RAPPORT D'EXPERT SUR LE COÛT DE LA DETTE

KATHLEEN MCSHANE

TESTIMONY OF
KATHLEEN C. McSHANE
ON
EMBEDDED COST OF DEBT
ON BEHALF OF HYDRO-QUÉBEC

Q. Please state your name and business address.

A. My name is Kathleen C. McShane and my business address is 4550 Montgomery Avenue, Suite 350N, Bethesda, Maryland 20814.

Q. What is your occupation?

A. I am a Senior Vice President of Foster Associates, Inc., an economic consulting firm.

Q. What are your educational background and experience?

A. I hold a Masters in Business Administration with a concentration in Finance from the University of Florida (1980) and have been a CFA charterholder since 1989. My professional experience is detailed in Appendix A to this Exhibit.

Q. What is the purpose of your testimony?

A. I have been requested by Hydro-Québec to evaluate the Company's proposal to establish the cost of debt for regulatory purposes.

Q. In D-2003-93, for Hydro-Québec's electricity distribution operations, the Régie

concluded the following:

> "Toutefois, dans la présente section qui traite de la structure et du coût du capital, la Régie a recours au concept d'isolement. Il en découle une structure du capital présumée pour le Distributeur, composée d'un avoir propre présumé et d'une dette présumée auxquels correspondent, selon la Régie, un coût présumé de la dette. En principée, le coût de la dette du Distributeur devrait être calculé indépendamment de celui d'Hydro-Québec intégrée, tout comme le coût de l'avoir propre est calculé distinctement."

What are your comments?

A. Regulatory convention and precedent provide regulated utilities the opportunity to recover their embedded cost of debt. The embedded cost of debt represents costs that were incurred in the past under the regulatory model that existed at the time. Unless disallowed by the regulator, the costs are presumed to have been prudently incurred.

The regulatory compact then provides the utility, in exchange for the granting of an exclusive franchise, a reasonable opportunity to recover those prudently incurred costs and a reasonable rate of return. The restructuring of the electric utility industry in the Province does not rescind the opportunity to recover the costs incurred in the past.

Any decision that the Régie takes regarding the recovery of debt costs should recognize that restructuring – which is the catalyst that has led to the "unbundling" of cost of capital – does not nullify the regulatory compact. The regulatory compact should continue to be respected.

Q. Has the regulatory compact been recognized in other jurisdictions which have restructured their utility industries?

A. Yes. Virtually all jurisdictions that have instituted regulatory reform have recognized that utilities should be permitted to recover stranded costs, where stranded costs may be defined as unrecoverable in a competitive market. These costs, now stranded due to transition to a more competitive market, were prudently incurred pursuant to a regulatory model. Legislation and regulations accompanying restructuring have recognized the validity of the regulatory compact.

Q. Can you provide some examples?

A. Yes. Illustrations in Canada include:

Alberta

In Alberta, the restructuring of the electric utility industry was designed to avoid stranded costs. Power Purchase Arrangements for existing utility-owned generation, based on cost of service principles provided for recovery of, and a return on, capital committed by the utilities, including the debt issued on an integrated basis.

Ontario

The restructuring plan in Ontario provides for recovery of the stranded debt of the "pre-restructured" Ontario Hydro through various dedicated revenue streams, including deemed income taxes imputed to all sectors of the industry, full property tax assessments, and a competitive transition charge.

New Brunswick

The New Brunswick Energy Policy issued in May 2001 instituted a "user pay" approach to stranded costs (as contrasted with a loss of revenues to the Crown utility).

Illustrations in the U.S. include:

The FERC

In the U.S., the FERC, in its order establishing open access to transmission (Order No. 888, dated July 1996) concluded that utilities should have the opportunity to recover legitimate, prudent and verifiable costs that may be stranded during transition to more competition. Moreover, FERC stated that failure to deal with the stranded cost problem could destabilize the financial integrity of the industry.

Massachusetts

In Massachusetts the Department of Public Utilities stated, "[T]he Department notes that the honoring of existing commitments is a critical foundation for the future electric industry." (RE: Electric Industry, D.P.U. 95-30, Massachusetts Department of Public Utilities Appendix B, 163 PUR 4th (1995))

Rhode Island

In Rhode Island, the principles of restructuring "provide for the honoring of existing utility commitments". (RE: Electric Industry Restructuring (Docket No. 2320, Order No. 14797) Rhode Island Public Utilities Commission, 164 PUR 4th 441 (1995))

Q. What is the relevance of these decisions on "stranded costs" to the cost of debt issue before the Régie?

A. The issue is one of fairness to the shareholder. Hydro-Québec historically operated as a bundled integrated utility. Its financing has been carried out on an integrated basis, consistent with the structure of the corporation, and found to be

prudent. It would be unfair to the shareholder to now impose a deemed cost of debt on one or more of the "stand-alone" regulated functions of Hydro-Québec that would impair the ability to recover the historically incurred embedded cost of debt.

Q. Are you aware of any regulatory jurisdictions that have deemed a "stand-alone" cost of debt for a utility?

A. There have been very few instances of deeming a cost of debt.

A cost of debt was deemed for the municipal electricity distribution utilities (MEUs) in Ontario when the industry was restructured, and regulation of the MEUs on a rate base/rate of return basis commenced. However, the reason for doing so related to the fact that many of the MEUs had little or no debt. For ratemaking purposes, a deemed utility capital structure was required that would minimize the cost of capital to ratepayers. The imputation of a capital structure where little or no debt exists requires deeming a debt cost for notional debt. However, if an MEU had outstanding debt, it could apply its embedded cost to the portion of the deemed debt ratio the actual debt represented. (If the MEU raises actual debt to bring its deemed and actual capital structures in line, the actual cost of the debt issued would replace the deemed cost.) In the case of Hydro-Québec, it has actual debt outstanding and, thus in contrast to the MEUs, requires no deeming of a debt cost.

A second case with similar origins was that of Alberta Natural Gas, for which the National Energy Board had imputed a long-term cost of debt to its B.C. pipeline operations, using an estimate of the current cost. The imputation of a debt cost was originally required because, as the pipeline's rate base declined, and its actual debt was redeemed, its actual equity ratio increased to a level inconsistent with minimizing the cost of capital. Consequently, the National Energy Board imputed

a deemed capital structure and deemed cost of long-term debt for that portion of the deemed equity ratio not represented by actual long-term debt.[1] The use of the current cost of debt for the unfunded debt portion of the deemed capital structure was intended to reflect the regulatory philosophy that a utility should be able to freely recapitalize itself, incurring neither a gain nor a loss on the issue of new debt, so as to permit the utility to achieve the allowed rate of return on equity.

In a third case, the Alberta Public Utilities Board imputed a lower cost of debt to certain debt issues allocated by the more diversified parent company to the regulated pipeline, Alberta Gas Transmission (now Nova Gas Transmission). The Board did so because it judged that the pipeline could have raised debt on a "stand-alone" basis at an A rating, rather than at the BBB rating of its diversified parent, Nova Corporation (Decisions E92086 and E93060). This is not relevant to Hydro-Québec's circumstances. As discussed below, it is unlikely that either Hydro-Québec Distribution or TransÉnergie could access debt on a "stand-alone" basis at the cost rates available to Hydro-Québec.

Q. Are there cases, to your knowledge, where a regulator has deemed a "stand-alone" embedded cost of debt to the various functions of an unbundled utility in place of the integrated debt cost?

A. No. For example, the Alberta Energy and Utilities Board has unbundled the major functions (generation, transmission and distribution) of the electric utilities under its jurisdiction and has determined for each an appropriate "stand-alone" capital structure and return on equity. It has not, however, made any attempt to determine a "stand-alone" embedded cost of debt for each function. In fact, no party has ever requested that the Board attempt to retroactively redetermine what cost of debt each function might have incurred had it historically operated on a

[1] When ANG expanded in the early 1990s, the NEB determined that the parent company – which itself was financed in large part by short-term debt – should allocate a portion of new long-term debt issues to the pipeline operations so as to fund the deemed debt component, or face having the parent's cost of debt used for regulatory purposes.

"stand-alone" basis.

Q. It was suggested in the Hydro-Québec distribution proceeding that the integrated cost of debt should be replaced with a deemed cost of debt because the distribution operations could have accessed the debt markets at a lower cost on a "stand-alone" basis. What is your response to this suggestion?

A. Hydro-Québec is able to access the long-term debt markets at the Province's cost plus a guarantee fee of 50 basis points. The Province has debt ratings of A+ by S&P and A by DBRS. At the end of August 2004, the long-term (30-year) debt of Hydro-Québec was trading at a spread of approximately 50 basis points over long Canadas. Adding the 0.5% guarantee fee, the effective spread is approximately 105 basis points. By comparison, the indicated spread for a long-term (30-year) issue of the highest rated investor-owned utility (CU Inc., rated A and A(high) by S&P and DBRS respectively) was 95 basis points.[2] Thus, including the 0.5% guarantee fee, both transmission and distribution customers are paying a cost of debt that is similar to that of an investor-owned utility with a strong A rating. However, it is highly unlikely that either Hydro-Québec Distribution or TransÉnergie, as "stand-alone" utilities, would be rated a strong A. At 65% and 70% debt ratios respectively, Hydro-Québec Distribution and TransÉnergie would most likely be rated in the BBB+/BBB range by the Canadian debt rating agencies.

The indicated spreads at the end of August 2004 for a new long-term (30-year) debt issue of Canadian utilities with one Canadian agency debt rating in the BBB category were as follows:

	RATINGS	**SPREAD**

[2] RBC Capital Markets, *Power & Pipelines Weekly Review*, August 26, 2004.

	DBRS	S&P	(basis points)
EPCOR Utilities	A(low)	BBB-	147
Nova Scotia Power	A (low)	BBB+	142
Terasen Gas	A	BBB	138
Union Gas	A	BBB	123
Westcoast Energy	A(low)	BBB	142

Source: RBC Capital Markets, *Power & Pipelines Weekly Review*, August 26, 2004.

These spreads confirm that the cost of new debt to a stand-alone BBB-rated utility would be significantly higher than the integrated Hydro-Québec's cost (inclusive of the guarantee fee) that is borne by the transmission and distribution customers.

Consequently, on a stand-alone basis, both Hydro-Québec Distribution's and TransÉnergie's long-term debt cost would be materially higher than what is being charged customers by virtue of Hydro-Québec's integrated financing. Thus, the integrated financing undertaken by Hydro-Québec confers a benefit on transmission and distribution customers that would be lost if the concept of a deemed stand-alone debt cost were to be implemented on a go-forward basis.

Q. Please briefly state your conclusions.

A. Hydro-Québec is proposing a methodology for setting the cost of debt that is intended to balance (1) the preservation of the benefits to the ratepayer of integrated financing; (2) the maintenance of the ability to recover prudently incurred "debt costs"; and (3) the protection of ratepayers from foreign risks on previously issued U.S. dollar denominated debt.

It would be unfair and contrary to regulatory practice for the Régie to attempt to

rewrite history by creating either stand-alone embedded costs of debt or by imputing a notional cost of debt which could deprive the utility of the ability to recover its prudently incurred costs.

Further, the imputation of a notional stand-alone debt cost to Hydro-Québec Distribution and TransÉnergie would eliminate the cost benefits of integrated debt financing that are being conferred on ratepayers.

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 100 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. Ms. McShane has also 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, and form of regulation (including performance-based regulation).

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. In a study prepared for the

Canadian Ministry of Energy, Ms. McShane analyzed Federal regulation of U.S. pipelines, including trends in rate design and rate structures. Ms. McShane has also co-managed market demand studies, focusing on demand for Canadian gas in U.S. markets. 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

Other Issues

Client	Issue	Date
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	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