## [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] Second Stage Growth Stock Annualized First Stage Third Stage Company Ticker Price Dividend Growth Year 6 Year 7 Year 8 Year 9 Year 10 Growth ROE ALLETE, Inc. ALE \$70.32 \$2.24 5.37% 5.17% 4.98% 4.79% 4.59% 4.40% 4.21% 7 91% Alliant Energy Corporation LNT \$39.05 \$1.34 5.62% 5.38% 5.15% 4.91% 4.68% 4.44% 4.21% 8.27% Ameren Corporation AEE 4.21% 8.33% \$55.24 \$1.83 6.43% 6.06% 5.69% 5.32% 4.95% 4.58% American Electric Power Company, Inc. AEP \$66.84 \$2.48 5.01% 4.88% 4.74% 4.61% 4.47% 4.34% 4.21% 8.43% Duke Energy Corporation DUK \$76.66 \$3.56 4.13% 4.14% 4.16% 4.17% 4.18% 4.19% 4.21% 9.23% El Paso Electric Company EE 5.10% 4.80% 4.50% 4.36% 4.21% 7.21% \$50.76 \$1.34 4.95% 4.65% 4.37% Hawaiian Electric Industries, Inc. ΗE \$33.54 5.20% 4.87% 4.70% 4.54% 4.21% 8.47% \$1.24 5.03% IDACORP, Inc. IDA \$83.89 \$2.36 3.57% 3.67% 3.78% 3.89% 3.99% 4.10% 4.21% 7.10% NextEra Energy, Inc. NEE \$152.61 \$4.44 8.42% 7.01% 6.31% 5.61% 4.91% 4.21% 8.31% 7.72% OGE Energy Corp. OGE \$31.38 5.93% 5.36% 5.07% 4.78% 4.50% 4.21% 9.33% \$1.33 5.65% **Pinnacle West Capital Corporation** PNW \$78.08 \$2.78 4.39% 4.36% 4.33% 4.30% 4.27% 4.24% 4.21% 8.10% PNM Resources. Inc. PNM \$36.12 \$1.06 6.40% 6.03% 5.67% 5.30% 4.94% 4.57% 4.21% 7.85% Portland General Electric Company POR \$41.15 \$1.36 3.90% 3.95% 4.00% 4.05% 4.10% 4.16% 4.21% 7.70% PPL Corporation 4.21% PPL \$30.81 \$1.58 4.57% 4.51% 4.45% 4.39% 4.33% 4.27% 9.93% Southern Company SO 3.56% 3.67% 3.77% 3.88% 3.99% 4.21% 9.72% \$44.07 \$2.32 4.10% Xcel Energy Inc. XEL \$44.38 \$1.44 5.48% 5.27% 5.06% 4.85% 4.63% 4.42% 4.21% 8.01% MEAN 8.37% MEDIAN 8.29%

# 30-DAY MULTI-STAGE DCF -- MEAN GROWTH RATE -- FORECASTED GDP GROWTH

Notes:

[1] Source: Bloomberg Professional, equals 30-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4 Col. [8], mean growth rate

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, mean estimate of forecasted GDP growth

## [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] Second Stage Growth Stock Annualized First Stage Third Stage Company Ticker Price Dividend Growth Year 6 Year 7 Year 8 Year 9 Year 10 Growth ROE ALLETE, Inc. ALE \$74.69 \$2.24 5.37% 5.17% 4.98% 4.79% 4.59% 4.40% 4.21% 7.69% Alliant Energy Corporation LNT \$41.93 \$1.34 5.62% 5.38% 5.15% 4.91% 4.68% 4.44% 4.21% 7.98% Ameren Corporation AEE 4.21% \$59.16 \$1.83 6.43% 6.06% 5.69% 5.32% 4.95% 4.58% 8.06% American Electric Power Company, Inc. AEP \$71.95 \$2.48 5.01% 4.88% 4.74% 4.61% 4.47% 4.34% 4.21% 8.13% Duke Energy Corporation DUK \$83.33 \$3.56 4.13% 4.14% 4.16% 4.17% 4.18% 4.19% 4.21% 8.82% El Paso Electric Company EE 5.10% 4.80% 4.50% 4.36% 4.21% 6.96% \$55.15 \$1.34 4.95% 4.65% 4.37% Hawaiian Electric Industries, Inc. ΗE \$35.46 5.20% 4.87% 4.70% 4.54% 4.21% 8.24% \$1.24 5.03% IDACORP, Inc. IDA \$90.03 \$2.36 3.57% 3.67% 3.78% 3.89% 3.99% 4.10% 4.21% 6.89% NextEra Energy, Inc. NEE \$154.24 \$4.44 8.42% 7.01% 6.31% 5.61% 4.21% 8.26% 7.72% 4.91% OGE Energy Corp. OGE \$33.48 5.93% 5.36% 5.07% 4.78% 4.50% 4.21% 9.01% \$1.33 5.65% **Pinnacle West Capital Corporation** PNW \$84.43 \$2.78 4.39% 4.36% 4.33% 4.30% 4.27% 4.24% 4.21% 7.80% PNM Resources. Inc. PNM \$40.41 \$1.06 6.40% 6.03% 5.67% 5.30% 4.94% 4.57% 4.21% 7.46% Portland General Electric Company POR \$45.04 \$1.36 3.90% 3.95% 4.00% 4.05% 4.10% 4.16% 4.21% 7.39% PPL Corporation 4.21% PPL \$33.42 \$1.58 4.57% 4.51% 4.45% 4.39% 4.33% 4.27% 9.47% Southern Company SO 3.56% 3.67% 3.77% 3.88% 3.99% 4.21% 9.23% \$48.25 \$2.32 4.10% Xcel Energy Inc. XEL \$47.76 \$1.44 5.48% 5.27% 5.06% 4.85% 4.63% 4.42% 4.21% 7.74% MEAN 8.07% MEDIAN 8.02%

# 90-DAY MULTI-STAGE DCF -- MEAN GROWTH RATE -- FORECASTED GDP GROWTH

Notes:

[1] Source: Bloomberg Professional, equals 90-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4 Col. [8], mean growth rate

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, mean estimate of forecasted GDP growth

## [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] Second Stage Growth Stock Annualized First Stage Third Stage Company Ticker Price Dividend Growth Year 6 Year 7 Year 8 Year 9 Year 10 Growth ROE ALLETE, Inc. ALE \$74.89 \$2.24 5.37% 5.17% 4.98% 4.79% 4.59% 4.40% 4.21% 7.68% Alliant Energy Corporation LNT \$41.81 \$1.34 5.62% 5.38% 5.15% 4.91% 4.68% 4.44% 4.21% 7.99% Ameren Corporation AEE 4.21% \$58.48 \$1.83 6.43% 6.06% 5.69% 5.32% 4.95% 4.58% 8.10% American Electric Power Company, Inc. AEP \$71.68 \$2.48 5.01% 4.88% 4.74% 4.61% 4.47% 4.34% 4.21% 8.14% Duke Energy Corporation DUK \$84.51 \$3.56 4.13% 4.14% 4.16% 4.17% 4.18% 4.19% 4.21% 8.75% El Paso Electric Company EE \$54.57 5.10% 4.80% 4.50% 4.36% 4.21% 6.99% \$1.34 4.95% 4.65% 4.37% Hawaiian Electric Industries, Inc. ΗE \$34.36 5.20% 4.87% 4.70% 4.54% 4.21% 8.37% \$1.24 5.03% IDACORP, Inc. IDA \$88.94 \$2.36 3.57% 3.67% 3.78% 3.89% 3.99% 4.10% 4.21% 6.93% NextEra Energy, Inc. NEE \$150.21 \$4.44 8.42% 7.01% 6.31% 5.61% 4.91% 4.21% 8.37% 7.72% OGE Energy Corp. OGE \$34.61 5.93% 5.36% 4.78% 4.50% 4.21% 8.85% \$1.33 5.65% 5.07% **Pinnacle West Capital Corporation** PNW \$85.94 \$2.78 4.39% 4.36% 4.33% 4.30% 4.27% 4.24% 4.21% 7.74% PNM Resources. Inc. PNM \$40.46 \$1.06 6.40% 6.03% 5.67% 5.30% 4.94% 4.57% 4.21% 7.46% Portland General Electric Company POR \$45.62 \$1.36 3.90% 3.95% 4.00% 4.05% 4.10% 4.16% 4.21% 7.35% PPL Corporation 4.21% PPL \$36.00 \$1.58 4.57% 4.51% 4.45% 4.39% 4.33% 4.27% 9.08% Southern Company SO 3.56% 3.67% 3.77% 3.88% 3.99% 4.21% 9.19% \$48.63 \$2.32 4.10% Xcel Energy Inc. XEL \$47.81 \$1.44 5.48% 5.27% 5.06% 4.85% 4.63% 4.42% 4.21% 7.73% MEAN 8.05% MEDIAN 8.05%

# 180-DAY MULTI-STAGE DCF -- MEAN GROWTH RATE -- FORECASTED GDP GROWTH

Notes:

[1] Source: Bloomberg Professional, equals 180-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4 Col. [8], mean growth rate

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, mean estimate of forecasted GDP growth

## [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] Second Stage Growth Stock Annualized First Stage Third Stage Company Ticker Price Dividend Growth Year 6 Year 7 Year 8 Year 9 Year 10 Growth ROE ALLETE, Inc. ALE \$70.32 \$2.24 5.00% 4.86% 4.72% 4.59% 4.45% 4.31% 4.17% 7.79% Alliant Energy Corporation LNT \$39.05 \$1.34 5.40% 5.20% 4.99% 4.79% 4.58% 4.38% 4.17% 8.18% Ameren Corporation AEE \$55.24 \$1.83 6.00% 5.70% 5.39% 5.09% 4.78% 4.48% 4.17% 8.19% American Electric Power Company, Inc. AEP \$66.84 \$2.48 4.00% 4.03% 4.06% 4.09% 4.11% 4.14% 4.17% 8.14% Duke Energy Corporation DUK \$76.66 \$3.56 3.70% 3.78% 3.86% 3.94% 4.01% 4.09% 4.17% 9.07% El Paso Electric Company EE 5.00% 4.72% 4.59% 4.45% 4.17% 7.16% \$50.76 \$1.34 4.86% 4.31% 1.95% Hawaiian Electric Industries, Inc. ΗE \$33.54 1.50% 2.39% 2.84% 3.28% 3.73% 4.17% 7.51% \$1.24 IDACORP, Inc. IDA \$83.89 \$2.36 3.10% 3.28% 3.46% 3.64% 3.81% 3.99% 4.17% 6.98% NextEra Energy, Inc. NEE \$152.61 \$4.44 7.90% 6.66% 6.04% 5.41% 4.17% 7.28% 4.79% 8.15% OGE Energy Corp. OGE \$31.38 5.80% 5.53% 5.26% 4.99% 4.71% 4.44% 4.17% 9.26% \$1.33 **Pinnacle West Capital Corporation** PNW \$78.08 \$2.78 3.00% 3.20% 3.39% 3.59% 3.78% 3.98% 4.17% 7.73% PNM Resources. Inc. PNM \$36.12 \$1.06 5.80% 5.53% 5.26% 4.99% 4.71% 4.44% 4.17% 7.68% Portland General Electric Company POR \$41.15 \$1.36 2.70% 2.95% 3.19% 3.44% 3.68% 3.93% 4.17% 7.40% PPL Corporation 2.82% 4.17% PPL \$30.81 \$1.58 2.14% 2.48% 3.16% 3.49% 3.83% 9.08% Southern Company SO 2.17% 2.50% 3.50% 4.17% 9.23% \$44.07 \$2.32 2.84% 3.17% 3.84% Xcel Energy Inc. XEL \$44.38 \$1.44 4.50% 4.45% 4.39% 4.34% 4.28% 4.23% 4.17% 7.74% MEAN 8.08% MEDIAN 7.97%

## 30-DAY MULTI-STAGE DCF -- LOW GROWTH RATE -- FORECASTED GDP GROWTH

Notes:

[1] Source: Bloomberg Professional, equals 30-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4, minimum of (Col. [5], [6], [7])

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, low estimate of forecasted GDP growth

## [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] Second Stage Growth Stock Annualized First Stage Third Stage Company Ticker Price Dividend Growth Year 6 Year 7 Year 8 Year 9 Year 10 Growth ROE ALLETE, Inc. ALE \$74.69 \$2.24 5.00% 4.86% 4.72% 4.59% 4.45% 4.31% 4.17% 7.58% Alliant Energy Corporation LNT \$41.93 \$1.34 5.40% 5.20% 4.99% 4.79% 4.58% 4.38% 4.17% 7.90% Ameren Corporation AEE \$59.16 \$1.83 6.00% 5.70% 5.39% 5.09% 4.78% 4.48% 4.17% 7.92% American Electric Power Company, Inc. AEP \$71.95 \$2.48 4.00% 4.03% 4.06% 4.09% 4.11% 4.14% 4.17% 7.85% Duke Energy Corporation DUK \$83.33 \$3.56 3.70% 3.78% 3.86% 3.94% 4.01% 4.09% 4.17% 8.67% El Paso Electric Company EE 5.00% 4.72% 4.59% 4.45% 4.17% 6.91% \$55.15 \$1.34 4.86% 4.31% \$1.24 1.95% Hawaiian Electric Industries, Inc. ΗE \$35.46 1.50% 2.39% 2.84% 3.28% 3.73% 4.17% 7.32% IDACORP, Inc. IDA \$90.03 \$2.36 3.10% 3.28% 3.46% 3.64% 3.81% 3.99% 4.17% 6.77% NextEra Energy, Inc. NEE \$154.24 \$4.44 7.90% 6.66% 6.04% 5.41% 4.17% 7.28% 4.79% 8.11% OGE Energy Corp. OGE \$33.48 5.80% 5.53% 5.26% 4.99% 4.71% 4.44% 4.17% 8.94% \$1.33 **Pinnacle West Capital Corporation** PNW \$84.43 \$2.78 3.00% 3.20% 3.39% 3.59% 3.78% 3.98% 4.17% 7.45% PNM Resources. Inc. PNM \$40.41 \$1.06 5.80% 5.53% 5.26% 4.99% 4.71% 4.44% 4.17% 7.30% Portland General Electric Company POR \$45.04 \$1.36 2.70% 2.95% 3.19% 3.44% 3.68% 3.93% 4.17% 7.11% PPL Corporation 2.82% 4.17% PPL \$33.42 \$1.58 2.14% 2.48% 3.16% 3.49% 3.83% 8.68% 8.77% Southern Company SO 2.17% 2.50% 3.50% 4.17% \$48.25 \$2.32 2.84% 3.17% 3.84% Xcel Energy Inc. XEL \$47.76 \$1.44 4.50% 4.45% 4.39% 4.34% 4.28% 4.23% 4.17% 7.48% MEAN 7.80% MEDIAN 7.71%

## 90-DAY MULTI-STAGE DCF -- LOW GROWTH RATE -- FORECASTED GDP GROWTH

Notes:

[1] Source: Bloomberg Professional, equals 90-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4, minimum of (Col. [5], [6], [7])

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, low estimate of forecasted GDP growth

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
						Sec		_			
		Stock	Annualized	First Stage						Third Stage	
Company	Ticker	Price	Dividend	Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Growth	ROE
ALLETE, Inc.	ALE	\$74.89	\$2.24	5.00%	4.86%	4.72%	4.59%	4.45%	4.31%	4.17%	7.57%
Alliant Energy Corporation	LNT	\$41.81	\$1.34	5.40%	5.20%	4.99%	4.79%	4.58%	4.38%	4.17%	7.91%
Ameren Corporation	AEE	\$58.48	\$1.83	6.00%	5.70%	5.39%	5.09%	4.78%	4.48%	4.17%	7.97%
American Electric Power Company, Inc.	AEP	\$71.68	\$2.48	4.00%	4.03%	4.06%	4.09%	4.11%	4.14%	4.17%	7.86%
Duke Energy Corporation	DUK	\$84.51	\$3.56	3.70%	3.78%	3.86%	3.94%	4.01%	4.09%	4.17%	8.60%
El Paso Electric Company	EE	\$54.57	\$1.34	5.00%	4.86%	4.72%	4.59%	4.45%	4.31%	4.17%	6.94%
Hawaiian Electric Industries, Inc.	HE	\$34.36	\$1.24	1.50%	1.95%	2.39%	2.84%	3.28%	3.73%	4.17%	7.43%
IDACORP, Inc.	IDA	\$88.94	\$2.36	3.10%	3.28%	3.46%	3.64%	3.81%	3.99%	4.17%	6.81%
NextEra Energy, Inc.	NEE	\$150.21	\$4.44	7.90%	7.28%	6.66%	6.04%	5.41%	4.79%	4.17%	8.21%
OGE Energy Corp.	OGE	\$34.61	\$1.33	5.80%	5.53%	5.26%	4.99%	4.71%	4.44%	4.17%	8.78%
Pinnacle West Capital Corporation	PNW	\$85.94	\$2.78	3.00%	3.20%	3.39%	3.59%	3.78%	3.98%	4.17%	7.39%
PNM Resources, Inc.	PNM	\$40.46	\$1.06	5.80%	5.53%	5.26%	4.99%	4.71%	4.44%	4.17%	7.30%
Portland General Electric Company	POR	\$45.62	\$1.36	2.70%	2.95%	3.19%	3.44%	3.68%	3.93%	4.17%	7.07%
PPL Corporation	PPL	\$36.00	\$1.58	2.14%	2.48%	2.82%	3.16%	3.49%	3.83%	4.17%	8.35%
Southern Company	SO	\$48.63	\$2.32	2.17%	2.50%	2.84%	3.17%	3.50%	3.84%	4.17%	8.73%
Xcel Energy Inc.	XEL	\$47.81	\$1.44	4.50%	4.45%	4.39%	4.34%	4.28%	4.23%	4.17%	7.48%
MEAN											7.78%
MEDIAN											7.72%

# 180-DAY MULTI-STAGE DCF -- LOW GROWTH RATE -- FORECASTED GDP GROWTH

Notes:

[1] Source: Bloomberg Professional, equals 180-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4, minimum of (Col. [5], [6], [7])

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, low estimate of forecasted GDP growth

## [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] Second Stage Growth Stock Annualized First Stage Third Stage Company Ticker Price Dividend Growth Year 6 Year 7 Year 8 Year 9 Year 10 Growth ROE ALLETE, Inc. ALE \$70.32 \$2.24 6.10% 5.79% 5.48% 5.17% 4.86% 4.55% 4.24% 8.12% Alliant Energy Corporation LNT \$39.05 \$1.34 6.00% 5.71% 5.41% 5.12% 4.83% 4.54% 4.24% 8.39% Ameren Corporation AEE 6.01% 4.24% 8.48% \$55.24 \$1.83 6.90% 6.46% 5.57% 5.13% 4.69% American Electric Power Company, Inc. 4.24% AEP \$66.84 \$2.48 5.63% 5.40% 5.17% 4.94% 4.71% 4.48% 8.63% Duke Energy Corporation DUK \$76.66 \$3.56 4.50% 4.46% 4.41% 4.37% 4.33% 4.29% 4.24% 9.38% El Paso Electric Company EE 5.20% 4.88% 4.72% 4.56% 4.40% 4.24% 7.26% \$50.76 \$1.34 5.04% Hawaiian Electric Industries, Inc. ΗE \$33.54 8.50% 7.79% 7.08% 6.37% 5.66% 4.95% 4.24% 9.46% \$1.24 IDACORP, Inc. IDA \$83.89 \$2.36 4.10% 4.12% 4.15% 4.17% 4.20% 4.22% 4.24% 7.24% NextEra Energy, Inc. NEE \$152.61 \$4.44 8.85% 7.31% 6.55% 5.78% 4.24% 8.45% 8.08% 5.01% OGE Energy Corp. OGE \$31.38 6.00% 5.71% 5.41% 5.12% 4.83% 4.54% 4.24% 9.38% \$1.33 **Pinnacle West Capital Corporation** PNW \$78.08 \$2.78 5.50% 5.29% 5.08% 4.87% 4.66% 4.45% 4.24% 8.42% PNM Resources. Inc. PNM \$36.12 \$1.06 7.50% 6.96% 6 4 1 % 5.87% 5.33% 4.79% 4.24% 8.14% Portland General Electric Company POR \$41.15 \$1.36 6.00% 5.71% 5.41% 5.12% 4.83% 4.54% 4.24% 8.24% PPL Corporation PPL \$30.81 \$1.58 7.00% 6.54% 6.08% 5.62% 5.16% 4.70% 4.24% 10.85% Southern Company SO 4.50% 4.46% 4.41% 4.33% 4.29% 4.24% 10.08% \$44.07 \$2.32 4.37% Xcel Energy Inc. XEL \$44.38 \$1.44 6.15% 5.83% 5.51% 5.20% 4.88% 4.56% 4.24% 8.20% MEAN 8.67% MEDIAN 8.43%

## 30-DAY MULTI-STAGE DCF -- HIGH GROWTH RATE -- FORECASTED GDP GROWTH

Notes:

[1] Source: Bloomberg Professional, equals 30-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4, maximum of (Col. [5], [6], [7])

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, high estimate of forecasted GDP growth

## [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] Second Stage Growth Stock Annualized First Stage Third Stage Company Ticker Price Dividend Growth Year 6 Year 7 Year 8 Year 9 Year 10 Growth ROE ALLETE, Inc. ALE \$74.69 \$2.24 6.10% 5.79% 5.48% 5.17% 4.86% 4.55% 4.24% 7 89% Alliant Energy Corporation LNT \$41.93 \$1.34 6.00% 5.71% 5.41% 5.12% 4.83% 4.54% 4.24% 8.11% Ameren Corporation AEE 6.01% 4.24% 8.20% \$59.16 \$1.83 6.90% 6.46% 5.57% 5.13% 4.69% American Electric Power Company, Inc. 4.24% AEP \$71.95 \$2.48 5.63% 5.40% 5.17% 4.94% 4.71% 4.48% 8.32% Duke Energy Corporation DUK \$83.33 \$3.56 4.50% 4.46% 4.41% 4.37% 4.33% 4.29% 4.24% 8.96% El Paso Electric Company EE 5.20% 4.88% 4.72% 4.56% 4.40% 4.24% 7.01% \$55.15 \$1.34 5.04% Hawaiian Electric Industries, Inc. ΗE \$35.46 8.50% 7.79% 7.08% 6.37% 5.66% 4.95% 4.24% 9.18% \$1.24 IDACORP, Inc. IDA \$90.03 \$2.36 4.10% 4.12% 4.15% 4.17% 4.20% 4.22% 4.24% 7.02% NextEra Energy, Inc. NEE \$154.24 \$4.44 8.85% 7.31% 6.55% 5.78% 4.24% 8.40% 8.08% 5.01% OGE Energy Corp. OGE \$33.48 6.00% 5.71% 5.41% 5.12% 4.83% 4.54% 4.24% 9.06% \$1.33 **Pinnacle West Capital Corporation** PNW \$84.43 \$2.78 5.50% 5.29% 5.08% 4.87% 4.66% 4.45% 4.24% 8.10% PNM Resources. Inc. PNM \$40.41 \$1.06 7.50% 6.96% 6 4 1 % 5.87% 5.33% 4.79% 4.24% 7.73% Portland General Electric Company POR \$45.04 \$1.36 6.00% 5.71% 5.41% 5.12% 4.83% 4.54% 4.24% 7.89% PPL Corporation PPL \$33.42 \$1.58 7.00% 6.54% 6.08% 5.62% 5.16% 4.70% 4.24% 10.33% Southern Company SO 4.50% 4.46% 4.41% 4.33% 4.29% 4.24% 9.56% \$48.25 \$2.32 4.37% Xcel Energy Inc. XEL \$47.76 \$1.44 6.15% 5.83% 5.51% 5.20% 4.88% 4.56% 4.24% 7.92% MEAN 8.36% MEDIAN 8.15%

# 90-DAY MULTI-STAGE DCF -- HIGH GROWTH RATE -- FORECASTED GDP GROWTH

Notes:

[1] Source: Bloomberg Professional, equals 90-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4, maximum of (Col. [5], [6], [7])

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, high estimate of forecasted GDP growth

# 180-DAY MULTI-STAGE DCF -- HIGH GROWTH RATE -- FORECASTED GDP GROWTH

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
						Sec	_				
Company	Ticker	Stock Price	Annualized Dividend	First Stage Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Third Stage Growth	ROE
ALLETE, Inc.	ALE	\$74.89	\$2.24	6.10%	5.79%	5.48%	5.17%	4.86%	4.55%	4.24%	7.88%
Alliant Energy Corporation		\$41.81	\$1.34	6.00%	5.71%	5.41%	5.12%	4.83%	4.54%	4.24%	8.12%
Ameren Corporation	AEE	\$58.48	\$1.83	6.90%	6.46%	6.01%	5.57%	5.13%	4.69%	4.24%	8.25%
American Electric Power Company, Inc.	AEP	\$71.68	\$2.48	5.63%	5.40%	5.17%	4.94%	4.71%	4.48%	4.24%	8.33%
Duke Energy Corporation	DUK	\$84.51	\$3.56	4.50%	4.46%	4.41%	4.37%	4.33%	4.29%	4.24%	8.89%
El Paso Electric Company	EE	\$54.57	\$1.34	5.20%	5.04%	4.88%	4.72%	4.56%	4.40%	4.24%	7.04%
Hawaiian Electric Industries, Inc.	HE	\$34.36	\$1.24	8.50%	7.79%	7.08%	6.37%	5.66%	4.95%	4.24%	9.34%
IDACORP, Inc.	IDA	\$88.94	\$2.36	4.10%	4.12%	4.15%	4.17%	4.20%	4.22%	4.24%	7.06%
NextEra Energy, Inc.	NEE	\$150.21	\$4.44	8.85%	8.08%	7.31%	6.55%	5.78%	5.01%	4.24%	8.51%
OGE Energy Corp.	OGE	\$34.61	\$1.33	6.00%	5.71%	5.41%	5.12%	4.83%	4.54%	4.24%	8.90%
Pinnacle West Capital Corporation	PNW	\$85.94	\$2.78	5.50%	5.29%	5.08%	4.87%	4.66%	4.45%	4.24%	8.03%
PNM Resources, Inc.	PNM	\$40.46	\$1.06	7.50%	6.96%	6.41%	5.87%	5.33%	4.79%	4.24%	7.72%
Portland General Electric Company	POR	\$45.62	\$1.36	6.00%	5.71%	5.41%	5.12%	4.83%	4.54%	4.24%	7.84%
PPL Corporation	PPL	\$36.00	\$1.58	7.00%	6.54%	6.08%	5.62%	5.16%	4.70%	4.24%	9.90%
Southern Company	SO	\$48.63	\$2.32	4.50%	4.46%	4.41%	4.37%	4.33%	4.29%	4.24%	9.52%
Xcel Energy Inc.	XEL	\$47.81	\$1.44	6.15%	5.83%	5.51%	5.20%	4.88%	4.56%	4.24%	7.92%
MEAN											8.33%
MEDIAN											8.18%

## Notes:

[1] Source: Bloomberg Professional, equals 180-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4, maximum of (Col. [5], [6], [7])

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, high estimate of forecasted GDP growth

## 30-DAY MULTI-STAGE DCF -- MEAN GROWTH RATE -- HISTORICAL GDP GROWTH [4] 101 101 Г**И**Л [6] [6] --------

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
				_		Sec					
Company	Ticker	Stock Price	Annualized Dividend	First Stage Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Third Stage Growth	ROE
ALLETE, Inc.	ALE	\$70.32	\$2.24	5.37%	5.38%	5.39%	5.41%	5.42%	5.43%	5.45%	8.92%
Alliant Energy Corporation	LNT	\$39.05	\$1.34	5.62%	5.59%	5.56%	5.53%	5.50%	5.48%	5.45%	9.26%
Ameren Corporation	AEE	\$55.24	\$1.83	6.43%	6.27%	6.10%	5.94%	5.78%	5.61%	5.45%	9.32%
American Electric Power Company, Inc.	AEP	\$66.84	\$2.48	5.01%	5.08%	5.16%	5.23%	5.30%	5.37%	5.45%	9.42%
Duke Energy Corporation	DUK	\$76.66	\$3.56	4.13%	4.35%	4.57%	4.79%	5.01%	5.23%	5.45%	10.18%
El Paso Electric Company	EE	\$50.76	\$1.34	5.10%	5.16%	5.22%	5.27%	5.33%	5.39%	5.45%	8.26%
Hawaiian Electric Industries, Inc.	HE	\$33.54	\$1.24	5.20%	5.24%	5.28%	5.32%	5.36%	5.41%	5.45%	9.45%
IDACORP, Inc.	IDA	\$83.89	\$2.36	3.57%	3.88%	4.19%	4.51%	4.82%	5.13%	5.45%	8.15%
NextEra Energy, Inc.	NEE	\$152.61	\$4.44	8.42%	7.92%	7.43%	6.93%	6.44%	5.94%	5.45%	9.30%
OGE Energy Corp.	OGE	\$31.38	\$1.33	5.93%	5.85%	5.77%	5.69%	5.61%	5.53%	5.45%	10.27%
Pinnacle West Capital Corporation	PNW	\$78.08	\$2.78	4.39%	4.57%	4.74%	4.92%	5.10%	5.27%	5.45%	9.10%
PNM Resources, Inc.	PNM	\$36.12	\$1.06	6.40%	6.24%	6.08%	5.92%	5.76%	5.61%	5.45%	8.87%
Portland General Electric Company	POR	\$41.15	\$1.36	3.90%	4.16%	4.42%	4.67%	4.93%	5.19%	5.45%	8.72%
PPL Corporation	PPL	\$30.81	\$1.58	4.57%	4.72%	4.86%	5.01%	5.15%	5.30%	5.45%	10.84%
Southern Company	SO	\$44.07	\$2.32	3.56%	3.87%	4.19%	4.50%	4.82%	5.13%	5.45%	10.64%
Xcel Energy Inc.	XEL	\$44.38	\$1.44	5.48%	5.48%	5.47%	5.47%	5.46%	5.45%	5.45%	9.02%
MEAN											9.36%
MEDIAN											9.28%

## Notes:

[1] Source: Bloomberg Professional, equals 30-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4 Col. [8], mean growth rate

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, mean estimate of historical GDP growth

[10]

## [1] [2] [3] [4] [6] [5] [7] [8] [9] Second Stage Growth

90-DAY MULTI-STAGE DCF -- MEAN GROWTH RATE -- HISTORICAL GDP GROWTH

		Stock	Annualized	First Stage						Third Stage	
Company	Ticker	Price	Dividend	Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Growth	ROE
ALLETE, Inc.	ALE	\$74.69	\$2.24	5.37%	5.38%	5.39%	5.41%	5.42%	5.43%	5.45%	8.71%
Alliant Energy Corporation	LNT	\$41.93	\$1.34	5.62%	5.59%	5.56%	5.53%	5.50%	5.48%	5.45%	8.99%
Ameren Corporation	AEE	\$59.16	\$1.83	6.43%	6.27%	6.10%	5.94%	5.78%	5.61%	5.45%	9.06%
American Electric Power Company, Inc.	AEP	\$71.95	\$2.48	5.01%	5.08%	5.16%	5.23%	5.30%	5.37%	5.45%	9.13%
Duke Energy Corporation	DUK	\$83.33	\$3.56	4.13%	4.35%	4.57%	4.79%	5.01%	5.23%	5.45%	9.79%
El Paso Electric Company	EE	\$55.15	\$1.34	5.10%	5.16%	5.22%	5.27%	5.33%	5.39%	5.45%	8.02%
Hawaiian Electric Industries, Inc.	HE	\$35.46	\$1.24	5.20%	5.24%	5.28%	5.32%	5.36%	5.41%	5.45%	9.23%
IDACORP, Inc.	IDA	\$90.03	\$2.36	3.57%	3.88%	4.19%	4.51%	4.82%	5.13%	5.45%	7.96%
NextEra Energy, Inc.	NEE	\$154.24	\$4.44	8.42%	7.92%	7.43%	6.93%	6.44%	5.94%	5.45%	9.26%
OGE Energy Corp.	OGE	\$33.48	\$1.33	5.93%	5.85%	5.77%	5.69%	5.61%	5.53%	5.45%	9.96%
Pinnacle West Capital Corporation	PNW	\$84.43	\$2.78	4.39%	4.57%	4.74%	4.92%	5.10%	5.27%	5.45%	8.82%
PNM Resources, Inc.	PNM	\$40.41	\$1.06	6.40%	6.24%	6.08%	5.92%	5.76%	5.61%	5.45%	8.49%
Portland General Electric Company	POR	\$45.04	\$1.36	3.90%	4.16%	4.42%	4.67%	4.93%	5.19%	5.45%	8.43%
PPL Corporation	PPL	\$33.42	\$1.58	4.57%	4.72%	4.86%	5.01%	5.15%	5.30%	5.45%	10.40%
Southern Company	SO	\$48.25	\$2.32	3.56%	3.87%	4.19%	4.50%	4.82%	5.13%	5.45%	10.17%
Xcel Energy Inc.	XEL	\$47.76	\$1.44	5.48%	5.48%	5.47%	5.47%	5.46%	5.45%	5.45%	8.76%
MEAN											9.07%
MEDIAN											9.03%

## Notes:

[1] Source: Bloomberg Professional, equals 90-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4 Col. [8], mean growth rate

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, mean estimate of historical GDP growth

## [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] Second Stage Growth Stock Annualized First Stage Third Stage Company Ticker Price Dividend Growth Year 6 Year 7 Year 8 Year 9 Year 10 Growth ROE ALLETE, Inc. ALE \$74.89 \$2.24 5.37% 5.38% 5.39% 5.41% 5.42% 5.43% 5.45% 8.70% Alliant Energy Corporation LNT \$41.81 \$1.34 5.62% 5.59% 5.56% 5.53% 5.50% 5.48% 5.45% 9.00% Ameren Corporation AEE \$58.48 \$1.83 6.43% 6.27% 6.10% 5.94% 5.78% 5.61% 5.45% 9.10% American Electric Power Company, Inc. AEP \$71.68 \$2.48 5.01% 5.08% 5.16% 5.23% 5.30% 5.37% 5.45% 9.14% Duke Energy Corporation DUK \$84.51 \$3.56 4.13% 4.35% 4.57% 4.79% 5.01% 5.23% 5.45% 9.72% El Paso Electric Company EE \$54.57 5.22% 5.27% 5.33% 5.39% 5.45% 8.05% \$1.34 5.10% 5.16% Hawaiian Electric Industries, Inc. ΗE \$34.36 5.20% 5.28% 5.32% 5.36% 5.41% 5.45% 9.36% \$1.24 5.24% IDACORP, Inc. IDA \$88.94 \$2.36 3.57% 3.88% 4.19% 4.51% 4.82% 5.13% 5.45% 7.99% NextEra Energy, Inc. NEE \$150.21 \$4.44 8.42% 7.43% 6.93% 6.44% 5.94% 5.45% 9.36% 7.92% OGE Energy Corp. OGE \$34.61 5.93% 5.77% 5.69% 5.61% 5.45% 9.81% \$1.33 5.85% 5.53% **Pinnacle West Capital Corporation** PNW \$85.94 \$2.78 4.39% 4.57% 4.74% 4.92% 5.10% 5.27% 5.45% 8.76% PNM Resources. Inc. PNM \$40.46 \$1.06 6.40% 6.24% 6.08% 5.92% 5.76% 5.61% 5.45% 8.49% Portland General Electric Company POR \$45.62 \$1.36 3.90% 4.16% 4.42% 4.67% 4.93% 5.19% 5.45% 8.39% **PPL** Corporation PPL \$36.00 \$1.58 4.57% 4.72% 4.86% 5.01% 5.15% 5.30% 5.45% 10.04% Southern Company SO 3.56% 4.19% 4.50% 4.82% 5.45% 10.14% \$48.63 \$2.32 3.87% 5.13% Xcel Energy Inc. XEL \$47.81 \$1.44 5.48% 5.48% 5.47% 5.47% 5.46% 5.45% 5.45% 8.75% MEAN 9.05% MEDIAN 9.05%

## 180-DAY MULTI-STAGE DCF -- MEAN GROWTH RATE -- HISTORICAL GDP GROWTH

Notes:

[1] Source: Bloomberg Professional, equals 180-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4 Col. [8], mean growth rate

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, mean estimate of historical GDP growth

## [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] Second Stage Growth Stock Annualized First Stage Third Stage Company Ticker Price Dividend Growth Year 6 Year 7 Year 8 Year 9 Year 10 Growth ROE ALLETE, Inc. ALE \$70.32 \$2.24 5.00% 5.07% 5.14% 5.21% 5.27% 5.34% 5.41% 8.81% Alliant Energy Corporation LNT \$39.05 \$1.34 5.40% 5.40% 5.40% 5.41% 5.41% 5.41% 5.41% 9.18% Ameren Corporation AEE 5.61% 5.41% 9.19% \$55.24 \$1.83 6.00% 5.90% 5.80% 5.71% 5.51% American Electric Power Company, Inc. 4.47% AEP \$66.84 \$2.48 4.00% 4.24% 4.71% 4.94% 5.18% 5.41% 9.13% Duke Energy Corporation DUK \$76.66 \$3.56 3.70% 3.99% 4.27% 4.56% 4.84% 5.13% 5.41% 10.02% El Paso Electric Company EE 5.00% 5.07% 5.27% 5.41% \$50.76 \$1.34 5.14% 5.21% 5.34% 8.21% Hawaiian Electric Industries, Inc. ΗE \$33.54 \$1.24 1.50% 2.80% 3.46% 4.11% 4.76% 5.41% 8.54% 2.15% IDACORP, Inc. IDA \$83.89 \$2.36 3.10% 3.49% 3.87% 4.26% 4.64% 5.03% 5.41% 8.03% NextEra Energy, Inc. NEE \$152.61 \$4.44 7.90% 7.49% 7.07% 6.66% 6.24% 5.41% 9.15% 5.83% OGE Energy Corp. OGE \$31.38 5.80% 5.74% 5.67% 5.54% 5.41% 10.20% \$1.33 5.61% 5.48% **Pinnacle West Capital Corporation** PNW \$78.08 \$2.78 3.00% 3.40% 3.80% 4.21% 4.61% 5.01% 5.41% 8.75% PNM Resources. Inc. PNM \$36.12 \$1.06 5.80% 5.74% 5.67% 5.61% 5.54% 5.48% 541% 8.70% Portland General Electric Company POR \$41.15 \$1.36 2.70% 3.15% 3.60% 4.06% 4.51% 4.96% 5.41% 8.43% **PPL** Corporation PPL \$30.81 \$1.58 2.14% 2.69% 3.23% 3.78% 4.32% 4.87% 5.41% 10.03% Southern Company SO 2.17% 3.79% 4.33% 4.87% 5.41% 10.17% \$44.07 \$2.32 2.71% 3.25% Xcel Energy Inc. XEL \$44.38 \$1.44 4.50% 4.65% 4.80% 4.96% 5.11% 5.26% 5.41% 8.76% MEAN 9.08% MEDIAN 8.97%

# 30-DAY MULTI-STAGE DCF -- LOW GROWTH RATE -- HISTORICAL GDP GROWTH

Notes:

[1] Source: Bloomberg Professional, equals 30-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4, minimum of (Col. [5], [6], [7])

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, low estimate of historical GDP growth

## [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] Second Stage Growth Stock Annualized First Stage Third Stage Company Ticker Price Dividend Growth Year 6 Year 7 Year 8 Year 9 Year 10 Growth ROE ALLETE, Inc. ALE \$74.69 \$2.24 5.00% 5.07% 5.14% 5.21% 5.27% 5.34% 5.41% 8.60% Alliant Energy Corporation LNT \$41.93 \$1.34 5.40% 5.40% 5.40% 5.41% 5.41% 5.41% 5.41% 8.91% Ameren Corporation AEE 5.61% 5.41% 8.93% \$59.16 \$1.83 6.00% 5.90% 5.80% 5.71% 5.51% American Electric Power Company, Inc. 4.47% AEP \$71.95 \$2.48 4.00% 4.24% 4.71% 4.94% 5.18% 5.41% 8.86% Duke Energy Corporation DUK \$83.33 \$3.56 3.70% 3.99% 4.27% 4.56% 4.84% 5.13% 5.41% 9.64% El Paso Electric Company EE 5.00% 5.07% 5.27% 5.41% 7.97% \$55.15 \$1.34 5.14% 5.21% 5.34% Hawaiian Electric Industries, Inc. ΗE \$35.46 \$1.24 1.50% 2.15% 2.80% 3.46% 4.11% 4.76% 5.41% 8.36% IDACORP, Inc. IDA \$90.03 \$2.36 3.10% 3.49% 3.87% 4.26% 4.64% 5.03% 5.41% 7.84% NextEra Energy, Inc. NEE \$154.24 \$4.44 7.90% 7.49% 7.07% 6.66% 6.24% 5.41% 9.11% 5.83% OGE Energy Corp. OGE \$33.48 5.80% 5.74% 5.67% 5.54% 5.41% 9.90% \$1.33 5.61% 5.48% **Pinnacle West Capital Corporation** PNW \$84.43 \$2.78 3.00% 3.40% 3.80% 4.21% 4.61% 5.01% 5.41% 8.49% PNM Resources. Inc. PNM \$40.41 \$1.06 5.80% 5.74% 5.67% 5.61% 5.54% 5.48% 541% 8.34% Portland General Electric Company POR \$45.04 \$1.36 2.70% 3.15% 3.60% 4.06% 4.51% 4.96% 5.41% 8.16% **PPL** Corporation PPL \$33.42 \$1.58 2.14% 2.69% 3.23% 3.78% 4.32% 4.87% 5.41% 9.65% Southern Company SO 2.17% 3.79% 4.33% 4.87% 5.41% 9.74% \$48.25 \$2.32 2.71% 3.25% Xcel Energy Inc. XEL \$47.76 \$1.44 4.50% 4.65% 4.80% 4.96% 5.11% 5.26% 5.41% 8.52% MEAN 8.81% MEDIAN 8.73%

# 90-DAY MULTI-STAGE DCF -- LOW GROWTH RATE -- HISTORICAL GDP GROWTH

Notes:

[1] Source: Bloomberg Professional, equals 90-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4, minimum of (Col. [5], [6], [7])

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, low estimate of historical GDP growth

## [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] Second Stage Growth Stock Annualized First Stage Third Stage Company Ticker Price Dividend Growth Year 6 Year 7 Year 8 Year 9 Year 10 Growth ROE ALLETE, Inc. ALE \$74.89 \$2.24 5.00% 5.07% 5.14% 5.21% 5.27% 5.34% 5.41% 8.60% Alliant Energy Corporation LNT \$41.81 \$1.34 5.40% 5.40% 5.40% 5.41% 5.41% 5.41% 5.41% 8.92% Ameren Corporation AEE 5.61% 5.41% 8.97% \$58.48 \$1.83 6.00% 5.90% 5.80% 5.71% 5.51% American Electric Power Company, Inc. 4.47% AEP \$71.68 \$2.48 4.00% 4.24% 4.71% 4.94% 5.18% 5.41% 8.87% Duke Energy Corporation DUK \$84.51 \$3.56 3.70% 3.99% 4.27% 4.56% 4.84% 5.13% 5.41% 9.58% El Paso Electric Company EE \$54.57 5.00% 5.07% 5.27% 5.41% 8.00% \$1.34 5.14% 5.21% 5.34% Hawaiian Electric Industries, Inc. ΗE \$34.36 \$1.24 1.50% 2.80% 3.46% 4.11% 4.76% 5.41% 8.46% 2.15% IDACORP, Inc. IDA \$88.94 \$2.36 3.10% 3.49% 3.87% 4.26% 4.64% 5.03% 5.41% 7.87% NextEra Energy, Inc. NEE \$150.21 \$4.44 7.90% 7.49% 7.07% 6.24% 5.41% 9.21% 6.66% 5.83% OGE Energy Corp. OGE \$34.61 \$1.33 5.80% 5.74% 5.67% 5.54% 5.41% 9.75% 5.61% 5.48% **Pinnacle West Capital Corporation** PNW \$85.94 \$2.78 3.00% 3.40% 3.80% 4.21% 4.61% 5.01% 5.41% 8.43% PNM Resources. Inc. PNM \$40.46 \$1.06 5.80% 5.74% 5.67% 5.61% 5.54% 5.48% 541% 8.34% Portland General Electric Company POR \$45.62 \$1.36 2.70% 3.15% 3.60% 4.06% 4.51% 4.96% 5.41% 8.12% **PPL** Corporation PPL \$36.00 \$1.58 2.14% 2.69% 3.23% 3.78% 4.32% 4.87% 5.41% 9.33% Southern Company SO 2.17% 3.79% 4.33% 4.87% 5.41% 9.70% \$48.63 \$2.32 2.71% 3.25% Xcel Energy Inc. XEL \$47.81 \$1.44 4.50% 4.65% 4.80% 4.96% 5.11% 5.26% 5.41% 8.51% MEAN 8.79% MEDIAN 8.73%

## 180-DAY MULTI-STAGE DCF -- LOW GROWTH RATE -- HISTORICAL GDP GROWTH

## Notes:

[1] Source: Bloomberg Professional, equals 180-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4, minimum of (Col. [5], [6], [7])

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, low estimate of historical GDP growth

## [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] Second Stage Growth Stock Annualized First Stage Third Stage Company Ticker Price Dividend Growth Year 6 Year 7 Year 8 Year 9 Year 10 Growth ROE ALLETE, Inc. ALE \$70.32 \$2.24 6.10% 6.00% 5.89% 5.79% 5.69% 5.59% 5.48% 9.12% Alliant Energy Corporation LNT \$39.05 \$1.34 6.00% 5.91% 5.83% 5.74% 5.66% 5.57% 5.48% 9.38% Ameren Corporation AEE 9.47% \$55.24 \$1.83 6.90% 6.66% 6.43% 6.19% 5.96% 5.72% 5.48% American Electric Power Company, Inc. AEP \$66.84 \$2.48 5.63% 5.61% 5.58% 5.56% 5.53% 5.51% 5.48% 9.61% Duke Energy Corporation DUK \$76.66 \$3.56 4.50% 4.66% 4.83% 4.99% 5.16% 5.32% 5.48% 10.32% El Paso Electric Company EE 5.20% 5.25% 5.29% 5.34% 5.39% 5.48% \$50.76 \$1.34 5.44% 8.31% Hawaiian Electric Industries, Inc. ΗE \$33.54 8.50% 8.00% 7.49% 6.99% 6.49% 5.99% 5.48% 10.40% \$1.24 IDACORP, Inc. IDA \$83.89 \$2.36 4.10% 4.33% 4.56% 4.79% 5.02% 5.25% 5.48% 8.28% NextEra Energy, Inc. NEE \$152.61 \$4.44 8.85% 8.29% 7.73% 6.61% 6.05% 5.48% 9.44% 7.17% OGE Energy Corp. OGE \$31.38 6.00% 5.91% 5.83% 5.74% 5.66% 5.48% 10.32% \$1.33 5.57% **Pinnacle West Capital Corporation** PNW \$78.08 \$2.78 5.50% 5.50% 5.49% 5.49% 5.49% 5.49% 5.48% 9.41% PNM Resources. Inc. PNM \$36.12 \$1.06 7.50% 7.16% 6.83% 6.49% 6.16% 5.82% 5.48% 9.15% Portland General Electric Company POR \$41.15 \$1.36 6.00% 5.91% 5.83% 5.74% 5.66% 5.57% 5.48% 9.24% **PPL** Corporation PPL \$30.81 \$1.58 7.00% 6.75% 6.49% 6.24% 5.99% 5.74% 5.48% 11.72% Southern Company SO 4.50% 4.83% 4.99% 5.16% 5.32% 5.48% 10.99% \$44.07 \$2.32 4.66% Xcel Energy Inc. XEL \$44.38 \$1.44 6.15% 6.04% 5.93% 5.82% 5.71% 5.60% 5.48% 9.20% MEAN 9.65% MEDIAN 9.42%

## 30-DAY MULTI-STAGE DCF -- HIGH GROWTH RATE -- HISTORICAL GDP GROWTH

Notes:

[1] Source: Bloomberg Professional, equals 30-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4, maximum of (Col. [5], [6], [7])

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, high estimate of historical GDP growth

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]		
				_	Second Stage Growth								
		Stock	Annualized	First Stage						Third Stage			
Company	Ticker	Price	Dividend	Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Growth	ROE		
ALLETE, Inc.	ALE	\$74.69	\$2.24	6.10%	6.00%	5.89%	5.79%	5.69%	5.59%	5.48%	8.90%		
Alliant Energy Corporation	LNT	\$41.93	\$1.34	6.00%	5.91%	5.83%	5.74%	5.66%	5.57%	5.48%	9.11%		
Ameren Corporation	AEE	\$59.16	\$1.83	6.90%	6.66%	6.43%	6.19%	5.96%	5.72%	5.48%	9.20%		
American Electric Power Company, Inc.	AEP	\$71.95	\$2.48	5.63%	5.61%	5.58%	5.56%	5.53%	5.51%	5.48%	9.31%		
Duke Energy Corporation	DUK	\$83.33	\$3.56	4.50%	4.66%	4.83%	4.99%	5.16%	5.32%	5.48%	9.92%		
El Paso Electric Company	EE	\$55.15	\$1.34	5.20%	5.25%	5.29%	5.34%	5.39%	5.44%	5.48%	8.07%		
Hawaiian Electric Industries, Inc.	HE	\$35.46	\$1.24	8.50%	8.00%	7.49%	6.99%	6.49%	5.99%	5.48%	10.13%		
IDACORP, Inc.	IDA	\$90.03	\$2.36	4.10%	4.33%	4.56%	4.79%	5.02%	5.25%	5.48%	8.08%		
NextEra Energy, Inc.	NEE	\$154.24	\$4.44	8.85%	8.29%	7.73%	7.17%	6.61%	6.05%	5.48%	9.39%		
OGE Energy Corp.	OGE	\$33.48	\$1.33	6.00%	5.91%	5.83%	5.74%	5.66%	5.57%	5.48%	10.01%		
Pinnacle West Capital Corporation	PNW	\$84.43	\$2.78	5.50%	5.50%	5.49%	5.49%	5.49%	5.49%	5.48%	9.10%		
PNM Resources, Inc.	PNM	\$40.41	\$1.06	7.50%	7.16%	6.83%	6.49%	6.16%	5.82%	5.48%	8.75%		
Portland General Electric Company	POR	\$45.04	\$1.36	6.00%	5.91%	5.83%	5.74%	5.66%	5.57%	5.48%	8.91%		
PPL Corporation	PPL	\$33.42	\$1.58	7.00%	6.75%	6.49%	6.24%	5.99%	5.74%	5.48%	11.23%		
Southern Company	SO	\$48.25	\$2.32	4.50%	4.66%	4.83%	4.99%	5.16%	5.32%	5.48%	10.50%		
Xcel Energy Inc.	XEL	\$47.76	\$1.44	6.15%	6.04%	5.93%	5.82%	5.71%	5.60%	5.48%	8.93%		
MEAN											9.35%		
MEDIAN											9.16%		

# 90-DAY MULTI-STAGE DCF -- HIGH GROWTH RATE -- HISTORICAL GDP GROWTH

Notes:

[1] Source: Bloomberg Professional, equals 90-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4, maximum of (Col. [5], [6], [7])

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, high estimate of historical GDP growth

## [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] Second Stage Growth Stock Annualized First Stage Third Stage Company Ticker Price Dividend Growth Year 6 Year 7 Year 8 Year 9 Year 10 Growth ROE ALLETE, Inc. ALE \$74.89 \$2.24 6.10% 6.00% 5.89% 5.79% 5.69% 5.59% 5.48% 8.90% Alliant Energy Corporation LNT \$41.81 \$1.34 6.00% 5.91% 5.83% 5.74% 5.66% 5.57% 5.48% 9.12% Ameren Corporation AEE 9.25% \$58.48 \$1.83 6.90% 6.66% 6.43% 6.19% 5.96% 5.72% 5.48% American Electric Power Company, Inc. AEP \$71.68 \$2.48 5.63% 5.61% 5.58% 5.56% 5.53% 5.51% 5.48% 9.32% Duke Energy Corporation DUK \$84.51 \$3.56 4.50% 4.66% 4.83% 4.99% 5.16% 5.32% 5.48% 9.86% El Paso Electric Company EE \$54.57 5.20% 5.25% 5.29% 5.34% 5.39% 5.48% 8.10% \$1.34 5.44% Hawaiian Electric Industries, Inc. ΗE \$34.36 8.50% 8.00% 7.49% 6.99% 6.49% 5.99% 5.48% 10.28% \$1.24 IDACORP, Inc. IDA \$88.94 \$2.36 4.10% 4.33% 4.56% 4.79% 5.02% 5.25% 5.48% 8.12% NextEra Energy, Inc. NEE \$150.21 \$4.44 8.85% 8.29% 7.73% 6.61% 6.05% 5.48% 9.50% 7.17% OGE Energy Corp. OGE \$34.61 6.00% 5.91% 5.83% 5.74% 5.66% 5.48% 9.86% \$1.33 5.57% **Pinnacle West Capital Corporation** PNW \$85.94 \$2.78 5.50% 5.50% 5.49% 5.49% 5.49% 5.49% 5.48% 9.04% PNM Resources. Inc. PNM \$40.46 \$1.06 7.50% 7.16% 6.83% 6.49% 6.16% 5.82% 5.48% 8.75% Portland General Electric Company POR \$45.62 \$1.36 6.00% 5.91% 5.83% 5.74% 5.66% 5.57% 5.48% 8.86% **PPL** Corporation PPL \$36.00 \$1.58 7.00% 6.75% 6.49% 6.24% 5.99% 5.74% 5.48% 10.81% Southern Company SO 4.50% 4.83% 4.99% 5.16% 5.32% 5.48% 10.45% \$48.63 \$2.32 4.66% Xcel Energy Inc. XEL \$47.81 \$1.44 6.15% 6.04% 5.93% 5.82% 5.71% 5.60% 5.48% 8.93% MEAN 9.32% MEDIAN 9.18%

## 180-DAY MULTI-STAGE DCF -- HIGH GROWTH RATE -- HISTORICAL GDP GROWTH

Notes:

[1] Source: Bloomberg Professional, equals 180-trading day average as of February 28, 2018

[2] Source: Bloomberg Professional

[3] Source: JMC-4, maximum of (Col. [5], [6], [7])

[4] Equals [3] + ([9] - [3]) / 6

[5] Equals [4] + ([9] - [3]) / 6

[6] Equals [5] + ([9] - [3]) / 6

[7] Equals [6] + ([9] - [3]) / 6

[8] Equals [7] + ([9] - [3]) / 6

[9] Source: JMC-5, high estimate of historical GDP growth