

- 1 Q. **(Reference CA-NP-146) Mr. Coyne was asked whether he is aware of any published**  
2 **academic research that analyzes the intervalling effect related to betas based on**  
3 **weekly data. Leaving aside Mr. Coyne’s opinion regarding the intervalling effect as**  
4 **set out in his response to CA-NP-146, can Mr. Coyne answer the question as to**  
5 **whether he is aware of any published academic research that analyzes the**  
6 **intervalling effect and, if so, can he identify this academic research?**  
7
- 8 A. Yes, Mr. Coyne is aware of published academic research on the “intervalling effect”.  
9 See, for example, *Estimating and Adjusting for the Intervalling-Effect Bias in Beta* by  
10 Cohen, Hawawini, Maier, Schwartz, Whitcomb, February 1980, Revised October 1981,  
11 subsequently published in *Management Science*. The authors examine the influence of  
12 “short period data” on betas measured down to a daily trading basis. Importantly, they  
13 find that the intervalling effect depends on the security’s “thinness”. As shown in the  
14 response to CA-NP-146, the average daily trading volume for the companies in Mr.  
15 Coyne’s Canadian and U.S. proxy groups demonstrates that lack of liquidity is not a  
16 concern for investors in these companies. These are large cap stocks with substantial  
17 trading volume and which are covered by multiple analysts. Mr. Coyne is not aware of  
18 any regulator in Canada or the U.S. that has found the intervalling effect to be present, or  
19 a concern, with utility betas.