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Date Testimony Prepared:

Revenue Requirement and Missouri
Regulatory Framework

Michael P. Gorman

Direct Testimony

Missouri Industrial Energy Consumers

ER-2012-0166

July 6, 2012

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

**In the Matter of Union Electric Company,
d/b/a Ameren Missouri's Tariff to Increase
Its Annual Revenues for Electric Service**

Case No. ER-2012-0166

Tariff No. YE-2012-0370

Direct Testimony and Schedules of

Michael P. Gorman

Revenue Requirement

On behalf of

Missouri Industrial Energy Consumers

NON-PROPRIETARY VERSION

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**STATE OF MISSOURI)
)
COUNTY OF ST. LOUIS)**

SS

Affidavit of Michael P. Gorman

Michael P. Gorman, being first duly sworn, on his oath states:

1. My name is Michael P. Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Missouri Industrial Energy Consumers in this proceeding on their behalf.

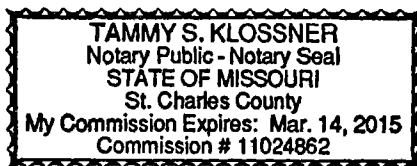
2. Attached hereto and made a part hereof for all purposes are my direct testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2012-0166.

3. I hereby swear and affirm that the testimony and schedules are true and correct and that they show the matters and things that they purport to show.



Michael P. Gorman

Subscribed and sworn to before me this 5th day of July, 2012.





Notary Public

**In the Matter of Union Electric Company,
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Michael P. Gorman

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**In the Matter of Union Electric Company,
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Direct Testimony of Michael P. Gorman

1 also respond to Ameren Missouri witnesses' criticisms of the Missouri Regulatory
2 Framework, and comment on proposals to modify or add regulatory mechanisms that
3 the Company believes will improve its ability to earn its authorized return on equity.

4 **SUMMARY**

5 **Q PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS.**

6 A I recommend the Missouri Public Service Commission (the "Commission" or "MPSC")
7 award Ameren Missouri a return on common equity of 9.30%, which is the midpoint of
8 my recommended range of 9.20% to 9.40%, and an overall rate of return of 7.64%.
9 Schedule MPG-1.

10 My recommended return on equity and the Company's proposed capital
11 structure will provide Ameren Missouri with an opportunity to realize cash flow
12 financial coverages and balance sheet strength that support Ameren Missouri's
13 current investment grade bond rating. Consequently, my recommended return on
14 equity represents fair compensation given Ameren Missouri's investment risk, and it
15 will preserve the Company's financial integrity and credit standing.

16 I will also respond to Ameren Missouri witness Mr. Robert Hevert's proposed
17 return on equity of 10.75%. For the reasons discussed below, Mr. Hevert's
18 recommended return on equity is excessive and should be rejected.

19 **Q DOES YOUR RECOMMENDED RETURN ON EQUITY REFLECT AMEREN**
20 **MISSOURI'S EXISTING INVESTMENT RISK?**

21 A Yes. My recommended return on equity reflects fair compensation for Ameren
22 Missouri's existing investment risk including its regulatory risk which is based on the
23 Missouri Regulatory Framework used to set rates that recover its cost of service and

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1 support its financial integrity. These factors are reflected in Ameren Missouri's
2 existing bond rating and other risk factors used to select a comparable risk proxy
3 group. If the Commission modified Ameren Missouri's existing regulatory
4 mechanisms to reduce Ameren Missouri's investment risk, then any related risk
5 reduction should be considered in determining a fair risk-adjusted return on equity for
6 Ameren Missouri.

7 **Q HOW DID YOU ESTIMATE AMEREN MISSOURI'S CURRENT MARKET COST OF**
8 **EQUITY?**

9 A I performed analyses using three Discounted Cash Flow ("DCF") models, a Risk
10 Premium ("RP") study, and a Capital Asset Pricing Model ("CAPM"). These analyses
11 used a proxy group of publicly traded companies that have investment risk similar to
12 Ameren Missouri. Based on these assessments, I estimate Ameren Missouri's
13 current market cost of equity to be 9.30%.

14 **Q PLEASE SUMMARIZE YOUR FINDINGS AND CONCLUSIONS RELATING TO**
15 **MISSOURI'S REGULATORY FRAMEWORK.**

16 A Missouri's Regulatory Framework is balanced and supports the development of just
17 and reasonable rates that provide a reasonable opportunity for Ameren Missouri to
18 earn its authorized return on equity. This is evident from credit rating analysts'
19 findings that over the last several rate cases, Ameren Missouri's rate decisions have
20 been constructive and credit supportive.

21 Further, the Company's critique of regulatory mechanisms is not designed to
22 strike a fair balance between investors and ratepayers. Therefore, the Company's
23 proposed regulatory mechanisms should be rejected.

1 **RATE OF RETURN**

2 **Q HOW DOES YOUR RECOMMENDED RETURN ON EQUITY COMPARE TO**
3 **AMEREN MISSOURI'S LAST AUTHORIZED RETURN ON EQUITY?**

4 A On July 13, 2011, the Commission issued its final order in Ameren Missouri's rate
5 case (Missouri Public Service Commission, Case No. ER-2011-0028) which included
6 a return on equity of 10.20%.

7 My recommended return on equity is lower in this case than the return on
8 equity included in Ameren Missouri's rate case from July 2011. However, this lower
9 return on equity is justified based on clear evidence that capital market costs today
10 are much lower than they were in 2011 when Ameren Missouri's rates were
11 approved.

12 **Q DO YOU BELIEVE MARKET COSTS OF CAPITAL ARE LOWER TODAY THAN**
13 **THEY WERE IN AMEREN MISSOURI'S LAST RATE CASE?**

14 A Yes. Market costs of capital have declined since Ameren Missouri's last rate case.
15 This is illustrated by a comparison of bond yields in this case and the last case, and is
16 evident from cost of capital estimates in this case versus the last case. In Table 1
17 below, I show the change in utility bond yields.

TABLE 1

Capital Costs – Ameren Missouri Rate Cases

<u>Description</u>	<u>Current Case¹</u>	<u>Case No. ER-2011-0028</u>	<u>Yield Change</u>
"A" Rated Utility Bond Yields	4.27%	5.37%	1.10%
"Baa" Rated Utility Bond Yields	5.01%	5.72%	0.71%
13-Week Period Ending	06/15/2012	07/08/2011	

Source:

¹Schedule MPG-14, page 1.

As shown in the table above, the current market cost of debt for "A" (by Standard & Poor's, "S&P") and "Baa" (by Moody's) rated utility bond yields has decreased in this case relative to Ameren Missouri's last rate case. The current "A" rated utility bond yield is over 1.0 percentage points lower now than it was in Ameren Missouri's last rate case. Also, the current "Baa" utility bond yield is over 0.70 percentage points lower than during Ameren Missouri's last rate case.

Utility bond yields have declined by approximately 70 to 110 basis points since Ameren Missouri's last rate case. This decline in utility bond yields suggests that Ameren Missouri's cost of capital is lower now than it was in its last rate case.

Electric Utility Industry Market Outlook

Q PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.

A I begin my estimate of a fair return on equity for Ameren Missouri by reviewing the market's assessment of electric utility industry investment risk, credit standing and stock price performance in general. I used this information to get a sense of the market's perception of the risk characteristics of electric utility investments in general,

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1 which is then used to produce a refined estimate of the market's return requirement
2 for assuming investment risk similar to Ameren Missouri's utility operations.

3 Based on the assessments described below, I find the credit rating outlook of
4 the industry to be strong and supportive of the industry's financial integrity, and
5 electric utilities' stocks have exhibited strong price performance over the last several
6 years.

7 Based on this review of credit outlooks and stock price performance, I
8 conclude that the market has again embraced the electric utility industry as a
9 safe-haven investment, and views utility equity and debt investments as low-risk
10 securities.

11 **Q PLEASE DESCRIBE THE ELECTRIC UTILITIES' CREDIT RATING OUTLOOK.**

12 A Electric utilities' credit rating outlook has improved over the recent past and is now
13 stable. S&P recently provided an assessment of the credit rating of U.S. electric
14 utilities. S&P's commentary included the following:

15 **Solid Industry Fundamentals Support Stable Outlook**

16 The U.S. electric utility sector performed well through 2011, and found
17 it easier to access the capital markets than did most other corporate
18 issuers.

19 Investor appetite for electric utility debt remains healthy, and deals
20 have been oversubscribed. Credit fundamentals indicate that most, if
21 not all, electric utilities should continue to have ample access to
22 funding sources and credit. Some firms may issue common stock to
23 partially fund construction spending, which would help to support the
24 capital structure balance. In addition, many utilities are accessing
25 short-term credit markets through commercial paper programs at very
26 low rates.¹

¹Standard & Poor's RatingsDirect on the Global Credit Portal: "Industry Economic And Ratings Outlook: Continued Ratings Stability Expected For U.S. Regulated Electric Utilities In 2012," January 25, 2012 at 4-5.

1 Similarly, Fitch states:

2 **Electric Utilities: Stable**

3 Fitch's Outlook for the electric utility sector in 2012 remains stable.
4 The sector benefits from low interest rates, modest inflationary
5 pressures, open capital markets, and low natural gas and power
6 prices. Fitch expects these conditions to persist into 2013.

7 The favorable funding environment helps to offset any stress that
8 would otherwise result during an extended period of high projected
9 capital investment. Capex is expected to remain elevated, increasing
10 5%–6% over 2011 levels.²

11 *Value Line* also continues to characterize utility stock investments as a safe haven:

12 **Conclusion**

13 With most of 2011 completed, it seems almost certain that electric
14 utility stocks will have outperformed the broader market averages
15 when the year is over. As of mid-December, the Value Line Utility
16 Average is up slightly, while the Value Line Geometric Average is down
17 about 14%. Electric utility stocks have long been viewed as a safe
18 haven in volatile markets, due in large part to their generous dividend
19 yields.³

20 The Edison Electric Institute ("EEI") also opined as follows:

21 There was little change during 2011 in the industry's long-term outlook.
22 Many regulated utilities are engaged in capital spending programs that
23 should, according to Wall Street analysts, help drive slow but steady
24 earnings growth over the next several years. New EPA regulations
25 may boost capex by 30% in the years ahead, relative to EEI's latest
26 capex survey estimates.⁴

27 **Q PLEASE DESCRIBE ELECTRIC UTILITY STOCK PRICE PERFORMANCE OVER**
28 **THE LAST SEVEN YEARS.**

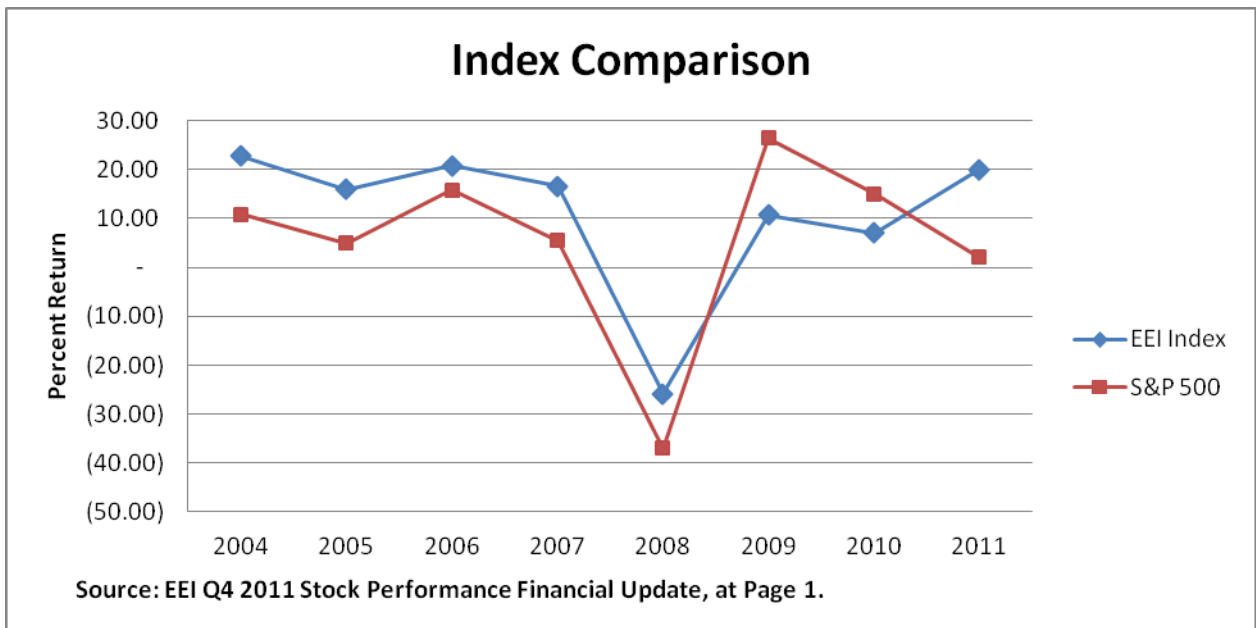
29 **A** As shown in the graph below, the EEI has recorded electric utility stock price
30 performance compared to the market. The EEI data shows that its Electric Utility

²*FitchRatings*: "2012 Outlook: Utilities, Power, and Gas," December 5, 2011 at 10.

³*Value Line Investment Survey*, December 23, 2011 at 901.

⁴*EEI Q4 2011 Stock Performance* at 1.

1 Index has outperformed the market, with a few exceptions, triggered by the recent
2 state of the economic environment.



3 During 2009 and 2010, the EEI Index underperformed the market, which is not
4 unusual for stocks that are considered “safe havens” during periods of market
5 turbulence.

6 In 2011, the EEI Index outperformed the market. EEI states the following:

7 **Commentary**

8 The EEI Index produced a positive 20% return during 2011, its
9 strongest annual gain since 2006, outperforming the broad market
10 after two consecutive years of underperformance as stocks rebounded
11 from the lows reached during 2008 financial crisis.

12 * * *

13 The strength of the EEI Index in 2011 is no surprise, highlighting the
14 industry's traditional role as a defensive investment following its
15 reemphasis in recent years of core regulated businesses with slow but
16 predictable earnings growth and steady dividends. In fact, the
17 industry's average dividend yield exceeded 4% during the year,
18 leading that of all other U.S. business sectors.⁵

⁵EEI Q4 2011 Stock Performance at 1 and 4-5.

Ameren Missouri Investment Risk

Q PLEASE DESCRIBE THE MARKET'S ASSESSMENT OF THE INVESTMENT RISK OF AMEREN MISSOURI.

A The market assessment of Ameren Missouri's investment risk is best described by credit rating analysts' reports. Ameren Missouri's current corporate credit ratings from S&P and Moody's are "BBB+" and "A3," respectively.

Specifically, S&P states the following:

Rationale

Standard & Poor's Ratings Services' ratings on St. Louis-based Ameren Missouri (AM) reflect the consolidated credit profile of its parent, Ameren Corp. (Ameren). The ratings also reflect AM's "excellent" business risk profile and Ameren's "significant" financial risk profile under our criteria.

* * *

AM's excellent business risk profile reflects its lower-risk, monopolistic rate-regulated utility businesses that provide an essential service. Additionally, the company's recent rate cases and regulatory mechanisms indicate an overall decreasing regulatory risk. In 2010 and 2011, the company received electric and gas rate case orders from the Missouri Public Service Commission (MPSC) that included more than \$400 million of rate increases. In addition, the company also has credit-supportive trackers, including a fuel adjustment clause, pension and other postemployment benefit trackers, and a cost tracker for vegetation management and infrastructure inspections.⁶

Moody's states:

The stable rating outlook reflects the recently credit supportive rate case outcome that should marginally decrease regulatory lag, cash flow coverage metrics that have been strong for its rating over the last two years, the recent moderation of environmental capital expenditures due to higher use of ultra-low sulfur coal, and Moody's expectation that other environmental compliance costs will be recovered through rates in a timely manner.⁷

⁶Standard & Poor's RatingsDirect on the Global Credit Portal: "Ameren Missouri," March 16, 2012 at 2, emphasis added.

⁷Moody's Investors Service Credit Opinion: "Union Electric Company," August 12, 2011.

Ameren Missouri's Proposed Capital Structure

**Q WHAT CAPITAL STRUCTURE IS THE COMPANY REQUESTING TO USE TO
DEVELOP ITS OVERALL RATE OF RETURN FOR ELECTRIC OPERATIONS IN
THIS PROCEEDING?**

**A Ameren Missouri's July 2012 forecasted capital structure, as supported by Ameren
Missouri witness Mr. Ryan J. Martin, is shown below in Table 2.**

TABLE 2	
Ameren Missouri's <u>Proposed Capital Structure</u>	
<u>Description</u>	<u>Percent of Total Capital</u>
Long-Term Debt	46.802%
Preferred Stock	1.062%
Common Equity	<u>52.136%</u>
Total Capital Structure	100.000%
Source: Schedule RJM-2.	

**Q ARE YOU PROPOSING ANY ADJUSTMENTS TO MR. MARTIN'S PROPOSED
CAPITAL STRUCTURE?**

A No.

1 **Return on Equity**

2 **Q PLEASE DESCRIBE WHAT IS MEANT BY A “UTILITY’S COST OF COMMON**
3 **EQUITY.”**

4 A A utility’s cost of common equity is the return investors require on an investment in
5 the utility. Investors expect to achieve their return requirement from receiving
6 dividends and stock price appreciation.

7 **Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED**
8 **UTILITY’S COST OF COMMON EQUITY.**

9 A In general, determining a fair cost of common equity for a regulated utility has been
10 framed by two hallmark decisions of the U.S. Supreme Court: *Bluefield Water Works*
11 & *Improvement Co. v. Public Serv. Commission of West Virginia*, 262 U.S. 679 (1923)
12 and *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).

13 These decisions identify the general standards to be considered in
14 establishing the cost of common equity for a public utility. Those general standards
15 provide that the authorized return should: (1) be sufficient to maintain financial
16 integrity; (2) attract capital under reasonable terms; and (3) be commensurate with
17 returns investors could earn by investing in other enterprises of comparable risk.

18 **Q PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE THE COST**
19 **OF COMMON EQUITY FOR AMEREN MISSOURI.**

20 A I have used several models based on financial theory to estimate Ameren Missouri’s
21 cost of common equity. These models are: (1) a constant growth Discounted Cash
22 Flow (“DCF”) model using analyst growth data; (2) a sustainable growth DCF model;
23 (3) a multi-stage growth DCF model; (4) an RP model; and (5) a CAPM. I have

1 applied these models to a group of publicly traded utilities that I have determined
2 share investment risk similar to Ameren Missouri's.

3 **Q HOW DID YOU SELECT A UTILITY PROXY GROUP SIMILAR IN INVESTMENT**
4 **RISK TO AMEREN MISSOURI TO ESTIMATE ITS CURRENT MARKET COST OF**
5 **EQUITY?**

6 A I relied on the same utility proxy group used by Ameren Missouri witness Mr. Hevert
7 to estimate Ameren Missouri's return on equity.

8 **Q HOW DOES THE PROXY GROUP INVESTMENT RISK COMPARE TO AMEREN**
9 **MISSOURI'S INVESTMENT RISK?**

10 A The proxy group is shown on Schedule MPG-2. This proxy group has an average
11 senior credit rating from S&P of "BBB+," which is identical to S&P's senior secured
12 credit rating for Ameren Missouri. The proxy group's senior secured credit rating from
13 Moody's is "Baa1," which is a notch lower than Ameren Missouri's senior secured
14 credit rating from Moody's of "A3." The proxy group has comparable investment risk
15 to Ameren Missouri.

16 The proxy group has an average common equity ratio of 48.0% (including
17 short-term debt) from *AUS Utility Reports* ("AUS") and 51.3% (excluding short-term
18 debt) from *Value Line* in 2011. The proxy group's common equity ratio is slightly
19 lower but comparable to the Company's proposed common equity ratio of 52.1%
20 excluding short-term debt.

21 I also compared Ameren Missouri's business risk to the business risk of the
22 proxy group based on S&P's ranking methodology. Ameren Missouri has an S&P
23 business risk profile of "Excellent," which is identical to the S&P business risk profile

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of the proxy group. The S&P business risk profile score indicates that Ameren Missouri's business risk is comparable to that of the proxy group.⁸

Based on these proxy group selection criteria, I believe that my proxy group reasonably approximates the investment risk of Ameren Missouri, and can be used to estimate a fair return on equity for Ameren Missouri.

Discounted Cash Flow Model

Q PLEASE DESCRIBE THE DCF MODEL.

A The DCF model posits that a stock price is valued by summing the present value of expected future cash flows discounted at the investor's required rate of return or cost of capital. This model is expressed mathematically as follows:

$$P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} + \dots + \frac{D_\infty}{(1+K)^\infty} \text{ where} \quad (\text{Equation 1})$$

P_0 = Current stock price
 D = Dividends in periods 1 - ∞
 K = Investor's required return

This model can be rearranged in order to estimate the discount rate or investor-required return, "K." If it is reasonable to assume that earnings and dividends will grow at a constant rate, then Equation 1 can be rearranged as follows:

$$K = D_1/P_0 + G \quad (\text{Equation 2})$$

K = Investor's required return
 D_1 = Dividend in first year
 P_0 = Current stock price
 G = Expected constant dividend growth rate

⁸S&P ranks the business risk of a utility company as part of its corporate credit rating review. S&P considers total investment risk in assigning bond ratings to issuers, including utility companies. In analyzing total investment risk, S&P considers both the business risk and the financial risk of a corporate entity, including a utility company. S&P's business risk profile score is based on a six-notch credit rating starting with "Vulnerable" (highest risk) to "Excellent" (lowest risk). The business risk of most utility companies falls within the lowest risk category, "Excellent," or the category one notch lower (more risk), "Strong." *Standard & Poor's: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded,"* May 27, 2009.

Equation 2 is referred to as the annual “constant growth” DCF model.

Q PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF MODEL.

A As shown in Equation 2 above, the DCF model requires a current stock price, expected dividend, and expected growth rate in dividends.

Q WHAT STOCK PRICE HAVE YOU RELIED ON IN YOUR CONSTANT GROWTH DCF MODEL?

A I relied on the average of the weekly high and low stock prices of the utilities in the proxy group over a 13-week period ended June 15, 2012. An average stock price is less susceptible to market price variations than a spot price. Therefore, an average stock price is less susceptible to aberrant market price movements, which may not be reflective of the stock’s long-term value.

A 13-week average stock price reflects a period that is still short enough to contain data that reasonably reflect current market expectations, but the period is not so short as to be susceptible to market price variations that may not reflect the stock’s long-term value. In my judgment, a 13-week average stock price is a reasonable balance between the need to reflect current market expectations and the need to capture sufficient data to smooth out aberrant market movements.

Q WHAT DIVIDEND DID YOU USE IN YOUR CONSTANT GROWTH DCF MODEL?

A I used the most recently paid quarterly dividend, as reported in *The Value Line Investment Survey*.⁹ This dividend was annualized (multiplied by 4) and adjusted for next year’s growth to produce the D_1 factor for use in Equation 2 above.

⁹*The Value Line Investment Survey*, March 23, May 4, and May 25, 2012.

1 **Q WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR CONSTANT**
2 **GROWTH DCF MODEL?**

3 A There are several methods that can be used to estimate the expected growth in
4 dividends. However, regardless of the method, for purposes of determining the
5 market-required return on common equity, one must attempt to estimate investors'
6 consensus about what the dividend or earnings growth rate will be, and not what an
7 individual investor or analyst may use to make individual investment decisions.

8 As predictors of future returns, security analysts' growth estimates have been
9 shown to be more accurate than growth rates derived from historical data.¹⁰ That is,
10 assuming the market generally makes rational investment decisions, analysts' growth
11 projections are more likely to influence observable stock prices than growth rates
12 derived only from historical data.

13 For my constant growth DCF analysis, I have relied on a consensus, or mean,
14 of professional security analysts' earnings growth estimates as a proxy for investor
15 consensus dividend growth rate expectations. I used the average of analysts' growth
16 rate estimates from three sources: Zacks, SNL Financial, and Reuters. All such
17 projections were available on June 17, 2012, and all were reported online.

18 Each consensus growth rate projection is based on a survey of security
19 analysts. The consensus estimate is a simple arithmetic average, or mean, of
20 surveyed analysts' earnings growth forecasts. A simple average of the growth
21 forecasts gives equal weight to all surveyed analysts' projections. It is problematic as
22 to whether any particular analyst's forecast is more representative of general market
23 expectations. Therefore, a simple average, or arithmetic mean, of analyst forecasts is
24 a good proxy for market consensus expectations.

¹⁰See, e.g., David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating Share Yield," *The Journal of Portfolio Management*, Spring 1989.

1 **Q WHAT ARE THE GROWTH RATES YOU USED IN YOUR CONSTANT GROWTH**
2 **DCF MODEL?**

3 A The growth rates I used in my DCF analysis are shown in Schedule MPG-3. The
4 average growth rate for my proxy group is 4.84%.

5 **Q WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF MODEL?**

6 A As shown in Schedule MPG-4, the average and median constant growth DCF returns
7 for my proxy group are 9.30% and 9.90%, respectively.

8 **Q DO YOU HAVE ANY COMMENTS ON THE RESULTS OF YOUR CONSTANT**
9 **GROWTH DCF ANALYSIS?**

10 A Yes. The three- to five-year growth rates are in line with the long-term sustainable
11 growth rate. Therefore, I believe my constant growth DCF analysis using analysts'
12 three- to five-year growth rates reflects reasonable growth outlooks and the DCF
13 results are also reasonable. Nevertheless, I consider other DCF methodologies in
14 order to enhance the information available to accurately estimate Ameren Missouri's
15 current market return on common equity.

16 **Sustainable Growth DCF**

17 **Q PLEASE DESCRIBE HOW YOU ESTIMATED A SUSTAINABLE LONG-TERM**
18 **GROWTH RATE FOR YOUR SUSTAINABLE GROWTH DCF MODEL.**

19 A A sustainable growth rate is based on the percentage of the utility's earnings that is
20 retained and reinvested in utility plant and equipment. These reinvested earnings
21 increase the earnings base (rate base). Earnings grow when plant funded by

1 reinvested earnings is put into service, and the utility is allowed to earn its authorized
2 return on such additional rate base investment.

3 The internal growth methodology is tied to the percentage of earnings retained
4 in the company and not paid out as dividends. The earnings retention ratio is 1 minus
5 the dividend payout ratio. As the payout ratio declines, the earnings retention ratio
6 increases. An increased earnings retention ratio will fuel stronger growth because
7 the business funds more investments with retained earnings. The payout ratios of the
8 proxy group are shown on my Schedule MPG-5. These dividend payout ratios and
9 earnings retention ratios then can be used to develop a sustainable long-term
10 earnings retention growth rate. A sustainable long-term retention ratio will help gauge
11 whether analysts' current three- to five-year growth rate projections can be sustained
12 over an indefinite period of time.

13 The data used to estimate the long-term sustainable growth rate is based on
14 the Company's current market to book ratio and on *Value Line's* three- to five-year
15 projections of earnings, dividends, earned returns on book equity, and stock
16 issuances.

17 As shown in Schedule MPG-6, page 1, the average sustainable growth rate
18 for the proxy group using this internal growth rate model is 4.20%.

19 **Q WHAT IS THE DCF ESTIMATE USING THESE SUSTAINABLE LONG-TERM**
20 **GROWTH RATES?**

21 **A** A DCF estimate based on these sustainable growth rates is developed in Schedule
22 MPG-7. As shown there, a sustainable growth DCF analysis produces proxy group
23 average and median DCF results of 8.63% and 8.47%, respectively.

Multi-Stage Growth DCF Model

Q HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?

A Yes. My first constant growth DCF is based on consensus analysts' growth rate projections, so it is a reasonable reflection of rational investment expectations over the next three to five years. The limitation on the constant growth DCF model is that it cannot reflect a rational expectation that a period of high/low short-term growth can be followed by a change in growth to a rate that is more reflective of long-term sustainable growth. Hence, I performed a multi-stage growth DCF analysis to reflect this outlook of changing growth expectations.

Q WHEN DO YOU BELIEVE SHORT-TERM GROWTH RATES CHANGE OVER TIME?

A Analyst projected growth rates over the next three to five years will change as utility earnings growth outlooks change. Utility companies typically go through cycles in making investments in their systems. When utility companies are making large investments, their rate base grows rapidly, which accelerates their earnings growth. Once a major construction cycle is completed or levels off, growth in the utility rate base slows, and its earnings slow from an abnormally high three- to five-year growth rate period to a lower sustainable growth rate.

As major construction cycles extend over longer periods of time, even with an accelerated construction program, the growth rate of the utility will slow simply because it is adding to a larger rate base, and the utility has limited human and capital resources available to expand its construction program. Hence, the three- to five-year growth rate projection should be used as a long-term sustainable growth rate but not without making a reasonable informed judgment to determine whether it

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1 considers the current market environment, the industry, and whether the three- to
2 five-year growth outlook is sustainable.

3 **Q CAN A UTILITY'S ELEVATED THREE- TO FIVE-YEAR GROWTH RATE**
4 **CONTINUE INDEFINITELY IF ITS CAPITAL PROGRAM CONTINUES OVER AN**
5 **INDEFINITE PERIOD OF TIME?**

6 **A** No. Because the growth rate will slow over time, even if the utility's capital program
7 remains at an elevated level. This is illustrated in Table 3 below. Consider a
8 hypothetical company with a beginning plant-in-service of \$1 million and an elevated
9 capital expenditure program of \$100,000 (10% of total capital). Capital expenditures
10 stay elevated but also grow at the rate of inflation of 2% over the next 10 years. This
11 company has depreciation expense based on a rate of gross plant of 3.0%.

12 In this example, the first year, the capital expenditures less depreciation
13 expense will grow plant-in-service from \$1 million up to \$1,070,000 – a 7% plant
14 growth. In this example, earnings in the year would begin at an assumed 10% rate of
15 return on investment, or \$103,500. This represents a 10% return on average plant
16 investment for the year. Now assume that the capital improvement program
17 continues, and plant-in-service increases from the initial \$1 million up to \$1,139,900
18 by the end of year 2. In this second year, earnings would increase to \$110,495, a
19 6.8% growth in earnings relative to year 1. Each year, the embedded plant-in-service
20 increases by capital improvements less depreciation expense. As a result, the growth
21 in earnings slows because a percent change in plant-in-service starts to slow as the
22 beginning of the year plant-in-service number increases. That is, the denominator in
23 the growth equation increases with a relatively flat but elevated level of capital
24 improvements resulting in a decreasing growth in earnings. With this continued level

1 of elevated capital improvement offset by depreciation expense, the growth rate of
2 earnings starts at around 6.8% in the beginning of the growth period, declines to
3 around 5.3% after five years of growth, and further declines to around 4.2% after
4 10 years of elevated capital investment spending. Hence, while the company
5 maintains an elevated level of capital spending throughout the forecast period, the
6 earnings growth rate nevertheless declines from 6.8% at the beginning of the
7 spending period, down to 4.2% after 10 years of elevated capital spending. Again,
8 this occurs because the denominator in the growth equation increases as plant
9 investment is made and plant-in-service increases. As a result, elevated capital
10 expenditures have a lower growth impact on a larger capital base after years of
11 elevated capital spending relative to the beginning of the capital spending program.

TABLE 3

Growth in Plant In-Service and Earnings

<u>Year</u>	<u>Beginning of Year Plant-in- Service (1)</u>	<u>Capital Improvement (2)</u>	<u>Depreciation Expense (3)</u>	<u>End of Year Plant-in- Service (4)</u>	<u>Avg Year Plant (5)</u>	<u>ROE (6)</u>	<u>Earnings (7)</u>	<u>Annual Earnings Growth Rate (8)</u>
0	\$1,000,000	\$100,000	\$30,000	\$1,070,000	\$1,035,000	10.0%	\$103,500	
1	\$1,070,000	\$102,000	\$32,100	\$1,139,900	\$1,104,950	10.0%	\$110,495	<u>6.8%</u>
2	\$1,139,900	\$104,040	\$34,197	\$1,209,743	\$1,174,822	10.0%	\$117,482	6.3%
3	\$1,209,743	\$106,121	\$36,292	\$1,279,572	\$1,244,657	10.0%	\$124,466	5.9%
4	\$1,279,572	\$108,243	\$38,387	\$1,349,428	\$1,314,500	10.0%	\$131,450	5.6%
5	\$1,349,428	\$110,408	\$40,483	\$1,419,353	\$1,384,390	10.0%	\$138,439	<u>5.3%</u>
6	\$1,419,353	\$112,616	\$42,581	\$1,489,388	\$1,454,371	10.0%	\$145,437	5.1%
7	\$1,489,388	\$114,869	\$44,682	\$1,559,575	\$1,524,482	10.0%	\$152,448	4.8%
8	\$1,559,575	\$117,166	\$46,787	\$1,629,954	\$1,594,765	10.0%	\$159,476	4.6%
9	\$1,629,954	\$119,509	\$48,899	\$1,700,565	\$1,665,259	10.0%	\$166,526	4.4%
10	\$1,700,565	\$121,899	\$51,017	\$1,771,447	\$1,736,006	10.0%	\$173,601	<u>4.2%</u>

Notes:

Column 2: Escalation Rate 2.00%.

Column 3: Depr Rate 3.00%.

Column 4 = Column 1 plus Column 2 less Column 3.

Column 5 = (Column 1 + Column 4)/2.

Column 7 = Column 5 * Column 6.

Column 8 = Column 7 N ÷ Column 7 N-1 (N is the Year) less 1.

1 **Q** **IS THE USE OF A MULTI-STAGE DCF MODEL SUPPORTED IN ACADEMIC AND**
2 **INDUSTRY LITERATURE?**

3 **A** Yes. In his book *New Regulatory Finance*, Dr. Morin states the following:

4 Dividends need not be, and probably are not, constant from period to
5 period. Moreover, there are circumstances where the standard DCF
6 model cannot be used to assess investor return requirements. For
7 example, if a utility company is in the process of altering its dividend
8 payout policy and dividends are not expected to grow at the same rate
9 as earnings during the transition period, the standard DCF model is
10 inapplicable. This is because the expected growth in stock price has
11 to be different from that of dividends, earnings, and book value if the
12 market price is to converge toward book value.

* * *

1 A Non-Constant Growth DCF model is appropriate whenever the
2 growth rate is expected to change, and the only way to produce a
3 change in the forecast payout ratio is by introducing an intermediate
4 growth rate that is different from the long-term growth rate, as in the
5 previous example.¹¹

6 **Q PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.**

7 A The multi-stage growth DCF model reflects the possibility of non-constant growth for
8 a company over time. The multi-stage growth DCF model reflects three growth
9 periods: (1) a short-term growth period, which consists of the first five years; (2) a
10 transition period, which consists of the next five years (6 through 10); and (3) a
11 long-term growth period, starting in year 11 through perpetuity.

12 For the short-term growth period, I relied on the consensus analysts' growth
13 projections described above in relationship to my constant growth DCF model. For
14 the transition period, the growth rates were reduced or increased by an equal factor,
15 which reflects the difference between the analysts' growth rates and the United
16 States Gross Domestic Product ("U.S. GDP") growth rate. For the long-term growth
17 period, I assumed each company's growth would converge to the maximum
18 sustainable growth rate for a utility company as proxied by the consensus analysts'
19 projected growth for the U.S. GDP of 4.9%.

20 **Q WHY IS THE GDP GROWTH PROJECTION A REASONABLE PROXY FOR THE**
21 **MAXIMUM SUSTAINABLE GROWTH RATE FOR A UTILITY?**

22 A Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the
23 overall economy. Utilities' earnings/dividend growth is created by increased utility
24 investment or rate base. Such investment, in turn, is driven by service area economic

¹¹*New Regulatory Finance*, Roger A. Morin, PhD, 2006 Public Utilities Reports, Inc., Vienna, Virginia, pp. 264 and 267.

1 growth and demand for utility service. In other words, utilities invest in plant to meet
2 sales demand growth, and sales growth, in turn, is tied to economic growth in their
3 service areas. The Energy Information Administration (“EIA”) has observed that utility
4 sales growth is less than U.S. GDP growth, as shown in Schedule MPG-8. Utility
5 sales growth has lagged behind GDP growth for more than a decade. As a result,
6 nominal GDP growth is a very conservative, albeit overstated, proxy for electric utility
7 sales growth, rate base growth, and earnings growth. Therefore, GDP growth is a
8 conservative proxy for the highest sustainable long-term growth rate of a utility.

9 **Q IS THERE RESEARCH THAT SUPPORTS YOUR POSITION THAT, OVER THE**
10 **LONG TERM, A COMPANY’S EARNINGS AND DIVIDENDS CANNOT GROW AT**
11 **A RATE GREATER THAN THE GROWTH OF THE U.S. GDP?**

12 **A** Yes. This concept is supported in both published analyst literature and academic
13 work. Specifically, in a textbook entitled “Fundamentals of Financial Management,”
14 published by Eugene Brigham and Joel F. Houston, the authors state as follows:

15 The constant growth model is most appropriate for mature
16 companies with a stable history of growth and stable future
17 expectations. Expected growth rates vary somewhat among
18 companies, but dividends for mature firms are often expected
19 to grow in the future at about the same rate as nominal gross
20 domestic product (real GDP plus inflation).¹²

21 **Q HOW DID YOU DETERMINE A SUSTAINABLE LONG-TERM GROWTH RATE**
22 **THAT REFLECTS THE CONSENSUS OF THE MARKET?**

23 **A** I relied on the consensus analysts’ projections of long-term GDP growth. *The Blue*
24 *Chip Financial Forecasts* publishes consensus economists’ GDP growth projections
25 twice a year. These consensus analysts’ GDP growth outlooks are the best available

¹²“Fundamentals of Financial Management,” Eugene F. Brigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298.

1 measure of the market's assessment of long-term GDP growth. These analyst
2 projections reflect all current outlooks for GDP, as reflected in analyst projections, and
3 are likely the most influential on investors' expectations of future growth outlooks.
4 The consensus economists' published GDP growth rate outlook is 5.1% to 4.7% over
5 the next 10 years.¹³

6 Therefore, I propose to use the consensus economists' projected 5- and 10-
7 year average GDP consensus growth rate of 4.9%, as published by *Blue Chip*
8 *Financial Forecasts*, as an estimate of long-term sustainable growth. *Blue Chip*
9 *Financial Forecasts'* projections provide real GDP growth projections of 2.8% and
10 2.5%, and GDP inflation of 2.2% and 2.1%¹⁴ over the 5-year and 10-year projection
11 periods, respectively. This consensus GDP growth forecast represents the most
12 likely views of market participants because it is based on published consensus
13 economist projections.

14 **Q DO YOU CONSIDER OTHER SOURCES OF PROJECTED LONG-TERM GDP**
15 **GROWTH?**

16 A Yes, and these sources corroborate my consensus analysts' projections. The U.S.
17 EIA in its Annual Energy Outlook projects real GDP out until 2035. In its 2011 Annual
18 Report, the EIA projects real GDP through 2035 to be in the range of 2.1% to 3.2%,
19 with a midpoint or reference case of 2.7%.¹⁵

20 Also, the Congressional Budget Office ("CBO") makes long-term economic
21 projections. The CBO is projecting real GDP growth of 3.3% to 2.4% during the next

¹³ *Blue Chip Financial Forecasts*, June 1, 2012 at 14.

¹⁴ GDP growth is the product of real and inflation GDP growth.

¹⁵ *DOE/EIA Annual Energy Outlook 2011 With Projections to 2035*, April 2011 at 58.

1 five and 10 years, respectively, with GDP price inflation of 1.9% to 2.0%.¹⁶ The
2 CBO's real GDP projections are higher than the consensus but its GDP inflation is
3 lower than the consensus economists.

4 The real GDP and nominal GDP growth projections made by the U.S. EIA and
5 those made by the CBO support the use of the consensus analyst 5-year and 10-year
6 projected GDP growth outlooks as a reasonable market assessment of long-term
7 prospective GDP growth.

8 **Q WHAT STOCK PRICE, DIVIDEND, AND GROWTH RATES DID YOU USE IN YOUR**
9 **MULTI-STAGE GROWTH DCF ANALYSIS?**

10 A I relied on the same 13-week stock price and the most recent quarterly dividend
11 payment data discussed above. For stage one growth, I used the consensus
12 analysts' growth rate projections discussed above in my constant growth DCF model.
13 The transition period begins in year 6 and ends in year 10. For the long-term
14 sustainable growth rate starting in year 11, I used 4.9%, the average of the
15 consensus economists' 5-year and 10-year projected nominal GDP growth rates.

16 **Q WHAT ARE THE RESULTS OF YOUR MULTI-STAGE GROWTH DCF MODEL?**

17 A As shown in Schedule MPG-9, the average and median DCF returns on equity for my
18 proxy group are 9.38% and 9.70%, respectively. Again, for consistency I will rely on
19 the median DCF result.

20 **Q PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.**

21 A The results from my DCF analyses are summarized in Table 4 below:

¹⁶CBO: *The Budget and Economic Outlook: Fiscal Years 2012 to 2022*, January 2012.

<p style="text-align: center;">TABLE 4</p> <p style="text-align: center;"><u>Summary of DCF Results</u></p>	
<u>Description</u>	<u>Estimates</u>
Constant Growth DCF Model (Analysts' Growth)	9.30%
Constant Growth DCF Model (Sustainable Growth)	8.63%
Multi-Stage Growth DCF Model	<u>9.40%</u>
Average	9.11%

1 I conservatively conclude that a DCF return for Ameren Missouri in this case is
2 9.40%.

3 **Risk Premium Model**

4 **Q PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.**

5 A This model is based on the principle that investors require a higher return to assume
6 greater risk. Common equity investments have greater risk than bonds because
7 bonds have more security of payment in bankruptcy proceedings than common equity
8 and the coupon payments on bonds represent contractual obligations. In contrast,
9 companies are not required to pay dividends or guarantee returns on common equity
10 investments. Therefore, common equity securities are considered to be more risky
11 than bond securities.

12 This risk premium model is based on two estimates of an equity risk premium.
13 First, I estimated the difference between the required return on utility common equity
14 investments and U.S. Treasury bonds. The difference between the required return on
15 common equity and the Treasury bond yield is the risk premium. I estimated the risk
16 premium on an annual basis for each year over the period 1986 through 2011. The
17 common equity required returns were based on regulatory commission-authorized

1 returns for electric utility companies. Authorized returns are typically based on expert
2 witnesses' estimates of the contemporary investor-required return.

3 The second equity risk premium estimate is based on the difference between
4 regulatory commission-authorized returns on common equity and contemporary
5 "A" rated utility bond yields. I selected the period 1986 through 2011 because public
6 utility stocks consistently traded at a premium to book value during that period. This
7 is illustrated in Schedule MPG-10, which shows that the market to book ratio since
8 1986 for the electric utility industry was consistently above 1.0. Over this period,
9 regulatory authorized returns were sufficient to support market prices that at least
10 exceeded book value. This is an indication that regulatory authorized returns on
11 common equity supported a utility's ability to issue additional common stock without
12 diluting existing shares. It further demonstrates that utilities were able to access
13 equity markets without a detrimental impact on current shareholders.

14 Based on this analysis, as shown in Schedule MPG-11, the average indicated
15 equity risk premium over U.S. Treasury bond yields has been 5.23%. Of the 26
16 observations, 20 indicated risk premiums fall in the range of 4.41% to 6.13%. Since
17 the risk premium can vary depending upon market conditions and changing investor
18 risk perceptions, I believe using an estimated range of risk premiums provides the
19 best method to measure the current return on common equity using this
20 methodology.

21 As shown in Schedule MPG-12, the average indicated equity risk premium
22 over contemporary Moody's utility bond yields was 3.81% over the period 1986
23 through 2011. The indicated equity risk premium estimates based on this analysis
24 primarily fall in the range of 3.03% to 4.62% over this time period.

1 **Q DO YOU BELIEVE THAT THESE EQUITY RISK PREMIUM ESTIMATES ARE**
2 **BASED ON A TIME PERIOD THAT IS TOO LONG OR TOO SHORT TO DRAW**
3 **ACCURATE RESULTS CONCERNING CONTEMPORARY MARKET**
4 **CONDITIONS?**

5 **A** No. Contemporary market conditions can change dramatically during the period that
6 rates determined in this proceeding will be in effect. A relatively long period of time
7 where stock valuations reflect premiums to book value is an indication that the
8 authorized returns on equity and the corresponding equity risk premiums were
9 supportive of investors' return expectations and provided utilities access to the equity
10 markets under reasonable terms and conditions. Further, this time period is long
11 enough to smooth abnormal market movement that might distort equity risk
12 premiums. While market conditions and risk premiums do vary over time, this
13 historical time period is a reasonable period to estimate contemporary risk premiums.

14 The time period I use in this risk premium study is a generally accepted period
15 to develop a risk premium study using "expectational" data. Conversely, studies have
16 recommended that use of "actual achieved return data" should be based on very long
17 historical time periods. The studies find that achieved returns over short time periods
18 may not reflect investors' expected returns due to unexpected and abnormal stock
19 price performance. However, these short-term abnormal actual returns would be
20 smoothed over time and the achieved actual returns over long time periods would
21 approximate investors' expected returns. Therefore, it is reasonable to assume that
22 averages of annual achieved returns over long time periods will generally converge
23 on the investors' expected returns.

24 My risk premium study is based on expectational data, not actual returns, and,
25 thus, need not encompass very long time periods.

1 **Q BASED ON HISTORICAL DATA, WHAT RISK PREMIUM HAVE YOU USED TO**
2 **ESTIMATE AMEREN MISSOURI'S COST OF COMMON EQUITY IN THIS**
3 **PROCEEDING?**

4 **A The equity risk premium should reflect the relative market perception of risk in the**
5 **utility industry today. I have gauged investor perceptions in utility risk today in**
6 **Schedule MPG-13. On that schedule, I show the yield spread between utility bonds**
7 **and Treasury bonds over the last 32 years. As shown in this schedule, the 2008**
8 **utility bond yield spreads over Treasury bonds for "A" rated and "Baa" rated utility**
9 **bonds are 2.25% and 2.97%, respectively. The utility bond yield spreads over**
10 **Treasury bonds for "A" and "Baa" rated utility bonds for 2009 are 1.97% and 2.99%,**
11 **respectively. In 2010, these spreads declined to 1.21% and 1.71%, respectively. In**
12 **2011, they declined further to 1.13% and 1.65%, respectively. These utility bond**
13 **yield spreads over Treasury bond yields are now lower than the 32-year average**
14 **spreads of 1.58% and 1.98%, respectively.**

15 A current 13-week average "A" rated utility bond yield of 4.27%, when
16 compared to the current Treasury bond yield of 3.00% as shown in Schedule
17 MPG-14, page 1 implies a yield spread of around 1.27%. This current utility bond
18 yield spread is lower than the 32-year average spread for "A" utility bonds of 1.58%.
19 The current spread for the "Baa" utility yields of 2.01% is slightly higher than, although
20 comparable to, the 32-year average spread of 1.98%.

21 These utility bond yield spreads are clear evidence that the market considers
22 the utility industry to be a relatively low risk investment and demonstrates that utilities
23 continue to have strong access to capital.

1 **Q HOW DID YOU ESTIMATE AMEREN MISSOURI'S COST OF COMMON EQUITY**
2 **WITH THIS RISK PREMIUM MODEL?**

3 A I added a projected long-term Treasury bond yield to my estimated equity risk
4 premium over Treasury yields. The 13-week average 30-year Treasury bond yield,
5 ending June 15, 2012 was 3.00%, as shown in Schedule MPG-14, page 1. *Blue Chip*
6 *Financial Forecasts* projects the 30-year Treasury bond yield to be 3.70%, and a
7 10-year Treasury bond yield to be 2.70%.¹⁷ Using the projected 30-year bond yield of
8 3.70%, and a Treasury bond risk premium of 4.41% to 6.13%, as developed above,
9 produces an estimated common equity return in the range of 8.11% (3.70% + 4.41%)
10 to 9.83% (3.70% + 6.13%). I recommend an equity risk premium of 9.26%, rounded
11 to 9.30%. This estimate is based on giving two-thirds weight to my high-end risk
12 premium estimate of 9.83%, and one-third weight to my low-end risk premium
13 estimate of 8.11%. I believe this weighting is appropriate given the unusually large
14 yield spreads between Treasury bond and "Baa" utility bond yields.

15 I next added my equity risk premium over utility bond yields to a current
16 13-week average yield on "Baa" rated utility bonds for the period ending June 15,
17 2012 of 5.01%. Adding the utility equity risk premium of 3.03% to 4.62%, as
18 developed above, to a "Baa" rated bond yield of 5.01%, produces a cost of equity in
19 the range of 8.04% (5.01% + 3.03%) to 9.63% (5.01% + 4.62%). Again, recognizing
20 the unusually low Treasury yield and wide Treasury to utility bond yield spreads, I
21 recommend a risk premium of 9.10%.

22 My risk premium analyses produce a return estimate in the range of 9.10% to
23 9.30%, with a midpoint estimate of 9.20%.

¹⁷ *Blue Chip Financial Forecasts*, June 1, 2012 at 2.

Capital Asset Pricing Model ("CAPM")

Q PLEASE DESCRIBE THE CAPM.

A The CAPM method of analysis is based upon the theory that the market-required rate of return for a security is equal to the risk-free rate, plus a risk premium associated with the specific security. This relationship between risk and return can be expressed mathematically as follows:

$$R_i = R_f + B_i \times (R_m - R_f) \text{ where:}$$

R_i = Required return for stock i

R_f = Risk-free rate

R_m = Expected return for the market portfolio

B_i = Beta - Measure of the risk for stock

The stock-specific risk term in the above equation is beta. Beta represents the investment risk that cannot be diversified away when the security is held in a diversified portfolio. When stocks are held in a diversified portfolio, firm-specific risks can be eliminated by balancing the portfolio with securities that react in the opposite direction to firm-specific risk factors (e.g., business cycle, competition, product mix, and production limitations).

The risks that cannot be eliminated when held in a diversified portfolio are non-diversifiable risks. Non-diversifiable risks are related to the market in general and are referred to as systematic risks. Risks that can be eliminated by diversification are regarded as non-systematic risks. In a broad sense, systematic risks are market risks, and non-systematic risks are business risks. The CAPM theory suggests that the market will not compensate investors for assuming risks that can be diversified away. Therefore, the only risk that investors will be compensated for are systematic or non-diversifiable risks. The beta is a measure of the systematic or non-diversifiable risks.

1 **Q PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.**

2 A The CAPM requires an estimate of the market risk-free rate, the company's beta, and
3 the market risk premium.

4 **Q WHAT DID YOU USE AS AN ESTIMATE OF THE MARKET RISK-FREE RATE?**

5 A As previously noted, *Blue Chip Financial Forecasts'* projected 30-year Treasury bond
6 yield is 3.70%.¹⁸ The current 30-year Treasury bond yield is 3.00%. I used *Blue Chip*
7 *Financial Forecasts'* projected 30-year Treasury bond yield of 3.70% for my CAPM
8 analysis.

9 **Q WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN ESTIMATE**
10 **OF THE RISK-FREE RATE?**

11 A Treasury securities are backed by the full faith and credit of the United States
12 government, so long-term Treasury bonds are considered to have negligible credit
13 risk. Also, long-term Treasury bonds have an investment horizon similar to that of
14 common stock. As a result, investor-anticipated long-run inflation expectations are
15 reflected in both common-stock required returns and long-term bond yields.
16 Therefore, the nominal risk-free rate (or expected inflation rate and real risk-free rate)
17 included in a long-term bond yield is a reasonable estimate of the nominal risk-free
18 rate included in common stock returns.

19 Treasury bond yields, however, do include risk premiums related to
20 unanticipated future inflation and interest rates. A Treasury bond yield is not a
21 risk-free rate. Risk premiums related to unanticipated inflation and interest rates are
22 systematic or market risks. Consequently, for companies with betas less than 1.0,

¹⁸*Blue Chip Financial Forecasts*, June 1, 2012 at 2.

1 using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis
2 can produce an overstated estimate of the CAPM return.

3 **Q WHAT BETA DID YOU USE IN YOUR ANALYSIS?**

4 A As shown in Schedule MPG-15, the proxy group average *Value Line* beta estimate is
5 0.75.

6 **Q HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?**

7 A I derived two market risk premium estimates, a forward-looking estimate and one
8 based on a long-term historical average.

9 The forward-looking estimate was derived by estimating the expected return
10 on the market (as represented by the S&P 500) and subtracting the risk-free rate from
11 this estimate. I estimated the expected return on the S&P 500 by adding an expected
12 inflation rate to the long-term historical arithmetic average real return on the market.
13 The real return on the market represents the achieved return above the rate of
14 inflation.

15 Morningstar's *Stocks, Bonds, Bills and Inflation 2012 Classic Yearbook*
16 publication estimates the historical arithmetic average real market return over the
17 period 1926 to 2011 as 8.6%.¹⁹ A current consensus analysts' inflation projection, as
18 measured by the Consumer Price Index, is 2.4%.²⁰ Using these estimates, the
19 expected market return is 11.21%.²¹ The market risk premium then is the difference
20 between the 11.21% expected market return, and my 3.70% risk-free rate estimate,
21 or approximately 7.50%.

¹⁹ *Morningstar, Inc. Ibbotson SBBI 2012 Classic Yearbook* at 84.

²⁰ *Blue Chip Financial Forecasts*, June 1, 2012 at 2.

²¹ $\{ [(1 + 0.086) * (1 + 0.024)] - 1 \} * 100$.

1 The historical estimate of the market risk premium was also estimated by
2 Morningstar in *Stocks, Bonds, Bills and Inflation 2012 Classic Yearbook*. Over the
3 period 1926 through 2011, Morningstar's study estimated that the arithmetic average
4 of the achieved total return on the S&P 500 was 11.8%,²² and the total return on
5 long-term Treasury bonds was 6.1%.²³ The indicated market risk premium is 5.7%
6 (11.8% - 6.1% = 5.7%). The average of my market risk premium estimates is 6.60%
7 (7.50% to 5.70%).

8 **Q HOW DOES YOUR ESTIMATED MARKET RISK PREMIUM RANGE COMPARE TO**
9 **THAT ESTIMATED BY MORNINGSTAR?**

10 A Morningstar's analysis indicates that a market risk premium falls somewhere in the
11 range of 5.9% to 6.6%. My market risk premium falls in the range of 5.7% to 7.5%.
12 My average market risk premium of 6.6% is at the high end of Morningstar's range.

13 Morningstar estimates a forward-looking market risk premium based on actual
14 achieved data from the historical period of 1926 through 2011. Using this data,
15 Morningstar estimates a market risk premium derived from the total return on large
16 company stocks (S&P 500), less the income return on Treasury bonds. The total
17 return includes capital appreciation, dividend or coupon reinvestment returns, and
18 annual yields received from coupons and/or dividend payments. The income return,
19 in contrast, only reflects the income return received from dividend payments or
20 coupon yields. Morningstar argues that the income return is the only true risk-free
21 rate associated with Treasury bonds and is the best approximation of a truly risk-free
22 rate. I disagree with this assessment from Morningstar, because it does not reflect a
23 true investment option available to the marketplace and therefore does not produce a

²² Morningstar, Inc. *Ibbotson SBBI 2012 Classic Yearbook* at 83.

²³ *Id.*

1 legitimate estimate of the expected premium of investing in the stock market versus
2 that of Treasury bonds. Nevertheless, I will use Morningstar's conclusion to show the
3 reasonableness of my market risk premium estimates.

4 Morningstar's range is based on several methodologies. First, Morningstar
5 estimates a market risk premium of 6.6% based on the difference between the total
6 market return on common stocks (S&P 500) less the income return on Treasury bond
7 investments. Second, Morningstar found that if the New York Stock Exchange (the
8 "NYSE") was used as the market index rather than the S&P 500, that the market risk
9 premium would be 6.4%, not 6.6%. Third, if only the two deciles of the largest
10 companies included in the NYSE were considered, the market risk premium would be
11 5.9%.²⁴

12 Finally, Morningstar found that the 6.6% market risk premium based on the
13 S&P 500 was influenced by an abnormal expansion of price-to-earnings ("P/E") ratios
14 relative to earnings and dividend growth during the period 1980 through 2001.
15 Morningstar believes this abnormal P/E expansion is not sustainable. Therefore,
16 Morningstar adjusted this market risk premium estimate to normalize the growth in the
17 P/E ratio to be more in line with the growth in dividends and earnings. Based on this
18 alternative methodology, Morningstar published a long-horizon supply-side market
19 risk premium of 6.1%.²⁵

²⁴Morningstar observes that the S&P 500 and the NYSE Decile 1-2 are both large capitalization benchmarks. *Morningstar, Inc. Ibbotson SBI 2012 Valuation Yearbook* at 54.

²⁵*Id.* at 66.

Q WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

A As shown in Schedule MPG-16, based on my and Morningstar's high-end market risk premium of 6.6%, a risk-free rate of 3.7%, and a beta of 0.75, my CAPM analysis produces a return of 8.65% (rounded to 8.70%).

Return on Equity Summary

Q BASED ON THE RESULTS OF YOUR RETURN ON COMMON EQUITY ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO YOU RECOMMEND FOR AMEREN MISSOURI?

A Based on my analyses, I estimate Ameren Missouri's current market cost of equity to be 9.30%.

TABLE 5	
<u>Return on Common Equity Summary</u>	
<u>Description</u>	<u>Results</u>
DCF	9.40%
Risk Premium	9.20%
CAPM	8.70%

My recommended return on common equity of 9.30% is at the midpoint of my recommended range of 9.20% to 9.40% that is based on my DCF and Risk Premium results.

1 **Financial Integrity**

2 **Q WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT AN**
3 **INVESTMENT GRADE BOND RATING FOR AMEREN MISSOURI?**

4 A Yes. I have reached this conclusion by comparing the key credit rating financial
5 ratios for Ameren Missouri's retail cost of service in this case, adjusted for my
6 proposed return on equity and the Company's proposed capital structure, to S&P's
7 benchmark financial ratios using S&P's new credit metric ranges.

8 **Q PLEASE DESCRIBE THE MOST RECENT S&P FINANCIAL RATIO CREDIT**
9 **METRIC METHODOLOGY.**

10 A S&P publishes a matrix of financial ratios that correspond to its assessment of the
11 business risk of the utility company and related bond rating. On May 27, 2009, S&P
12 expanded its matrix criteria²⁶ by including additional business and financial risk
13 categories. Based on S&P's most recent credit matrix, the business risk profile
14 categories are "Excellent," "Strong," "Satisfactory," "Fair," "Weak," and "Vulnerable."
15 Most electric utilities have a business risk profile of "Excellent" or "Strong." The
16 financial risk profile categories are "Minimal," "Modest," "Intermediate," "Significant,"
17 "Aggressive," and "Highly Leveraged." Most of the electric utilities have a financial
18 risk profile of "Aggressive." Ameren Missouri has an "Excellent" business risk profile
19 and a "Significant" financial risk profile.

²⁶S&P updated its original 2007 credit metric guidelines in 2009, and incorporated utility metric benchmarks with the general corporate rating metrics. *Standard & Poor's*: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

1 **Q PLEASE DESCRIBE S&P’S USE OF THE FINANCIAL BENCHMARK RATIOS IN**
2 **ITS CREDIT RATING REVIEW.**

3 A S&P evaluates a utility’s credit rating based on an assessment of its financial and
4 business risks. A combination of financial and business risks equates to the overall
5 assessment of Ameren Missouri’s total credit risk exposure. S&P publishes a matrix
6 of financial ratios that defines the level of financial risk as a function of the level of
7 business risk.

8 S&P publishes ranges for three primary financial ratios that it uses as
9 guidance in its credit review for utility companies. The three primary financial ratio
10 benchmarks it relies on in its credit rating process include: (1) Total Debt to Total
11 Capital; (2) Debt to Earnings Before Interest, Taxes, Depreciation and Amortization
12 (“EBITDA”); and (3) Funds From Operations (“FFO”) to Total Debt.

13 **Q HOW DID YOU APPLY S&P’S FINANCIAL RATIOS TO TEST THE**
14 **REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS?**

15 A I calculated each of S&P’s financial ratios based on Ameren Missouri’s cost of service
16 for its Missouri jurisdictional electric operations. While S&P would normally look at
17 total consolidated Ameren Missouri financial ratios in its credit review process, my
18 investigation in this proceeding is not the same as S&P’s. I am attempting to judge
19 the reasonableness of my proposed cost of capital for rate-setting in Ameren
20 Missouri’s regulated utility operations. Hence, I am attempting to determine whether
21 my proposed rate of return will in turn support cash flow metrics, balance sheet
22 strength, and earnings that will support an investment grade bond rating and Ameren
23 Missouri’s financial integrity.

1 **Q DID YOU INCLUDE ANY OFF-BALANCE SHEET DEBT (“OBSD”)?**

2 A Yes. As shown in Schedule MPG-17, S&P estimated off-balance sheet debt
3 equivalents of \$95.6 million attributed to Ameren Missouri’s operating leases. S&P
4 includes other off-balance sheet debt adjustments which I did not include in my
5 analysis. Post-retirement benefits, and accrued interest not reported on the
6 Company’s debt and asset retirement obligations, were not included in my analysis.
7 Each of these factors are either reflected in Ameren Missouri’s cost of service, or I
8 could not find evidence that they relate to regulated utility operations. As such, I did
9 not include them in the metrics to judge the reasonableness of my rate of return for
10 retail operations in Missouri in this proceeding.

11 **Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS FOR**
12 **AMEREN MISSOURI.**

13 A The S&P financial metric calculations for Ameren Missouri at a 9.30% return are
14 developed on Schedule MPG-17, page 1.

15 Ameren Missouri’s adjusted total debt ratio is approximately 47%. This is
16 within the “Significant” utility guideline range of 45% to 50%. This total debt ratio will
17 support an investment grade bond rating.

18 As shown on Schedule MPG-17, page 1, column 1, based on an equity return
19 of 9.30%, Ameren Missouri will be provided an opportunity to produce a debt to
20 EBITDA ratio of 2.7x. This is within S&P’s “Intermediate” guideline range of 2.0x to
21 3.0x²⁷ and stronger than the “Significant” range of 3.0x to 4.0x. This ratio also
22 supports an investment grade credit rating.

²⁷Standard & Poor’s RatingsDirect. “Criteria Methodology: Business Risk/Financial Risk Matrix Expanded,” May 27, 2009 at 4.

1 Finally, Ameren Missouri's retail operations FFO to total debt coverage at a
2 9.30% equity return would be 25%, which is within the "Significant" metric guideline
3 range of 20% to 30%. The FFO/total debt ratio will support an investment grade bond
4 rating.

5 At my recommended return on equity of 9.30% and the Company's proposed
6 capital structure, Ameren Missouri's financial credit metrics are supportive of an
7 investment grade bond rating.

8 **RESPONSE TO AMEREN MISSOURI WITNESS MR. ROBERT HEVERT**

9 **Q WHAT RETURN ON COMMON EQUITY IS AMEREN MISSOURI PROPOSING FOR**
10 **THIS PROCEEDING?**

11 A Ameren Missouri is proposing to set rates based on a return on equity of 10.75%²⁸ for
12 its retail operations. Mr. Hevert is sponsoring Ameren Missouri's return on equity
13 recommendation. Mr. Hevert relied on constant and multi-stage growth DCF
14 analyses, CAPM studies, and a Bond Yield Plus Risk Premium approach to support
15 his recommended return for Ameren Missouri.

16 **Q ARE MR. HEVERT'S RETURN ON EQUITY ESTIMATES REASONABLE?**

17 A No. Mr. Hevert's estimated costs ranging from 10.50% to 11.00% are overstated and
18 should be disregarded. Mr. Hevert's analyses produce excessive results for various
19 reasons: (1) his constant and multi-stage growth DCF results are based on
20 excessive, unsustainable growth rates, (2) his multi-stage growth DCF model does
21 not appropriately reflect the timing of the dividend payments and includes an
22 unreasonable transition stage dividend growth rate created by the imbalance

²⁸Hevert Direct at 2-3.

1 assumption that dividend payout ratios will increase to historical levels while earning
2 growth exceeds historical levels, (3) his CAPM is based on inflated market risk
3 premiums and beta estimates, and (4) his Bond Yield Plus Risk Premium is based on
4 inflated utility equity risk premiums.

5 **Q PLEASE SUMMARIZE AMEREN MISSOURI WITNESS MR. HEVERT'S RETURN**
6 **ON EQUITY ESTIMATES.**

7 A Mr. Hevert's return on equity estimates are summarized below in Table 6. In
8 Column 2, I show the results with prudent and sound adjustments to Mr. Hevert's
9 common equity return estimates. With reasonable adjustments to his proxy group's
10 DCF, CAPM and Risk Premium return estimates, Mr. Hevert's own studies show my
11 recommended return on equity (as described above) is reasonable for Ameren
12 Missouri.

TABLE 6

Hevert's Return on Equity Estimates

<u>Description</u>	<u>Mean¹</u> <u>(1)</u>	<u>Adjusted²</u> <u>(2)</u>
<u>Constant Growth DCF</u>		
30-Day Average Stock Price	10.12%	10.12%
90-Day Average Stock Price	10.24%	10.24%
180-Day Average Stock Price	<u>10.26%</u>	<u>10.26%</u>
Average	10.21%	10.21%
<u>Multi-Stage Growth DCF</u>		
30-Day Average Stock Price	10.64%	9.40%
90-Day Average Stock Price	10.76%	9.47%
180-Day Average Stock Price	<u>10.81%</u>	<u>9.51%</u>
Average	10.74%	9.46%
<u>CAPM Results (Bloomberg Beta)</u>		
Current Treasury Yield (Sharpe Ratio – 2.97%)	10.87%	8.09%
Current Treasury Yield (Market DCF – 2.97%)	10.68%	8.09%
Proj Treasury Yield (Sharpe Ratio – 3.43%)	11.33%	8.55%
Proj Treasury Yield (Market DCF – 3.43%)	<u>11.14%</u>	<u>8.55%</u>
Average	11.00%	8.32%
<u>CAPM Results (Value Line Beta)</u>		
Current Treasury Yield (Sharpe Ratio – 2.97%)	10.56%	7.89%
Current Treasury Yield (Market DCF – 2.97%)	10.38%	7.89%
Proj Treasury Yield (Sharpe Ratio – 3.43%)	11.02%	8.35%
Proj Treasury Yield (Market DCF – 3.43%)	<u>10.84%</u>	<u>8.35%</u>
Average	10.70%	8.12%
<u>Risk Premium</u>	10.37%	9.64%
Range	10.50%-11.00%	8.12%-10.21%
Recommended/Midpoint ROE	10.75%	9.20%

Sources:

¹Hevert Direct Testimony at 48-49.²Schedule MPG-19.

1 **Q PLEASE DESCRIBE MR. HEVERT'S CONSTANT GROWTH DCF RETURN**
2 **ESTIMATES.**

3 A His constant growth DCF returns are developed in his Schedule RBH-E1, pages 1-3.
4 Mr. Hevert's constant growth DCF model results are overstated because they are
5 based on unsustainably high short-term (five-year) growth rate estimates.

6 The short-term growth rates upon which Mr. Hevert relied overstate
7 reasonable estimates of long-term sustainable growth rates for regulated utility
8 operations. By relying on growth rates that overstate sustainable long-term growth
9 rate outlooks, Mr. Hevert's constant growth DCF estimates are inflated and
10 unreasonable.

11 **Q DID MR. HEVERT SHOW THE GROWTH RATES USED TO PRODUCE HIS LOW,**
12 **MEAN AND HIGH DCF RETURN ESTIMATES?**

13 A He did, however they were comingled within his data included on his schedule. To
14 make his DCF calculations more transparent, I have separated his growth rate
15 estimates, dividend yields and corresponding DCF return estimates on my Schedule
16 MPG-18.

17 As shown on that schedule, his DCF return estimates for his proxy group are
18 based on a range of growth rate estimates from a low of 4.38%, to a mean growth
19 rate estimate of 5.71% (which he did show on his schedule), and a high DCF growth
20 rate of 7.10%. These growth rate estimates were used in all of his constant growth
21 DCF study 30-, 90- and 180-day average stock prices.

1 **Q WHY DO YOU BELIEVE THAT MR. HEVERT'S MEDIAN AND HIGH-END**
2 **GROWTH RATE ESTIMATES OF 5.71% AND 7.10%, RESPECTIVELY, ARE FAR**
3 **TOO HIGH TO BE REASONABLE ESTIMATES OF LONG-TERM SUSTAINABLE**
4 **GROWTH?**

5 **A** These growth rates cannot be sustained indefinitely for various reasons. First, the
6 consensus of economists is that GDP growth of the U.S. general economy, which is a
7 proxy for the growth rate of the economies in which these utilities operate, is between
8 4.7% and 5.1% indefinitely.²⁹ Hence, the growth rates of 5.71% and 7.10% are
9 substantially higher than the growth outlooks of the economies in which these utilities
10 operate. It is simply not rational to expect that these companies can grow faster than
11 the economies in which they provide service, because utilities provide service to meet
12 the demand of the economies they serve.

13 Second, growth rates in the range of 5.71% and 7.10% could not be sustained
14 by the current earnings retention rate of utility companies. Indeed, Mr. Hevert
15 projects that the long-term payout ratio for the utility industry will be about 66.42%
16 (Schedule RBH-E2). In order to sustain growth rates of 5.71% and 7.10%, utilities
17 would have to achieve returns on book equity of 17.00% and 21.14%, respectively,
18 indefinitely.³⁰ Hence, it is simply not a rational outlook to expect that utilities will be
19 able to produce earnings that could sustain this level of growth indefinitely.

20 **Q CAN YOU DESCRIBE AGAIN WHY A THREE- TO FIVE-YEAR GROWTH RATE**
21 **CAN EXCEED A LONG-TERM SUSTAINABLE GROWTH RATE?**

22 **A** Yes. A three- to five-year growth rate can exceed a long-term sustainable growth
23 rate for several reasons including: (1) the utility's capital program and rate base are

²⁹ *Blue Chip Financial Forecasts*, June 1, 2012, page 14.

³⁰ $5.71\% \div (1 - 66.42\%) = 17.00\%$ and $7.10\% \div (1 - 66.42\%) = 21.14\%$.

1 growing at an abnormally high level; (2) a company's growth in earnings is above a
2 depressed level of earnings; and/or (3) altering dividend payout ratio targets can
3 create temporary acceleration or decline to short-term growth.

4 As discussed above, while short-term accelerated earnings growth rates may
5 be a reasonable expectation for relatively short periods of time, it is not reasonable to
6 expect that accelerated short-term growth can be sustained indefinitely. That is the
7 flaw of Mr. Hevert's DCF studies. He is deriving DCF estimates based on
8 accelerated short-term growth rates that he assumes can be sustained over an
9 indefinite period of time. This is simply not a rational outlook, and produces an
10 excessive DCF return estimate.

11 **Q CAN MR. HEVERT'S DCF ANALYSES BE REVISED TO REFLECT A**
12 **REASONABLE LONG-TERM SUSTAINABLE GROWTH RATE?**

13 **A** Yes. Mr. Hevert's DCF studies can be revised to reflect the short-term growth rate
14 estimates that will be realized over the period they were designed to reflect, five
15 years, and the growth rate after that would eventually converge down to a lower
16 sustainable long-term rate of growth. This can be accomplished by creation of a
17 multi-stage growth DCF analysis. Multi-stage growth can reflect abnormally high
18 short-term growth, followed by a decline to a lower growth rate that can be sustained
19 over a long-term period.

20 **Q DID MR. HEVERT PERFORM A MULTI-STAGE GROWTH DCF ANALYSIS?**

21 **A** Yes, he did, however, it is flawed for at least three reasons. First, he relied on a
22 long-term GDP growth rate of 5.61% as a long-term sustainable growth. Mr. Hevert's
23 GDP growth rate is based on a nominal GDP growth rate that is considerably higher

1 than the market GDP growth outlooks as reflected in the consensus analysts'
2 projections. Second, Mr. Hevert's multi-stage DCF study is flawed because he
3 reflects four quarters of dividend payments in the first two quarters after the stock is
4 purchased. This misstatement of dividend receipts overstates the DCF return
5 estimate. Finally, he makes an inconsistent assumption on his long-term steady-state
6 growth rate, in combination with his long-term steady-state dividend payout ratio. The
7 assumptions underlying these two growth outlooks are contradictory and produce an
8 implausible transitional stage dividend growth rate outlook.

9 **Q HOW DID MR. HEVERT CALCULATE A NOMINAL GDP GROWTH RATE?**

10 A As discussed at pages 28 and 29 of his direct testimony, Mr. Hevert relied on the
11 long-term historical real GDP return of 3.26%, as measured over the period 1929
12 through 2010. He then adjusted this to a nominal GDP growth by an inflation rate of
13 2.28%, which is the average of three sources.³¹ Using an inflation factor of 2.28%
14 and an historical real GDP growth of 3.26%, Mr. Hevert produced a nominal GDP
15 growth rate outlook of 5.61%.

16 **Q WHY IS MR. HEVERT'S GDP GROWTH ESTIMATE EXCESSIVE IN COMPARISON**
17 **TO THAT OF PUBLISHED MARKET ANALYSTS?**

18 A The consensus economists' projected GDP growth rate is much lower than the GDP
19 growth rate used by Mr. Hevert in his DCF analysis. A comparison of Mr. Hevert's
20 GDP growth rate and consensus economists' projected GDP growth over the next 5
21 and 10 years is shown in Table 7. As shown in this table, Mr. Hevert's GDP rate of

³¹(1) The spread between Treasury securities and TIPS (2.29%); (2) Zero-Coupon Inflation Index Swaps (2.56%), and (3) Average of EIA projections for the CPI (2.07%) and GDP Price Index (1.87%).

5.61% reflects real GDP of 3.26% and an inflation adjusted GDP of 2.3%. However, consensus economists' projections of nominal GDP over the next 5 and 10 years are 5.1% and 4.7%, respectively.³²

As is clearly evident in Table 7, Mr. Hevert's historical GDP growth is much higher than, and not representative of, consensus market expected forward-looking GDP growth.

TABLE 7			
<u>GDP Projections</u>			
<u>Description</u>	<u>GDP Inflation</u>	<u>Real GDP</u>	<u>Nominal GDP</u>
Mr. Hevert	2.3%	3.3%	5.61%
Consensus Economists (5-Year)	2.2%	2.8%	5.10%
Consensus Economists (10-Year)	2.1%	2.5%	4.70%
Source: <i>Blue Chip Financial Forecasts</i> , June 1 2012 at 14.			

As such, Mr. Hevert's 5.61% nominal GDP growth rate is not reflective of consensus market expectations and should be rejected. Indeed, Mr. Hevert's 5.61% GDP growth rate outlook is inconsistent with the consensus of economists' independent projections of future long-term GDP growth, and also inconsistent with projections made by the U.S. EIA, and CBO as referenced in my testimony above where I describe the parameters used in my own multi-stage growth DCF analyses. Those agencies also project nominal GDP much more consistent with the consensus independent economists' projections discussed in Table 7 above. For all these reasons, Mr. Hevert's GDP growth outlook rate projections are simply out of line and out of touch with the consensus market outlooks.

³²*Blue Chip Financial Forecasts*, June 1 2012 at 14.

1 **Q PLEASE DESCRIBE HOW MR. HEVERT MISSTATED THE DIVIDEND CASH**
2 **FLOWS IN HIS MULTI-STAGE GROWTH DCF MODEL.**

3 A Mr. Hevert has critically misspecified the timing of the cash flows in his multi-growth
4 DCF study. On his Schedule RBH-E2, he modeled the first cash flow as four quarters
5 of dividends that are paid two quarters after the stock is purchased. The second cash
6 flow then reflects eight quarters of dividends received by the investor in only six
7 quarters after the stock is purchased. This misspecification of cash flow timing
8 continues through the entire DCF time period. Hence, Mr. Hevert's multi-growth DCF
9 model has substantially misstated the timing of cash flow payments after buying a
10 utility stock.

11 Mr. Hevert's DCF model, however, falsely assumes that utilities will accelerate
12 the payment of dividends to investors by giving them four quarters of dividends after
13 the stock is owned for a two quarter time period. This acceleration of dividend
14 payments results in an overstatement to the cash flow receipts and Mr. Hevert's
15 multi-stage growth DCF result.

16
17 **Q PLEASE EXPLAIN HOW MR. HEVERT'S MULTI-STAGE GROWTH DCF MODEL**
18 **OVERSTATED DIVIDEND CASH FLOWS BECAUSE OF HIS LONG-TERM**
19 **DIVIDEND PAYOUT RATIO ASSUMPTION.**

20 A Mr. Hevert modified analysts' three- to five-year dividend payout projections of 61%
21 and assumed that eventually they would increase to the long-term historical median
22 dividend payout ratio of the industry of 66.42%.³³ Unfortunately, Mr. Hevert's
23 assumption that the utility industry's earnings will grow at the long-term GDP growth
24 rate, is contradictory to his assumption that the dividend payout ratio will increase

³³Hevert Direct at 29.

1 back to the historical long-term average. As a utility's payout ratio increases, its
2 earnings growth rate will slow because it is retaining a smaller percentage of its
3 earnings to fuel future growth. Historically, utilities' earnings have grown at rates
4 slower than the GDP growth rate. This historical growth is largely because the
5 historical payout ratios were higher than they are currently and are projected to be by
6 *Value Line*.

7 Mr. Hevert's assumption that payout ratios will increase during a transition
8 period results in a dividend growth that is about 2 percentage points higher than his
9 earnings growth during the transition period. This transitional dividend growth is
10 driven by the unreasonable assumption that the dividend payout ratio will increase
11 back to the long-term historical average, while earnings continue to increase at
12 historically high levels. The combination of his historically high earnings growth rate
13 is not plausible if the dividend payout ratio increases back to the long-term historical
14 level. The two assumptions are contradictory, and cannot be used together.

15 **Q HOW CAN MR. HEVERT'S MODEL BE CORRECTED TO ELIMINATE THIS**
16 **CONTRADICTION ASSUMPTION?**

17 A Simply eliminating his assumption that the utility payout ratio will revert from the
18 analysts' three- to five-year growth rate projections to the higher long-term historical
19 growth rate will correct this problem. Assuming the payout ratio will stay relatively flat
20 based on the utility analysts' three- to five-year growth rate projections, and assuming
21 earnings and dividends grow at approximately the GDP growth rate thereafter, will
22 have a consistent assumption for the outlook for growth for earnings and dividends
23 going forward.

1 **Q HOW WOULD MR. HEVERT’S MULTI-STAGE GROWTH DCF MODEL CHANGE IF**
2 **THE THREE CORRECTIONS YOU DESCRIBED ABOVE ARE MADE TO HIS**
3 **RETURN ESTIMATE?**

4 **A As shown below in Table 8, revising the GDP growth rate to the consensus analysts’**
5 **projection, correcting the cash flow timing in the model, and coordinating the payout**
6 **ratio assumption with the long-term earnings growth rate assumption, reduces his**
7 **multi-stage growth DCF return to 9.46% from 10.74%.**

TABLE 8		
<u>Multi-Stage Growth DCF Analysis</u>		
<u>Description</u>	<u>Hevert¹</u> <u>(1)</u>	<u>Corrected</u> <u>DCF</u> <u>(2)</u>
30-Day Average Stock Price	10.64%	9.40%
90-Day Average Stock Price	10.76%	9.47%
180-Day Average Stock Price	<u>10.81%</u>	<u>9.51%</u>
Average	10.74%	9.46%
<hr/>		
Sources:		
¹ Hevert Direct Testimony at 49.		
² Schedule MPG-19.		

8 **Q PLEASE DESCRIBE THE ISSUES YOU TAKE WITH MR. HEVERT’S CAPM**
9 **ANALYSES.**

10 **A My major concern with Mr. Hevert’s CAPM analysis is that his market risk premium**
11 **estimates are inflated.**

1 **Q PLEASE DESCRIBE MR. HEVERT'S MARKET RISK PREMIUMS.**

2 A Mr. Hevert developed two market risk premium estimates. The first one is a
3 DCF-derived market risk premium of 9.94%, which is based on a market DCF return
4 of 12.91% less the current 30-year Treasury bond yield of 2.97%. (Schedule
5 RBH-E2, page 2 of 7). The second market risk premium (referred as the Sharpe
6 market risk premium) of 10.18% is based on one historical market risk premium
7 estimate of 6.70%, adjusted for the difference in long-term historical and current
8 market volatility. (*Id.*, page 1).

9 **Q WHAT ISSUES DO YOU HAVE WITH MR. HEVERT'S DCF-DERIVED MARKET**
10 **RISK PREMIUM ESTIMATES?**

11 A Mr. Hevert's DCF-derived market risk premium is based on a market return of
12 12.91%, which consists of a growth rate component of 10.68% and a dividend yield of
13 2.12%. As discussed above, the DCF model requires a long-term sustainable growth
14 rate. Mr. Hevert's sustainable market growth rate of 10.68% is far too high to be a
15 rational outlook for sustainable long-term market growth. This growth rate is more
16 than two times the growth rate of the U.S. GDP long-term growth outlook of 4.9%.
17 Indeed, it is even about twice Mr. Hevert's flawed and overstated GDP growth
18 projection.

19 As a result of this unreasonable long-term market growth rate estimate,
20 Mr. Hevert's market DCF return is inflated and not reliable. Consequently,
21 Mr. Hevert's 9.94% market risk premium is inflated and not reliable.

1 **Q IS THERE INFORMATION ON ACTUAL ACHIEVED CAPITAL APPRECIATION**
2 **FOR THE MARKET INDEX USED BY MR. HEVERT?**

3 A Yes. Morningstar estimates the actual capital appreciation for the S&P 500 over the
4 period 1926 through 2011 to have been 7.4%.³⁴ Using this gauge of actual capital
5 appreciation in the market in the past as an estimate of future expected growth of the
6 market index going forward, along with a 2.1% yield on the S&P 500 estimated by
7 Mr. Hevert, would imply a total expected return on the market going forward of
8 approximately 9.5%. This 9.5% less the risk-free estimates used by Mr. Hevert of
9 3.0% would imply a going-forward expected market risk premium of 6.5%.

10 This expected return on the market is very consistent with Morningstar's data
11 which estimates market risk premiums in the range of 5.9% to 6.6% based on its
12 historical market and Treasury bond investment data that I discussed above.

13 **Q PLEASE DESCRIBE MR. HEVERT'S SHARPE MARKET RISK PREMIUM.**

14 A Mr. Hevert's Sharpe market risk premium is 10.18%. Mr. Hevert maintains that his
15 Sharpe market risk premium adjusts the historical market risk premium to reflect the
16 difference between historic and expected market volatility. He adjusts the historical
17 market risk premium of 6.70% by the expected market volatility of 30.82%, relative to
18 historical market volatility of 20.28%.³⁵ He measures expected market volatility using
19 the Chicago Board Options Exchange's ("CBOE") three-month volatility index of
20 settlement prices of futures on the CBOE's one-month volatility index (April 2012
21 through June 2012).

22 As shown on his Schedule RBH-E4, page 1, using this relative comparison of
23 market volatility, he adjusts the historical market risk premium of 6.70% up to 10.18%,

³⁴2012 Ibbotson *S&P Valuation Yearbook* at 23.

³⁵Schedule RBH-E4, page 1 of 7.

1 by the ratio of expected market volatility of 30.82%, to historical market volatility of
2 20.28% (6.70% x (30.82% ÷ 20.28%)).

3 **Q DO YOU BELIEVE THAT MR. HEVERT'S SHARPE RATIO EXPECTED MARKET**
4 **RISK PREMIUM PRODUCES RELIABLE RESULTS?**

5 A No. The period rates determined in this proceeding will be in effect is several years
6 into the future. In significant contrast, Mr. Hevert is measuring expected market
7 volatility for a relatively short one-month time period in 2012. This relatively short
8 period of time does not prove that market volatility in the long term will be different
9 from volatility in the past. Mr. Hevert's short-term based analysis is not useful in
10 estimating a fair return for Ameren Missouri in this case. It simply is not designed to
11 estimate long-term investors' cost of capital requirements.

12 **Q WHY IS MR. HEVERT'S PROPOSAL TO MEASURE MARKET RISK PREMIUM**
13 **BASED ON A 30-DAY MARKET VOLATILITY NOT USEFUL IN ESTIMATING A**
14 **FAIR RETURN ON EQUITY FOR AMEREN MISSOURI IN THIS PROCEEDING?**

15 A Mr. Hevert's Sharpe ratio market risk premium does not capture the return
16 expectations of long-term utility investors. Rather, it reflects the short-term
17 investment outlooks of short-term trading investors or speculators looking to react to
18 misvaluations in the marketplace. Indeed, the entire analysis is based on derivative
19 future valuation data rather than directly on stock price data. As such, the Sharpe
20 market risk premium does not measure long-term stock investment outlooks and
21 requirements, and does not produce a fair return on equity estimate for Ameren
22 Missouri.

1 **Q CAN MR. HEVERT'S CAPM ANALYSIS BE REVISED TO REFLECT A MORE**
2 **REASONABLE MARKET RISK PREMIUM?**

3 A Yes. Using Mr. Hevert's risk-free rates of 2.97% and 3.43%, published Bloomberg
4 beta estimate of 0.776, and the 6.60% market risk premium described above,
5 Mr. Hevert's CAPM would be in the range of 8.09% to 8.55%. Using the same
6 risk-free rates and market risk premiums, and the *Value Line* beta of 0.745, will
7 produce a CAPM return in the range of 7.89% to 8.35% for Mr. Hevert's proxy group.

8 **Q PLEASE DESCRIBE MR. HEVERT'S BOND YIELD PLUS RISK PREMIUM.**

9 A As shown on Schedule RBH-E5, Mr. Hevert constructs a risk premium return on
10 equity estimate based on the premise that equity risk premiums are inversely related
11 to the interest rates. He estimates an average electric risk premium over Treasury
12 bond yield of 5.50% over the period 1992 to 2011. Then he applies a regression
13 analysis to the current short-term, long-term, and projected Treasury bond yields of
14 2.97%, 3.43% and 5.30%, respectively, to produce an average electric risk premium
15 of 6.47% and return on equity estimate of 10.37%.

16 **Q IS MR. HEVERT'S BOND YIELD PLUS RISK PREMIUM METHODOLOGY**
17 **REASONABLE?**

18 A No. Mr. Hevert's contention that there is a simplistic inverse relationship between
19 equity risk premiums and interest rates is not supported by academic research. While
20 academic studies have shown that, in the past, there has been an inverse
21 relationship with these variables, researchers have found that the relationship

1 changes over time and is influenced by changes in perception of the risk of bond
2 investments relative to equity investments, and not simply changes to interest rates.³⁶

3 In the 1980s, equity risk premiums were inversely related to interest rates, but
4 that was likely attributable to the interest rate volatility that existed at that time. As
5 such, when interest rates were more volatile, the relative perception of bond
6 investment risk increased relative to the investment risk of equities. This changing
7 investment risk perception caused changes in equity risk premiums.

8 In today's marketplace, interest rate volatility is not as extreme as it was
9 during the 1980s.³⁷ Nevertheless, changes in the perceived risk of bond investments
10 relative to equity investments still drive changes in equity premiums. However, a
11 relative investment risk differential cannot be measured simply by observing nominal
12 interest rates. Changes in nominal interest rates are highly influenced by changes to
13 inflation outlooks, which also change equity return expectations. As such, the
14 relevant factor needed to explain changes in equity risk premiums is the relative
15 changes to the risk of equity versus debt securities investments, and not simply
16 changes in interest rates.

17 Importantly, Mr. Hevert's analysis simply ignores investment risk differentials.
18 He bases his adjustment to the equity risk premium exclusively on changes in
19 nominal interest rates. This is a flawed methodology and does not produce accurate
20 or reliable risk premium estimates. As such, his argument should be rejected by the
21 Commission.

³⁶"The Market Risk Premium: Expectational Estimates Using Analysts' Forecasts," Robert S. Harris and Felicia C. Marston, *Journal of Applied Finance*, Volume 11, No. 1, 2001 and "The Risk Premium Approach to Measuring a Utility's Cost of Equity," Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *Financial Management*, Spring 1985.

³⁷Morningstar SBBI, 2009 Classic Yearbook at 95-96.

1 **Q CAN MR. HEVERT'S BOND YIELD PLUS RISK PREMIUM STUDY BE USED TO**
2 **PRODUCE A MORE REASONABLE RETURN ON EQUITY ESTIMATE FOR**
3 **AMEREN MISSOURI?**

4 **A Yes.** Mr. Hevert's equity risk premium average of 5.50% applied to the current and
5 projected long-term Treasury bond yields of 2.97% and 5.30%, respectively, will
6 produce a risk premium return estimate in the range of 8.47% to 10.80%, with a
7 midpoint of 9.64%.

8 **Q DID MR. HEVERT ALSO OFFER AN ANALYSIS TO ASSESS CURRENT MARKET**
9 **CONDITIONS IN SUPPORT OF HIS RECOMMENDED RETURN ON EQUITY?**

10 **A Yes.** At pages 6 through 13 of his direct testimony, Mr. Hevert describes several
11 factors which he suggests gauge investor sentiment including incremental credit
12 spreads, market volatility, and the relationship between the dividend yield of proxy
13 group companies and Treasury yields. He concludes that these metrics indicate that
14 current levels of instability and risk aversion are significantly higher than the levels
15 observed prior to the recent recession and generally are higher than during the period
16 2002-2003 of capital market contraction.

17 **Q DO YOU BELIEVE THAT MR. HEVERT'S USE OF THESE MARKET SENTIMENTS**
18 **SUPPORTS HIS FINDINGS THAT AMEREN MISSOURI'S CURRENT MARKET**
19 **COST OF EQUITY IS CURRENTLY 10.75%?**

20 **A No.** Indeed, in many instances Mr. Hevert's analysis simply ignores market
21 sentiments toward utility companies, and instead lumps utility investments in with
22 general corporate investments. A broader analysis of utility securities shows that the
23 market generally regards utility securities as low-risk investment instruments, and

1 helps support the reasonable findings that utilities' cost of capital is very low in
2 today's marketplace.

3 **Q WHAT IS THE MARKET SENTIMENT WHICH YOU BELIEVE DIRECTLY GAUGES**
4 **MARKET SENTIMENT FOR UTILITY INVESTMENTS?**

5 A The market sentiment toward utility investments, rather than just general corporate
6 investments, shows that the market is placing high value on utility securities
7 recognizing their low risk and stable characteristics.

8 For example, as shown on my Schedule MPG-13, under column 10, I show
9 the spread between "A" rated utility bond yields and "Aaa" rated corporate bond
10 yields. Currently, the spread is less than one-half of 1 percentage point. This is a
11 relatively low spread over the 32-year time horizon. Indeed, current spreads of utility
12 versus high-grade corporate bond yields are at the lowest level they have been in
13 most periods over the last 32 years. This is also reflective of the spreads between
14 "Baa" utility bond yields relative to "Baa" corporate bond yields. Currently, utility
15 bonds are trading at a premium to corporate bonds. This has been largely the case
16 during the significant market turbulence that has occurred over the last five to eight
17 years. However, over longer periods of time, utility bond yields on average trade at
18 parity to a premium to corporate "Baa" rated utility bond yields. The current strong
19 utility bond valuation is an indication of the market's sentiment that utility bonds have
20 lower risk than general corporate bonds, and are generally regarded as a safe haven
21 by the investment industry.

22 Also, Mr. Hevert observes that utility bond yields are high relative to current
23 Treasury bond yields. This abnormal yield spread is primarily caused by the flight to
24 quality which has significantly enhanced Treasury bond valuations, and has in turn

1 widened the Treasury yield spread to utility dividends. Nevertheless, utility stocks
2 have maintained relatively robust valuations and relatively stable dividend yields.

3 Further, other measures of utility stock valuations also support a robust
4 market for utility stocks. As shown on my Schedule MPG-20, utility valuation
5 measures – e.g., price-to-earnings ratio and market price to cash flow ratio – show
6 that stock valuation measures for the proxy group are robust. For example, for the
7 Electric proxy group, the current 2012 price-to-earnings ratio is at a premium to the
8 11-year average of this ratio.

9 For all these reasons, direct assessments of valuation measures, and market
10 sentiment toward utility securities support the credit rating agencies' findings, as
11 quoted above, that the utility industry is largely regarded as a low-risk, safe haven
12 investment. All of this supports my findings that utilities' market cost of equity is very
13 low in today's very low cost capital market environment.

14 **Q DID MR. HEVERT ASSESS THE MISSOURI REGULATORY ENVIRONMENT IN**
15 **ASSESSING AMEREN MISSOURI'S RISK AS A COMPONENT OF DETERMINING**
16 **A FAIR RETURN ON EQUITY?**

17 **A** Yes. At page 47 of his testimony, he concludes that Ameren Missouri is not allowed
18 to earn a cash return on CWIP, required to use an historical test year reflecting known
19 and measurable changes to its cost of service, and is only allowed to implement
20 interim rates under emergency conditions. For all those reasons, he believes Ameren
21 Missouri's existing regulatory mechanisms are not adequate to mitigate regulatory lag
22 and undermine the Company's ability to earn its authorized return on equity. He
23 states that in contrast, many of the proxy companies have more favorable cost

1 recovery mechanisms which help reduce regulatory lag and support a more
2 supportive credit environment.

3 **Q DOES MR. HEVERT DO A RELIABLE JOB IN ASSESSING REGULATORY RISK**
4 **AS A COMPONENT OF HIS RETURN ON EQUITY INVESTIGATION?**

5 A No. Concerning the regulatory mechanisms, Mr. Hevert was asked to explain how
6 much revenue was collected through the various regulatory mechanisms he identifies
7 on his Schedule RBH-E7, in comparison to the total Company's revenue
8 requirement.³⁸ Understanding how much revenue is collected through the regulatory
9 mechanism in comparison to total revenue requirement will assess whether or not the
10 regulatory mechanisms actually mitigate regulatory lag as Mr. Hevert concludes.

11 However, Mr. Hevert did not and could not explain the amount and
12 significance of revenue collected through the regulatory mechanisms he identifies.
13 Indeed, he stated in discovery that such an analysis would require many assumptions
14 which would limit the usefulness of such a determination. While I do not disagree
15 with him that the analysis would be complicated, I strongly conclude that without such
16 an analysis his conclusion that the regulatory mechanisms used by the proxy
17 companies mitigate regulatory lag relative to Ameren Missouri's regulatory lag is
18 simply without merit and unfounded.

19 Further, his assessment of the regulatory mechanisms and overall Missouri
20 regulatory environment is also invalid for the reasons discussed later in this
21 testimony.

³⁸Ameren's response to MIEC data request 18, item 19.

1 **MISSOURI REGULATORY FRAMEWORK/EARNINGS ATTRITION**

2 **Q DO AMEREN MISSOURI WITNESSES COMMENT ON THE MISSOURI**
3 **REGULATORY FRAMEWORK?**

4 A Yes. Mr. Baxter concludes that one of the greatest challenges facing Ameren
5 Missouri is excessive regulatory lag created by the Missouri Regulatory Framework.
6 (Warner Baxter Direct at 17). Mr. Baxter then defines regulatory lag as the time
7 period between when a company incurs cost, changes in cost and investments, and
8 the time when those costs, changes and investments are reflected in its rates. He
9 further asserts that regulatory lag also occurs when weather normalized revenues
10 change between rate cases due to changes in customer usage.

11 At pages 19 and 20 of his testimony, Mr. Baxter concludes that the alleged
12 inadequate Missouri Regulatory Framework deprives Missouri utilities of the
13 opportunity to fully recover their prudently incurred costs and thus deprives utilities of
14 a reasonable opportunity to earn a fair return on their investments. In support of this
15 assertion, Mr. Baxter compares authorized returns on equity and earned returns on
16 common equity over the period July 2007 through October 2011. From that
17 comparison, he asserts that the Missouri Regulatory Framework and resulting
18 regulatory lag are unreasonable.

19 **Q DID MR. BAXTER OFFER SPECIFIC CRITICISMS OF THE MISSOURI**
20 **REGULATORY FRAMEWORK?**

21 A Yes. Mr. Baxter and Ameren Missouri witness John Reed offer specific criticisms as
22 follows:

- 23 1. The regulatory process uses a test year based on historical costs. The use of
24 an historical test year is detrimental to a company when its costs are
25 increasing. (Baxter Direct at 18).

- 1 2. The Missouri Regulatory Framework allows an 11-month time frame to
2 complete a rate case. He concludes that an 11-month time period is longer
3 than the rate case time period in many other jurisdictions and contributes to
4 excessive regulatory lag.
- 5 3. The Missouri statute prohibits the recovery of investment in plant until the
6 plant is fully operational, and used and useful. (Baxter Direct at 19). He
7 states that construction of certain equipment can take several years, and the
8 utility must pay all costs of construction with no opportunity to recover those
9 costs (including financial costs) or any return on its investment until that asset
10 goes into service. He believes that this delay in recovering construction costs
11 does not occur in some other states that allow construction work in progress
12 ("CWIP") to be included in rate base or permit rates to be adjusted between
13 rate cases for new assets that are actually serving customers.

14 **Q IS MR. BAXTER'S AND OTHER AMEREN MISSOURI WITNESSES'**
15 **CHARACTERIZATION OF THE MISSOURI REGULATORY FRAMEWORK**
16 **GENERALLY CONSISTENT WITH VIEWS OF THE INVESTMENT COMMUNITY?**

17 **A** No. The witnesses are correct that the Missouri regulatory environment is rated as
18 below average by many credit rating analysts, but the Ameren witnesses ignore that
19 the investment community has generally characterized Ameren Missouri rate orders
20 over its last several rate cases as credit supportive. For example, Fitch Ratings
21 Services states the following:

22 **
23 _____
24 _____
_____ 39**

25 Similarly, Moody's also states an improving regulatory environment:

26 **SUMMARY RATING RATIONALE**

27 Union Electric's rating reflects a below average regulatory framework
28 in Missouri; high environmental capital expenditures that have been
29 partly mitigated by the increased use of ultra-low sulfur coal; and
30 improved cash flow coverage metrics over the last two years that are
31 now strong for its Baa rating. Despite the company's regulatory and
32 political constraints, Moody's notes that Union Electric's most recent

³⁹Fitch Ratings Corporates: "Union Electric Company," March 13, 2012, provided by Ameren Missouri in a Highly Confidential response to data request MPSC 0250, emphasis added.



1 rate case outcome was generally supportive of the utility credit profile
2 and should help reduce its chronic regulatory lag. However, the utility
3 still faces legal challenges to some rates from several industrial
4 customers; has thus far been unable to obtain rate recovery for a [sic]
5 preliminary expenditures related to an early site permit for a potential
6 new nuclear generating unit; and was denied recovery of some Taum
7 Sauk pumped storage facility enhancements beyond what was
8 recovered from insurance.⁴⁰

9 Finally, S&P also notes an improving regulatory environment:

10 AM's excellent business risk profile reflects its recent rate cases and
11 regulatory mechanisms that indicate an overall decreasing regulatory
12 risk overall. In 2010 and 2011, the company received electric and gas
13 rate case orders from the Missouri Public Service Commission (MPSC)
14 that included more than \$400 million of rate increases. In addition, the
15 company also has credit supportive trackers including a fuel
16 adjustment clause, pension and other post-employment benefit
17 trackers, and a cost tracker for vegetation management and
18 infrastructure inspections.⁴¹

19 **Q THE CREDIT RATING AGENCIES CHARACTERIZE MISSOURI'S REGULATORY**
20 **ENVIRONMENT AS BELOW AVERAGE. SHOULD THE COMMISSION ACCEPT**
21 **THE COMPANY'S PROPOSED REGULATORY MECHANISMS IN ORDER TO**
22 **IMPROVE RATING AGENCY ASSESSMENT?**

23 **A** No. The characterization of regulatory risk is not very well defined by the credit rating
24 agencies. Indeed, it appears as though the analysts consider any cost disallowance
25 to be a regulatory risk, even if the cost disallowance was for a cost that was found not
26 to be prudent or reasonable. Hence, to the extent utility management incurs
27 significant amounts of unreasonable or imprudent costs, and those costs are
28 disallowed for ratemaking purposes, that might erode the jurisdiction regulatory risk
29 rating by the credit rating agencies.

⁴⁰Moody's Investors Service Credit Opinion: "Union Electric Company," August 12, 2011., emphasis added

⁴¹Standard & Poor's RatingsDirect on the Global Credit Portal: "Ameren Missouri," December 12, 2011, emphasis added.

1 Therefore, it is critically important to understand how the credit rating analysts
2 assigned a regulatory environment rating, before giving the rating significant weight in
3 deciding whether a change to Missouri's Regulatory Framework is justified.

4 **Q WHY DO YOU BELIEVE IT IS UNCLEAR HOW CREDIT ANALYSTS ESTABLISH**
5 **RANKINGS?**

6 A From a regulatory perspective, credit analysts are primarily focused on whether or not
7 costs are recovered in rates, and not whether the cost was prudent or imprudent, and
8 appropriate to be included in rates. As an example, consider the statement by
9 Moody's regarding the Missouri Commission's disallowance of the Taum Sauk repair
10 costs:

11 **- Below average regulatory frameworks in both Missouri and**
12 **Illinois**

13
14 Both of Ameren's regulated utilities operate in what Moody's considers
15 to be below average regulatory frameworks, resulting in significant
16 regulatory lag, preventing both Union Electric and Ameren Illinois from
17 earning their allowed returns on equity. In Missouri, factors
18 contributing to this assessment include lengthy 11 month base rate
19 case timelines; the lack of interim rate relief; the use of historical test
20 years; and less than full recovery of fuel costs in rates. Union
21 Electric's most recent rate case outcome, in July 2011, was more
22 supportive of credit quality than some previous rate cases, however,
23 with the Missouri Public Service Commission (MPSC) approving a
24 \$173 million rate increase based on a 10.2% return on equity,
25 including \$52 million related to higher fuel costs than had been
26 authorized in its last rate order. This outcome compared to an
27 amended company request of \$211 million. The order also approved
28 the continued use of certain cost trackers, including vegetation
29 management, infrastructure, and pension and post retirement benefits.
30 Union Electric was denied recovery of \$89 million costs related to
31 enhancements to its Taum Sauk pumped storage facility in excess of
32 those covered by insurance.⁴²

⁴²Moody's Investors Service Credit Opinion: "Ameren Corporation," August 12, 2011, emphasis added.

1 Of significance is Moody's observation that Ameren Missouri was denied
2 recovery of \$89 million of Taum Sauk costs. Moody's made no mention of whether or
3 not the cost was disallowed because of its imprudence, or whether it was a proper
4 regulatory action to exclude an imprudent cost.

5 Hence, before the Commission places weight on credit rating agencies'
6 assessments of regulatory risk, more details need to be offered to explain how rating
7 agencies establish the regulatory ranking. To the extent that the disallowance of
8 imprudent or unreasonable costs results in an erosion to the regulatory ranking, then I
9 recommend the Commission carefully consider the weight, if any, which should be
10 placed on the credit agencies' assessment.

11 **Q IS THERE ANY OTHER REASON WHY THE COMMISSION SHOULD BE**
12 **SKEPTICAL OF THE CREDIT RATING AGENCIES' ASSESSMENTS OF**
13 **REGULATORY RISK IN MISSOURI?**

14 **A** Yes. In material provided to credit rating agencies, it appears that Ameren Missouri
15 was discussing its perspective of the Missouri Regulatory Framework.⁴³ Hence, it is
16 not clear whether or not the analysts' characterization of the Missouri Regulatory
17 Framework simply repeats Ameren Missouri management's characterization, or the
18 analysts' independent view of the Missouri Regulatory Framework.

19 As such, before significant weight is given to a credit analyst's view of the
20 Regulatory Framework in Missouri, I encourage the Commission to seek expert
21 testimony from the credit rating analysts to confirm the independence of the
22 assessment, review the accuracy and legitimacy of the factual basis for the rating,

⁴³Highly Confidential Response to Staff Data Request MPSC 0250 Attachments (several presentations).

1 and gauge whether or not the rating truly reflects a balanced assessment of the
2 Missouri Regulatory Framework.

3 **Q DO YOU PROPOSE A GENERAL PRINCIPLE THE COMMISSION SHOULD**
4 **CONSIDER BEFORE MODIFYING THE REGULATORY FRAMEWORK IN**
5 **MISSOURI?**

6 A Yes. The Regulatory Framework should primarily be designed to balance the
7 interests of shareholders and ratepayers. While the rate-setting process should
8 provide a reasonable opportunity for Ameren Missouri to earn its authorized return on
9 equity, the process should also ensure that rates paid by customers are just and
10 reasonable, as stable as possible, and allow customers within Ameren Missouri's
11 service territory to prosper in their own marketplaces. The primary emphasis of the
12 Regulatory Framework should be to balance stakeholder interests. That is, a
13 rate-setting process ensures rates: (1) that are competitive, just and reasonable for
14 ratepayers; and (2) that provide a reasonable opportunity for Ameren Missouri to
15 recover its cost of service.

16 **Q HAVE RATES HISTORICALLY MET THIS STANDARD?**

17 A Yes. This is Ameren Missouri's fifth rate case since 2007. However, prior to 2007,
18 Ameren Missouri's last rate increase was 20 years earlier, in 1987. Further, twice in
19 this 20-year period Ameren Missouri actually decreased its rates, in 1995 and again
20 in 2001.⁴⁴ Further, in 1987 Ameren Missouri was awarded a 12.01% return on equity
21 according to SNL. From the period 1987 through 2006, Ameren Missouri's reported

⁴⁴SNL Union Electric Past Rate Case History.

1 earned returns on common equity exceeded its authorized return on equity. See
2 Schedule MPG-21.

3 Importantly, during this time period Ameren Missouri's rate base increased
4 from approximately \$3.8 billion in 1987, up to over \$5.6 billion by 2006. As such, the
5 mix of regulatory mechanisms during this long time span provided Ameren Missouri
6 an opportunity to earn its authorized return on equity without increasing rates to
7 customers. Indeed, rates may have been excessive during that time period despite
8 the significant increase in its rate base investments, and rate reductions.

9 The circumstances identified and discussed by Mr. Baxter and Ameren
10 Missouri witness Reed in this proceeding are discussed in the testimony of MIEC
11 witness Michael Brosch. I will not repeat his testimony here, other than to say that
12 the Regulatory Framework in Missouri generally does support Ameren Missouri's
13 ability to earn its authorized return on equity over time.

14 **Q DID THE AMEREN MISSOURI WITNESSES CAREFULLY CONSIDER THE**
15 **PROPOSED IMPACT OF CHANGES TO THE MISSOURI REGULATORY**
16 **FRAMEWORK ON RATES FROM A CUSTOMER PERSPECTIVE?**

17 **A** No. Indeed, it would appear that Ameren witnesses did not believe the impact on
18 ratepayers was a significant consideration. In MIEC's 18th data request, item 17,
19 Ameren Missouri witness John Reed was asked to provide copies of all reports he
20 reviewed in developing his testimony concerning the benefit to customers and utility
21 investors of competitive utility rates, predictable utility rates, and stable utility rates. In
22 response to that question, Mr. Reed indicated that he did not review any reports
23 addressing these issues. He did go on to suggest that cost of service could decline if
24 a utility was allowed to automatically recover its cost of service, however he provided

1 no backup for that assertion. Hence, Ameren Missouri witnesses' arguments in
2 support of a modified Regulatory Framework in Missouri seems to focus entirely on
3 benefitting utility investors and not striking an appropriate balance between the
4 interests of customers and shareholders. (A copy of the Company's response is
5 included as Schedule MPG-22.)

6 **Q DO YOU HAVE OTHER MARKET SUPPORT WHICH SUGGESTS THAT THE**
7 **REGULATORY FRAMEWORK IN MISSOURI IS GENERALLY SUPPORTIVE OF**
8 **UTILITIES' ACCESS TO CAPITAL?**

9 A Yes. Credit rating agencies not only assess utility company regulatory risk, but also
10 generally assess a utility's overall operating and financial risk. A component of
11 operating risk includes regulatory risk as well as other operating risk factors such as
12 service area economy, fuel diversity, competitive position, and other factors that help
13 determine whether or not the utility's earnings and cash flows are stable and
14 predictable and will support its fixed financial obligations.

15 S&P currently rates Ameren Missouri's business risk as "Excellent." This is its
16 highest business risk assessment within its corporate credit rating category and
17 indicates Ameren Missouri has a very low business risk. Similarly, Moody's does rate
18 the Regulatory Framework for Ameren Missouri as below investment grade, but it
19 rates Ameren Missouri's ability to "Ability to Recover Costs And Earn Returns" at an
20 investment grade level.⁴⁵

21 These credit rating agency comments suggest that Missouri's regulatory
22 procedure provides utilities an opportunity to earn their authorized returns.

⁴⁵Moody's Investors Service Credit Opinion: "Union Electric Company," August 12, 2011.

1 **Q CAN YOU RESPOND TO MR. BAXTER’S CLAIM THAT MISSOURI’S 11-MONTH**
2 **RATE CASE TIMELINE IS AN UNREASONABLE ASPECT OF THE MISSOURI**
3 **REGULATORY FRAMEWORK?**

4 **A**Mr. Baxter’s claim that an 11-month time frame is unreasonable is not fully explained
5 and not justified. He notes that some other utilities outside of Missouri operate under
6 a shorter time frame.

7 A rate case involves very complicated analysis which requires a significant
8 amount of data. The outcome of the rate case should ensure that the cost of service
9 and rates are measured and developed accurately. The accuracy of the process is
10 beneficial to both customers and to the utility’s shareholders.

11 The fact that other jurisdictions may have a shorter rate case timeline does not
12 necessarily mean that utilities in other jurisdictions develop rates more efficiently, or
13 more accurately, nor does it mean other utilities have a better opportunity to earn
14 their authorized returns on equity.

15 **Q COULD THERE BE A DETRIMENTAL IMPACT AS A RESULT OF SHORTENING**
16 **THE 11-MONTH REGULATORY TIMELINE?**

17 **A**Yes. Shortening the timeline would tilt the balance of the regulatory process further in
18 favor of the utility. The utility is able to recover its regulatory expenses as part of its
19 cost of service, so the resources it can apply to a rate case significantly exceed the
20 resources available to other stakeholders in the rate case process. As such,
21 shortening the timeline would give the utility an even greater ability to direct the
22 process in a way that is most favorable to it, and less favorable to customers.

1 **Q PLEASE RESPOND TO MR. BAXTER’S CLAIM THAT THE MISSOURI**
2 **REGULATORY FRAMEWORK’S LACK OF INTERIM RATE RELIEF IS A**
3 **DISADVANTAGE TO MISSOURI UTILITIES.**

4 A Like most jurisdictions, Missouri’s Regulatory Framework does allow a utility to seek
5 interim rate relief if it demonstrates a financial need. Indeed, Ameren Missouri
6 witness Hevert’s Schedule RBH-E8 (pages 4-6) makes this clear. Out of the 35
7 utilities listed on that schedule, over 28 of them only allow interim rate relief in the
8 event that the utility can demonstrate financial need or to avoid harm. The interim
9 rate standards for many of these utilities appear to be very similar to Missouri’s.

10 **Q PLEASE COMMENT ON THE USE OF AN HISTORICAL TEST YEAR IN**
11 **MISSOURI’S REGULATORY FRAMEWORK.**

12 A The Missouri Regulatory Framework does rely on an historical test year. However,
13 the Missouri Regulatory Framework does allow for a true-up of historical costs based
14 on known and measurable changes up to a true-up date. Hence, while historical data
15 is used as a starting point, known and measurable changes are reflected up to a time
16 between three and six months before the rates actually go into effect. As such, the
17 data used to develop rates in Missouri is typically no more than six months stale by
18 the time the rates go into effect. Also, Missouri uses an end-of-period rate base,
19 which is more advantageous to the utility than the average rate base typically used in
20 a forecasted test year.

21 Further, a test year of any design will have benefits and detriments. A
22 forecasted test year has significant advantages and disadvantages for both
23 ratepayers and investors. Future test years have disadvantages to the extent
24 forecasts are notoriously unreliable and may over or understate actual costs,

1 revenues, sales, and capital investments during the forecasted test year, and the
2 period rates will be in effect. The primary objective of designing a test year is to
3 create a test period that properly matches revenues and costs, which allows the
4 regulator to design rates that reasonably provide a fair opportunity for the utility to
5 recover its reasonable and prudent cost of service.

6 **Q IS THERE EVIDENCE THAT UTILITIES AT TIMES PREFER AN HISTORICAL**
7 **TEST YEAR?**

8 A Yes. As I have noted in prior testimony, utilities that can choose between the
9 historical or forecasted test year do not always choose to use forecasted test years.
10 That is true for Ameren Missouri's affiliate company, Ameren Illinois, in several rate
11 cases in Illinois. In Illinois, prior to the formula rate plan going into effect, Ameren
12 Illinois had an option of using an historical, current or forecasted test year. In at least
13 two of its last three rate cases, Ameren Illinois chose to design rates using an
14 historical test year.⁴⁶ Therefore, Missouri regulatory procedures that prescribe an
15 historical test year are not necessarily a disadvantage to either investors or to
16 ratepayers. Rather, it is simply a mechanism that generally has supported Ameren
17 Missouri's ability to set rates that meet its earnings objectives over very long periods
18 of time, and allowed Ameren Missouri to stay out of rate case activities through the
19 1990s and early 2000s.

⁴⁶AmerenCILCO, AmerenCIPS, AmerenIP, Illinois Commerce Commission Docket Nos. 07-0585 et. al (Cons.), Order, September 24, 2008 at 6; and Docket Nos. 06-0070 et al. (Cons.), Order, November 21, 2006 at 6.

1 **Q WOULD MODIFYING THE MISSOURI REGULATORY PROCEDURE TO ALLOW A**
2 **CURRENT RETURN ON CWIP IMPROVE AMEREN MISSOURI'S ABILITY TO**
3 **EARN ITS AUTHORIZED RETURN ON EQUITY?**

4 **A No.** Allowing a utility to include its CWIP in rate base in a rate case does not improve
5 its ability to earn its authorized return on equity. Rather, including CWIP in rate base
6 enhances a utility's cash flows during construction. If a utility is precluded from
7 including CWIP in rate base, it accumulates an Allowance for Funds Used During
8 Construction ("AFUDC") carrying charge rate on its CWIP balance. The AFUDC rate
9 recovers its construction period carrying charges, including a return on equity if
10 long-term capital is used to support CWIP. This AFUDC rate will enhance the utility's
11 earnings during construction, albeit it will be non-cash earnings.

12 Fitch recognized that AFUDC construction carrying charge accruals support
13 utilities' earnings, but at the disadvantage of utility cash flows. Fitch stated as follows:

14 Most concerning was a stipulation agreement whereby the company
15 withdrew its request for an environmental cost recovery mechanism in
16 exchange for the ability to continue recording an allowance for funds
17 used during construction (AFUDC) and to defer depreciation costs for
18 pollution control equipment at one of its power plants, which bolsters
19 earnings but provides no incremental cash flow until reflected in rates
20 in a subsequent rate case. The agreement does allow UE to pursue
21 an environmental cost recovery mechanism in future rate filings.⁴⁷

22 As such, including a current return on CWIP does have benefits to the utility
23 but the benefits are related to utility cash flows and does not produce earnings higher
24 than does AFUDC.

25 As such, including CWIP in rate base is not a modification of Missouri's
26 Regulatory Framework that will cure Mr. Baxter's complaint – namely, that Missouri's

⁴⁷Fitch Ratings Global Power U.S. and Canada Full Rating Report: "Union Electric Company," July 15, 2010.

1 Regulatory Framework does not allow Ameren Missouri a fair opportunity to earn its
2 authorized return on equity.

3 **Q DO YOU BELIEVE THAT THE MISSOURI REGULATORY FRAMEWORK**
4 **PROVIDES A REASONABLE OPPORTUNITY FOR MISSOURI UTILITIES TO**
5 **RECOVER THEIR COST OF SERVICE AND EARN A FAIR RETURN?**

6 **A** Yes. Indeed, many of the regulatory mechanisms outlined by Mr. Baxter and other
7 Ameren Missouri witnesses are available to Ameren Missouri and other Missouri
8 utilities but they first must demonstrate the need. For example, consider the following
9 regulatory mechanisms available to Missouri utilities:

- 10 1. Ameren Missouri does have a Fuel Adjustment Clause, albeit it has a
11 sharing mechanism which will not allow it full recovery of fuel costs under
12 certain conditions. However, that fuel adjustment mechanism also
13 provides an opportunity for Ameren Missouri to over-recover its fuel costs.
14 Hence, the risk of under-recovery is symmetrical with the opportunity for
15 over-recovery to produce an earnings enhancement.
- 16 2. As noted by Ameren Missouri witnesses, Missouri has accounting tracker
17 mechanisms for pension, OPEB and FIN 48 costs. These accounting
18 tracker mechanisms help to ensure that the Company's rates are adjusted
19 for these volatile expenses, which are largely outside the control of
20 management. I say "largely" because management does have the control
21 to ensure that trust fund investments are reasonably invested, and cash
22 contributions are made based on minimum funding requirements, and
23 other reasonable contribution levels.
- 24 3. While Ameren Missouri has chosen not to pursue them, an environmental
25 cost recovery mechanism and a renewable energy cost recovery
26 mechanism are available. Both of these mechanisms, as well as the FAC,
27 however, require periodic base rate filings to ensure that Ameren Missouri
28 is not adjusting rates when the revenues it currently recovers are already
29 adequate to recover its full cost of service.

30 Many jurisdictions referenced by the Ameren witnesses in this case may have
31 more tracker mechanisms than Missouri, but those tracker mechanisms are
32 implemented within their regulatory framework to ensure a reasonable balance
33 between shareholders and customers. For example, in Wisconsin a utility is required

1 to make a rate filing at least every two years. A similar biannual rate requirement is
2 included in Virginia Commonwealth rules. Also, Indiana has many tracker
3 mechanisms, but its fuel adjustment tracker specifically includes an earnings test
4 before rate adjustments are allowed. Hence, in Indiana the Commission is careful in
5 gauging rate increases based on whether or not the utility's earnings are already
6 adequate before implementing its fuel adjustment tracker adjustment.

7 **Q DOES MR. BAXTER RECOMMEND SPECIFIC REGULATORY MECHANISMS?**

8 A Yes. Mr. Baxter recommends the following:

- 9 1. The Company's Fuel Adjustment Clause be continued as recommended
10 by the Company;
- 11 2. The Company's existing vegetation management/infrastructure inspection
12 tracker be continued;
- 13 3. The Company's pension/OPEB tracker, and FIN 48 tracker be retained;
- 14 4. Allow the Company to true up its revenue requirement as has been done
15 in the last four Ameren Missouri cases;
- 16 5. Implement a two-way storm restoration cost tracker;
- 17 6. Implement a plant in-service accounting approach similar to what the
18 Company implemented for its Sioux scrubbers. This plant in-service
19 accounting approach allows the Company to accrue a carrying charge
20 based on its overall weighted cost of capital on net investment and
21 non-revenue producing plant additions between the plant additions' times
22 they go into service, and the time the additions are reflected in rates. He
23 also recommends to defer depreciation on these same non-revenue
24 producing significant plant additions.
- 25 7. Finally, Mr. Baxter recommends that the Commission implement the
26 energy efficiency cost recovery mechanism that the Company is proposing
27 in the Missouri Energy Efficiency Investment Act ("MEEIA") filing.
28 Mr. Baxter concludes that this energy efficiency cost recovery mechanism
29 will ensure that aggressive energy efficiency can be pursued to the
30 ultimate benefit of Ameren Missouri's customers and the environment.

1 **Q DO YOU HAVE ANY GENERAL COMMENTS ABOUT MR. BAXTER’S PROPOSAL**
2 **FOR IMPLEMENTING NEW TRACKERS AND ACCOUNTING MECHANISMS?**

3 A Yes. Again, these regulatory mechanisms should be balanced in protecting the
4 customers’ need for competitive, predictable rates, and the Company’s need for
5 regulatory mechanisms that allow it to recover reasonable and prudent cost.
6 However, the regulatory mechanisms should not allow the Company to reduce efforts
7 to operate its system efficiently and manage costs.

8 The Company’s proposed regulatory mechanisms should be considered
9 extraordinary. The mechanisms tilt the balance of the regulatory process more in
10 favor of investors. Importantly, these regulatory mechanisms do not eliminate risk;
11 rather, they simply shift the risk from investors to customers. This was observed by
12 SNL in its assessment of similar tracker mechanisms implemented around the
13 country. In describing these adjustment clauses and rate riders, Regulatory
14 Research Associates stated as follows:

15 It should be noted that the use of the adjustment clause or rate rider
16 has the effect of shifting the risk associated with the recovery of the
17 expense in question from shareholders to customers, because if the
18 clause operates as designed, the company is able to recover its costs
19 fairly quickly, without any negative effect on the bottom line, and
20 without the expense and delay associated with seeking recovery
21 through the general rate case process.⁴⁸

22 **Q DO YOU HAVE ANY COMMENTS CONCERNING THE COMPANY’S PROPOSED**
23 **PLANT IN-SERVICE ACCOUNTING MECHANISM?**

24 A Yes. I recommend this accounting mechanism be rejected. The Company’s
25 proposed accounting mechanism would allow Ameren Missouri to defer its return “on”
26 and “of” depreciation expense for non-revenue producing new assets from the time

⁴⁸Regulatory Research Associates *Regulatory Focus*: “Adjustment Clauses and Rate Riders, A State-By-State Overview,” March 21, 2012 (reissued on May 17, 2012), emphasis added.

1 that they are placed in-service until the time that they are reflected in rates. This
2 proposal fails to recognize that the Company's rates may not need to be increased in
3 order to provide a fair return on, and recovery of, the new investment costs. Simply
4 because a utility places new plant in-service does not mean that its rates will
5 automatically need to be increased. For example, other changes in the ratemaking
6 calculus may change and provide room for a utility to fully recover the new asset
7 costs without a rate change.

8 If the Company's plant in-service accounting mechanism is implemented,
9 customers could be faced with the requirement to pay the new asset return twice –
10 once during the period that those assets are placed in-service up until the time a new
11 rate order is put in effect if rates already cover the increased costs, and a second
12 time if the new asset costs are deferred and are used to increase rates in a
13 subsequent rate case.

14 MIEC witness Brosch addresses this mechanism in more detail.

15 **Q ARE YOU AWARE OF ANY UTILITIES THAT WERE ABLE TO PUT MAJOR**
16 **ASSETS IN-SERVICE WITHOUT INCREASING THEIR RATES?**

17 **A** Yes. As noted above, during the period 1987 through 2006 Ameren Missouri did not
18 increase its rates a single time. However, the Company's rate base in 1987 was
19 \$3.84 billion and grew to \$5.6 billion by 2006. As discussed above, Ameren
20 Missouri's actual earnings were not distressed during this time period, despite no rate
21 increases and an increasing rate base. Clearly, the fact that a utility is increasing its
22 plant in-service alone does not indicate that the utility's rates will not provide fair
23 compensation to the utility for the plant additions. The only process available to make

1 that determination is a full review of all revenues and costs to determine whether or
2 not revenue collections and earnings opportunities are balanced.

3 Another example involves Mid-American Energy Company ("MEC") in Iowa. It
4 was able to develop and place in-service a new coal-fired unit, a new gas-fired unit,
5 and over 1,800 MW of new wind generation during a 16-year rate freeze period that
6 began in 1997 and is scheduled to conclude at the end of calendar year 2013.⁴⁹ MEC
7 has specific rider mechanisms only for additional energy efficiency expenses and
8 costs related to the study of new nuclear generating facilities in Iowa. However,
9 MEC's rates were adequate to fully recover the significant increase in rate base
10 investment, and depreciation expense associated with these new assets without
11 changing its rate structure. It should also be noted that MEC did not have an energy
12 adjustment clause in place during this period of new investment, having eliminated its
13 energy adjustment clause in 1997.⁵⁰ Hence, it is evident that a change in rates is not
14 a foregone conclusion simply because a utility places a new major investment in-
15 service.

16 **Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

17 **A** Yes.

⁴⁹Direct Testimony of William J. Fehrman, pp. 2-3, Docket No. RPU-2012-0001, Iowa Utilities Board.

⁵⁰Iowa Utilities Board, Order Approving Settlement With Modifications at 3, Docket Nos. RPU-01-3 and RPU-01-5, MidAmerican Energy Company.

Qualifications of Michael P. Gorman

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,
3 Chesterfield, MO 63017.

4 **Q PLEASE STATE YOUR OCCUPATION.**

5 A I am a consultant in the field of public utility regulation and a Managing Principal with
6 Brubaker & Associates, Inc., energy, economic and regulatory consultants.

7 **Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK
8 EXPERIENCE.**

9 A In 1983 I received a Bachelors of Science Degree in Electrical Engineering from
10 Southern Illinois University, and in 1986, I received a Masters Degree in Business
11 Administration with a concentration in Finance from the University of Illinois at
12 Springfield. I have also completed several graduate level economics courses.

13 In August of 1983, I accepted an analyst position with the Illinois Commerce
14 Commission ("ICC"). In this position, I performed a variety of analyses for both formal
15 and informal investigations before the ICC, including: marginal cost of energy, central
16 dispatch, avoided cost of energy, annual system production costs, and working
17 capital. In October of 1986, I was promoted to the position of Senior Analyst. In this
18 position, I assumed the additional responsibilities of technical leader on projects, and
19 my areas of responsibility were expanded to include utility financial modeling and
20 financial analyses.

**Michael P. Gorman
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1 In 1987, I was promoted to Director of the Financial Analysis Department. In
2 this position, I was responsible for all financial analyses conducted by the staff.
3 Among other things, I conducted analyses and sponsored testimony before the ICC
4 on rate of return, financial integrity, financial modeling and related issues. I also
5 supervised the development of all Staff analyses and testimony on these same
6 issues. In addition, I supervised the Staff's review and recommendations to the
7 Commission concerning utility plans to issue debt and equity securities.

8 In August of 1989, I accepted a position with Merrill-Lynch as a financial
9 consultant. After receiving all required securities licenses, I worked with individual
10 investors and small businesses in evaluating and selecting investments suitable to
11 their requirements.

12 In September of 1990, I accepted a position with Drazen-Brubaker &
13 Associates, Inc. ("DBA"). In April 1995, the firm of Brubaker & Associates, Inc. ("BAI")
14 was formed. It includes most of the former DBA principals and Staff. Since 1990, I
15 have performed various analyses and sponsored testimony on cost of capital,
16 cost/benefits of utility mergers and acquisitions, utility reorganizations, level of oper-
17 ating expenses and rate base, cost of service studies, and analyses relating industrial
18 jobs and economic development. I also participated in a study used to revise the
19 financial policy for the municipal utility in Kansas City, Kansas.

20 At BAI, I also have extensive experience working with large energy users to
21 distribute and critically evaluate responses to requests for proposals ("RFPs") for
22 electric, steam, and gas energy supply from competitive energy suppliers. These
23 analyses include the evaluation of gas supply and delivery charges, cogeneration
24 and/or combined cycle unit feasibility studies, and the evaluation of third-party
25 asset/supply management agreements. I have participated in rate cases on rate

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1 design and class cost of service for electric, natural gas, water and wastewater
2 utilities. I have also analyzed commodity pricing indices and forward pricing methods
3 for third party supply agreements, and have also conducted regional electric market
4 price forecasts.

5 In addition to our main office in St. Louis, the firm also has branch offices in
6 Phoenix, Arizona and Corpus Christi, Texas.

7 **Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?**

8 A Yes. I have sponsored testimony on cost of capital, revenue requirements, cost of
9 service and other issues before the Federal Energy Regulatory Commission and
10 numerous state regulatory commissions including: Arkansas, Arizona, California,
11 Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas,
12 Louisiana, Michigan, Missouri, Montana, New Jersey, New Mexico, New York, North
13 Carolina, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Vermont,
14 Virginia, Washington, West Virginia, Wisconsin, Wyoming, and before the provincial
15 regulatory boards in Alberta and Nova Scotia, Canada. I have also sponsored
16 testimony before the Board of Public Utilities in Kansas City, Kansas; presented rate
17 setting position reports to the regulatory board of the municipal utility in Austin, Texas,
18 and Salt River Project, Arizona, on behalf of industrial customers; and negotiated rate
19 disputes for industrial customers of the Municipal Electric Authority of Georgia in the
20 LaGrange, Georgia district.

1 **Q PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR**
2 **ORGANIZATIONS TO WHICH YOU BELONG.**

3 A I earned the designation of Chartered Financial Analyst (“CFA”) from the CFA
4 Institute. The CFA charter was awarded after successfully completing three
5 examinations which covered the subject areas of financial accounting, economics,
6 fixed income and equity valuation and professional and ethical conduct. I am a
7 member of the CFA Institute’s Financial Analyst Society.

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Ameren Missouri

Rate of Return

<u>Line</u>	<u>Description</u>	<u>Amount (000)</u> (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	Weighted Cost (4)
1	Long-Term Debt	\$ 3,605,229	46.802%	5.88%	2.75%
2	Short-Term Debt	-	0.000%	0.00%	0.00%
3	Preferred Stock	81,828	1.062%	4.18%	0.04%
4	Common Equity	<u>4,016,120</u>	<u>52.136%</u>	9.30%	<u>4.85%</u>
5	Total	\$ 7,703,177	100.000%		7.64%

Source:
Schedule RJM-E1.

Ameren Missouri

Proxy Group

<u>Line</u>	<u>Company</u>	<u>Credit Ratings¹</u>		<u>Common Equity Ratios</u>		<u>S&P Business Risk Score³</u>
		<u>S&P</u> (1)	<u>Moody's</u> (2)	<u>AUS¹</u> (3)	<u>Value Line²</u> (4)	
1	American Electric Power	BBB	Baa2	44.7%	48.5%	Excellent
2	Cleco Corp.	BBB	Baa2	51.9%	51.5%	Excellent
3	Edison International	BBB+	A1	38.2%	40.6%	Strong
4	Great Plains Energy Inc.	BBB	Baa2	41.8%	51.6%	Excellent
5	IDACORP, Inc.	A-	A2	51.8%	54.4%	Excellent
6	Integrus Energy	A-	A2	55.1%	60.6%	Excellent
7	Otter Tail Corp.	BBB-	Baa2	53.5%	54.0%	Satisfactory
8	Pinnacle West Capital	BBB-	Baa2	49.8%	55.9%	Excellent
9	Portland General	A-	A3	49.3%	50.4%	Excellent
10	Southern Co.	A	A2	46.5%	47.1%	Excellent
11	Westar Energy	BBB+	Baa1	45.9%	50.0%	Excellent
12	Average	BBB+	Baa1	48.0%	51.3%	Excellent
13	Ameren Missouri	BBB+ ⁴	A3 ⁴		52.136% ⁵	Excellent

Sources:

¹ *AUS Utility Reports*, June 1, 2012.

² *The Value Line Investment Survey*, March 23, May 4, and May 25, 2012.

³ *S&P RatingsDirect*: "U.S. Regulated Electric Utilities, Strongest To Weakest," April 20, 2012.

⁴ SNL Financial.

⁵ Martin Direct, Schedule RJM-E1.

Ameren Missouri

Consensus Analysts' Growth Rates

<u>Line</u>	<u>Company</u>	<u>Zacks</u>		<u>SNL</u>		<u>Reuters</u>		<u>Average of Growth Rates (7)</u>
		<u>Estimated Growth %¹</u>	<u>Number of Estimates</u>	<u>Estimated Growth %²</u>	<u>Number of Estimates</u>	<u>Estimated Growth %³</u>	<u>Number of Estimates</u>	
		(1)	(2)	(3)	(4)	(5)	(6)	
1	American Electric Power	3.60%	N/A	4.00%	7	3.84%	8	3.81%
2	Cleco Corp.	N/A	N/A	3.00%	1	3.00%	1	3.00%
3	Edison International	1.47%	N/A	2.90%	5	2.48%	8	2.28%
4	Great Plains Energy Inc.	7.75%	N/A	7.50%	4	8.50%	3	7.92%
5	IDACORP, Inc.	5.00%	N/A	4.50%	2	4.50%	2	4.67%
6	Integrus Energy	4.50%	N/A	4.50%	4	7.20%	4	5.40%
7	Otter Tail Corp.	5.00%	N/A	5.00%	1	5.00%	1	5.00%
8	Pinnacle West Capital	5.68%	N/A	5.40%	5	6.04%	7	5.71%
9	Portland General	4.10%	N/A	4.50%	4	4.27%	9	4.29%
10	Southern Co.	5.04%	N/A	5.40%	7	5.64%	9	5.36%
11	Westar Energy	6.22%	N/A	5.30%	6	6.03%	6	5.85%
12	Average	4.84%	N/A	4.73%	4	5.14%	5	4.84%

Sources:

¹ Zacks Elite, <http://www.zackselite.com/>, downloaded on June 17, 2012.

² SNL Interactive, <http://www.snl.com/>, downloaded on June 17, 2012.

³ Reuters, <http://www.reuters.com/>, downloaded on June 17, 2012.

Ameren Missouri

Constant Growth DCF Model (Consensus Analysts' Growth Rates)

<u>Line</u>	<u>Company</u>	<u>13-Week AVG Stock Price¹</u> (1)	<u>Analysts' Growth²</u> (2)	<u>Annualized Dividend³</u> (3)	<u>Adjusted Yield</u> (4)	<u>Constant Growth DCF</u> (5)
1	American Electric Power	\$38.39	3.81%	\$1.88	5.08%	8.90%
2	Cleco Corp.	\$40.04	3.00%	\$1.25	3.22%	6.22%
3	Edison International	\$43.66	2.28%	\$1.30	3.05%	5.33%
4	Great Plains Energy Inc.	\$20.03	7.92%	\$0.85	4.58%	12.50%
5	IDACORP, Inc.	\$39.88	4.67%	\$1.32	3.46%	8.13%
6	Integrys Energy	\$53.56	5.40%	\$2.72	5.35%	10.75%
7	Otter Tail Corp.	\$21.65	5.00%	\$1.19	5.78%	10.78%
8	Pinnacle West Capital	\$48.24	5.71%	\$2.10	4.60%	10.31%
9	Portland General	\$25.09	4.29%	\$1.06	4.41%	8.70%
10	Southern Co.	\$45.51	5.36%	\$1.96	4.54%	9.90%
11	Westar Energy	\$28.17	5.85%	\$1.32	4.96%	10.81%
12	Average	\$36.75	4.84%	\$1.54	4.46%	9.30%
13	Median					9.90%

Sources:

¹ SNL Financial, downloaded on June 17, 2012.

² Exhibit MPG-3.

³ *The Value Line Investment Survey*, March 23, May 4, and May 25, 2012.

Ameren Missouri

Payout Ratios

<u>Line</u>	<u>Company</u>	<u>Dividends Per Share</u>		<u>Earnings Per Share</u>		<u>Payout Ratio</u>	
		<u>2011</u>	<u>Projected</u>	<u>2011</u>	<u>Projected</u>	<u>2011</u>	<u>Projected</u>
		(1)	(2)	(3)	(4)	(5)	(6)
1	American Electric Power	\$1.85	\$2.15	\$3.13	\$3.75	59.11%	57.33%
2	Cleco Corp.	\$1.12	\$1.75	\$2.59	\$3.25	43.24%	53.85%
3	Edison International	\$1.29	\$1.50	\$3.23	\$3.50	39.94%	42.86%
4	Great Plains Energy Inc.	\$0.84	\$1.10	\$1.25	\$1.75	67.20%	62.86%
5	IDACORP, Inc.	\$1.20	\$1.90	\$3.36	\$3.55	35.71%	53.52%
6	Integrus Energy	\$2.72	\$2.80	\$2.88	\$4.25	94.44%	65.88%
7	Otter Tail Corp.	\$1.19	\$1.30	\$0.45	\$1.80	264.44%	72.22%
8	Pinnacle West Capital	\$2.10	\$2.40	\$2.99	\$3.75	70.23%	64.00%
9	Portland General	\$1.06	\$1.25	\$1.95	\$2.25	54.36%	55.56%
10	Southern Co.	\$1.87	\$2.25	\$2.55	\$3.25	73.33%	69.23%
11	Westar Energy	\$1.28	\$1.48	\$1.79	\$2.40	71.51%	61.67%
12	Average	\$1.50	\$1.81	\$2.38	\$3.05	79.41%	59.91%

Source:

The Value Line Investment Survey, March 23, May 4, and May 25, 2012.

Ameren Missouri

Sustainable Growth Rate

Line	Company	3 to 5 Year Projections										Sustainable
		Dividends	Earnings	Book Value	Book Value		Adjustment	Adjusted	Payout	Retention	Internal	Growth
		Per Share	Per Share	Per Share	Growth	ROE	Factor	ROE	Ratio	Rate	Growth Rate	Rate
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	American Electric Power	\$2.15	\$3.75	\$38.00	4.60%	9.87%	1.02	10.09%	57.33%	42.67%	4.31%	4.49%
2	Cleco Corp.	\$1.75	\$3.25	\$30.25	5.27%	10.74%	1.03	11.02%	53.85%	46.15%	5.09%	5.09%
3	Edison International	\$1.50	\$3.50	\$39.00	4.79%	8.97%	1.02	9.18%	42.86%	57.14%	5.25%	5.25%
4	Great Plains Energy Inc.	\$1.10	\$1.75	\$24.00	2.00%	7.29%	1.01	7.36%	62.86%	37.14%	2.74%	2.74%
5	IDACORP, Inc.	\$1.90	\$3.55	\$43.20	5.41%	8.22%	1.03	8.43%	53.52%	46.48%	3.92%	4.00%
6	Integrus Energy	\$2.80	\$4.25	\$44.25	3.09%	9.60%	1.02	9.75%	65.88%	34.12%	3.33%	3.33%
7	Otter Tail Corp.	\$1.30	\$1.80	\$19.05	3.77%	9.45%	1.02	9.62%	72.22%	27.78%	2.67%	3.80%
8	Pinnacle West Capital	\$2.40	\$3.75	\$41.25	3.35%	9.09%	1.02	9.24%	64.00%	36.00%	3.33%	3.95%
9	Portland General	\$1.25	\$2.25	\$26.50	3.73%	8.49%	1.02	8.65%	55.56%	44.44%	3.84%	3.88%
10	Southern Co.	\$2.25	\$3.25	\$26.25	5.25%	12.38%	1.03	12.70%	69.23%	30.77%	3.91%	5.98%
11	Westar Energy	\$1.48	\$2.40	\$28.15	4.86%	8.53%	1.02	8.73%	61.67%	38.33%	3.35%	3.73%
12	Average	\$1.81	\$3.05	\$32.72	4.19%	9.33%	1.02	9.53%	59.91%	40.09%	3.79%	4.20%

Sources and Notes:

Cols. (1), (2) and (3): *The Value Line Investment Survey, March 23, May 4, and May 25, 2012.*

Col. (4): $[\text{Col. (3)} / \text{Page 2 Col. (2)}]^{(1/5)} - 1$.

Col. (5): $\text{Col. (2)} / \text{Col. (3)}$.

Col. (6): $[2 * (1 + \text{Col. (4)})] / (2 + \text{Col. (4)})$.

Col. (7): $\text{Col. (6)} * \text{Col. (5)}$.

Col. (8): $\text{Col. (1)} / \text{Col. (2)}$.

Col. (9): $1 - \text{Col. (8)}$.

Col. (10): $\text{Col. (9)} * \text{Col. (7)}$.

Col. (11): $\text{Col. (10)} + \text{Page 2 Col. (9)}$.

Ameren Missouri

Sustainable Growth Rate

<u>Line</u>	<u>Company</u>	<u>13-Week</u> <u>Average</u> <u>Stock Price</u> ¹	<u>2011</u> <u>Book Value</u> <u>Per Share</u> ²	<u>Market</u> <u>to Book</u> <u>Ratio</u>	<u>Common Shares</u> <u>Outstanding (in Millions)</u> ²		<u>Growth</u> <u>(6)</u>	<u>S Factor</u> ³ <u>(7)</u>	<u>V Factor</u> ⁴ <u>(8)</u>	<u>S * V</u> ⁵ <u>(9)</u>
		<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>2011</u> <u>(4)</u>	<u>3-5 Years</u> <u>(5)</u>				
1	American Electric Power	\$38.39	\$30.35	1.26	483.00	500.00	0.69%	0.88%	20.94%	0.18%
2	Cleco Corp.	\$40.04	\$23.40	1.71	60.70	60.70	0.00%	0.00%	41.55%	0.00%
3	Edison International	\$43.66	\$30.86	1.41	325.81	325.81	0.00%	0.00%	29.31%	0.00%
4	Great Plains Energy Inc.	\$20.03	\$21.74	0.92	136.14	154.00	2.50%	2.30%	-8.55%	-0.20%
5	IDACORP, Inc.	\$39.88	\$33.19	1.20	49.95	51.00	0.42%	0.50%	16.78%	0.08%
6	Integrus Energy	\$53.56	\$38.01	1.41	77.91	77.90	0.00%	0.00%	29.03%	0.00%
7	Otter Tail Corp.	\$21.65	\$15.83	1.37	36.10	42.00	3.07%	4.20%	26.87%	1.13%
8	Pinnacle West Capital	\$48.24	\$34.98	1.38	109.25	118.50	1.64%	2.26%	27.49%	0.62%
9	Portland General	\$25.09	\$22.07	1.14	75.36	76.50	0.30%	0.34%	12.02%	0.04%
10	Southern Co.	\$45.51	\$20.32	2.24	865.13	940.00	1.67%	3.75%	55.35%	2.07%
11	Westar Energy	\$28.17	\$22.20	1.27	125.70	135.00	1.44%	1.82%	21.19%	0.39%
12	Average	\$36.75	\$26.63	1.39	213.19	225.58	1.17%	1.61%	28.05%	0.50%

Sources and Notes:

¹ SNL Financial, downloaded on June 17, 2012.

² *The Value Line Investment Survey, March 23, May 4, and May 25, 2012.*

³ Expected Growth in the Number of Shares, Column (3) * Column (6).

⁴ Expected Profit of Stock Investment, [1 - 1 / Column (3)].

⁵ Column (9) Line 12 excludes negative values.

Ameren Missouri

Constant Growth DCF Model (Sustainable Growth Rate)

<u>Line</u>	<u>Company</u>	<u>13-Week AVG Stock Price¹</u> (1)	<u>Sustainable Growth²</u> (2)	<u>Annualized Dividend³</u> (3)	<u>Adjusted Yield</u> (4)	<u>Constant Growth DCF</u> (5)
1	American Electric Power	\$38.39	4.49%	\$1.88	5.12%	9.61%
2	Cleco Corp.	\$40.04	5.09%	\$1.25	3.28%	8.37%
3	Edison International	\$43.66	5.25%	\$1.30	3.13%	8.38%
4	Great Plains Energy Inc.	\$20.03	2.74%	\$0.85	4.36%	7.10%
5	IDACORP, Inc.	\$39.88	4.00%	\$1.32	3.44%	7.45%
6	Integrus Energy	\$53.56	3.33%	\$2.72	5.25%	8.57%
7	Otter Tail Corp.	\$21.65	3.80%	\$1.19	5.72%	9.52%
8	Pinnacle West Capital	\$48.24	3.95%	\$2.10	4.52%	8.47%
9	Portland General	\$25.09	3.88%	\$1.06	4.39%	8.27%
10	Southern Co.	\$45.51	5.98%	\$1.96	4.56%	10.55%
11	Westar Energy	\$28.17	3.73%	\$1.32	4.86%	8.59%
12	Average	\$36.75	4.20%	\$1.54	4.42%	8.63%
13	Median					8.47%

Sources:

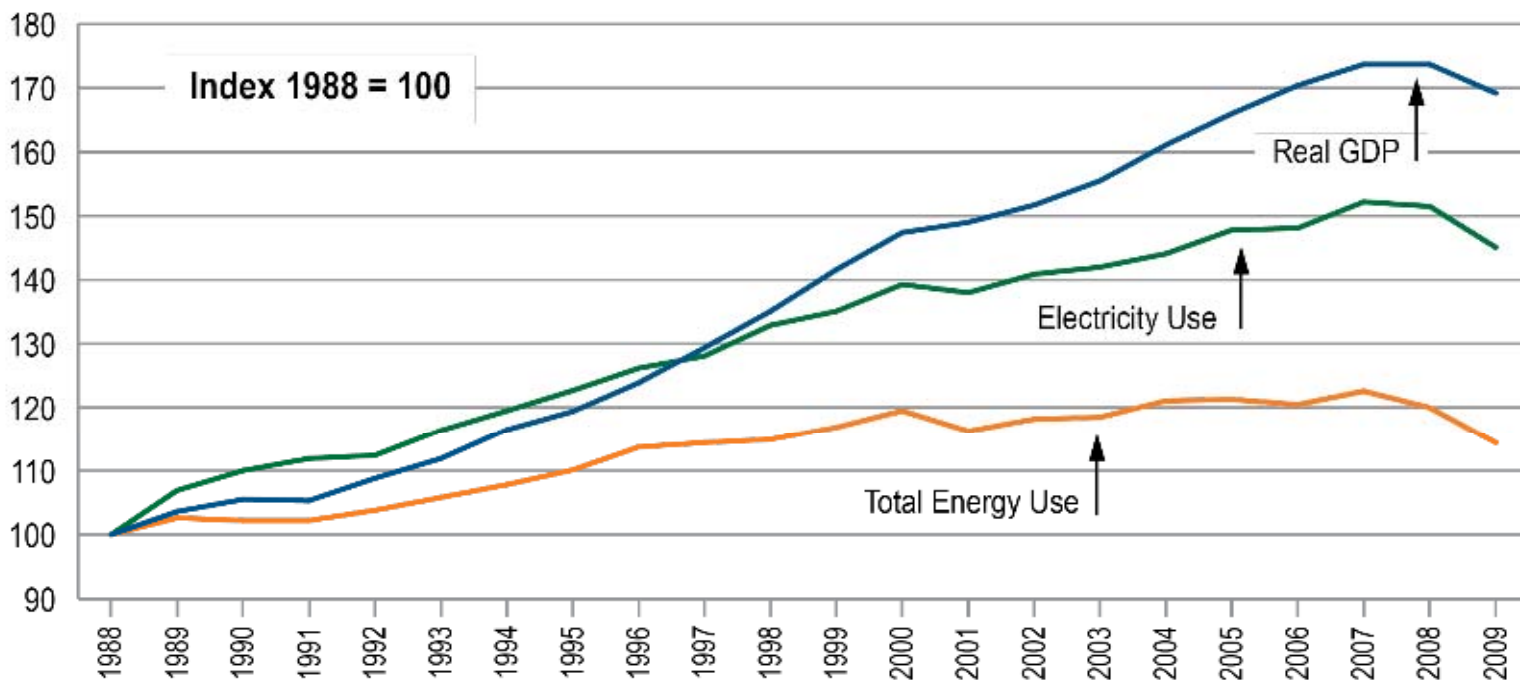
¹ SNL Financial, downloaded on June 17, 2012.

² Exhibit MPG-6, page 1 of 2.

³ *The Value Line Investment Survey*, March 23, May 4, and May 25, 2012.

Ameren Missouri

Electricity Sales Are Linked to U.S. Economic Growth



Note:

1988 represents the base year. Graph depicts increases or decreases from the base year.

Sources:

U.S. Department of Energy, Energy Information Administration.

Edison Electric Institute, <http://www.eei.org>.

Ameren Missouri

Multi-Stage Growth DCF Model

<u>Line</u>	<u>Company</u>	<u>13-Week AVG</u>	<u>Annualized</u>	<u>First Stage</u>	<u>Second Stage Growth</u>					<u>Third Stage</u>	<u>Multi-Stage</u>
		<u>Stock Price¹</u>	<u>Dividend²</u>	<u>Growth³</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>	<u>Growth⁴</u>	<u>Growth DCF</u>
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	American Electric Power	\$38.39	\$1.88	3.81%	3.99%	4.18%	4.36%	4.54%	4.72%	4.90%	9.70%
2	Cleco Corp.	\$40.04	\$1.25	3.00%	3.32%	3.63%	3.95%	4.27%	4.58%	4.90%	7.78%
3	Edison International	\$43.66	\$1.30	2.28%	2.72%	3.16%	3.59%	4.03%	4.46%	4.90%	7.51%
4	Great Plains Energy Inc.	\$20.03	\$0.85	7.92%	7.41%	6.91%	6.41%	5.91%	5.40%	4.90%	10.24%
5	IDACORP, Inc.	\$39.88	\$1.32	4.67%	4.71%	4.74%	4.78%	4.82%	4.86%	4.90%	8.31%
6	Integrus Energy	\$53.56	\$2.72	5.40%	5.32%	5.23%	5.15%	5.07%	4.98%	4.90%	10.39%
7	Otter Tail Corp.	\$21.65	\$1.19	5.00%	4.98%	4.97%	4.95%	4.93%	4.92%	4.90%	10.71%
8	Pinnacle West Capital	\$48.24	\$2.10	5.71%	5.57%	5.44%	5.30%	5.17%	5.03%	4.90%	9.70%
9	Portland General	\$25.09	\$1.06	4.29%	4.39%	4.49%	4.60%	4.70%	4.80%	4.90%	9.16%
10	Southern Co.	\$45.51	\$1.96	5.36%	5.28%	5.21%	5.13%	5.05%	4.98%	4.90%	9.55%
11	Westar Energy	\$28.17	\$1.32	5.85%	5.69%	5.53%	5.38%	5.22%	5.06%	4.90%	10.11%
12	Average	\$36.75	\$1.54	4.84%	4.85%	4.86%	4.87%	4.88%	4.89%	4.90%	9.38%
13	Median										9.70%

Sources:

¹ SNL Financial, downloaded on June 17, 2012.

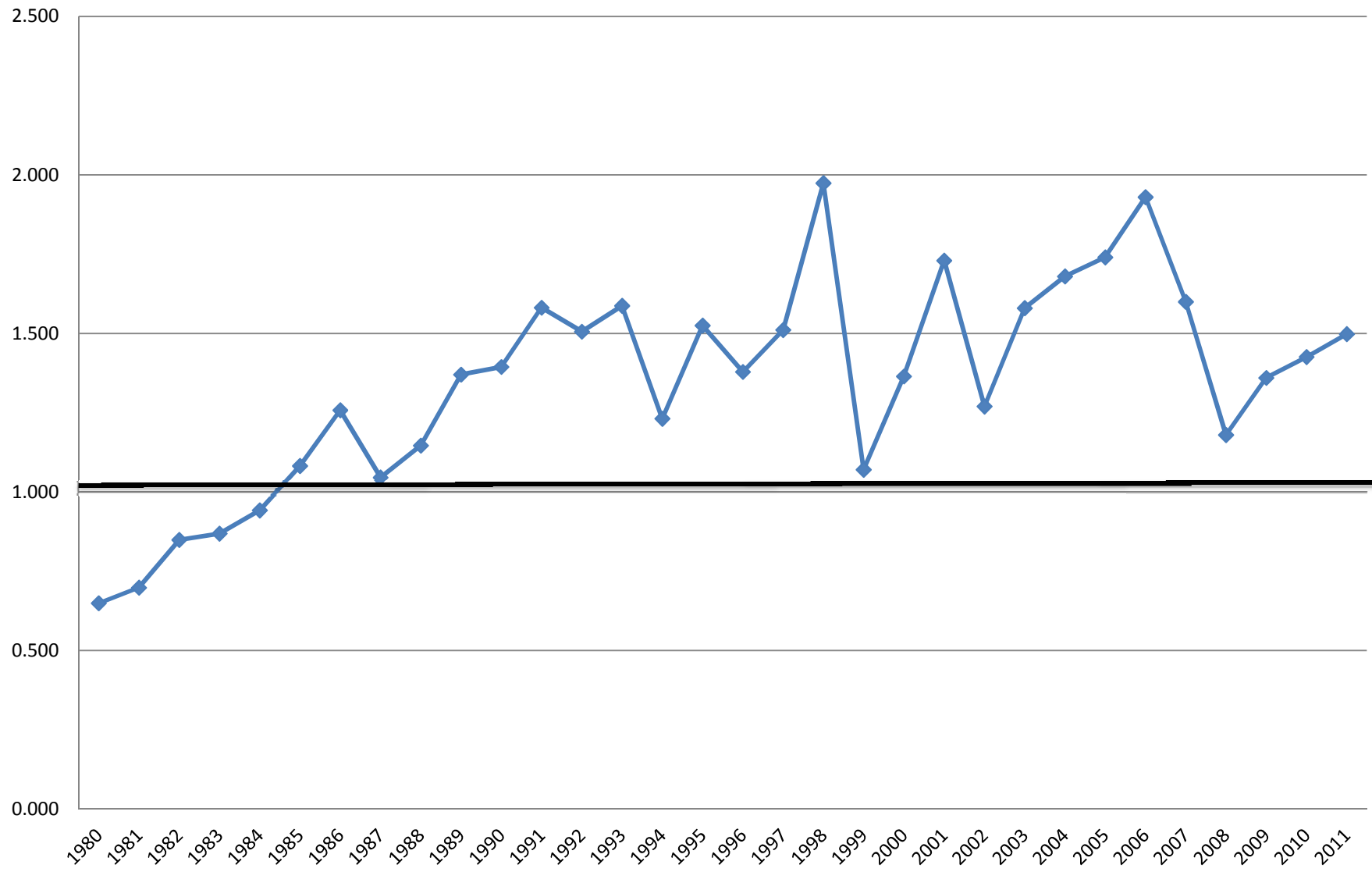
² *The Value Line Investment Survey*, March 23, May 4, and May 25, 2012.

³ Exhibit MPG-3.

⁴ *Blue Chip Financial Forecasts*, June 1, 2012 at 14.

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Common Stock Market/Book Ratio



Ameren Missouri

Equity Risk Premium - Treasury Bond

<u>Line</u>	<u>Year</u>	<u>Authorized Electric Returns¹</u> (1)	<u>Treasury Bond Yield²</u> (2)	<u>Indicated Risk Premium</u> (3)
1	1986	13.93%	7.80%	6.13%
2	1987	12.99%	8.58%	4.41%
3	1988	12.79%	8.96%	3.83%
4	1989	12.97%	8.45%	4.52%
5	1990	12.70%	8.61%	4.09%
6	1991	12.55%	8.14%	4.41%
7	1992	12.09%	7.67%	4.42%
8	1993	11.41%	6.60%	4.81%
9	1994	11.34%	7.37%	3.97%
10	1995	11.55%	6.88%	4.67%
11	1996	11.39%	6.70%	4.69%
12	1997	11.40%	6.61%	4.79%
13	1998	11.66%	5.58%	6.08%
14	1999	10.77%	5.87%	4.90%
15	2000	11.43%	5.94%	5.49%
16	2001	11.09%	5.49%	5.60%
17	2002	11.16%	5.43%	5.73%
18	2003	10.97%	4.96%	6.01%
19	2004	10.75%	5.05%	5.70%
20	2005	10.54%	4.65%	5.89%
21	2006	10.36%	4.99%	5.37%
22	2007	10.36%	4.83%	5.53%
23	2008	10.46%	4.28%	6.18%
24	2009	10.48%	4.07%	6.41%
25	2010	10.34%	4.25%	6.09%
26	2011	10.22%	3.91%	6.31%
27	Average	11.45%	6.22%	5.23%

Sources:

¹ Regulatory Research Associates, Inc., *Regulatory Focus*, Jan. 85 - Dec. 06, and January 10, 2012.

² St. Louis Federal Reserve: Economic Research, <http://research.stlouisfed.org/>. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

Ameren Missouri

Equity Risk Premium - Utility Bond

<u>Line</u>	<u>Year</u>	<u>Authorized Electric Returns¹</u> (1)	<u>Average "A" Rated Utility Bond Yield²</u> (2)	<u>Indicated Risk Premium</u> (3)
1	1986	13.93%	9.58%	4.35%
2	1987	12.99%	10.10%	2.89%
3	1988	12.79%	10.49%	2.30%
4	1989	12.97%	9.77%	3.20%
5	1990	12.70%	9.86%	2.84%
6	1991	12.55%	9.36%	3.19%
7	1992	12.09%	8.69%	3.40%
8	1993	11.41%	7.59%	3.82%
9	1994	11.34%	8.31%	3.03%
10	1995	11.55%	7.89%	3.66%
11	1996	11.39%	7.75%	3.64%
12	1997	11.40%	7.60%	3.80%
13	1998	11.66%	7.04%	4.62%
14	1999	10.77%	7.62%	3.15%
15	2000	11.43%	8.24%	3.19%
16	2001	11.09%	7.76%	3.33%
17	2002	11.16%	7.37%	3.79%
18	2003	10.97%	6.58%	4.39%
19	2004	10.75%	6.16%	4.59%
20	2005	10.54%	5.65%	4.89%
21	2006	10.36%	6.07%	4.29%
22	2007	10.36%	6.07%	4.29%
23	2008	10.46%	6.53%	3.93%
24	2009	10.48%	6.04%	4.44%
25	2010	10.34%	5.46%	4.88%
26	2011	10.22%	5.04%	5.18%
27	Average	11.45%	7.64%	3.81%

Sources:

¹ Regulatory Research Associates, Inc., *Regulatory Focus*, Jan. 85 - Dec. 06, and January 10, 2012.

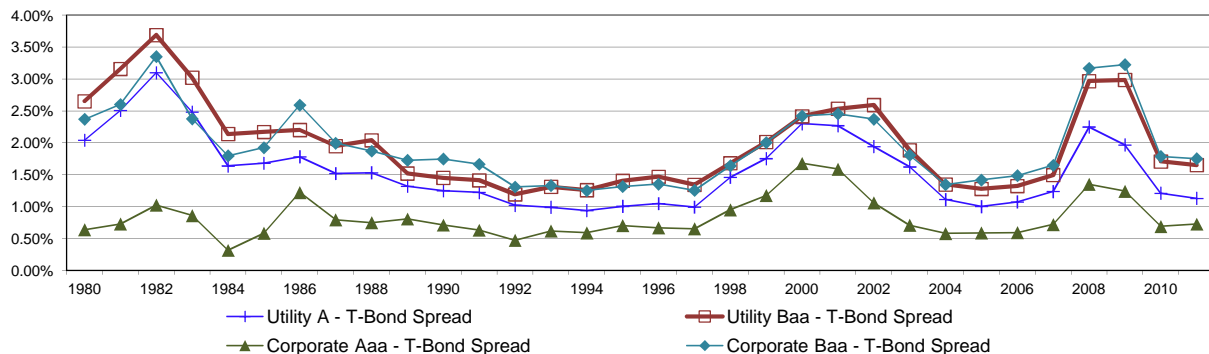
² Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2009 were obtained from the Mergent Bond Record. The utility yields from 2010-2011 were obtained from <http://credittrends.moodys.com/>.

Ameren Missouri

Bond Yield Spreads

Line	Year	T-Bond Yield ¹ (1)	Public Utility Bond				Corporate Bond				Utility - Corp. Spread	
			A ² (2)	Baa ² (3)	A-T-Bond Spread (4)	Baa-T-Bond Spread (5)	Aaa ¹ (6)	Baa ¹ (7)	Aaa-T-Bond Spread (8)	Baa-T-Bond Spread (9)	A / Aaa (10)	Baa / Baa (11)
1	1980	11.30%	13.34%	13.95%	2.04%	2.65%	11.94%	13.67%	0.64%	2.37%	1.40%	0.28%
2	1981	13.44%	15.95%	16.60%	2.51%	3.16%	14.17%	16.04%	0.73%	2.60%	1.78%	0.56%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	1.03%	3.35%	2.07%	0.34%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	0.86%	2.38%	1.62%	0.65%
5	1984	12.39%	14.03%	14.53%	1.64%	2.14%	12.71%	14.19%	0.32%	1.80%	1.32%	0.34%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	0.58%	1.93%	1.10%	0.24%
7	1986	7.80%	9.58%	10.00%	1.78%	2.20%	9.02%	10.39%	1.22%	2.59%	0.56%	-0.39%
8	1987	8.58%	10.10%	10.53%	1.52%	1.95%	9.38%	10.58%	0.80%	2.00%	0.72%	-0.05%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	0.75%	1.87%	0.78%	0.17%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.81%	1.73%	0.51%	-0.21%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	0.71%	1.75%	0.54%	-0.29%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	0.63%	1.67%	0.59%	-0.25%
13	1992	7.67%	8.69%	8.86%	1.02%	1.19%	8.14%	8.98%	0.47%	1.31%	0.55%	-0.12%
14	1993	6.60%	7.59%	7.91%	0.99%	1.31%	7.22%	7.93%	0.62%	1.33%	0.37%	-0.02%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.59%	1.25%	0.35%	0.01%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.71%	1.32%	0.30%	0.09%
17	1996	6.70%	7.75%	8.17%	1.05%	1.47%	7.37%	8.05%	0.67%	1.35%	0.38%	0.12%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.66%	1.26%	0.34%	0.09%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.95%	1.64%	0.51%	0.04%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	1.18%	2.01%	0.58%	0.01%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	1.68%	2.42%	0.62%	-0.01%
22	2001	5.49%	7.76%	8.03%	2.27%	2.54%	7.08%	7.95%	1.59%	2.45%	0.68%	0.08%
23	2002	5.43%	7.37%	8.02%	1.94%	2.59%	6.49%	7.80%	1.06%	2.37%	0.88%	0.22%
24	2003	4.96%	6.58%	6.84%	1.62%	1.89%	5.67%	6.77%	0.71%	1.81%	0.91%	0.08%
25	2004	5.05%	6.16%	6.40%	1.11%	1.35%	5.63%	6.39%	0.58%	1.35%	0.53%	0.00%
26	2005	4.65%	5.65%	5.93%	1.00%	1.28%	5.24%	6.06%	0.59%	1.42%	0.41%	-0.14%
27	2006	4.99%	6.07%	6.32%	1.08%	1.32%	5.59%	6.48%	0.60%	1.49%	0.48%	-0.16%
28	2007	4.83%	6.07%	6.33%	1.24%	1.50%	5.56%	6.48%	0.72%	1.65%	0.52%	-0.15%
29	2008	4.28%	6.53%	7.25%	2.25%	2.97%	5.63%	7.45%	1.35%	3.17%	0.90%	-0.20%
30	2009	4.07%	6.04%	7.06%	1.97%	2.99%	5.31%	7.30%	1.24%	3.23%	0.72%	-0.24%
31	2010	4.25%	5.46%	5.96%	1.21%	1.71%	4.94%	6.04%	0.69%	1.79%	0.52%	-0.08%
32	2011	3.91%	5.04%	5.56%	1.13%	1.65%	4.64%	5.66%	0.73%	1.75%	0.40%	-0.10%
33	Average	7.30%	8.87%	9.27%	1.58%	1.98%	8.12%	9.25%	0.83%	1.95%	0.75%	0.03%

Yield Spreads
Treasury Vs. Corporate & Treasury Vs. Utility



Sources:

¹ St. Louis Federal Reserve: Economic Research, <http://research.stlouisfed.org/>.

² Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2009 were obtained from the Mergent Bond Record. The utility yields from 2010-2011 were obtained from <http://credittrends.moodys.com/>.

Ameren Missouri

Treasury and Utility Bond Yields

<u>Line</u>	<u>Date</u>	<u>Treasury Bond Yield¹</u> (1)	<u>"A" Rated Utility Bond Yield²</u> (2)	<u>"Baa" Rated Utility Bond Yield²</u> (3)
1	06/15/12	2.70%	4.08%	4.90%
2	06/08/12	2.77%	4.16%	4.97%
3	06/01/12	2.53%	3.92%	4.75%
4	05/25/12	2.85%	4.20%	5.02%
5	05/18/12	2.80%	4.08%	4.85%
6	05/11/12	3.02%	4.22%	4.96%
7	05/04/12	3.07%	4.29%	5.03%
8	04/27/12	3.12%	4.33%	5.06%
9	04/20/12	3.12%	4.35%	5.07%
10	04/13/12	3.14%	4.37%	5.08%
11	04/06/12	3.21%	4.44%	5.13%
12	03/30/12	3.35%	4.54%	5.20%
13	03/23/12	3.31%	4.51%	5.15%
14	Average	3.00%	4.27%	5.01%
15	Spread To Treasury		1.27%	2.01%

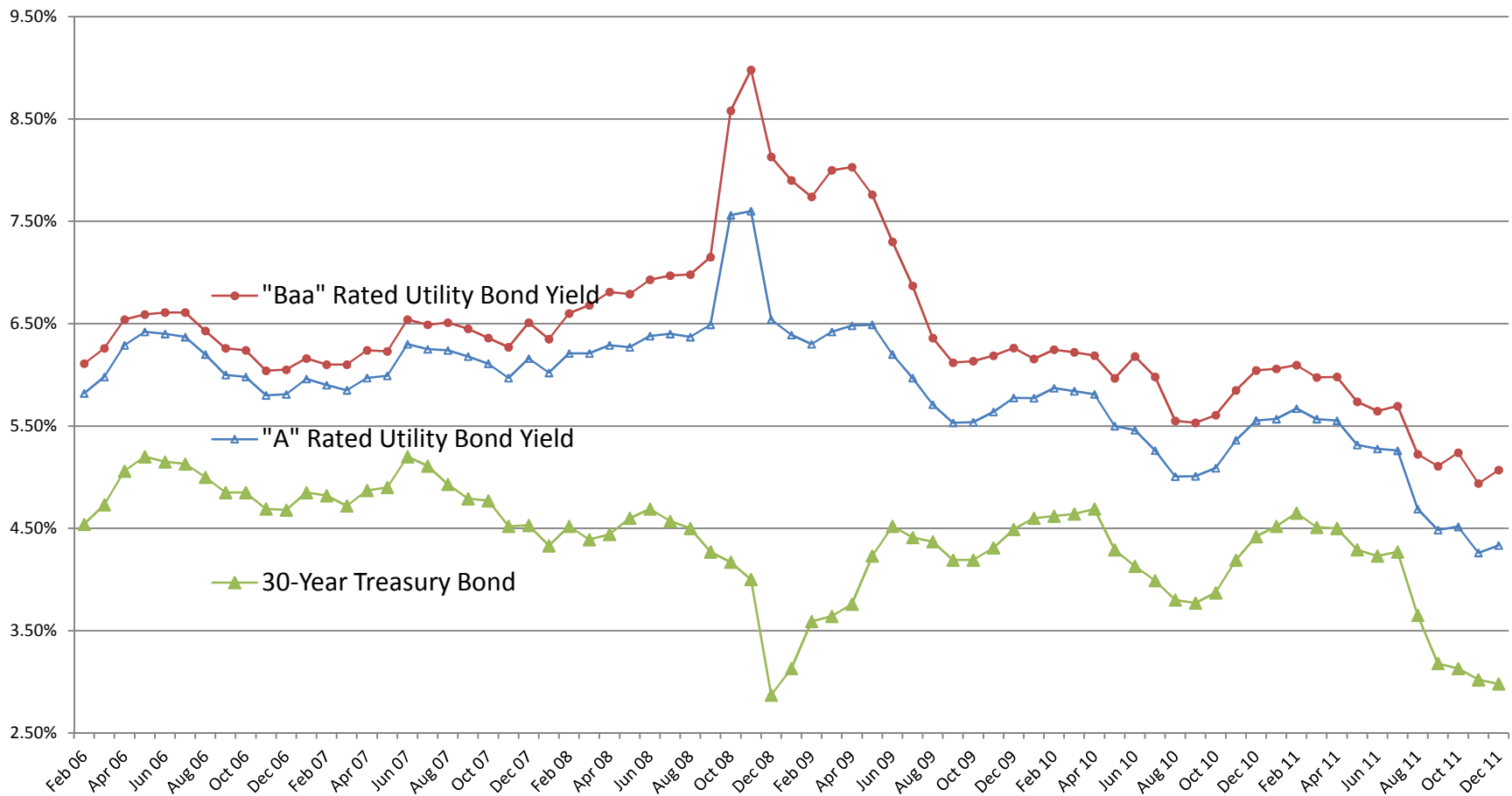
Sources:

¹ St. Louis Federal Reserve: Economic Research, <http://research.stlouisfed.org>.

²<http://credittrends.moodys.com/>.

Ameren Missouri

Trends in Bond Yields



Sources:

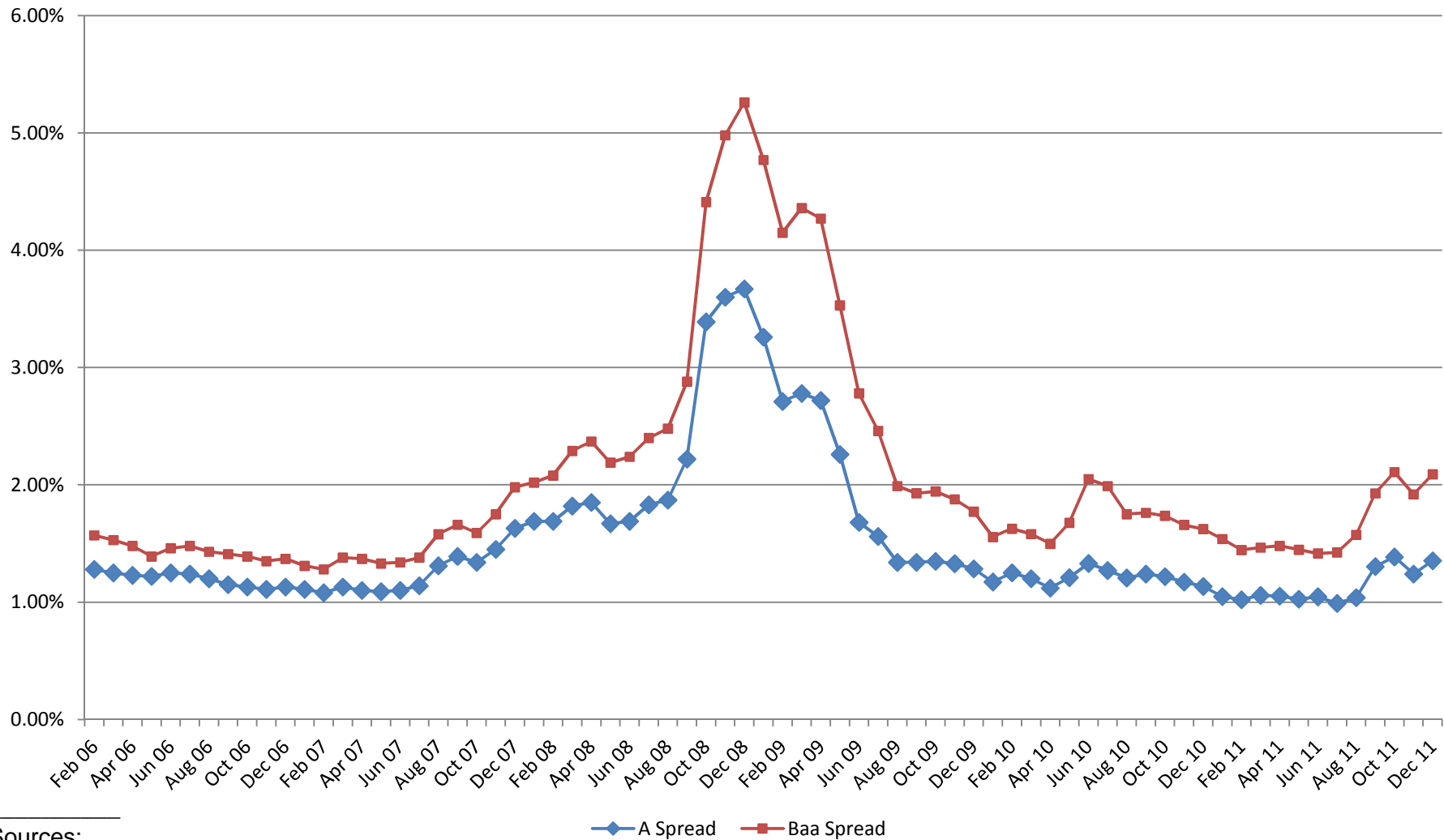
Merchant Bond Record.

www.moodys.com, Bond Yields and Key Indicators.

St. Louis Federal Reserve: Economic Research, <http://research.stlouisfed.org/>

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Yield Spread Between Utility Bonds and 30-Year Treasury Bonds



Sources:

Merchant Bond Record.

www.moodys.com, Bond Yields and Key Indicators.

St. Louis Federal Reserve: Economic Research, <http://research.stlouisfed.org/>

Ameren Missouri

Value Line Beta

<u>Line</u>	<u>Company</u>	<u>Beta</u>
1	American Electric Power	0.70
2	Cleco Corp.	0.70
3	Edison International	0.80
4	Great Plains Energy Inc.	0.75
5	IDACORP, Inc.	0.70
6	Integrus Energy	0.90
7	Otter Tail Corp.	0.90
8	Pinnacle West Capital	0.70
9	Portland General	0.75
10	Southern Co.	0.55
11	Westar Energy	0.75
12	Average	0.75

Source:
The Value Line Investment Survey,
March 23, May 4, and May 25, 2012.

Ameren Missouri

CAPM Return

<u>Line</u>	<u>Description</u>	<u>Market Risk Premium</u>
1	Risk-Free Rate ¹	3.70%
2	Risk Premium ²	6.60%
3	Beta ³	0.75
4	CAPM	8.65%

Sources:

¹ *Blue Chip Financial Forecasts*, June 1, 2012, at 2.

² Morningstar, Inc. *Ibbotson SBI 2012 Classic Yearbook* at 86, and Morningstar, Inc. *Ibbotson SBI 2012 Valuation Yearbook* at 54 and 66.

³ Exhibit MPG-15.

Ameren Missouri

Standard & Poor's Credit Metrics

<u>Line</u>	<u>Description</u>	Retail	S&P Benchmark ^{1/2}		<u>Reference</u>
		<u>Cost of Service</u> <u>Amount (\$000)</u> (1)	<u>Intermediate</u> (2)	<u>Significant</u> (3)	
1	Rate Base	\$ 6,810,174			Schedule GSW-E15.
2	Weighted Common Return	4.85%			Page 2, Line 4, Col. 4.
3	Pre-Tax Rate of Return	10.62%			Page 2, Line 5, Col. 5.
4	Income to Common	\$ 330,201			Line 1 x Line 2.
5	EBIT	\$ 723,319			Line 1 x Line 3.
6	Depreciation & Amortization	\$ 461,617			Schedule GSW-E15.
7	Imputed Amortization	\$ 7,064			Standard & Poor's Online.
8	Deferred Income Taxes & ITC	\$ (7,109)			Schedule GSW-E15.
9	Funds from Operations (FFO)	\$ 791,773			Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest Expense	\$ 5,936			Standard & Poor's Online.
11	EBITDA	\$ 1,197,936			Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio	47%	35% - 45%	45% - 50%	Page 3, Line 5, Col. 2.
13	Debt to EBITDA	2.7x	2.0x - 3.0x	3.0x - 4.0x	(Line 1 x Line 12) / Line 11.
14	FFO to Total Debt	25%	30% - 45%	20% - 30%	Line 9 / (Line 1 x Line 12).

Sources:

¹ Standard & Poor's: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009

² *S&P RatingsDirect*: "U.S. Regulated Electric Utilities, Strongest to Weakest," April 20, 2012.

Note:

Based on the April 2012 S&P report, Ameren Missouri has an "Excellent" business profile and a "Significant" financial profile.

Ameren Missouri

Standard & Poor's Credit Metrics (Pre-Tax Rate of Return)

<u>Line</u>	<u>Description</u>	<u>Amount (000)</u> (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	<u>Weighted Cost</u> (4)	<u>Pre-Tax Weighted Cost</u> (5)
1	Long-Term Debt	\$ 3,605,229	46.802%	5.88%	2.75%	2.75%
2	Short-Term Debt	-	0.000%	0.00%	0.00%	0.00%
3	Preferred Stock	81,828	1.062%	4.18%	0.04%	0.04%
4	Common Equity	<u>4,016,120</u>	<u>52.136%</u>	9.30%	<u>4.85%</u>	<u>7.83%</u>
5	Total	\$ 7,703,177	100.000%		7.64%	10.62%
6	Tax Conversion Factor*					1.6141

Sources:

Schedule RJM-E1.

* Schedule GSW-E14.

Ameren Missouri

Standard & Poor's Credit Metrics (Financial Capital Structure)

<u>Line</u>	<u>Description</u>	<u>Amount (000)</u> <u>(1)</u>	<u>Weight</u> <u>(2)</u>
1	Long-Term Debt	\$ 3,605,229	46.23%
2	Short-Term Debt	-	0.00%
3	Off Balance Sheet Debt*	<u>95,620</u>	<u>1.23%</u>
4	Total Debt	\$ 3,700,849	47.45%
5	Preferred Stock	\$ 81,828	1.05%
6	Common Equity	<u>4,016,120</u>	<u>51.50%</u>
7	Total	\$ 7,798,797	100.00%

Sources:

Schedule RJM-E1.

* Standard & Poor's Online.

Ameren Missouri

Hevert Constant Growth DCF Analysis (30-Day Average Stock Price)

<u>Line</u>	<u>Company</u>	<u>Stock Price</u> (1)	<u>Annualized Dividend</u> (2)	<u>Low EPS Growth Rate</u> (3)	<u>Expected Dividend Yield</u> (4)	<u>Low DCF ROE</u> (5)	<u>Average EPS Growth Rate</u> (6)	<u>Expected Dividend Yield</u> (7)	<u>Average DCF ROE</u> (8)	<u>High EPS Growth Rate</u> (9)	<u>Expected Dividend Yield</u> (10)	<u>High DCF ROE</u> (11)
1	American Electric Power	\$39.50	\$1.88	3.87%	4.85%	8.72%	4.12%	4.86%	8.98%	4.50%	4.87%	9.37%
2	Cleco Corp.	\$36.20	\$1.25	3.00%	3.51%	6.51%	5.33%	3.55%	8.88%	7.00%	3.57%	10.57%
3	Edison International	\$39.46	\$1.30	3.18%	3.35%	6.53%	4.09%	3.36%	7.45%	5.00%	3.38%	8.38%
4	Great Plains Energy Inc.	\$20.98	\$0.85	4.10%	4.13%	8.23%	5.53%	4.16%	9.70%	6.50%	4.18%	10.68%
5	IDACORP, Inc.	\$40.76	\$1.20	4.00%	3.00%	7.00%	4.40%	3.01%	7.41%	4.70%	3.01%	7.71%
6	Integrus Energy	\$51.48	\$2.72	4.50%	5.40%	9.90%	7.63%	5.49%	13.12%	9.40%	5.53%	14.93%
7	Otter Tail Corp.	\$21.20	\$1.19	5.00%	5.75%	10.75%	7.67%	5.83%	13.50%	13.00%	5.98%	18.98%
8	Pinnacle West Capital	\$46.61	\$2.10	5.30%	4.62%	9.92%	5.63%	4.63%	10.26%	6.00%	4.64%	10.64%
9	Portland General	\$24.61	\$1.06	5.00%	4.41%	9.41%	6.13%	4.44%	10.57%	7.50%	4.47%	11.97%
10	Southern Co.	\$44.38	\$1.89	5.10%	4.37%	9.47%	5.67%	4.38%	10.05%	6.00%	4.39%	10.39%
11	Westar Energy	\$27.40	\$1.28	5.08%	4.79%	9.87%	6.56%	4.83%	11.39%	8.50%	4.87%	13.37%
12	Average	\$35.69	\$1.52	4.38%	4.38%	8.76%	5.71%	4.41%	10.12%	7.10%	4.44%	11.54%

Source:
Schedule RBH-E1.

Ameren Missouri

Hevert Constant Growth DCF Analysis (90-Day Stock Price)

<u>Line</u>	<u>Company</u>	<u>Stock Price</u>	<u>Annualized Dividend</u>	<u>Low EPS Growth Rate</u> (1)	<u>Expected Dividend Yield</u> (3)	<u>Low DCF ROE</u> (4)	<u>Average EPS Growth Rate</u> (5)	<u>Expected Dividend Yield</u> (7)	<u>Average DCF ROE</u> (8)	<u>High EPS Growth Rate</u> (9)	<u>Expected Dividend Yield</u> (11)	<u>High DCF ROE</u> (12)
1	American Electric Power	\$38.69	\$1.88	3.87%	4.95%	8.82%	4.12%	4.96%	9.08%	4.50%	4.97%	9.47%
2	Cleco Corp.	\$35.57	\$1.25	3.00%	3.57%	6.57%	5.33%	3.61%	8.94%	7.00%	3.64%	10.64%
3	DPL, Inc.	\$38.63	\$1.30	3.18%	3.42%	6.60%	4.09%	3.43%	7.52%	5.00%	3.45%	8.45%
4	Empire District Electric	\$20.28	\$0.85	4.10%	4.28%	8.38%	5.53%	4.31%	9.84%	6.50%	4.33%	10.83%
5	IDACORP, Inc.	\$39.48	\$1.20	4.00%	3.10%	7.10%	4.40%	3.11%	7.51%	4.70%	3.11%	7.81%
6	Northeast Utilities	\$50.46	\$2.72	4.50%	5.51%	10.01%	7.63%	5.60%	13.23%	9.40%	5.64%	15.04%
7	Pinnacle West Capital	\$20.17	\$1.19	5.00%	6.05%	11.05%	7.67%	6.12%	13.79%	13.00%	6.28%	19.28%
8	Portland General	\$45.08	\$2.10	5.30%	4.78%	10.08%	5.63%	4.79%	10.42%	6.00%	4.80%	10.80%
9	Progress Energy	\$24.24	\$1.06	5.00%	4.48%	9.48%	6.13%	4.51%	10.63%	7.50%	4.54%	12.04%
10	Southern Co.	\$43.09	\$1.89	5.10%	4.50%	9.60%	5.67%	4.51%	10.18%	6.00%	4.52%	10.52%
11	Westar Energy	\$26.84	\$1.28	5.08%	4.89%	9.97%	6.56%	4.92%	11.48%	8.50%	4.97%	13.47%
12	Average	\$34.78	\$1.46	4.38%	4.50%	8.88%	5.71%	4.53%	10.24%	7.10%	4.57%	11.67%

Source:
Schedule RBH-E1.

Ameren Missouri

Hevert Constant Growth DCF Analysis (180-Day Stock Price)

<u>Line</u>	<u>Company</u>	<u>Stock Price</u>	<u>Annualized Dividend</u>	<u>Low EPS Growth Rate</u> (1)	<u>Expected Dividend Yield</u> (3)	<u>Low DCF ROE</u> (4)	<u>Average EPS Growth Rate</u> (5)	<u>Expected Dividend Yield</u> (7)	<u>Average DCF ROE</u> (8)	<u>High EPS Growth Rate</u> (9)	<u>Expected Dividend Yield</u> (11)	<u>High DCF ROE</u> (12)
1	American Electric Power	\$37.96	\$1.88	3.87%	5.05%	8.92%	4.12%	5.05%	9.18%	4.50%	5.06%	9.56%
2	Cleco Corp.	\$35.04	\$1.25	3.00%	3.62%	6.62%	5.33%	3.66%	9.00%	7.00%	3.69%	10.69%
3	DPL, Inc.	\$38.48	\$1.30	3.18%	3.43%	6.61%	4.09%	3.45%	7.54%	5.00%	3.46%	8.46%
4	Empire District Electric	\$20.27	\$0.85	4.10%	4.28%	8.38%	5.53%	4.31%	9.84%	6.50%	4.33%	10.83%
5	IDACORP, Inc.	\$39.09	\$1.20	4.00%	3.13%	7.13%	4.40%	3.14%	7.54%	4.70%	3.14%	7.84%
6	Northeast Utilities	\$50.70	\$2.72	4.50%	5.49%	9.99%	7.63%	5.57%	13.20%	9.40%	5.62%	15.02%
7	Pinnacle West Capital	\$20.82	\$1.19	5.00%	5.86%	10.86%	7.67%	5.94%	13.60%	13.00%	6.09%	19.09%
8	Portland General	\$44.28	\$2.10	5.30%	4.87%	10.17%	5.63%	4.88%	10.50%	6.00%	4.88%	10.88%
9	Progress Energy	\$24.55	\$1.06	5.00%	4.43%	9.43%	6.13%	4.45%	10.58%	7.50%	4.48%	11.98%
10	Southern Co.	\$41.42	\$1.89	5.10%	4.68%	9.78%	5.67%	4.69%	10.37%	6.00%	4.70%	10.70%
11	Westar Energy	\$26.63	\$1.28	5.08%	4.93%	10.01%	6.56%	4.97%	11.53%	8.50%	5.01%	13.51%
12	Average	\$34.48	\$1.46	4.38%	4.52%	8.90%	5.71%	4.55%	10.26%	7.10%	4.59%	11.69%

Source:
Schedule RBH-E1.

Ameren Missouri

Revised Hevert Multi-Stage Growth DCF Model (Summary)

<u>Line</u>	<u>Description</u>	<u>Hevert¹</u> (1)	<u>Corrected DCF Results²</u> (2)
<u>Multi-Stage DCF Models</u>			
1	30-Day Average Stock Price	10.64%	9.40%
2	90-Day Average Stock Price	10.76%	9.47%
3	180-Day Average Stock Price	<u>10.81%</u>	<u>9.51%</u>
4	Average	10.74%	9.46%

Sources:

¹ Hevert Direct at 49.

² Pages 2 to 4.

Ameren Missouri

Revised Hevert Multi-Stage Growth DCF Model (30-Day Average Stock Price)

<u>Line</u>	<u>Company</u>	<u>Stock Price</u> (1)	<u>Analyst Growth</u> (2)	<u>Long-Term Growth*</u> (3)	<u>Payout Ratio</u>			<u>Multi-Stage Growth DCF</u> (7)
					<u>2011</u> (4)	<u>2015</u> (5)	<u>2022</u> (6)	
1	American Electric Power	\$39.50	4.12%	4.90%	59.00%	55.00%	55.00%	8.68%
2	Cleco Corp.	\$36.20	5.33%	4.90%	46.00%	59.00%	59.00%	9.08%
3	Edison International	\$39.46	4.09%	4.90%	50.00%	46.00%	46.00%	8.97%
4	Great Plains Energy Inc.	\$20.98	5.53%	4.90%	63.00%	60.00%	60.00%	9.95%
5	IDACORP, Inc.	\$40.76	4.40%	4.90%	39.00%	45.00%	45.00%	8.33%
6	Integrus Energy	\$51.48	7.63%	4.90%	82.00%	68.00%	68.00%	10.66%
7	Otter Tail Corp.	\$21.20	7.67%	4.90%	NMF	92.00%	92.00%	n/a
8	Pinnacle West Capital	\$46.61	5.63%	4.90%	76.00%	65.00%	65.00%	9.93%
9	Portland General	\$24.61	6.13%	4.90%	53.00%	52.00%	52.00%	9.12%
10	Southern Co.	\$44.38	5.67%	4.90%	73.00%	68.00%	68.00%	9.14%
11	Westar Energy	<u>\$27.40</u>	<u>6.56%</u>	<u>4.90%</u>	<u>72.00%</u>	<u>59.00%</u>	<u>59.00%</u>	<u>10.19%</u>
12	Average	\$35.69	5.71%	4.90%	61.30%	60.82%	60.82%	9.40%

Sources:

Schedule RBH-E2, page 1.

* *Blue Chip Financial Forecasts*, June 1, 2012 at 14.

Ameren Missouri

Revised Hevert Multi-Stage Growth DCF Model (90-Day Average Stock Price)

<u>Line</u>	<u>Company</u>	<u>Stock Price</u> (1)	<u>Analyst Growth</u> (2)	<u>Long-Term Growth*</u> (3)	<u>Payout Ratio</u>			<u>Multi-Stage Growth DCF</u> (7)
					<u>2010</u> (4)	<u>2014</u> (5)	<u>2024</u> (6)	
1	American Electric Power	\$38.69	4.12%	4.90%	59.00%	55.00%	55.00%	8.75%
2	Cleco Corp.	\$35.57	5.33%	4.90%	46.00%	59.00%	59.00%	9.16%
3	Edison International	\$38.63	4.09%	4.90%	50.00%	46.00%	46.00%	9.06%
4	Great Plains Energy Inc.	\$20.28	5.53%	4.90%	63.00%	60.00%	60.00%	10.12%
5	IDACORP, Inc.	\$39.48	4.40%	4.90%	39.00%	45.00%	45.00%	8.44%
6	Integrus Energy	\$50.46	7.63%	4.90%	82.00%	68.00%	68.00%	10.78%
7	Otter Tail Corp.	\$20.17	7.67%	4.90%	NMF	92.00%	92.00%	n/a
8	Pinnacle West Capital	\$45.08	5.63%	4.90%	76.00%	65.00%	65.00%	10.10%
9	Portland General	\$24.24	6.13%	4.90%	53.00%	52.00%	52.00%	9.18%
10	Southern Co.	\$43.09	5.67%	4.90%	73.00%	68.00%	68.00%	9.27%
11	Westar Energy	<u>\$26.84</u>	<u>6.56%</u>	<u>4.90%</u>	<u>72.00%</u>	<u>59.00%</u>	<u>59.00%</u>	<u>9.86%</u>
12	Average	\$34.78	5.71%	4.90%	61.30%	60.82%	60.82%	9.47%

Sources:

Schedule RBH-E2, page 2.

* *Blue Chip Financial Forecasts*, June 1, 2012 at 14.

Ameren Missouri

Revised Hevert Multi-Stage Growth DCF Model (180-Day Average Stock Price)

<u>Line</u>	<u>Company</u>	<u>Stock Price</u> (1)	<u>Analyst Growth</u> (2)	<u>Long-Term Growth*</u> (3)	<u>Payout Ratio</u>			<u>Multi-Stage Growth DCF</u> (7)
					<u>2010</u> (4)	<u>2014</u> (5)	<u>2024</u> (6)	
1	American Electric Power	\$37.96	4.12%	4.90%	59.00%	55.00%	55.00%	8.83%
2	Cleco Corp.	\$35.04	5.33%	4.90%	46.00%	59.00%	59.00%	9.22%
3	Edison International	\$38.48	4.09%	4.90%	50.00%	46.00%	46.00%	9.07%
4	Great Plains Energy Inc.	\$20.27	5.53%	4.90%	63.00%	60.00%	60.00%	10.12%
5	IDACORP, Inc.	\$39.09	4.40%	4.90%	39.00%	45.00%	45.00%	8.48%
6	Integrus Energy	\$50.70	7.63%	4.90%	82.00%	68.00%	68.00%	10.75%
7	Otter Tail Corp.	\$20.82	7.67%	4.90%	NMF	92.00%	92.00%	n/a
8	Pinnacle West Capital	\$44.28	5.63%	4.90%	76.00%	65.00%	65.00%	10.19%
9	Portland General	\$24.55	6.13%	4.90%	53.00%	52.00%	52.00%	9.13%
10	Southern Co.	\$41.42	5.67%	4.90%	73.00%	68.00%	68.00%	9.44%
11	Westar Energy	<u>\$26.63</u>	<u>6.56%</u>	<u>4.90%</u>	<u>72.00%</u>	<u>59.00%</u>	<u>59.00%</u>	<u>9.90%</u>
12	Average	\$34.48	5.71%	4.90%	61.30%	60.82%	60.82%	9.51%

Sources:

Schedule RBH-E2, page 3.

* *Blue Chip Financial Forecasts*, June 1, 2012 at 14.

Ameren Missouri

Electric Proxy Group Valuation Metrics

		Price to Earnings (P/E) Ratio ¹												
Line	Company	12-Year	Current											
		Average	2012 ²	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	American Electric Power	12.78	12.40	11.92	13.42	10.03	13.06	16.27	12.91	13.70	12.42	10.66	12.68	13.88
2	Cleco Corp.	14.43	15.40	13.25	12.27	13.21	14.09	19.58	17.32	15.05	13.76	12.39	12.25	14.64
3	Edison International	13.44	13.90	11.81	10.32	9.72	12.36	16.03	12.99	11.74	37.59	6.97	7.78	10.02
4	Great Plains Energy Inc.	15.15	16.60	16.11	12.10	16.03	20.55	16.35	18.30	13.96	12.59	12.23	11.09	15.87
5	IDACORP, Inc.	15.29	13.80	11.54	11.83	10.20	13.93	18.19	15.07	16.70	15.49	26.51	18.88	11.40
6	Integrus Energy	16.52	18.20	17.46	14.72	14.80	30.68	21.44	14.72	13.36	11.55	14.88	13.96	12.50
7	Otter Tail Corp.	26.09	30.00	47.48	55.10	31.16	30.06	19.02	17.35	15.40	17.34	17.77	16.01	16.45
8	Pinnacle West Capital	14.61	14.30	14.60	12.57	13.74	16.07	14.93	13.69	19.24	15.80	13.96	14.43	12.03
9	Portland General	14.78	13.10	12.37	12.00	14.40	16.30	11.94	23.35	N/A	N/A	N/A	N/A	N/A
10	Southern Co.	15.42	17.80	15.85	14.90	13.52	16.13	15.95	16.19	15.92	14.68	14.83	14.63	14.60
11	Westar Energy	14.32	14.60	14.78	12.96	14.95	16.96	14.10	12.18	14.79	17.44	10.78	14.02	N/A
12	Average	15.71	16.37	17.01	16.56	14.70	18.20	16.71	15.82	14.98	16.87	14.10	13.57	13.49

		Market Price to Cash Flow (MP/CF) Ratio ¹												
Line	Company	12-Year	Current	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
		Average	2012 ^{2/a}											
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	American Electric Power	5.56	5.79	5.17	5.54	4.71	5.71	6.84	5.54	6.07	5.50	4.69	5.19	5.93
2	Cleco Corp.	6.85	6.92	4.93	5.49	6.15	6.45	9.61	8.96	7.73	7.08	5.24	6.10	7.52
3	Edison International	4.78	5.32	4.27	4.11	3.95	5.63	7.01	5.87	5.61	6.84	2.82	2.96	3.00
4	Great Plains Energy Inc.	6.05	5.65	5.21	4.49	5.06	7.71	7.13	7.68	6.70	6.52	5.92	5.14	5.37
5	IDACORP, Inc.	7.02	6.86	6.02	6.67	5.31	7.10	8.23	7.73	7.55	7.15	7.27	7.53	6.78
6	Integrus Energy	7.63	8.33	7.34	7.11	6.31	10.34	10.25	8.14	7.39	6.73	6.60	6.47	6.50
7	Otter Tail Corp.	8.54	7.55	7.22	8.07	8.01	11.65	9.53	8.66	8.18	9.01	8.13	8.33	8.14
8	Pinnacle West Capital	5.32	6.92	5.57	5.65	3.84	4.19	4.76	4.48	7.48	5.88	4.80	5.21	5.08
9	Portland General	4.84	5.18	4.07	4.13	4.63	4.81	5.34	5.74	N/A	N/A	N/A	N/A	N/A
10	Southern Co.	8.01	9.36	7.25	7.79	7.08	8.18	8.62	8.47	8.41	8.28	8.28	7.83	6.63
11	Westar Energy	5.63	6.77	5.62	5.51	5.32	7.09	6.88	5.81	7.00	6.54	4.24	2.94	3.89
12	Average	6.38	6.79	5.70	5.87	5.49	7.17	7.65	7.01	7.21	6.95	5.80	5.77	5.88

Sources:

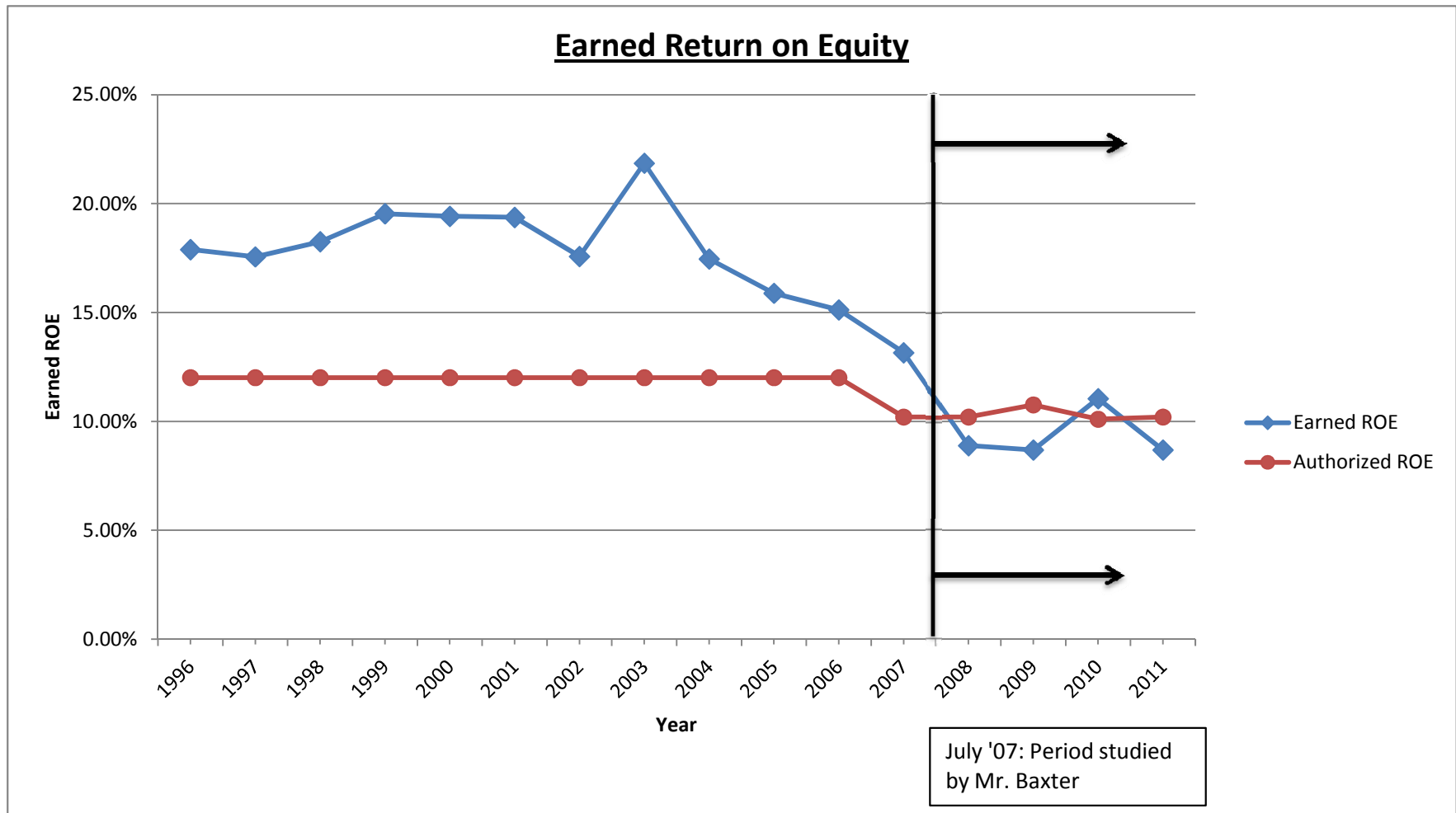
¹ *The Value Line Investment Survey Investment Analyzer Software*, downloaded on July 3, 2012.

² *The Value Line Investment Survey*, March 23, May 4, and May 25, 2012.

Note:

^a Based on recent price published in *The Value Line Investment Survey*, March 23, May 4, and May 25, 2012 and the 2011 actual cash-flow per share.

Ameren Missouri



Ameren Missouri
Response to MIEC Data Request
MPSC Case No. ER-2012-0166
In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to
Increase Its Revenues for Electric Service

Data Request No.: MIEC 18.17 - Diana Vuylsteke

Concerning Mr. Reed's testimony, please provide copies of all reports, if any, Mr. Reed reviewed in developing his testimony concerning the benefit to customers and utility investors of competitive utility rates, predictable utility rates, and stable utility rates. Please explain answer.

RESPONSE

Prepared By: John J. Reed

Title: Chairman and Chief Executive Officer of Concentric Energy Advisors, Inc.

Date: June 21, 2012

Mr. Reed did not review any reports concerning the benefit to customers and utility investors of competitive utility rates, predictable utility rates, and stable utility rates. Mr. Reed states on page 49 of his Direct Testimony that Ameren Missouri's electric rates are among the lowest in the country, and are, in fact, the lowest in Missouri. In Mr. Reed's view, the Company must have the opportunity to earn its authorized return so that it can attract capital at reasonable rates to fund its operations. Reducing regulatory lag will reduce the cost of those funds, all else being equal. As such, both customers and investors will benefit from Ameren Missouri's proposal to reduce earnings attrition through its proposed Plant in Service Accounting and two way storm cost tracking mechanism.