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Witness: Matthew J. Barnes
Sponsoring Party: MoPSC Staff
Type of Exhibit: Surrebuttal Testimony
Case No.: ER-2008-0093
Date Testimony Prepared: April 25, 2008

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

SURREBUTTAL TESTIMONY

OF

MATTHEW J. BARNES

STAFF Exhibit No. 219
Case No(s). ER-2008-0093
Date 5-12-08 Rptr KF

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2008-0093

Jefferson City, Missouri
April 2008

EXHIBIT

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MATTHEW J. BARNES
THE EMPIRE DISTRICT ELECTRIC COMPANY
CASE NO. ER-2008-0093

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Matthew J. Barnes

1 Capital Asset Pricing Model (CAPM), and an alleged adjustment that should be made to
2 Staff's CAPM because of Empire's size. I will address each of these points. I will also
3 present Staff's corrected rate-of-return recommendation for Empire.

4 **CORRECTIONS**

5 Q. On page 4, lines 13 through 16, in Dr. Vander Weide's surrebuttal testimony,
6 he says that Staff eliminated Xcel Energy from its proxy group even though that company
7 met all of the Staff's criteria for inclusion in the proxy group. Is Dr. Vander Weide correct?

8 A. Yes. At the time Staff was preparing its comparable company criteria in
9 Schedule 12 of the Staff Cost of Service Report (COS Report), it misspelled Xcel Energy
10 when searching for the company in Value Line. Staff made the correction to include Xcel in
11 its proxy group and in the attached revised schedules herein.

12 Q. Did Staff's return on equity (ROE) and rate-of-return (ROR) change as a
13 result of making the correction?

14 A. Yes. Although the change was relatively immaterial, Staff now recommends
15 a ROE in the range of 9.72 percent to 10.80 percent with a mid-point of 10.26 percent for
16 Empire. Staff now recommends a ROR in the range of 8.38 percent to 8.93 percent with a
17 mid-point of 8.65 percent for Empire. Please refer to the set of updated Revised Schedules
18 attached to this testimony to determine how these numbers were derived.

19 **RESPONSE TO DR. VANDER WEIDE'S REBUTTAL TESTIMONY**

20 Q. On page 5, lines 7 through 14, in his rebuttal testimony, Dr. Vander Weide
21 presents the following question and answer:

22 Q. Mr. Barnes's criterion that companies must have 70
23 percent revenue from electric service eliminates some

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1 companies that are combination electric/gas companies. Is
2 there any reason why combination electric/natural gas
3 companies should be eliminated from the proxy group?
4

5 A. No. Since natural gas operations are similar in risk to
6 electric operations, a combination electric/natural gas company
7 is similar in risk to an electric company.
8

9 Is the Commission setting rates in this proceeding based on both Empire's electric
10 and natural gas operations?

11 A. No. The Commission is being asked to set rates based on Empire's Missouri
12 electrical operations only. That is the reason Staff chose to use 70 percent electric revenues
13 as one criterion to select companies that are reasonably similar in risk to Empire.

14 Q. On page 7, lines 13 through 23 of his rebuttal testimony, Dr. Vander Weide
15 criticizes the size of Staff's proxy group compared to his. What is Staff's response?

16 A. As presented on Schedule 12 of the COS Report, Staff used eight criteria to
17 select comparable companies that have similar business risk to Empire.

18 Q. What are the eight criteria that Staff selected?

19 A. The following are the eight criteria that Staff selected:

- 20 1. Stock Publicly Traded;
- 21 2. Information Printed in Value Line;
- 22 3. 10-Years of Data Available;
- 23 4. Percent of Electric Revenues greater than or equal to 70;
- 24 5. No Pending Merger in the last 6 months;
- 25 6. No Cut Dividend in the last 10 years;
- 26 7. Two Sources for Projected Growth Available with on from Value
27 Line;
- 28 8. At Least Investment Grade.

29 Q. Of the eight criteria Staff elected to choose comparable companies that have
30 similar business risk to Empire, which one is the most important?

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1 A. Of the eight criteria Staff elected to choose comparable companies that have
2 similar business risk to Empire, the percent of electric revenues greater than or equal to 70
3 (Criterion number 4 above) is the most important.

4 Q. Why is this criterion the most important?

5 A. This criterion is important because it eliminates utility companies that have
6 less than 70 percent revenue from electric utility operations, which is the business risk I am
7 evaluating for purposes of recommending a fair and reasonable rate of return for Empire.

8 Q. Does Dr. Vander Weide provide any evidence or a recommendation that there
9 should be a minimum number of companies in a proxy group?

10 A. No. He does not.

11 Q. On page 8, line 16, through page 9, line 4 in his rebuttal testimony,
12 Dr. Vander Weide criticizes Staff for not using the quarterly compounding version of the
13 DCF model as he did. How do you respond?

14 A. It is hard to fathom that many investors would employ the precision that
15 Dr. Vander Weide suggests. Value Line does not publish quarterly projected dividends.
16 It provides projected dividends on an annual basis. The dividend yield provided by
17 Value Line in its Ratings and Reports tear sheets is based on the expected dividend for the
18 next year without quarterly compounding. The following definition of "dividend yield" is
19 contained in the *Value Line Investment Survey for Windows: User's Manual*, © 1995 through
20 2002:

21 The common dividends declared per share expressed as a
22 percentage of the average annual price of the stock. Dividend
23 yield = common dividends declared per share divided by the
24 average annual price of a stock. The year-ahead estimated
25 dividend yield (shown in the top right-hand corner of the

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1 Value Line page) is the estimated total of cash dividends to be
2 declared over the next 12 months, divided by the recent price
3 of the stock.
4

5 Staff believes that investors make their investment decisions primarily based upon the annual
6 dividend assumption, and for that reason it is appropriate to recommend ROE estimations to
7 the Commission based on that assumption.

8 Q. On page 9, lines 12 through 23, in his rebuttal testimony, Dr. Vander Weide
9 criticized Staff's use of Value Line to estimate the dividends expected over the next year in
10 order to estimate the dividend yield in Staff's DCF analysis. What is Staff's response?

11 A. Dr. Vander Weide claims that Staff's approach is not consistent with the
12 assumption that dividends will grow at the same constant rate forever. Actually, Empire is
13 the perfect counter-example to Dr. Vander Weide's argument in this case. In Staff's opinion
14 it is unreasonable to believe that investors expect to receive an annual dividend next year that
15 is higher than Empire's current annual dividend of \$1.28. Empire has paid this same
16 dividend amount since 1993 and has given no indication it intends to change the dividend in
17 the near future. Also, this is most likely investors' expectations as well, which is what rate of
18 return witnesses should be trying to evaluate.

19 Q. On page 10, lines 7 through 17 in his rebuttal testimony, Dr. Vander Weide
20 disagreed with Staff's consideration of historical growth rates when estimating the growth
21 component of the DCF model. What is Staff's response?

22 A. It is Staff's opinion that investors would be foolish not to at least consider
23 historical growth rates when making investing decisions. Staff considers all information that
24 is available and makes a judgment to determine a reasonable growth rate for utility
25 companies. As Staff mentioned in the Staff Report, historical growth rates have been volatile

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1 in recent years, which makes it more difficult to estimate a constant, sustainable growth rate
2 based purely on historical growth rate results. Staff notes that if investors did not consider
3 historical growth rates relevant when making investment decisions, then Value Line would
4 not spend their time or money to publish historical financial information.

5 Q. On page 13, line 13 through page 14, line 2 in Dr. Vander Weide's rebuttal
6 testimony, he criticizes Staff for not explaining how they arrived at 6.70 percent for the
7 high end of the growth rate. Can you explain how Staff arrived at 6.70 percent?

8 A. Yes. Staff calculated the high end of the growth rate for its DCF model by
9 averaging the low proxy group average projected growth rate of 5.55 percent and the
10 high proxy group average projected growth rate of 7.83 percent to arrive at 6.68 percent or
11 rounded to 6.70 percent as shown on Schedule 15 in the Staff COS Report. As mentioned
12 previously, Staff has since restated the growth rate due to an error when selecting companies
13 for its proxy group. Staff used the same technique as before to arrive at a new growth rate
14 range of 5.55 percent to 6.63 percent. See Revised Schedule 15 attached to this testimony.

15 Q. On page 17, lines 3 through 18 of Dr. Vander Weide's rebuttal testimony he
16 discusses risk premium estimates using geometric means as compared to arithmetic means.
17 Do you have a simple example to illustrate why Staff does not believe investors use
18 arithmetic means when determining the amount of risk premium they will require on a given
19 stock or a portfolio of stocks?

20 A. Yes. Suppose that an investor makes a \$1 stock investment over a three-year
21 period. If an investor pays \$1 for a stock in year 1 and in year 2 the stock increases to \$1.50,
22 then the investor would have a 50 percent growth rate. In year three the price of the stock
23 decreases by 50 percent to \$.75. If an investor performed a simple arithmetic average of

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1 these two returns, then they would think that they received 0 percent [(50 percent +
2 -50 percent)/2] growth in the investment over the three-year period. However, in reality the
3 investor actually had a 25 percent decline in the investment over this three-year period. This
4 is why using the arithmetic mean as advocated by Dr. Vander Weide is questionable.

5 Q. On page 18, line 19 through page 19, line 2 in his rebuttal testimony,
6 Dr. Vander Weide criticizes Staff for not making an upward adjustment to its CAPM because
7 the comparable group's beta is below 1.00. What is Staff's response?

8 A. Beta is the measure of the relative volatility of the individual stock price as it
9 relates to the market. If a company's beta is less than one, then it is considered to have less
10 market risk than the overall market and if it is greater than one, then it is considered to have
11 more market risk than the overall market. Staff notes that beta only measures the amount of
12 risk caused by the market, not company-specific risks. Staff's comparable group and
13 Empire's beta are exactly the same (.85). This implies that Staff's comparable
14 group's estimated cost of common equity is a good proxy for the subject company.

15 Q. On page 19, line 14 through page 20, line 3 in his rebuttal testimony,
16 Dr. Vander Weide claims an adjustment should be made to Staff's CAPM because of
17 Empire's small size. What is Staff's response?

18 A. Dr. Vander Weide uses an Ibbotson Associates study that was based on all of
19 the stocks in the New York Stock Exchange, the American Stock Exchange and the
20 NASDAQ National Market, not Empire or utility specific.

21 **SUMMARY AND CONCLUSIONS**

22 Q. Please summarize the conclusion of your surrebuttal testimony.

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1 A. My revised cost of common equity of 9.72 percent to 10.80 percent with a
2 mid-point of 10.26 percent would produce a fair and reasonable rate of return of 8.38 percent
3 to 8.93 percent with a mid-point of 8.65 percent for Empire.

4 Q. Does this conclude your surrebuttal testimony?

5 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

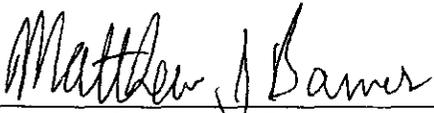
In the Matter of The Empire District Electric)
Company of Joplin, Missouri's Application for)
Authority to File Tariffs Increasing Rates for)
Electric Service Provided to Customers in the)
Missouri Service Area of the Company)

Case No. ER-2008-0093

AFFIDAVIT OF MATTHEW J. BARNES

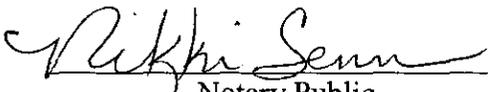
STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Matthew J. Barnes, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Surrebuttal Testimony in question and answer form, consisting of 8 pages to be presented in the above case; that the answers in the foregoing Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

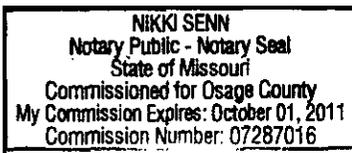


Matthew J. Barnes

Subscribed and sworn to before me this twenty-seventh day of April, 2008.



Nikki Senn
Notary Public



The Empire District Electric Company
Case No. ER-2008-0093

Criteria for Selecting Comparable Electric Utility Companies

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ValueLine Electric Utility Companies(Ticker)	Stock Publicly Traded	Information Printed in ValueLine	10-Years of Data Available	% Electric Revenues ≥ 70%	No Pending Merger in the last 6 months	No Cut Dividend in the last 10 years	Two Sources for Projected Growth Available with One from Value Line	At Least Investment Grade Credit Rating	Comparable Company Met All Criteria
ALLETE(ALE)	Yes	Yes	No						
Allegheny Energy(AYE)	Yes	Yes	Yes	Yes	Yes	No			
Alliant Energy(LNT)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ameren Corp.(AEE)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
American Electric Power(AEP)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Aquila, Inc.(ILA)	Yes	Yes	Yes	No					
Avista Corp.(AVA)	Yes	Yes	Yes	No					
Black Hills(BKH)	Yes	Yes	Yes	No					
CenterPoint Energy(CNP)	Yes	Yes	No						
Central Vermont Public Service(CV)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
CH Energy Group(CHG)	Yes	Yes	Yes	No					
Cleco Corp.(CNL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CMS Energy Corp.(CMS)	Yes	Yes	Yes	No	Yes	No			
Consolidated Edison(ED)	Yes	Yes	Yes	No					
Constellation Energy(CEG)	Yes	Yes	Yes	No					
Dominion Resources(D)	Yes	Yes	Yes	No					
DPL Inc.(DPL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DTE Energy(DTE)	Yes	Yes	Yes	No					
Duke Energy(DUK)	Yes	Yes	No						
Edison International(EIX)	Yes	Yes	Yes	Yes	Yes	No			
El Paso Electric(EE)	Yes	Yes	Yes	Yes	Yes	No			
Energy East Corp.(EAS)	Yes	Yes	Yes	No					
Entergy Corp.(ETR)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Evergreen Energy Inc.(EEE)	Yes	Yes	No						
Exelon Corp.(EXC)	Yes	Yes	No						
FirstEnergy Corp.(FE)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Florida Public Utilities(FPU)	Yes	Yes	No						
FPL Group(FPL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Great Plains Energy (GXP)	Yes	Yes	Yes	No					
Hawaiian Electric(HE)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IDACORP, Inc.(IDA)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Integrus Energy(TEG)	Yes	Yes	Yes	No					
Maine & Maritimes Corp.(MAM)	Yes	Yes	No						
MDU Resources(MDU)	Yes	Yes	Yes	No					
MGE Energy(MGEE)	Yes	Yes	Yes	No					
NISource Inc.(NI)	Yes	Yes	Yes	No					
Northeast Utilities(NU)	Yes	Yes	Yes	Yes	Yes	No			
NSTAR(NST)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
OGE Energy(OGI)	Yes	Yes	Yes	No					
Otter Tail Corp.(OTTR)	Yes	Yes	Yes	No					
Pepco Holdings(POM)	Yes	Yes	No						
PG&E Corp.(PCG)	Yes	Yes	Yes	Yes	Yes	No			
Pinnacle West Capital(PNW)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PNM Resources(PNM)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Portland General(POR)	Yes	Yes	No						
PPL Corp.(PPL)	Yes	Yes	Yes	No					
Progress Energy(PGN)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Public Service Enterprise(PEG)	Yes	Yes	Yes	No					
Puget Energy Inc.(PSD)	Yes	Yes	Yes	No					
SCANA Corp.(SCG)	Yes	Yes	Yes	No					
Sempra Energy(SRE)	Yes	Yes	Yes	No					
Sierra Pacific Resources(SRP)	Yes	Yes	Yes	Yes	Yes	No			
Southern Company(SO)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TECO Energy(TE)	Yes	Yes	Yes	No					
UIL Holdings(UIL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N.A.	
UniSource Energy(UNS)	Yes	Yes	Yes	Yes	Yes	No			
UNITIL Corp.(UTL)	Yes	Yes	No						
Vectren Corp.(VVC)	Yes	Yes	No						
Westar Energy(WR)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wisconsin Energy(WEC)	Yes	Yes	Yes	No					
Xcel Energy(XEL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Sources: Columns 1, 2 and 5 = Standard & Poor's RatingsDirect.

Columns 3, 4 and 6 = The Value Line Investment Survey: Ratings & Reports, November 30, December 28, 2007 and February 08, 2008.

Column 6 = I/B/E/S Inc.'s Institutional Brokers Estimate System, January 17, 2008.

Notes: N.A. = Not available.

**The Empire District Electric Company
Case No. ER-2008-0093**

**Comparable Electrical Utility Companies
for The Empire District Electric Company**

Number	Ticker Symbol	Company Name
1	LNT	Alliant Energy
2	AEE	Ameren Corp.
3	PNW	American Electric Power
4	CNL	Cleco Corp.
5	DPL	DPL Inc.
6	ETR	Entergy Corp.
7	FE	FirstEnergy Corp.
8	FPL	FPL Group
9	HE	Hawaiian Electric
10	IDA	IDACORP, Inc.
11	NST	NSTAR
12	PNW	Pinnacle West Capital
13	PNM	PNM Resources
14	PGN	Progress Energy
15	SO	Southern Company
16	WR	Westar Energy
17	XEL	Xcel Energy

**The Empire District Electric Company
Case No. ER-2008-0093**

**Ten-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates
for the Comparable Electric Utility Companies and The Empire District Electric Company**

Company Name	--- 10-Year Annual Compound Growth Rate ---			Average of 10-Year Annual Compound Growth Rates
	DPS	EPS	BVPS	
Alliant Energy	-6.00%	-1.00%	1.00%	-2.00%
Ameren Corp.	0.50%	0.00%	3.00%	1.17%
American Electric Power	-5.00%	-0.50%	-0.50%	-2.00%
Cleco Corp.	2.00%	3.00%	5.50%	3.50%
DPL Inc.	1.50%	1.50%	0.50%	1.17%
Entergy Corp.	1.50%	8.50%	3.00%	4.33%
FirstEnergy Corp.	2.00%	4.50%	5.50%	4.00%
FPL Group	4.50%	5.50%	6.50%	5.50%
Hawaiian Electric	0.50%	0.50%	1.50%	0.83%
IDACORP, Inc.	-4.50%	0.00%	3.00%	-0.50%
NSTAR	2.50%	4.50%	3.50%	3.50%
Pinnacle West Capital	7.50%	2.00%	4.50%	4.67%
PNM Resources	0.00%	4.00%	6.00%	3.33%
Progress Energy	3.00%	1.00%	6.50%	3.50%
Southern Company	2.00%	2.50%	1.00%	1.83%
Westar Energy	-8.00%	-5.00%	-4.00%	-5.67%
Xcel Energy	-4.50%	-3.50%	-1.00%	-3.00%
Average	-0.03%	1.62%	2.68%	1.42%
Standard Deviation	3.98%	3.04%	2.81%	2.91%

Source: The Value Line Investment Survey: Ratings & Reports, November 30, December 28, 2007 and February 08, 2008.

**The Empire District Electric Company
Case No. ER-2008-0093**

**Five-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates
for the Comparable Electric Utility Companies and The Empire District Electric Company**

----- 5-Year Annual Compound Growth Rates -----

Company Name	DPS	EPS	BVPS	Average of 5-Year Annual Compound Growth Rates
Alliant Energy	-11.50%	-3.00%	-2.50%	-5.67%
Ameren Corp.	0.00%	-2.00%	5.50%	1.17%
American Electric Power	-9.50%	3.00%	-2.50%	-3.00%
Cleco Corp.	1.00%	0.00%	5.50%	2.17%
DPL Inc.	0.50%	-3.50%	0.50%	-0.83%
Entergy Corp.	11.00%	10.50%	4.00%	8.50%
FirstEnergy Corp.	4.00%	3.50%	4.50%	4.00%
FPL Group	5.50%	4.50%	6.50%	5.50%
Hawaiian Electric	0.00%	-1.00%	2.00%	0.33%
IDACORP, Inc.	-8.50%	-8.50%	2.50%	-4.83%
NSTAR	3.00%	3.50%	2.50%	3.00%
Pinnacle West Capital	6.00%	-5.00%	4.00%	1.67%
PNM Resources	7.50%	-2.50%	4.50%	3.17%
Progress Energy	2.50%	-0.50%	5.00%	2.33%
Southern Company	2.00%	3.00%	1.00%	2.00%
Westar Energy	-11.00%	21.00%	-9.00%	0.33%
Xcel Energy	-10.50%	-6.50%	-4.50%	-7.17%
Average	<u>0.16%</u>	<u>1.44%</u>	<u>2.13%</u>	<u>0.75%</u>
Standard Deviation	6.59%	6.67%	3.87%	3.51%

Source: The Value Line Investment Survey: Ratings & Reports, November 30, December 28, 2007 and February 08, 2008.

**The Empire District Electric Company
Case No. ER-2008-0093**

**Average of Ten- and Five-Year Dividends Per Share, Earnings Per Share,
and Book Value Per Share for the Comparable Electric Utility Companies
and The Empire District Electric Company**

Company Name	10-Year Average DPS, EPS & BVPS	5-Year Average DPS, EPS & BVPS	Average of 5-Year & 10-Year Averages
Alliant Energy	-2.00%	-5.67%	-3.83%
Ameren Corp.	1.17%	1.17%	1.17%
American Electric Power	-2.00%	-3.00%	-2.50%
Cleco Corp.	3.50%	2.17%	2.83%
DPL Inc.	1.17%	-0.83%	0.17%
Entergy Corp.	4.33%	8.50%	6.42%
FirstEnergy Corp.	4.00%	4.00%	4.00%
FPL Group	5.50%	5.50%	5.50%
Hawaiian Electric	0.83%	0.33%	0.58%
IDACORP, Inc.	-0.50%	-4.83%	-2.67%
NSTAR	3.50%	3.00%	3.25%
Pinnacle West Capital	4.67%	1.67%	3.17%
PNM Resources	3.33%	3.17%	3.25%
Progress Energy	3.50%	2.33%	2.92%
Southern Company	1.83%	2.00%	1.92%
Westar Energy	-5.67%	0.33%	-2.67%
Xcel Energy	-3.00%	-7.17%	-5.08%
Average	<u>1.42%</u>	<u>0.75%</u>	<u>1.08%</u>