

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VL BETA
LONG-TERM HISTORICAL MARKET RETURN
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Value Line 5-year Beta (β)	Historical Market Risk Premium	ROE (K)
Alliant Energy Corporation	LNT	4.23%	0.90	7.94%	11.38%
Ameren Corporation	AEE	4.23%	0.90	7.94%	11.38%
American Electric Power Company, Inc.	AEP	4.23%	0.85	7.94%	10.98%
Duke Energy Corporation	DUK	4.23%	0.90	7.94%	11.38%
Edison International	EIX	4.23%	1.00	7.94%	12.17%
Entergy Corporation	ETR	4.23%	1.00	7.94%	12.17%
Evergy, Inc.	EVRG	4.23%	0.95	7.94%	11.77%
IDACORP, Inc.	IDA	4.23%	0.85	7.94%	10.98%
NextEra Energy, Inc.	NEE	4.23%	1.05	7.94%	12.57%
NorthWestern Corporation	NWE	4.23%	0.95	7.94%	11.77%
OGE Energy Corporation	OGE	4.23%	1.05	7.94%	12.57%
Pinnacle West Capital Corp	PNW	4.23%	0.95	7.94%	11.77%
Portland General Electric Company	POR	4.23%	0.95	7.94%	11.77%
PPL Corporation	PPL	4.23%	1.15	7.94%	13.36%
Southern Company	SO	4.23%	0.95	7.94%	11.77%
TXNM Energy, Inc.	TXNM	4.23%	0.90	7.94%	11.38%
Xcel Energy Inc.	XEL	4.23%	0.85	7.94%	10.98%
Mean					11.77%

Notes:

[1] Source: Bloomberg Professional as of August 31, 2024

[2] Source: Value Line

[3] Source: Duff & Phelps Average Large Co. Stocks Historical Return less Income Only Returns LT Gov't (1926-2023)

[4] Equals [1] + [2] x [3]

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE & VL BETA
LONG-TERM HISTORICAL MARKET RETURN
 $K = R_f + \beta (R_m - R_f)$

Company	Ticker	[1]	[2]	[3]	[4]
		Near-term projected 30-year U.S. Treasury bond yield (Q4 2024 - Q4 2025)	Value Line 5-year Beta (β)	Historical Market Risk Premium	ROE (K)
Alliant Energy Corporation	LNT	4.12%	0.90	8.05%	11.37%
Ameren Corporation	AEE	4.12%	0.90	8.05%	11.37%
American Electric Power Company, Inc.	AEP	4.12%	0.85	8.05%	10.96%
Duke Energy Corporation	DUK	4.12%	0.90	8.05%	11.37%
Edison International	EIX	4.12%	1.00	8.05%	12.17%
Entergy Corporation	ETR	4.12%	1.00	8.05%	12.17%
Evergy, Inc.	EVRG	4.12%	0.95	8.05%	11.77%
IDACORP, Inc.	IDA	4.12%	0.85	8.05%	10.96%
NextEra Energy, Inc.	NEE	4.12%	1.05	8.05%	12.57%
NorthWestern Corporation	NWE	4.12%	0.95	8.05%	11.77%
OGE Energy Corporation	OGE	4.12%	1.05	8.05%	12.57%
Pinnacle West Capital Corp	PNW	4.12%	0.95	8.05%	11.77%
Portland General Electric Company	POR	4.12%	0.95	8.05%	11.77%
PPL Corporation	PPL	4.12%	1.15	8.05%	13.38%
Southern Company	SO	4.12%	0.95	8.05%	11.77%
TXNM Energy, Inc.	TXNM	4.12%	0.90	8.05%	11.37%
Xcel Energy Inc.	XEL	4.12%	0.85	8.05%	10.96%
Mean					11.77%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 9, August 30, 2024 at 2

[2] Source: Value Line

[3] Source: Duff & Phelps Average Large Co. Stocks Historical Return less Income Only Returns LT Gov't (1926-2023)

[4] Equals [1] + [2] x [3]

CAPITAL ASSET PRICING MODEL -- LONG-TERM PROJECTED RISK-FREE RATE & VL BETA
LONG-TERM HISTORICAL MARKET RETURN
 $K = R_f + \beta (R_m - R_f)$

Company	Ticker	[1] Projected 30-year U.S. Treasury bond yield (2026 - 2030)	[2] Value Line 5-year Beta (β)	[3] Historical Market Risk Premium	[4] ROE (K)
Alliant Energy Corporation	LNT	4.30%	0.90	7.87%	11.38%
Ameren Corporation	AEE	4.30%	0.90	7.87%	11.38%
American Electric Power Company, Inc.	AEP	4.30%	0.85	7.87%	10.99%
Duke Energy Corporation	DUK	4.30%	0.90	7.87%	11.38%
Edison International	EIX	4.30%	1.00	7.87%	12.17%
Entergy Corporation	ETR	4.30%	1.00	7.87%	12.17%
Evergy, Inc.	EVRG	4.30%	0.95	7.87%	11.78%
IDACORP, Inc.	IDA	4.30%	0.85	7.87%	10.99%
NextEra Energy, Inc.	NEE	4.30%	1.05	7.87%	12.56%
NorthWestern Corporation	NWE	4.30%	0.95	7.87%	11.78%
OGE Energy Corporation	OGE	4.30%	1.05	7.87%	12.56%
Pinnacle West Capital Corp	PNW	4.30%	0.95	7.87%	11.78%
Portland General Electric Company	POR	4.30%	0.95	7.87%	11.78%
PPL Corporation	PPL	4.30%	1.15	7.87%	13.35%
Southern Company	SO	4.30%	0.95	7.87%	11.78%
TXNM Energy, Inc.	TXNM	4.30%	0.90	7.87%	11.38%
Xcel Energy Inc.	XEL	4.30%	0.85	7.87%	10.99%
Mean					11.78%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 6, May 31, 2024 at 14

[2] Source: Value Line

[3] Source: Duff & Phelps Average Large Co. Stocks Historical Return less Income Only Returns LT Gov't (1926-2023)

[4] Equals [1] + [2] x [3]

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & BLOOMBERG BETA
LONG-TERM HISTORICAL MARKET RETURN
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Bloomberg 10-year Beta (β)	Historical Market Risk Premium	ROE (K)
Alliant Energy Corporation	LNT	4.23%	0.77	7.94%	10.38%
Ameren Corporation	AEE	4.23%	0.73	7.94%	10.06%
American Electric Power Company, Inc.	AEP	4.23%	0.74	7.94%	10.11%
Duke Energy Corporation	DUK	4.23%	0.71	7.94%	9.84%
Edison International	EIX	4.23%	0.84	7.94%	10.88%
Entergy Corporation	ETR	4.23%	0.84	7.94%	10.88%
Evergy, Inc.	EVRG	4.23%	0.77	7.94%	10.32%
IDACORP, Inc.	IDA	4.23%	0.77	7.94%	10.36%
NextEra Energy, Inc.	NEE	4.23%	0.80	7.94%	10.58%
NorthWestern Corporation	NWE	4.23%	0.85	7.94%	11.02%
OGE Energy Corporation	OGE	4.23%	0.89	7.94%	11.31%
Pinnacle West Capital Corp	PNW	4.23%	0.80	7.94%	10.60%
Portland General Electric Company	POR	4.23%	0.77	7.94%	10.33%
PPL Corporation	PPL	4.23%	0.93	7.94%	11.63%
Southern Company	SO	4.23%	0.76	7.94%	10.29%
TXNM Energy, Inc.	TXNM	4.23%	0.81	7.94%	10.63%
Xcel Energy Inc.	XEL	4.23%	0.72	7.94%	9.92%
Mean					10.54%

Notes:

[1] Source: Bloomberg Professional as of August 31, 2024

[2] Source: Bloomberg Professional

[3] Source: Duff & Phelps Average Large Co. Stocks Historical Return less Income Only Returns LT Gov't (1926-2023)

[4] Equals [1] + [2] x [3]

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE & BLOOMBERG BETA
LONG-TERM HISTORICAL MARKET RETURN
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]
		Near-term projected 30-year			
		U.S. Treasury bond yield (Q4 2024 - Q4 2025)	Bloomberg 10-year Beta (β)	Historical Market Risk Premium	ROE (K)
Company	Ticker				
Alliant Energy Corporation	LNT	4.12%	0.77	8.05%	10.35%
Ameren Corporation	AEE	4.12%	0.73	8.05%	10.03%
American Electric Power Company, Inc.	AEP	4.12%	0.74	8.05%	10.08%
Duke Energy Corporation	DUK	4.12%	0.71	8.05%	9.81%
Edison International	EIX	4.12%	0.84	8.05%	10.86%
Entergy Corporation	ETR	4.12%	0.84	8.05%	10.86%
Evergy, Inc.	EVRG	4.12%	0.77	8.05%	10.29%
IDACORP, Inc.	IDA	4.12%	0.77	8.05%	10.33%
NextEra Energy, Inc.	NEE	4.12%	0.80	8.05%	10.56%
NorthWestern Corporation	NWE	4.12%	0.85	8.05%	11.00%
OGE Energy Corporation	OGE	4.12%	0.89	8.05%	11.30%
Pinnacle West Capital Corp	PNW	4.12%	0.80	8.05%	10.57%
Portland General Electric Company	POR	4.12%	0.77	8.05%	10.30%
PPL Corporation	PPL	4.12%	0.93	8.05%	11.62%
Southern Company	SO	4.12%	0.76	8.05%	10.26%
TXNM Energy, Inc.	TXNM	4.12%	0.81	8.05%	10.61%
Xcel Energy Inc.	XEL	4.12%	0.72	8.05%	9.89%
Mean					10.51%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 9, August 30, 2024 at 2

[2] Source: Bloomberg Professional

[3] Source: Duff & Phelps Average Large Co. Stocks Historical Return less Income Only Returns LT Gov't (1926-2023)

[4] Equals [1] + [2] x [3]

CAPITAL ASSET PRICING MODEL -- LONG-TERM PROJECTED RISK-FREE RATE & BLOOMBERG BETA
LONG-TERM HISTORICAL MARKET RETURN
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]
		Projected 30-year			
Company	Ticker	U.S. Treasury bond yield (2026 - 2030)	Bloomberg 10-year Beta (β)	Historical Market Risk Premium	ROE (K)
Alliant Energy Corporation	LNT	4.30%	0.77	7.87%	10.39%
Ameren Corporation	AEE	4.30%	0.73	7.87%	10.08%
American Electric Power Company, Inc.	AEP	4.30%	0.74	7.87%	10.13%
Duke Energy Corporation	DUK	4.30%	0.71	7.87%	9.86%
Edison International	EIX	4.30%	0.84	7.87%	10.89%
Entergy Corporation	ETR	4.30%	0.84	7.87%	10.89%
Evergy, Inc.	EVRG	4.30%	0.77	7.87%	10.34%
IDACORP, Inc.	IDA	4.30%	0.77	7.87%	10.37%
NextEra Energy, Inc.	NEE	4.30%	0.80	7.87%	10.60%
NorthWestern Corporation	NWE	4.30%	0.85	7.87%	11.03%
OGE Energy Corporation	OGE	4.30%	0.89	7.87%	11.32%
Pinnacle West Capital Corp	PNW	4.30%	0.80	7.87%	10.61%
Portland General Electric Company	POR	4.30%	0.77	7.87%	10.34%
PPL Corporation	PPL	4.30%	0.93	7.87%	11.63%
Southern Company	SO	4.30%	0.76	7.87%	10.30%
TXNM Energy, Inc.	TXNM	4.30%	0.81	7.87%	10.64%
Xcel Energy Inc.	XEL	4.30%	0.72	7.87%	9.94%
Mean					10.55%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 6, May 31, 2024 at 14

[2] Source: Bloomberg Professional

[3] Source: Duff & Phelps Average Large Co. Stocks Historical Return less Income Only Returns LT Gov't (1926-2023)

[4] Equals [1] + [2] x [3]