OPINION

on

CAPITAL STRUCTURE AND EQUITY RISK PREMIUM

for

NATURAL RESOURCE GAS

Prepared by

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FOSTER ASSOCIATES, INC.

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TABLE OF CONTENTS

I. INTRODUCTION AND SUMMARY OF CONCLUSIONS

Q. Please state your name, business address, occupation and educational background and experience.

A. My name is Kathleen C. McShane and my business address is 4550 Montgomery Avenue, Suite 350N, Bethesda, Maryland 20814. I am an Executive 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). I have testified on issues related to cost of capital and various ratemaking issues on behalf of local gas distribution utilities, pipelines, electric utilities and telephone companies, in more than 150 proceedings in Canada and the U.S. My professional experience is provided in Appendix A.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to evaluate the reasonableness of Natural Resource Gas' (NRG's) proposed capital structure and to determine an appropriate equity risk premium for the utility.

Q. Please summarize your conclusions.

A. In my opinion, NRG's proposed deemed capital structure containing 35% common equity ratio is reasonable. However, its higher total risk relative to a benchmark natural gas local distribution company (LDC) like Enbridge Gas requires that the allowed ROE include an incremental equity risk premium. Based on my analysis, I recommend an incremental equity risk premium of 1.5 percentage points relative to that allowed Enbridge Gas. At the most recent consensus forecast (February 2006) of 30-year Canada bond yields, the indicated ROE for 2007 for NRG would be 10.1%.

II. BACKGROUND

Q. Please describe the circumstances that have lead to your testimony in this proceeding.

A. In 1994, NRG obtained third-party financing with a private placement of a 15-year loan through Imperial Life. At the completion of the financing, NRG's capital structure contained approximately 35.5% common equity. The indenture provisions of the loan prohibited NRG from making dividend distributions without the express permission of the lender. The inability to make dividend payments resulted in the common equity ratio gradually rising as NRG was required to retain earnings. In 1997, the Ontario Energy Board deemed NRG's common equity ratio at 50.0%, which was close to the actual ratio at the time and allowed the utility an equity risk premium equal to that of Consumers Gas (now Enbridge Gas Distribution). The rationale for this decision was that the difference in the level of business risk faced by the two utilities was compensated for in different capital structures. NRG's higher business risk relative to Enbridge's warranted a 50% common equity ratio compared to Enbridge's 35% deemed common equity ratio. In other words, at a 50% common equity ratio, NRG was of approximately similar total (business plus financial) risk to Enbridge, and hence required a similar return on equity.

Since NRG obtained the Imperial Life loan, interest rates have declined significantly. The yield on 30-year Government of Canada bonds averaged 8.7% in 1994; in 2005, the average yield was 4.4%, a reduction of 430 basis points. As a result of the reduction in interest rates over the past 12 years, as well as the stringent indenture provisions in the Imperial Life loan, NRG sought and has obtained replacement financing.

The Bank of Nova Scotia has committed to lend NRG $6.5 million in a non-revolving loan for a term of five years, with the rate on the loan to be set at either a floating rate of prime plus 0.25% or at a fixed rate to be determined by the bank at NRG's option. Interest is payable monthly, and principal is to be repaid over the life of the loan according to a 25-year amortization schedule, with the unpaid balance due at the end of the five-year term. The Bank of Nova Scotia has also committed to an operating credit line for NRG's seasonal operating needs and a revolving credit line to assist in financing capital expenditures. NRG is proposing to fix the rate on the non-revolving loan for the entire five-year period. The quoted fixed rate on the loan is 6.8%. With the completion of the refinancing, NRG's actual capital structure will contain close to 35% common equity during the 2007 test year. The provisions of the loan do not contain a prohibition on dividend payments (as the Imperial loan did) and thus will permit NRG to manage its actual capital structure so as to maintain an actual equity ratio close to 35% over the term of the loan. For regulatory purposes, the Company is proposing a 35% deemed common equity ratio.

III. APPROACH TO DETERMINING CAPITAL STRUCTURE AND EQUITY RISK PREMIUM FOR NRG

Q. Please summarize the basic financial principles that underpin the determination of a reasonable capital structure and return on equity for a regulated utility.

A. The opportunity cost of capital to a firm, or division of a firm, is a function of its business risks. The financing of the assets with a combination of debt and equity can lower the overall (weighted average) cost of capital because interest expense on the debt is tax deductible. However, too much debt will increase the weighted average cost, as the costs associated with financial distress will outweigh the benefits of additional debt.

In principle, the capital structure decision should attempt to minimize the overall cost of capital, i.e., to achieve an optimal capital structure. In practice, the optimal capital structure cannot be pinpointed, as there is a range of capital structures over which the weighted average cost of capital does not change materially.

There are two basic approaches that can be used to establish an appropriate capital structure and return on equity for NRG. The first is to establish for the company a capital structure that would result in a "benchmark utility return" being directly applicable to NRG.

This type of approach is analogous to that employed by the National Energy Board when it established its automatic adjustment mechanism for a number of oil and gas pipelines in 1995. Deemed capital structure ratios were established for individual pipelines that were intended to compensate for different levels of business risks, so that a single return on equity could be applied to all of the pipelines. The same approach was taken by the Alberta Energy and Utilities Board in its Generic Cost of Capital proceeding (Decision 2004-052, dated July 2, 2004), when it set different capital structure ratios for eleven applicant utilities, and then applied the same benchmark utility return to each.

The Ontario Energy Board took the same approach in setting different capital structures for the electricity distributors in Decision RP-1999-034, dated January 18, 2000, and then applied the same return on equity to each. The size of the rate base of the electricity distributors was used as a proxy for the differences in business risk, resulting in allowed common equity ratios that ranged from 35% for the largest utilities to 50% for the smallest (rate base of less than $100 million).

The second approach is to establish a capital structure that is reasonably compatible with the business risks of the utility, and is adequate for the utility to access the debt markets on reasonable terms, but may not result in the same level

of equity risk as faced by a benchmark utility. Consequently, an incremental equity risk premium relative to the benchmark utility is required, in order to provide full compensation for both business and financial risks to each utility. This is the approach that has effectively been adopted by the British Columbia Utilities Commission for the various utilities that it regulates, as well as by the Régie de l'Energie in Québec. For example, the BCUC allows Terasen Gas, which is the designated low risk utility, a common equity ratio of 35%. FortisBC, in comparison, is allowed a 40% common equity ratio as well as an equity risk premium of 40 basis points above that applicable to the benchmark low risk utility. It is also the approach taken by this Board for Enbridge and Union Gas, by allowing the same deemed common equity ratio (35%) for both, but a somewhat higher equity risk premium for Union Gas, to recognize its somewhat higher business risk.

The same principle underpins the two options: there is a trade-off between capital structure and return on equity. Thus, the evaluation of the various components of the cost of capital cannot be undertaken in isolation. The cost of equity is a function of the business risks and financial risks of the firm. Simplistically, there is an inverse relationship between the cost of equity and the common equity ratio. All other things equal, the higher the common equity ratio, the lower the cost of equity.

Although some regulators have expressed a preference for recognition of business risk differences through capital structure, it does not mean that the alternative approach is not equally valid as long as the end result produces a reasonable balance of capital structure and return on equity.

For purposes of assessing the capital structure and return on equity for NRG, I relied upon the second approach. More specifically,

1. I evaluated the reasonableness of the deemed capital structure that has been proposed by NRG as a result of its debt refinancing; and,

2. I used the OEB's allowed equity risk premium for Enbridge Gas Distribution as a point of departure for estimating an appropriate equity risk premium for NRG at its proposed capital structure.

With respect to the second point, the OEB has recently undertaken an in-depth review of the allowed returns of both Enbridge and Union Gas. In Decision RP-2002-0158 dated January 16, 2004, the Board concluded that its current ROE guidelines produced appropriate prospective results, and that there was no demonstrated need to set a new benchmark ROE. Consequently, I have used the results of those ROE guidelines as they apply to Enbridge, as the point of departure for quantifying the required equity risk premium for NRG. Enbridge, with debt ratings in the A category by both the major debt rating agencies, DBRS and Standard & Poor's, would qualify as a relatively low risk utility, and thus as a "benchmark". By extension, its allowed ROE can be viewed as a benchmark, or reference point, against which the incremental equity risk premium for NRG can be estimated.

IV. REASONABLENESS OF PROPOSED CAPITAL STRUCTURE

A. KEY PRINCIPLES

Q. What are the key principles that underpin the evaluation of NRG's proposed capital structure?

A. The evaluation of NRG's capital structure should be premised on the following principles:

1. The Stand-Alone Principle: The stand-alone principle encompasses the notion that the cost of capital incurred by the ratepayers should be equivalent to that which would be faced by the utility raising capital in the public markets on the strength of its own business and financial parameters. The cost of capital should reflect neither subsidies given to, nor taken from, other activities of the utility or its parent. Respect for the stand-alone principle is intended to promote efficient allocation of capital resources and avoid cross-subsidies. The OEB, similar to the preponderance of regulators in Canada, has consistently respected the stand-alone principle in its determination of allowed capital structures and returns on equity.

2. Business Risks: The capital structure should be compatible with the business risks of the utility. The business risks to which investors in an LDC are exposed are those that reflect the basic characteristics of the operating environment and regulatory framework of the utility that can lead to the failure to recover a compensatory return on, and/or the return of the capital investment itself.

3. Access to Capital: A reasonable capital structure, in conjunction with the returns allowed on the various sources of capital, should allow a utility to access the debt markets on reasonable terms. For the larger utilities, like Enbridge, who regularly access the public debt markets, the capital structure and return should provide the basis for a stand-alone investment grade debt rating in the A category. However, NRG is too small to be rated and too small to access the public debt markets. Nevertheless, quantitative guidelines that apply to the larger utilities with rated debt can provide some assistance in establishing whether the capital structure, in conjunction with the allowed ROE, produces adequate financing flexibility.

B. BUSINESS RISK PROFILE OF NRG

Q. Please explain your understanding of the term "business risks".

A. Business risks have both short-term and longer-term aspects. The capital structure and fair return on equity should reflect both short- and long-term risks. Long-term risks are important because utility assets are long-lived. Moreover, utility stocks are not typically purchased as short-term investments. Since utilities are generally regulated on the basis of annual revenue requirements, there is a tendency to downplay longer-term risks, essentially on the grounds that the regulatory framework provides the regulator an opportunity to compensate the shareholder for the longer-term risks when they are experienced. This premise may not hold. First, customer resistance may forestall higher return rewards when the risk materializes. Second, no regulatory Commission can bind a successor Commission and thus guarantee that investors will be compensated for longer-term risks in the event they are incurred in the future.

Q. What are the key business risks faced by a LDC?

A. Business risk encompasses those market demand, supply and regulatory factors that expose the shareholders to the risk of underrecovery of the required return on, and the return of, their capital investment.

Market demand risk relates to those factors that can lead to annual volatility in deliveries or loss of customers. It includes market size, economic diversity and strength of the service area, growth potential, concentration of sales, competition with alternative energy sources and weather.

Supply and physical risks faced by an LDC incorporate the risk of inadequate supply or the inability to deliver natural gas. The risks are a function of the

utility's location relative to supply, the diversity of supply sources, the geography of the service area and the operating flexibility of the system.

The regulatory framework in which a utility operates is, next to the basic demand risks, the most significant aspect of risk to which shareholders in a regulated firm are exposed. The financial community is very conscious of the regulatory environment, as highlighted in reports of both bond rating agencies and investment analysts.

Regulation has the power to expose utilities to significant risks, by permitting bypass of facilities, disallowing costs, approving rate designs that are tilted against recovery of fixed costs, or returns that do not conform to informed investors' perception of risk. Alternatively, regulation can provide an environment characterized by even-handedness, conducive to continued growth consistent with economic allocation of resources, and affording the utility an opportunity to achieve a fair return with a reasonably high probability. Enlightened regulation will mitigate risks that are not susceptible to managerial control, and award a return that provides both (1) fair compensation for the risks that are left with management and (2) incentives to achieve (and exceed) the allowed return through continued improvement in productivity.

Q. What, in your view, are that risk-related factors that distinguish NRG from other gas distributors, and, in particular, from Enbridge?

A. The main factors are size and the nature of the market each serves. NRG is a very small utility (rate base of $9 million) serving approximately 6,500 customers in a predominantly rural area southeast of London, Ontario. It is by far the smallest of the mature investor-owned LDCs in Canada. To provide some perspective, the following table summarizes the rate base, number of customers and deliveries of NRG, Enbridge Gas (as the benchmark utility), and three of the smallest mature

investor-owned LDCs in Canada other than NRG. As the table indicates, NRG is smaller than the other small LDCs.

Table 1

	Rate Base ($ millions)	Customers	Deliveries (GJs)
NRG	9.7	6,500	925,000
Enbridge Gas	3,200	1,727,000	473,200,000
AltaGas Utilities	146	60,000	14,400,000
Gazifère	58	30,000	5,800,000
Pacific Northern Gas	165	39,000	14,000,000

Q. What role does size play in the evaluation of risk and the required return?

A. A small utility cannot diversify its risks to the same extent as larger utilities whose assets, geography and economic bases are less concentrated. Negative events are likely to have greater impact on the earnings or viability of a smaller company. The impact of small size is frequently exhibited in lower debt ratings for companies whose financial parameters are stronger than their larger peers.

Q. Can you provide a concrete example of the impact of size on the debt ratings?

A. Yes. In its November 2004 rating report for FortisBC, an electric utility, DBRS called the company's small size a "challenge" and stated,

> "FortisBC is a small utility compared to the dominant generator in the province, the Crown-owned BC Hydro, and serves a rural and low-population density region in south-central British Columbia. To some extent, its small size and franchise area limit opportunities for growth, operating efficiencies, and economies of scale as they relate to PBR."

FortisBC, which has assets of approximately $500 million, is rated BBB (High) by DBRS, despite the allowed common equity ratio of 40% and the allowed ROE that is 40 basis points above that of the "benchmark" low risk utility. Its Moody's

rating of Baa(3) is the lowest of all the Canadian utilities Moody's rates, despite the debt rating agency's characterization of FortisBC as of "low business risk" (Moody's Investors Service, Rating Action: FortisBC Inc., November 16, 2004).

Q. What are the key differences between the market base of NRG and Enbridge?

A. In 2005, approximately 40% of NRG's deliveries were to industrial and agricultural customers versus less than 25% for Enbridge Gas. Approximately 17% of the NRG's gross margin was attributable to its industrial and agricultural customers, as compared to approximately 8% for Enbridge. More important, however, than the absolute percentages of load and margin attributable to industrial/agricultural customers is the makeup of the load. NRG's service area is dominated by the agricultural sector, specifically tobacco processing and curing, greenhouse heating, grain drying, and livestock (poultry and cattle operations). Enbridge's industrial load, in contrast, is considerably more diversified among a wide variety of resource- and non-resource based industries than NRG's. Approximately 80% of NRG's total industrial/agricultural load in 2005 was accounted for by agriculture. Enbridge's largest industry (pulp and paper) accounts for less than 20% of its total industrial load.

As a utility with significant exposure to the agriculture industry, NRG's risks are partly a reflection of the same risks that impact those sectors. As regards tobacco, the industry has been experiencing a reduction in the number of producers as well as the amount of production as tobacco consumption has declined both domestically and globally. In NRG's service area, a number of farms have accepted buy-outs and are no longer growing tobacco. The expectation is that the tobacco industry will continue to contract over the longer term. NRG's major tobacco processing customer, Imperial Tobacco, has already closed a portion of its Aylmer facility and will completely shut down the remainder of those operations in 2007. No replacement crop has been identified that would make up

for the load lost from Imperial or from the tobacco farms in NRG's service area that are no longer growing tobacco.

With respect to grain drying, the risks to NRG's load include crop failures, low prices for product and competition from alternative fuels. In the livestock area, the risks largely relate to prices for stock as well as circumstances that could shut down the entire sector, e.g., avian flu or mad cow disease.

The undiversified economic base of NRG's service area, concentrated in a relatively volatile industry, contrasts sharply with that of Enbridge, whose distribution area has been described by the Dominion Bond Rating Service as:

> "consisting of central, eastern, and the Niagara Peninsula regions of Ontario, has a number of attractive characteristics: (a) It is one of the fastest growing areas in the province, in terms of both population and economic prosperity, and Enbridge Gas has experienced an average customer growth rate of roughly 3.4% annually over the past five years. (b) The area has a high population density, which contributes to a competitive cost structure. (c) The Company's customer profile and revenues are heavily weighted with higher margin and more stable residential and commercial customer categories, which ensures that the Company's earnings have a relatively low exposure to the economic cycle". (DBRS, June 1, 2005 *Credit Rating Report.*)

Other factors that bear on the risk profile of NRG include (1) the increased volatility in and level of gas prices that been experienced since 2000, which in conjunction with conservation efforts, negatively impact average use per customer; (2) an increase in supply risk, due to the maturity of the Western Canada Sedimentary Basin and the anticipated decline in production from conventional sources; and (3) changes in the regulatory model in Ontario, including unbundling of rates, the move from cost of service to performance-based regulation, the potential for market-based storage rates, and the shift in the utility bypass policy toward a "let the market decide" approach.

On balance, the combination of these trends points to a higher level of business risk for all Ontario LDCs, relative to 1998 (the last time NRG's capital structure and ROE were reviewed).

Based on the above, the market- and size-related factors are the key differences between NRG and Enbridge that would, from an investor's perspective, be reflected in a higher return requirement for NRG, as was the case in 1998 when the Board set NRG's deemed equity ratio at 50% compared to Enbridge's 35% (1998). Since that time, there is no evidence from the investment community there has been any material change in the relative overall business risk between the two LDCs. In the case of Enbridge Gas, its debt was downgraded by DBRS from A to A- in 2000. The reasons given were the increased earnings volatility resulting from the transfer of ancillary businesses to affiliates and the steady decline in allowed ROEs over the prior five years. In NRG's case, from the spread on the five-year Bank of Nova Scotia loan relative to the spread that was required on the longer-term (15-year) Imperial Life loan obtained in 1994,[1] it can be inferred that, from an investor's perspective, its business risk is no lower today than it was more than a decade ago.

Given NRG's higher market risks and small size relative to Enbridge, incremental compensation to the equity investor is required; that compensation can be provided either through a higher common equity ratio or a higher common equity return.

[1] The indicated spread over the five-year benchmark Canada bond yield on the new five-year loan, as discussed later in this document is approximately 280 basis points. The corresponding spread on the 15-year Imperial Life loan was approximately 295 basis points, based on the May/June 1994 average of the 10- and 30-year benchmark Canada bond yields (11.8% versus 8.85%). The spread for highly-rated issuers and lower rated issuers (e.g., A versus BBB) typically widens as the term to maturity of the debt instrument lengthens, a comparison of the spreads for the two NRG issues does not indicate any reduction in spread over time when the difference in terms (5 years versus 15 years) is taken into account.

C. REASONABLENESS OF PROPOSED COMMON EQUITY RATIO

Q. How does NRG's proposed common equity ratio compare to the common equity ratios allowed for other mature LDCs in Canada?

A. It is within the range allowed for the major LDCs and identical to Enbridge's, but lower than those of the smaller LDCs, as indicated in Table 2 below. It should also be noted that two of the three small LDCs are allowed higher equity risk premiums than the "benchmark" LDCs in their jurisdiction. Gazifère is allowed an equity risk premium that is 40 basis points higher than Gaz Metro's; PNG is allowed an equity risk premium that is 65 basis points higher than Terasen Gas'.

Table 2

Allowed Common Equity Ratios for Canadian LDCs	
LDC	**Allowed Common Equity Ratio**
Major LDCs:	
ATCO Gas	38.0%
Enbridge Gas	35.0%
Gaz Metro	38.5%
Terasen Gas	35.0%
Union Gas	35.0%[1/]
Small LDCs:	
AltaGas	41.5%
Gazifère	40.0%
Pacific Northern Gas	36.0%[1/]

[1/] Application for increase to 40% pending.

Q. Do you believe the equity ratio proposed by NRG is appropriate, given your conclusion that the Company is of higher business risk than Enbridge?

A. Yes, as long as the return on equity reasonably reflects the difference in business risk between the two utilities. The proposed capital structure reflects the Bank of

Nova Scotia's analysis of the circumstances of NRG, and their willingness to lend funds sufficient for NRG to achieve an actual capital structure similar to the proposed deemed ratios. However, capital structure ratios are only one of the financial parameters that lenders or debt rating agencies are concerned with when assessing the financial risk of a utility. They are also concerned with such quantitative measures of financial risk as interest coverage ratios, both pre-tax and cash flow, and cash flow to debt ratios. These ratios are a function of capital structure and equity return, as well as cash flows from depreciation.

I would also point out that after the Imperial Life loan was made the approved capital structure of NRG contained 35.2% common equity. With a 35.2% regulated common equity ratio, the OEB allowed NRG a return on equity for test year 1995 that was 135 basis points above that of Enbridge Gas (13.0% versus 11.65%).

Q. If the Bank of Nova Scotia was willing to lend NRG sufficient funds to reduce its actual common equity ratio from its current level of over 50% to 35%, what does this say about the Bank's view of the relative risk of NRG?

A. To answer that question, it is necessary to compare the rate at which they are willing to lend funds to NRG to the rate at which an LDC like Enbridge (with debt ratings in the A category) could raise funds for a similar period. The fixed rate for the 5-year loan has been quoted at 6.8%. This rate represents a spread of approximately 280 basis points over the recent benchmark five-year Government of Canada bond, which has been trading at a yield of approximately 4.0%. As set out in Table 3 below, the recent indicated spread for a new five-year debt issue for a Canadian utility rated A by at least one of the two debt rating agencies is approximately 40-45 basis points. The difference between the NRG spread and an A rated utility bond spread for a similar term is thus approximately 235-240 basis points.

Table 3

Indicated Spreads for New Utility 5-Year Issues	
Company	**Spread over 5-Year Canada**
Enbridge Gas	39
Enbridge Inc.	42
EPCOR Utilities	43
Hydro One	34
Nova Scotia Power	45
Terasen Gas	44
TransCanada PipeLines	40
Union Gas	41
Westcoast	51
Average	**42**

Source: CIBC World Markets, February 3, 2006.

The resulting net differential between the spread on the NRG loan and the spread for a five-year A rated utility bond issue of 235-240 basis points demonstrates that the Bank of Nova Scotia has concluded that NRG is of significantly higher total risk than an A rated utility like Enbridge Gas. That difference in total risk needs to be recognized in NRG's equity risk premium.

V. EQUITY RISK PREMIUM FOR NRG

Q. Please explain how you would determine the incremental equity risk premium that should be applied to NRG.

A. In the absence of market data for NRG itself or for similar risk proxy utilities (there are only six utilities in total in Canada with publicly-traded stock), inferences must be made from indirect indicators. The most obvious indicator is the difference in debt costs referenced above. The differential between the cost of

5-year debt to NRG and a benchmark utility like Enbridge can be interpreted as a floor on the differential between their respective costs of equity. As indicated in Table 3, the differential between the cost of five-year debt for NRG and Enbridge is approximately 240 basis points. The corresponding spread between the cost of equity, which is perpetual in duration, would be higher.

A second indicator of the differential in the equity risk premium can be derived from the studies on the impact of size on return performed by Ibbotson Associates (the authors of the seminal studies on equity risk premiums in the U.S.). Ibbotson Associates Inc. has documented historic returns and betas for companies of different sizes. The analyses they have performed indicate that small companies tend to exhibit higher betas than larger companies (and, thus, higher required returns).

Based on the Ibbotson classification of stocks, NRG would be, if it were publicly-traded, a Micro-Cap stock (market capitalization of equity between $1.4 and $505 million). By comparison, the typical investor-owned Canadian utility, if it were traded, would be a Mid-Cap stock (market value of equity in the range of $1.6-$6.2 billion). Ibbotson's analysis indicates the betas of Micro-Cap stocks have been approximately 0.32 higher than those of Mid-Cap stocks.[2]

When the difference in betas is applied to a market risk premium of 5.25% (as determined by the OEB in its January 2004 decision in RP-2002-0158), the Ibbotson analysis supports an incremental equity risk premium of about 170 basis points (5.25% x .32) for a Micro-Cap company, e.g., NRG.

A third way to estimate the difference in required return is to estimate, using capital structure theory, the difference in required return on equity at NRG's deemed capital structure containing 50% equity and one containing 35% common

[2] Ibbotson Associates, Stocks, Bonds, Bills, and Inflation: Valuation Edition, 2005 Yearbook, pages 127-158.

equity. The rationale for the difference in the required return on equity at different capital structures begins with the recognition, as previously noted, that the overall cost of capital for a firm is primarily a function of business risk. In the absence of the deductibility of interest expense for tax purposes and costs associated with the use of excessive debt, the overall cost of capital to a firm would not change materially if the firm were to change its capital structure.

The use of debt, however, creates a class of investors whose claims on the resources of the firm take precedence over those of the equity holder. Theoretically, the sum of the cash flows, which are available to both the debt holders and equity holders, does not change when debt is added to the capital structure. In other words, the cost of capital is constant regardless of capital structure. However, the issuance of debt, which carries fixed costs which must be paid before the equity shareholder receives any return, increases the potential variability of the equity shareholder's return. Thus, as the debt ratio rises, the cost of equity rises.

The existence of corporate income taxes and the deductibility of interest for income tax purposes, in conjunction with the costs associated with potential bankruptcy or loss of financial flexibility, alter the conclusion that the cost of capital is constant across all capital structures. The deductibility of interest expense for income tax purposes means that there is a cash flow advantage to equity holders from the assumption of debt. When interest expense is deductible for income tax purposes, the after-tax cost of capital is reduced when debt is used. Partially offsetting this advantage, as the proportion of debt in the capital structure is increased, loss of financial flexibility and potential for bankruptcy tend to increase the cost of capital. In addition, although interest expense is tax deductible at the corporate level, it is taxable to investors at a higher rate than equity, offsetting some of the net after-tax advantage of increasing the debt component of the capital structure. Further, in the specific case of utilities, the benefits from the tax deductibility of interest flow through to ratepayers.

While it is impossible to state with precision whether, within a reasonable range of capital structures, raising the debt ratio decreases the overall cost of capital or leaves it unchanged, in either case, the costs of the components of the capital structure do change. An increase in financial risk will be accompanied by an increase in the cost of equity. The amount by which the cost of common equity increases for a given increase in the debt ratio can be estimated under each of the two theories.

Theory 1

The cost of capital remains unchanged as the capital structure changes.

Theory 2

The cost of capital declines as the percentage of debt in the capital structure increases.

Schedule 1 provides the formulas required to estimate the change in the cost of equity under each theory.

To estimate the required increase in the cost of equity to recognize the difference in financial risk between a 50% common equity ratio and a 35% common equity ratio, the following steps were taken:

(1) Estimate the NRG's weighted average cost of capital using its most recently approved deemed equity ratio of 50%, its cost of new debt of 6.8%, the forecast allowed return on equity for 2007 at the previously deemed capital structure containing 50% common equity (i.e., an ROE equal to Enbridge's allowed return), and the statutory corporate income tax rate of 36.12%.

(2) Estimate the increase in common equity return required to account for the difference between the previously deemed common equity ratio of 50% and the proposed deemed common equity ratio of 35% under both capital structure theories.

The allowed return on equity for NRG at the previously deemed 50% common equity ratio was estimated using the Board's Draft Guidelines and the forecast of 30-year Canada bond yields using the February 2006 Consensus Forecast. Based on the Consensus Forecast, the yield on 30-year Canadas is anticipated to be 4.5%[3], and the allowed ROE for both Enbridge and NRG at a 50% deemed common equity ratio would be 8.6%.[4]

To summarize the results found on Schedule 1, based on Theory 1 (no change in cost of capital as the equity ratio declines), the difference in financial risk between a common equity ratio of 50% and a common equity ratio of 35% translates into an increase in the equity return requirement of 1.82%. Based on Theory 2 (cost of capital declines as the equity ratio declines), the difference in financial risk between a common equity ratio of 50% and a common equity ratio of 35% translates into an increase in the required equity return requirement of 0.60%. Since both theories have merit, it is reasonable to give both weight. The mid-point of the range of the two theories is approximately 120 basis points, which suggests an increase of approximately 8 basis points in required equity return for each percentage decrease in the common equity ratio.

Based on the results of the three indicators, which suggest an incremental equity risk premium in the range of 120-245 basis points, I recommend that the Board allowed an incremental risk premium for NRG relative to the benchmark of 150 basis points. At the forecast (based on the February 2006 *Consensus Forecast*)

[3] Based on average of 3-month and 12-month forward forecasts of the 10-year Canada bond of 4.3% and 4.6% respectively, plus the daily average spread between 10- and 30-year Canada bond yields during February 2006 of 5 basis points.

[4] Allowed ROE = Benchmark ROE + 75% (Forecast Bond Yield – Benchmark Bond Yield)
8.6% = 10.65% + 75% (4.50% - 7.25%).

benchmark (Enbridge Gas) ROE of 8.6%, this translates into a return on equity for NRG of 10.1%.

VI. FINANCIAL METRICS FOR NRG

Q. If the Board accepts the proposed capital structure and return on equity, what are the forecast levels of the key measures of financial strength?

A. Other than the debt ratio, the debt rating agencies typically focus on financial metrics such as cash flow interest coverage, cash flow to total debt and pre-tax interest coverage.

At the proposed capital structure and return on equity of 10.1%, with the debt refinancing, NRG's forecast 2007 ratios are:

Financial Metric	Forecast Ratio
Cash Flow Interest Coverage	3.6 x
Cash Flow/Debt	17.8%
Pre-Tax Interest Coverage	2.3 x

To provide some perspective on the level of NRG's forecast financial metrics, Table 4 below sets forth the actual achieved ratios for the major gas LDCs with rated debt.

Table 4

	DBRS Rating	Cash Flow Coverage	Cash Flow/Debt	Pre-Tax Interest Coverage
ATCO Gas [1/]	A(high)	4.3 x	19.0%	2.9 x
Enbridge Gas	A	3.7 x	12.7%	2.7 x
Gaz Metro Inc.	A	4.5 x	21.8%	2.9 x
Terasen Gas	A	2.7 x	9.3%	2.0 x
Union Gas	A	3.0 x	11.1%	2.1 x
Average	A	3.6 x	14.8%	2.5 x

1/ Ratings and ratios for CU Inc.
Note: Ratios represent averages for 2002-2004.
Source: Schedule 2

With a combined common equity ratio of 35% and an ROE of 10.1%, NRG's key financial metrics will be similar to those of the major Canadian LDCs with rated debt.

VII. CONCLUSIONS

In my opinion, NRG's proposed common equity ratio of 35% is reasonable, in conjunction with an allowed ROE that is 1.5 percentage points above that applicable to Enbridge Gas. The 1.5 percentage point incremental risk premium reasonably reflects NRG's higher business risk relative to Enbridge and results in financial metrics that are comparable to those of the major gas utilities with rated debt.

QUANTIFICATION OF IMPACT ON EQUITY RETURN REQUIREMENT FOR DIFFERENCE BETWEEN CAPITAL STRUCTURES

THEORY 1:

The overall cost of capital is invariant to changes in the capital structure. The cost of equity rises as the debt ratio rises, but the after-tax weighted average cost of capital stays the same.

Formula for After-Tax Weighted Average Cost of Capital:

$WACC_{AT}$	=	(Debt Cost)(1-tax rate)(Debt Ratio) + (Equity Cost)(Equity Ratio)

ASSUMPTIONS:

Debt Cost	=	Current Cost of Long Term Debt for NRG
	=	6.80%[1]
Equity Cost	=	Current Allowed ROE Based on 4.5% Long Canada
	=	8.60%
Tax Rate	=	36.12%[2]

STEPS:

1. Estimate $WACC_{AT}$ at 50% common equity ratio

$WACC_{AT}$	=	(6.80%)(1-.36125)(50%) + (8.60%)(50%)
	=	6.47%

2. Estimate Cost of Equity at 35% common equity ratio with $WACC_{AT}$ unchanged at 6.47%

$WACC_{AT}$	=	(Debt Cost)(1-tax rate)(Debt Ratio) + (Equity Cost)(Equity Ratio)
6.47%	=	(6.80%)(1-.3612)(65%)+(X)(35%)
Cost of Equity at 35.0% Common Equity Ratio	=	10.42%

3. Difference between Equity Return at 50% and 35% common equity ratios:

10.42% - 8.60%	=	1.82% (182 basis points)

[1] NRG's cost of new debt.
[2] Statutory corporate income tax rate.

THEORY 2:

After-Tax Cost of Capital Declines as Debt Ratio Rises; Cost of Equity Rises

ASSUMPTIONS:

Debt Cost	=	Current Cost of Long Term Debt for NRG
	=	6.80%
Equity Cost	=	Current Allowed ROE Based on 4.5% Long Canada
	=	8.60%
Tax Rate	=	36.12%

STEPS:

1 Estimate $WACC_{AT}$ at 50% common equity ratio

$WACC_{AT}$ = (6.80%)(1-.3612)(50%) + (9.60%)(50%)

= 6.47%

2 Estimate $WACC_{AT}$ at 35% common equity ratio (65% debt ratio)

$$WACC_{AT(\text{new debt ratio})} = WACC_{AT(\text{old debt ratio})} \times (1\text{-t} \times \text{Debt Ratio}_{new})/(1\text{-t} \times \text{Debt Ratio}_{old})$$

$$WACC_{AT(\text{new debt ratio})} = 6.47\% \quad \frac{(1\text{-}.3612 \times 65\%)}{(1\text{-}.3612 \times 50\%)}$$

$$WACC_{AT(\text{new debt ratio})} = 6.04\%$$

3 Estimate Cost of Equity at new $WACC_{AT}$ at higher debt ratio:

$WACC_{AT}$(new debt ratio) = (Debt Cost)(1-tax rate)(Debt Ratio_{new}) + (Equity Cost)(Equity Ratio_{new})

6.04 = (6.80%)(1-.3612)(65%) + (X)(35%)

Cost of Equity at 35% equity ratio = 9.20%

4 Difference between Equity Return at 50% and 35% common equity ratios:

9.20% - 8.6% = .60% (60 basis points)

Financial Metrics for Major Gas LDCs
With Rated Debt

	2004	2003	2002	Average
DBRS Rating				
ATCO Gas [1/]	A(high)	A(high)	A(high)	A(high)
Enbridge Gas	A	A	A	A
Gaz Metro	A	A	A	A
Terasen	A	A	A	A
Union Gas	A	A	A	A
Average	**A**	**A**	**A**	**A**
Median	**A**	**A**	**A**	**A**
Cash Flow Coverage (times)				
ATCO Gas [1/]	4.4	4.5	4.1	4.3
Enbridge Gas	3.5	3.7	3.8	3.7
Gaz Metro	4.5	4.4	4.5	4.5
Terasen	2.8	2.7	2.7	2.7
Union Gas	3.0	3.0	3.0	3.0
Average	**3.6**	**3.7**	**3.6**	**3.6**
Median	**3.5**	**3.7**	**3.8**	**3.7**
Cash Flow/Debt (%)				
ATCO Gas [1/]	19.2	19.1	18.7	19.0
Enbridge Gas	11.7	16.1	10.3	12.7
Gaz Metro	20.8	23.1	21.4	21.8
Terasen	9.7	8.9	9.3	9.3
Union Gas	13.2	9.7	10.4	11.1
Average	**14.9**	**15.4**	**14.0**	**14.8**
Median	**13.2**	**16.1**	**10.4**	**12.7**
Pre-Tax Interest Coverage (times)				
ATCO Gas [1/]	2.9	3.0	2.8	2.9
Enbridge Gas	2.5	2.7	2.7	2.7
Gaz Metro	2.9	2.9	3.0	2.9
Terasen	2.0	2.0	2.0	2.0
Union Gas	2.1	2.1	2.1	2.1
Average	**2.5**	**2.5**	**2.5**	**2.5**
Median	**2.5**	**2.7**	**2.7**	**2.7**

1/ Data for CU Inc.; 2004 data are for 12 months ended September 2004
Source: DBRS Reports

UPDATE

of

OPINION

on

CAPITAL STRUCTURE AND EQUITY RISK PREMIUM

for

NATURAL RESOURCE GAS

Prepared by

KATHLEEN C. McSHANE

FOSTER ASSOCIATES, INC.

July 2006

The purpose of this additional evidence is to update my Opinion for Natural Resource Gas (NRG) dated March 2006 to reflect the impact of the actual cost of the five-year note with the Bank of Nova Scotia for which the promissory note was signed on March 31, 2006. The actual fixed rate on the five-year note is 7.52%, compared to the 6.8% estimate that was reflected in my earlier report.

The actual rate of 7.52% compares to the yield on five-year Canada bonds of 4.15% on March 31, and reflects a spread of close to 340 basis points on a spot basis. Compared to the 4.5% five-year Canada yield prevailing at the end of June 2006, the spread is somewhat lower, at approximately 300 basis points. The updated Table 3 below, which shows indicated spreads in mid-April and mid-June of 2006 for a five-year issue by a Canadian utility rated A by at least one of the two major debt rating agencies, indicates that market spreads for the large utilities have not changed materially over the past three months.

Table 3 Updated

Indicated Spreads for New Utility 5-Year Issues		
Company	**Spread over 5-Year Canada**	
	April 10	**June 12**
Enbridge Gas	38	39
Enbridge Inc.	43	45
EPCOR Utilities	44	45
Hydro One	31	32
Nova Scotia Power	50	55
Terasen Gas	45	49
TransCanada PipeLines	39	40
Union Gas	41	39
Westcoast	48	49
Average	**42**	**44**

Source: CIBC World Markets, April 10 and June 12, 2006.

The spread at which NRG was able to issue five-year debt confirms that the Bank of Nova Scotia considers NRG to be a substantially more risky utility than an A rated utility like Enbridge Gas Distribution. Similar to its cost of debt, NRG's cost of equity, given a similar capital structure to a large gas distributor, is materially higher than that of a benchmark Canadian utility, e.g., Enbridge Gas. NRG's higher cost of equity needs to be recognized in its allowed return on equity; my estimate of a reasonable incremental equity risk premium remains at 150 basis points.

The 7.52% actual cost of the five-year loan does weaken the estimated financial metrics slightly. The updated financial metrics based on the actual cost of debt are shown in the table below. While the updated financial metrics are slightly lower on average than in the initial evidence, they remain within the ranges achieved by the major Canadian LDCs.

Financial Metric	Forecast Ratio for 2007
Cash Flow Interest Coverage	3.3x
Cash Flow/Debt	17.9%
Pre-Tax Interest Coverage	2.2x

Source: EB-2005-0544, Exhibit E6 Tab 1 Schedule 3 Updated
And Exhibit F6 Tab 1 Schedules 1 and 2 Updated