

1 **Volume 2: Cost of Capital: Expert Opinion of James Coyne- Capital Structure and Risk**
2 **Profile**

3
4 **Q. Mr. Coyne explains (page 44) that he uses “*Bloomberg Beta estimates based on***
5 ***parameters entered by the user.*” Instead of entering an adjustment, please provide**
6 **the beta estimates without an adjustment using the same Bloomberg data for both**
7 **weekly and monthly stock returns Please confirm that the returns have been**
8 **adjusted for dividend payments and represent total returns, not just price returns.**
9

10 A. See Attachment A for the requested data. Note that Concentric entered manual
11 parameters including calculation start date, end date, periodicity, relative index, and
12 whether the beta should be raw or adjusted. Bloomberg calculates the beta based on these
13 parameters.
14

15 Bloomberg adjusts stock returns for dividend payments, but not index returns. Concentric
16 previously contacted Bloomberg regarding the question and was told that the Beta
17 calculation looks at price movement, not total return. Bloomberg stated:
18

19 *Raw (historical) beta measures the volatility of the stock price relative to*
20 *the volatility in the market index. Beta is the percent change in the price of*
21 *the stock given a 1% change in the market index.*

**Bloomberg Beta Estimates
Weekly and Monthly Stock Return Data Without Adjustments**

	Adjusted Weekly Bloomberg Beta	Raw Weekly Bloomberg Beta	Adjusted Monthly Bloomberg Beta	Raw Monthly Bloomberg Beta
Canadian Group	0.87	0.81	0.75	0.63
U.S. Electric Utility Group	0.89	0.83	0.69	0.53
North American Electric Group	0.86	0.79	0.66	0.50

Source: Bloomberg Professional, as of August 31, 2023. All betas are calculated over a five-year period.

Canadian Proxy Group	Ticker	Adjusted Weekly Bloomberg Beta	Raw Weekly Bloomberg Beta	Adjusted Monthly Bloomberg Beta	Raw Monthly Bloomberg Beta
Algonquin Power & Utilities Corp.	AQN	0.99	0.99	0.70	0.55
AltaGas Ltd.	ALA	1.13	1.19	1.18	1.27
Canadian Utilities Limited	CU	0.84	0.76	0.72	0.57
Emera Inc.	EMA	0.70	0.54	0.49	0.24
Enbridge Inc.	ENB	0.93	0.90	0.93	0.89
HydroOne Ltd.	H	0.66	0.49	0.51	0.27
MEAN		0.87	0.81	0.75	0.63

US Electric Proxy Group	Ticker	Adjusted Weekly Bloomberg Beta	Raw Weekly Bloomberg Beta	Adjusted Monthly Bloomberg Beta	Raw Monthly Bloomberg Beta
Alliant Energy Corporation	LNT	0.87	0.80	0.70	0.55
American Electric Power Company, Inc.	AEP	0.83	0.74	0.64	0.46
Duke Energy Corporation	DUK	0.81	0.71	0.62	0.44
Entergy Corporation	ETR	0.94	0.91	0.77	0.65
Eergy, Inc.	EVRG	0.87	0.80	0.67	0.50
Eversource Energy	ES	0.88	0.82	0.67	0.50
NextEra Energy Inc.	NEE	0.89	0.84	0.65	0.47
OGE Corp	OGE	1.00	0.99	0.80	0.70
Pinnacle West Capital Corporation	PNW	0.92	0.88	0.65	0.47
Portland General Electric Company	POR	0.86	0.79	0.72	0.57
MEAN		0.89	0.83	0.69	0.53

North American Electric Proxy Group	Ticker	Adjusted Weekly Bloomberg Beta	Raw Weekly Bloomberg Beta	Adjusted Monthly Bloomberg Beta	Raw Monthly Bloomberg Beta
Algonquin Power & Utilities Corp.	AQN	0.99	0.99	0.70	0.55
Canadian Utilities Limited	CU	0.84	0.76	0.72	0.57
Emera Inc.	EMA	0.70	0.54	0.49	0.24
HydroOne Inc.	H	0.66	0.49	0.51	0.27
Alliant Energy Corporation	LNT	0.87	0.80	0.70	0.55
American Electric Power Company, Inc.	AEP	0.83	0.74	0.64	0.46
Duke Energy Corporation	DUK	0.81	0.71	0.62	0.44
Entergy Corporation	ETR	0.94	0.91	0.77	0.65
Eergy, Inc.	EVRG	0.87	0.80	0.67	0.50
Eversource Energy	ES	0.88	0.82	0.67	0.50
NextEra Energy Inc.	NEE	0.89	0.84	0.65	0.47
OGE Corp	OGE	1.00	0.99	0.80	0.70
Pinnacle West Capital Corporation	PNW	0.92	0.88	0.65	0.47
Portland General Electric Company	POR	0.86	0.79	0.72	0.57
MEAN		0.86	0.79	0.66	0.50

Source: Bloomberg Professional, as of August 31, 2023. All betas are calculated over a five-year period.