**Volume 3, Section 1 – McShane, Cost of Capital** 

Q. (page 5, line 124, through page 6, line 171, and Statistical Exhibit, Schedule 13)

a. Please categorize the list of Canadian regulated utilities that appears in Schedule 13 in terms of their inherent business risks (that is, ignoring the impact of their varying capital structures). Which ones are exposed to higher-than-average business risks, which ones are exposed to lower-than-average business risks, and which ones have an inherent business riskiness that approximates the average for the group of 7 regulated utilities. Please explain the major considerations that have gone into the categorization.

 b. For the 7 utilities in Schedule 13, please provide the approximate percentage of either assets or revenues (or both) that are devoted to electricity generation.

c. For the 7 utilities in Schedule 13, please indicate which ones enjoy a "weather normalization reserve" or similar regulatory mechanism that normalizes their revenues for abnormal weather conditions.

 d. For the 7 utilities in Schedule 13, please indicate which ones enjoy a "weather normalization reserve" or similar regulatory mechanism that normalizes their purchased power costs for variations in hydroelectric production due to stream flows that are either above or below normal.

e. For the 7 utilities in Schedule 13, please indicate which ones enjoy a "rate stabilization account" or similar regulatory mechanism that protects them and their ratepayers against changes in fuel costs passed through from their energy supplier, other abnormal fuel cost changes, and municipal tax adjustments. For each utility identified as having some similar rate stabilization account, please list the uncontrollable risks that are covered.

f. In light of the above and other relevant considerations, please indicate where Newfoundland Power (NP) should be slotted in terms of the relative business risk categorization set out in answer to part (a) of this request. Is NP a utility with higher-than-average aggregate business risk characteristics or exposures, about average business risk exposures, or lower-than-average business risk exposures?

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A. (a) Schedule 13 is a schedule of betas which includes those of the only seven available conventional equities (as contrasted with income trusts or limited partnerships) that are significantly involved in regulated activities. In principle, however, the beta, as a measure of non-diversifiable investment risk, is a function of both the types of investments and the degree of diversification. With the exception of Pacific Northern Gas and Emera, the companies listed on Schedule 13 are holding companies with a portfolio of investments with differing degrees of diversification. Ms. McShane has not analyzed the business risks of all of the various operations of each of the companies listed on Schedule 13 in a detailed fashion. However, she has made a relative business risk assessment for the seven companies based on the relative proportions of earnings contributed from each

business segment in conjunction with a relative business risk ranking of the various operations. The table below sets out the approximate percentage of earnings contributed by each business activity in 2006 for each of the companies.

## **Canadian Utilities Ltd:**

Canadian Cliffics Ltd.		
Utilities (electric and gas distribution)	34%	
Electricity Generation	37%	
Global *	28%	
* Global includes ATCO Midstream, Frontec and I-Tek		
Emera:		
Integrated Electric Utility	86%	
Electric Distribution Utility	14%	
Enbridge Inc.:		
Liquids Pipelines Canada	42%	
Liquids Pipelines U.S.	10%	
Liquids Pipelines International	13%	
Gas Pipelines Canada/U.S.	12%	
Gas Distribution –Enbridge Gas Distribution	10%	
Gas Distribution—Other	13%	
Fortis Inc.:		
Canadian Electric Utilities (primarily distribution)	65%	
Caribbean Utilities	9%	
Generation	13%	
Properties	12%	
Pacific Northern Gas:		
Gas Distribution	100%	
Terasen Inc.:		
Gas Distribution	70%	
Liquids Pipelines Canada	24%	
Liquids Pipelines U.S.	6%	
Note: Terasen has not been a publicly-traded company since November		

## **TransCanada Corporation:**

2005.

Gas Pipelines Canada	40%
Gas Pipelines U.S.	15%
Gas Pipelines Global	2%
Electricity Generation *	44%

<sup>\*</sup> Includes natural gas storage: approximately 5% of total earnings

The generic business risk rankings of the various major operations are as follows, from lowest to highest risk:

Gas Distribution/Electricity Distribution/ Gas Pipeline Canada Gas Pipelines US/Liquids Pipelines Canada/Integrated Electric Utility Liquids Pipelines U.S./Generation (contract) Properties/Global Operations

 These relative risk categorizations are general in nature. Not all gas distribution operations face the same level of business risk. Pacific Northern Gas, a small gas distribution utility in B.C. with a large industrial customer base, is of significantly higher inherent business risk than Enbridge Gas Distribution, a large utility with a very economically diverse and growing customer base. Emera's largest investment, Nova Scotia Power, faces higher business risk than the typical integrated electric utility, in large part because its generation costs are dependent on oil prices and it has no automatic fuel cost adjustment clause.

Gas distribution generically is somewhat riskier than electricity distribution generally because, in the absence of a weather normalization clause, the annual earnings are subject to weather-related variability; downward pressure on annual customer usage is also an issue for gas distributors, but less so for electricity distributors. Canadian gas pipelines have less annual revenue variability than either gas or electricity distributors, since they collect their revenue requirements in demand charges, and as contract carriers, are protected by contractual arrangements, but face higher long-run competitive risks than gas or electricity distributors. None of the companies in these industries faces significant exposure to under-recovery of commodity costs, either because they do not purchase gas or electricity (e.g., the utilities of Canadian Utilities Ltd., FortisAlberta, the Canadian gas pipelines) or because they have adjustment mechanisms that allow for recovery of purchased gas or electricity costs (all of the gas distribution utilities, Newfoundland Power, Maritime Electric).

Liquids pipelines are common carriers and do not have the protection of long-term contracts, although the regulatory framework (e.g., the Incentive Toll Settlement of Enbridge Pipelines' "Older System") may provide a degree of protection to earnings from variations in throughput. Liquids pipelines like the Enbridge Pipelines mainline face competitive risks from other oil pipelines and alternative modes of transportation. Integrated electric utilities generally face higher business risks than distribution utilities because generation is in principle more operationally complex; unplanned outages at generation facilities may force the companies to purchase higher cost power with no ability to recover the additional costs. Stand-alone generation is of higher risk than an integrated utility, because it is subject to competitive threats and may incur higher than anticipated costs with no means of recovery. However, the specific level of risk faced by a generation investment is highly dependent on various factors, e.g., the technology (nuclear vs. hydro vs. gas), whether the plant is base-load, mid-merit or peaking, and the specifics of contractual arrangements between the owner and the purchaser of the power.

Based on the degree of diversification and nature of the operations of the seven companies on Schedule 13, Ms. McShane would consider PNG and Emera to be of above average risk. Canadian Utilities would also be of above average risk, given the proportion of earnings derived from generation and global enterprises. TransCanada Corp. and Enbridge Inc. would be of approximately average risk and Fortis Inc. and Terasen Inc. would be of below average risk. However, Ms. McShane's conclusion that Newfoundland Power is an average business risk utility is based on comparisons with other operating companies (i.e., those listed on Schedule 1) rather than with the seven companies listed on Schedule 13.

(b)

The percentages below represent the approximate percentage of electricity generation assets as a percent of total assets for each of the companies on Schedule 13.

Canadian Utilities	32% (37% Earnings before taxes)
Emera	45%
Enbridge	minimal *
Fortis	23%
PNG	0%
Terasen Inc.	0%
TransCanada	22% (39% earnings)

<sup>\*</sup> Investments in four generation projects as result of its interest in the Enbridge Income Fund.

(c) The following utilities in Canada other than Newfoundland Power have weather normalization clauses or a mechanism that adjusts for weather:

Terasen Gas Gaz Metro PNG

Terasen Gas' and PNG's mechanism also adjusts for changes in per customer usage for the weather-sensitive classes of customers. While ATCO Gas does not have a weather normalization clause, it has a rate design that mitigates earnings volatility. Most electric distribution utilities in Canada (or in the U.S.) do not have a significant heating load (e.g., the Ontario and Alberta distribution utilities), and are not subject to significant weather-related revenue volatility. The Alberta transmission utilities receive their approved revenue requirement in fixed monthly payments from the Alberta Electricity System Operator and thus face no revenue volatility. The gas pipelines collect their revenue requirements through demand charges and are not subject to weather volatility.

(d) All of the gas distributors have Purchased Gas Adjustment Clauses that provide for flow-through to customers of actual gas costs. The Alberta and Ontario electricity distributors are not at risk for recovery of purchased power costs. Maritime Electric has an Energy Cost Adjustment Mechanism. While FortisBC does not have a deferral account for purchased gas costs, its own generation is hydro and its major purchased power contract

- has a true-up provision. None of the gas pipelines incur commodity costs; they are transmission-only entities. They do however have deferral accounts for the costs of transmission by other pipelines that they incur.
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(e) Please see response to CA-NP 266(d). With specific regard to municipal taxes, the NEB-regulated gas pipelines have deferral accounts for municipal taxes, as do the BC utilities. The Alberta utilities collect their municipal taxes through a separate rider that ensures recovery of the actual costs. In general, deferral accounts are a standard approach in Canada for costs which are beyond the control of management and which are not easily forecasted. For example, Terasen Gas, PNG, FortisBC and Gaz Metro have deferral accounts for short term interest costs.

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(f) Ms. McShane would view Newfoundland Power as being of lower business risk as compared to the companies listed on Schedule 13, but as of approximately average business risk as compared to the companies on Schedule 1.