Page 1 of 3

1 2	Q.		Reference: <i>Fair Return and Capital Structure for Newfoundland Power (NP)</i> , Evidence of Laurence D. Booth, April 2024, page 37, lines 25-26.									
3 4 5			<i>"Where the CAPM gets controversial is in the beta coefficient since risk is constantly changing, as are beta coefficients."</i>									
6			0 0,									
7		a)	Is Dr.	Booth aware that beta coefficients for electric and gas utilities have								
8 9				ed substantially since January 2020 as reported by Bloomberg and Value oth of which are well-regarded sources of financial data used by investors?								
10				with of witten are well regarded sources of infunction data used by investors.								
11		b)	If Dr. B	ooth believes that risk is constantly changing, please explain why he does								
12		~)		on current market data on beta coefficients for a group of companies								
13			•	able to NP in terms of risk?								
14												
15		c)	c) Why is it more reasonable to rely on historical beta coefficients for utilities over									
16			the pas	t 60 years than on current market data, if the Northwestern decision								
17			require	s the use of data that reflects change in the money market (i.e., the capital								
18			market)?								
19												
20	A.	a)		question is referring to Mr. Coyne's evidence, which uses adjusted betas and								
21			not a	ctual estimated betas. Please see Dr. Booth's Appendix C where he indicates:								
22												
23			a.	The only published academic research shows that the Blume adjustment								
24 25				does not hold for utilities.								
25 26			b.	The betas estimated by RBC, the Globe and Mail, Yahoo Finance using S&P								
20 27			υ.	data, Reuters and CFRA, an independent research firm that makes their								
28				reports available to Scotia I Trade.								
29				reports available to Seotia i frade.								
30			c.	That both Morningstar and the Financial Post define beta as normal								
31				estimates and not Blume adjusted betas.								
32												
33			d.	Value Line is a private subscription-based US service that does not follow								
34				most Canadian companies and is not publicly available, and it is doubtful it								
35				is relied on by institutional investors.								
36												
37			e.	Bloomberg is a data provider, and to get Blume adjusted betas you click a								
38				radio button, so it is up to the analyst to get regular betas or Blume adjusted								
39				betas.								

Page 2 of 3

Dr. Booth has never seen publicly available Blume adjusted betas for utilities in Canada, and even for the US electric utility holding companies, which are undoubtedly riskier than NP, the average beta is about 0.60. This is an increase from the time of Dr. Booth's 2001 report, and is the top end of Dr. Booth's current beta range. The following is his table from Appendix C page 15.

	NWN	NJR	SR	ATO	SWX	OGS	Average	Median
MKT CAP	1.5	4.1	3.3	17.2	4.5	3.4	6.12	3.75
RBC	0.57	0.64	0.52	0.66	0.31	0.65	0.54	0.61
Yahoo	0.56	0.65	0.51	0.67	0.31	N/A	0.54	0.56
CFRA	0.56	0.65	0.52	0.66	0.31	0.66	0.54	0.61
Reuters	0.51	0.63	0.62	0.44	0.81	0.63	0.60	0.63
Booth	0.58	0.63	0.52	0.65	0.31	0.65	0.54	0.61
Average	0.56	0.64	0.54	0.62	0.41	0.65	0.55	0.59
Median	0.56	0.64	0.52	0.66	0.31	0.65	0.54	0.60
Globe and mail	0.28	0.63		0.67	0.31	0.66	0.47	0.63

- b) Dr. Booth does not rely 100% on current betas for individual companies since they are affected by whatever happened during the five-year estimation window for both the company and the overall stock market as he explains in Appendix C. The fact is that the "current" betas are actually the past five-year betas and may not reflect the future. For example, the most recent five-year period is only relevant if one assumes that a Covid 19-like pandemic and massive central bank intervention are likely to occur over the forward test years. Dr. Booth does not judge this to be reasonable.
- c) The Northwestern utilities decision did not rely on betas or the CAPM. It did require that the Board make a decision based on current market conditions, and that is what the CAPM and beta estimates do. Note that Dr. Booth's beta estimates for individual Canadian utilities do not go back 60 years, and even the utility index estimates only go back to 1987. The US electric UHC data does go back longer, and these long-dated beta estimates are mentioned to discuss their strengths and weaknesses and judge whether there is any trend over time, which might support a Blume's adjustment, but which they clearly do not. Note what follows is a repeat of the graph in Schedule 8 of Dr. Booth's Appendix C, where there is a recent increase in US electric utility betas. However, this is well within normal bounds, and the cyclical behaviour of the estimates. Note the same behaviour is evident in US gas company betas, but in contrast there is no evidence of this for Canadian utility holding companies as Schedule 4 of Dr. Booth's Appendix C, also repeated below shows. So it looks like a US risk perception against the US stock market.

NP-CA-011 NP 2025-2026 General Rate Application

Page 3 of 3



1 2

