Q. Volume 2: Cost of Capital: Expert Opinion of James Coyne-Capital Structure and Risk Profile

Reference: "2025/2026 General Rate Application," Newfoundland Power Inc., December 12, 2023, vol. 2, Expert Evidence, "Cost of Capital," Concentric Energy Advisors Inc., November 7, 2023, ch. V(B)(1), p. 43, fig. 26.

a) Why were 30-year government bonds chosen for the risk-free rate versus the 10-year?

b) The yield on the 30-year government bonds is imputed based on the forecasted yield on the 10-year government bond and the historical spread between 10-year and 30-year yields. The 30-year Canada benchmark bond yields are publicly available and are fairly liquid. Why was the direct yield on the Canada 30-year benchmark not chosen?

c) Why was weekly beta chosen over monthly historical beta for this selection?

d) There is no evidence to show that the comparable company's beta is being unlevered to determine Newfoundland Power's beta. Please advise the reason for this selection?

e) How is the US Market Risk Premium relevant to Newfoundland Power's cost of equity calculation?

A. a) Concentric uses the 30-year government bond yield as the risk-free rate because it best aligns with the average life of utility assets (which tend to range from 20-30 years or longer in most instances) and because utilities generally issue debt with longer maturities than 10 years.

b) Concentric relies on the forecast government bond yield rather than the current average government bond yield. A longer-term forecast of 30-year government bonds is not available for Canada. For that reason, Concentric uses the 10-year forecast government bond yield from Consensus Economics and then adds the historical spread between 10- and 30-year government bonds. Please see the response to Request for Information PUB-NP-117 regarding why Concentric prefers the forecast government bond yield rather than the current average.

c) The following excerpt from Mr. Coyne's January 2020 report filed with the Alberta Utilities Commission explains why Concentric prefers weekly instead of monthly betas in the CAPM analysis.[1]

> *Table 2 presents the descriptive statistics for each beta using both monthly and weekly returns and two- and five-year periods. As my analysis demonstrates in the Table below, five years of weekly data provides the best regression fit and the resulting adjusted beta coefficient has the greatest explanatory power.*

[1] Prepared Direct Testimony of James M. Coyne, Alberta Utilities Commission 2021 Generic Cost of Capital, Exhibit No. 24110-X0167, January 20, 2020, at 17-18.

Table 2: Beta Statistics

Group Beta as of November 29, 2019	*Raw Beta*	*Adj. Beta*	*t-Statistic*	*R2*	*R*	*Data Points*
S&P/TSX Utilities Index/ S&P/TSX						
2 Years Monthly	0.579	0.719	3.619	0.373	0.611	24
2 Years Weekly	0.370	0.580	4.490	0.165	0.406	104
5 Years Monthly	0.481	0.654	3.254	0.154	0.393	60
5 Years Weekly	0.658	0.772	10.930	0.316	0.562	261
S&P Utilities Index/ S&P *500*						
2 Years Monthly	0.187	0.458	1.261	0.067	0.260	24
2 Years Weekly	0.330	0.554	4.404	0.160	0.400	104
5 Years Monthly	0.158	0.439	1.219	0.025	0.158	60
5 Years Weekly	0.315	0.543	5.215	0.095	0.308	261

As Table 2 shows, all of the weekly beta estimates are statistically significant at the 95 percent confidence level, the standard threshold to accept that regression results actually explain the relationship and are not due to chance. A t-statistic in excess of 2.00 (two-tailed test) is required to reach 95 percent confidence in the two-year weekly beta; and a t-statistic in excess of 1.96 is required to reach 95 percent confidence in the five-year weekly beta. The two-year monthly results would require a t-statistic in excess of 2.07 to fall within the 95 percent confidence level. The Canadian utilities index shows stronger regression results for the monthly indexes than the U.S. and are statistically significant, though monthly results are weaker than weekly. The monthly results for the U.S. fall significantly below the level required to satisfy the 95 percent confidence threshold. Even the five-year monthly results would require a t-statistic of 2.00 and does not satisfy the 95 percent confidence threshold for a two-tailed test. It is evident from the Table above, based on the strength of the t-statistics, that five-year weekly return data is superior in terms of predicting future returns.

d) While Concentric is aware of methods to adjust beta for differences in financial leverage such as the Hamada equation, Concentric has not included that adjustment because the equity ratio for Newfoundland Power is lower than most of the U.S. companies in the North American electric proxy group. Making a leverage adjustment would cause the CAPM results to increase for the North American electric proxy group. This further demonstrates that Concentric's ROE analysis is conservative.

e) As explained on page 27 of Concentric's *Cost of Capital* report, Volume 2, the Canadian and U.S. economies and capital markets are highly integrated and exhibit strong correlation across a variety of metrics, including GDP growth and government bond yields. On that basis, Concentric concludes:

> *Based on these macroeconomic indicators, there are no fundamental dissimilarities between Canada and the U.S. (in terms of economic growth, inflation, or government bond yields) that would cause a reasonable investor to have a materially different return expectation for a group of comparable risk utilities in the two countries. Our cost of capital analysis is framed by the conclusion that Canada and the U.S. have comparable macroeconomic and investment environments.*

For that reason, Concentric believes it is reasonable to use an average of the Canadian and U.S. market risk premium in the CAPM analysis in this proceeding.