

Q. Reference Evidence of Newfoundland Power, pages 3.8

In footnote 22 NP points to the increase in pension expense under the defined benefit pension plan and the reduction in the discount rate from 6.50% in 2010 to 5.75% in 2011.

- a. In 2009 Mercer assumed a 6.0% discount rate, please explain how Mercer defined the discount rate in valuing a defined benefit pension plan.**
- b. Please explain in detail Mercer's reasons for reducing the discount rate from 6.5% in 2010 to 5.75% in 2011.**
- c. Please confirm that the discount rate is the expected rate of return on plan assets as adjusted by the actuary for individual factors.**
- d. Please provide the approximate breakdown of the pension plan assets into: long term bonds, equities (domestic, US and non-North America) and other assets and the expected rate of return attached to each.**
- e. Please indicate what would happen to the funded status of the pension plan if the actuary used NP's requested 10.5% ROE as the long run return on the equity market; would the plan move into surplus or would the deficit increase?**
- f. Please indicate in detail why the Board should not use Mercer's long run equity market return as a basis for determining the ROE for NP, that is, if NP thinks it is fair and reasonable to determine pension costs paid by ratepayers why is it not fair and reasonable to also use Mercer's estimates in determining NP's ROE?**
- g. In footnote 28 NP indicates it has reduced the discount rate for calculating the fair value of OPEBS from 5.75% to 5.25%, please indicate the basis for this reduction.**

A. The discount rate referred to in footnote 22 at p. 3-8 is a discount rate used annually for *accounting* purposes, including the calculation of pension expense. The discount rate used by Mercer's (Canada) Ltd. in valuing the Company's defined benefit pension plan is used for *funding* purposes. These discount rates are used for different purposes and calculated differently.

- a. The 6.0% discount rate for funding purposes is an actuarially determined amount based on Federal and Provincial Regulations.¹ Mercer provides calculations and recommendations on the discount rate based on the long-term expected return on the Pension Plan's assets using the target asset mix.
- b. The discount rate referred to in this question is used to calculate pension expense for accounting purposes.

¹ Federal and Provincial Regulations guidance for discount rates is outlined in the *Pension Benefits Act Regulations*, Part III Section 11 to 12.

Accounting standards require that the discount rate used be an interest rate determined by reference to market interest rates at the measurement date (December 31st) on high-quality debt instruments with cash flows that match the timing and amount of expected benefit payments. The reason for the reduction in the discount rate is that the referenced market interest rates declined from December 31, 2009 (rate for 2010) to December 31, 2010 (rate for 2011).

- c. Unable to confirm due to lack of clarity in question. The discount rate used for accounting purposes is a market observable debt rate. The discount rate used for pension funding purposes is the expected long term return on diversified pension plan assets, less pension plan administrative expenses. Newfoundland Power observes that this long term return is a geometric mean which is appropriate to measure performance over a long period but inappropriate to estimate a utility's cost of capital. Only *arithmetic* returns are appropriate for the estimation of a utility's cost of capital.²
- d. Table 1 provides the approximate current breakdown of the Company's pension plan assets between equities and bonds and the expected rate of return for each component calculated on an *arithmetic* basis.³

Table 1
Pension Plan Assets

	Asset Mix	Expected ROR
Equities	56%	9.9%
Bonds	44%	4.3%

- e. If the forecast long term return on pension plan assets is increased, it would be expected that the forecast value of the pension plan assets would increase. The ultimate impact of the increase in *forecast* long term return on the funded status of the plan would depend on a number of factors including whether the forecast return is, in fact, achieved. The actual impacts on funded status will be different on an accounting basis from a funding bases, however, the general dynamic will be similar.
- f. Newfoundland Power has not proposed the Board use a return on equity of 9.9% as this question suggests.

² The appropriateness of using arithmetic versus geometric means in estimating utilities' cost of capital is discussed in, amongst other places, Morin, *New Regulatory Finance*, p.133 *et. seq.*

³ The arithmetic rates of return were provided by the Company's actuaries, Mercer (Canada) Ltd.

1 Newfoundland Power does not believe the Board should use a pension
2 assumption of a long run equity market return as a basis for the allowed return on
3 equity for Newfoundland Power. Even if the long run geometric return is
4 translated to arithmetic return, the proposition that pension fund return
5 assumptions form a legitimate basis for establishing a utility's cost of equity has
6 conceptual difficulties. One difficulty is that a pension assumption of a long run
7 equity market return reflects a diversified equity portfolio return, which is not
8 necessarily comparable in risk to an average risk utility's equity. A second
9 difficulty relates to the differing goals of pension fund management (to ensure
10 availability of assets to fund employee retirement income) and utility regulation
11 (to set a fair return).

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13 g. The reduction in the accounting discount rate from 5.75% in 2011 to 5.25% in
14 2012 reflects changes in market interest rates from December 31, 2010 (rate for
15 2011) to December 31, 2011 (rate for 2012) associated with the calculation of
16 OPEBs expense.