

1 **Q. Referring to page 21, at line 23-26, please provide all evidence for your conclusion**
2 **that “a very large portion” of Newfoundland Power’s costs are fixed and do not**
3 **vary in proportion to sales variability. Please provide all underlying data and all**
4 **computer printouts, including all statistical tests (e.g., goodness of fit, statistical**
5 **confidence, variance, etc.), associated with the regression equations presented at**
6 **pages 39 (lines 10-11), 40 (lines 7-8), 41 (lines 8-9 and 12-13) and 42 (lines 8-9).**
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8 A. The statements at page 21, lines 22 to 28 address the risk to operating income associated
9 with extraordinary events due to the high proportion of fixed costs to total costs in
10 Newfoundland Power’s cost structure. This element of Newfoundland Power’s business
11 risk is also addressed in Section 2.2.2 of the *Finance & Accounting Evidence*, which
12 provides a breakdown of the fixed and variable unit costs of the Company at Table 6, on
13 page 23. As the table shows, fixed costs, over which the Company’s management can
14 exert no control, account for a significantly larger portion of Newfoundland Power’s total
15 costs than variable costs.
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17 The concept of operating leverage referred to by Dr. Morin is described in virtually all
18 finance texts. Attachment A contains an excerpt from *Fundamentals of Corporate*
19 *Finance* (3rd Cdn. Edition), by Ross, Westerfield, Jordan and Roberts.
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21 With reference to the regression equation on page 42 respecting the risk premium
22 analysis of U.S. electric utilities, the annual allowed ROE data was taken from
23 Regulatory Research Associates, Inc.’s (“*Regulatory Focus*”, Major Rate Case Decisions
24 – July 2002) comprehensive survey of 437 ROE decisions by regulators over the period
25 1987-2001 for electric utilities. The allowed ROE data are shown in Table 1. The
26 prevailing yield on long-term Treasury bonds for each year was subtracted from the
27 average authorized ROE each year to arrive at the authorized risk premium for that year.
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Table 1 Allowed ROEs			
	ROE Electric	Bond Yield	Risk Premium
1987	13.0	8.6	4.4
1988	12.8	9.0	3.8
1989	13.0	8.5	4.5
1990	12.7	8.6	4.1
1991	12.6	8.1	4.4
1992	12.1	7.7	4.4
1993	11.4	6.6	4.8
1994	11.3	7.4	4.0
1995	11.6	6.9	4.7
1996	11.4	6.7	4.7
1997	11.4	6.6	4.8
1998	11.7	5.6	6.1
1999	10.8	5.9	4.9
2000	11.4	6.0	5.4
2001	10.9	5.5	5.4
Mean	11.9	7.2	4.7

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The statistical output and statistical regression with the risk premium as the dependent variable and interest rates as the independent variable were performed routinely using the standard electronic OLS regression function supplied in the Lotus 123 software. The following statistical relationship between the risk premium (RP) and interest rates (YIELD) emerges over the 1987-2001 period:

$$RP = 0.077163 - 0.42164 \text{ YIELD} \quad R^2 = 0.70$$

(t=5.6)

The regression output from the electronic spreadsheet is set out on page 3 of 3.

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Constant	7.7163
Std Err of Y Est	0.3347
R Squared	0.70
No. of	15
Observations	
Degrees of	13
Freedom	
X Coefficient(s)	-0.42164
Std Err of Coef.	0.07588
t-value	-5.6

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For the other regression equations, respecting the Canadian allowed risk premium study, the underlying data and regression results are provided in Attachment B.