Q. Reference: Appendix G of Ms. McShane's evidence.

Ms. McShane's listing of Expert Testimony/Opinions on Rate of Return and Capital Structure and listing of Expert Testimony/Opinions on Other Issues does not make reference to her expert opinion evidence provided on behalf of the Insurance Bureau of Canada to the Board in Newfoundland dated November 8, 2004.

(a) Why does Ms. McShane not refer to this expert testimony in her C.V.?

(b) Please provide a copy of this expert testimony.

A. (a) At page G-4 of her Qualifications, Ms. McShane does refer to the expert opinion evidence provided to the Board on behalf of the Insurance Bureau of Canada in 2004.

(b) Attachment A is a copy of the *Prepared Testimony of Kathleen C. McShane* dated November 8, 2004.

Prepared Testimony of
Kathleen C. McShane, CFA

Submitted to
The Board of Commissioners of Public Utilities

November 8, 2004

BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

NEWFOUNDLAND AND LABRADOR

Prepared Testimony of

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Bethesda, Maryland 20814

November 8, 2004

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I. QUALIFICATIONS

My name is Kathleen C. McShane and my business address is 4550 Montgomery Avenue, Suite 350N, Bethesda, Maryland 20814. I am a Senior Vice President of Foster Associates, Inc., an economic consulting firm. I hold a Masters in Business Administration with a concentration in Finance from the University of Florida (1980) and the Chartered Financial Analyst designation (1989). My expertise is in cost of capital, risk issues and form of regulation, with specific focus on public utilities. I have testified on cost of capital and ratemaking issues in over 125 cases in Federal, State, Provincial and Territorial regulatory jurisdictions in Canada and the U.S. since 1987. My professional experience is detailed in Appendix A to this Exhibit.

II. INTRODUCTION

I have been retained by the Insurance Bureau of Canada to provide an expert opinion on the relevance of reliance on the allowed returns for public utilities as a comparison, or benchmark, for the target return on equity for automobile insurers in Newfoundland and Labrador.

The issue of the comparability of allowed returns on equity for public utilities and the target return for automobile insurers in Newfoundland and Labrador arises from several sources.

First, the Board of Commissioners for Public Utilities is charged with the regulation of rates for both public utilities and automobile insurers. The Board has recently set allowed returns for the two major electric utilities under its jurisdiction, Newfoundland and Labrador Hydro (Order No. P.U.14, 2004) and Newfoundland Power (Order No. P.U.19, 2003). In arriving at its decision on the

target ROE for automobile insurers, it is important that the Board take into account critical differences between the two industries.

Second, the report submitted by Mercer Oliver Wyman entitled "*Proposed Newfoundland and Labrador Private Passenger and Commercial Automobile Insurance: Benchmark Ranges for 2005*" (October 12, 2004) sets out the Board's selected methodology for setting the target return on equity for automobile insurers. That methodology is "to set the after-tax ROE to be equal to the return on investment (ROI) (before tax) plus 2.5%. The return on investment (ROI) is based on a (monthly) five-year average of the before-tax yields of ten-year Government of Canada Bonds." (page 39). The Board's methodology, according to Mercer Oliver Wyman, indicates an after-tax return on equity of 7.9%, premised on a 5.4% five-year average of 10-year Canada yields.

As discussed in my report, the Board's methodology results in a target return on equity for automobile insurers that is materially lower than the allowed returns on equity for public utilities across Canada. A comparison of the risk characteristics of public utilities and automobile insurers highlights the inadequacy of the formula-driven target ROE for automobile insurers.

Third, the NERA report (authored by Dr. Cindy Ma and Mr. Kurt Strunk) commissioned by the Board, entitled "*The Cost of Equity Capital for Automobile Insurance Firms*" (October 13, 2004), arrives at the conclusion that "a cost of equity in the range of 11% to 14% is appropriate for the Board to use when setting benchmark automobile rates" (page 16). In the Ma/Strunk report, there is reference to the average allowed returns on equity for U.S. gas utilities over the 2002-June 2004 period of 11.0%. This report will demonstrate that there are significant differences between the business and financial risks faced by gas utilities and automobile insurers which would render the 11.0% allowed ROE for the former an inadequate benchmark for automobile insurers.

III. MANDATE OF THE PUBLIC UTILITIES BOARD OF NEWFOUNDLAND AND LABRADOR

A. PUBLIC UTILITIES

The Board of Commissioners of Public Utilities (Board) for Newfoundland and Labrador is charged with setting reasonable rates for the public utilities under its jurisdiction. Specifically, the Electrical Power Control Act (Section 3) states that the rates to be charged:

> (i) should be reasonable and not unjustly discriminatory;
> (ii) should be established, wherever practicable, based on forecast costs for that supply of power for 1 or more years;
> (iii) should provide sufficient revenue to the producer or retailer of the power to enable it to earn a just and reasonable return as construed under the Public Utilities Act so that it is able to achieve and maintain a sound credit rating in the financial markets of the world.

The Public Utilities Act, Section 80. (1) states that:

> A public utility is entitled to earn annually a just and reasonable return as determined by the Board on the rate base, as fixed and determined by the Board for each type or kind of service supplied by the public utility…

B. AUTOMOBILE INSURERS

The Board is charged with general supervision of the rates charged by the 56 automobile insurers operating in Newfoundland and Labrador under provisions of the Automobile Insurance Act (Section 48). While the Act requires all proposed changes in rates to be approved by the Board, in contrast to legislation governing public utilities, it does not prescribe a methodology to be used to establish

automobile insurers' rates. However, the Board describes its responsibility as follows:

> To ensure that rates are fair for consumers, commensurate with the risk represented and insured by companies, and adequate to cover future claims obligations and operating costs of automobile insurance companies. (Board of Commissioners of Public Utilities, "*Operations Carried Out Under The Automobile Insurance Act",* Annual Report 2001-2002).

To assist in carrying out its regulatory mandate, the Board establishes Benchmark Rate Ranges with upper and lower bounds that it relies upon in its review of individual automobile insurer's rate filings. In general, the Board will approve an insurer's rates if they fall within the established range. Rate applications which propose rates outside the range are subject to a more in-depth analysis by the Board.

IV. CONCEPT OF RETURN IN NEWFOUNDLAND RATE REGULATION

A. PUBLIC UTILITIES

The Board has set out the fundamental principles that govern its decision-making in setting rates for the Province's public utilities in P.U.14 (2004), for Newfoundland and Labrador Hydro. The principles that govern the return component of rates include:

1. Fair Return

   Regulated utilities are given the opportunity to earn a fair rate of return. To be considered fair, the return must be:

   - commensurate with return on investments of similar risk;
   - sufficient to assure financial integrity; and
   - sufficient to attract necessary capital.

The fair return principle is consistent with both Section 80(1) of the *Act* and Section 3(a)(iii) of the *EPCA*.

2. Cost of Service

Under this principle a utility is permitted to set rates that allow the recovery of costs for regulated operations, including a fair return on its investment devoted to regulated operations – no more, no less.

As stated by the Board,

> "The focus of return on rate base regulation is on earnings, in particular the allowed return per dollar of investment (rate base). Rates are set to give the regulated utility the opportunity to recover its revenue requirement consisting of its estimated operating costs and a fair return on its rate base. These costs are generally estimated for a test year(s) for which the rates are set."

Rate base, as defined by the Board, consists of "the amount of investment on which a regulated utility is allowed to earn a fair return. Rate base comprises primarily depreciated investment in plant and equipment plus working capital as well as certain deferred assets/costs attributable to future operations." The public utility's rate base in Newfoundland and Labrador, as in the preponderance of regulatory jurisdictions in Canada, is measured on the basis of original (accounting) costs.

The Board also defines a just and reasonable allowed rate of return on rate base as "equivalent to the cost of capital representing the sum of the weighted costs of both debt and equity in the capital structure."

The capital structure ratios, like the rate base, are also measured on the basis of the book values (as contrasted with market values) of debt, preferred stock and common equity.

A public utility's total revenue requirement is comprised of its operating and maintenance expenses, depreciation expense, interest expense, an after-tax return on both common and preferred equity, and an income tax allowance. The revenue requirement or cost of service is allocated across customer classes through analysis of the costs incurred in purchasing, producing, transmitting and distributing electricity to its customers by customer class. Once the revenue requirement has been allocated by customer class, rates are designed so as to provide a reasonable opportunity for the utility to earn its allowed rate of return through recovery of the required costs.

For Newfoundland Power, an investor-owned utility, the Board uses an automatic adjustment mechanism to annually re-estimate the appropriate return on common equity, based on changes in the yield on long-term Canada bonds. The revised return on equity is used to reset the allowed return on rate base. Newfoundland Power is allowed to earn a return on rate base of up to 36 basis points (.36%) above the allowed return on rate base. Earnings in excess of that level are credited to an excess revenue account, with the disposition of the balance to be determined by the Board.

B. AUTOMOBILE INSURERS

Regulation of automobile insurers' rates in Newfoundland and Labrador, in contrast to the focus on earnings regulation for public utilities, can be characterized as price regulation. As noted above, the Board's objective is to set rates that are "commensurate with the risk represented and insured by companies, and adequate to cover future claims obligations and operating costs". In establishing rates for automobile insurers, the Board does have regard to a target after-tax return on equity.[1]

[1] Defined in the Mercer Oliver Wyman report as the "insurer's profit as a percentage of its surplus, where profit is the sum of (a) underwriting profit, and (b) investment income earned on both the underwriting operations of the company and on the surplus carried by the company."

However, in contrast to its clear exposition of the principles that should underpin the determination of the fair return for the public utilities it regulates, the Board has not established analogous principles for establishing the target ROE for automobile insurers. The Board has a methodology for establishing the target after-tax return on equity for automobile insurers, but as described earlier in this report has not set out a rationale for that methodology.

The NERA report adopts the principles of a fair and reasonable return that reflect the standard for public utilities in both Canada and the U.S. The principles specified in the NERA report are virtually identical to those adopted by this Board for purposes of regulating the Province's public utilities. In particular, the NERA report refers to the comparable earnings standard as expressed by the National Energy Board and the U.S. Supreme Court in *Federal Power Commission et al. v. Hope Natural Gas Co.*, 320 U.S. 591 (1944), which defines a fair return as one that is comparable to, or commensurate with, returns of other enterprises having corresponding risks.

These principles are, in my opinion, equally valid for establishing a target return on equity for an automobile insurer. A fair return on equity, as NERA suggests, is frequently defined as the capital market-derived cost of equity. The cost of equity is defined as the return an investor requires to commit equity capital to a particular venture given that venture's business and financial risks.

V. ALLOWED RETURNS FOR CANADIAN UTILITIES

Table 1 below summarizes recent allowed after-tax returns on equity and approved common equity ratios for major investor-owned Canadian utilities, including natural gas pipelines, natural gas distributors, and electric utilities. The most recent allowed returns on equity have averaged approximately 9.5%, with a range of 9.15% to 10.15%. The allowed returns on equity have been applied to common equity ratios approved for rate setting purposes ranging from 30% to 44%, with the level depending in part on the specific industry in which the utility operates (and thus the level of business risks faced)[2] and averaging approximately 37%.

Table 1 also includes the long Canada (30-year bond) yield on which the allowed return on equity was based. The availability of this yield for the utilities reflects the fact that Canadian regulators (with the exception of Nova Scotia) rely primarily on the equity risk premium test to set allowed returns for public utilities.

[2] To illustrate, gas pipelines like TransCanada PipeLines are generally viewed as facing less business risk than gas distributors. The pipelines' lower business risk is reflected in a lower approved common equity ratio. In Alberta, the differences among individual utilities business risks are reflected in differential approved common equity ratios, so as to produce the same level of investment (total business plus financial) risk for all utilities. The same allowed return on equity is then applied to each utility, whether it is a natural gas pipeline or an electric distribution utility.

Most Canadian regulators set the allowed return on equity for public utilities as the yield (actual or forecast) on 30-year Canadas plus an equity risk premium. The average 30-year Canada yield shown on Table 1 is approximately 5.7%, compared to the average corresponding allowed return on equity of 9.5%.

TABLE 1

EQUITY RETURN AWARDS AND CAPITAL STRUCTURES ADOPTED BY REGULATORY BOARDS FOR INVESTOR-OWNED CANADIAN UTILITIES

(Percentages)

	Decision Date	Order/File Number	Common Stock Equity	Equity Return	Forecast 30-Year Bond Yield
	(1)	(2)	(3)	(4)	(5)
NEWFOUNDLAND AND LABRADOR					
Newfoundland Power	6/03	PU 19(2003)	44.55	9.75	5.60
NOVA SCOTIA					
Nova Scotia Power	10/02	NSUARB-P-875	35.00	10.15	5.95 [1/]
QUEBEC					
Gaz Metropolitain	9/03	D-2003-180	38.50	9.45	5.48
ONTARIO					
Enbridge Gas Distribution Inc	11/03; 1/04	RP-2002-0158; RP-2002-0133	35.00	9.69	5.97
Union Gas	1/04; 3/04	RP-2002-0158; RP-2003-0063	35.00	9.62	5.68
ALBERTA					
ATCO Electric					
Transmission	7/04	EUB 2004-052	33.00	9.60	5.68
Distribution	7/04	EUB 2004-052	37.00	9.60	5.68
ATCO Gas	10/03	EUB 2003-072	37.00 [2/]	9.50	6.00
BRITISH COLUMBIA					
FortisBC Inc.	11/03; 5/04	L-57-03; G-38-04	40.00	9.55	5.65
Pacific Northern Gas	11/03; 7/04	L-57-03; G-69-04	36.00	9.80	5.65
Terasen Gas	11/03	L-57-03	33.00	9.15	5.65
NATIONAL ENERGY BOARD					
TransCanada PipeLines[3/]	12/03	RH-3-94; RH-4-2001	33.00	9.56	5.68

[1/] Average of experts' estimates.

[2/] The 2004 equity ratio was set in Decision EUB 2003-072. In 2005, the equity ratio increases to 38% (EUB 2004-052). The common equity return will be equal to that applicable to the other Alberta utilities.

[3/] The NEB return also applies to Alberta Natural Gas, Foothills Pipelines (Yukon) Ltd., and TransQuebec & Maritimes Pipeline at equity ratios of 30%, and to Westcoast Energy's Mainline at an equity ratio of 31%.

Source: Board Decisions.

The average equity risk premium allowed for Canadian public utilities is thus 3.8%. The 3.8% equity risk premium can be compared to the 2.5% premium added to the five-year average of 10-year Government of Canada bond yields to arrive at the Board's target return on equity for automobile insurers. Since the yield on 30-year Canadas has been historically about 0.35% higher than the yield on 10-year Canadas, the automobile insurers' 2.5% premium over 10-year Canadas effectively becomes approximately 2.15% over 30-year Canadas.

Given the differences in business and financial risks faced by public utilities compared to automobile insurers (discussed later in this report), a risk premium for the latter of less than 60% of that applicable to the typical public utility is clearly inadequate.

VI. ALLOWED RETURNS FOR NEWFOUNDLAND AND LABRADOR UTILITIES

Newfoundland Power is the only investor-owned public utility regulated by the Board.[3] As indicated in Table 1, Newfoundland Power's allowed return on equity is 9.75%. Its approved common equity ratio is the lesser of the actual and 45%. For 2003, its rates were set using a forecast book value common equity ratio of 44.5%.

The allowed capital structure and return on equity for Newfoundland Power (NP) are set on a "stand-alone basis", that is, on the basis of the utility's own business

[3] Table 1 excludes Crown Corporations, e.g., Newfoundland and Labrador Hydro (NLH), the other major public utility regulated by the PUB. Although the government-owned utility is subject to rate base/rate of return regulation, the PUB, in its most recent decision, determined that NLH is not sufficiently similar to an investor-owned utility to warrant a comparable return on equity. Consequently, the circumstances of NLH and its allowed return on shareholder's equity have no relevance to an appropriate return on equity for either investor-owned utilities or automobile insurers.

and financial risks, not those of its more diversified parent, the entity whose stock is publicly-traded.

The allowed equity return reflects the business environment in which NP operates, which comprises the following characteristics:

- Newfoundland Power is the only distribution utility in the area it serves;

- Its rates are set on the basis of its forecast sales and costs, including a return on equity, and an income tax allowance. The allowed return on rate base, the depreciation expense (return of invested capital), and the income tax allowance account for approximately 30% of the total revenue requirement. Forecasting risk associated with these cost elements is relatively low;

- The utility has deferral accounts for weather and purchased power (a rate stabilization mechanism). NP's weather normalization account dampens the utility's earnings variability due to higher or lower than forecast sales arising from colder or warmer than normal weather. The rate stabilization mechanism allows the utility to pass through to customers unanticipated changes in the costs of power purchased from NLH. Purchased power accounts for approximately 60% of NP's total revenue requirement;

- The utility's demand, in recent years, has been relatively stable;

- Over the past five years, the average return on equity reported by NP has been 10.9%, compared to an allowed return on equity of 9.45%; and,

- The utility's principal business risks arise from its relatively small service area, characterized by relatively low expected long-term economic growth and a declining population.

The allowed return on equity also reflects the level of financial risks borne by the utility; the level of financial risks faced is reflected in NP's most recent approved debt ratio of 54%.

The Board has concluded (P.U.19) that NP faces average investment (business plus financial) risk compared to other Canadian utilities. In relation to all companies, however, the Board concluded that NP is materially lower than average risk. In P.U.16 (1998), the Board concluded that NP's beta (or relative risk factor) was 0.60. By definition, an average risk company has a beta of 1.0. To put this difference in perspective, the NERA report relies on equity market risk premiums of 5.0% to 7.2%. Using the mid-point of these values of approximately 6.0%, an average risk stock could require an equity risk premium of 6.0%.[4] A public utility with a beta of 0.60 would require an equity risk premium of 3.6%, or 2.4 percentage points less.

VII. BUSINESS RISKS OF OTHER CANADIAN UTILITIES

The other Canadian utilities represented on Table 1 face similar, if not identical, business risks to NP. Some of the utilities face competition with alternative energy sources (e.g., Gaz Metro competes with electricity and oil), but few utilities compete with others for the same delivery service.[5] The key short-term risks are cost forecasting risks – the preponderance of which are fixed costs – and revenue forecasting risks. The level of revenue forecasting risks depends on the nature of the individual utility's customer base (cyclical industrial versus a more

[4] Beta times equity market risk premium.
[5] Some pipelines face pipe-on-pipe competition for transportation of gas or oil (e.g., TransCanada PipeLines).

stable residential/commercial customer profile). Other risks include disallowance of costs and political intervention in the regulatory process.

Public utility regulation in Canada generally has also made significant use of deferral accounts to capture costs or revenues that are determined to be beyond the utility's control or ability to forecast. Costs in excess of those included in base rates are recovered from customers in a subsequent period if determined to be prudently incurred. All Canadian gas utilities have deferral accounts for gas costs, which can account for 75% of the utility's total costs. Other cost deferral accounts approved for utilities are for purchased power, fuel costs, short-term interest expenses, and insurance costs.

Some Canadian utilities have access to revenue deferral accounts, which collect from, or refund to, customers an under- or over-collection of revenues due to higher or lower than expected deliveries due to abnormal weather or unforecast changes in customer usage. Other revenue deferral accounts that have been approved for utilities have included accounts for deliveries not subject to contracts (and thus deemed to be unforecastable), or lost profit margin due to customer closure.

The relatively low level of business risk (compared to an "average risk" company) faced by the utilities is reflected in their relatively low level of approved common equity ratios. The average approved common equity ratio across utility industries in Canada of approximately 37% compares to an average of approximately 60% for companies that comprise the S&P/TSX Composite. Similar to the Board's conclusions regarding Newfoundland Power, other Canadian regulators have determined that the major public utilities under their jurisdiction face relatively low investment risk, as reflected in recent allowed returns on equity in a narrow range of 9.15-10.15%.

VIII. U.S. GAS UTILITIES

NERA cites an 11.0% average allowed return on equity for U.S. natural gas distribution utilities as a comparison to its 12.29% to 13.94%[6] range of costs of equity estimated for automobile insurers using a discounted cash flow approach.[7]

The business risks faced by U.S. gas utilities are generally similar to those faced by gas utilities in Canada. The regulatory model is similar, in that rates are set to recover the revenue requirement, including an allowed return on equity. U.S. gas utilities have deferral accounts for purchased gas costs. A number of the major gas utilities also have the benefit of weather-normalization mechanisms. There is no systematic difference in competitive or economic cycle risks as between the two countries' gas utilities. Key differences in the U.S., which point to somewhat higher business risks for the U.S. utilities, include the use of historic test year costs for setting future rates and less reliance on deferred accounts to mitigate the utilities' cost recovery risks. An offsetting factor is the inclusion of deferred taxes in the U.S. utilities' revenue requirements, and only taxes currently payable in most Canadian jurisdictions. The use of taxes payable puts the Canadian utilities at risk of underrecovery of future (higher) taxes when they come due.

To the extent that U.S. gas utilities face higher business risks than their Canadian counterparts, those risks have been reflected in higher approved equity ratios (lower financial risks). The typical Canadian gas distributor has an approved common equity ratio of about 36%. The average approved common equity ratio associated with the allowed returns on equity cited in the NERA report was

[6] Range of estimates reflect DCF results presented in the "*Addendum to NERA Report, The Cost of Equity Capital for Automobile Insurance Firms*" (October 25, 2004).
[7] The discounted cash flow approach is the model most widely used by U.S. regulators to set allowed returns for public utilities.

approximately 49%.[8] Further, while the business risks of the U.S. gas utilities may be somewhat higher than those faced by their Canadian peers, they remain significantly lower than those faced by the automobile insurers.

IX. BUSINESS RISKS OF AUTOMOBILE INSURERS

Automobile insurers face a significantly different and riskier business environment than the typical Canadian utility. The following characteristics of automobile insurers distinguish them from the public utilities for which this Board also sets returns on equity.

While the average Canadian utility provides a monopoly service, the business of automobile insurers is very competitive. There are a large number of insurers operating in Canada generally, and in Newfoundland specifically, with no single insurer dominating the market. Further, in contrast to the typical public utility, an automobile insurer operating in Newfoundland and Labrador is required to operate within a mixed industry structure of rate regulation and competition.

Premiums, the rates charged by automobile insurers, are based on forecasts of a number of variables, principally the number and cost of future claims, the investment income that will be earned, operating expenses (e.g., labor and commissions) and taxes. The forecasting of these costs is materially more complex than the forecasting undertaken by public utilities to arrive at rates necessary to recover their revenue requirement.

Many Canadian utilities' rates are set annually, based on the forecasts of demand and costs for a single future year. Automobile insurers are setting rates that reflect the potential for claims or costs to differ from the levels anticipated for

[8] *Regulatory Research Associates*, "Major Rate Case Decisions – January 2002-December 2003: Supplemental Study,." January 22, 2004; *Regulatory Research Associates*, "Major Rate Case Decisions – January-June 2004," July 8, 2004.

many years into the future. (That is, the rates reflect the present value of future claims of current policyholders as well as the projected costs of administering those claims.)

The potential for the actual outcomes to deviate from the forecasts is also materially higher for automobile insurers. While both automobile insurers and utilities have an ability to seek changes to rates if the existing rates do not adequately cover their costs, the automobile insurers are more constrained in their ability to do so by competition within the industry.

In contrast to public utilities, which have mechanisms approved to allow the future recovery of some under forecast costs (e.g., gas costs, purchased power costs), automobile insurers have no ability to recover any such costs in future rates.

An automobile insurer's financial performance is in part dependent on its ability to cede a portion of its claims to reinsurers and thus reduce its underwriting risk. The availability and prices of reinsurance are subject to considerable uncertainty, particularly subsequent to 9/11.

Investment income is a key contributor to the financial performance of insurers. Investment income is sensitive to the vagaries of the capital markets. A utility faces considerably less sensitivity to the capital markets, as its exposure to capital market volatility is primarily limited to the difference between the cost forecast for, and incurred in, a particular year for additional debt capital.

Insurers' financial performance is considerably more cyclical than utilities'. While utility demand is generally stable, cyclical effects in the utilities' returns can be mitigated by re-estimating the forecasted demand, and resetting the rates to recover the revenue requirement. Insurers do not have a similar ability to mitigate

the cyclicality of the business. Thus, the earned returns on equity of insurers have exhibited significant volatility. Moreover, while the financial performance of public utilities has continued, over the past several years, to exhibit returns in line with the levels allowed, the performance of the automobile insurance business in Canada generally has not reached the target return on equity levels. Moreover, the financial performance of the automobile insurers has fallen well short of levels commensurate with the costs of equity that have been estimated in the NERA report.

In summary, the business risks of automobile insurers exceed those of public utilities by a wide margin. In the absence of an offsetting lower degree of debt leverage, the automobile insurers' higher business risks require a target common equity return in excess of the public utilities' recent allowed returns on equity.

X. IMPACT OF LEVERAGE

As the NERA report points out, there is a direct relationship between the debt ratio of a firm and its cost of equity. The higher a firm's debt ratio, the higher its cost of equity.

The NERA report provides leverage ratios for its proxy sample companies in Exhibits 6 and 7A. As indicated on page 13 of the NERA report, "the majority of our companies have debt to total capital ratios of over 80%. This is a high degree of leverage, as compared to, for example, the utilities sector."

For the utilities on Table 1 of my report, the average approved debt ratio is approximately 60%. The impact on the cost of equity of only the difference in financial risks between utilities and automobile insurers can be estimated at over 2.5 percentage points, based on the 6.0% mid-point of NERA's two market risk premium estimates.

As noted earlier, risk is comprised of both business and financial risks. The beta (or relative risk factor), as used in NERA's application of the Capital Asset Pricing Model, is an equity (or investment risk) beta, measuring the combined business and financial risk. An estimated "business risk" or asset beta can be extracted from the equity risk beta, using the following formulation:

Asset Beta = Equity % * Equity Beta + Debt % * Debt Beta* (1-Tax Rate)

For the typical Canadian utility, the regulator-determined equity betas have recently been in the range of 0.55 – 0.60. The spread between the cost of a utility's long-term debt and the long Canada yield ("risk-free" rate) can be used as a proxy for the debt risk premium. The debt risk premium divided by the equity market risk premium serves as a proxy for the debt beta. The recent debt spread of about 1.25 percentage points divided by the NERA report's 6.0% mid-point of its two market risk premium estimates equals a debt beta of 0.21.

Using a 0.60 utility equity beta, the asset beta is equal to 0.32, calculated as follows:

Asset Beta = Equity % * Equity Beta + Debt % * Debt Beta* (1-Tax Rate)

0.32 = 40% * 0.60 + 60% * 0.21 * (1-.3612)

The 0.32 asset beta can then be translated into an equity beta for a company with the same level of business risk, but with an 80% debt ratio as follows:

Asset Beta = Equity % * Equity Beta + Debt % * Debt Beta* (1-Tax Rate)

0.32 = 20% * X + 80% * 0.21 * (1-.3612)

The new equity beta for the more highly levered (higher debt ratio) firm is 1.06. The difference between the original equity beta of 0.60 (at 60% debt) and the "relevered" equity beta (at 80% debt), multiplied by NERA's 6.0% mid-point market equity risk premium is an estimate of the difference in the cost of equity due to differences in financial risks. The calculated difference is 2.75 percentage points.[9] Thus, the difference in financial risks only between a Canadian public utility and an automobile insurer with 80% leverage would call for a target ROE for the latter of at least 12.0%. The 12.0% is equal to the average Canadian utility allowed ROE of 9.5% plus a premium of 2.5% for the automobile insurer's higher debt ratio.

XII. CONCLUSIONS

In my opinion, the target rate of return on equity for automobile insurers should be premised on similar principles to those that govern the regulated public utilities. The level of the target return on equity should be compatible with the companies' business and financial risks, both of which are materially higher than those that public utilities face. The higher financial risks alone of the typical automobile insurer indicate a return about 2.5 percentage points higher than the utilities' allowed returns on equity. An incremental equity risk premium of 2.5 percentage points places the target equity return close to the mid-point of the NERA report's estimated cost of equity range of 11.0 – 14.0%. The higher business risks of the automobile insurers raise the target equity return to a level well above the mid-point.

[9] (1.06 – 0.60) * 6.0% = 2.75%

APPENDIX A
QUALIFICATIONS OF
KATHLEEN C. McSHANE

Kathleen McShane is a Senior Vice President and senior consultant with Foster Associates, Inc., where she has been employed since 1981. She holds an M.B.A. degree in Finance from the University of Florida, and M.A. and B.A. degrees from the University of Rhode Island. She has been a CFA charterholder (since 1989).

Ms. McShane worked for the University of Florida and its Public Utility Research Center, functioning as a research and teaching assistant, before joining Foster Associates. She taught both undergraduate and graduate classes in financial management and assisted in the preparation of a financial management textbook.

At Foster Associates, Ms. McShane has worked in the areas of financial analysis, energy economics and cost allocation. Ms. McShane has presented testimony in more than 125 proceedings on rate of return and capital structure before federal, state, provincial and territorial regulatory boards, on behalf of U.S. and Canadian telephone companies, gas pipelines and distributors, and electric utilities. These testimonies include the assessment of the impact of business risk factors (e.g., competition, rate design, contractual arrangements) on capital structure and equity return requirements. She has also testified on various ratemaking issues, including deferral accounts, rate stabilization mechanisms, excess earnings accounts, cash working capital, and rate base issues. Ms. McShane has provided consulting services for numerous U.S. and Canadian companies on financial and regulatory issues, including financing, dividend policy, corporate structure, cost of capital, automatic adjustments for return on equity, form of regulation (including performance-based regulation), unbundling, corporate separations, regulatory climate, income tax allowance for partnerships, change in fiscal year end, treatment of inter-corporate financial transactions, and the impact of weather normalization on risk.

Ms. McShane was principal author of a study on the applicability of alternative incentive regulation proposals to Canadian gas pipelines. She was instrumental in the design and preparation of a study of the profitability of 25 major U.S. gas pipelines, in which she developed estimates of rate base, capital structure, profit margins, unit costs of providing services, and various measures of return on investment. Other studies performed by Ms. McShane include a comparison of municipal and privately owned gas utilities, an analysis of the appropriate capitalization and financing for a new gas pipeline, risk/return analyses of proposed water and gas distribution companies and an independent power project, pros and cons of performance-based regulation, and a study on pricing of a competitive product for the U.S. Postal Service. She has also conducted seminars on cost of capital for regulated utilities, with focus on the Canadian regulatory arena.

Publications, Papers and Presentations

- "Utility Cost of Capital Canada vs. U.S.", presented at the CAMPUT Conference, May 2003.
- "The Effects of Unbundling on a Utility's Risk Profile and Rate of Return", (co-authored with Owen Edmondson, Vice President of ATCO Electric), presented at the Unbundling Rates Conference, New Orleans, Louisiana sponsored by Infocast, January 2000.
- Atlanta Gas Light's Unbundling Proposal: More Unbundling Required?" presented at the 24th Annual Rate Symposium, Kansas City, Missouri, sponsored by several Commissions and Universities, April 1998.
- "Incentive Regulation: An Alternative to Assessing LDC Performance", (co-authored with Dr. William G. Foster), presented at the Natural Gas Conference, Chicago, Illinois sponsored by the Center for Regulatory Studies, May 1993.
- "Alternative Regulatory Incentive Mechanisms", (co-authored with Stephen F. Sherwin), prepared for the National Energy Board, Incentive Regulation Workshop, October 1992.
- "Market-Oriented Sales Rates and Transportation Services of U.S. Natural Gas Distribution Companies", (co-authored with Dr. William G. Foster), published by the IAEE in *Papers and Proceedings of the Eighth Annual North American Conference*, May 1987.

- "Canadian Gas Exports: Impact of Competitive Pricing on Demand", (co-authored with Dr. William G. Foster), presented to A.G.A.'s Gas Price Elasticity Seminar, February 1986.

- "Marketing Canadian Natural Gas in the U.S.", (co-authored with Dr. William G. Foster), published by the IAEE in *Proceedings: Fifth Annual North American Meeting*, 1983.

Expert Testimony/Opinions

on

Rate of Return & Capital Structure

Alberta Natural Gas	1994
Alberta Power/ATCO Electric	1989, 1991, 1993, 1995, 1998, 1999, 2000, 2003
AltaGas Utilities	2000
Ameren (CIPS and & Union Electric)	2000 (3 cases), 2002 (3 cases) 2003
ATCO Gas	2000, 2003
ATCO Pipelines	2000, 2003
BC Gas	1992, 1994
Bell Canada	1987, 1993
Benchmark Utility Cost of Equity (British Columbia)	1999
Canadian Western Natural Gas	1989, 1998, 1999
Centra Gas B.C.	1992, 1995, 1996, 2002
Centra Gas Ontario	1990, 1991, 1993, 1994, 1996
Dow Pool A Joint Venture	1992
Edmonton Water/EPCOR Water Services	1994, 2000
Enbridge Gas Distribution	1988, 1989, 1991-1997, 2001, 2002
Enbridge Gas New Brunswick	2000
Gas Company of Hawaii	2000
Gaz Metropolitain	1988
Gazifère	1993, 1994, 1995, 1996, 1997, 1998
Generic ROE Proceeding in Alberta (ATCO Utilities and AltaGas)	2003
Heritage Gas	2002
HydroOne/Ontario Hydro Services Corp.	1999, 2000

Illinois Power	2004
Laclede Gas Company	1998, 1999, 2001, 2002
Maritimes NRG (Nova Scotia) and (New Brunswick)	1999
Multi-Pipeline Cost of Capital Hearing (National Energy Board)	1994
Natural Resource Gas	1994, 1997
Newfoundland & Labrador Hydro	2001, 2003
Newfoundland Power	1998, 2002
Newfoundland Telephone	1992
Northwestel, Inc.	2000
Northwestern Utilities	1987, 1990
Northwest Territories Power Corp.	1990, 1992, 1993, 1995, 2001
Nova Scotia Power Inc.	2001, 2002
Ozark Gas Transmission	2000
Pacific Northern Gas	1990, 1991, 1994, 1997, 1999, 2001
Platte Pipeline Co.	2002
St. Lawrence Gas	1997, 2002
Southern Union Gas	1990, 1991, 1993
Stentor	1997
Tecumseh Gas Storage	1989, 1990
Telus Québec	2001
TransCanada PipeLines	1988, 1989, 1991 (2 cases), 1992, 1993
TransGas and SaskEnergy LDC	1995
Trans Québec & Maritimes Pipeline	1987
Union Gas	1988, 1989, 1990, 1992, 1994, 1996, 1998, 2001
Westcoast Energy	1989, 1990, 1992 (2 cases), 1993
West Kootenay Power/Utilicorp United Networks (B.C.)	1995, 1999, 2001
Yukon Electric Co. Ltd./Yukon Energy	1991, 1993

Expert Testimony/Opinions

on

Ratemaking Issues

Client	Issue	Date
Enbridge Gas New Brunswick	AFUDC	2004
Heritage Gas	Deferral Accounts	2004
ATCO Electric	Carrying Costs on Deferral Account	2001
Newfoundland & Labrador Hydro	Rate Base, Cash Working Capital	2001
Gazifère Inc.	Cash Working Capital	2000
Maritime Electric	Rate Subsidies	2000
Enbridge Consumers Gas	Principles of Cost Allocation	1998
Enbridge Consumers Gas	Unbundling/Regulatory Compact	1998
Maritime Electric	Form of Regulation	1995
Northwest Territories Power	Rate Stabilization Fund	1995
Canadian Western Natural Gas	Cash Working Capital/ Compounding Effect	1989
Gaz Metro/ Province of Québec	Cost Allocation/ Incremental vs. Rolled-In Tolling	1984