

Exhibit No.:  
Issue: Revenue Requirement  
Witness: Michael Gorman  
Type of Exhibit: Direct Testimony  
Sponsoring Party: Missouri Industrial Energy Consumers  
Case No.: ER-2011-0028  
Date Testimony Prepared: February 8, 2011

**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 ) **Case No. ER-2011-0028**  
Revenues for Electric Service ) Tariff No. YE-2011-0116  
\_\_\_\_\_)

Direct Testimony and Schedules of

**Michael Gorman**

**Revenue Requirement**

On behalf of

**Missouri Industrial Energy Consumers**

February 8, 2011



**BRUBAKER & ASSOCIATES, INC.**  
CHESTERFIELD, MO 63017

Project 9371

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-2011-0028  
Tariff No. YE-2011-0116

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

Affidavit of Michael Gorman

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

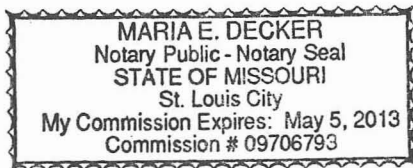
1. My name is Michael Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Missouri Industrial Energy Consumers in this proceeding on their behalf.

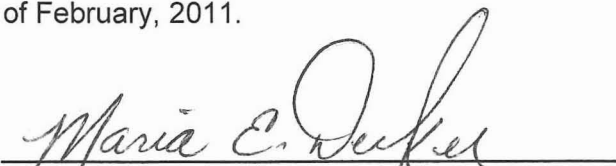
2. Attached hereto and made a part hereof for all purposes are my direct testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2011-0028.

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 Gorman

Subscribed and sworn to before me this 7th day of February, 2011.



  
\_\_\_\_\_  
Notary Public

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

<b>In the Matter of Union Electric Company, d/b/a Ameren Missouri's Tariff to Increase Its Annual Revenues for Electric Service</b>	) ) ) ) ) ) )	<b>Case No. ER-2011-0028</b> Tariff No. YE-2011-0116
---	---------------------------------	---

**Table of Contents to the  
Direct Testimony of Michael Gorman**

	<u>Page</u>
I. INTRODUCTION.....	1
II. SUMMARY.....	2
III. ELECTRIC UTILITY INDUSTRY MARKET OUTLOOK.....	3
IV. AMEREN MISSOURI'S INVESTMENT RISK.....	6
V. AMEREN MISSOURI'S PROPOSED CAPITAL STRUCTURE .....	7
VI. RETURN ON COMMON EQUITY.....	8
A. Discounted Cash Flow Model .....	11
B. Sustainable Growth DCF .....	20
C. Multi-Stage Growth DCF Model .....	22
D. Risk Premium Model.....	25
E. Capital Asset Pricing Model.....	29
F. Return on Equity Summary.....	35
G. Financial Integrity.....	35
<b>QUALIFICATIONS OF MICHAEL GORMAN.....</b>	<b>Appendix A</b>
<b>SCHEDULE MPG-1 THROUGH SCHEDULE MPG-17</b>	

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

	)	
In the Matter of Union Electric	)	
Company, d/b/a Ameren Missouri's	)	<b>Case No. ER-2011-0028</b>
Tariff to Increase Its Annual	)	Tariff No. YE-2011-0116
Revenues for Electric Service	)	
	)	

**Direct Testimony of Michael Gorman**

**I. INTRODUCTION**

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14

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

A Michael 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 my 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"). These companies purchase substantial quantities of electricity from Ameren Missouri ("Company"), principally at the primary and transmission voltage levels.

1                    Their cost of electricity would increase approximately 11% if Ameren Missouri  
2                    were granted the full amount of the increase which it has requested. This proceeding  
3                    will have a substantial impact on these companies' cost of doing business, and thus  
4                    they are vitally interested in the outcome.

5    **Q        WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

6    A        I will recommend a fair return on equity and overall rate of return for Ameren Missouri  
7                    in this proceeding.

## 8                    **II. SUMMARY**

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

10   A        I recommend the Missouri Public Service Commission (“Commission”) award Ameren  
11                    Missouri a return on common equity of 9.75%, which is the midpoint of my 9.5% to  
12                    10.0% estimated range of Ameren Missouri's current market cost of common equity.

13                    My recommended return on equity for Ameren Missouri is based on a  
14                    constant growth Discounted Cash Flow (“DCF”) model, a sustainable growth DCF  
15                    model, a multi-stage growth DCF model, a Risk Premium analysis, and a Capital  
16                    Asset Pricing Model (“CAPM”) analysis. These analyses estimate a fair return on  
17                    equity based on observable market information for a group of publicly traded electric  
18                    utility companies that approximate Ameren Missouri's investment risk.

19                    I also show that my proposed return on equity provides Ameren Missouri an  
20                    opportunity to achieve cash flow credit metrics that will support an investment grade  
21                    bond rating and maintain financial integrity.

22                    As such, my recommended return on equity represents fair compensation for  
23                    Ameren Missouri's investment risk and will support Ameren Missouri's financial  
24                    integrity.

**Michael Gorman**  
**Page 2**

1                   As set forth on Schedule MPG-1, I recommend an overall rate of return of  
2                   7.87% be used to set Ameren Missouri's rates in this proceeding.

3    **Q       HOW IS YOUR TESTIMONY ORGANIZED?**

4    A       My testimony is organized as follows:

- 5                   1. I will review the current electric utility industry market outlook.
- 6                   2. I will review Ameren Missouri's current investment risk and credit standing.
- 7                   3. I will review Ameren Missouri's proposed capital structure used to set  
8                   rates in this proceeding.
- 9                   4. I will estimate a fair return on equity for Ameren Missouri.
- 10                  5. I will review Ameren Missouri's financial integrity at my proposed rate of  
11                  return.

### 12                   **III. ELECTRIC UTILITY INDUSTRY MARKET OUTLOOK**

13   **Q       PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.**

14   A       I review the credit rating and investment return performance of the electric utility  
15            industry. Based on the assessments described below, I find the credit rating outlook  
16            of the industry to be strong and supportive of the industry's financial integrity.  
17            Further, electric utilities' stocks have exhibited strong return performance and are  
18            characterized as a safe investment.

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

20   A       Electric utilities' credit rating outlook is improving over the recent past. Standard &  
21            Poor's ("S&P") recently provided an assessment of the credit rating of U.S. electric  
22            utilities for 2010. S&P's commentary included the following:

1                   **Solid Industry Fundamentals Support Stable Outlook**

2                   Throughout 2010, U.S. electric utilities performed well amid continuing  
3                   favorable access to capital. With rebounding markets, external  
4                   financing activity for the U.S. regulated electric utility industry was  
5                   about \$35 billion, well below the \$48 billion in more difficult market  
6                   conditions in 2009. Companies have continued to proactively  
7                   pre-finance maturities, taking advantage of investor appetite and  
8                   favorable spreads, and focused on strengthening their balance sheets  
9                   and liquidity. Investor appetite for first mortgage bonds remained  
10                  healthy, with deals continuing to be oversubscribed. Credit  
11                  fundamentals indicate that most, if not all, electric utilities should  
12                  continue to have ample access to capital markets and credit. Liquidity,  
13                  an industry-wide strength, has been improving. Banking syndicates  
14                  are expressing willingness to negotiate credit facilities, now with  
15                  lengthening terms.<sup>1</sup>

16                  Similarly, Fitch states:

17                               **Rating Outlook**

18                  Stable Credit Outlook for Most Segments: Relatively low prices for  
19                  natural gas and power, low interest rates, open capital-market  
20                  conditions, and a slow economic recovery forecasted by Fitch Ratings  
21                  for 2011 are the foundation for a stable credit outlook for most  
22                  business segments within the utilities, power, and gas (UPG) sector.  
23                  Fitch's 2011 credit outlook for investor-owned gas and electric utilities,  
24                  utility parent companies, pipelines, and midstream gas companies is  
25                  stable. A significant exception is the negative 2011 credit outlook for  
26                  competitive generators, whose profit margins and cash flows are  
27                  subject to continuing compression from low gas and power prices and  
28                  an overhang of excess power capacity.<sup>2</sup>

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

30                               **Conclusion**

31                  The main appeal of electric utility stocks continues to be the prospect  
32                  of consistent income in the form of quarterly dividends, coupled with  
33                  relative stability. Each utility in this Issue offers a dividend, which for  
34                  the most part, is quite generous in relation to those in other industries.  
35                  Although valuation concerns have arisen as of late due to the recent  
36                  increase in utility stock prices, we believe that these equities remain a  
37                  popular safe haven for conservative investors.<sup>3</sup>

---

<sup>1</sup>Standard & Poor's RatingsDirect on the Global Credit Portal: "Industry Economic And Ratings Outlook: Stable Industry Outlook For U.S. Regulated Electric Utilities Supports Ratings," January 14, 2011, emphasis added.

<sup>2</sup>Fitch Ratings: "2011 Outlook: U.S. Utilities, Power, and Gas," December 20, 2010, emphasis added.

<sup>3</sup>*Value Line Investment Survey*, November 26, 2010 at 139, emphasis added.

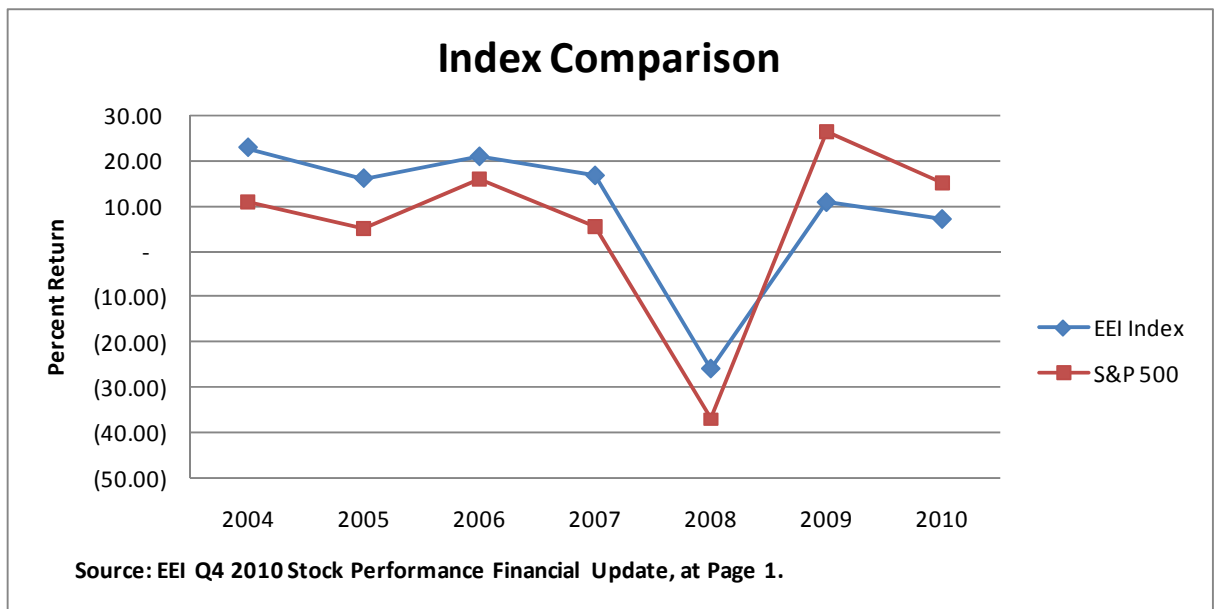
1 The Edison Electric Institute (“EEI”) also opined as follows:

2 Many regulated utilities are engaged in capital spending programs that  
3 should help drive solid mid- to high-single-digit earnings growth over  
4 the next several years, which will augment the group’s strong dividend  
5 yield.<sup>4</sup>

6 **Q PLEASE DESCRIBE ELECTRIC UTILITY STOCK PRICE PERFORMANCE OVER**  
7 **THE LAST FIVE YEARS.**

8 A As shown in Figure 1 below, the EEI has recorded electric utility stock price  
9 performance compared to the market. The EEI data shows that its Electric Utility  
10 Index has outperformed the market over the last five years (2004-2010).

**FIGURE 1**



11 During 2009 and 2010, the EEI Index underperformed the market, which is not  
12 unusual for stocks that are considered “safe havens” during periods of market  
13 turbulence. The EEI states the following:

14 The EEI Index produced a 1.3% return in the fourth quarter of 2010,  
15 significantly trailing the Dow Jones Industrials’ 8.0% return, the S&P

<sup>4</sup>EEI Q4 2010 Financial Update at 1, emphasis added.



1 500's 10.7% return and the Nasdaq Composite's 12.0% gain. During  
2 the quarter, the broad market sustained the rally that begin in July on  
3 signs that the U.S. economy would avoid a dip back into recession and  
4 that Europe's political leaders would find a way to defuse the sovereign  
5 debt crisis affecting its weaker economies, avoiding a traumatic impact  
6 on the stability of European banks. Fears of slowing U.S. growth and  
7 the eruption of Europe's sovereign debt worries had driven the broad  
8 market down during May and June, while regulated utilities stocks  
9 outperformed. In a strong quarter for the market, one might expect  
10 utilities to underperform, and indeed they did during Q4.

11 \* \* \*

12 By late in the year, most industry analysts were commenting that utility  
13 price earnings multiples had climbed above their historical average  
14 levels and that the undervaluation evident earlier in the year had  
15 largely disappeared. However, with interest rates as low as they are  
16 and the risk of a return to broad economic weakness still very much in  
17 play, there was a general sense of confidence that the sector's capital  
18 investment growth potential and strong dividend yields offer a floor of  
19 support for its stock prices, especially if the economy should suffer  
20 renewed weakness.<sup>5</sup>

#### 21 **IV. AMEREN MISSOURI'S INVESTMENT RISK**

22 **Q PLEASE PROVIDE A BRIEF OVERVIEW OF AMEREN MISSOURI AND ITS**  
23 **INVESTMENT CHARACTERISTICS.**

24 **A** Ameren Missouri's senior secured credit ratings from S&P and Moody's are "BBB+"  
25 and "A3," respectively.

26 Concerning Ameren Missouri, S&P states the following:

##### 27 **Rationale**

28 The ratings on Ameren Missouri reflect Ameren Corp.'s (Ameren)  
29 consolidated credit profile. The ratings also reflect Ameren Missouri's  
30 excellent business risk profile and Ameren's consolidated significant  
31 financial risk profile. Ameren's subsidiaries include rate regulated  
32 utilities Ameren Illinois and Ameren Missouri, and merchant energy  
33 company AmerenEnergy Generating Co. (GenCo.) As of Sept. 30,  
34 2010, Ameren had about \$7.7 billion of total debt outstanding. Based  
35 on the combination of future earnings, cash flow, capital expenditures,

---

<sup>5</sup>EEI Q4 2010 Financial Update at 1, 4 and 6.

1 and credit risk exposure, we view Ameren as about 75% regulated and  
2 25% merchant generation.

3 Ameren Missouri's excellent business risk profile reflects its recent rate  
4 cases and regulatory mechanisms that overall indicate a decreasing  
5 regulatory risk. Ameren Missouri is a rate-regulated utility that serves  
6 1.2 million electric and 126,000 gas customers in portions of central  
7 and eastern Missouri. The company also has 10,400 megawatt (MW)  
8 of generating capacity of which 5,400 MW is base load coal and 1,200  
9 MW is nuclear generation. In 2009 and 2010, the company received  
10 credit supportive rate case orders from the Missouri Public Service  
11 Commission that includes more than \$390 million of base rate  
12 increases, a fuel adjustment clause, pension and OPEB trackers, and  
13 a cost tracker for vegetation management and infrastructure  
14 inspections. Recently, the company filed for a \$12 million gas revenue  
15 increase and a \$263 million electric rate increase. The commission's  
16 orders for the gas and electric rate cases are expected by April 2011  
17 and July 2011, respectively. We expect that Ameren Missouri will  
18 continue to file rate cases on a frequent basis to reduce its regulatory  
19 lag.

20 Ameren's consolidated satisfactory business risk profile reflects the  
21 combination of the excellent business risk profiles of Ameren's  
22 regulated businesses offset by the fair business risk profile of  
23 Ameren's merchant energy businesses.<sup>6</sup>

## 24 **V. AMEREN MISSOURI'S PROPOSED CAPITAL STRUCTURE**

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

28 **A** Ameren Missouri's proposed capital structure, as supported by Ameren Missouri  
29 witness Mr. Michael G. O'Bryan, is shown below in Table 1.

---

<sup>6</sup>Standard & Poor's RatingsDirect on the Global Credit Portal: "Ameren Missouri,"  
December 29, 2010 at 2.

**TABLE 1**

**Ameren Missouri's Proposed Capital Structure**  
**(March 31, 2010)**

<u>Description</u>	<u>Percent of Total Capital</u>
Long-Term Debt	47.591%
Preferred Stock	1.490%
Common Equity	<u>50.919%</u>
Total Capital Structure	100.000%

Source: Schedule MGO-E1.

1    **Q    ARE YOU PROPOSING ANY ADJUSTMENTS TO AMEREN MISSOURI'S**  
2    **PROPOSED CAPITAL STRUCTURE?**

3    **A    No.**

4    **VI. RETURN ON COMMON EQUITY**

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

7    **A    A utility's cost of common equity is the return investors expect, or require, in order to**  
8    **make an investment in the utility. Investors expect to achieve their return requirement**  
9    **from receiving dividends and stock price appreciation.**

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

12   **A    In general, determining a fair cost of common equity for a regulated utility has been**  
13   **framed by two decisions of the U.S. Supreme Court: Bluefield Water Works &**

1 Improvement Co. v. Public Serv. Commission of West Virginia, 262 U.S. 679 (1923)  
2 and Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944).

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

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

10 A I have used several models based on financial theory to estimate Ameren Missouri's  
11 cost of common equity. These models are: (1) a constant growth DCF model; (2) a  
12 sustainable growth DCF model; (3) a multi-stage growth DCF model; (4) a Risk  
13 Premium model, and (5) a CAPM analysis. I have applied these models to a group of  
14 publicly traded utilities that I have determined reflect investment risk similar to  
15 Ameren Missouri.

16 **Q HOW DID YOU SELECT A PROXY GROUP OF UTILITIES SIMILAR IN**  
17 **INVESTMENT RISK TO AMEREN MISSOURI TO ESTIMATE ITS CURRENT**  
18 **MARKET COST OF EQUITY?**

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

1 Q HOW DOES THIS PROXY GROUP'S INVESTMENT RISK COMPARE TO THE  
2 INVESTMENT RISK OF AMEREN MISSOURI?

3 A The proxy group is shown in Schedule MPG-2. This proxy group has an average  
4 senior secured credit rating from S&P of "BBB+," which is the same as Ameren  
5 Missouri's senior secured credit rating from S&P of "BBB+." The proxy group's senior  
6 secured credit rating from Moody's is "A3," which is also the same as Ameren  
7 Missouri's senior secured credit rating from Moody's of "A3."

8 The proxy group has an average common equity ratio of 45.3% (including  
9 short-term debt) from AUS and 46.5% (excluding short-term debt) from *Value Line* in  
10 2009. This proxy group's common equity ratio is lower than Ameren Missouri's  
11 proposed common equity ratio of 51%.<sup>7</sup> A lower common equity ratio suggests that  
12 Ameren Missouri has less financial risks than the proxy group.

13 I also compared Ameren Missouri's business risk to the business risk of my  
14 proxy group based on S&P's ranking methodology. Ameren Missouri has a business  
15 risk profile of "Excellent," which is identical to the risk profile of the proxy group.<sup>8</sup>

16 I believe the proxy group is reasonably comparable in total investment risk to  
17 Ameren Missouri.

---

<sup>7</sup>Table 1 of this testimony at 8.

<sup>8</sup>Standard & Poor's business risk methodology ranks a corporate entity's operating risk based on a scale of "Excellent" (lowest risk) to "Vulnerable" (highest risk). S&P has a six-tiered scale with "Excellent" the highest, "Vulnerable" the weakest, and most utilities falling into the highest business risk profile scores (indicating lowest business risk) of "Excellent" and "Strong." (Standard & Poor's RatingsDirect Credit Criteria Methodology: "Business Risk/Financial Risk Matrix Expanded," May 27, 2009).

1 **A. Discounted Cash Flow Model**

2 **Q PLEASE DESCRIBE THE DCF MODEL.**

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

6 
$$P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} \dots \frac{D_\infty}{(1+K)^\infty} \text{ where} \quad \text{(Equation 1)}$$
  
7

8  $P_0$  = Current stock price  
9  $D$  = Dividends in periods 1 -  $\infty$   
10  $K$  = Investor's required return

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

14 
$$K = D_1/P_0 + G \quad \text{(Equation 2)}$$

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

19 Equation 2 is referred to as the annual "constant growth" DCF model.

20 **Q WILL YOU INCLUDE A QUARTERLY COMPOUNDING ADJUSTMENT TO YOUR**  
21 **DCF RETURN ESTIMATE?**

22 A No. Including the quarterly compounding adjustment to Ameren Missouri's  
23 authorized return on equity is inappropriate. If a quarterly compounding adjustment is  
24 added to a DCF return estimate, shareholders will be permitted to earn the dividend  
25 reinvestment return twice: (1) through the higher authorized return on equity, and  
26 (2) through actual receipt of dividends and the reinvestment of those dividends

1 throughout the year. This double counting of the dividend reinvestment return is not  
2 reasonable and will unjustly inflate Ameren Missouri's rates.

3 **Q PLEASE EXPLAIN WHY THE QUARTERLY COMPOUNDING RETURN SHOULD**  
4 **NOT BE INCLUDED IN AMEREN MISSOURI'S AUTHORIZED RETURN ON**  
5 **EQUITY.**

6 A Simply put, the quarterly compounding component of the return is not a cost to the  
7 utility. Only the utility's cost of common equity capital should be included in the  
8 authorized return on equity.

9 This issue surrounds whether or not the DCF return estimate should include  
10 the expectations by investors that they will receive cash flows within the year, that can  
11 be reinvested in other investments of comparable risk, and thus the cash flows will  
12 produce compounded returns throughout the year. The relevant issue for setting  
13 rates is whether or not that reinvestment return is a cost to the utility. It is not!

14 The reinvestment return is not a cost to the utility and therefore should not be  
15 included in the authorized return on equity. While it is reasonable for investors to  
16 expect to have the opportunity to earn the compounded return produced by cash  
17 flows received within the year, the compound return is not paid to investors by the  
18 utility.

19 **Q CAN YOU PROVIDE AN EXAMPLE OF WHY THE COMPOUNDING RETURN**  
20 **ESTIMATE IS NOT A COST TO THE UTILITY?**

21 A Yes. I will provide two examples to help illustrate this point. First, consider the cost  
22 to the utility of an outstanding utility bond. Most utility bonds pay a coupon every six  
23 months. The utility annual cost paid to the bond investor is the sum of the two

1 semi-annual coupon payments. A bond investor expects to receive the semi-annual  
2 coupon payments from the utility, but also has an opportunity to reinvest the first  
3 coupon payment for the remaining six months of the year to enhance his end-of-year  
4 return. This compound return component is, however, not a cost to the utility  
5 because the utility does not pay the extra return.

6 For example, assume Ameren Missouri has an outstanding bond with a face  
7 value of \$1,000, at an interest rate of 6% which is paid in two semi-annual \$30  
8 coupon payments. Ameren Missouri's cost of this bond is 6%. This 6% cost to  
9 Ameren Missouri is based on a \$30 coupon payment paid in month 6 and month 12  
10 for an annual payment of \$60 relative to the \$1,000 face value of the bond. However,  
11 the bond investor would have an annual expected return on this bond of 6.1%. This  
12 annual expected return would be realized by receiving the first \$30 semi-annual  
13 coupon payment from Ameren Missouri and reinvesting it for the remaining six  
14 months of the year. This would produce \$0.89 of semi-annual compounding return  
15 ( $\$30 \times [(1.06)^{\frac{1}{2}} - 1]$ ). Hence, the bond investor would receive \$60 from Ameren  
16 Missouri, and \$0.89 from investing the first coupon for a total annual return of 6.09%,  
17 or 6.1%.

18 Importantly, if Ameren Missouri were to recover a 6.1% cost of this bond in its  
19 cost of service, and paid that return out to the bond investor, then the bond investor  
20 would receive \$60.89 from Ameren Missouri, rather than the \$60.00 actual cost, but  
21 the bond investor could still reinvest the semi-annual coupon, now \$30.89 for the  
22 remaining six months of the year. This would provide the investor with the  
23 reinvestment return twice, once from utility ratepayers, and a second time after the  
24 semi-annual coupon payment was paid and reinvested.



1 Reflecting this compounding assumption in the authorized return on equity  
2 therefore will double count the reinvestment return opportunity.

3 **Q DOES THIS EXAMPLE ALSO APPLY TO UTILITY STOCK INVESTMENTS?**

4 A Yes. Assume now that an investor purchased Ameren Missouri stock for \$100, and  
5 expects to receive four quarterly dividends of \$1.50, or \$6.00 per year. The expected  
6 cost to the utility of this dividend payment over the year would be \$6.00, or 6.0%.  
7 However, the expected effective yield of the dividend to investors would be 6.13%  
8 because the quarterly dividends could be reinvested for the remaining term of the  
9 year. Hence, the expected end-of-year value of those four \$1.50 quarterly dividend  
10 payments to the investor would be \$6.13.<sup>9</sup> Again, the utility pays \$6.00 of annual  
11 dividends. The \$0.13 is not paid to investors from the utility, but is rather earned in  
12 the other investments that earn the same return, which the dividends were invested in  
13 throughout the year.

14 Importantly, the reinvestment return of the dividends is not paid by the utility,  
15 and therefore is not part of the utility's cost of capital. Again, if this dividend  
16 reinvestment return is included in the utility's authorized return on equity, then  
17 investors will receive the dividend reinvestment return twice, once through the  
18 authorized return on equity, and a second time when dividends are actually received  
19 by investors and reinvested.

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

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

---

<sup>9</sup> $1.5 \times (1.06)^{.75} + 1.5 \times (1.06)^{.5} + 1.5 \times (1.06)^{.25} + 1.5 = \$6.13.$

1 Q WHAT STOCK PRICE AND DIVIDEND HAVE YOU RELIED ON IN YOUR  
2 CONSTANT GROWTH DCF MODEL?

3 A I relied on the average of the weekly high and low stock prices over a 13-week period  
4 ended January 21, 2011. An average stock price is less susceptible to market price  
5 variations than a spot price. Therefore, an average stock price is less susceptible to  
6 aberrant market price movements, which may not be reflective of the stock's  
7 long-term value.

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

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

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

19 A There are several methods one can use in order to estimate the expected growth in  
20 dividends. However, for purposes of determining the market required return on  
21 common equity, one must attempt to estimate investors' consensus about what the  
22 dividend or earnings growth rate will be, and not what an individual investor or analyst  
23 may use to form individual investment decisions.

1 Security analysts' growth estimates have been shown to be more accurate  
2 predictors of future returns than growth rates derived from historical data because  
3 they are more reliable estimates for the period these are made to reflect.<sup>10</sup> Assuming  
4 the market generally makes rational investment decisions, analysts' growth  
5 projections are more likely the growth estimates considered by the market that  
6 influence observable stock prices than are growth rates derived from only historical  
7 data.

8 For my constant growth DCF analysis, I have relied on a consensus, or mean,  
9 of professional security analysts' earnings growth estimates as a proxy for the  
10 investor consensus dividend growth rate expectations. I used the average of three  
11 sources of analysts' growth rate estimates: Zacks, SNL Financial and Reuters. All  
12 consensus analysts' projections used were available on January 24, 2011, as  
13 reported online.

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

---

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

1 **Q ARE ANALYSTS' GROWTH RATE PROJECTIONS INTENDED TO REPRESENT**  
2 **LONG-TERM SUSTAINABLE GROWTH FOR THE UNDERLYING SECURITY?**

3 A No. Analysts' growth rate projections are intended to represent a period of three to  
4 five years. These growth rates reflect the analysts' assessments of the growth  
5 outlooks for these companies during this time period. This is significant, because the  
6 constant growth DCF model requires a growth rate that can be sustained over a long-  
7 term indefinite period. Since analysts' three- to five-year growth rate estimates may  
8 or may not be reasonable estimates of long-term sustainable growth, I will test the  
9 reasonableness of assuming these growth rate outlooks can be sustained over the  
10 long-term period later in this testimony.

11 **Q WHAT IS THE GROWTH RATE YOU USED IN YOUR CONSTANT GROWTH DCF**  
12 **MODEL?**

13 A The growth rates I used in my DCF analysis are shown in Schedule MPG-3. The  
14 average and median growth rates for the proxy group are 5.59% and 5.13%,  
15 respectively.

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

17 A As shown in Schedule MPG-4, the average and median constant growth DCF returns  
18 for the proxy group are 10.31% and 10.17%, respectively.

19 **Q DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF YOUR**  
20 **CONSTANT GROWTH DCF ANALYSIS?**

21 A Yes. The three- to five-year growth rate exceeds a sustainable long-term growth rate,  
22 which is a required input for the constant growth DCF model.

**Michael Gorman**  
**Page 17**

1 **Q WHY DO YOU BELIEVE THE PROXY GROUP'S THREE- TO FIVE-YEAR**  
2 **GROWTH RATE IS IN EXCESS OF A LONG-TERM SUSTAINABLE GROWTH**  
3 **RATE?**

4 A The three- to five-year growth rate of the proxy group exceeds the growth rate of the  
5 overall U.S. economy. As developed below, the consensus of published economists  
6 projects that the U.S. Gross Domestic Product ("GDP") will grow at a rate of no more  
7 than 4.8% and 4.7% over the next 5 and 10 years, respectively. A company cannot  
8 grow, indefinitely, at a faster rate than the market in which it sells its products. The  
9 U.S. economy, or GDP, growth projection represents a ceiling, or high-end,  
10 sustainable growth rate for a utility over an indefinite period of time.

11 **Q WHY IS THE GDP GROWTH PROJECTION CONSIDERED A CEILING GROWTH**  
12 **RATE FOR A UTILITY?**

13 A Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the  
14 overall economy. The utilities' earnings/dividend growth is created by increased utility  
15 investment or rate base. Utility plant investment, in turn, is driven by service area  
16 economic growth and demand for utility service. In other words, utilities invest in  
17 plant to meet sales demand growth, and sales growth in turn is tied to economic  
18 growth in their service areas. The Energy Information Administration ("EIA") has  
19 observed that utility sales growth is less than U.S. GDP growth, as shown in  
20 Schedule MPG-5. Utility sales growth has lagged behind GDP growth. Hence,  
21 nominal GDP growth is a very conservative, albeit overstated, proxy for electric utility  
22 sales growth, rate base growth and earnings growth. Therefore, GDP growth is a  
23 reasonable proxy for the highest sustainable long-term growth rate of a utility.

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

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

7 The constant growth model is most appropriate for mature companies  
8 with a stable history of growth and stable future expectations.  
9 Expected growth rates vary somewhat among companies, but  
10 dividends for mature firms are often expected to grow in the future at  
11 about the same rate as nominal gross domestic product (real GDP  
12 plus inflation).<sup>11</sup>

13 Also, Morningstar's *Stocks, Bonds, Bills and Inflation 2009 Yearbook*  
14 *Valuation Edition* tracked dividends of the stock market in comparison to GDP growth  
15 over the period 1926 through the end of 2008.<sup>12</sup> Based on that study, the authors  
16 found that earnings and dividends for the market have historically grown in tandem  
17 with the overall economy. It is important to note that the growth of companies  
18 included in the overall market will normally be higher than that of utility companies.  
19 These non-utility companies achieve a higher level of growth because they retain a  
20 larger percentage of their earnings and pay out a much smaller percentage of their  
21 earnings as dividends. Retaining higher percentages of total earnings fuels stronger  
22 growth for these non-utility companies, however, it also implies significantly lower  
23 dividend yield compared to utility stock investments. Since the market in general  
24 grows at the overall GDP growth rate, it is very conservative to assume that utility  
25 companies could achieve this same level of sustained growth without a material  
26 reduction in their dividend payout ratios and associated dividend yields. As such,

---

<sup>11</sup>"Fundamentals of Financial Management," Eugene F. Brigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298.

<sup>12</sup>*Stocks, Bonds, Bills and Inflation 2009 Yearbook Valuation Edition* (Morningstar, Inc.) at 67.

1 using the GDP as a maximum sustainable growth rate is very conservative and will  
2 produce a high-end DCF estimate for utility securities.

3 **Q HAVE ANALYSTS RECOGNIZED THAT SHORT-TERM GROWTH OUTLOOKS**  
4 **WILL SLOW OVER TIME?**

5 A Yes. *Value Line* recognized that dividend growth will likely slow from short-term  
6 growth patterns. *Value Line* stated as follows:

7 Dividends have been increasing at a rapid pace since 2002, reflecting  
8 relatively healthy balance sheets throughout the industry. In fact, last  
9 year 61% of electric utilities raised their dividend, 33% reported no  
10 change, 2% reinstated theirs, 2% lowered them, and only 2% are not  
11 paying them at all. In any industry these statistics would be viewed as  
12 quite favorable. But, 2008 actually marked the slowing of a trend for  
13 the electric utility industry, in which the percentage of dividend  
14 increases declined. The reversal is attributable to deteriorating  
15 economic conditions, elevated capital spending, and higher debt-to-  
16 capitalization ratios. Despite this, many utilities are still sporting  
17 attractive yields.<sup>13</sup>

## 18 **B. Sustainable Growth DCF**

19 **Q PLEASE DESCRIBE HOW YOU ESTIMATE A SUSTAINABLE LONG-TERM**  
20 **GROWTH RATE FOR YOUR SUSTAINABLE GROWTH DCF MODEL.**

21 A A sustainable growth rate is based on the percentage of the utility's earnings that is  
22 retained and reinvested in utility plant and equipment. These reinvested earnings  
23 increase the earnings base (rate base) and will grow earnings when the reinvested  
24 earnings investment is put into service, and the Company is allowed to earn its  
25 authorized return on the additional rate base investment.

---

<sup>13</sup>*Value Line Investment Survey*, May 29, 2009, emphasis added.

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

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

15           As shown in Schedule MPG-7, page 1 of 2, the average and median  
16 sustainable growth rates for the proxy group using this internal growth rate model are  
17 5.42% and 4.76%, respectively.

18 **Q       WHAT IS THE CONSTANT GROWTH DCF ESTIMATE USING THIS**  
19 **SUSTAINABLE LONG-TERM GROWTH RATE?**

20 **A**     A DCF estimate based on this sustainable growth rate is developed in Schedule  
21 MPG-8. As shown there, a sustainable growth DCF analysis produces group average  
22 and median DCF results of 10.26% and 9.67%, respectively.

23           The average result is skewed due to a significant outlier – DPL, Inc., which  
24 produces a return on equity of 17.93%. Excluding DPL, Inc., the proxy group's



1 average DCF would be 9.49%. Therefore, I conclude that the median result of 9.67%  
2 better represents the central tendency of the proxy group. Hence, I will rely on the  
3 median DCF result.

4 The sustainable growth DCF result is based on the dividend and price data  
5 used in my constant growth DCF study (using analyst growth rates) and the  
6 sustainable growth rate discussed above and developed in Schedule MPG-7.

### 7 **C. Multi-Stage Growth DCF Model**

#### 8 **Q HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?**

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

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

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

22 For the short-term growth period, I relied on the consensus analysts' growth  
23 projections described above in relationship to my constant growth DCF model. For

1 the transition period, the growth rates were reduced or increased by an equal annual  
2 factor, that transitioned the analysts' growth rates up/down to a long-term sustainable  
3 growth (GDP growth) rate by the start of the sustainable growth period (year 11). For  
4 the long-term growth period, I assumed each company's growth would converge to  
5 the maximum sustainable growth rate for a utility company as proxied by the  
6 consensus analysts' projected growth for the U.S. GDP of 4.7%.

7 **Q WHAT DO YOU BELIEVE IS A REASONABLE SUSTAINABLE LONG-TERM**  
8 **GROWTH RATE?**

9 A A reasonable growth rate that can be sustained in the long run should be based on  
10 consensus analysts' projections. *Blue Chip Economic Indicators* publishes  
11 consensus GDP growth projections twice a year. Based on its latest issue, the  
12 consensus economists' published GDP growth rate outlook is 4.8% to 4.7% over the  
13 next 5 to 10 years, respectively.<sup>14</sup>

14 Therefore, I propose to use the consensus economists' projected 10-year  
15 GDP consensus growth rate of 4.7%, as published by *Blue Chip Economic Indicators*,  
16 as an estimate of sustainable long-term growth. This consensus GDP growth  
17 forecast represents the most likely views of market participants because it is based  
18 on published economist projections.

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

21 A I relied on the same 13-week stock price and the most recent quarterly dividend  
22 payment discussed above. For stage one growth, I used the consensus analysts'

---

<sup>14</sup>*Blue Chip Economic Indicators*, October 10, 2010 at 15.

1 growth rate projections discussed above in my constant growth DCF model. The  
2 transition period begins in year 6 and ends in year 10. For the long-term sustainable  
3 growth rate starting in year 11, I used 4.7%, the consensus economists' 10-year  
4 projected nominal GDP growth rate.

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

6 A As shown in Schedule MPG-9, the average and median multi-stage growth DCF  
7 returns on equity for the proxy group are 9.65% and 9.86%, respectively.

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

9 A The results from my DCF analyses are summarized in Table 2:

<b><u>Description</u></b>	<b><u>Proxy Group Median</u></b>
Constant Growth DCF Model (Analysts' Growth)	10.17%
Constant Growth DCF Model (Sustainable Growth)	9.67%
Multi-Stage Growth DCF Model	<u>9.86%</u>
Average	9.90%

10 For reasons set forth above, I believe my constant growth DCF model based  
11 on analysts' growth is inflated because short-term analyst growth rate projections are  
12 not reasonable estimates of long-term sustainable growth. Therefore, it would be  
13 justified to give minimal weight to the results of the constant growth DCF model based  
14 on inflated analysts' growth rate estimates. However, I will give equal weight to all  
15 three of my DCF estimates. Therefore, based on my DCF studies, I conclude a return

**Michael Gorman**  
**Page 24**

1 on equity in the range of 9.67% to 10.17%, and the average DCF result of 9.90% are  
2 reasonable in this case.

### 3 **D. Risk Premium Model**

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

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

12 This risk premium model is based on two estimates of an equity risk premium.  
13 First, I estimated the difference between the required return on utility common equity  
14 investments and U.S. Treasury bonds. The difference between the required return on  
15 common equity and the Treasury bond yield is the risk premium. I estimated the risk  
16 premium on an annual basis for each year over the period 1986 through 2010. The  
17 common equity required returns were based on regulatory commission-authorized  
18 returns for electric utility companies. Authorized returns are typically based on expert  
19 witnesses' estimates of the contemporary investor required return.

20 The second equity risk premium method is based on the difference between  
21 regulatory commission-authorized returns on common equity and contemporary  
22 "A" rated utility bond yields. This time period was selected because over the period  
23 1986 through 2010, public utility stocks have consistently traded at a premium to  
24 book value. This is illustrated in Schedule MPG-10, where the market to book ratio

1 since 1986 for the electric utility industry was consistently above 1.0. Over this time  
2 period, regulatory authorized returns were sufficient to support market prices that at  
3 least exceeded book value. This is an indication that regulatory authorized returns on  
4 common equity supported a utility's ability to issue additional common stock, without  
5 diluting existing shares. It further demonstrates that utilities were able to access  
6 equity markets without a detrimental impact on current shareholders.

7 Based on this analysis, as shown in Schedule MPG-11, the average indicated  
8 equity risk premium over U.S. Treasury bond yields has been 5.19%. Of the 25  
9 observations, 19 indicated risk premiums fall in the range of 4.40% to 6.09%. Since  
10 the risk premium can vary depending upon market conditions and changing investor  
11 risk perceptions, I believe using an estimated range of risk premiums provides the  
12 best method to measure the current return on common equity using this  
13 methodology.

14 As shown in Schedule MPG-12, the average indicated equity risk premium  
15 over contemporary Moody's utility bond yields was 3.76% over the period 1986  
16 through 2010. The indicated equity risk premium estimates based on this analysis  
17 primarily fall in the range of 3.03% to 4.59% over this time period.

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

22 **A** No. Contemporary market conditions can change dramatically during the period that  
23 rates determined in this proceeding will be in effect. A relatively long period of time  
24 where stock valuations reflect premiums to book value is an indication that the

1 authorized returns on equity and the corresponding equity risk premiums were  
2 supportive of investors' return expectations and provided utilities access to the equity  
3 markets under reasonable terms and conditions. Further, this time period is long  
4 enough to smooth abnormal market movement that might distort equity risk  
5 premiums. While market conditions and risk premiums do vary over time, this  
6 historical time period is a reasonable period to estimate contemporary risk premiums.

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

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

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

21 **A** The equity risk premium should reflect the relative market perception of risk in the  
22 utility industry today. I have gauged investor perceptions in utility risk today in  
23 Schedule MPG-13. On that schedule, I show the yield spread between utility bonds  
24 and Treasury bonds over the last 30 years. As shown in this schedule, the 2008

1 utility bond yield spreads over Treasury bonds for “A” rated and “Baa” rated utility  
2 bonds are 2.25% and 2.97%, respectively. The utility bond yield spreads over  
3 Treasury bonds for “A” and “Baa” rated utility bonds for 2009 are 1.96% and 2.98%,  
4 respectively. In 2010, these spreads declined to 1.21% and 1.71%, respectively.  
5 These utility bond yield spreads over Treasury bond yields are now lower than the  
6 30-year average spreads of 1.59% and 1.99%, respectively.

7 A current 13-week average “A” rated utility bond yield of 5.47%, when  
8 compared to the current Treasury bond yield of 4.33% as shown in Schedule  
9 MPG-14, page 1 of 3, implies a yield spread of around 1.14%. This current utility  
10 bond yield is lower than the 30-year average spread for “A” utility bonds of 1.59%.  
11 The spread for the “Baa” utility yields of 1.63% is also lower than the 30-year average  
12 spread of 1.99%.

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

16 **Q HOW DID YOU ESTIMATE AMEREN MISSOURI’S COST OF COMMON EQUITY**  
17 **WITH THIS RISK PREMIUM MODEL?**

18 A I added a projected long-term Treasury bond yield to my estimated equity risk  
19 premium over Treasury yields. The 13-week average 30-year Treasury bond yield,  
20 ending January 21, 2011 was 4.33%, as shown in Schedule MPG-14, page 1 of 3.  
21 *Blue Chip Financial Forecasts* projects the 30-year Treasury bond yield to be 5.0%,  
22 and a 10-year Treasury bond yield to be 4.1%.<sup>15</sup> Using the projected 30-year bond  
23 yield of 5.0%, and a Treasury bond risk premium of 4.40% to 6.09%, as developed

---

<sup>15</sup>*Blue Chip Financial Forecasts*, January 1, 2011 at 2.

1 above, produces an estimated common equity return in the range of 9.40% (5.0% +  
2 4.40%) to 11.09% (5.0% + 6.09%), with a midpoint of 10.25%.

3 I next added my equity risk premium over utility bond yields to a current  
4 13-week average yield on "Baa" rated utility bonds for the period ending January 21,  
5 2011 of 5.96%. Adding the utility equity risk premium of 3.03% to 4.59%, as  
6 developed above, to an "Baa" rated bond yield of 5.96%, produces a cost of equity in  
7 the range of 8.99% to 10.55%, with a midpoint of 9.77%.

8 My risk premium analyses produce a return estimate in the range of 9.77% to  
9 10.25%, with a midpoint estimate of 10.01%, rounded to 10.0%.

## 10 **E. Capital Asset Pricing Model**

### 11 **Q PLEASE DESCRIBE THE CAPM.**

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

$$16 \quad R_i = R_f + B_i \times (R_m - R_f) \text{ where:}$$

17  $R_i$  = Required return for stock i

18  $R_f$  = Risk-free rate

19  $R_m$  = Expected return for the market portfolio

20  $B_i$  = Beta - Measure of the risk for stock

21 The stock-specific risk term in the above equation is beta. Beta represents  
22 the investment risk that cannot be diversified away when the security is held in a  
23 diversified portfolio. When stocks are held in a diversified portfolio, firm-specific risks  
24 can be eliminated by balancing the portfolio with securities that react in the opposite



1 direction to firm-specific risk factors (e.g., business cycle, competition, product mix,  
2 and production limitations).

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

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

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

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

16 A As previously noted, *Blue Chip Financial Forecasts'* projected 30-year Treasury bond  
17 yield is 5.0%.<sup>16</sup> The current 30-year bond yield is 4.33%. I used *Blue Chip Financial*  
18 *Forecasts'* projected 30-year Treasury bond yield of 5.0% for my CAPM analysis.

---

<sup>16</sup>*Blue Chip Financial Forecasts*, January 1, 2011 at 2.

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

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

11           Treasury bond yields, however, do include risk premiums related to  
12   unanticipated future inflation and interest rates. A Treasury bond yield is not a  
13   risk-free rate. Risk premiums related to unanticipated inflation and interest rates are  
14   systematic or market risks. Consequently, for companies with betas less than 1.0,  
15   using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis  
16   can produce an overstated estimate of the CAPM return.

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

18   A     As shown in Schedule MPG-15, the proxy group average *Value Line* beta estimate is  
19   0.67.

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

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

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

7           Morningstar's *Stocks, Bonds, Bills and Inflation 2010 Classic Yearbook*  
8 publication estimates the historical arithmetic average real market return over the  
9 period 1926 to 2009 as 8.6%.<sup>17</sup> A current consensus analysts' inflation projection, as  
10 measured by the Consumer Price Index, is 2.1%.<sup>18</sup> Using these estimates, the  
11 expected market return is 10.88%.<sup>19</sup> The market premium then is the difference  
12 between the 10.88% expected market return, and my 5.0% risk-free rate estimate, or  
13 5.88%, rounded to 5.90%.

14           The historical estimate of the market risk premium was also estimated by  
15 Morningstar in *Stocks, Bonds, Bills and Inflation 2010 Classic Yearbook*. Over the  
16 period 1926 through 2009, Morningstar's study estimated that the arithmetic average  
17 of the achieved total return on the S&P 500 was 11.8%,<sup>20</sup> and the total return on long-  
18 term Treasury bonds was 5.8%.<sup>21</sup> The indicated equity risk premium is 6.0% (11.8% -  
19 5.8% = 6.0%).

---

<sup>17</sup>Morningstar, Inc. *Ibbotson SBBI 2010 Classic Yearbook* at 82.

<sup>18</sup>*Blue Chip Financial Forecasts*, January 1, 2011 at 2.

<sup>19</sup> $\{ [(1 + 0.086) * (1 + 0.021)] - 1 \} * 100$ .

<sup>20</sup>Morningstar, Inc. *Ibbotson SBBI 2010 Classic Yearbook* at 82.

<sup>21</sup>*Id.*

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

3    A    Morningstar's analysis indicates that a market risk premium falls somewhere in the  
4    range of 5.2% to 6.7%. My market risk premium falls in the range of 5.9% to 6.0%.  
5    My market risk premium is generally in the middle of Morningstar's range.

6           Morningstar estimates a forward-looking market risk premium based on actual  
7    achieved data from the historical period of 1926 through 2009. Using this data,  
8    Morningstar estimates a market risk premium derived from the total return on large  
9    company stocks (S&P 500), less the income return on Treasury bonds. The total  
10   return includes capital appreciation, dividend or coupon reinvestment returns, and  
11   annual yields received from coupons and/or dividend payments. The income return,  
12   in contrast, only reflects the income return received from dividend payments or  
13   coupon yields. Morningstar argues that the income return is the only true risk-free  
14   rate associated with the Treasury bond and is the best approximation of a truly  
15   risk-free rate. I disagree with this assessment from Morningstar, because it does not  
16   reflect a true investment option available to the marketplace and therefore does not  
17   produce a legitimate estimate of the expected premium of investing in the stock  
18   market versus that of Treasury bonds. Nevertheless, I will use Morningstar's  
19   conclusion to show the reasonableness of my market risk premium estimates.

20           Morningstar's range is based on several methodologies. First, Morningstar  
21   estimates a market risk premium of 6.7% based on the difference between the total  
22   market return on common stocks (S&P 500) less the income return on Treasury bond  
23   investments. Second, Morningstar found that if the New York Stock Exchange (the  
24   "NYSE") was used as the market index rather than the S&P 500, that the market risk  
25   premium would be 6.4% and not 6.7%. Third, if only the two deciles of the largest

**Michael Gorman**  
**Page 33**

1 companies included in the NYSE were considered, the market risk premium would be  
2 5.9%.<sup>22</sup>

3 Finally, Morningstar found that the 6.7% market risk premium based on the  
4 S&P 500 was impacted by an abnormal expansion of price-to-earnings (“P/E”) ratios  
5 relative to earnings and dividend growth during the period 1980 through 2001.  
6 Morningstar believes this abnormal P/E expansion is not sustainable. Therefore,  
7 Morningstar adjusted this market risk premium estimate to normalize the growth in the  
8 P/E ratio to be more in line with the growth in dividends and earnings. Based on this  
9 alternative methodology, Morningstar published a long-horizon supply-side market  
10 risk premium of 5.2%.<sup>23</sup>

11 **Q WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?**

12 **A** As shown in Schedule MPG-16, based on my low-end market risk premium of 5.9%,  
13 high-end market risk premium of 6.0%, a risk-free rate of 5.0%, and a beta of 0.67,  
14 my CAPM analysis produces a return in the range of 8.95% to 9.02%. Using  
15 Morningstar’s high-end market risk premium of 6.7% would produce a CAPM return of  
16 9.49%. I am concerned about the low estimate produced by the CAPM at this time.  
17 Therefore, I will use the high-end of this range, 9.49% (rounded to 9.5%) for use in  
18 my recommended return for Ameren Missouri.

---

<sup>22</sup>Morningstar observes that the S&P 500 and the NYSE Decile 1-2 are both large capitalization benchmarks. Morningstar, Inc. *Ibbotson S&P 2010 Valuation Yearbook* at 54.

<sup>23</sup>*Id.* at 66.

1 **F. Return on Equity Summary**

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

5 A Based on my analyses, I estimate Ameren Missouri's current market cost of equity to  
6 be 9.75%.

<b>TABLE 3</b>	
<b><u>Return on Common Equity Summary</u></b>	
<b><u>Description</u></b>	<b><u>Results</u></b>
DCF	9.90%
Risk Premium	10.00%
CAPM	9.50%

7 My recommended return on equity range is 9.5% to 10.0%, with a midpoint of  
8 9.75%. My low end is based on my CAPM return estimate. The high end of my  
9 recommended range is based on the average of my risk premium and DCF analyses  
10 (9.95%), rounded to 10.0%.

11 **G. Financial Integrity**

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

14 A Yes. I have reached this conclusion by comparing the key credit rating financial  
15 ratios for Ameren Missouri at its proposed capital structure, and my return on equity  
16 to S&P's benchmark financial ratios using S&P's new credit metric ranges.

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

3 A S&P publishes a matrix of financial ratios that correspond to its assessment of the  
4 business risk of the utility company and related bond rating. S&P updated its credit  
5 metric guidelines on November 30, 2007, and incorporated utility metric benchmarks  
6 with the general corporate rating metrics. However, the effect of integrating the utility  
7 metrics with those of general corporate bonds resulted in a reduction to the  
8 transparency in S&P's credit metric guideline for utilities. Most recently, on May 27,  
9 2009 S&P expanded its matrix criteria and included an additional business and  
10 financial risk category.

11 Based on S&P's most recent credit matrix, the business risk profile categories  
12 are "Excellent," "Strong," "Satisfactory," "Fair," "Weak," and "Vulnerable." Most electric  
13 utilities have a business risk profile of "Excellent" or "Strong."

14 The S&P financial risk profile categories are "Minimal," "Modest,"  
15 "Intermediate," "Significant," "Aggressive," and "Highly Leveraged." Most of the  
16 electric utilities have a financial risk profile of "Excellent" or "Aggressive."

17 Ameren Missouri has an "Excellent" business risk profile and a "Significant"  
18 financial risk profile.

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

21 A S&P evaluates a utility's credit rating based on an assessment of its financial and  
22 business risks. A combination of financial and business risks equates to the overall  
23 assessment of Ameren Missouri's total credit risk exposure. S&P publishes a matrix

1 of financial ratios that defines the level of financial risk as a function of the level of  
2 business risk.

3 S&P publishes ranges for three primary financial ratios that it uses as  
4 guidance in its credit review for utility companies. The three primary financial ratio  
5 benchmarks it relies on in its credit rating process include: (1) debt to EBITDA,<sup>24</sup>  
6 (2) funds from operations (“FFO”) to total debt, and (3) total debt to total capital.

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

9 A I calculated each of S&P’s financial ratios based on Ameren Missouri’s cost of service  
10 for retail operations. While S&P would normally look at total consolidated financial  
11 ratios in its credit review process, my investigation in this proceeding is to judge the  
12 reasonableness of my proposed cost of capital for rate-setting in Ameren Missouri’s  
13 utility operations. Hence, I am attempting to determine whether the rate of return and  
14 cash flow generation opportunity reflected in my proposed utility rates for Ameren  
15 Missouri will support target investment grade bond ratings and financial integrity.

16 **Q DID YOU INCLUDE ANY OFF-BALANCE SHEET DEBT?**

17 A Yes. As shown in Schedule MPG-17, page 3 of 4 and page 4 of 4, I included Ameren  
18 Corp. off-balance sheet debt of \$243.3 million in developing the credit metrics.  
19 I allocated a portion of the utility-related OBS to Ameren Missouri using a factor of  
20 Missouri’s leases to total Ameren Corp. leases.

---

<sup>24</sup>Earnings Before Interest, Taxes, Depreciation and Amortization.



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

3   A     The S&P financial metric calculations for Ameren Missouri are developed on  
4     Schedule MPG-17, page 1 of 4.

5             As shown in Schedule MPG-17, page 1 of 4, column 1, based on an equity  
6     return of 9.75%, Ameren Missouri will be provided an opportunity to produce a debt to  
7     EBITDA ratio of 2.9x. This is at the high end of S&P's new "Intermediate" guideline  
8     range of 2.0x to 3.0x and is stronger than the "Significant" guideline.<sup>25</sup> This ratio  
9     supports an investment grade credit rating.

10            Ameren Missouri's retail operations FFO to total debt coverage at a 9.75%  
11    equity return would be 27%, which is within the "Significant" metric guideline range of  
12    20% to 30%. The FFO/total debt ratio will support Ameren Missouri's investment  
13    grade bond rating.

14            Finally, Ameren Missouri's total debt ratio to total capital is 50%. This is within  
15    the "Significant" guideline range of 45% to 50%. This total debt ratio will support  
16    Ameren Missouri's investment grade bond rating.

17            At my recommended return on equity, the Company's financial credit metrics  
18    are supportive of Ameren Missouri's current investment grade bond rating.

---

<sup>25</sup>Standard & Poor's RatingsDirect: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

1    **Q     DO YOU BELIEVE THIS CREDIT METRIC EVALUATION OF AMEREN MISSOURI**  
2           **AT YOUR PROPOSED RETURN ON EQUITY PROVIDES MEANINGFUL**  
3           **INFORMATION TO HELP THE COMMISSION DETERMINE THE**  
4           **APPROPRIATENESS OF YOUR RECOMMENDATION?**

5    A     Yes. While S&P calculates these credit metrics based on total Company operations,  
6           and not the retail operations of Ameren Missouri as I have performed in this study, my  
7           review of these ratios still provides meaningful information on the proposed rate of  
8           return for Ameren Missouri in this case and how it will contribute and help support its  
9           consolidated operations credit standing. Further, while credit rating agencies also  
10          consider other financial metrics and qualitative considerations, these metrics are  
11          largely driven by the cost of service items of depreciation expense and return on  
12          equity. Hence, to the extent these important aspects of cost of service impact  
13          Ameren Missouri's internal cash flows, the relative impact on Ameren Missouri will be  
14          measured by these credit metrics. As illustrated above, an authorized return on  
15          equity of 9.75% will support internal cash flows that will be adequate to maintain  
16          Ameren Missouri's current investment grade bond rating.

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

18   A     Yes, it does.

## Appendix A

### Qualifications of Michael Gorman

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

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

4    **Q     PLEASE STATE YOUR OCCUPATION.**

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

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

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

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

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

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

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

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

1 indices and forward pricing methods for third party supply agreements, and have also  
2 conducted regional electric market price forecasts.

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

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

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

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

21 A I earned the designation of Chartered Financial Analyst (“CFA”) from the CFA  
22 Institute. The CFA charter was awarded after successfully completing three  
23 examinations which covered the subject areas of financial accounting, economics,

1 fixed income and equity valuation and professional and ethical conduct. I am a  
2 member of the CFA Institute's Financial Analyst Society.

\\Doc\Shares\ProLawDocs\SDW\9371\Testimony - BAI\191880.doc

# Ameren Missouri

## Rate of Return

<u>Line</u>	<u>Description</u>	<u>Amount (000)</u> (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	<u>Weighted Cost</u> (4)
1	Long-Term Debt	\$ 3,657,492	47.59%	5.94%	2.83%
2	Short-Term Debt	-	0.00%	0.00%	0.00%
3	Preferred Stock	114,502	1.49%	5.19%	0.08%
4	Common Equity	<u>3,913,191</u>	<u>50.92%</u>	<b>9.75%</b>	<u>4.96%</u>
5	<b>Total</b>	<b>\$ 7,685,186</b>	<b>100.00%</b>		<b>7.87%</b>

Source:  
Schedule MGO-E1.

# Ameren Missouri

## Proxy Group

<u>Line</u>	<u>Company</u>	<u>Credit Ratings<sup>1</sup></u>		<u>Common Equity Ratios</u>		<u>S&amp;P Business Risk Score<sup>3</sup></u> (5)
		<u>S&amp;P</u> (1)	<u>Moody's</u> (2)	<u>AUS<sup>1</sup></u> (3)	<u>Value Line<sup>2</sup></u> (4)	
1	American Electric Power	BBB	Baa2	42.1%	45.4%	Excellent
2	Cleco Corp.	BBB	Baa2	48.8%	45.8%	Excellent
3	DPL, Inc.	A	Aa3	47.3%	46.9%	Excellent
4	Empire District Electric	BBB+	A3	42.0%	48.4%	Excellent
5	IDACORP, Inc.	A-	A2	48.3%	49.8%	Excellent
6	Northeast Utilities	BBB	A3	42.8%	41.5%	Excellent
7	Pinnacle West Capital	BBB-	Baa2	50.1%	49.6%	Excellent
8	Portland General	A-	A3	46.4%	49.7%	Strong
9	Progress Energy	A	A1	44.6%	43.3%	Excellent
10	Southern Co.	A	A2	44.0%	43.6%	Excellent
11	Westar Energy	BBB+	Baa1	42.1%	47.4%	Excellent
12	<b>Average</b>	<b>BBB+</b>	<b>A3</b>	<b>45.3%</b>	<b>46.5%</b>	<b>Excellent</b>
13	Ameren Missouri	BBB+ <sup>4</sup>	A3 <sup>4</sup>		50.9% <sup>5</sup>	Excellent

Sources:

<sup>1</sup> *AUS Utility Reports*, January 2011.

<sup>2</sup> *The Value Line Investment Survey*, November 5, November 26, and December 24, 2010.

<sup>3</sup> *S&P RatingsDirect*: "U.S. Regulated Electric Utilities, Strongest to Weakest," January 7, 2011.

<sup>4</sup> SNL Interactive, <http://www.snl.com/>, downloaded on January 13, 2011.

<sup>5</sup> Schedule MPG-1.



# Ameren Missouri

## Growth Rates

<u>Line</u>	<u>Company</u>	<u>Zacks</u>		<u>SNL</u>		<u>Reuters</u>		<u>Average of Growth Rates</u> (7)
		<u>Estimated Growth %<sup>1</sup></u>	<u>Number of Estimates</u>	<u>Estimated Growth %<sup>2</sup></u>	<u>Number of Estimates</u>	<u>Estimated Growth %<sup>3</sup></u>	<u>Number of Estimates</u>	
		(1)	(2)	(3)	(4)	(5)	(6)	
1	American Electric Power	4.00%	4	3.30%	6	4.03%	7	3.78%
2	Cleco Corp.	7.00%	1	3.00%	1	3.00%	1	4.33%
3	DPL, Inc.	N/A	N/A	4.20%	3	8.00%	2	6.10%
4	Empire District Electric	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5	IDACORP, Inc.	4.67%	3	5.00%	3	4.67%	3	4.78%
6	Northeast Utilities	7.68%	3	7.00%	3	7.00%	8	7.23%
7	Pinnacle West Capital	6.50%	4	8.00%	5	7.54%	7	7.35%
8	Portland General	5.60%	5	5.00%	6	5.13%	7	5.24%
9	Progress Energy	4.67%	3	4.00%	5	3.66%	8	4.11%
10	Southern Co.	4.43%	3	5.50%	7	5.11%	8	5.01%
11	Westar Energy	8.12%	3	7.50%	4	8.33%	6	7.98%
12	<b>Average</b>	<b>5.85%</b>	<b>3</b>	<b>5.25%</b>	<b>4</b>	<b>5.65%</b>	<b>6</b>	<b>5.59%</b>
13	<b>Median</b>							<b>5.13%</b>

Sources and Notes:

<sup>1</sup> Zacks Elite, <http://www.zackselite.com/>, downloaded on January 24, 2011.

<sup>2</sup> SNL Interactive, <http://www.snl.com/>, downloaded on January 24, 2011.

<sup>3</sup> Reuters, <http://www.reuters.com/>, downloaded on January 24, 2011.

N/A: Not Available.

# Ameren Missouri

## Constant Growth DCF Model

<u>Line</u>	<u>Company</u>	<u>13-Week AVG Stock Price</u> <sup>1</sup> (1)	<u>Analysts' Growth</u> <sup>2</sup> (2)	<u>Annualized Dividend</u> <sup>3</sup> (3)	<u>Adjusted Yield</u> (4)	<u>Constant Growth DCF</u> (5)
1	American Electric Power	\$36.19	3.78%	\$1.84	5.28%	9.05%
2	Cleco Corp.	\$30.89	4.33%	\$1.00	3.38%	7.71%
3	DPL, Inc.	\$25.97	6.10%	\$1.21	4.95%	11.05%
4	Empire District Electric	\$21.78	N/A	\$1.28	N/A	N/A
5	IDACORP, Inc.	\$37.01	4.78%	\$1.20	3.40%	8.18%
6	Northeast Utilities	\$31.61	7.23%	\$1.03	3.48%	10.70%
7	Pinnacle West Capital	\$41.27	7.35%	\$2.10	5.46%	12.81%
8	Portland General	\$21.60	5.24%	\$1.04	5.07%	10.31%
9	Progress Energy	\$44.07	4.11%	\$2.48	5.86%	9.97%
10	Southern Co.	\$38.08	5.01%	\$1.82	5.02%	10.03%
11	Westar Energy	\$25.27	7.98%	\$1.24	5.30%	13.28%
12	<b>Average</b>	<b>\$32.16</b>	<b>5.59%</b>	<b>\$1.48</b>	<b>4.72%</b>	<b>10.31%</b>
13	<b>Median</b>		<b>5.13%</b>			<b>10.17%</b>

Sources and Notes:

<sup>1</sup> <http://moneycentral.msn.com>, downloaded on January 24, 2011.

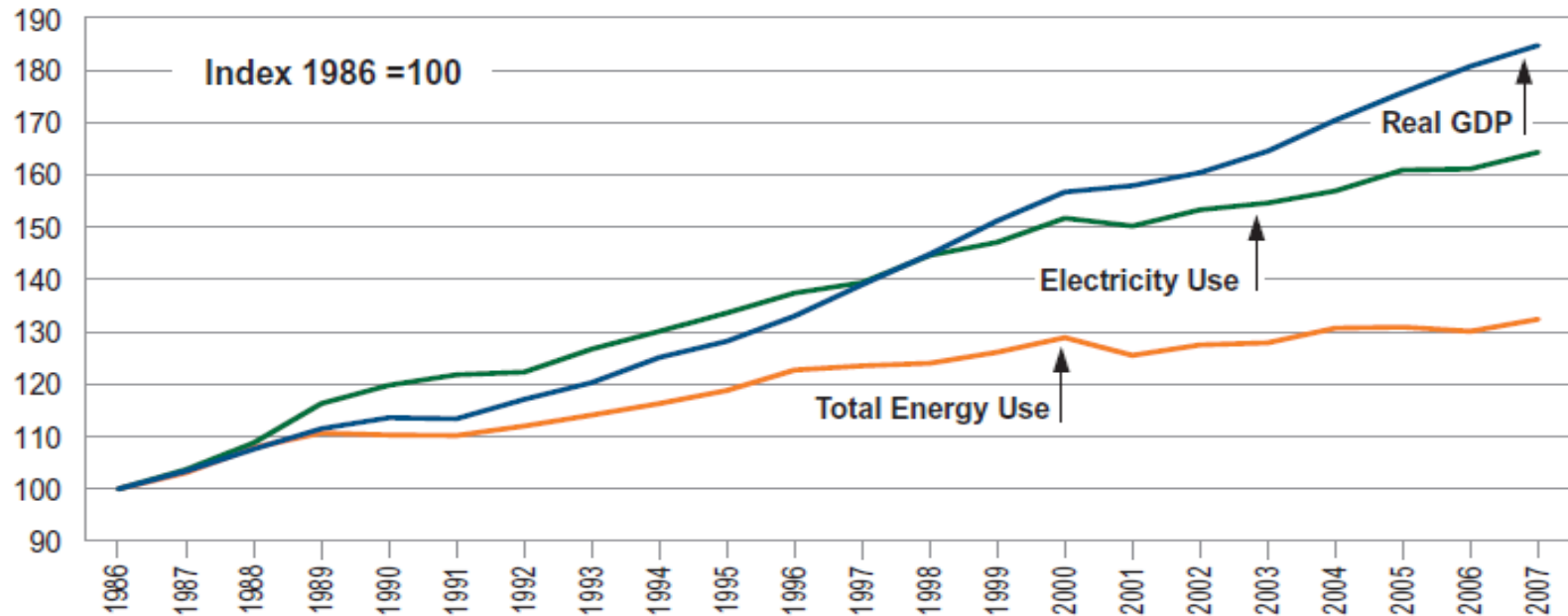
<sup>2</sup> Schedule MPG-3, Column 7.

<sup>3</sup> *The Value Line Investment Survey*, November 5, November 26, and December 24, 2010.

N/A: Not Available.

# Ameren Missouri

## Electricity Sales Are Linked to U.S. Economic Growth



1986 represents the base year. Graph depicts increases or decreases from the base year.

Source: U.S. Department of Energy, Energy Information Administration (EIA).

© 2008 by the Edison Electric Institute. All rights reserved.

# Ameren Missouri

## Payout Ratios

<u>Line</u>	<u>Company</u>	<u>Dividends Per Share</u>		<u>Earnings Per Share</u>		<u>Payout Ratio</u>	
		<u>2009</u> (1)	<u>Projected</u> (2)	<u>2009</u> (3)	<u>Projected</u> (4)	<u>2009</u> (5)	<u>Projected</u> (6)
1	American Electric Power	\$1.64	\$2.00	\$2.97	\$3.50	55.22%	57.14%
2	Cleco Corp.	\$0.90	\$1.45	\$1.76	\$2.75	51.14%	52.73%
3	DPL, Inc.	\$1.14	\$1.50	\$2.01	\$3.00	56.72%	50.00%
4	Empire District Electric	\$1.28	\$1.35	\$1.18	\$1.75	108.47%	77.14%
5	IDACORP, Inc.	\$1.20	\$1.40	\$2.64	\$3.10	45.45%	45.16%
6	Northeast Utilities	\$0.95	\$1.35	\$1.91	\$2.75	49.74%	49.09%
7	Pinnacle West Capital	\$2.10	\$2.30	\$2.26	\$3.50	92.92%	65.71%
8	Portland General	\$1.01	\$1.20	\$1.31	\$2.00	77.10%	60.00%
9	Progress Energy	\$2.48	\$2.58	\$2.99	\$3.55	82.94%	72.68%
10	Southern Co.	\$1.73	\$2.10	\$2.32	\$3.00	74.57%	70.00%
11	Westar Energy	\$1.20	\$1.40	\$1.28	\$2.40	93.75%	58.33%
12	<b>Average</b>	<b>\$1.42</b>	<b>\$1.69</b>	<b>\$2.06</b>	<b>\$2.85</b>	<b>71.64%</b>	<b>59.82%</b>

Source:

*The Value Line Investment Survey*, November 5, November 26, and December 24, 2010.

# Ameren Missouri

## Sustainable Growth Rates

<u>Line</u>	<u>Company</u>	3 to 5 Year Projections									Growth Rate Plus <u>S * V<sup>1</sup></u> (10)
		<u>Dividends</u>	<u>Earnings</u>	<u>Book Value</u>	<u>ROE</u>	<u>Adjustment</u>	<u>Adjusted</u>	<u>Payout</u>	<u>Retention</u>	<u>Internal</u>	
		<u>Per Share</u>	<u>Per Share</u>	<u>Per Share</u>		<u>Factor</u>	<u>ROE</u>	<u>Ratio</u>	<u>Rate</u>	<u>Growth Rate</u>	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)			
1	American Electric Power	\$2.00	\$3.50	\$34.25	10.22%	1.02	10.44%	57.14%	42.86%	4.48%	4.74%
2	Cleco Corp.	\$1.45	\$2.75	\$25.75	10.68%	1.03	11.03%	52.73%	47.27%	5.22%	6.24%
3	DPL, Inc.	\$1.50	\$3.00	\$12.50	24.00%	1.03	24.72%	50.00%	50.00%	12.36%	12.67%
4	Empire District Electric	\$1.35	\$1.75	\$17.00	10.29%	1.01	10.37%	77.14%	22.86%	2.37%	3.21%
5	IDACORP, Inc.	\$1.40	\$3.10	\$36.50	8.49%	1.02	8.68%	45.16%	54.84%	4.76%	5.21%
6	Northeast Utilities	\$1.35	\$2.75	\$26.25	10.48%	1.03	10.74%	49.09%	50.91%	5.47%	6.23%
7	Pinnacle West Capital	\$2.30	\$3.50	\$38.50	9.09%	1.02	9.24%	65.71%	34.29%	3.17%	4.15%
8	Portland General	\$1.20	\$2.00	\$23.75	8.42%	1.01	8.54%	60.00%	40.00%	3.42%	3.61%
9	Progress Energy	\$2.58	\$3.55	\$40.00	8.88%	1.02	9.04%	72.68%	27.32%	2.47%	2.90%
10	Southern Co.	\$2.10	\$3.00	\$23.50	12.77%	1.03	13.10%	70.00%	30.00%	3.93%	5.88%
11	Westar Energy	\$1.40	\$2.40	\$24.20	9.92%	1.02	10.07%	58.33%	41.67%	4.20%	4.76%
12	<b>Average</b>	<b>\$1.69</b>	<b>\$2.85</b>	<b>\$27.47</b>	<b>11.20%</b>	<b>1.02</b>	<b>11.45%</b>	<b>59.82%</b>	<b>40.18%</b>	<b>4.71%</b>	<b>5.42%</b>
13	<b>Median</b>										<b>4.76%</b>

Sources:

*The Value Line Investment Survey*, November 5, November 26, and December 24, 2010.

<sup>1</sup> Page 2, Column 9.

# Ameren Missouri

## Sustainable Growth Rates

<u>Line</u>	<u>Company</u>	<u>13-Week</u>	<u>2009</u>	<u>Market</u>	<u>Common Shares</u>		<u>Growth</u>	<u>S Factor</u> <sup>3</sup>	<u>V Factor</u> <sup>4</sup>	<u>S * V</u> <sup>5</sup>
		<u>Average</u>	<u>Book Value</u>	<u>to Book</u>	<u>Outstanding (in Millions)</u> <sup>2</sup>					
		<u>Stock Price</u> <sup>1</sup>	<u>Per Share</u> <sup>2</sup>	<u>Ratio</u>	<u>2009</u>	<u>3-5 Years</u>	<u>(6)</u>	<u>(7)</u>	<u>(8)</u>	<u>(9)</u>
		(1)	(2)	(3)	(4)	(5)				
1	American Electric Power	\$36.19	\$27.49	1.32	478.05	498.00	0.82%	1.08%	24.03%	0.26%
2	Cleco Corp.	\$30.89	\$18.50	1.67	60.26	65.00	1.53%	2.55%	40.11%	1.02%
3	DPL, Inc.	\$25.97	\$9.25	2.81	118.97	120.00	0.17%	0.48%	64.38%	0.31%
4	Empire District Electric	\$21.78	\$15.75	1.38	38.11	42.50	2.20%	3.05%	27.67%	0.84%
5	IDACORP, Inc.	\$37.01	\$29.17	1.27	47.90	52.00	1.66%	2.10%	21.17%	0.44%
6	Northeast Utilities	\$31.61	\$20.37	1.55	175.62	188.00	1.37%	2.13%	35.57%	0.76%
7	Pinnacle West Capital	\$41.27	\$32.69	1.26	101.43	122.00	3.76%	4.75%	20.78%	0.99%
8	Portland General	\$21.60	\$20.50	1.05	75.21	90.00	3.66%	3.85%	5.09%	0.20%
9	Progress Energy	\$44.07	\$33.30	1.32	281.00	300.00	1.32%	1.74%	24.44%	0.43%
10	Southern Co.	\$38.08	\$18.15	2.10	819.65	895.00	1.77%	3.72%	52.33%	1.95%
11	Westar Energy	\$25.27	\$20.78	1.22	109.07	124.00	2.60%	3.16%	17.76%	0.56%
12	<b>Average</b>	<b>\$32.16</b>	<b>\$22.36</b>	<b>1.54</b>	<b>209.57</b>	<b>226.95</b>	<b>1.90%</b>	<b>2.60%</b>	<b>30.30%</b>	<b>0.71%</b>

Sources and Notes:

<sup>1</sup> <http://moneycentral.msn.com>, downloaded on January 24, 2011.

<sup>2</sup> *The Value Line Investment Survey*, November 5, November 26, and December 24, 2010.

<sup>3</sup> Expected Growth in the Number of Shares, Column (3) \* Column (6).

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

<sup>5</sup> Column (7) \* Column (8).

# Ameren Missouri

## Sustainable Constant Growth DCF Model

<u>Line</u>	<u>Company</u>	<u>13-Week AVG Stock Price<sup>1</sup></u> (1)	<u>Sustainable Growth<sup>2</sup></u> (2)	<u>Annualized Dividend<sup>3</sup></u> (3)	<u>Adjusted Yield</u> (4)	<u>Constant Growth DCF</u> (5)
1	American Electric Power	\$36.19	4.74%	\$1.84	5.33%	10.06%
2	Cleco Corp.	\$30.89	6.24%	\$1.00	3.44%	9.68%
3	DPL, Inc.	\$25.97	12.67%	\$1.21	5.26%	17.93%
4	Empire District Electric	\$21.78	3.21%	\$1.28	6.07%	9.28%
5	IDACORP, Inc.	\$37.01	5.21%	\$1.20	3.41%	8.62%
6	Northeast Utilities	\$31.61	6.23%	\$1.03	3.44%	9.67%
7	Pinnacle West Capital	\$41.27	4.15%	\$2.10	5.30%	9.46%
8	Portland General	\$21.60	3.61%	\$1.04	4.99%	8.60%
9	Progress Energy	\$44.07	2.90%	\$2.48	5.79%	8.69%
10	Southern Co.	\$38.08	5.88%	\$1.82	5.06%	10.94%
11	Westar Energy	\$25.27	4.76%	\$1.24	5.14%	9.90%
12	<b>Average</b>	<b>\$32.16</b>	<b>5.42%</b>	<b>\$1.48</b>	<b>4.84%</b>	<b>10.26%</b>
13	<b>Median</b>					<b>9.67%</b>

Sources:

<sup>1</sup> <http://moneycentral.msn.com>, downloaded on January 24, 2011.

<sup>2</sup> Schedule MPG-7, Page 1 of 2, Column 10.

<sup>3</sup> *The Value Line Investment Survey*, November 5, November 26, and December 24, 2010.

# Ameren Missouri

## Multi-Stage Growth DCF Model

<u>Line</u>	<u>Company</u>	<u>13-Week AVG</u>	<u>Annualized</u>	<u>First Stage</u>	<u>Second Stage Growth</u>					<u>Third Stage</u>	<u>Multi-Stage</u>
		<u>Stock Price</u> <sup>1</sup>	<u>Dividend</u> <sup>2</sup>	<u>Growth</u> <sup>3</sup>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>	<u>Growth</u> <sup>4</sup>	<u>Growth DCF</u>
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	American Electric Power	\$36.19	\$1.84	3.78%	3.93%	4.08%	4.24%	4.39%	4.55%	4.70%	9.73%
2	Cleco Corp.	\$30.89	\$1.00	4.33%	4.39%	4.46%	4.52%	4.58%	4.64%	4.70%	8.00%
3	DPL, Inc.	\$25.97	\$1.21	6.10%	5.87%	5.63%	5.40%	5.17%	4.93%	4.70%	10.02%
4	Empire District Electric	\$21.78	\$1.28	N/A	N/A	N/A	N/A	N/A	N/A	4.70%	N/A
5	IDACORP, Inc.	\$37.01	\$1.20	4.78%	4.77%	4.75%	4.74%	4.73%	4.71%	4.70%	8.11%
6	Northeast Utilities	\$31.61	\$1.03	7.23%	6.81%	6.38%	5.96%	5.54%	5.12%	4.70%	8.68%
7	Pinnacle West Capital	\$41.27	\$2.10	7.35%	6.91%	6.46%	6.02%	5.58%	5.14%	4.70%	10.93%
8	Portland General	\$21.60	\$1.04	5.24%	5.15%	5.06%	4.97%	4.88%	4.79%	4.70%	9.91%
9	Progress Energy	\$44.07	\$2.48	4.11%	4.21%	4.31%	4.41%	4.50%	4.60%	4.70%	10.39%
10	Southern Co.	\$38.08	\$1.82	5.01%	4.96%	4.91%	4.86%	4.80%	4.75%	4.70%	9.80%
11	Westar Energy	\$25.27	\$1.24	7.98%	7.44%	6.89%	6.34%	5.79%	5.25%	4.70%	10.94%
12	<b>Average</b>	<b>\$32.16</b>	<b>\$1.48</b>	<b>5.59%</b>	<b>5.44%</b>	<b>5.29%</b>	<b>5.15%</b>	<b>5.00%</b>	<b>4.85%</b>	<b>4.70%</b>	<b>9.65%</b>
13	<b>Median</b>										<b>9.86%</b>

Sources and Notes:

<sup>1</sup> <http://moneycentral.msn.com>, downloaded on January 24, 2011.

<sup>2</sup> *The Value Line Investment Survey*, November 5, November 26, and December 24, 2010.

<sup>3</sup> Schedule MPG-3, Column 7.

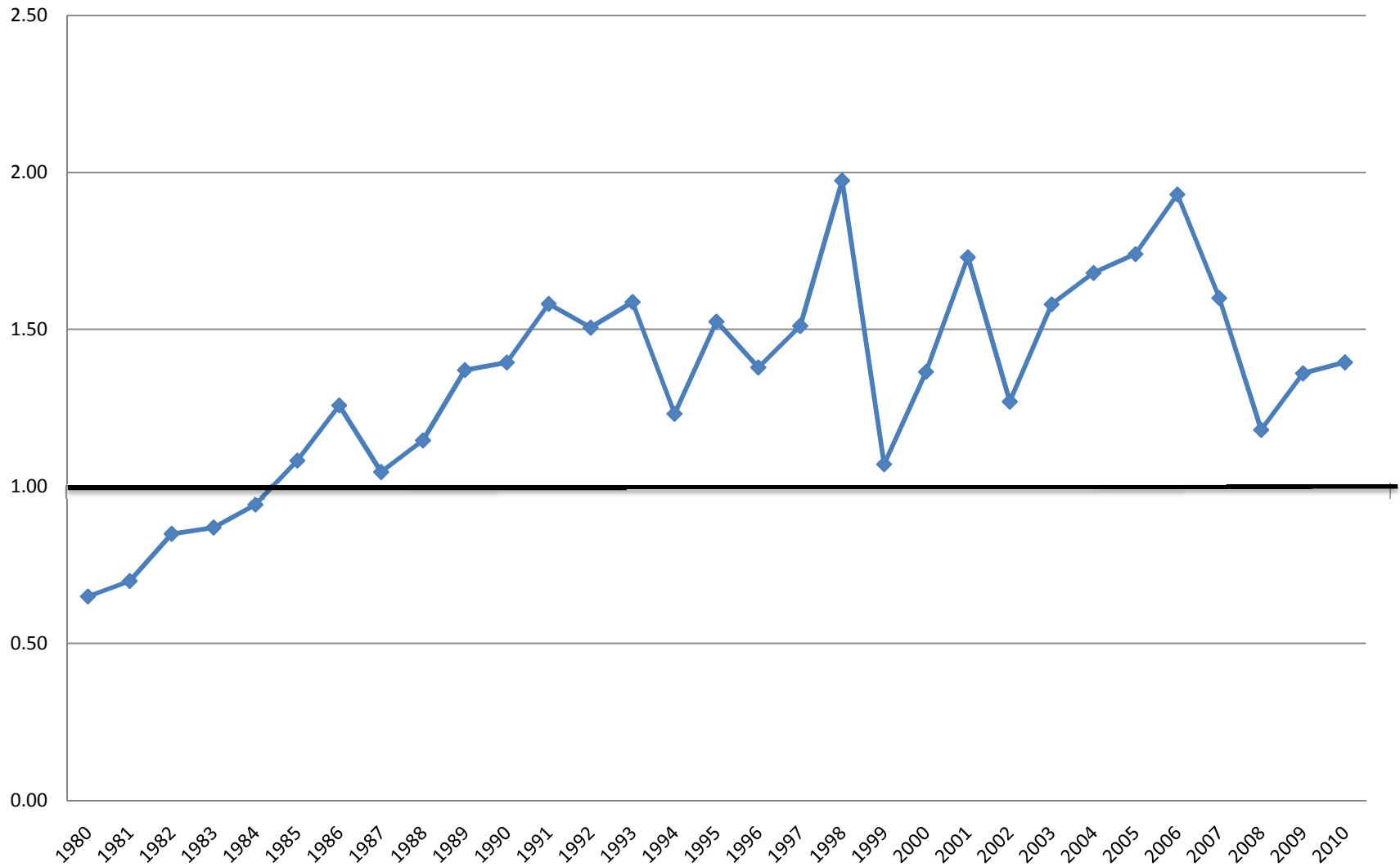
<sup>4</sup> *Blue Chip Economic Indicators*, October 10, 2010 at 15.

N/A: Not Available.



# Ameren Missouri

## Electric Common Stock Market/Book Ratio



Sources:

2001 - September 2010: *AUS Utility Reports*.

1980 - 2000: *Mergent Public Utility Manual*, 2003.

# Ameren Missouri

## Electric Equity Risk Premium - Treasury Bond

<u>Line</u>	<u>Year</u>	<u>Authorized Electric Returns<sup>1</sup></u> (1)	<u>Treasury Bond Yield<sup>2</sup></u> (2)	<u>Indicated Risk Premium</u> (3)
1	1986	13.93%	7.78%	6.15%
2	1987	12.99%	8.59%	4.40%
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%	6.59%	4.82%
9	1994	11.34%	7.37%	3.97%
10	1995	11.55%	6.88%	4.67%
11	1996	11.39%	6.71%	4.68%
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%	4.91%	5.45%
22	2007	10.36%	4.84%	5.52%
23	2008	10.46%	4.28%	6.18%
24	2009	10.48%	4.08%	6.40%
25	2010 <sup>3</sup>	10.34%	4.25%	6.09%
26	<b>Average</b>	<b>11.50%</b>	<b>6.31%</b>	<b>5.19%</b>

Sources:

<sup>1</sup> Regulatory Research Associates, Inc., *Regulatory Focus*, Jan. 85 - Dec. 06, and January 7, 2011.

<sup>2</sup> Economic Report of the President 2010: Table 73. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

<sup>3</sup> St. Louis Federal Reserve: Economic Research, <http://research.stlouisfed.org/>.

# Ameren Missouri

## Electric Equity Risk Premium - Utility Bond

<u>Line</u>	<u>Year</u>	<u>Authorized Electric Returns<sup>1</sup></u> (1)	<u>Average "A" Rated Utility Bond Yield<sup>2</sup></u> (2)	<u>Indicated Risk Premium</u> (3)
1	1986	13.93%	9.58%	4.35%
2	1987	12.99%	10.10%	2.89%
3	1988	12.79%	10.49%	2.30%
4	1989	12.97%	9.77%	3.20%
5	1990	12.70%	9.86%	2.84%
6	1991	12.55%	9.36%	3.19%
7	1992	12.09%	8.69%	3.40%
8	1993	11.41%	7.59%	3.82%
9	1994	11.34%	8.31%	3.03%
10	1995	11.55%	7.89%	3.66%
11	1996	11.39%	7.75%	3.64%
12	1997	11.40%	7.60%	3.80%
13	1998	11.66%	7.04%	4.62%
14	1999	10.77%	7.62%	3.15%
15	2000	11.43%	8.24%	3.19%
16	2001	11.09%	7.76%	3.33%
17	2002	11.16%	7.37%	3.79%
18	2003	10.97%	6.58%	4.39%
19	2004	10.75%	6.16%	4.59%
20	2005	10.54%	5.65%	4.89%
21	2006	10.36%	6.07%	4.29%
22	2007	10.36%	6.07%	4.29%
23	2008	10.46%	6.53%	3.93%
24	2009	10.48%	6.04%	4.44%
25	2010 <sup>3</sup>	10.34%	5.46%	4.88%
26	<b>Average</b>	<b>11.50%</b>	<b>7.74%</b>	<b>3.76%</b>

Sources:

<sup>1</sup> Regulatory Research Associates, Inc., *Regulatory Focus*, Jan. 85 - Dec. 06, and January 7, 2011.

<sup>2</sup> 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 were obtained from <http://credittrends.moodys.com/>.

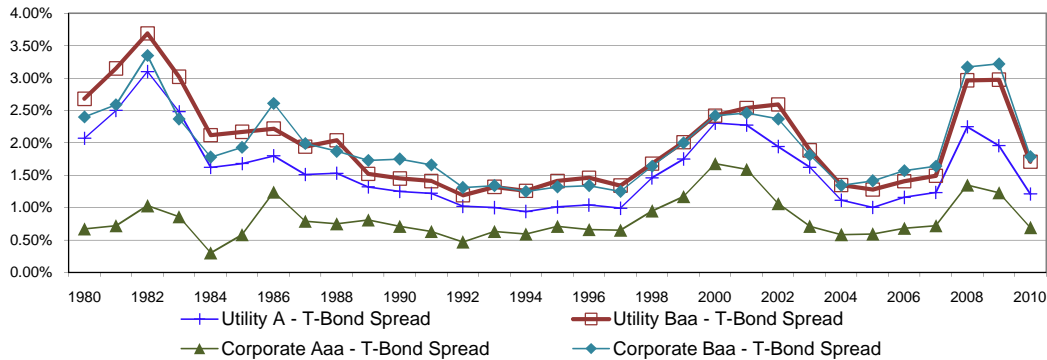
<sup>3</sup> [www.moodys.com](http://www.moodys.com), Bond Yields and Key Indicators.

# Ameren Missouri

## Utility Bond Yield Spreads

Line	Year	Public Utility Bond Yields					Corporate Bond Yields				
		T-Bond Yield <sup>1</sup> (1)	A <sup>2</sup> (2)	Baa <sup>2</sup> (3)	A-T-Bond Spread (4)	Baa-T-Bond Spread (5)	Aaa <sup>1</sup> (6)	Baa <sup>1</sup> (7)	Aaa-T-Bond Spread (8)	Baa-T-Bond Spread (9)	Baa Utility - Corporate (10)
1	1980	11.27%	13.34%	13.95%	2.07%	2.68%	11.94%	13.67%	0.67%	2.40%	0.28%
2	1981	13.45%	15.95%	16.60%	2.50%	3.15%	14.17%	16.04%	0.72%	2.59%	0.56%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	1.03%	3.35%	0.34%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	0.86%	2.37%	0.65%
5	1984	12.41%	14.03%	14.53%	1.62%	2.12%	12.71%	14.19%	0.30%	1.78%	0.34%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	0.58%	1.93%	0.24%
7	1986	7.78%	9.58%	10.00%	1.80%	2.22%	9.02%	10.39%	1.24%	2.61%	-0.39%
8	1987	8.59%	10.10%	10.53%	1.51%	1.94%	9.38%	10.58%	0.79%	1.99%	-0.05%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	0.75%	1.87%	0.17%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.81%	1.73%	-0.21%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	0.71%	1.75%	-0.30%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	0.63%	1.66%	-0.25%
13	1992	7.67%	8.69%	8.86%	1.02%	1.19%	8.14%	8.98%	0.47%	1.31%	-0.12%
14	1993	6.59%	7.59%	7.91%	1.00%	1.32%	7.22%	7.93%	0.63%	1.34%	-0.02%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.59%	1.25%	0.01%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.71%	1.32%	0.09%
17	1996	6.71%	7.75%	8.17%	1.04%	1.46%	7.37%	8.05%	0.66%	1.34%	0.12%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.65%	1.25%	0.09%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.95%	1.64%	0.04%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	1.17%	2.00%	0.01%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	1.68%	2.42%	0.00%
22	2001	5.49%	7.76%	8.03%	2.27%	2.54%	7.08%	7.95%	1.59%	2.46%	0.08%
23	2002	5.43%	7.37%	8.02%	1.94%	2.59%	6.49%	7.80%	1.06%	2.37%	0.22%
24	2003	4.96%	6.58%	6.84%	1.62%	1.89%	5.67%	6.77%	0.71%	1.81%	0.07%
25	2004	5.05%	6.16%	6.40%	1.11%	1.35%	5.63%	6.39%	0.58%	1.34%	0.00%
26	2005	4.65%	5.65%	5.93%	1.00%	1.28%	5.24%	6.06%	0.59%	1.41%	-0.14%
27	2006	4.91%	6.07%	6.32%	1.16%	1.41%	5.59%	6.48%	0.68%	1.57%	-0.16%
28	2007	4.84%	6.07%	6.33%	1.23%	1.49%	5.56%	6.48%	0.72%	1.64%	-0.15%
29	2008	4.28%	6.53%	7.25%	2.25%	2.97%	5.63%	7.45%	1.35%	3.17%	-0.20%
30	2009	4.08%	6.04%	7.06%	1.96%	2.98%	5.31%	7.30%	1.23%	3.22%	-0.24%
31	2010	4.25%	5.46%	5.96%	1.21%	1.71%	4.94%	6.04%	0.69%	1.79%	-0.08%
32	<b>Average</b>	<b>7.40%</b>	<b>9.00%</b>	<b>9.39%</b>	<b>1.59%</b>	<b>1.99%</b>	<b>8.24%</b>	<b>9.36%</b>	<b>0.83%</b>	<b>1.96%</b>	<b>0.03%</b>

**Yield Spreads**  
Treasury Vs. Corporate & Treasury Vs. Utility



Sources:

<sup>1</sup> Economic Report of the President 2008: Table 73 at 316. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

<sup>2</sup> Mergent Public Utility Manual 2003. Moody's Daily News Reports.

# Ameren Missouri

## Utility and Treasury Bond Yields

<u>Line</u>	<u>Date</u>	<u>Treasury Bond Yield<sup>1</sup></u> (1)	<u>"A" Rated Utility Bond Yield<sup>2</sup></u> (2)	<u>"Baa" Rated Utility Bond Yield<sup>2</sup></u> (3)
1	01/21/11	4.57%	5.60%	6.09%
2	01/14/11	4.50%	5.56%	6.06%
3	01/07/11	4.48%	5.55%	6.05%
4	12/31/10	4.43%	5.45%	5.93%
5	12/23/10	4.45%	5.58%	6.06%
6	12/17/10	4.50%	5.54%	6.01%
7	12/10/10	4.39%	5.58%	6.05%
8	12/03/10	4.22%	5.48%	5.96%
9	11/26/10	4.22%	5.38%	5.86%
10	11/19/10	4.30%	5.43%	5.92%
11	11/12/10	4.22%	5.44%	5.94%
12	11/05/10	4.04%	5.31%	5.80%
13	10/29/10	4.00%	5.21%	5.70%
14	<b>13-Wk Average</b>	<b>4.33%</b>	<b>5.47%</b>	<b>5.96%</b>
15	<b>Spread</b>		<b>1.14%</b>	<b>1.63%</b>

---

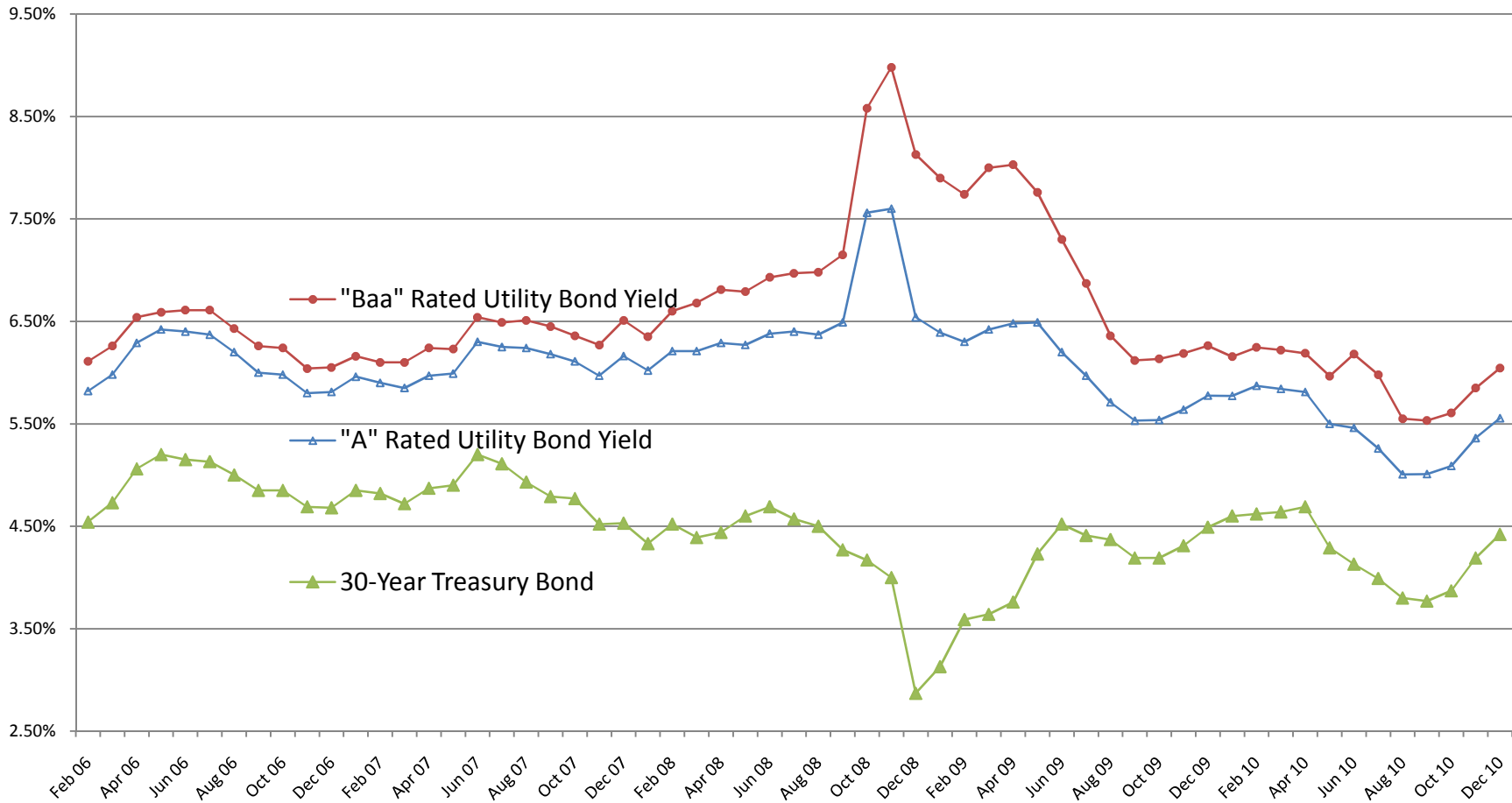
Sources:

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

<sup>2</sup> [www.moodys.com](http://www.moodys.com), Bond Yields and Key Indicators.

# Ameren Missouri

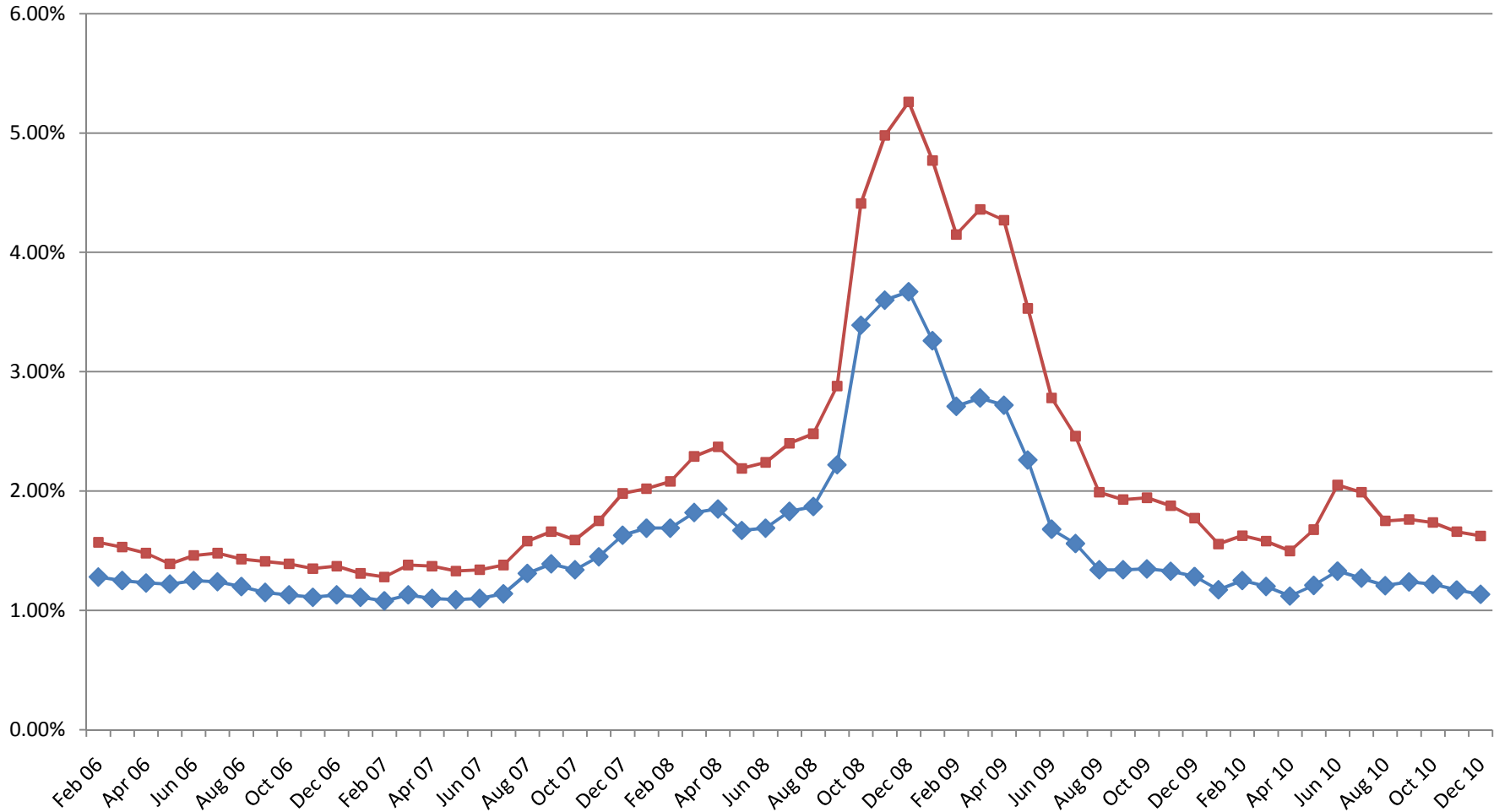
## Trends in Utility Bond Yields



Sources:  
 Merchant Bond Record.  
 www.moodys.com, Bond Yields and Key Indicators.  
 St. Louis Federal Reserve: Economic Research, <http://research.stlouisfed.org/>

# Ameren Missouri

## Spread Between "A" and "Baa" Rated Utility Bond Yield and 30-Year Treasury Bond Yield



Sources:

Merchant Bond Record.

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

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

◆ A Spread    ■ Baa Spread

# Ameren Missouri

## Value Line Beta

<u>Line</u>	<u>Company</u>	<u>Beta</u>
1	American Electric Power	0.70
2	Cleco Corp.	0.65
3	DPL, Inc.	0.60
4	Empire District Electric	0.70
5	IDACORP, Inc.	0.70
6	Northeast Utilities	0.70
7	Pinnacle West Capital	0.70
8	Portland General	0.75
9	Progress Energy	0.60
10	Southern Co.	0.55
11	Westar Energy	0.75
12	<b>Average</b>	<b>0.67</b>

---

Source:

*The Value Line Investment Survey*,  
November 5, November 26, and December 24, 2010.



# Ameren Missouri

## CAPM Return

<u>Line</u>	<u>Description</u>	<u>Gorman CAPM Range</u>		<u>Morningstar</u>
		<u>Low</u>	<u>High</u>	
		(1)	(2)	(3)
1	Risk-Free Rate <sup>1</sup>	5.00%	5.00%	5.00%
2	Risk Premium <sup>2</sup>	5.90%	6.00%	6.70%
3	Beta <sup>3</sup>	0.67	0.67	0.67
4	CAPM	8.95%	9.02%	9.49%

Sources:

<sup>1</sup> *Blue Chip Financial Forecasts*; January 1, 2011, at 2.

<sup>2</sup> Morningstar, Inc. *Ibbotson S&P 500 2010 Classic Yearbook*, at 82, and Morningstar, Inc. *Ibbotson S&P 500 2010 Valuation Yearbook* at 54 and 66.

<sup>3</sup> *The Value Line Investment Survey*, November 5, November 26, and December 24, 2010.

# Ameren Missouri

## Standard & Poor's Credit Metrics

<u>Line</u>	<u>Description</u>	Retail	S&P Benchmark <sup>1/2</sup>			<u>Reference</u>
		Cost of Service <u>Amount</u> (1)	<u>Intermediate</u> (2)	<u>Significant</u> (3)	<u>Aggressive</u> (4)	
1	Rate Base	\$ 6,810,053,516				Weiss Workpapers, GSW-WP-E1.
2	Weighted Common Return	4.96%				Page 2, Line 4, Col. 4.
3	Pre-Tax Rate of Return	10.92%				Page 2, Line 5, Col. 5.
4	Income to Common	\$ 338,089,644				Line 1 x Line 2.
5	EBIT	\$ 743,341,942				Line 1 x Line 3.
6	Depreciation & Amortization	\$ 426,931,419				Weiss Workpapers, GSW-WP-E4.
7	Imputed Amortization	\$ 9,706,268				Page 4, Line 9, Col. 1.
8	Deferred Income Taxes & ITC	\$ 152,706,117				Weiss Workpapers, GSW-WP-E4.
9	Funds from Operations (FFO)	\$ 927,433,448				Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest Expense	\$ 7,290,883				Page 4, Line 8, Col. 1.
11	EBITDA	\$ 1,187,270,512				Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio	50%	35% - 45%	<b>45% - 50%</b>	50% - 60%	Page 3, Line 5, Col. 2.
13	Debt to EBITDA	2.9x	<b>2.0x - 3.0x</b>	3.0x - 4.0x	4.0x - 5.0x	(Line 1 x Line 12) / Line 11.
14	FFO to Total Debt	27%	30% - 45%	<b>20% - 30%</b>	12% - 20%	Line 9 / (Line 1 x Line 12).

Sources:

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

<sup>2</sup> *S&P RatingsDirect*: "U.S. Regulated Electric Utilities, Strongest to Weakest," October 6, 2010.

Note:

Based on the May 2009 S&P metrics, Ameren Missouri has an "Excellent" business profile and a "Significant" financial profile.

# Ameren Missouri

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

<u>Line</u>	<u>Description</u>	<u>Amount (000)</u> (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	<u>Weighted Cost</u> (4)	<u>Pre-Tax Weighted Cost</u> (5)
1	Long-Term Debt	\$ 3,657,492	47.59%	5.94%	2.83%	2.83%
2	Short-Term Debt	-	0.00%	0.00%	0.00%	0.00%
3	Preferred Equity	114,502	1.49%	5.19%	0.08%	0.08%
4	Common Equity	<u>3,913,191</u>	<u>50.92%</u>	<b>9.75%</b>	<u>4.96%</u>	<u>8.01%</u>
5	<b>Total</b>	<b>\$ 7,685,186</b>	<b>100.00%</b>		<b>7.87%</b>	<b>10.92%</b>
6	Tax Conversion Factor*					1.6133

Sources:

Schedule MGO-E1.

\* Schedule GSW-E14.

# Ameren Missouri

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

<u>Line</u>	<u>Description</u>	<u>Amount (000)</u> (1)	<u>Weight</u> (2)
1	Long-Term Debt	\$ 3,657,492	46.93%
2	Short-Term Debt	-	0.00%
3	Preferred Equity	114,502	1.47%
4	Off Balance Sheet Debt*	<u>108,826</u>	<u>1.40%</u>
5	<b>Total Long-Term Debt</b>	<b>\$ 3,880,821</b>	<b>49.79%</b>
6	Common Equity	<u>3,913,191</u>	<u>50.21%</u>
7	<b>Total</b>	<b>\$ 7,794,012</b>	<b>100.00%</b>

\_\_\_\_\_  
Sources:  
Schedule MGO-E1.  
\* Page 4, Line 7, Col. 1.

# Ameren Missouri

## Standard & Poor's Credit Metrics (Operating Leases)

<u>Line</u>	<u>Description</u>	<u>Amount (000)</u> (1)	<u>Reference</u> (2)
<b>Ameren Missouri Allocator</b>			
1	Ameren Missouri Operating Leases	\$ 157,000	Form 10-K, 12/31/09.
2	Ameren Corp. Operating Leases	\$ 351,000	Form 10-K, 12/31/09.
3	<b>Ameren Missouri Allocation Factor</b>	<b>0.45</b>	<b>Line 1 / Line 2</b>
<b>Total Company<sup>1</sup></b>			
4	Operating Leases	\$ 243,300	
5	Imputed Interest Expense	\$ 16,300	
6	Imputed Amortization Expense	\$ 21,700	
<b>Ameren Missouri Allocation</b>			
7	Total Off Balance Sheet Debt	\$ 108,826	Line 3 * Line 4
8	Imputed Interest Expense	\$ 7,291	Line 3 * Line 5
9	Imputed Amortization Expense	\$ 9,706	Line 3 * Line 6

Source:

<sup>1</sup> *Standard & Poor's RatingsDirect*, "Ameren Missouri," December 29, 2010 at 6.