

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VL BETA
CONSTANT GROWTH DCF APPLIED TO S&P 500
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]	[5]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Value Line 5-year Beta (β)	Market Return (R_m)	Market Risk Premium ($R_m - R_f$)	ROE (K)
Alliant Energy Corporation	LNT	4.23%	0.90	14.21%	9.97%	13.21%
Ameren Corporation	AEE	4.23%	0.90	14.21%	9.97%	13.21%
American Electric Power Company, Inc.	AEP	4.23%	0.85	14.21%	9.97%	12.71%
Duke Energy Corporation	DUK	4.23%	0.90	14.21%	9.97%	13.21%
Edison International	EIX	4.23%	1.00	14.21%	9.97%	14.21%
Entergy Corporation	ETR	4.23%	1.00	14.21%	9.97%	14.21%
Evergy, Inc.	EVRG	4.23%	0.95	14.21%	9.97%	13.71%
IDACORP, Inc.	IDA	4.23%	0.85	14.21%	9.97%	12.71%
NextEra Energy, Inc.	NEE	4.23%	1.05	14.21%	9.97%	14.70%
NorthWestern Corporation	NWE	4.23%	0.95	14.21%	9.97%	13.71%
OGE Energy Corporation	OGE	4.23%	1.05	14.21%	9.97%	14.70%
Pinnacle West Capital Corp	PNW	4.23%	0.95	14.21%	9.97%	13.71%
Portland General Electric Company	POR	4.23%	0.95	14.21%	9.97%	13.71%
PPL Corporation	PPL	4.23%	1.15	14.21%	9.97%	15.70%
Southern Company	SO	4.23%	0.95	14.21%	9.97%	13.71%
TXNM Energy, Inc.	TXNM	4.23%	0.90	14.21%	9.97%	13.21%
Xcel Energy Inc.	XEL	4.23%	0.85	14.21%	9.97%	12.71%
Mean			0.950			13.71%

Notes:

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

[2] Source: Value Line

[3] Source: Value Line

[4] Equals [3] - [1]

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

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE & VL BETA
CONSTANT GROWTH DCF APPLIED TO S&P 500
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]	[5]
		Near-term projected 30-year U.S. Treasury bond yield (Q4 2024 - Q4 2025)		Value Line 5-year Beta (β)	Market Return (Rm)	Market Risk Premium (Rm - Rf)
Company	Ticker					ROE (K)
Alliant Energy Corporation	LNT	4.12%	0.90	14.21%	10.09%	13.20%
Ameren Corporation	AEE	4.12%	0.90	14.21%	10.09%	13.20%
American Electric Power Company, Inc.	AEP	4.12%	0.85	14.21%	10.09%	12.69%
Duke Energy Corporation	DUK	4.12%	0.90	14.21%	10.09%	13.20%
Edison International	EIX	4.12%	1.00	14.21%	10.09%	14.21%
Entergy Corporation	ETR	4.12%	1.00	14.21%	10.09%	14.21%
Evergy, Inc.	EVRG	4.12%	0.95	14.21%	10.09%	13.70%
IDACORP, Inc.	IDA	4.12%	0.85	14.21%	10.09%	12.69%
NextEra Energy, Inc.	NEE	4.12%	1.05	14.21%	10.09%	14.71%
NorthWestern Corporation	NWE	4.12%	0.95	14.21%	10.09%	13.70%
OGE Energy Corporation	OGE	4.12%	1.05	14.21%	10.09%	14.71%
Pinnacle West Capital Corp	PNW	4.12%	0.95	14.21%	10.09%	13.70%
Portland General Electric Company	POR	4.12%	0.95	14.21%	10.09%	13.70%
PPL Corporation	PPL	4.12%	1.15	14.21%	10.09%	15.72%
Southern Company	SO	4.12%	0.95	14.21%	10.09%	13.70%
TXNM Energy, Inc.	TXNM	4.12%	0.90	14.21%	10.09%	13.20%
Xcel Energy Inc.	XEL	4.12%	0.85	14.21%	10.09%	12.69%
Mean						13.70%

Notes:

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

[2] Source: Value Line

[3] Source: Value Line

[4] Equals [3] - [1]

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

CAPITAL ASSET PRICING MODEL -- LONG-TERM PROJECTED RISK-FREE RATE & VL BETA
CONSTANT GROWTH DCF APPLIED TO S&P 500
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]	[5]
		Projected 30-year U.S. Treasury bond yield (2026 - 2030)	Value Line 5-year Beta (β)	Market Return (R_m)	Market Risk Premium ($R_m - R_f$)	ROE (K)
Company	Ticker					
Alliant Energy Corporation	LNT	4.30%	0.90	14.21%	9.91%	13.22%
Ameren Corporation	AEE	4.30%	0.90	14.21%	9.91%	13.22%
American Electric Power Company, Inc.	AEP	4.30%	0.85	14.21%	9.91%	12.72%
Duke Energy Corporation	DUK	4.30%	0.90	14.21%	9.91%	13.22%
Edison International	EIX	4.30%	1.00	14.21%	9.91%	14.21%
Entergy Corporation	ETR	4.30%	1.00	14.21%	9.91%	14.21%
Evergy, Inc.	EVERG	4.30%	0.95	14.21%	9.91%	13.71%
IDACORP, Inc.	IDA	4.30%	0.85	14.21%	9.91%	12.72%
NextEra Energy, Inc.	NEE	4.30%	1.05	14.21%	9.91%	14.70%
NorthWestern Corporation	NWE	4.30%	0.95	14.21%	9.91%	13.71%
OGE Energy Corporation	OGE	4.30%	1.05	14.21%	9.91%	14.70%
Pinnacle West Capital Corp	PNW	4.30%	0.95	14.21%	9.91%	13.71%
Portland General Electric Company	POR	4.30%	0.95	14.21%	9.91%	13.71%
PPL Corporation	PPL	4.30%	1.15	14.21%	9.91%	15.69%
Southern Company	SO	4.30%	0.95	14.21%	9.91%	13.71%
TXNM Energy, Inc.	TXNM	4.30%	0.90	14.21%	9.91%	13.22%
Xcel Energy Inc.	XEL	4.30%	0.85	14.21%	9.91%	12.72%
Mean						13.71%

Notes:

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

[2] Source: Value Line

[3] Source: Value Line

[4] Equals [3] - [1]

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

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & BLOOMBERG BETA
CONSTANT GROWTH DCF APPLIED TO S&P 500
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]	[5]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Bloomberg 10-year Beta (β)	Market Return (R_m)	Market Risk Premium ($R_m - R_f$)	ROE (K)
Alliant Energy Corporation	LNT	4.23%	0.77	14.21%	9.97%	11.95%
Ameren Corporation	AEE	4.23%	0.73	14.21%	9.97%	11.56%
American Electric Power Company, Inc.	AEP	4.23%	0.74	14.21%	9.97%	11.61%
Duke Energy Corporation	DUK	4.23%	0.71	14.21%	9.97%	11.28%
Edison International	EIX	4.23%	0.84	14.21%	9.97%	12.58%
Entergy Corporation	ETR	4.23%	0.84	14.21%	9.97%	12.59%
Evergy, Inc.	EVRG	4.23%	0.77	14.21%	9.97%	11.88%
IDACORP, Inc.	IDA	4.23%	0.77	14.21%	9.97%	11.93%
NextEra Energy, Inc.	NEE	4.23%	0.80	14.21%	9.97%	12.21%
NorthWestern Corporation	NWE	4.23%	0.85	14.21%	9.97%	12.76%
OGE Energy Corporation	OGE	4.23%	0.89	14.21%	9.97%	13.12%
Pinnacle West Capital Corp	PNW	4.23%	0.80	14.21%	9.97%	12.23%
Portland General Electric Company	POR	4.23%	0.77	14.21%	9.97%	11.89%
PPL Corporation	PPL	4.23%	0.93	14.21%	9.97%	13.52%
Southern Company	SO	4.23%	0.76	14.21%	9.97%	11.84%
TXNM Energy, Inc.	TXNM	4.23%	0.81	14.21%	9.97%	12.27%
Xcel Energy Inc.	XEL	4.23%	0.72	14.21%	9.97%	11.38%
Mean			0.794			12.15%

Notes:

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

[2] Source: Bloomberg Professional

[3] Source: Value Line

[4] Equals [3] - [1]

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

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE & BLOOMBERG BETA
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Company	Ticker	[1]	[2]	[3]	[4]	[5]
		Near-term projected 30-year U.S. Treasury bond yield (Q4 2024 - Q4 2025)	Bloomberg 10-year Beta (β)	Market Return (Rm)	Market Risk Premium (Rm - Rf)	ROE (K)
Alliant Energy Corporation	LNT	4.12%	0.77	14.21%	10.09%	11.93%
Ameren Corporation	AEE	4.12%	0.73	14.21%	10.09%	11.53%
American Electric Power Company, Inc.	AEP	4.12%	0.74	14.21%	10.09%	11.59%
Duke Energy Corporation	DUK	4.12%	0.71	14.21%	10.09%	11.25%
Edison International	EIX	4.12%	0.84	14.21%	10.09%	12.57%
Entergy Corporation	ETR	4.12%	0.84	14.21%	10.09%	12.57%
Evergy, Inc.	EVRG	4.12%	0.77	14.21%	10.09%	11.85%
IDACORP, Inc.	IDA	4.12%	0.77	14.21%	10.09%	11.90%
NextEra Energy, Inc.	NEE	4.12%	0.80	14.21%	10.09%	12.19%
NorthWestern Corporation	NWE	4.12%	0.85	14.21%	10.09%	12.74%
OGE Energy Corporation	OGE	4.12%	0.89	14.21%	10.09%	13.11%
Pinnacle West Capital Corp	PNW	4.12%	0.80	14.21%	10.09%	12.21%
Portland General Electric Company	POR	4.12%	0.77	14.21%	10.09%	11.86%
PPL Corporation	PPL	4.12%	0.93	14.21%	10.09%	13.51%
Southern Company	SO	4.12%	0.76	14.21%	10.09%	11.81%
TXNM Energy, Inc.	TXNM	4.12%	0.81	14.21%	10.09%	12.25%
Xcel Energy Inc.	XEL	4.12%	0.72	14.21%	10.09%	11.35%
Mean						12.13%

Notes:

- [1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 9, August 30, 2024 at 2
[2] Source: Bloomberg Professional
[3] Source: Value Line
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]

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

		[1]	[2]	[3]	[4]	[5]
		Projected 30-year U.S. Treasury bond yield (2026 - 2030)	Bloomberg 10-year Beta (β)	Market Return (R_m)	Market Risk Premium ($R_m - R_f$)	ROE (K)
Company	Ticker					
Alliant Energy Corporation	LNT	4.30%	0.77	14.21%	9.91%	11.97%
Ameren Corporation	AEE	4.30%	0.73	14.21%	9.91%	11.57%
American Electric Power Company, Inc.	AEP	4.30%	0.74	14.21%	9.91%	11.63%
Duke Energy Corporation	DUK	4.30%	0.71	14.21%	9.91%	11.30%
Edison International	EIX	4.30%	0.84	14.21%	9.91%	12.59%
Entergy Corporation	ETR	4.30%	0.84	14.21%	9.91%	12.60%
Evergy, Inc.	EVRG	4.30%	0.77	14.21%	9.91%	11.90%
IDACORP, Inc.	IDA	4.30%	0.77	14.21%	9.91%	11.95%
NextEra Energy, Inc.	NEE	4.30%	0.80	14.21%	9.91%	12.22%
NorthWestern Corporation	NWE	4.30%	0.85	14.21%	9.91%	12.77%
OGE Energy Corporation	OGE	4.30%	0.89	14.21%	9.91%	13.13%
Pinnacle West Capital Corp	PNW	4.30%	0.80	14.21%	9.91%	12.24%
Portland General Electric Company	POR	4.30%	0.77	14.21%	9.91%	11.91%
PPL Corporation	PPL	4.30%	0.93	14.21%	9.91%	13.53%
Southern Company	SO	4.30%	0.76	14.21%	9.91%	11.85%
TXNM Energy, Inc.	TXNM	4.30%	0.81	14.21%	9.91%	12.28%
Xcel Energy Inc.	XEL	4.30%	0.72	14.21%	9.91%	11.40%
	Mean					12.17%

Notes:

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

[2] Source: Bloomberg Professional

[3] Source: Value Line

[4] Equals [3] - [1]

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