

|                   |                   |
|-------------------|-------------------|
| Exhibit No.:      |                   |
| Issue:            | Cost of Capital   |
| Witness:          | Daniel J. Lawton  |
| Type of Exhibit:  | Direct            |
| Sponsoring Party: | OPC               |
| Case No:          | ER-2010-0036      |
| Date Prepared:    | December 18, 2009 |

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

|   |   |                              |
|---|---|------------------------------|
|   | § |                              |
| <b>In the Matter of Union Electric Company ,</b>        | § |                              |
| <b>d/b/a Ameren UE's Tariffs to Increase its annual</b> | § | <b>Case No. ER-2010-0036</b> |
| <b>Revenues for Electric Service</b>                    | § |                              |
|   | § |                              |

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**Direct Testimony and Exhibits of**

**Daniel J. Lawton**

**On behalf of**

**Missouri Office of Public Counsel**

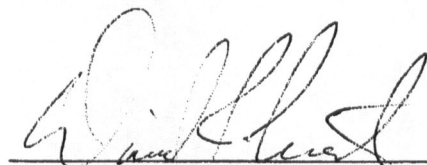
**December 18, 2009**

AFFIDAVIT OF DANIEL J. LAWTON  
FOR CASE NO. ER-2010-0036

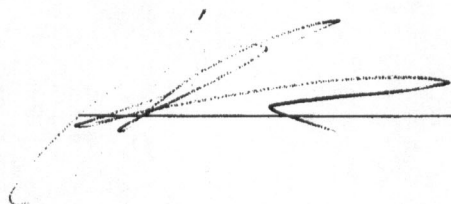
STATE OF TEXAS       §

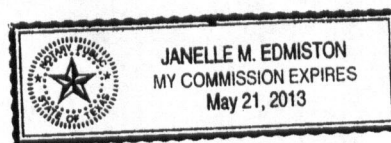
COUNTY OF TRAVIS   §

Daniel J. Lawton, being duly sworn on oath, says that he is the person identified in the foregoing prepared direct testimony and exhibits; and that such testimony and exhibits were prepared by or under the direct supervision of said person; that such answers and/or information appearing therein are true and correct to the best of his knowledge and belief; and if asked the questions appearing therein, his answers would, under oath, be the same.

  
\_\_\_\_\_  
Daniel J. Lawton

Subscribed and Sworn to before me on this 10<sup>th</sup> day of December 2009.

  
\_\_\_\_\_



My Commission Expires 5-21-2013

## **TABLE OF CONTENTS**

|                     |   |           |
|---------------------|---|-----------|
| <b>SECTION I:</b>   | <b>INTRODUCTION/BACKGROUND/SUMMARY .....</b>                | <b>1</b>  |
| <b>SECTION II:</b>  | <b>REGULATORY ISSUES AND COST OF CAPITAL .....</b>          | <b>8</b>  |
| <b>SECTION III:</b> | <b>CURRENT CAPITAL MARKET CONDITIONS .....</b>              | <b>12</b> |
| <b>SECTION IV:</b>  | <b>COST OF EQUITY CAPITAL DCF ANALYSIS .....</b>            | <b>17</b> |
| <b>SECTION V:</b>   | <b>RISK PREMIUM/CAPM COST OF EQUITY ESTIMATE .....</b>      | <b>26</b> |
| <b>SECTION VI:</b>  | <b>CAPITAL STRUCTURE .....</b>                              | <b>32</b> |
| <b>SECTION VII:</b> | <b>FINANCIAL INTEGRITY AND REGULATORY ENHANCEMENTS ....</b> | <b>36</b> |

**SCHEDULE (DJL-1) – Resume of Daniel J. Lawton**

**SCHEDULE (DJL-2) – Historical Government Bond and Corporate Bond Yields and Yield Spreads**

**SCHEDULE (DJL-3) – Comparable Company Equity Ratios and Beta**

**SCHEDULE (DJL-4) – Comparable Company Price and Dividend Data**

**SCHEDULE (DJL-5) – Comparable Company Analysts Growth Forecast Estimates for EPS and Historical Growth Data**

**SCHEDULE (DJL-6) – Comparable Company Constant Growth DCF Results**

**SCHEDULE (DJL-7) – Comparable Company Two Stage Growth DCF Results**

**SCHEDULE (DJL-8) – Risk Premium Analysis Results**

**SCHEDULE (DJL-9) – Select Financial Metrics Based on a 10.2% Equity Return**

**DIRECT TESTIMONY OF**

**DANIEL J. LAWTON**

**CASE NO. ER-2010-0036**

**SECTION I: INTRODUCTION/BACKGROUND/SUMMARY**

**Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is Daniel J. Lawton. My business address is 701 Brazos, Suite 500, Austin, Texas 78701.

**Q2. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.**

A. I have been working in the utility consulting business as an economist since 1983. Consulting engagements have included electric utility load and revenue forecasting, cost of capital analyses, revenue requirements/cost of service reviews, and rate design analyses in litigated rate proceedings before federal, state and local regulatory authorities. I have worked with municipal utilities developing electric rate cost of service studies for reviewing and setting rates. In addition, I have a law practice based in Austin, Texas. My main areas of legal practice include administrative law representing municipalities in electric and gas rate proceedings and other litigation and contract matters. I have included a brief description of my relevant educational background and professional work experience in Schedule (DJL-1).

1       **Q3. HAVE YOU PREVIOUSLY FILED TESTIMONY IN RATE**  
2       **PROCEEDINGS?**

3       A. Yes. A list of cases where I have previously filed testimony is included in  
4       Schedule (DJL-1).

5       **Q4. ON WHOSE BEHALF ARE YOU FILING TESTIMONY IN THIS**  
6       **PROCEEDING?**

7       A. I have been retained to review the Union Electric Company d/b/a AmerenUE  
8       (“Company or “AmerenUE”) cost of capital request on behalf of the Missouri  
9       Office of the Public Counsel (“OPC”).

10      **Q5. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
11      **PROCEEDING?**

12      A. The purpose of my testimony in this proceeding is to address the Company's  
13      requested overall cost of capital. I will address the Company's requested rate of  
14      return, capital structure, and capital cost rates for equity, preferred stock and long-  
15      term debt; which is presented in the pre-filed direct testimony of its cost of capital  
16      witnesses, Mr. Michael G. O'Bryan. Also, I address the specific issue of common  
17      equity costs set forth in the testimony of Dr. Roger Morin. Lastly, I address cash  
18      flow coverage and cash flow risk issues that are addressed in Company witness  
19      Lee Nickloy's testimony.

20      It should be noted that I have a number of comments regarding the Company's  
21      return request and calculations. I will reserve those comments for rebuttal  
22      testimony which will be filed on February 11, 2010, based on the current  
23      procedural schedule.

**Q6. WHAT MATERIALS DID YOU REVIEW AND RELY ON FOR THIS TESTIMONY?**

A. I have reviewed the Company's testimony in this proceeding, previous Missouri Public Service Commission ("Commission") orders, Company responses to interrogatories, Value Line Investment Survey ("Value Line"), financial reports of the Company, and various other financial information and other materials available in the public domain. When relying on other sources, I have referenced such sources in my testimony and on attached schedules and/or included copies or summaries in my attached schedules or workpapers.

**Q7. PLEASE SUMMARIZE YOUR FINDINGS AND CONCLUSIONS IN THIS CASE.**

A. My analyses of the Company's requested 8.577% overall cost of capital and 11.50% return on equity indicate that the Company's request is overstated given current market conditions and costs of capital.

Table 1 below shows the Company's requested capital structure, proposed cost rates and overall return in this case.

1

| TABLE 1 <sup>1</sup>                         |                 |         |        |                              |
|--|-----------------|---------|--------|------------------------------|
| AmerenUE                                     |                 |         |        |                              |
| <u>CAPITAL STRUCTURE AND COST OF CAPITAL</u> |                 |         |        |                              |
| DESCRIPTION                                  | AMOUNT          | RATIO   | COST   | WEIGHTED COST                |
| Long-Term Debt                               | \$3,615,044,928 | 51.008% | 5.967% | 3.044%                       |
| Preferred Stock                              | 114,502,040     | 1.600%  | 5.189% | 0.083%                       |
| Common Equity                                | 3,392,179,086   | 47.392% | 11.5%  | 5.450%                       |
| Total  | \$7,157,726,054 | 100.00% | -----  | 8.577%                       |
| Rate Base (Missouri Jurisdictional)          |                 |         |        | \$6,001,444,000 <sup>2</sup> |
| Requested Return                             |                 |         |        | \$514,744,000 <sup>3</sup>   |
| Taxes at Claimed Return                      |                 |         |        | \$198,140,000 <sup>4</sup>   |
| Return and Taxes Requested                   |                 |         |        | \$712,884,000 <sup>5</sup>   |

2

3

4

5

6

7

As is demonstrated in Table 1 above, the Company seeks approval of an 8.577% return on a rate base investment level of \$6,001,444,000. Such a return to investors amounts to \$514,744,000 annually in revenue requirements. When the return related taxes of \$198,140,000 is considered, the total annual revenue requirement impact of return and taxes is \$712,884,000.

8

I have calculated a more appropriate cost of common equity of 10.2% for this

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<sup>1</sup> Direct Testimony of Michael G. O'Bryan at Schedule MGO-E1

<sup>2</sup> See Direct Testimony of Gary S. Weiss at Schedule GSW-E19

<sup>3</sup> *Id.* or (8.577% x \$6,001,444,000)

<sup>4</sup> *Id.*

<sup>5</sup> Sum of RoR and Taxes or (\$514,744,000 + \$198,140,000)

1 case which would result in an overall cost of capital 7.961% for the Company  
2 employing the Company proposed capital structure and requested cost rates for  
3 long-term debt and preferred equity.

4 Based on my analyses (which are fully explained in the following pages), I make  
5 the following conclusions and recommendations:

6 (i) The Company's proposed 8.577% return on investment is overstated and  
7 should not be adopted as representative of the Company's cost of capital  
8 requirements;

9 (ii) The Company's proposed 11.50% return for equity shareholders is an  
10 overstatement of the required return on equity to hold and attract equity capital;

11 (iii) The Company's required return on equity is in the range of 9.3% to  
12 10.9%, and a midpoint estimate of 10.2% is reasonable; and

13 (iv) The Company's overall cost of capital to be earned on rate base  
14 investment employing the proposed capital structure, proposed cost rates for  
15 long-term debt and preferred stock and a 10.2% equity return is 7.961% for  
16 setting just and reasonable rates for customers in this proceeding.



**Q8. PLEASE SUMMARIZE THE COMPANY'S RATE INCREASE REQUEST  
IN THIS CASE.**

A. The Company's rate increase request is summarized in the following table:

| TABLE 2 <sup>6</sup><br>SUMMARY OF AmerenUE<br><u>REQUESTED REVENUE REQUIREMENT</u> |                |
|---|----------------|
| DESCRIPTION   | AMOUNT (000'S) |
| Rate Base Investment  | \$6,001,444    |
| Requested Return at 8.577%  | \$514,744      |
| Operating & Maintenance Expenses  | \$1,794,748    |
| Depreciation & Amortization   | \$376,408      |
| Taxes other than Income Taxes   | \$130,950      |
| Federal/State Income Tax & City Earnings Tax  | \$198,140      |
| Deferred Income Taxes   | <6,581>        |
| Total Revenue Requirement at Claimed Return   | \$3,008,409    |
| Current Rate Revenues at Present Rates  | \$2,606,876    |
| CLAIMED ANNUAL RATE INCREASE  | \$401,533      |

Thus, the overall annual rate increase request is \$401.5 million or about 18%.<sup>7</sup>  
Company witness Baxter testifies that about \$227 million of the \$401.5 million  
increase is fuel related and that about \$175 million of the increase is associated  
with non-fuel operating costs or base rates.<sup>8</sup>

<sup>6</sup> Direct Testimony of Gary S. Weiss at Schedule GSW-E19

<sup>7</sup> Direct Testimony of Warner L. Baxter at 5:8

<sup>8</sup> *Id.* at 5:9-13.

1       **Q9. HAS THE COMPANY IDENTIFIED THE COST DRIVERS FOR THIS**  
2       **RATE INCREASE REQUEST?**

3       A.     Company witness Baxter, at pages 9:22 – 11:10, identifies what he describes as  
4       “key drivers associated with the approximately \$175 million increase in non-fuel  
5       costs...”<sup>9</sup> Globally, the Company asserts higher investment and related expenses  
6       associated with distribution system and power plants are driving the need for the  
7       increase. Another key driver identified by Mr. Baxter is the cost of capital, along  
8       with increases in depreciation expense.<sup>10</sup>

9       **Q10. HOW HAS THE CLAIMED INCREASE IN COST OF CAPITAL**  
10       **IMPACTED THE COMPANY’S RATE REQUEST?**

11       A.     A straightforward measure is to examine the Company’s equity cost increase from  
12       this Commission’s January 27, 2009 decision in Case No. ER-2008-0318  
13       compared to the Company’s request. The current authorized equity return for this  
14       Company is 10.76%<sup>11</sup> and the Company requests equity return be increased to  
15       11.50% in this proceeding. The return and federal income tax impact of  
16       increasing equity return from 10.76% to 11.50% (assuming the Company’s  
17       investment level of \$6,001,444,000) is about \$32.4 million in added revenue  
18       requirements. Thus, \$32.4 million of the Company’s claimed \$175 million base  
19       rate increase is for increased shareholder returns and associated income taxes.

20       Thus, while I agree with Mr. Baxter that the Company’s requested return,  
21       specifically the equity return, is a significant factor impacting the rate increase  
22       request; I disagree that the 11.50% request is justified. I will explain later in this  
23       testimony why the market evidence supports a lower equity return.

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<sup>9</sup> *Id.* at 10:1-2.

<sup>10</sup> *Id.* at 11:1-10.

<sup>11</sup> In the Matter of Union Electric Company d/b/a AmerenUE’s Tariffs to Increase its Annual Revenues for Electric Service; Public Service Commission of the State of Missouri, Report and Order Case No. ER-2008-0318 at 18.

**SECTION II: REGULATORY ISSUES AND COST OF CAPITAL**

**Q11. PLEASE EXPLAIN THE COST OF CAPITAL CONCEPT AS IT RELATES TO THE REGULATORY PROCESS.**

A. The overall rate of return to be earned on rate base investment is an essential element in the regulatory and rate setting process. The overall return earned on rate base investment is typically a major portion of overall revenue requirements. For example, in this case the Company's requested overall return for the Company is 8.577%.<sup>12</sup> The Company's requested rate base investment level is \$6,001,444,000.<sup>13</sup> The Company's requested return on investment is \$514,744,000.<sup>14</sup>

The \$514,744,000 return on rate base investment represents about 22% of base rate revenue requirements (all costs excluding gas cost).<sup>15</sup> This means that 22 cents of every dollar paid by customers in base rates goes to satisfy return requirements of investors. These calculations are after tax. When income tax and revenue related is considered, the return requirement as a percentage of revenue requirements is higher as tax obligations are to satisfy equity return requirements. For example, if the federal, state and city earnings tax is combined with the return requirement, then the return and associated tax obligation represents 30.86% of base rates.

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<sup>12</sup> See Direct Testimony of Gary S. Weiss at Schedule GSW-E19, line 2.

<sup>13</sup> *Id.* at line 1.

<sup>14</sup> *Id.* at line 2.

<sup>15</sup> Base rate revenue requirement of approximately \$2,310,151,000 was estimate by removing the identified variable fuel amounts from O&M on Schedule GSW-E11-5 at lines 2 and 5.

1       **Q12. PLEASE EXPLAIN HOW THE VARIOUS COMPONENTS OF COST OF**  
2       **CAPITAL ARE DETERMINED.**

3       A.     The overall rate of return in the regulatory process is best explained in two parts.  
4             The first part is the return to senior securities, such as debt and preferred stock,  
5             which is contractually set at issuance. The reasonableness of the cost of these  
6             contractual obligations between the utility and its investors is examined by  
7             regulatory agencies as part of the utility's overall cost of service.

8             The second part of a Company's overall return requirement is the appropriate cost  
9             rate to assign the equity portion of capital costs. The return on equity should be  
10            established at a level that will permit the firm an opportunity to earn a fair rate of  
11            return. By fair rate of return, I mean a return earned by equity holders, which is  
12            sufficient to hold and attract capital, sufficient to maintain financial integrity, and  
13            a return on equity comparable to other investments of similar risks.

14            Two U.S. Supreme Court decisions are often cited as the legal standards for rate  
15            of return determination. The first is Bluefield Water Works and Improvement  
16            Company v. Public Service Commission of West Virginia, 262. U.S. 679 (1923).  
17            The Bluefield case established the following general standards for a rate of return:  
18            The return should be sufficient for maintaining financial integrity and capital  
19            attraction and a public utility is entitled to a return equal to that of investments of  
20            comparable risks.

21            The second U.S. Supreme Court decision is the Federal Power Commission v.  
22            Hope Natural Gas Company, 320 U.S. 591 (1942). In the Hope decision, the  
23            Court affirmed its earlier Bluefield standards and found that methods for  
24            determining return are not the test of reasonableness rather the result and impact  
25            of the end result are controlling.

1       The cost of capital is defined as the annual percentage that a utility must receive  
2       to maintain its financial integrity, to pay a return to security owners and to insure  
3       the continued attraction of capital at a reasonable cost and in an amount adequate  
4       to meet future needs. Mathematically, the cost of capital is the composite of the  
5       cost of several classes of capital used by the utility – debt, preferred stock, and  
6       common stock, weighted on the basis of an appropriate capital structure.

7       The ratemaking process requires the regulator to determine the utility's cost of  
8       capital for debt, preferred stock and equity costs. These calculations of cost rates,  
9       when combined with the proportions of each type of capital in the capital  
10      structure, result in a percentage figure that is then multiplied by the value of assets  
11      (investment) used and useful in the production of the utility service to ultimately  
12      arrive at a rate charged to customers. Rates should not be excessive (exceed  
13      actual costs) or burdensome to the customer and at the same time should be just  
14      and reasonable to the utility.

15      In summary, the objective of overall rate of return determination in the regulatory  
16      process is to compute the return such that the embedded (contractually required)  
17      cost of senior securities is recovered. In addition, a regulated utility should be  
18      provided an opportunity to generate additional earnings that are sufficient to  
19      compensate equity investors at a level that will hold existing investors, attract new  
20      investors, and maintain the financial integrity of the utility.

**Q13. PLEASE EXPLAIN THE COST OF EQUITY CONCEPT.**

A. The cost of equity, or return on equity capital, is the return expected by investors over some prospective time period. The cost of equity one seeks to estimate in this proceeding is the return investors expect prospectively when the rates from this case will be in effect.

The cost of common equity is not set by contract, and there are no hard and fast mathematical formulae with which to measure investor expectations with regard to equity requirements and perceptions of risk. As a result, any valid cost of equity recommendation must reflect investors' expectations of the risks facing a utility.

**Q14. WHAT PRINCIPAL METHODOLOGY DO YOU EMPLOY IN YOUR COST OF EQUITY CAPITAL ANALYSES?**

A. I employ the Discounted Cash Flow ("DCF") methodology for estimating the cost of equity, keeping in mind the general premise that any utility's cost of equity capital is the risk free return plus the premium required by investors for accepting the risk of investing in an equity instrument of the utility. It is my opinion that the best analytical technique for measuring a utility's cost of common equity is the DCF methodology. Other return on equity modeling techniques such as the Capital Asset Pricing Model ("CAPM") and risk premium are often used to check the reasonableness of the DCF results.

**Q15. PLEASE DESCRIBE THE RISKS YOU REFER TO ABOVE.**

A. As I stated earlier in this testimony, equity investors require compensation above and beyond the risk free return because of the increased risk factors investors face in the equity markets. Thus, investors require the risk free return plus some risk premium above the risk free return. The basic risks faced by investors that make up the equity risk premium include business risks, financial risks, regulatory risks,

and liquidity risks.

**SECTION III: CURRENT CAPITAL MARKET CONDITIONS**

**Q16. ARE CURRENT ECONOMIC CONDITIONS CONTINUING TO  
DECLINE?**

A. The impacts of the global recession continue. The U.S. and global financial markets did struggle with liquidity issues following the collapse of the subprime mortgage markets. The Federal Reserve and central banks around the world continue efforts to encourage lending in an effort to restore the financial markets to pre-financial crisis levels.

The Federal Reserve Chairman, Ben Bernanke, predicted that the global financial markets crisis will restrain U. S. economic growth well into 2009; and he was correct. Thus, while inflation issues have recently receded, economic conditions have worsened prospects of economic growth. While economic conditions have turned around significantly, unemployment and slow growth continue to impact the economy.

The Federal Reserve has taken numerous steps to address financial market liquidity issues including the cut in the federal funds rate to a target range of 0% to 0.25% as of December 16, 2008. These rates continue to be reaffirmed by the Federal Reserve. I have included in my Schedule (DJI-2) monthly bond yields for various securities showing changes by month since January 2006 through November 2009. As I discuss below, AAA and BBB Corporate bond yields are at levels that prevailed well before the recent financial crisis.

1       **Q17. DO YOU HAVE ANY GENERAL OBSERVATIONS CONCERNING THE**  
2       **RECENT TRENDS IN ECONOMIC CONDITIONS AND THE IMPACT**  
3       **ON CAPITAL COSTS?**

4       A.     Yes. As a general matter the U.S. economy has enjoyed growth, prosperity and  
5       stability since the early 1990's. Over this time period there has been a general  
6       level of economic expansions accompanied by historical low levels of inflation  
7       and interest rates.

8       Now, the economy has slowed significantly at least initially as a result of the  
9       “sub-prime” mortgage problems and more recently as a result of the liquidity  
10      crisis in the financial markets. Moreover, the economic slow down is having  
11      global impacts as can be seen in declining energy prices (natural gas, oil) as well  
12      as general commodity prices.

13      The financial sector crisis intensified through the last quarter of 2008, following  
14      the collapse and/or bailout of such institutions as Bear Stearns, Lehman Brothers,  
15      Merrill Lynch, Freddie Mac, Fannie Mae, AIG and Citigroup, Inc. The U.S.  
16      Government and governments around the world have been and continue to  
17      employ unprecedented monetary actions to minimize the impacts of the financial  
18      crisis on economic growth. While the impacts of these government rescue efforts  
19      and other monetary policy actions have not yet resolved all the tight credit market  
20      problems, these efforts have had, and continue to have, a significant impact.

21      The one sure thing is that an economic slowdown has occurred and is expected to  
22      continue. For this reason economic growth will be lower than past forecast  
23      estimates have suggested. This is true across all economic sectors including the  
24      utility industry. Thus, while utility stock prices may be lower and dividend yields  
25      higher – the other side of the coin shows lower economic growth expectations by  
26      investors.



**Q18. PLEASE DISCUSS THE FINANCIAL MARKETS, THE ECONOMY AND  
THE GENERAL RESPONSE OF THE U.S. GOVERNMENT.**

A. There is no question that the mortgage market collapse, subprime mortgage crisis, credit/liquidity crisis, economic recession and the subsequent bailout and restructuring of financial institutions has not only had tremendous impacts on the U.S. national economy, but global economic implications as well. After initial problems developed in the mortgage market, these problems associated with the subprime developed into a crisis which led to the collapse and need for bailout of certain financial institutions. The turmoil in the U.S. markets peaked in the third-quarter of 2008. During the summer of 2008 commodity prices increased sharply with a barrel of oil increasing to over \$150 and natural gas exceeding \$12 mmbtu. Now, in December 2009, a barrel of oil is at \$77.61 and gas is at \$4.581 mmbtu.

The U.S. economy entered recession in late 2007 and unemployment figures have been increasing. As of November 2009, the unemployment rate is at about 10% unemployment. Commodity prices have declined, but have rebounded from first quarter 2009 lows. The stock market for 2009 hit a low in March, but has since rebounded from March 2009 levels. Both the Dow and S&P 500 indexes are at their highest levels in a year and the Dow Jones Utility Average is approaching its highest level in a year. The change in course regarding commodity prices and the market downturn from early 2009 levels is evidence that the downward economic slide is over. While unemployment figures lag other economic indicators, financial news has improved in the markets.

In response to the economic crisis, the Federal Reserve has taken extraordinary and substantial measures to stabilize financial markets and address the significant resulting liquidity crisis. Among the numerous Federal Reserve measures is the opening of lending facilities to numerous banking and investment firms to free up tight credit markets. The development of the Troubled Asset Relief Program

1 (“TARP”) is designed to provide over \$700 billion in government funds into the  
2 banking system through capital infusions. In addition, the federal government has  
3 added billions of additional dollars to bail out and stabilize such prominent  
4 financial institutions as AIG, Citigroup and Bank of America. The federal  
5 government has expended substantial sums to bail out other industries such as the  
6 auto industry with cash for General Motors and Chrysler.

7 As part of the overall budget process, we have seen the federal government  
8 provide almost \$800 billion of economic stimulus – including tax cuts and  
9 additional government spending aimed at creating jobs and addressing the overall  
10 economic slowdown.

11 **Q19. HOW HAVE THE FINANCIAL MARKETS RESPONDED TO THE**  
12 **ACTIONS OF THE FEDERAL RESERVE AND OTHER STIMULUS**  
13 **ACTIONS?**

14 A. The long-term credit market response has been significant as of the end of 2009.  
15 The credit/liquidity crisis is associated with concerns and reluctance by credit  
16 providers to provide needed capital due to concerns over the weak economy. As  
17 shown in Schedule (DJL-2), interest rates on BBB rated bonds increased  
18 substantially, about 7.0% in June 2008 to over 9.0% in November 2008. Since  
19 the November 2008 peak in the midst of the liquidity crisis, BBB rated bonds  
20 have steadily declined. Now, for November 2009, BBB rated bonds have  
21 averaged about 6.3%<sup>16</sup> or are at levels seen just prior to the liquidity crisis.  
22 Current daily BBB bond yields are at 6.3% as of early December 2009.

23 Further, BBB bonds and the AAA corporate bond yields are approaching or are  
24 back to the pre-credit/liquidity crisis levels. These historical bond yields are

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<sup>16</sup> www.federalreserve.gov/releaseh15date/weekly, three month average of September 2009 – November 2009. Also see Schedule (DJL-2)

1 shown in Schedule (DJI-2).

2 In summary, the market evidence appears to demonstrate that the massive  
3 government response have had the desired effect on credit markets. Actions by  
4 the Federal Reserve and the current administration show a continued commitment  
5 to restoring the economic health and financial markets quickly. Economic  
6 recovery is expected to gain momentum slowly with some economic segments  
7 growing more slowly than others.

8 Thus, while the economy is slowly changing course in terms of economic growth,  
9 the upheaval in financial markets is an event of the past as we see interest rates  
10 and capital costs back to or approaching pre-financial crisis levels.

11 **Q20. WHAT CONCLUSIONS DO YOU DRAW FROM CURRENT ECONOMIC**  
12 **CONDITIONS IN PROVIDING GUIDANCE IN SETTING EQUITY**  
13 **CAPITAL COSTS IN THIS PROCEEDING?**

14 A. While the bottom tier of corporate bond rates (BBB) increased substantially in  
15 September 2008 – such increases do not appear to be a trend, but rather the direct  
16 impact of an atypical event in the capital markets. The economic slowdown or  
17 recession caused general investor expectations of growth to decline. The bottom  
18 line is that the general economic data does not support increasing capital costs.  
19 Further, it is not sound ratemaking to establish revenue requirements and rates on  
20 atypical or abnormal events – especially when such events (continuation of the  
21 financial liquidity crisis) are not likely to continue or be repeated.

1       **SECTION IV:           COST OF EQUITY CAPTIAL DCF ANALYSIS**

2  
3       **Q21. YOU STATED ABOVE THAT YOU RELIED ON A DCF ANALYSIS.**  
4       **PLEASE DESCRIBE HOW YOU CONDUCTED YOUR DCF ANALYSIS.**

5       A.     For my cost of capital analyses I have employed a 31 company comparable group  
6             as a proxy for AmerenUE. The Company as a subsidiary of Ameren Corporation  
7             has no publically traded stock or other published financial measures for which a  
8             study can be performed. The goal is to establish an equity return for the  
9             AmerenUE Missouri operations. Therefore, I have developed a 31 company  
10            group of electric utility companies that are followed by Value Line.

11           I employed the same comparable companies as employed in Company witness,  
12           Dr. Morin's, analysis.<sup>17</sup> These two groups are sufficiently large such that no  
13           individual company results will bias the group average. Moreover, by employing  
14           the same proxy companies, the differences between my proposals and the  
15           Company's on return are limited to the analyses presented.

16           Given that Dr. Morin's second group of companies (the S&P Index Utilities)  
17           shown in his schedule (RAM-E7), page 3, provides only two different utilities  
18           from his first proxy group; I merely combined these two additional companies  
19           with the first group to arrive at a 31 company comparable group.

20  

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<sup>17</sup> The proxy group electric utilities relied on by Dr. Morin for his DCF results are presented in his Schedules (RAM-E5, p.2), (RAM-E6, p.2), (RAM-E7, p.3) and (RAM-E8, p.3).

1       **Q22. WHY HAVE YOU EXAMINED COMPARABLE ELECTRIC**  
2       **COMPANIES?**

3       A.     There are several reasons why it is appropriate to examine a group of companies  
4       rather than rely solely on one company.

5               1)     A comparable risk group analysis is consistent with the  
6                       requirements of a fair and reasonable return addressed in the *Hope*  
7                       and *Bluefield* cases. The return on investment should be  
8                       commensurate with returns earned by firms with comparable risk.  
9                       Thus, there is a need to examine firms of comparable risk to  
10                      identify the fair and reasonable comparable returns being earned. In  
11                      addition, the equity returns of comparable firms are viewed as  
12                      opportunity costs of forgone investments in the market which, like  
13                      other investment opportunities, will directly impact the cost of  
14                      equity of the Company.

15              2)     The reliability of the cost of equity estimate is enhanced when the  
16                      calculation is based on equity capital estimates from a variety of  
17                      risk equivalent companies. A group of comparable companies can  
18                      be employed as a check on a single company analysis. Further, the  
19                      comparable group analysis, whether employed as a check or the  
20                      primary analysis, mitigates any distortions resulting from  
21                      measurement errors in dividend yield and expected growth  
22                      measures and estimates. For example, the average growth rate  
23                      estimate based on forecasts of several comparable firms is less  
24                      likely to deviate from investor expectations of growth than an  
25                      estimate for a single firm. Moreover, the general assumptions  
26                      underlying the DCF model are more likely to be met for a group of  
27                      companies than for a single firm.

1                   3)     An analysis of a comparable group also avoids circularity problems.  
2                             In the analysis of investor-owned utilities, the stock price (that is,  
3                             the cost of capital) is a direct function of an investor's growth rate  
4                             expectations, which is also a function of an investor's perception of  
5                             the regulatory environment. The bottom line is that the cost of  
6                             equity depends in part on the anticipated regulatory environment  
7                             and actions. Thus, both the components of the DCF model –  
8                             dividend yield and growth expectations – are influenced by the  
9                             regulatory process.

                  4)     Extending the sample size of comparable companies beyond a  
                           single regulatory influence will mitigate the regulatory circulatory  
                           problem. Specific conditions concerning a subject utility often  
                           requires that a comparable company analysis be employed. As is  
                           the case here, one of the most common conditions is the lack of  
                           market data necessary to perform a DCF analysis. In times of utility  
                           consolidation and merger, many utilities are owned and controlled  
                           by a single parent holding company, which is the case with the  
                           Company.

10       **Q23. HAVE YOU PROVIDED A LISTING OF THE COMPANIES IN THE**  
11       **COMPARABLE GROUP?**

12       A.     Yes. Contained in my Schedule (DJI-3) is a list of the 31 companies in the  
13                   comparable group, along with additional data of Company equity ratio projected  
14                   for 2009, 2010 and 2012-2014.

15       **Q24. PLEASE EXPLAIN THE DCF METHODOLOGY YOU HAVE**  
16       **EMPLOYED IN YOUR ANALYSIS.**

17       A.     The foundation of the DCF model is in the theory of security valuation. The price

1           that an investor is willing to pay for a share of common stock today is determined  
2           by what income stream the investor expects to receive from the investment. The  
3           return the investor expects to receive over the investment time horizon is  
4           composed of: (i) dividend payments, and (ii) the appreciated sale value of the  
5           investment. A proper analysis adds dividends to the gain on the final sale value,  
6           and discounts these expected future earnings to a present value.

7           To determine or estimate investor requirements using the DCF model, one  
8           computes a cost of capital requirement, or discount rate from the current market  
9           data and the expected dividend stream. The DCF model stated as a formula is as  
10          follows:

11                      $K = D/P + G$

12                     where:

13                     K = required return on equity,

14                     D = dividend rate,

15                     P = stock price,

16                     D/P = dividend yield, and

17                     G = growth in dividends.

18          **Q25. PLEASE EXPLAIN HOW YOU CALCULATED THE DIVIDEND YIELD**  
19          **FOR THE COMPARABLE COMPANIES.**

20          A.       The dividend yield is the ratio of the annual expected dividend to the stock price.  
21                   When calculating the dividend yield, one must be cautious and not rely on spot  
22                   stock prices. One must be equally cautious not to rely on long periods of time as  
23                   the data becomes unrepresentative of market conditions. The objective is to use a  
24                   period of time such that the resulting dividend yield is representative of the  
25                   prospective period when rates will be in effect.

1 While there is no fixed period for selecting the denominator of the dividend yield  
2 (i.e., stock price), the key guideline is that the yield not be distorted due to  
3 fluctuations in stock market prices. On the other hand, dividends, the numerator  
4 of the yield calculation, are relatively stable, as opposed to the stock prices, which  
5 are subject to daily and cyclical market fluctuations. The selection of a  
6 representative time period will dampen the effect of stock market changes.

7 The price and dividend data used for each of the companies in the comparable  
8 group is contained in my Schedule (DJI-4).

9 As I discussed earlier in this testimony, there has been substantial volatility in the  
10 market due to impacts associated with the current financial market crisis. For  
11 these reasons I have reviewed an average 52-week high and low price for a recent  
12 twelve month period ending in November 2009. In addition, I have examined  
13 shorter time periods to evaluate the dividend yield. For this case, I am employing  
14 a dividend yield based on a recent six week period through November 2009 of  
15 stock data.

16 To calculate dividends, I annualized the current dividend and increased the  
17 resulting annual dividend by one half the growth rate. The resulting dividend  
18 yield is shown on my Schedule (DJI-4) for the comparable group.

19 **Q26. HOW DOES YOUR DIVIDEND YIELD CALCULATION COMPARE TO**  
20 **DR. MORIN'S ESTIMATES OF DIVIDEND YIELD?**

21 A. As shown on my Schedule (DJI-4), the comparable group average and median  
22 dividend yield is about 5.0% - 5.3% before growth adjustments. Dr. Morin's  
23 analysis shown in his Schedules (RAM 5-8), shows a dividend yield range for the  
24 comparable group of 5.6% to 5.7%, which is about 30-70 basis points above my  
25 estimate for the comparable group. In my opinion, the difference in dividend  
26 yield is primarily related to the time period of when the respective analyses were



1 conducted.

2 **Q27. PLEASE EXPLAIN HOW YOU HAVE CALCULATED THE EXPECTED**  
3 **GROWTH RATE IN YOUR DCF ANALYSIS FOR THE COMPANIES IN**  
4 **THE COMPARABLE GROUP.**

5 A. Like dividend yields, there exists no single or simple method to calculate growth  
6 rates. The calculation of investor growth expectations is the most difficult part of  
7 the DCF analysis. To estimate investor expectations of growth, I have examined  
8 forecasted growth rates, and other financial data for each of the companies in the  
9 comparable group.

10 Implementation of the DCF model requires the exercise of considerable judgment  
11 with regard to estimating investor expectations of growth and it is a difficult task,  
12 but such difficulties are not insurmountable. Many factors affect capital markets  
13 in general and individual stocks specifically. Investors are aware and informed of  
14 current economic conditions and expectations. Such economic variables entail  
15 the current state of the economy, the trade deficit, federal budget uncertainty,  
16 fiscal policy, inflation and Federal Reserve Board policies on interest rates.

17 Investors generally have good information on the economic and financial  
18 variables outlined above. All of this information is available quickly, especially  
19 in recent decades with easy access to the worldwide web. This information  
20 influences return expectations and, as a result, the maximum price an investor will  
21 pay for various securities.

22 Like the information available on the general economy, investors also have access  
23 to a wealth of information about particular types of securities, industries and  
24 specific company investments. This information is also factored into investor  
25 expectations and therefore the stock price individuals are willing to pay.

1 Common earnings growth rate forecasts and historical growth rate data may be  
2 found in the Value Line Investment survey ("Value Line") publication. These  
3 Value Line earnings estimates are five year projections in annual earnings.  
4 Again, Value Line is widely available to the public, and is a good source of  
5 earnings projections. Other earnings estimates are forecasted by Zacks as well as  
6 First Call projections, widely available on the internet at Zacks.com and Yahoo  
7 Finance respectively. Those earnings projections along with other stock specific  
8 financial data provide a range of estimates of earnings and are readily available at  
9 no cost.

10 **Q28. PLEASE EXPLAIN YOUR GROWTH RATE ANALYSIS.**

11 A. I have included in my Schedule (DJL-5) the growth rates I have reviewed in my  
12 analysis. Along with historical growth rates, the first set of growth rates is the  
13 Value Line forecasted growth rates in earnings per share ("EPS") for each  
14 company in the comparable group. The second set of growth rates examined is  
15 the Zacks forecasted growth rates in earnings. The third growth estimate  
16 considered is the First Call growth rates which are readily available to investors at  
17 Yahoo Finance.

18 The growth rates described above provide a range of estimates for each of the  
19 comparable companies. The resulting range of average and median forecasted  
20 growth rates for the companies in and the comparable group is from 5.0% to  
21 5.9%. Relying on the combined forecasted earnings per share estimates, the  
22 growth rate average and median range can be narrowed to 5.40% to 5.75% as  
23 shown in Schedule (DJL-5).

24 **Q29. HOW DO THESE GROWTH RATES COMPARE TO GROWTH**  
25 **ESTIMATES EMPLOYED BY DR. MORIN?**

26 A. Reviewing Dr. Morin's Schedules (RAM 5-8), it appears Dr. Morin has relied

1 upon a growth rate range of 5.5% - 6.7% for the comparable group. This estimate  
2 is limited to Value Line and Zacks earnings and estimates that are both outdated  
3 and overstated. The end result is Dr. Morin's estimates should not be relied on in  
4 this case.

5 **Q30. DID YOU RELY ON THE HISTORICAL GROWTH RATES IN**  
6 **EARNINGS?**

7 A. No. While the growth in earnings as reported by Value Line for a recent five and  
8 ten year history are presented in my Schedule (DJL-5), they were not used in this  
9 case. First, many companies had negative earnings growth over this historical  
10 period which would substantially limit the sample size of the DCF comparable  
11 group analysis. Second, investors (whose expectations we seek to estimate) do  
12 rely on analyst forecasts. Thus, current growth forecasts provide more insight  
13 into investor capital cost expectations than the historical earnings performance.

14 **Q31. PLEASE SUMMARIZE YOUR CONSTANT GROWTH DCF ANALYSIS.**

15 A. I have summarized these results in my Schedule (DJL-6). For the comparable  
16 group the range of results is 10.9% to 11.1%.

17 **Q32. HAVE YOU CALCULATED ADDITIONAL DCF ANALYSES FOR THE**  
18 **COMPARABLE GROUP COMPANIES?**

19 A. Yes. I have calculated in Schedule (DJL-7) a two stage non-constant growth DCF  
20 analysis for the comparable group companies.

21 **Q33. PLEASE DESCRIBE YOUR TWO-STAGE NON-CONSTANT GROWTH**  
22 **DCF.**

23 A. This analysis calculates equity cost using a non-constant growth Two Stage DCF  
24 Model. The constant growth DCF model is often adjusted to reflect multiple  
25 growth assumptions because the constant growth rate assumption is often not

1 consistent with investor expectations. As an example, it is often the case where  
2 short-term growth estimates are not consistent with long-term sustainable growth  
3 projections. In those instances, where more than one growth rate estimate is  
4 appropriate, a multi-stage non-constant growth model can be employed to derive a  
5 cost of capital estimate. In other words, the constant growth model is adjusted to  
6 incorporate multiple growth rate periods, assuring a constant growth (long-term)  
7 rate is estimated for a longer period.

8 For the first growth stage (years 1-4) of the model, the Value Line growth in  
9 dividends is employed and an annual dividend is calculated. The second stage  
10 (years 5 and beyond)<sup>18</sup> an earnings growth estimate based on averaging the  
11 comparable group median of forecasts of EPS, from Schedule (DJL-5), of 5.11%  
12 is employed. This long-run earnings estimate is based on the median for Value  
13 Line, Zacks, and First Call earnings forecasts.

14 In the two-stage model the dividend cash flows are discounted equal to the price<sup>19</sup>  
15 paid for the stock. The calculated discount rate or internal rate of return is the cost  
16 of equity capital estimate.

17 **Q34. WHAT ARE THE RESULTS OF THE TWO-STAGE NON-CONSTANT**  
18 **GROWTH DCF ANALYSIS?**

19 A. The results of the two-stage non-constant growth DCF analysis are shown in  
20 Schedule (DJL-7). The comparable group average indicates a cost of equity of  
21 10.2 – 10.4%.

---

<sup>18</sup> The model is ended at year 150.

<sup>19</sup> Price is based on the 6 week average of closing prices ending November 2009.

**Q35. PLEASE SUMMARIZE YOUR DCF ESTIMATES.**

A. The table below is a summary of the DCF results:

| TABLE 3<br>COST OF EQUITY CAPITAL SUMMARY |                  |
|---|------------------|
| DESCRIPTION                               | COMPARABLE GROUP |
| Constant Growth DCF                       | 10.9% - 11.1%    |
| Non-Constant Growth Two Stage DCF         | 10.2% - 10.4%    |

This range of estimates for the Comparable Group range from 10.2%-11.1%, with a DCF midpoint of 10.65%.

**SECTION V: RISK PREMIUM/CAPM COST OF EQUITY ESTIMATE**

**Q36. PLEASE DESCRIBE THE RISK PREMIUM ANALYSIS.**

A. Debt instruments such as bonds (long-term debt) are less risky than common equity when both classes of capital are issued by the same entity. Bondholders have a prior contractual claim to the earnings of the corporation and returns on bonds are less variable and more predictable than stocks. The bottom line is that debt is less risky than equity. There are numerous return studies of capital market investments, all of which show lower returns with lower risks and higher returns with higher risk investments. These financial truisms provide a sound theoretical basis and foundation for the risk premium method for estimating equity costs.

1 The risk premium approach is useful in that the analysis is based on current  
2 market interest rates, that is, the current observable cost of debt capital. But, the  
3 risk premium approach is not without its problems and drawbacks. In practice,  
4 there is considerable debate as to the time period to analyze in the determination  
5 of the bond/equity return risk spread. Historical debt/equity risk spreads  
6 measured over many decades may not be relevant to current capital market  
7 requirements. Others argue that a long-term analysis is necessary, since the goal  
8 is to measure investors' long-term expectations.

9 Another version of the risk premium method is the capital asset pricing model  
10 ("CAPM"). Generally, the CAPM begins with a theoretically risk-free interest  
11 rate such as a three-month Treasury bill rate. The risk premium, or equity spread  
12 above and beyond the risk free rate is adjusted by the stock beta.<sup>20</sup> The risk free  
13 return measure is combined with the equity risk premium adjusted for the measure  
14 of beta to arrive at a CAPM result.

15 Like the risk premium discussed above, the CAPM is subject to measurement  
16 uncertainties. First, the general problem of how to measure the equity risk  
17 premium and the time period for which the premium is analyzed is subject to  
18 considerable debate. This problem and associated criticisms is generic to all  
19 variants of the risk premium model. Second, measures of beta are often unstable  
20 from period to period and may not reflect the equity risk spread measure.

21 For all of the above reasons, risk premium methods should be viewed with  
22 considerable caution.

---

<sup>20</sup> Beta is a measure of the volatility of the specific stock movement relative to that of a market measure such as the S&P 500. A beta below 1.0 means that a specific stock is less volatile than the market measure, while a beta above 1.0 indicates a specific stock is more volatile than the market measure.

1       **Q37. PLEASE DESCRIBE YOUR RISK PREMIUM ANALYSIS**

2       A.     The risk premium analysis is based on the differences between the average  
3             authorized equity returns and the average corporate bond yields for each year to  
4             estimate the indicated risk premium. Once the equity risk premium was estimated  
5             I added the current estimated BBB bond yield to arrive at an equity estimate based  
6             on a risk premium measure.

7             Employing this approach the risk premium is 3.19% (Schedule (DJI-8)).  
8             Combining the estimated BBB bond yield of 6.1% with the 3.19% risk premium  
9             results in an equity return estimate of 9.3%.

10            In a second part of this risk premium analysis, I calculated the interest rate / risk  
11            premium relationship. Some analysts argue that because changes in debt costs do  
12            not impact equity cost on a one for one basis, the equity risk premium should be  
13            adjusted for this fact. To address this, I calculated the debt cost / risk premium  
14            relationship to be 41.34% and increased the risk premium accordingly. The  
15            resulting risk premium equity return estimate using this analysis is 10.55% as  
16            shown in Schedule (DJI-8).

17       **Q38. HOW DID YOU DEVELOP A BBB BOND YIELD FOR YOUR**  
18       **ANALYSIS?**

19       A.     I started with the BBB corporate bond yields for November 2009 as reported by  
20             the Federal Reserve.<sup>21</sup> These BBB yields for November 2009, like all interest rates  
21             for long-term securities, continue the steady decline from the peak November  
22             2008 levels. The average yield for November 2009 is in the range of 6.3%.  
23             Second, I compared the BBB corporate yields to BBB public utility bond yields  
24             for the period January 2006 – May 2009 and calculated a 19 basis point

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<sup>21</sup> See [www.federalreserve.gov](http://www.federalreserve.gov)

1 differential in the yields for this period. It should be noted that the yield spread is  
2 closer to 30 basis points since October 2008, but that yield differential is declining  
3 and to be conservative I have employed the 19 basis point longer term view yield  
4 differential.

5 Combining the 6.3% current BBB corporate yield with the 19 basis point BBB  
6 public utility bond differential, I estimated a current BBB rate of 6.1%. Thus, for  
7 my risk premium analyses, I have employed a 6.1% BBB bond rate for this case.

## 8 **CAPITAL ASSET PRICING MODEL ANALYSIS**

### 9 **Q39. PLEASE DESCRIBE THE CAPITAL ASSET PRICING MODEL.**

10 A. The Capital Asset Pricing Model ("CAPM") is a version of the risk premium  
11 approach described above. The CAPM measures the relationship between a  
12 specific security's investment risk and its return. The general mathematical form  
13 of the CAPM can be described as follows:

$$14 \quad K = RF + B(RM - RF)$$

15 Where: K = cost of equity  
16 Rf = risk free return  
17 Rm = return on market  
18 B = Beta  
19 Rm - Rf = market risk premium  
20

### 21 **Q40. HOW HAVE YOU CALCULATED YOUR CAPM ESTIMATES?**

22 A. The CAPM analysis I employ is the same analysis employed by Dr. Morin, except  
23 that the CAPM input data is updated to current market costs. Employing a beta  
24 value of .72, a current three month average (September 2009 – November 2009)



1 30 year U.S. Treasury yield of 4.2% and a market risk premium of 6.5% results in  
2 a CAPM equity return estimate of 8.9%. Dr. Morin's outdated estimate produced  
3 a 9.3% equity cost estimate.

4 I should note that this CAPM estimate is on the high side as the market risk  
5 premium is overstated. This is an issue that will be addressed in rebuttal  
6 testimony.

7 **Q41. PLEASE DESCRIBE THE BETA U.S. TREASURY YIELD YOU**  
8 **EMPLOYED IN YOUR UPDATE OF DR. MORIN'S CAPM ANALYSIS.**

9 A. Beta is a measure of specific stock volatility relative to a market index. Betas less  
10 than 1.0 move less than the market while Betas greater than 1.0 have more  
11 movement or volatility relative to a market index. For this case I employed the  
12 Value Line Betas for each company in the comparable group. These Value Line  
13 Betas are shown in my Schedule (DJL-2). The 30 year U.S. Treasury yield is  
14 based on a 3 month average of September through November 2009. This data is  
15 shown in Schedule (DJL-2).

16 **Q42. DID YOU ESTIMATE AN UPDATE OF ALTERNATIVE CAPM**  
17 **CALCULATION OF EQUITY RETURN?**

18 A. Yes, I calculated an update employing the alternative estimate of the empirical  
19 version of the CAPM or ECAPM. It is argued that the CAPM estimate of equity  
20 cost will underestimate the return required for low-beta securities and overstate  
21 the required return for high-beta securities.

22 To address the flaws of the CAPM, the alternative ECAPM estimates the cost of  
23 equity employing the following equation:

24 
$$ROE = R_f + \alpha + (\beta \alpha (R_m - R_f))$$

25 Where  $(\alpha)$  is the measure of the constant of a risk return line. Typically, an  $(\alpha)$

value of 1% to 2% is employed in the ECAPM analysis resulting in a more conservative estimate of equity return. Employing a 1% ( $\alpha$ ) value results in the following ECAPM:

$$ROE = R_f + .25 (R_m - R_f) + .75 \beta (R_m - R_f)$$

Employing current Value Line beta estimates and current 30 year U.S. Treasury yields, the ECAP estimate is as follows:

$$4.2\% + .25(6.5\%) + .75(.72)(6.5\%) = 9.33\%.$$

**Q43. PLEASE SUMMARIZE YOUR DCF, RISK PREMIUM AND CAPM ANALYSES?**

A. The following table summarized the cost of equity results for each analysis:

**TABLE 4**

**COST OF EQUITY CAPITAL SUMMARY**

| Model               | <b><u>COMPARABLE GROUP</u></b> |
|---------------------|--------------------------------|
|                     | Range                          |
| Constant Growth DCF | 10.9% - 11.1%                  |
| Two-Stage DCF       | 10.2% - 10.4%                  |
| Risk Premium        | 9.3% - 10.6%                   |
| CAPM                | 8.9% - 9.3%                    |

The relevant range (after eliminating the highest and lowest results) for the comparable group is 9.3% to 10.9%. The midpoint estimate for the comparable group is about 10.2%. In my opinion, a return on equity estimate of 10.2% is a reasonable estimate of AmerenUE's equity costs.

**Q44. DID YOU ADJUST THE COST OF EQUITY FOR FLOTATION COSTS?**

A. No. Flotation costs to the extent they are incurred can and should be requested in cost of service – not as an increase in equity costs. This is an issue that will be addressed in rebuttal testimony.

**SECTION VI: CAPITAL STRUCTURE**

**Q45. WHAT CAPITAL STRUCTURE, COST RATES AND OVERALL COST OF CAPITAL IS THE COMPANY PROPOSING IN THIS CASE?**

A. The Company's proposed capital structure and cost rates is as follows:

| TABLE 5 <sup>22</sup>                                |                 |         |        |               |
|--|-----------------|---------|--------|---------------|
| AmerenUE PROPOSED                                    |                 |         |        |               |
| <u>CAPITAL STRUCTURE AND OVERALL COST OF CAPITAL</u> |                 |         |        |               |
| DESCRIPTION  | AMOUNT          | RATIO   | COST   | WEIGHTED COST |
| Long-Term Debt                                       | \$3,651,044,928 | 51.008% | 5.967% | 3.044%        |
| Preferred Stock                                      | 114,502,040     | 1.600%  | 5.189% | 0.083%        |
| Common Equity  | 3,392,179,086   | 47.392% | 11.5%  | 5.450%        |
| Total  | \$7,157,726,054 | 100.00% | -----  | 8.577%        |

<sup>22</sup> Direct Testimony of Michael G. O'Bryan at Schedule MGO-E1

1       **Q46. WHAT IS THE SIGNIFICANCE OF CAPITAL STRUCTURE?**

2       A.     The overall cost of capital is the sum of the weighted average cost rates of various  
3             sources of capital. The quantity or portion of each type of capital, combined with  
4             the cost rate of capital determines the overall rate of return that the Company  
5             should be allowed to earn in this proceeding. The most significant relationship in  
6             any capital structure is the debt to equity ratio.

7       **Q47. DOES THERE EXIST SOME SET RELATIONSHIP OR IDEAL MIX OF**  
8       **DEBT AND EQUITY CAPITAL?**

9       A.     There exists no set debt/equity relationship for all firms or all industries in terms  
10            of leveraging. However, the ideal capital structure is one that minimizes the  
11            overall cost of capital to the firm, while still maintaining financial integrity so as  
12            to maintain the ability to attract capital at reasonable costs to meet future needs.  
13            Because the cost of debt is generally lower than the cost of equity, and also  
14            because the cost of debt represents a tax deductible expense, any increase in the  
15            quantity of debt capital tends to decrease the overall cost of capital relative to  
16            equity financing. One must keep in mind that increases in the quantity of debt  
17            financing can cause the financial risk of the Company to increase. In other words,  
18            there is a cost for the savings associated with increased debt leveraging. That cost  
19            is increased financial risk to the firm.

20            In summary, it is not possible to determine with precision the exact proportion of  
21            debt and equity that minimizes the overall cost of capital without imposing undue  
22            financial risk upon the Company. There does exist some range of capital structure  
23            that generally meets the goal of minimizing the overall cost of capital while  
24            maintaining the firm's financial integrity.

1       **Q48. WHAT CRITERIA SHOULD REGULATORS EMPLOY IN**  
2       **DETERMINING THE APPROPRIATE CAPITAL STRUCTURE TO BE**  
3       **USED FOR RATEMAKING?**

4       A.     In my opinion, rate regulation should focus on two criteria to determine the  
5       appropriate capital structure. Those factors as outlined below should be economy  
6       and safety.

7             The advantage of debt in the capital structure is that debt costs less than equity.  
8             Moreover, interest charges are deductible for income tax purposes and act to  
9             reduce taxes. Thus, the more debt in the capital structure the lower the cost of  
10            capital will be. The question of economy is addressed by examining whether  
11            increases in the debt ratio act to increase the cost rates of both debt and equity so  
12            as to over balance the benefits of the larger proportion of debt.

13            In addition, there is always the overriding question of safety. In other words,  
14            financial risk is increased if the proportion of debt is increased by such a  
15            magnitude that interest obligations cannot be covered during periods of depressed  
16            earnings.

17       **Q49. HOW DOES THE COMPANY'S CAPITAL STRUCTURE WHICH**  
18       **INCLUDES A 47.4% EQUITY RATIO COMPARE WITH THE CAPITAL**  
19       **STRUCTURE RATIOS OF THE COMPARABLE RISK COMPANIES?**

20       A.     The Company's proposed capital structure compares quite favorably to the equity  
21       ratios in the comparable group outlined in my Schedule DJL-2. As can be seen  
22       from Schedule (DJL-2), the group equity ratio averages 47.0% to 47.5% percent  
23       for 2009 and 2010. Thus, the Company has similar financial risk in terms of  
24       leverage as the comparable group companies.

**Q50. WHAT CAPITAL STRUCTURE AND COST RATES DO YOU RECOMMEND IN THIS CASE?**

A. I recommend the Company's proposed capital structure be employed and those cost rates are as follows:

| TABLE 6<br><u>AmerenUE CAPITAL STRUCTURE</u> |         |        |               |
|--|---------|--------|---------------|
| DESCRIPTION                                  | RATIO   | COST   | WEIGHTED COST |
| Long-Term Debt                               | 51.008% | 5.967% | 3.044%        |
| Preferred Stock                              | 1.600%  | 5.189% | 0.083%        |
| Common Equity                                | 47.392% | 10.2%  | 4.834%        |
| Total  | 100.00% |        | 7.961%        |
|  |         |        |               |
|  |         |        |               |

As can be seen from the above, I am recommending an overall return on investment of 7.961%. This recommendation is based on the Company's proposed capital structure and proposed cost rates for long-term debt and preferred combined with my recommended 10.2% equity return.

**Q51. PLEASE SUMMARIZE YOUR OVERALL COST OF CAPITAL RECOMMENDATION IN THIS CASE.**

A. The Company's requested 11.50% return on equity is overstated. A more reasoned cost of equity analysis results in a required return on shareholder equity of 10.2%. The combination of the recommended equity return adjustment and use of the Company's proposed capital structure results in an overall cost of capital of 7.961% in this case.

**SECTION VII: FINANCIAL INTEGRITY AND REGULATORY**  
**ENHANCEMENTS**

**Q52. WILL YOUR RECOMMENDED RETURN PROVIDE THE COMPANY SUFFICIENT INTEREST COVERAGE TO MAINTAIN ITS FINANCIAL INTEGRITY?**

A. Yes. Based on the capital structure above, my recommended overall cost of capital (which is based on a 10.2% ROE) provides sufficient interest coverage and financial metrics for the Company.

**Q53. WHAT FINANCIAL RATIOS OR FINANCIAL METRICS SHOULD THE COMMISSION CONSIDER WHEN EVALUATING COST OF EQUITY?**

A. In my opinion, the Commission should consider the financial metrics that bond rating agencies consider in evaluating credit risk to a Company. Key financial metrics measure cash flow as a percentage of debt, and debt leverage ratio.

**Q54. HOW ARE THESE FINANCIAL RATIOS CONSIDERED AND CALCULATED?**

A. Ratings agencies such as Standard & Poor's develop rating guidelines that make explicit general ratings outcomes that are typical or expected given various financial and business risk combinations. A rating matrix or guideline is just that, a guideline, not a rule written in stone that guarantees a particular rating for a particular achieved financial metric level.

Funds from a company's operations, in other words cash flow, are very critical to any rating/risk consideration. Interest and principal obligations of a company cannot be paid out of earnings if earnings are not cash. Thus, analyses of cash flow reveal debt servicing ability.

1 Debt and capital structure considerations are indicative of leverage and flexibility  
2 to address financial changes. The liquidity crisis that hit all markets and  
3 industries starting last year is an example of the importance of financial  
4 flexibility. Stable and continuous cash flows provide financial flexibility.

5 Each of these financial ratios are calculated in my Schedule (DJL-9) employing  
6 the Company's request and my recommendations in this proceeding. The results  
7 of my analyses indicate strong financial metrics.

8 **Q55. HOW DID YOU DETERMINE WHICH S&P FINANCIAL METRIC**  
9 **MEASURES TO EMPLOY IN EVALUATING CASH FLOW FOR THIS**  
10 **PROCEEDING?**

11 A. Starting with the Standard & Poor's Ratings Direct of May 27, 2009; "Criteria  
12 Methodology: Business Risk/Financial Risk Matrix Expanded", I employed cash  
13 flow risk measures for a financial risk profile of "significant" to "intermediate"  
14 for a "BBB" to "A" rating.<sup>23</sup> The resulting financial risk indicative ratios are as  
15 follows:

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<sup>23</sup> I have included the source documents in my workpapers.



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| Table 7<br>Financial Risk Benchmarks                                      |           |
|---|-----------|
| 1. Funds from operations / debt (%)                                       | 30% - 60% |
| 2. Debt / Earnings before interest, taxes, depreciation, amortization (x) | 1.5 – 3.0 |
| 3. Debt / Capital (%)   | 25% - 45% |

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These financial metrics are commonly employed by rating agencies and are readily calculated or estimated from revenue requirement schedules to arrive at a measurable estimate of financial integrity. Again, these financial benchmarks are guidelines and not guarantees. Nonetheless, such benchmarks do provide some guidance as to the impact of cash flow impacts on the regulated operations of the Company.

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I should also note that I have calculated interest coverage ratios, both pre-tax and after tax, from the capital structure and overall return requested by the Company and the overall return I recommend. These basic interest coverage calculations are provided in my Schedule (DJL-9). In addition, I also calculate interest coverage off of funds from operations along with the other financial measures I discuss below.

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**Q56. PLEASE DESCRIBE THESE FINANCIAL RISK METRICS YOU ARE ANALYZING FOR PURPOSES OF FINANCIAL INTEGRITY.**

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A. All these financial measures look to the Company’s leverage or (debt) level and ability to service interest obligations on the debt. The first metric I will discuss is funds from operations to total debt (FFO/Debt) which measures cash flow from a company’s operations to the total outstanding debt of the firm. The more funds from operations a company has relative to outstanding debt – the lower the risk. Thus, the higher the percentage the better.

1 Looking at FFO/Debt (%) from an individual perspective – banks would view a  
2 borrower more favorably if he had earnings of \$100,000 per year and total  
3 outstanding debt of \$200,000 ( $\$100,000/\$200,000 = 50\%$ ) versus a borrower who  
4 made \$50,000 per year but had outstanding debt of \$200,000 ( $\$50,000/\$200,000$ )  
5 = 25%. Thus, the higher the FFO/Debt percentage – the greater the ability to  
6 service the debt.

7 The second measure is the debt/earnings before interest, taxes, depreciation, and  
8 amortization or Debt / EBITA (x) measure. This Debt/EBITA (x) metric measures  
9 the multiple of total debt obligations to annual cash flow. The lower the multiple  
10 – the better for credit quality. Again, viewing this measure from an individual  
11 perspective – a borrower who has \$200,000 of outstanding debt and \$100,000 of  
12 cash flow income ( $\$200,000/\$100,000 = 2.0x$ ), is a better financial risk than an  
13 individual who has \$200,000 of outstanding debt and a \$50,000 per year cash  
14 flow income ( $\$200,000/\$50,000 = 4.0x$ ).

15 Interest coverage ratios measure the capacity of income streams to service  
16 ongoing interest obligations. Thus, the higher the annual flow of funds from  
17 operations relative to interest obligations, the lower the risk.

18 Lastly, the Debt/Capital (%) is a measure of total leverage. Obviously, the lower  
19 the outstanding debt – the lower the overall financial risk.

20 **Q57. HAVE YOU CALCULATED THESE FINANCIAL METRICS**  
21 **EMPLOYING THE COMPANY'S FILING?**

22 A. Yes. Included in my Schedule (DJL-9) is a calculation of these basic financial  
23 measures employing the results of the Company's filed case (an equity return of  
24 11.5%) and under a proposal employing a 10.2% return on equity.

25 As expected, the cash flow metrics decrease somewhat when a lower return, i.e.  
26 10.2%, is employed: but, in my opinion, not enough to threaten bond rating or

1 financial integrity.

2 The bottom line is that a 10.2% equity return in this case will allow the Company  
3 to maintain financial integrity, and in my opinion, is consistent with just and  
4 reasonable rates to consumers.

5 **Q58. DOES THIS CONCLUDE YOUR TESTIMONY?**

6 A. Yes.