bay Company	4.33	2.03	6.67	1.22	0.14	(7.95)	(1.06)	(1.71)	7.70	10.21	2.88	2.16
IPSCO Inc.	(3.16)	0.04	1.35	(27.55)	13.69	17.90	9.95	8.57	10.45	16.48	(3.13)	4.77
Lassonde Industries Inc.	7.06	9.88	8.69	6.95	6.03	10.63	9.31	11.31	12.66	8.06	7.72	9.06
Leon's Furniture Limited	7.42	11.08	13.70	8.00	7.18	12.93	2.93	11.33	13.64	15.09	9.48	10.33
Loblaw Companies Limited	15.65	14.24	7.06	11.71	55.65	13.63	12.79	10.11	12.55	7.52	20.86	16.09
MAAX Inc.	3.54	8.98	11.32	5.46	89.87	24.33	35.22	10.65	23.11	15.18	23.83	22.77
Rothmans Inc.	(49.18)	24.43	21.50	22.20	(31.24)	20.96	20.10	(10.82)	33.61	(35.24)	(2.46)	1.63
SNC-Lavalin Group Inc.	33.88	14.02	2.16	7.78	6.81	24.61	4.94	8.01	12.26	7.62	12.93	12.21
Torstar Corporation	18.31	(19.49)	(3.93)	5.65	(13.78)	37.92	2.73	0.41	3.38	(7.86)	(2.65)	2.33
Uni-Sélect Inc.	13.22	13.96	9.83	14.19	16.84	17.71	16.62	19.78	22.46	26.61	13.61	17.12
MEAN	4.99	8.69	8.56	6.83	11.50	13.48	8.30	6.54	11.46	6.78	8.11	8.71
MEDIAN	7.06	8.98	7.96	6.70	6.81	12.93	7.44	8.01	12.08	7.75	7.50	8.15

1 - formerly G.T.C. Transcontinental Group Ltd.

Source: Financial Post datagroup (online)

SCHEDULE 26

INTEREST COVERAGE RATIO

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Alcan Inc.	4.30	1.13	12.17	10.01	7.58	8.23	6.10	5.31	1.96	0.44	7.04	5.72
Astral Media Inc.	76.62	24.64	4.17	10.88	15.71	85.26	35.76	28.80	71.46	15.88	26.41	36.92
CCL Industries Inc.	2.15	1.91	2.01	3.09	2.66	3.60	3.86	4.94	5.36	2.50	2.36	3.21
CHUM Limited	3.21	5.98	10.28	25.69	127.50	202.65	99.71	104.61	0.00	0.00	34.53	57.96
Cameco Corporation	22.91	12.69	(2.50)	7.13	5.96	19.58	141.18	83.32	60.37	12.46	9.24	36.31
Canada Bread Company, Limited	17.02	28.48	11.42	6.09	3.47	24.45	12.26	9.34	14.97	0.00	13.30	12.75
Canadian Tire Corporation, Limited	4.78	3.98	3.42	3.25	4.26	4.20	3.92	3.54	2.18	3.20	3.94	3.67
The Jean Coutu Group (PJC) Inc.	10.22	13.98	13.13	9.98	8.08	8.00	8.76	5.78	6.84	9.64	11.08	9.44
Transcontinental Inc. - 1	10.17	3.36	4.28	4.26	4.31	5.37	2.53	4.68	3.59	3.95	5.28	4.65
Hudson's Bay Company	4.32	3.38	4.83	3.41	1.87	0.00	1.70	1.62	3.63	3.77	3.56	2.85
IPSCO Inc.	2.28	2.45	3.27	5.21	5.43	6.45	5.36	4.95	4.87	7.51	3.73	4.78
Lassonde Industries Inc.	16.08	10.72	8.01	7.84	7.85	8.39	9.12	10.11	9.92	6.65	10.10	9.47
Leon's Furniture Limited	0.00	0.00	0.00	0.00	0.00	0.00	676.02	184.36	144.18	122.72	0.00	112.73
Loblaw Companies Limited	5.80	4.98	5.11	5.21	5.21	5.29	5.31	4.79	3.79	3.47	5.26	4.90
MAAX Inc.	10.25	5.18	4.41	4.74	7.44	12.09	8.29	4.65	11.41	48.33	6.40	11.68
Rothmans Inc.	32.92	68.15	356.51	230.09	401.62	405.63	369.53	275.90	290.53	513.22	217.86	294.41
SNC-Lavalin Group Inc.	-	1.77	1.87	2.98	17.44	12.64	9.66	8.88	13.99	4.59	4.81	7.38
Torstar Corporation	16.02	(1.44)	2.98	5.08	3.74	15.25	4.33	3.73	5.89	0.40	5.28	5.60
Uni-Sélect Inc.	45.52	14.72	10.67	23.50	38.57	56.65	25.01	40.35	36.11	16.11	26.60	30.72
MEAN	14.98	10.85	24.00	19.39	35.19	46.51	75.18	41.56	36.37	40.78	20.88	34.48
MEDIAN	10.20	4.98	4.41	5.21	5.96	8.39	8.76	5.78	6.84	4.59	6.40	9.44

1 - formerly G.T.C. Transcontinental Group Ltd.

Source: Financial Post datagroup (online)

SCHEDULE 27

DIVIDEND PAYOUT RATIO

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Alcan Inc.	0.53	40.00	0.25	0.30	0.37	0.31	0.37	0.23	0.92	(0.82)	8.29	4.25
Astral Media Inc.	0.13	0.20	0.43	0.28	0.33	0.38	(0.27)	1.88	0.36	0.47	0.27	0.42
CCL Industries Inc.	0.52	0.46	0.45	0.23	0.23	0.24	0.25	0.29	0.33	1.50	0.38	0.45
CHUM Limited	0.18	0.15	0.10	0.15	0.11	0.16	0.20	0.21	0.26	0.15	0.14	0.17
Cameco Corporation	0.50	0.43	(0.35)	0.35	0.63	0.34	0.19	0.26	0.32	0.36	0.31	0.30
Canada Bread Company, Limited	0.13	0.25	0.30	0.82	1.77	0.16	0.21	0.23	0.23	0.23	0.65	0.43
Canadian Tire Corporation, Limited	0.16	0.18	0.21	0.21	0.19	0.22	0.26	0.29	6.42	0.45	0.19	0.86
The Jean Coutu Group (PJC) Inc.	0.17	0.15	0.16	0.14	0.14	0.13	0.12	0.14	0.14	0.26	0.15	0.16
Transcontinental Inc. - 1	0.08	0.39	0.12	0.19	0.22	0.21	1.36	0.26	0.21	0.30	0.20	0.33
Hudson's Bay Company	0.22	0.35	0.21	0.28	1.35	(0.49)	1.18	1.55	0.28	0.30	0.48	0.52
IPSCO Inc.	0.58	0.43	0.34	0.26	0.19	0.10	0.16	0.16	0.23	0.37	0.36	0.28
Lassonde Industries Inc.	1.26	0.23	0.21	0.26	0.32	0.18	0.30	0.24	0.18	0.27	0.46	0.35
Leon's Furniture Limited	0.50	0.22	0.23	0.61	0.60	0.21	0.79	0.23	0.18	0.19	0.43	0.38
Loblaw Companies Limited	0.18	0.20	0.21	0.16	0.20	0.18	0.17	0.19	0.22	0.30	0.19	0.20
MAAX Inc.	0.09	0.15	0.15	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.05
Rothmans Inc.	2.51	0.46	0.51	0.52	1.96	0.49	0.55	1.29	0.36	2.07	1.19	1.07
SNC-Lavalin Group Inc.	0.09	0.51	0.47	0.31	0.20	0.24	0.19	0.19	0.13	0.22	0.32	0.25
Torstar Corporation	0.35	(0.50)	1.20	0.51	(8.38)	0.16	0.55	0.89	0.77	(3.52)	(1.36)	(0.80)
Uni-Sélect Inc.	0.17	0.18	0.22	0.19	0.17	0.16	0.17	0.16	0.13	0.09	0.19	0.16
MEAN	0.44	2.34	0.29	0.31	0.03	0.18	0.36	0.46	0.61	0.17	0.68	0.52
MEDIAN	0.18	0.23	0.22	0.26	0.22	0.18	0.21	0.23	0.23	0.27	0.31	0.33

1 - formerly G.T.C. Transcontinental Group Ltd.

Source: Financial Post datagroup (online)

SCHEDULE 28

DEFERRED TAXES AS A PERCENTAGE OF TOTAL INVESTED CAPITAL

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	Average 1998-2002	Average 1993-2002
Alcan Inc.	7.85	7.23	8.42	9.64	8.77	12.05	12.42	11.86	10.62	10.48	8.38	9.93
Astral Media Inc.	23.60	25.33	0.84	0.12	1.05	0.00	0.00	0.00	0.00	0.00	10.19	5.09
CCL Industries Inc.	7.17	6.10	5.57	5.41	4.51	4.68	1.56	0.59	0.00	0.00	5.75	3.56
CHUM Limited	6.16	1.38	1.12	1.26	0.65	0.91	0.93	0.83	0.91	0.83	2.11	1.50
Cameco Corporation	18.85	17.28	16.85	14.82	6.24	2.87	0.00	0.00	0.00	0.00	14.81	7.69
Canada Bread Company, Limited	5.67	11.57	12.66	8.72	8.56	7.92	8.45	7.66	7.09	8.18	9.44	8.65
Canadian Tire Corporation, Limited	0.86	0.59	0.83	1.10	1.64	1.68	1.19	0.85	0.45	1.51	1.00	1.07
The Jean Coutu Group (PJC) Inc.	0.34	0.15	0.03	0.31	0.16	0.06	0.23	0.00	0.00	0.22	0.20	0.15
Transcontinental Inc. - 1	8.23	4.99	6.50	6.80	6.74	7.38	6.65	5.71	6.62	5.71	6.65	6.53
Hudson's Bay Company	0.57	5.02	3.54	2.99	0.75	2.54	4.42	4.40	4.56	2.98	2.57	3.18
IPSCO Inc.	9.11	9.42	7.28	7.75	8.08	1.75	2.68	3.28	3.02	4.60	8.33	5.70
Lassonde Industries Inc.	7.74	6.56	7.22	7.88	7.31	7.44	7.93	9.55	9.35	9.23	7.34	8.02
Leon's Furniture Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loblaw Companies Limited	0.85	0.68	1.34	2.19	2.94	3.04	2.67	1.99	2.14	1.68	1.60	1.95
MAAX Inc.	4.80	5.04	4.27	2.17	1.90	3.15	4.04	1.68	2.13	1.01	3.63	3.02
Rothmans Inc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SNC-Lavalin Group Inc.	0.00	0.00	0.16	0.44	0.00	6.59	10.80	10.35	11.17	5.69	0.12	4.52
Torstar Corporation	4.17	3.59	4.95	2.45	2.38	6.24	1.77	0.68	0.15	0.30	3.51	2.67
Uni-Sélect Inc.	1.75	1.52	1.28	0.65	0.49	0.25	0.14	0.32	0.68	0.69	1.14	0.78
MEAN	5.67	5.60	4.36	3.93	3.27	3.61	3.47	3.14	3.10	2.80	4.57	3.90
MEDIAN	4.80	4.99	3.54	2.19	1.90	2.87	1.77	0.85	0.91	1.01	3.51	3.18

1 - formerly G.T.C. Transcontinental Group Ltd.

Source: Financial Post datagroup (online)

Schedule 29

BETA VALUES (TSE Market Based)

Alcan Inc.	1.65
Andrés Wines Ltd.	0.45
Astral Media Inc.	1.04
CCL Industries Inc.	0.71
CHUM Limited	(0.37)
Cameco Corporation	0.35
Canada Bread Company, Limited	0.47
Canadian Tire Corporation, Limited	0.95
The Jean Coutu Group (PJC) Inc.	0.78
Transcontinental Inc. - 1	0.22
Hudson's Bay Company	1.29
IPSCO Inc.	1.19
Intrawest Corporation	0.80
Lassonde Industries Inc.	(0.32)
Leon's Furniture Limited	(0.01)
Loblaw Companies Limited	0.60
MAAX Inc.	1.02
Rothmans Inc.	0.42
SNC-Lavalin Group Inc.	0.52
Torstar Corporation	0.30
Uni-Sélect Inc.	0.46
MEAN	0.60
MEDIAN	0.52

1 - formerly G.T.C. Transcontinental Group Ltd.

Source: Financial Post Datagroup (on-line), 52 weeks ending August 8, 2003

SCHEDULE 30A

Financial Ratings of Selected Utilities

	Last Update	Mortgage Bonds	Last Update	Debentures	Last Update	Preferred Shares	Last Update	Commercial Paper
Oil Pipelines								
Enbridge Pipelines Inc.-1			16-Jul-02	A (high)			16-Jul-02	R-1 (low)
Gas Pipelines								
TransCanada Pipeline	26-Jun-02	A	11-Jun-03	A	11-Jun-03	Pfd-2 (low)	11-Jun-03	R-1 (low)
Westcoast Energy Inc.			14-Jan-03	A (low)	14-Jan-03	Pfd-2 (low)	14-Jan-03	R-1 (low)
Gas Utilities								
Gaz Metropolitan Inc.	8-Apr-03	A					8-Apr-03	R-1 (low)
Union Gas			22-Jul-03	A	22-Jul-03	Pfd-2	22-Jul-03	R-1 (low)
Terasen Inc-2			25-Apr-03	BBB (high)			25-Apr-03	R-1 (low)
Terasen Gas Inc. -3			18-Jul-03	A			18-Jul-03	R-1 (low)
Electrical Utilities								
Canadian Utilities Ltd.	14-Nov-02	A			14-Nov-02	Pfd-2	14-Nov-02	R-1 (low)
Maritime Electric-4			13-Jan-03	BBB (high)	13-Jan-03	Pfd-3 (high)		
Nfld. Power	30-Jan-03	A			30-Jan-03	Pfd-2		
TransAlta Utilities			12-Dec-02	A (low)				
Nova Scotia Power	20-Nov-02	A (low)	20-Nov-02	A (low)	20-Nov-02	Pfd-2 (low)	20-Nov-02	R-1 (low)
Telephone								
Bell Canada			13-May-03	A (high)	13-May-03	Pfd -2 (high)	13-May-03	R-1 (middle)
Telus Comm. (Quebec) Inc.	16-Jun-03	BBB	16-Jun-03	BBB				
Telus Comm Inc.			16-Jun-03	BBB	16-Jun-03	Pfd-3		
Telus Corporation								
Maritime Tel & Tel - 5					16-Apr-03	Pfd-2 (low)	16-Apr-03	R-1 (low)
Newfoundland Telephone -6	16-Apr-03	A	16-Apr-03	A				

Definition of Ratings:

AAA	Highest Credit Quality	Pfd-1	Superior Credit Quality	R-1	Prime Credit
AA	Superior Credit Quality	Pfd-2	Satisfactory Credit Qualit	R-2	Adequate Cre
A	Satisfactory Credit Quality	Pfd-3	Adequate Credit Quality	R-3	Speculative
BBB	Adequate Credit Quality	Pfd-4	Speculative		
BB	Speculative	Pfd-5	Highly Speculative		
B	Highly Speculative	D	In Arrears		

Source: Dominion Bond Rating Service (on-line)

1 - Formerly called Interprovincial Pipelines Inc.
2- Formerly called BC Gas Inc.
3- Formerly called BC Gas Utility Ltd.
4 - Used Fortis Inc. Rating (Martime Electric is a subsidary)
5- Used Aliant Inc. (subsidiary)

SCHEDULE 30B

Financial Ratings of Selected Utilities

	Last Update	Mortgage Bond	Last Update	Senior Un-Secured	Last Update	Preferred Shares	Last Update	Commercial Paper
Oil Pipelines								
Enbridge Pipelines Inc.-1			18-Dec-01	A-			18-Dec-01	A-1 low
Gas Pipelines								
TransCanada Pipeline	08-Mar-01	A-	08-Mar-01	BBB+	08-Mar-01	BBB		
Westcoast Energy Inc.			17-Jun-03	BBB+	17-Jun-03	BBB-	17-Jun-03	A-2
Gas Utilities								
Gaz Metropolitan Inc.	23-Apr-01	A					23-Apr-01	A-2
Union Gas			17-Jun-03	BBB+	17-Jun-03	BBB-	17-Jun-03	A-2
Terasen Inc-2			26-Jun-03	BBB-			26-Jun-03	A-2
Terasen Gas Inc. -3	19-Nov-02	A-	26-Jun-03	BBB			28-Aug-01	A-2
Electrical Utilities								
Canadian Utilities Ltd.			22-Nov-02	A-	27-Jun-01	A-	27-Jun-01	A-1
Maritime Electric-4	11-Nov-02	A-						
Newfoundland Power	20-Mar-01	A			20-Mar-01	BBB		
TransAlta Utilities	29-May-03	BBB						
Nova Scotia Power			24-Apr-03	BBB+	24-Apr-03	BBB-		
Telephone								
Bell Canada			28-Jun-02	A	28-Jun-02	BBB+	28-Jun-02	A-1
Telus Communications (Quebec) Inc.	29-May-03	A-	29-May-03	BBB				
Telus Communication Inc.			07-Nov-02	BBB	07-Nov-02	BB+		
Telus Corporation			08-Aug-03	BBB				
Maritime Tel & Tel - 5					04-May-01	BBB	04-May-01	A-1
Newfoundland Telephone -6	21-Feb-02	A+	21-Feb-02	A				

Definition of Ratings:

AAA	Highest Rating (Extremely Strong)	A-1+ & A-1	Highest Investment Quality (Strong/Extremely Strong)
AA	High Rating Quality (Very Strong)	A-2	Highest Quality (Satisfactory)
A	Good Rating (Good)	A-3	Good Quality (Adequate)
BBB	Medium Quality (Adequate)	B	Medium Quality (Adequate under current conditions)

Plus (+) or Minus (-) relative standing within major rating categories

( ) - ability to meet financial commitments

Source: Standard's and Poors Bond Rating Service

Debenture - Senior Unsecured in S&P Ratings
First Mortgage Bonds - Senior Secured

1 - Formerly called Interprovincial Pipelines Inc.
2- Formerly called BC Gas Inc.
3- Formerly called BC Gas Utility Ltd.
4 - Used Fortis Inc. Rating (Martime Electric is a subsidary)
5- Used Aliant Inc. (subsidiary)
6- Used Aliant Telecom Inc. (subsidiary)

Schedule 31

Bond Yield by Rating Category

Corporate	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**
AA	5.96	5.63	6.01	6.41	5.10	4.47
A	6.23	5.95	6.35	6.81	6.01	5.73
BBB	6.40	6.51	7.24	7.95	7.02	6.62
All Corporates	6.15	5.88	6.28	6.73	5.92	5.63

Source: Scotia McLeod's Handbook of Canadian Debt Market Indices
Note: Figures above are average annual yields for Universe Bonds

Newfoundland and Labrador Hydro - Schedule of Key Ratios

Schedule 32

Key Ratios	**2002**	**2001**	**2000**	**1999**	**1998**	**1997**	**1996**	**1995**	**1994**	**1993**	**1992**	**1991**	**1990**
Debt to common equity	5.67	4.00	3.55	3.17	3.35	4.00	4.26	4.26	4.26	4.56	4.88	5.25	5.25
Return on common equity	9.01	7.93	4.90	6.61	8.76	5.74	3.93	4.57	2.43	3.67	3.77	4.13	5.59
Interest Coverage Ratio	1.37	1.38	1.18	1.33	1.42	1.23	1.15	1.17	1.06	1.10	1.12	1.06	1.08

Source: Consolodated Newfoundland and Labrador Hydro Annual Financial Statements and 2003 NLH General Rate Application

Schedule 33

Worldwide Equity Risk Premia Relative to Long Term Bond Returns, 1900-2000

Country	Geometric Mean %	Arithmetic Mean %	Standard Deviation %
Australia	6.3	8.0	18.9
Belgium	2.9	4.8	20.7
Canada	4.5	6.0	17.8
Denmark	2.0	3.3	16.9
France	4.9	7.0	21.6
Germany	6.7	9.9	28.4
Ireland	3.2	4.6	17.4
Italy	5.0	8.4	30.0
Japan	6.2	10.3	33.2
Netherlands	4.7	6.7	21.4
South Africa	5.4	7.1	19.7
Spain	2.3	4.2	20.3
Sweden	5.2	7.4	22.1
Switzerland	2.7	4.2	17.9
United Kingdom	4.4	5.6	16.7
United States	5.0	7.0	2.0
World	4.6	5.6	14.5

Source: Triumph of the Optimists, Elroy Dimson, Paul Marsh, Mike Stauton, Princton University Press, 2002 (page 173, Table 12-2)

Schedule 34-1

INTEREST COVERAGE

	2002	2001	2000	1999	1998	1997	1996	Average
British Columbia Hydro and Power Authority *	1.43	2.48	1.66	1.58	1.58	1.43	1.16	1.62
Hydro Quebec	1.59	1.42	1.37	1.26	1.19	1.20	1.11	1.30
Manitoba Hydro-Electric Board *	1.42	1.62	1.35	1.23	1.25	1.23	1.16	1.32
New Brunswick Power Corporation *	1.08	0.69	1.23	0.91	0.82	0.94	1.02	0.96
Saskatchewan Power Corporation	2.03	1.40	1.69	2.96	1.11	1.65	1.64	1.78
MEAN	1.51	1.52	1.46	1.59	1.19	1.29	1.22	1.40
MEDIAN	1.43	1.42	1.37	1.26	1.19	1.23	1.16	1.32

* Fiscal year ending March 31

Source: Compact Disclosure Canada (online), NB Power, SaskPower and Manitoba Hydro-Electric Board annual reports 2002

Schedule 34-2

RETURN ON COMMON EQUITY

	2002	2001	2000	1999	1998	1997	1996	Average
British Columbia Hydro and Power Authority *	26.97	31.36	16.59	17.43	18.69	16.00	7.38	19.20
Hydro Quebec	10.51	7.61	7.70	6.70	5.20	6.20	4.30	6.89
Manitoba Hydro-Electric Board *	16.44	24.82	18.58	15.02	19.61	22.20	19.77	19.49
New Brunswick Power Corporation *	n/a	n/a	n/a	n/a	(9.87)	(4.34)	1.76	(1.78)
Saskatchewan Power Corporation	10.92	2.56	9.75	9.90	11.40	12.25	13.66	10.06
MEAN	12.97	13.27	10.52	9.81	9.01	10.46	9.37	10.77
MEDIAN	13.68	16.22	13.17	12.46	11.40	12.25	7.38	10.06

* Fiscal year ending March 31
n/a - NB power had negative equity

Source: Compact Disclosure Canada (online), NB Power, SaskPower and Manitoba Hydro-Electric Board annual reports 2002

Schedule 34-3

NET DEBT EQUITY RATIO

	2002	2001	2000	1999	1998	1997	1996	Average
British Columbia Hydro and Power Authority *	4.92	5.37	5.29	5.43	6.51	6.84	8.05	6.06
Hydro Quebec	2.63	2.55	2.44	2.62	2.83	2.88	2.92	2.70
Manitoba Hydro-Electric Board *	5.48	6.40	8.08	8.83	9.80	9.33	13.47	8.77
New Brunswick Power Corporation *	n/a	n/a	n/a	n/a	9.79	7.10	7.05	3.42
Saskatchewan Power Corporation	1.59	1.68	1.40	1.42	1.67	1.52	1.70	1.57
MEAN	2.92	3.20	3.44	3.66	6.12	5.53	6.64	4.50
MEDIAN	3.78	3.96	3.87	4.03	6.51	6.84	7.05	3.42

* Fiscal year ending March 31
n/a - NB power had negative equity

Source: Compact Disclosure Canada (online), NB Power, SaskPower and Manitoba Hydro-Electric Board annual reports 2002

Schedule 34-4

CAPITAL STRUCTURE USING GROSS LONG TERM DEBT

	2002		2001		2000		1999		1998		Average	
	Debt	**Equity**	**Debt**	**Equity**	**Debt**	**Equity**	**Debt**	**Equity**	**Debt**	**Equity**	**Debt**	**Equity**
British Columbia Hydro and Power Authority *	83.11	16.89	84.30	15.70	84.10	15.90	84.45	15.55	86.68	13.32	84.53	15.47
Hydro Quebec	72.45	27.55	71.83	28.17	70.93	29.07	72.38	27.62	73.89	26.11	72.30	27.70
Manitoba Hydro-Electric Board *	84.57	15.43	86.49	13.51	88.99	11.01	89.83	10.17	90.74	9.26	88.13	11.87
New Brunswick Power Corporation *	107.10	(7.10)	106.67	(6.67)	103.45	(3.45)	105.44	(5.44)	90.73	9.27	102.68	(2.68)
Saskatchewan Power Corporation	61.41	38.59	62.64	37.36	58.33	41.67	58.65	41.35	62.61	37.39	60.73	39.27
MEAN	81.73	18.27	82.39	17.61	81.16	18.84	82.15	17.85	80.93	19.07	81.67	18.33
MEDIAN	83.11	16.89	84.30	15.70	84.10	15.90	84.45	15.55	86.68	13.32	84.53	15.47

* Fiscal year ending March 31

Source: Compact Disclosure Canada (online), NB Power, SaskPower and Manitoba Hydro-Electric Board annual reports 2002

SCHEDULE 35

CAPITAL STRUCTURES FOR REGULATORY PURPOSES FOR SELECTED CANADIAN UTILITIES

	(1) Decision Date	Order/File Number	Debt	Preferred Stock	Deferred Taxes/No Cost Capital	Common Stock Equity	Return on Common Equity		Structure
Gas Distributors									
Enbridge Consumers' Gas	12/02	RP-2001-0032	61.71	3.29		35.00	9.66		Deemed
Union Gas Ltd	09/02	RP-2002-0130	62.93	3.50		33.57	9.66	(10)	Actual
Terasen Inc. (2)	11/02	L-46-02	67.00			33.00	9.42		Deemed
Electrics									
ATCO Ltd. (3)	02/01	Decision 2001-14	59.00			41.00	9.50		Deemed
ATCO Ltd. (4)	10/00	Decision 2000-65	65.00			35.00	9.75		Deemed
TransAlta Utilities (5)	01/01	Decision 2001-4	65.00			35.00	9.40		Deemed
Newfoundland Power	06/03	PU 19 (2003)	54.28	1.45		44.27	9.75		Deemed
Nova Scotia Power	10/02	NSUARB-NSPI-P-875	65.00			35.00	10.15		Deemed
Gas & Oil Pipe Lines									
Enbridge Pipelines Inc.		Negotiated							
Trans Quebec & Maritime Pipe Line	03/95	RH-2-94	70.00			30.00	9.79	(6)	Deemed
TransCanada Pipe Line	06/02	RH-4-2001	67.00			33.00	9.79	(7)	Deemed
TransCanada's BC System (8)	03/95	RH-2-94	70.00			30.00	9.79	(9)	Deemed
Westcoast Energy		Negotiated							
Trans-Mountain Pipe Line		Negotiated							

Notes

(1) Decision Date reflects the date when the decision regarding the capital structure and return on common equity were issued, unless otherwise stated
(2) Formerly BC Gas Utility Ltd.
(3) For ATCO's electric distribution facilities
(4) For ATCO's electric transmission facilities
(5) TransAlta's Transmission business was sold to AltaLink in 2002, and the Distribution was sold to Aquila in 2002
(6) Indicated Return is as of 12/02, date in the 'Decision Date' column reflects the date when the capital structure and formula for Return were decided upon
(7) Indicated Return is as of 12/02, date in the 'Decision Date' column reflects the date when the capital structure and formula for Return were decided upon
(8) Formerly Alberta Natural Gas
(9) Indicated Return is as of 12/02, date in the 'Decision Date' column reflects the date when the capital structure and formula for Return were decided upon
(10) Indicated Return is as of 09/02, date in the 'Decision Date' column reflects the date when Return was decided RP-2001-0029