Exhibit No.:
Issues: Revenue Requirement and Missouri Regulatory Framework
Witness: Michael P. Gorman
Type of Exhibit: Direct Testimony
Sponsoring Party: Missouri Industrial Energy Consumers
Case No.: ER-2012-0166
Date Testimony Prepared: 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

July 6, 2012

BRUBAKER & ASSOCIATES, INC.

Exhibit No.508

Project 9553

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

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

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.

TAMMY S. KLOSSNER
Notary Public - Notary Seal
STATE OF MISSOURI
St. Charles County
My Commission Expires: Mar. 14, 2015
Commission # 11024862

Tammy S Klossner
Notary Public

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Direct Testimony of Michael P. Gorman

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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

Q WHAT IS YOUR OCCUPATION?

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

Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A This information is included in Appendix A to this testimony.

Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A This testimony is presented on behalf of the Missouri Industrial Energy Consumers ("MIEC").

Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A I will recommend an overall rate of return and fair return on common equity for use in setting Ameren Missouri's (or "Company") revenue requirement in this case. I will

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

SUMMARY

Q PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS.

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

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

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

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

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

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

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

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

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

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

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

RATE OF RETURN

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

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

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

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

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

TABLE 1

Capital Costs – Ameren Missouri Rate Cases

Description	Current Case[1]	Case No. ER-2011-0028	Yield Change
"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:
[1]Schedule 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,

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

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

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

Q PLEASE DESCRIBE THE ELECTRIC UTILITIES' CREDIT RATING OUTLOOK.

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

> **Solid Industry Fundamentals Support Stable Outlook**
>
> The U.S. electric utility sector performed well through 2011, and found it easier to access the capital markets than did most other corporate issuers.
>
> Investor appetite for electric utility debt remains healthy, and deals have been oversubscribed. Credit fundamentals indicate that most, if not all, electric utilities should continue to have ample access to funding sources and credit. Some firms may issue common stock to partially fund construction spending, which would help to support the capital structure balance. In addition, many utilities are accessing short-term credit markets through commercial paper programs at very low rates.[1]

[1] *Standard & 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.

Similarly, Fitch states:

> **Electric Utilities: Stable**
>
> Fitch's Outlook for the electric utility sector in 2012 remains stable. The sector benefits from low interest rates, modest inflationary pressures, open capital markets, and low natural gas and power prices. Fitch expects these conditions to persist into 2013.
>
> The favorable funding environment helps to offset any stress that would otherwise result during an extended period of high projected capital investment. Capex is expected to remain elevated, increasing 5%–6% over 2011 levels.[2]

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

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

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

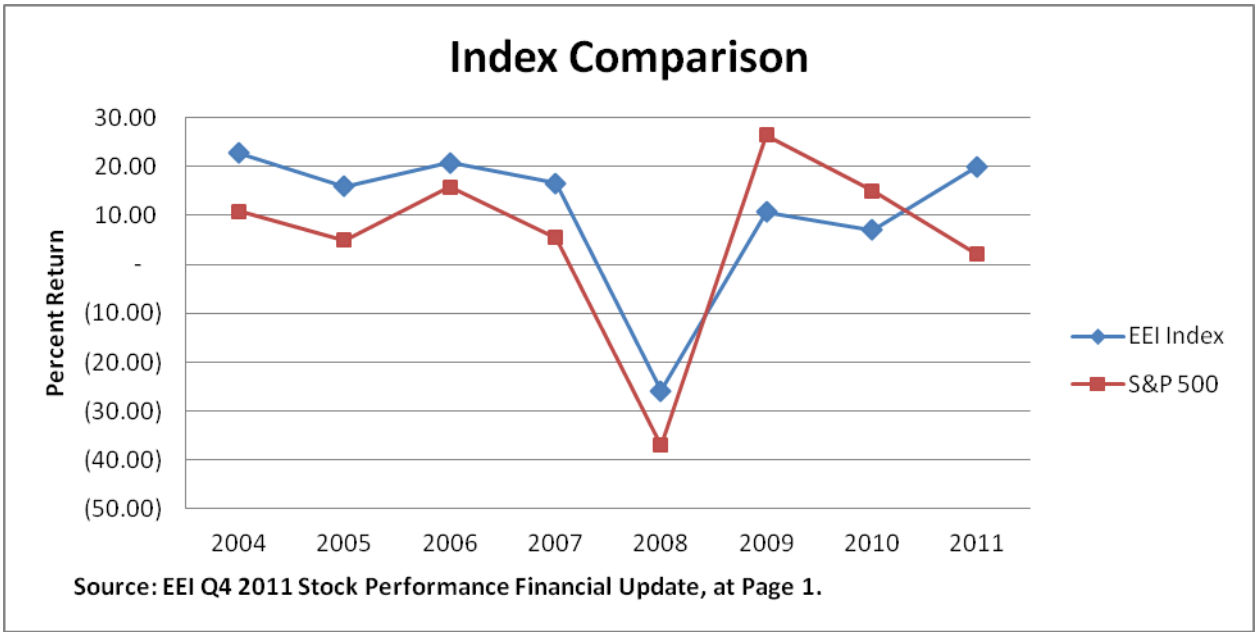
> There was little change during 2011 in the industry's long-term outlook. Many regulated utilities are engaged in capital spending programs that should, according to Wall Street analysts, help drive slow but steady earnings growth over the next several years. New EPA regulations may boost capex by 30%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

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

A As shown in the graph below, the EEI has recorded electric utility stock price 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.

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



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

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

> **Commentary**
>
> The EEI Index produced a positive 20% return during 2011, its strongest annual gain since 2006, outperforming the broad market after two consecutive years of underperformance as stocks rebounded from the lows reached during 2008 financial crisis.
>
> * * *
>
> The strength of the EEI Index in 2011 is no surprise, highlighting the industry's traditional role as a defensive investment following its reemphasis in recent years of core regulated businesses with slow but predictable earnings growth and steady dividends. In fact, the industry's average dividend yield exceeded 4% during the year, leading that of all other U.S. business sectors.[5]

[5] *EEI 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]

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

[7] Moody'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
Proposed Capital Structure

Description	Percent of Total Capital
Long-Term Debt	46.802%
Preferred Stock	1.062%
Common Equity	52.136%
Total Capital Structure	100.000%

Source: Schedule RJM-2.

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

A No.

Return on Equity

Q PLEASE DESCRIBE WHAT IS MEANT BY A "UTILITY'S COST OF COMMON EQUITY."

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

Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED UTILITY'S COST OF COMMON EQUITY.

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

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

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

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

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

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

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

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

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

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

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

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:

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

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:

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

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

[8] S&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.

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

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

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

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

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

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

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

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

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

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

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

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

Sustainable Growth DCF

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

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

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

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

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

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

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

A A DCF estimate based on these sustainable growth rates is developed in Schedule MPG-7. As shown there, a sustainable growth DCF analysis produces proxy group 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

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

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

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

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

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

TABLE 3

Growth in Plant In-Service and Earnings

Year	Beginning of Year Plant-in-Service (1)	Capital Improvement (2)	Depreciation Expense (3)	End of Year Plant-in-Service (4)	Avg Year Plant (5)	ROE (6)	Earnings (7)	Annual Earnings Growth Rate (8)
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	6.8%
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	5.3%
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	4.2%

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.

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

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

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

* * *

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

Q PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.

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

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

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

A Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the overall economy. Utilities' earnings/dividend growth is created by increased utility 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.

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

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

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

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

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

A I relied on the consensus analysts' projections of long-term GDP growth. *The Blue Chip Financial Forecasts* publishes consensus economists' GDP growth projections 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.

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

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

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

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

Also, the Congressional Budget Office ("CBO") makes long-term economic 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.

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

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

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

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

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

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

Q PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.

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

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

TABLE 4

Summary of DCF Results

Description	Estimates
Constant Growth DCF Model (Analysts' Growth)	9.30%
Constant Growth DCF Model (Sustainable Growth)	8.63%
Multi-Stage Growth DCF Model	9.40%
Average	9.11%

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

Risk Premium Model

Q PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

My risk premium analyses produce a return estimate in the range of 9.10% to 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:

$R_i = R_f + B_i \times (R_m - R_f)$ 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.

Q PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.

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

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

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

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

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

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

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

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

Q WHAT BETA DID YOU USE IN YOUR ANALYSIS?

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

Q HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?

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

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

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

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

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

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

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

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

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

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

[24]Morningstar observes that the S&P 500 and the NYSE Decile 1-2 are both large capitalization benchmarks. *Morningstar, Inc. Ibbotson SBBI 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

Return on Common Equity Summary

Description	Results
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.

Financial Integrity

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

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

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

A S&P publishes a matrix of financial ratios that correspond to its assessment of the business risk of the utility company and related bond rating. On May 27, 2009, S&P expanded its matrix criteria[26] by including additional business and financial risk categories. Based on S&P's most recent credit matrix, the business risk profile categories are "Excellent," "Strong," "Satisfactory," "Fair," "Weak," and "Vulnerable." Most electric utilities have a business risk profile of "Excellent" or "Strong." The financial risk profile categories are "Minimal," "Modest," "Intermediate," "Significant," "Aggressive," and "Highly Leveraged." Most of the electric utilities have a financial risk profile of "Aggressive." Ameren Missouri has an "Excellent" business risk profile and a "Significant" financial risk profile.

[26] S&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.

Q PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS IN ITS CREDIT RATING REVIEW.

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

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

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

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

Q DID YOU INCLUDE ANY OFF-BALANCE SHEET DEBT ("OBSD")?

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

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

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

Ameren Missouri's adjusted total debt ratio is approximately 47%. This is within the "Significant" utility guideline range of 45% to 50%. This total debt ratio will support an investment grade bond rating.

As shown on Schedule MPG-17, page 1, column 1, based on an equity return of 9.30%, Ameren Missouri will be provided an opportunity to produce a debt to EBITDA ratio of 2.7x. This is within S&P's "Intermediate" guideline range of 2.0x to 3.0x[27] and stronger than the "Significant" range of 3.0x to 4.0x. This ratio also supports an investment grade credit rating.

[27] *Standard & Poor's RatingsDirect*: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009 at 4.

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

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

RESPONSE TO AMEREN MISSOURI WITNESS MR. ROBERT HEVERT

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

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

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

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

[28]Hevert Direct at 2-3.

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

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

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

TABLE 6

Hevert's Return on Equity Estimates

Description	Mean[1] (1)	Adjusted[2] (2)
Constant Growth DCF		
30-Day Average Stock Price	10.12%	10.12%
90-Day Average Stock Price	10.24%	10.24%
180-Day Average Stock Price	10.26%	10.26%
Average	10.21%	10.21%
Multi-Stage Growth DCF		
30-Day Average Stock Price	10.64%	9.40%
90-Day Average Stock Price	10.76%	9.47%
180-Day Average Stock Price	10.81%	9.51%
Average	10.74%	9.46%
CAPM Results (Bloomberg Beta)		
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%)	11.14%	8.55%
Average	11.00%	8.32%
CAPM Results (*Value Line* Beta)		
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%)	10.84%	8.35%
Average	10.70%	8.12%
Risk Premium	10.37%	9.64%
Range	**10.50%-11.00%**	**8.12%-10.21%**
Recommended/Midpoint ROE	**10.75%**	**9.20%**

Sources:
[1]Hevert Direct Testimony at 48-49.
[2]Schedule MPG-19.

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

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

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

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

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

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

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

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

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

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

A Yes. A three- to five-year growth rate can exceed a long-term sustainable growth 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% ÷ (1 – 66.42%) = 17.00% and 7.10% ÷ (1 – 66.42%) = 21.14%.

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

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

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

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

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

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

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

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

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

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

A The consensus economists' projected GDP growth rate is much lower than the GDP growth rate used by Mr. Hevert in his DCF analysis. A comparison of Mr. Hevert's GDP growth rate and consensus economists' projected GDP growth over the next 5 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

GDP Projections

Description	GDP Inflation	Real GDP	Nominal GDP
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: *Blue Chip Financial Forecasts*, 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.

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

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

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

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

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

[33] Hevert Direct at 29.

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

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

Q HOW CAN MR. HEVERT'S MODEL BE CORRECTED TO ELIMINATE THIS CONTRADICTORY ASSUMPTION?

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

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

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

TABLE 8

Multi-Stage Growth DCF Analysis

Description	Hevert[1] (1)	Corrected DCF (2)
30-Day Average Stock Price	10.64%	9.40%
90-Day Average Stock Price	10.76%	9.47%
180-Day Average Stock Price	10.81%	9.51%
Average	10.74%	9.46%

Sources:
[1]Hevert Direct Testimony at 49.
[2]Schedule MPG-19.

Q PLEASE DESCRIBE THE ISSUES YOU TAKE WITH MR. HEVERT'S CAPM ANALYSES.

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

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

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

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

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

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

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

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

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

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

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

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

[34] 2012 Ibbotson *SBBI Valuation Yearbook* at 23.
[35] Schedule RBH-E4, page 1 of 7.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MISSOURI REGULATORY FRAMEWORK/EARNINGS ATTRITION

Q DO AMEREN MISSOURI WITNESSES COMMENT ON THE MISSOURI REGULATORY FRAMEWORK?

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

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

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

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

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

2. The Missouri Regulatory Framework allows an 11-month time frame to complete a rate case. He concludes that an 11-month time period is longer than the rate case time period in many other jurisdictions and contributes to excessive regulatory lag.

3. The Missouri statute prohibits the recovery of investment in plant until the plant is fully operational, and used and useful. (Baxter Direct at 19). He states that construction of certain equipment can take several years, and the utility must pay all costs of construction with no opportunity to recover those costs (including financial costs) or any return on its investment until that asset goes into service. He believes that this delay in recovering construction costs does not occur in some other states that allow construction work in progress ("CWIP") to be included in rate base or permit rates to be adjusted between rate cases for new assets that are actually serving customers.

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

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

> **_____
> _____
> _____[39]****

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

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

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

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

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

> AM's excellent business risk profile reflects its recent rate cases and regulatory mechanisms that indicate an overall decreasing regulatory risk overall. 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 post-employment benefit trackers, and a cost tracker for vegetation management and infrastructure inspections.[41]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Q HAVE RATES HISTORICALLY MET THIS STANDARD?

A Yes. This is Ameren Missouri's fifth rate case since 2007. However, prior to 2007, Ameren Missouri's last rate increase was 20 years earlier, in 1987. Further, twice in this 20-year period Ameren Missouri actually decreased its rates, in 1995 and again in 2001.[44] Further, in 1987 Ameren Missouri was awarded a 12.01% return on equity according to SNL. From the period 1987 through 2006, Ameren Missouri's reported

[44]SNL Union Electric Past Rate Case History.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Q PLEASE RESPOND TO MR. BAXTER'S CLAIM THAT THE MISSOURI REGULATORY FRAMEWORK'S LACK OF INTERIM RATE RELIEF IS A DISADVANTAGE TO MISSOURI UTILITIES.

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

Q PLEASE COMMENT ON THE USE OF AN HISTORICAL TEST YEAR IN MISSOURI'S REGULATORY FRAMEWORK.

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

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

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

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

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

[46] AmerenCILCO, 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.

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

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

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

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

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

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

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

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

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

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

1. Ameren Missouri does have a Fuel Adjustment Clause, albeit it has a sharing mechanism which will not allow it full recovery of fuel costs under certain conditions. However, that fuel adjustment mechanism also provides an opportunity for Ameren Missouri to over-recover its fuel costs. Hence, the risk of under-recovery is symmetrical with the opportunity for over-recovery to produce an earnings enhancement.

2. As noted by Ameren Missouri witnesses, Missouri has accounting tracker mechanisms for pension, OPEB and FIN 48 costs. These accounting tracker mechanisms help to ensure that the Company's rates are adjusted for these volatile expenses, which are largely outside the control of management. I say "largely" because management does have the control to ensure that trust fund investments are reasonably invested, and cash contributions are made based on minimum funding requirements, and other reasonable contribution levels.

3. While Ameren Missouri has chosen not to pursue them, an environmental cost recovery mechanism and a renewable energy cost recovery mechanism are available. Both of these mechanisms, as well as the FAC, however, require periodic base rate filings to ensure that Ameren Missouri is not adjusting rates when the revenues it currently recovers are already adequate to recover its full cost of service.

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

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

Q DOES MR. BAXTER RECOMMEND SPECIFIC REGULATORY MECHANISMS?

A Yes. Mr. Baxter recommends the following:

1. The Company's Fuel Adjustment Clause be continued as recommended by the Company;

2. The Company's existing vegetation management/infrastructure inspection tracker be continued;

3. The Company's pension/OPEB tracker, and FIN 48 tracker be retained;

4. Allow the Company to true up its revenue requirement as has been done in the last four Ameren Missouri cases;

5. Implement a two-way storm restoration cost tracker;

6. Implement a plant in-service accounting approach similar to what the Company implemented for its Sioux scrubbers. This plant in-service accounting approach allows the Company to accrue a carrying charge based on its overall weighted cost of capital on net investment and non-revenue producing plant additions between the plant additions' times they go into service, and the time the additions are reflected in rates. He also recommends to defer depreciation on these same non-revenue producing significant plant additions.

7. Finally, Mr. Baxter recommends that the Commission implement the energy efficiency cost recovery mechanism that the Company is proposing in the Missouri Energy Efficiency Investment Act ("MEEIA") filing. Mr. Baxter concludes that this energy efficiency cost recovery mechanism will ensure that aggressive energy efficiency can be pursued to the ultimate benefit of Ameren Missouri's customers and the environment.

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

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

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

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

Q DO YOU HAVE ANY COMMENTS CONCERNING THE COMPANY'S PROPOSED PLANT IN-SERVICE ACCOUNTING MECHANISM?

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

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

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

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

MIEC witness Brosch addresses this mechanism in more detail.

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

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

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

Another example involves Mid-American Energy Company ("MEC") in Iowa. It was able to develop and place in-service a new coal-fired unit, a new gas-fired unit, and over 1,800 MW of new wind generation during a 16-year rate freeze period that began in 1997 and is scheduled to conclude at the end of calendar year 2013.[49] MEC has specific rider mechanisms only for additional energy efficiency expenses and costs related to the study of new nuclear generating facilities in Iowa. However, MEC's rates were adequate to fully recover the significant increase in rate base investment, and depreciation expense associated with these new assets without changing its rate structure. It should also be noted that MEC did not have an energy adjustment clause in place during this period of new investment, having eliminated its energy adjustment clause in 1997.[50] Hence, it is evident that a change in rates is not a foregone conclusion simply because a utility places a new major investment in-service.

Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A Yes.

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

[50]Iowa 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

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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

Q PLEASE STATE YOUR OCCUPATION.

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

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

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

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

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

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

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

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

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

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

Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

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

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

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

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Ameren Missouri

Rate of Return

Line	Description	Amount (000) (1)	Weight (2)	Cost (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	4,016,120	52.136%	**9.30%**	4.85%
5	**Total**	**$ 7,703,177**	**100.000%**		**7.64%**

Source:
Schedule RJM-E1.

Ameren Missouri

Proxy Group

Line	Company	Credit Ratings[1] S&P (1)	Credit Ratings[1] Moody's (2)	Common Equity Ratios *AUS*[1] (3)	Common Equity Ratios *Value Line*[2] (4)	S&P Business Risk Score[3] (5)
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	Integrys 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

Line	Company	Zacks Estimated Growth %[1] (1)	Zacks Number of Estimates (2)	SNL Estimated Growth %[2] (3)	SNL Number of Estimates (4)	Reuters Estimated Growth %[3] (5)	Reuters Number of Estimates (6)	Average of Growth Rates (7)
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	Integrys 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.

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Constant Growth DCF Model
(Consensus Analysts' Growth Rates)

Line	Company	13-Week AVG Stock Price[1] (1)	Analysts' Growth[2] (2)	Annualized Dividend[3] (3)	Adjusted Yield (4)	Constant Growth DCF (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.

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Payout Ratios

Line	Company	Dividends Per Share		Earnings Per Share		Payout Ratio	
		2011	Projected	2011	Projected	2011	Projected
		(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	Integrys 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.

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Sustainable Growth Rate

Line	Company	3 to 5 Year Projections: Dividends Per Share (1)	Earnings Per Share (2)	Book Value Per Share (3)	Book Value Growth (4)	ROE (5)	Adjustment Factor (6)	Adjusted ROE (7)	Payout Ratio (8)	Retention Rate (9)	Internal Growth Rate (10)	Sustainable Growth Rate (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	Integrys 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): [Col. (3) / Page 2 Col. (2)] ^ (1/5) - 1.
Col. (5): Col. (2) / Col. (3).
Col. (6): [2 * (1 + Col. (4))] / (2 + Col. (4)).
Col. (7): Col. (6) * Col. (5).
Col. (8): Col. (1) / Col. (2).
Col. (9): 1 - Col. (8).
Col. (10): Col. (9) * Col. (7).
Col. (11): Col. (10) + Page 2 Col. (9).

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Sustainable Growth Rate

Line	Company	13-Week Average Stock Price[1] (1)	2011 Book Value Per Share[2] (2)	Market to Book Ratio (3)	Common Shares Outstanding (in Millions)[2] 2011 (4)	Common Shares Outstanding (in Millions)[2] 3-5 Years (5)	Growth (6)	S Factor[3] (7)	V Factor[4] (8)	S * V[5] (9)
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	Integrys 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.

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Constant Growth DCF Model
(Sustainable Growth Rate)

Line	Company	13-Week AVG Stock Price[1] (1)	Sustainable Growth[2] (2)	Annualized Dividend[3] (3)	Adjusted Yield (4)	Constant Growth DCF (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	Integrys 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.

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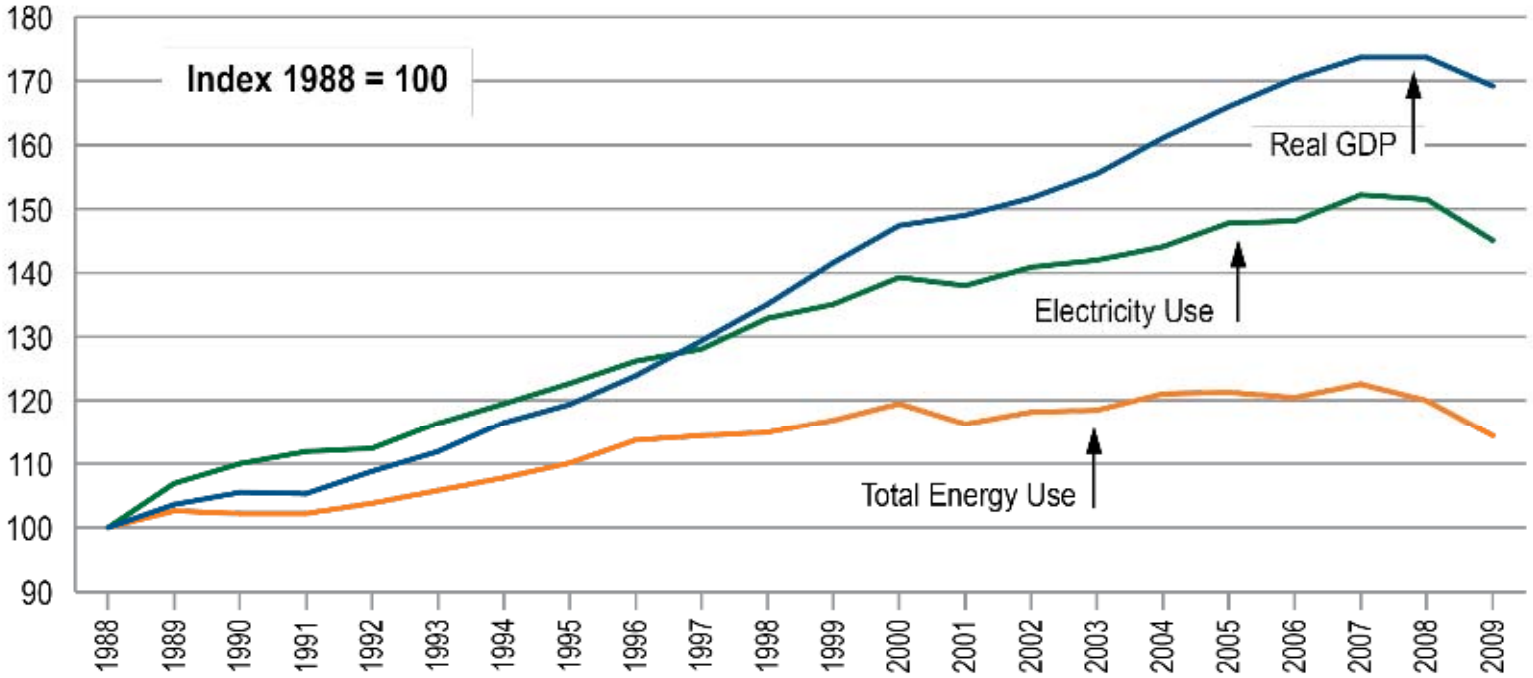
Electricity Sales Are Linked to U.S. Economic Growth



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.

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Multi-Stage Growth DCF Model

Line	Company	13-Week AVG Stock Price[1] (1)	Annualized Dividend[2] (2)	First Stage Growth[3] (3)	Second Stage Growth Year 6 (4)	Year 7 (5)	Year 8 (6)	Year 9 (7)	Year 10 (8)	Third Stage Growth[4] (9)	Multi-Stage Growth DCF (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	Integrys 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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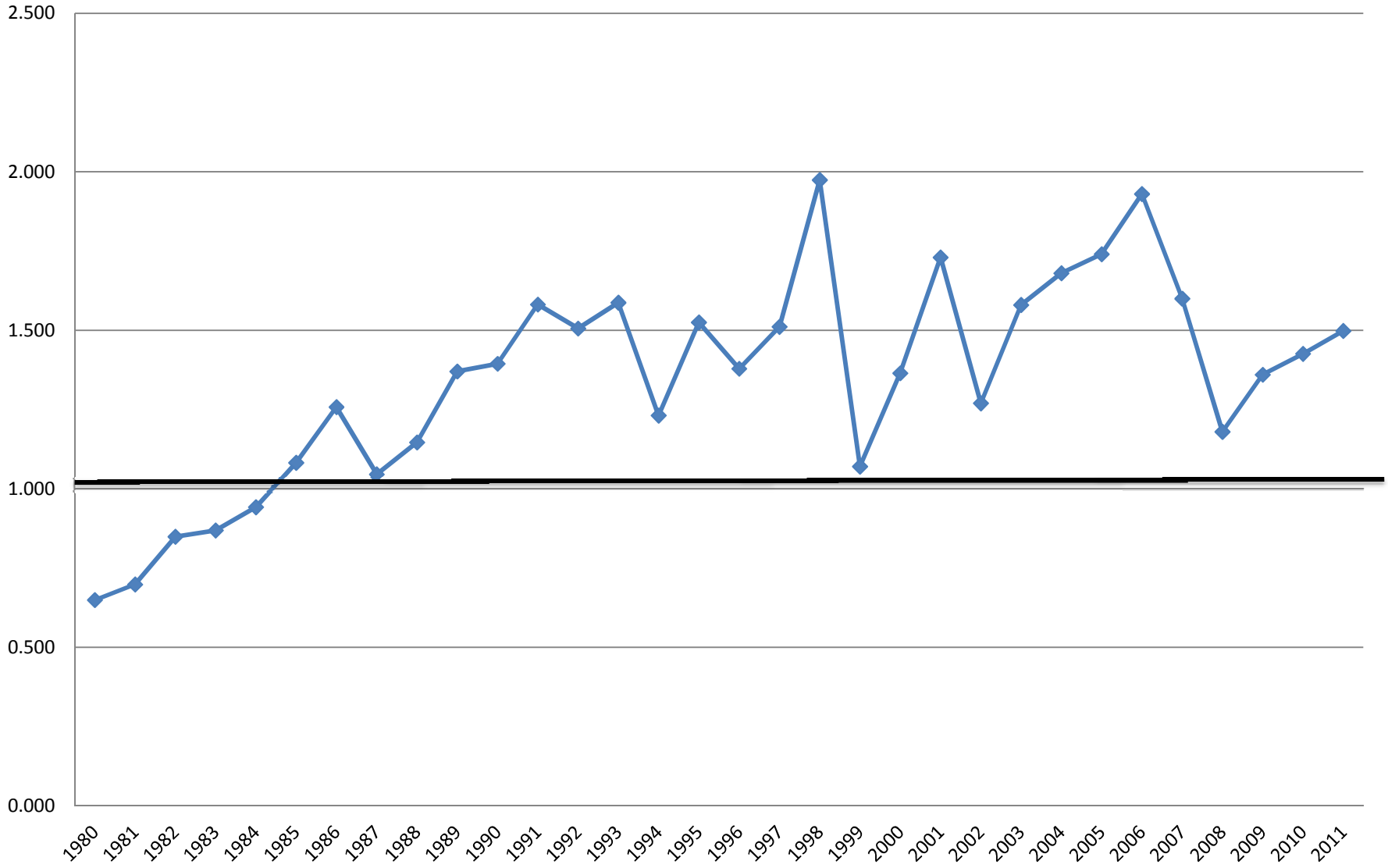
Common Stock Market/Book Ratio



Schedule MPG-10

Ameren Missouri

Equity Risk Premium - Treasury Bond

Line	Year	Authorized Electric Returns[1] (1)	Treasury Bond Yield[2] (2)	Indicated Risk Premium (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.

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Equity Risk Premium - Utility Bond

Line	Year	Authorized Electric Returns[1] (1)	Average "A" Rated Utility Bond Yield[2] (2)	Indicated Risk Premium (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/.

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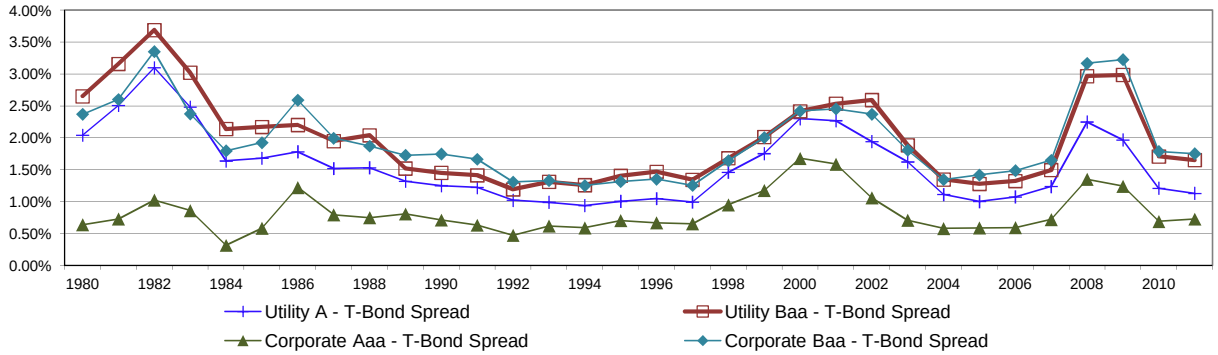
Bond Yield Spreads

Line	Year	T-Bond Yield[1] (1)	Public Utility Bond A[2] (2)	Public Utility Bond Baa[2] (3)	A-T-Bond Spread (4)	Baa-T-Bond Spread (5)	Corporate Bond Aaa[1] (6)	Corporate Bond Baa[1] (7)	Aaa-T-Bond Spread (8)	Baa-T-Bond Spread (9)	Utility - Corp. Spread A / Aaa (10)	Utility - Corp. Spread 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

Line	Date	Treasury Bond Yield[1] (1)	"A" Rated Utility Bond Yield[2] (2)	"Baa" Rated Utility Bond Yield[2] (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/.

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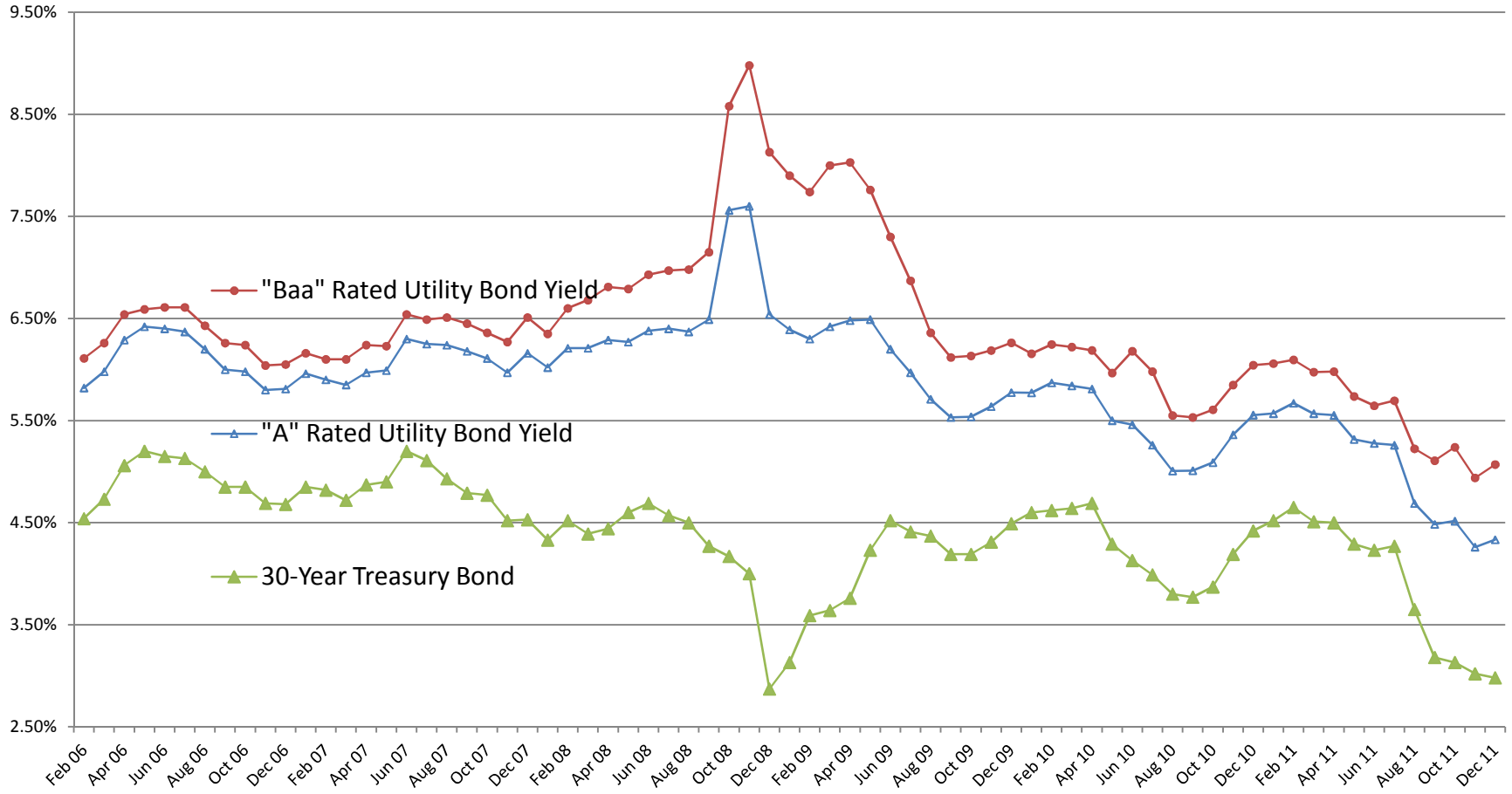
Trends in Bond Yields



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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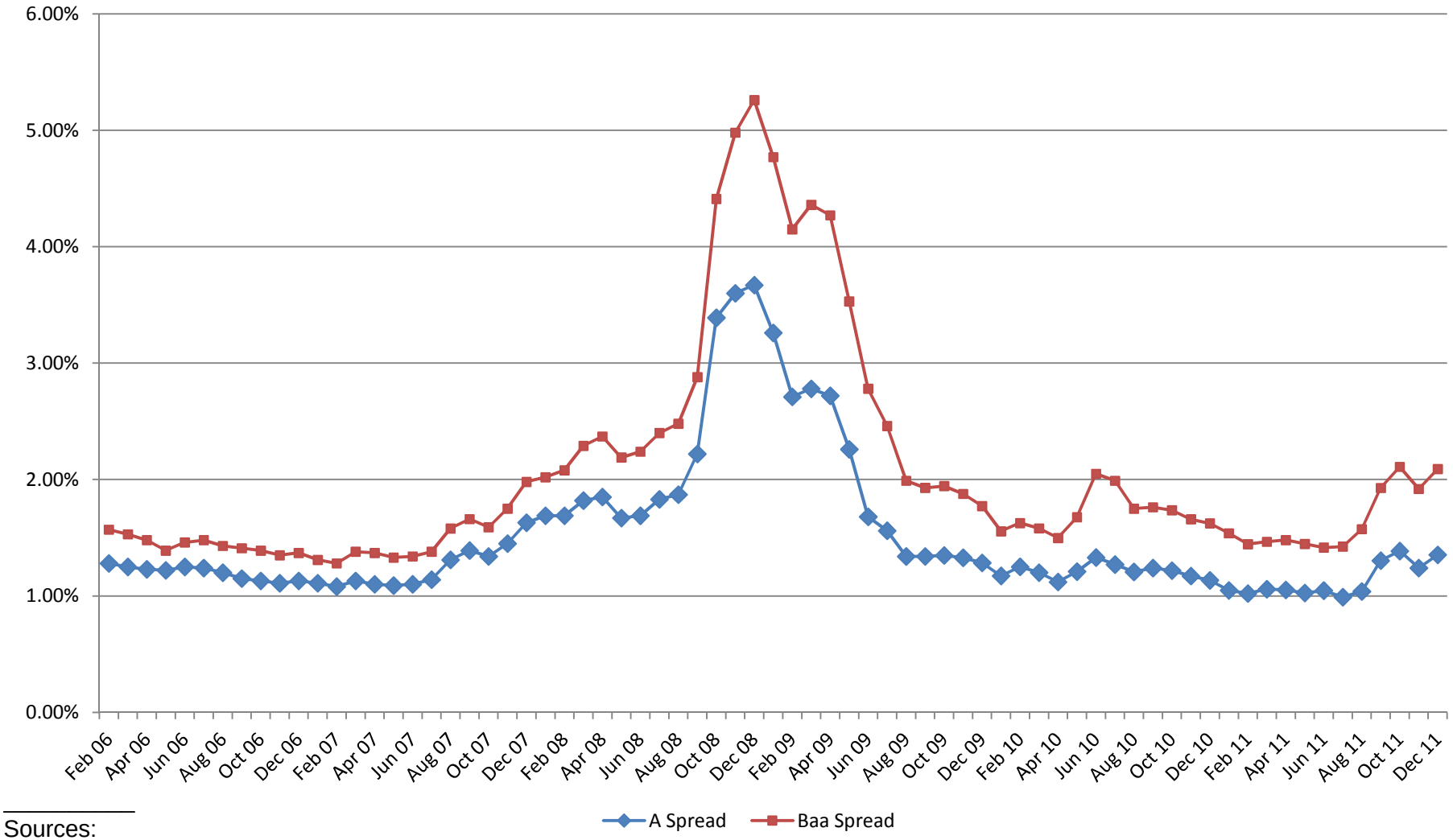
Yield Spread Between Utility Bonds and 30-Year Treasury Bonds



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

Line	Company	Beta
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	Integrys 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

Line	Description	Market Risk Premium
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 SBBI 2012 Classic Yearbook* at 86, and Morningstar, Inc. *Ibbotson SBBI 2012 Valuation Yearbook* at 54 and 66.

[3] Exhibit MPG-15.

Ameren Missouri

Standard & Poor's Credit Metrics

Line	Description	Retail Cost of Service Amount ($000) (1)	S&P Benchmark[1/2] Intermediate (2)	S&P Benchmark[1/2] Significant (3)	Reference (4)
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)

Line	Description	Amount (000) (1)	Weight (2)	Cost (3)	Weighted Cost (4)	Pre-Tax Weighted Cost (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	4,016,120	52.136%	**9.30%**	4.85%	7.83%
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)

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

Line	Company	Stock Price (1)	Annualized Dividend (2)	Low EPS Growth Rate (3)	Expected Dividend Yield (4)	Low DCF ROE (5)	Average EPS Growth Rate (6)	Expected Dividend Yield (7)	Average DCF ROE (8)	High EPS Growth Rate (9)	Expected Dividend Yield (10)	High DCF ROE (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	Integrys 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)

Line	Company	Stock Price	Annualized Dividend	Low EPS Growth Rate (1)	Expected Dividend Yield (3)	Low DCF ROE (4)	Average EPS Growth Rate (5)	Expected Dividend Yield (7)	Average DCF ROE (8)	High EPS Growth Rate (9)	Expected Dividend Yield (11)	High DCF ROE (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)

Line	Company	Stock Price	Annualized Dividend	Low EPS Growth Rate (1)	Expected Dividend Yield (3)	Low DCF ROE (4)	Average EPS Growth Rate (5)	Expected Dividend Yield (7)	Average DCF ROE (8)	High EPS Growth Rate (9)	Expected Dividend Yield (11)	High DCF ROE (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)

Line	Description	Hevert[1] (1)	Corrected DCF Results[2] (2)
	Multi-Stage DCF Models		
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	10.81%	9.51%
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)

Line	Company	Stock Price (1)	Analyst Growth (2)	Long-Term Growth* (3)	Payout Ratio 2011 (4)	Payout Ratio 2015 (5)	Payout Ratio 2022 (6)	Multi-Stage Growth DCF (7)
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	Integrys 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	$27.40	6.56%	4.90%	72.00%	59.00%	59.00%	10.19%
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)

Line	Company	Stock Price (1)	Analyst Growth (2)	Long-Term Growth* (3)	Payout Ratio 2010 (4)	Payout Ratio 2014 (5)	Payout Ratio 2024 (6)	Multi-Stage Growth DCF (7)
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	Integrys 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	$26.84	6.56%	4.90%	72.00%	59.00%	59.00%	9.86%
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.

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

Line	Company	Stock Price (1)	Analyst Growth (2)	Long-Term Growth* (3)	Payout Ratio 2010 (4)	Payout Ratio 2014 (5)	Payout Ratio 2024 (6)	Multi-Stage Growth DCF (7)
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	Integrys 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	$26.63	6.56%	4.90%	72.00%	59.00%	59.00%	9.90%
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.

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Electric Proxy Group
Valuation Metrics

Price to Earnings (P/E) Ratio [1]

Line	Company	12-Year Average (1)	Current 2012 [2] (2)	2011 (3)	2010 (4)	2009 (5)	2008 (6)	2007 (7)	2006 (8)	2005 (9)	2004 (10)	2003 (11)	2002 (12)	2001 (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	Integrys 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 Average (1)	Current 2012 [2/a] (2)	2011 (3)	2010 (4)	2009 (5)	2008 (6)	2007 (7)	2006 (8)	2005 (9)	2004 (10)	2003 (11)	2002 (12)	2001 (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	Integrys 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:

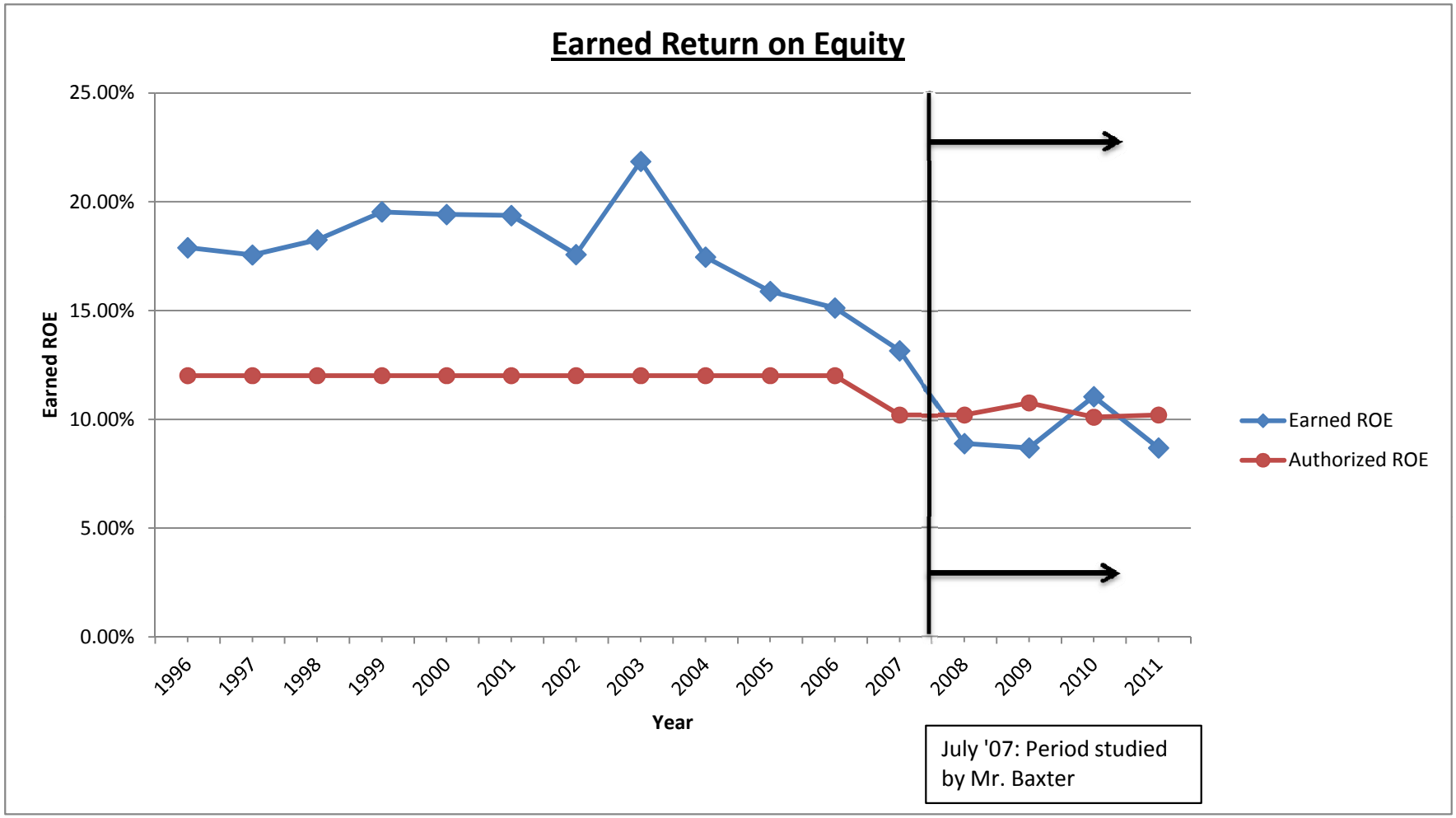
[1] *The Value Line Investment Survey Investment Analyzer Software,* downloaded on July 3, 2012.

[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. Reedâ€™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.

Schedule MPG-22