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Exhibit No.:

Witness:

Type of Exhibit:

Issue:

Sponsoring Parties:

Case No.:

Michael Gorman

Direct Testimony

Return on Equity

Missouri Industrial Energy Consumers

ER-2007-0002

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

In the Matter of Union Electric Company)
d/b/a AmerenUE for Authority to File)
Tariffs Increasing Rates for Electric)
Service Provided to Customers in the)
Company's Missouri Service Area)

Case No. ER-2007-0002

Direct Testimony of

Michael Gorman

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DEC 15 2006

Missouri Public
Service Commission

On Behalf of

Missouri Industrial Energy Consumers

December 15, 2006

BAI

BRUBAKER & ASSOCIATES, INC.
ST. LOUIS, MO 63141-2000

Project 8632

MIEC exhibit no. 705
Date 3/12/07 Case No. ER-2007-0002
Reporter _____

BRYAN CAVE

Diana M. Vuylsteke
Voice (314) 259-2543
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BY HAND DELIVERY

December 15, 2006

Cully Dale
Missouri Public Service Commission
200 Madison Street
Jefferson City, MO 65101

RE: Case No. ER-2007-0002

Dear Judge Dale:

Attached for filing on behalf of the Missouri Industrial Energy Consumers in the above-referenced case are an original and eight (8) copies each of the Direct Testimony and Schedules of Maurice Brubaker, the Direct Testimony and Schedules of Jim Selecky, the Direct Testimony and Schedules of Mike Gorman and both the Highly Confidential (HC) and Non-Proprietary (NP) versions of the Direct Testimony and Schedules of Jim Dauphinais.

Thank you for your assistance in bringing this filing to the attention of the Commission.

Very truly yours,

Diana Vuylsteke

Diana M. Vuylsteke

DMV:ln

attachment

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**BEFORE THE PUBLIC SERVICE COMMISSION
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STATE OF MISSOURI)
) SS
COUNTY OF ST. LOUIS)

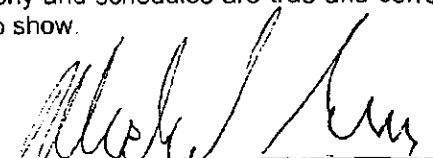
Affidavit of Michael Gorman

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 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000. We have been retained by the Missouri Industrial Energy Consumers in this proceeding on their behalf.

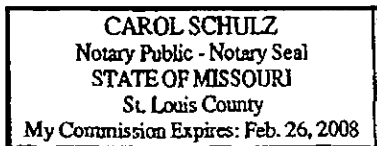
2. Attached hereto and made a part hereof for all purposes are my direct testimony and schedules, which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2007-0002.


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



Michael Gorman

Subscribed and sworn to before this 14th day of December 2006.





Notary Public

My Commission Expires February 26, 2008.

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

In the matter of Union Electric Company)	
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Tariffs Increasing Rates for Electric)	Case No. ER-2007-0002
Service Provided to Customers in the)	
Company's Missouri Service Area)	

Direct Testimony of Michael Gorman

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

2 A My name is Michael Gorman and my business address is 1215 Fern Ridge Parkway,
3 Suite 208, St. Louis, MO 63141-2000.

4 **Q WHAT IS YOUR OCCUPATION?**

5 A I am an energy advisor and a consultant in the field of public utility regulation and a
6 managing principal in the firm of BAI (Brubaker & Associates, Inc.).

7 **Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPER-**
8 **IENCE.**

9 A These are set forth in Appendix A to my testimony.

10 **Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

11 A I am appearing on behalf of the Missouri Industrial Energy Consumers (MIEC).
12 Member companies purchase substantial amounts of electricity from AmerenUE
13 (AmerenUE or Company).

**Michael Gorman
Page 1**

1 **Q WHAT IS THE SUBJECT OF YOUR TESTIMONY?**

2 A I will recommend a fair return on common equity and an overall rate of return for
3 AmerenUE.

4 I also intended to address incentive compensation. However, AmerenUE has
5 not timely responded to numerous data requests that are required for me to address
6 this issue. Therefore, I will address it in my rebuttal testimony.

7 The fact that I do not address an issue should not be interpreted as approval
8 of any position taken by AmerenUE.

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

10 A I recommend the Missouri Public Service Commission ("MPSC" or the "Commission")
11 award AmerenUE a return on common equity within my recommended range of 9.2%
12 to 10.3%. Absent an adjustment for performance, the award should be at the 9.8%
13 midpoint.

14 My recommended 9.8% return on equity for AmerenUE is based on constant
15 growth Discounted Cash Flow ("DCF"), Risk Premium ("RP") and Capital Asset
16 Pricing Model ("CAPM") analyses.

17 As set forth below in my testimony, I show that a 9.8% return on equity is fair
18 compensation based on the risk of AmerenUE's Missouri regulated utility operations,
19 and will provide AmerenUE with the opportunity to produce earnings and cash flow
20 financial metrics that will support its current "BBB" investment grade bond rating, and
21 will actually help to support an "A" bond rating, a one notch improvement to
22 AmerenUE's current bond rating. As such, my recommended rate of return will fairly
23 compensate AmerenUE's investors and help maintain AmerenUE's financial integrity,
24 credit standing and access to capital.

1 I respond to AmerenUE witness Ms. Kathleen C. McShane's proposed 12.0%
2 return on equity, and demonstrate why she has significantly overstated AmerenUE's
3 current market cost of common equity or return on equity.

4 I respond to AmerenUE witness Dr. James H. Vander Weide's recommended
5 12.2% return on equity for AmerenUE in this proceeding. I show that his
6 recommended return on equity is excessive because it overstates a reasonable DCF
7 and risk premium cost of equity for regulated utility operations and therefore would
8 result in excessive and unjust rates for Missouri customers.

9 I also discuss below the reasons for my proposed rejection of both Ms.
10 McShane's and Dr. Vander Weide's proposed financial adjustment to the proxy group
11 return on equity to reflect the alleged difference between AmerenUE's market
12 financial risk and book financial risk. This financial risk equity return adjustment is
13 unjust, unreasonable and is based on an erroneous assessment of investment risk.
14 Further, this financial risk adjustment is contrary to well-accepted methodologies used
15 by regulatory commissions, including the Missouri Public Service Commission, to
16 estimate a fair rate of return that fairly compensates investors, preserves the utility's
17 financial integrity, and support just and reasonable rates.

18 **AMERENUE CREDIT STANDING**

19 **Q PLEASE SUMMARIZE AMERENUE'S CURRENT CREDIT STANDING AND**
20 **ACCESS TO CAPITAL.**

21 **A** AmerenUE has a corporate bond rating from S&P and Moody's of "BBB+" and "A2,"
22 respectively.

1 **AMERENUE'S PROPOSED CAPITAL STRUCTURE**

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

5 A The proposed capital structure, as supported by AmerenUE witness Mr. Lee Nickloy
6 for AmerenUE utilities is shown below in Table 1.

TABLE 1	
AmerenUE Proposed Capital Structure (December 31, 2005)	
Description	AmerenUE Percent of Total Capital
Long-Term Debt	45.420%
Short-Term Debt	0.099%
Preferred Equity	2.040%
Common Equity	<u>52.441%</u>
Total Financial Capital Structure	100.000%
Source: Direct Testimony of Lee R. Nickloy, Schedule LRN-E1-1.	

7 Q DO YOU RECOMMEND ANY ADJUSTMENTS TO THE CAPITAL STRUCTURE
8 PROPOSED BY MR. NICKLOY TO SET AMERENUE'S RATES IN THIS
9 PROCEEDING?

10 A No.

1 **RETURN ON COMMON EQUITY**

2 **Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED**
3 **COMPANY'S COST OF COMMON EQUITY.**

4 A In general, determining a fair cost of common equity for a regulated utility has been
5 framed by two decisions of the U.S. Supreme Court, in Bluefield Water Works &
6 Improvement Co. v. Public Serv. Comm'n of West Virginia, 26 U.S. 679 (1923) and
7 Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944).

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

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

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

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

20 A I have used several models based on financial theory to estimate AmerenUE 's cost
21 of common equity. These models are: (1) the constant growth discounted cash flow
22 model ("DCF"), (2) the bond yield plus equity risk premium model, and (3) a capital
23 asset pricing model ("CAPM"). I have applied these models to a group of publicly

1 traded utilities that I have determined represent the investment risk of an electric
2 utility similar to AmerenUE. I discuss this comparable utility group below.

3 **Q HOW DID YOU DEVELOP A DCF ANALYSIS AND RISK PREMIUM ESTIMATES**
4 **FOR AMERENUE?**

5 **A I used a proxy group of publicly traded electric utilities that I determined to be**
6 **comparable in risk to AmerenUE. This proxy group was then used to estimate the**
7 **market required return on publicly traded companies that are similar in investment**
8 **risk to AmerenUE.**

9 My electric utility proxy risk group was developed as follows:

- 10 1. I started with all the electric utilities followed by The Value Line Investment
11 Survey.
- 12 2. I removed companies that did not meet the following risk factor criteria:
 - 13 a. Investment grade bond ratings from S&P and Moody's.
 - 14 b. Common equity ratios within the range of 40% to 60%.
 - 15 c. No suspension of dividends over the last two years.
 - 16 d. Consensus growth rates available.
 - 17 e. Business profile scores in the range of 4 to 6 from S&P.
 - 18 f. No significant merger and acquisition activity.
 - 19 g. No non-regulated business risk.

20 As shown on my Schedule MPG-1, my electric proxy group is a reasonable
21 risk proxy to AmerenUE. My electric group has an S&P and Moody's bond rating of
22 "BBB+" and "A3," which is comparable to AmerenUE ratings of "BBB+" and "A2,"
23 respectively. My electric proxy group has a S&P business profile score of 5, which is
24 identical to AmerenUE's score. The common equity ratio for my group is 49%, which
25 is comparable to AmerenUE's 52%.

1 **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 (ROR)
5 or cost of capital. This model is expressed mathematically as follows:

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

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

11 This model can be rearranged in order to estimate the discount rate or
12 investor required return, "K." If it is reasonable to assume that earnings and
13 dividends will 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 "constant growth" annual DCF model.

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.

23 **Q WHAT STOCK PRICE AND DIVIDEND HAVE YOU RELIED ON IN YOUR**
24 **CONSTANT GROWTH DCF MODEL?**

25 A I relied on the average of the weekly high and low stock prices over a 13-week period
26 ending November 10, 2006. An average stock price is less susceptible to market

1 price variations than is a spot price. Therefore, an average stock price is less
2 susceptible to aberrant market price movements, which may not be reflective of the
3 stock's long-term value.

4 A 13-week average stock price is short enough to contain data that
5 reasonably reflects current market expectations, but is not too short a period to be
6 susceptible to market price variations that may not be reflective of the security's long-
7 term value. Therefore, in my judgment, a 13-week average stock price is a
8 reasonable balance between the need to reflect current market expectations and to
9 capture sufficient data to smooth out aberrant market movements. I used the most
10 recently paid quarterly dividend, as reported in the Value Line Investment Survey.
11 This dividend was annualized (multiplied by 4) and adjusted for next year's growth to
12 produce the D1 factor for use in Equation 2 above.

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

14 A There are several methods one can use in order to estimate the expected growth in
15 dividends. However, for purposes of determining the market required return on
16 common equity, one must attempt to estimate what the consensus of investors
17 believe about the dividend or earnings growth rate, and not what an individual
18 investor or analyst may use to form individual investment decisions.

19 Security analysts' growth estimates have been shown to be more accurate
20 predictors of future returns than growth rates derived from historical data.^{1/} They are
21 more reliable estimates and, assuming the market generally makes rational
22 investment decisions, analysts' growth projections are the most likely growth
23 estimates that are built into stock prices.

^{1/}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 For my constant growth DCF analysis, I have relied on a consensus, or mean,
2 of professional security analysts' earnings growth estimates as a proxy for the
3 investor consensus dividend growth rate expectations. I used the average of three
4 sources of customer growth rate estimates, including Zack's Advisor, Reuters, and
5 Thomson Financial or First Call. All consensus analyst projections used were
6 available on November 13, 2006, as reported on-line. Each consensus growth rate
7 projection is based on a survey of security analysts. The consensus estimate is a
8 simple arithmetic average or mean of surveyed analysts' earnings growth forecasts.
9 A simple average of the growth forecast gives equal weight to all surveyed analysts'
10 projections. It is problematic as to whether any particular analyst's forecast is most
11 representative of general market expectations. Therefore, a simple average, or
12 arithmetic mean, of analyst forecasts is a good proxy for market consensus
13 expectations. The growth rates I used in my DCF analyses are shown on Schedule
14 MPG-2.

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

17 A As shown on Schedule MPG-3, the DCF return for my electric group is 9.2%.

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

20 A Yes. I believe the results of my constant growth DCF analysis, and a DCF analysis in
21 general in today's marketplace, reflect rational investment financial metrics and reflect
22 today's very low cost capital market. Therefore, the DCF results are reasonable.

Michael Gorman
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1 Q WHY DO YOU BELIEVE YOUR DCF REFLECTS CONSERVATIVE GROWTH
2 PROJECTIONS?

3 A The consensus analysts' growth rate for my electric proxy group is 5.16%. This
4 growth rate is a reasonable long-term growth rate, appropriate for a constant growth
5 DCF model for several reasons. First, a growth rate for my proxy group is reasonably
6 consistent with the five-year and ten-year projected GDP growth of 5.1%, and
7 considerably higher than the five-year and ten-year projected GDP inflation growth of
8 2.4%.²

9 Utilities' dividend growth cannot sustain a growth rate that exceeds the growth
10 rate of the overall economy. The growth rate of the utility's service territory is the
11 proxy for the sustainable long-term growth rate of earnings. Utilities invest in plant to
12 meet sales growth, and sales growth in turn is tied to economic activity. Hence,
13 nominal GDP growth is a proxy for the highest sustainable long-term growth rate of
14 the utility.

15 However, growth of utility companies has historically been tied to the rate of
16 inflation. This is because utilities typically pay out a very high percentage of earnings
17 as dividends, thus limiting the reinvestment of earnings and the growth to their
18 companies' business platforms. The growth rate used in my DCF analysis is much
19 higher than expected inflation rates, and nears the maximum sustainable growth
20 estimate as proxied by the GDP growth factor. The fact that my growth rate is
21 bracketed in this manner by high and low reasonable growth rate proxies clearly
22 indicates a very strong and relatively high growth rate used in my DCF estimate.

² Blue Chip Economic Forecasts, October 10, 2006, at 15.

1 Moreover, my proxy group's projected growth rate of 5.16% is considerably
2 higher than the historical growth rate the proxy groups have achieved over the last
3 five to ten years, and that projected over the next three to five years. As shown on
4 Schedule MPG-4, the historical dividend growth rates of my electric proxy group is
5 substantially lower than the nominal GDP growth.

6 **Q WHY DO YOU BELIEVE YOUR DCF RESULT REFLECTS RATIONAL COMPANY**
7 **FINANCIAL METRICS AND DIVIDEND EXPECTATIONS?**

8 A The dividend fundamentals of companies included in my comparable group show
9 strong and consistent earnings strength in relation to dividends. This indicates that
10 current and projected earnings support dividends and permit the continued
11 predictable growth in dividends.

12 For example, my electric comparable group had a 2005 dividend payout ratio
13 of approximately 66%, and a dividend to book ratio of 6.4%. The dividend payout
14 ratio represents the percentage of earnings paid out as dividends. Traditionally, utility
15 companies have paid out approximately 70% of their earnings as dividends. Value
16 Line's projected dividend to book and payout ratio for my electric proxy group is 6.1%
17 and 60%, respectively. A payout ratio of 60% suggests that my proxy group
18 companies' earnings will support dividends and retain earnings to produce future
19 growth to earnings and dividends at today's current low capital market costs of less
20 than a 100% return on equity.

1 **RISK PREMIUM MODEL**

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

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

10 This risk premium model is based on two estimates of an equity risk premium.
11 First, I estimated the difference between the required return on utility common equity
12 investments and Treasury bonds. The difference between the required return on
13 common equity and the bond yield is the risk premium. I estimated the risk premium
14 on an annual basis for each year over the period 1986 through September 2006. The
15 common equity required returns were based on regulatory commission-authorized
16 returns for electric utility companies. Authorized returns are typically based on expert
17 witnesses' estimates of the contemporary investor-required return.

18 The second equity risk premium method is based on the difference between
19 regulatory commission-authorized returns on common equity and contemporary "A"
20 rated utility bond yields. This time period from 1986 through September 2006 was
21 selected because over that period public utility bond yields have consistently traded
22 at a premium to book value. This is illustrated on my Schedule MPG-5, where the
23 market to book ratio since 1986 for the electric utility industry was consistently above
24 1.0. Therefore, over this time period, regulatory authorized returns were sufficient to
25 support market prices that at least exceeded book value. This is an indication that

1 regulatory authorized returns on common equity supported a utility's ability to issue
2 additional common stock, without diluting existing shares. This further indicates that
3 utilities were able to access equity markets without a detrimental impact on current
4 shareholders.

5 Based on this analysis, as shown on Schedule MPG-6, the average indicated
6 equity risk premium of authorized electric utility common equity returns over U.S.
7 Treasury bond yields has been 5.0%. Of the 21 observations, 15 indicated risk
8 premiums fall in the range of 4.4% to 5.9%. Since the risk premium can vary
9 depending upon market conditions and changing investor risk perceptions, I believe
10 using an estimated range of risk premiums provides the best method to measure the
11 current return on common equity using this methodology.

12 As shown on Schedule MPG-7, the average indicated authorized electric utility
13 common equity returns over contemporary Moody's utility bond yields over the period
14 1986 through September 2006 was 3.64%. Removing the three highest and lowest
15 risk premium estimates produces an electric equity risk premium in the range of 3.0%
16 to 4.4%.

17 **Q BASED ON HISTORICAL DATA, WHAT RISK PREMIUM HAVE YOU USED TO**
18 **ESTIMATE AMERENUE'S COST OF EQUITY IN THIS PROCEEDING?**

19 **A** The equity risk premium should reflect the relative market perception of risk in the
20 utility industry today. I have gauged investor perceptions in utility risk today on
21 Schedule MPG-8. On that schedule, I show the yield spread between utility bonds
22 and Treasury bonds over the last 25 years. As shown on this exhibit, the current
23 utility bond yield spreads for "A" rated and "Baa" rated utility bonds are 1.09% and
24 1.34%, respectively. These utility bond yield spreads over Treasury bond yields are
25 among the lowest yield spreads in the last 25 years, and are below the 25-year

Michael Gorman
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1 average "A" and "Baa" yield spreads of 1.60% and 1.97%, respectively. Hence, this
2 comparison of utility bond yield spreads indicates the market perception of utility risk
3 to be below the average industry risk over this historical time period.

4 Recognizing a robust nature and the current market's low-risk valuation of
5 utility investments, I believe it is appropriate to use an average market equity risk
6 premium to estimate the current market-required return on equity. Hence, I relied on
7 a market equity premium over Treasury bonds of 5.2% (midpoint of the 4.4% to 5.9%
8 range), and an equity risk premium over utility bond yields of 3.7% (midpoint of the
9 3.0% to 4.4% range), as described above.

10 **Q HOW DID YOU ESTIMATE AMERENUE'S COST OF COMMON EQUITY WITH**
11 **THIS MODEL?**

12 **A** I added a projected long-term Treasury bond yield to my estimated equity risk
13 premium over Treasury yields. Blue Chip Financial Forecasts projects the 30-year
14 Treasury bond yield to be 5.1%, and a 10-year Treasury bond to be 5.0%.^{3/} Using the
15 projected 30-year bond yield of 5.1%, and an electric equity risk premium of 5.2%,
16 produces an estimated common equity return of 10.3%.

17 I next added my equity risk premium over utility bond yields to a current 13-
18 week average yield on "Baa" rated utility bonds for the period ending November 11,
19 2006, of 6.26% - rounded to 6.3%. The current "Baa" utility bond yields are
20 developed on Schedule MPG-9. Adding the utility bond equity premium of 3.7% to a
21 "Baa" rated bond yield of 6.3% produces a cost of equity in the range of 10.0%.

22 My risk premium analyses produce an average return estimate of 10.2%,
23 based on the range of 10.0% to 10.3%.

^{3/} Blue Chip Financial Forecasts, November 1, 2006 at 2.

1 **CAPITAL ASSET PRICING MODEL**

2 **Q PLEASE DESCRIBE THE CAPM.**

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

7
$$R_i = R_f + B_i \times (R_m - R_f) \text{ where:}$$

8 R_i = Required return for stock i

9 R_f = Risk-free rate

10 R_m = Expected return for the market portfolio

11 B_i = Beta - Measure of the risk for stock;

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

18 The risks that cannot be eliminated when held in a diversified portfolio are
19 nondiversifiable risks. Nondiversifiable risks are related to the market in general and
20 are referred to as systematic risks. Risks that can be eliminated by diversification are
21 regarded as nonsystematic risks. In a broad sense, systematic risks are market risks,
22 and nonsystematic risks are business risks. The CAPM theory suggests that the
23 market will not compensate investors for assuming risks that can be diversified away.
24 Therefore, the only risk that investors will be compensated for are systematic or
25 nondiversifiable risks. The beta is a measure of the systematic or nondiversifiable
26 risks.

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

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

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

5 **A I used Blue Chip Financial Forecasts' projected 30-year Treasury bond yield of 5.1%.**
6 **The current 30-year bond yield is 5.1% (Blue Chip Financial Forecasts, November 1,**
7 **2006 at 2).**

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

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

18 Treasury bond yields, however, do include risk premiums related to unantici-
19 pated future inflation and interest rates. Therefore, a Treasury bond yield is not a
20 risk-free rate. Risk premiums related to unanticipated inflation and interest rates are
21 systematic or market risks. Consequently, for companies with betas less than one,
22 using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis
23 can produce an overstated estimate of the CAPM return.

Michael Gorman
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1 Q WHAT BETA DID YOU USE IN YOUR ANALYSIS?

2 A I relied on the group median Value Line beta estimate for my electric proxy group of
3 0.80, as shown on my Schedule MPG-10.

4 Q DO YOU RECOMMEND A CAREFUL CONSIDERATION OF A UTILITY BETA FOR
5 USE IN A CAPM STUDY?

6 A Yes. Utility betas have been increasing over the last five years, as shown on
7 Schedule MPG-10, largely because electric utility stocks have outperformed the
8 overall market. While this increasing beta gives the impression of increasing risk, that
9 interpretation is incorrect.

10 Indeed, electric utility risk factors have been decreasing as these companies
11 revert to a back-to-basics investment strategy that lower their operating risks, and
12 they have been divesting non-regulated businesses to reduce debt and strengthen
13 balance sheets, which is lowering risk. Value Line notes this in a recent review of the
14 electric utility industry. Value Line states as follows:

15 **"Better Finances**

16 This decade, utilities have distanced themselves from
17 risky unregulated business forays, including commodities
18 trading, foreign energy operations, water services and
19 aircraft leasing. Currently, *Dominion Resources* plans to
20 sell its oil and gas production business, *Duke* is spinning
21 its mid-stream gas operations to shareholders, *Northeast*
22 *Utilities* is divesting its merchant power generation
23 business, and *Progress Energy* is shedding power plant
24 and natural gas assets. Such actions have improved
25 earnings performance and strengthened capital ratios.
26 Companies are targeting a nearly equal weighting of debt
27 and equity on their balance sheets, a goal that should be
28 met by 2009-2011.

29 Revenue-backed and tax-exempt bonds will provide
30 economical funding for planned capital improvements.
31 This will further support overall finances." (The Value Line
32 Investment Survey, Electric Utility (East) Industry,
33 December 1, 2006, p. 157)

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1 Further, Value Line notes an increase in the common equity ratio and fixed
2 charge coverage ratio over the last three to five years. These Value Line parameters
3 indicate lower financial risk and stronger earnings and cash flow coverages of
4 financial obligations. This reduces utilities' risk and limits the variability to market
5 factors that can inhibit the utilities' ability to meet investors' earnings and cash flow
6 expectations.

7 These risk reductions have resulted in robust stock return performance for
8 electric utility stocks, as shown on my Schedule MPG-11. As illustrated on this
9 schedule, electric utility stocks have out performed the market over the last five years.
10 This utility stock performance has contributed to an increase in betas and given the
11 impression the electric utility stock variability is comparable to the overall market, but
12 other risk factors clearly show that that is a false indication. Reliance on the group
13 median beta, which is a beta that is stronger than the beta has been over the last five
14 years, and is more reflective of the majority of the individual company betas included
15 in my proxy group.

16 **Q HOW DID YOU DERIVE YOUR MARKET PREMIUM ESTIMATE?**

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

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

1 The Ibbotson and Associates' Stocks, Bonds, Bills and Inflation 2006 Year
2 Book publication, at 120, estimates the historical arithmetic average real market
3 return over the period 1926-2005 as 9.1%. A current five-year consensus analyst
4 inflation projection, as measured by the Consumer Price Index, is 2.3% (Blue Chip
5 Financial Forecasts, November 1, 2006 at 2). Using these estimates, the expected
6 market return is 11.6%⁴. The market premium then is the difference between the
7 11.6% expected market return, and my 5.1% risk-free rate estimate, or 6.5%.

8 The historical estimate of the market risk premium was also estimated
9 by Ibbotson and Associates in the Stock, Bonds, Bills and Inflation, 2006 Year
10 Book at 31. Over the period 1926 through 2005, Ibbotson's study estimated that the
11 arithmetic average of the achieved total return on the S&P 500 was 12.3%, and the
12 total return on long-term Treasury bonds was 5.8%. The indicated equity risk
13 premium is 6.5% (12.3% - 5.8% = 6.5%).

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

15 A As shown on Schedule MPG-12, based on the market risk premium of 6.5%, a risk
16 free rate of 5.1%, and a beta of 0.80, the CAPM estimated return on equity is 10.3%.

17 **RETURN ON EQUITY SUMMARY**

18 **Q BASED ON THE RESULTS OF YOUR RATE OF RETURN ON COMMON EQUITY**
19 **ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO**
20 **YOU RECOMMEND FOR AMERENUE?**

21 A Based on my analyses, I estimate AmerenUE's current market cost of equity to be
22 10.0%.

⁴ $(1.023) * (1.091) - 1 = 11.6\%$.

TABLE 2	
<u>Return on Common Equity Summary</u>	
<u>Description</u>	<u>Percent</u>
Constant Growth DCF	9.2%
Risk Premium	10.2%
CAPM	10.3%

1 My recommended return on equity of 9.8% is at the midpoint of my estimated
2 return on equity range for AmerenUE of 9.2% to 10.3%. The high end of my
3 estimated range is based on my CAPM and risk premium analyses, and the low end
4 of my estimated range is based on my DCF analysis.

5 **FINANCIAL INTEGRITY**

6 **Q WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT**
7 **AMERENUE'S CURRENT BOND RATING FROM S&P?**

8 A Yes. I have reached this conclusion by comparing the key credit rating financial
9 ratios for AmerenUE at the Company's proposed capital structure and my return on
10 equity to S&P's benchmark financial ratios for an "A" rated utility and a "BBB" rated
11 utility with an S&P business profile score of 5, AmerenUE's profile score.

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

14 A S&P evaluates a utility's credit rating based on an assessment of its financial and
15 business risks. A combination of financial and business risks equates to the overall
16 assessment of the Company's total credit risk exposure. S&P publishes a matrix of

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

3 S&P rates a utility's business risk based on a business profile score of 1,
4 lowest risk, up to 10, highest risk. Integrated electric utilities typically have a business
5 profile score from S&P of 4, 5 or 6, while T&D electric utilities' profile scores primarily
6 range from 2 to 4.

7 S&P publishes ranges for three primary financial ratios that it uses as
8 guidance in its credit review for utility companies. The three primary financial ratio
9 benchmarks it relies on in its credit rating process include: (1) funds from operations
10 ("FFO") to debt interest expense, (2) FFO to total debt, and (3) total debt to total
11 capital.

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

14 **A** I calculated each of S&P's financial ratios based on AmerenUE's cost of service for
15 retail operations, including the debt interest attributable to CWIP accruing AFUDC.
16 While S&P would normally look at consolidated AmerenUE corporate financial ratios
17 in its credit review process, my investigation in this proceeding is to judge the
18 reasonableness of my proposed cost of capital for AmerenUE's Missouri utility
19 regulated operations. Hence, I am attempting to determine whether the rate of return
20 and cash flow generation opportunity reflected in my proposed cost of capital for
21 AmerenUE will support its investment grade bond ratings and financial integrity.

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

3 **A The S&P financial metric calculation for AmerenUE is developed on my Schedule**
4 **MPG-13. In constructing this analysis, I reflected my recommended 9.8% return on**
5 **equity and the Company's recommended capital structure.**

6 As shown on my Schedule MPG-13, based on an equity return of 9.8%,
7 AmerenUE will be provided an opportunity to produce a Funds From Operations
8 ("FFO") to debt interest expense ratio of 4.9x. This FFO to interest coverage ratio is
9 above the range of S&P's benchmark ratio guideline of 4.5x to 3.8x for an "A" rated
10 utility company with a business profile score of 5.

11 AmerenUE's total debt ratio to total capital is 45.8% at the Company's
12 proposed capital structure. This is within S&P's "A" rated utility range of 42% to 50%.

13 Finally, AmerenUE's retail operations FFO to total debt coverage at a 9.8%
14 equity return would be 21.2%, which is near the top (strong) of S&P's financial metric
15 range of 15% to 22% for a "Baa" rated utility company.

16 At my proposed capital structure and return on equity, AmerenUE's financial
17 metrics are supportive of an "A" utility bond rating, which is an improvement to
18 AmerenUE's current bond rating of "BBB."

19 **Q HOW WOULD AMERENUE'S CREDIT METRICS LOOK IF THE COMMISSION**
20 **AWARDED AMERENUE A RETURN ON EQUITY AT THE LOW END OF YOUR**
21 **RECOMMENDED RANGE?**

22 **A If the Commission awarded AmerenUE a return on equity at the low end of my**
23 **recommended range, its credit metrics would still support its current "BBB" bond**
24 **rating. Specifically, with a return on equity of 9.2%, AmerenUE's FFO to debt interest**
25 **rate coverage ratio would be reduced only to 4.8x, which is still consistent with an "A"**

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1 bond rating; its FFO to total debt would drop to 20%, which is still a strong "BBB"
2 bond rating, and; its total debt ratio would not be impacted by a lower return on
3 equity.

4 As such, a return on equity at the low end of my recommended 9.2% to 10.2%
5 return on equity range will support AmerenUE's financial integrity, its current bond
6 rating, and fairly compensate investors for its investment risk.

7 **RESPONSE TO AMERENUE WITNESSES'**
8 **RETURN ON EQUITY RECOMMENDATIONS**

9 **Q WHAT RETURN ON COMMON EQUITY IS AMERENUE PROPOSING IN THIS**
10 **PROCEEDING?**

11 **A** AmerenUE is proposing a return on common equity of 12.0%. AmerenUE's proposed
12 return on equity is based on the analyses of Ms. McShane and Dr. Vander Weide.

13 I will respond to these two witnesses' development of a proxy group and
14 market cost of equity for the proxy group separately. Both witnesses propose a
15 financial risk adjustment to the proxy group's estimated market required return to
16 derive a fair return for AmerenUE's book capital structure used to set rates in this
17 proceeding. This financial risk adjustment is fundamentally flawed, is inconsistent
18 with traditional ratemaking methods of establishing fair compensation for regulated
19 utility operations, and is based on flawed and erroneous assessment of financial risk.
20 For the reasons set forth below, Dr. Vander Weide's and Ms. McShane's own
21 analyses, excluding their erroneous equity return add-ons, confirm my finding that a
22 reasonable return on equity for AmerenUE in this proceeding is under 10%.

1 **EQUITY RETURN ADD-ON FOR DIFFERENTIALS**
2 **IN FINANCIAL AND CAPITAL STRUCTURE RISK**

3 **Q ARE AMERENUE'S RATE OF RETURN WITNESSES PROPOSING A RETURN ON**
4 **EQUITY ADD-ON TO REFLECT THEIR BELIEF THAT AMERENUE'S FINANCIAL**
5 **RISK OR CAPITAL STRUCTURE RISK IS GREATER THAN THAT OF THE**
6 **PROXY GROUPS AND THEREFORE JUSTIFY A RETURN ON EQUITY ADD-ON?**

7 **A** Yes. AmerenUE witness McShane proposes to increase her 11.0% return on equity
8 estimated from her proxy groups, to a recommended 12.0% return for AmerenUE in
9 this proceeding. Ms McShane argues that a one-percentage point add-on premium is
10 appropriate because her proxy electric utility sample market value common equity
11 ratio is 62%, which exhibits less financial risk than AmerenUE's book value common
12 equity ratio of 52%. To account for this difference in the value of common equity
13 relative to AmerenUE's book value common equity, she argues that a return on equity
14 add-on premium is appropriate.

15 Similarly, AmerenUE's witness Dr. Vander Weide recommends to increase his
16 estimated return on equity of 11.5% for his proxy group up to 12.2% for AmerenUE
17 for the same reason. Dr. Vander Weide asserts that this return on equity add-on is
18 appropriate because AmerenUE's filed capital structure in this proceeding embodies
19 greater financial risk than embodied in the common equity ratio estimate for his
20 comparable proxy companies (at 6),

21 **Q HAVE DR. VANDER WEIDE AND MS. MCSHANE RECOMMENDED REASON-**
22 **ABLE ADJUSTMENTS TO THEIR PROXY GROUPS' ESTIMATED RETURN ON**
23 **EQUITY TO PRODUCE A FAIR RETURN ON EQUITY FOR AMERENUE IN THIS**
24 **PROCEEDING?**

1 A No. The witnesses' return on equity adjustments are flawed and should be rejected
2 for several reasons, including the following:

- 3 • The witnesses do not propose return on equity adjustments based on total
4 investment risk assessment of AmerenUE in comparison to the proxy groups.
5 Rather, the return on equity adjustments are based on their estimate of
6 financial risk alone.
- 7 • The witnesses' assessment of financial risk is flawed because it does not
8 properly evaluate the financial risk differential between the proxy groups and
9 AmerenUE.
- 10 • The witnesses' financial risk assessment is flawed because it fails to
11 recognize that a company's market stock price and market value are tied to its
12 earnings and cash flow on book value. Hence, book value financial risk is
13 already capturing a company's stock price.
- 14 • The witnesses' proposed adjustment is actually a thinly veiled market to book
15 ratio adjustment to the return on equity estimate. Market to book ratio
16 adjustments for regulated authorized returns on equity are widely rejected as
17 flawed and unreasonable and should also be rejected in this proceeding.

18 Q WHY DO YOU BELIEVE THE FINANCIAL RISK EQUITY RETURN ADD-ON IS
19 FLAWED BECAUSE IT DOES NOT REFLECT TOTAL INVESTMENT RISK?

20 A Witnesses McShane and Vander Weide state they are adjusting the proxy group's
21 return on equity to reflect the difference between AmerenUE's market capital
22 structure or financial risk and its book capital structure or financial risk. A measure of
23 this differential risk is based on a market value common equity ratio in comparison to
24 a book value common equity ratio. As such, the witnesses are completely ignoring all
25 other and relevant risk factors in developing this proposed return premium.

26 Specifically, the witnesses' measure of financial risk ignores the difference in
27 operating risk of AmerenUE in comparison to the other companies, which is
28 significant. Security analysts' evaluation of a utility company's risk considers total
29 investment risk assessment not only a limited financial risk assessment that the
30 AmerenUE witnesses are focusing on. For example, the Value Line Investment

1 Survey in reviewing different company stocks considers stock price variability,
2 industry fundamentals and financial risk measures including fixed charge coverage
3 ratios, balance sheet leverage, and earnings interest coverage.

4 S&P in its credit rating review of the utilities considers both business and
5 financial risk in assessing the overall credit standing of the utility. S&P's business risk
6 considers regulatory risk, management risk, competitive risk, as well as the utility's
7 supply and customers' diversity. All of these risk assessments are an indication of
8 the utility's ability to generate revenue, control costs and manage cash flow needed to
9 support financial obligations. In assessing financial risk, S&P also considers balance
10 sheet risk and earnings, and cash flow coverage of fixed obligations.

11 In significant contrast, witnesses McShane and Vander Weide only consider
12 capital structure financial risk in supporting their proposed equity return add-on.

13 **Q WHY DO YOU BELIEVE THE WITNESSES HAVE INACCURATELY MEASURED**
14 **FINANCIAL RISK?**

15 **A** The witnesses have inaccurately measured financial risk because it does not reflect
16 investors' expectations or security analysts' assessment of the financial risk of the
17 underlying enterprises. Hence, their methodology is fundamentally flawed and does
18 not accurately evaluate differences in financial risk.

19 Specifically, security analysts' reports typically identify the utilities' financial
20 risk in terms of capital structure leverage risk, and cash and earnings coverage of
21 obligations (i.e., debt, lease and contractual). For example, capital structure risk is
22 certainly a significant risk element of total financial risk, but other important
23 considerations include how expensive is the debt interest, and the utility's earnings
24 and cash flow coverage of the debt interest obligation. If the utility is able to issue
25 debt at a below industry average interest rate, and its balance sheet risk is

1 comparable to other companies, it is possible for the utility to have lower financial risk
2 even though it has comparable capital structure leverage risk.

3 Further, utilities have financial risk in addition to the utility's balance sheet risk.
4 For example, S&P also considers off-balance-sheet financial obligations for such
5 things as long-term purchased power agreements, and operating lease agreements
6 in evaluating financial risk. To the extent AmerenUE has less off-balance-sheet
7 purchased power contracts, the utilities included in Ms. McShane's and Dr. Vander
8 Weide's comparable groups could have greater financial risk even if they had
9 comparable balance sheet risk. The significance of this off-balance-sheet debt was
10 ignored by Ms. McShane and Dr. Vander Weide.

11 For all of these reasons, Ms. McShane and Dr. Vander Weide have not
12 provided a complete and thorough review of differences in financial risk between the
13 proxy groups and AmerenUE. Therefore, their conclusion that AmerenUE's return on
14 equity should be increased in order to compensate for differences in financial risk is
15 based on the flawed and erroneous analysis, and does not properly consider total
16 investment risk.

17 **Q IS IT CORRECT TO CONCLUDE THAT THERE IS A DIFFERENCE BETWEEN**
18 **AMERENUE'S MARKET VALUE FINANCIAL RISK AND BOOK VALUE**
19 **FINANCIAL RISK?**

20 **A** No. A utility's market value of equity is based on the earnings and cash flow strength
21 of the underlying stock. A utility's underlying stock earnings and cash flow are based
22 on its book value financial risk. Hence, the stock price already reflects its book value
23 financial risk, hence no adjustment to the equity return is needed.

24 Specifically, to the extent a company has higher book leverage risk, there is
25 greater uncertainty of that company's ability to produce earnings and cash flow. That

1 greater uncertainty in earnings and cash flow would be reflected by the stock market
2 price and hence market value equity ratio.

3 It is not accurate for the Ameren witnesses to claim there is material difference
4 in the market value financial risk and the book value financial risk. Indeed, the market
5 value of the underlying stock is based on the book value earnings and cash flow of
6 the company and hence book value leverage risk or book value equity ratio.

7 **Q WHY DO YOU BELIEVE THAT THE WITNESSES' SO-CALLED FINANCIAL RISK**
8 **ADJUSTMENT IS ACTUALLY A MARKET-TO-BOOK RATIO ADJUSTMENT IN**
9 **DISGUISE?**

10 **A** The witnesses' financial risk adjustment is essentially adjusting a market return on
11 equity in order to apply it to a book value. They are in effect asserting that since the
12 market value of a utility's stock is greater than its book value, the market return when
13 applied to book value must be adjusted.

14 **Q IS A MARKET-TO-BOOK RATIO ADJUSTMENT REASONABLE?**

15 **A** No. A market-to-book ratio adjustment will provide the utility with excessive earnings
16 opportunities, which results in unjust utility prices. Consider an example. Using Ms.
17 McShane's return estimate, and ignoring all the flaws I have listed above, assume
18 AmerenUE is faced with two alternative investment opportunities: (1) re-purchase its
19 own stock or (2) make incremental investments in utility plant. These are two
20 comparable risk investments, because a utility stock price is based on its return on
21 utility plant.

22 If Ms. McShane's recommendations were adopted, AmerenUE could earn
23 12% by making utility plant investments, but could only earn a return of 11.0% by
24 repurchasing its own stock. The 12% utility plant return includes Ms. McShane's 100

1 basis point financial risk adjustment that would be applied to book value utility plant
2 investments. The 11.0% return would be based on market investments including
3 utility stock.

4 In order to avoid this economic incentive to over-invest in utility plant because
5 it provides an inflated risk adjusted return opportunity, the Missouri Public Service
6 Commission should reject the Ameren witnesses' proposed financial risk add-on to a
7 return on equity estimated from the proxy groups. Excluding this equity risk add-on,
8 in the example above, AmerenUE would be provided an opportunity to earn the same
9 rate of return on incremental utility plant investments of 11.0%, as it could earn by
10 making a comparable risk of repurchasing its own stock, 11.0%. Regulation attempts
11 to mimic a competitive marketplace, and in a competitive marketplace, a company
12 cannot earn windfall profits by expanding its investments to meet customer demand.
13 In order to ensure that AmerenUE's rates are just and reasonable in this proceeding,
14 Ameren's return opportunities for incremental plant investments should be
15 comparable to its return opportunities of repurchasing its own stock. Hence, no
16 financial risk adjustment, or market to book ratio adjustment to the authorized return
17 on equity should be allowed.

18 **REVIEW OF MS. MCSHANE'S RETURN ON EQUITY ESTIMATE**

19 **Q HOW DID MS. MCSHANE ARRIVE AT HER 12.0% RETURN ON EQUITY**
20 **REQUEST FOR AMERENUE?**

21 **A** Ms. McShane's recommendation is based on a discounted cash flow analysis, a risk
22 premium analysis, and comparable earnings analysis. Using these models and a
23 group of companies Ms. McShane estimates to be comparable in risk to AmerenUE,
24 she estimates a market required return for her comparable risk proxy groups of

1 11.0%. She then adds 100 basis points to this proxy group estimated return to reflect
2 her belief that the authorized return on equity should be increased by a 100 basis
3 point premium to reflect a financial risk premium as discussed above.

4 Table 3, Column 1 below summarizes Ms. McShane's return on equity
5 findings, and Column 2 shows how her recommendation would change with
6 appropriate adjustments to her DCF and risk premium studies, and a rejection of her
7 comparable earnings analysis for the reasons set forth below.

TABLE 3			
<u>AmerenUE Return on Equity Estimates</u>			
<u>Line</u>	<u>Description</u>	<u>McShane Return (1)</u>	<u>Adjusted Return (2)</u>
1	DCF	10.0%	9.5%
2	CAPM Analysis	12.0%	10.2%
3	Equity Risk Premium Test	11.25%	10.1%
4	Average	11.0%	9.9%
5	Comparable Earnings Analysis	14.0% - 14.6%	Reject

8 As shown above and discussed below, with reasonable inputs and the
9 rejection of unreasonable return on equity "add-ons," Ms. McShane's methodologies
10 support my 9.8% recommended return on equity.

11 **Q IS MS. MCSHANE'S 100 BASIS POINT FINANCIAL RISK RETURN ADD-ON**
12 **REASONABLE?**

13 **A** No. Her financial risk premium is flawed for the reasons discussed above and should
14 be rejected.

1 **Q PLEASE DESCRIBE MS. MCSHANE'S DCF STUDY.**

2 A Ms. McShane performed a constant growth and two-stage growth DCF studies on her
3 proxy group companies. Ms. McShane's traditional DCF result for these companies
4 falls in the range of 9.2% to 11.0%, as shown on Schedules KCM-E4-1 and KCM-E5-
5 1 of her testimony.

6 The results of her two-stage growth DCF model produced a return of 9.4% as
7 developed on her Schedule KCM-E6-1.

8 Ms. McShane then summarizes her constant growth and two-stage growth
9 models and concludes that these unadjusted average DCF results indicate a return
10 on equity of 10.0% (McShane direct at 40).

11 **Q DO MS. MCSHANE'S ESTIMATED DCF RETURNS SUPPORT A 10.0% RETURN**
12 **ON EQUITY?**

13 A No. Ms. McShane's three DCF return estimates indicate a return on equity in the
14 range of 9.4% up to 10.7%. The high end of that range is excessive because current
15 consensus analysts' growth rate projections are not sustainable and produce
16 excessive DCF return estimates.

17 Specifically, on her Schedule KCM E4-1, her mean DCF return of 10.7% is
18 based on acceptable model inputs, however, for reasons set forth below, the group
19 average IBES growth rate of 6.7% overstates a reasonable estimate of a long-term
20 sustainable growth rate for utility companies at this time. As a result, since current
21 consensus growth rates do not represent reasonable sustainable long-term growth
22 rate estimates, primary weight should be given to Ms. McShane's two-stage DCF
23 model and little to no weight given to her constant growth DCF model.

24 On her Schedule KCM E5-1, she shows a group average mean return
25 estimate of 11.0%. However, that average return estimate is significantly biased by

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1 one estimate that blatantly exaggerates a fair return on equity for regulated utility
2 operations. Specifically, TXU Corp. produced a DCF return using a Value Line
3 growth rate estimate of 30%, which produced a DCF return of 34.0%. TXU Corp.'s
4 earnings reflect unregulated merchant generation, including nuclear generation
5 subsidiaries, as well as retail regulated operations. Further, TXU Corp.'s earnings are
6 recovering, therefore, three to five-year earnings growth projections represent
7 accelerated growth to reflect earnings recovery, rather than sustainable long-term
8 growth rate estimates.

9 Removing TXU Corp. from Ms. McShane's Schedule KCM E-5-1 would lower
10 the group average mean estimated DCF return of 11.0% down to 9.6%. A 9.6%
11 return estimate reflects the mean growth rate estimate of approximately 4.9%, which
12 is a much more reasonable estimate of long-term sustainable growth for utility
13 companies. It also corroborates her two-stage DCF result using IBES growth rates.

14 I believe that Ms. McShane's two-stage DCF result produces the most
15 reasonable estimate because it reflects the high expected three to five-year growth of
16 the companies, and a growth rate declining to a lower stainable level thereafter. The
17 two-stage model produces a DCF return of 9.4%. The average growth rate in her
18 Value Line estimate, excluding TXU, also produces a reasonable result of 9.6%.
19 However, I am concerned about the reliance on Value Line because it is a single
20 growth estimate rather than a consensus of analysts' growth projections. Neverthe-
21 less, giving some weight to the adjusted Value Line DCF return of 9.6%, and primary
22 weight to her consensus analyst growth rate two-stage DCF return estimate of 9.4%
23 would indicate a DCF return of 9.5%.

1 **Q PLEASE EXPLAIN WHY MS. MCSHANE'S IBES GROWTH RATE ESTIMATE OF**
2 **6.7% FOR HER PROXY GROUP OVERSTATES A REASONABLE SUSTAINABLE**
3 **LONG-TERM GROWTH RATE ESTIMATE FOR A DCF MODEL AT THIS TIME.**

4 **A Ms. McShane's DCF study shown on Schedule KCM E4-1 reflects a group average**
5 **growth rate of 6.7%. Her 6.6% growth rate is shown on her Schedule KCM-E4-1. On**
6 **that schedule, under Column 4, the 6.7% average growth rate is significantly**
7 **impacted by several companies that have abnormally high growth rates over the next**
8 **three to five years. Those abnormally high growth rates include Entergy Corp. of**
9 **10.1%, PNM Resources of 10.0%, PPL Corp. of 9.1%, and TXU Corp. of 10.9%.**

10 These companies' three to five-year growth rate projections by IBES, which
11 may be appropriate for the three to five-year time period forecasted, are not
12 reasonable estimates of long-term sustainable growth. Indeed, these growth rates
13 reflect significant non-regulated investment activities, such as for Exelon Corp. and
14 Entergy's non-regulated nuclear merchant generation subsidiaries that have higher
15 risk and much higher earnings growth potential than do regulated utility operations.
16 Also, Entergy's earnings growth rate over the next three to five years will reflect
17 recovery to the corporate earnings caused by hurricane damage and a bankrupt
18 operating utility affiliate in New Orleans, Louisiana. As such, lower earnings caused
19 by these unusual events, Entergy's earnings will recover to a sustainable level, which
20 will indicate an abnormally high growth rate during this earnings recovery period.
21 However, the earnings growth over the next three to five years is not a sustainable
22 long-term growth rate estimate for Entergy.

23 Further, Edison International has strong earnings growth largely attributable to
24 its unregulated subsidiary. In a similar fashion, TXU Corp. has non-regulated
25 generation investment in Texas that provides very strong earnings growth given

1 today's high gas prices. Further, TXU is evaluating significant additions to its coal-
2 fired generation in Texas that likely have very strong earnings growth prospects.

3 These earnings growth prospects are not characteristic of regulated low-risk
4 utility operations. Further, these growth rates are not sustainable even for high
5 growth non-regulated investment opportunities. The growth rate outlook for these
6 companies in the merchant generation side of the business likely reflect the need for
7 new generating capacity in many regions of the country, but will produce high
8 margins if the demand is met by solid-fuel resources. These margins, of course, will
9 depend on the level of natural gas prices and market clearing prices in those regions,
10 but currently the market appears to have the sense of a robust outlook for these types
11 of investments. After capacity reserve margins and additional base load investments
12 are made around the country, it is reasonable to expect that these growth rates would
13 decline to more long-term sustainable levels in the future. In any event, these growth
14 rates are not appropriate for low risk regulated utility operations.

15 As such, Ms. McShane's DCF growth rates using her IBES growth rates do
16 not reasonably reflect long-term sustainable growth rate estimates for her proxy
17 group. Therefore, I recommend rejection of this DCF estimate as an overstatement of
18 utilities' long-term sustainable growth and an overstatement of a reasonable DCF
19 return estimate.

20 **Q ARE THERE OTHER REASONS TO REJECT HER CONSENSUS GROUP IBES**
21 **GROWTH RATE ESTIMATES?**

22 **A** Yes. Her proxy group average IBES growth rate of 6.7% significantly exceeds the
23 maximum sustainable long-term growth rate. Specifically, her long-term utility growth
24 cannot exceed the growth in their service area economy. Utilities make investments
25 in utility plant to meet sales growth. Sales growth normally attracts economic activity

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1 in their service area. Currently, the projected growth rate of the U.S. economy is
2 approximately 5.1%. (Blue Chip Financial Forecasts, November 2006, page 2)
3 Hence, it is neither rational nor reasonable to expect these companies' long-term
4 growth rates to average 6.7% when the economy they serve is growing at 5.1%. For
5 this reason, it is appropriate and rational to expect that while these companies may
6 grow at an accelerated rate over the next three to five years, that growth rate will
7 eventually subside to a more long-term sustainable growth level. Ms. McShane's
8 two-stage growth rate reflects this rational expectation and produces a much more
9 reasonable DCF return estimate than does her constant growth rate DCF model,
10 which relies on an unsustainable high short-term growth rate.

11 **Q PLEASE SUMMARIZE MS. MCSHANE'S CAPM ANALYSIS.**

12 **A** Ms. McShane relies on the risk-free rate in the range of 5.0% to 5.5% (p. 30), a beta
13 of 0.90 (p. 36), and a market risk premium of 7.5% (p. 35). Using this data, she
14 concludes that her CAPM analysis indicates a return for AmerenUE in the range of
15 11.7% to 12.25 (p. 37).

16 **Q IS MS. MCSHANE'S CAPM ANALYSIS REASONABLE?**

17 **A** No. I have two major issues with Ms. McShane's CAPM analysis. First, her market
18 risk premium is significantly overstated. Second, her use of a beta estimate of 0.90
19 significantly overstates the risk of a regulated utility operation, such as AmerenUE.

20 **Q HOW WOULD MS. MCSHANE'S CAPM ANALYSIS CHANGE WITH A MORE**
21 **REASONABLE MARKET RISK PREMIUM ESTIMATE AND A BETA THAT**
22 **REFLECTS LOW RISK REGULATED OPERATIONS?**

1 A Adjusting Ms. McShane's CAPM analysis to reflect the market risk premium of 6.5%,
2 the current projected 10-year Treasury bond yield of 5.01% and a beta of 0.80 would
3 reduce her CAPM return estimate of 11.75% to 12.0%, down to 10.2%. The
4 appropriateness of this alternative market risk premium and beta estimate are
5 discussed below.

6 Q HOW DID MS. MCSHANE DEVELOP HER MARKET RISK PREMIUM RANGE IN
7 THE DEVELOPMENT OF HER CAPM?

8 A She used two methods to estimate a market risk premium. First, she estimated the
9 difference between the income return on 20-year Treasury securities, and the total
10 achieved return on equity securities over the period 1926 – 2005 (7.1%) and 1947 –
11 2005 (7.0%). She then increased the market risk premium from 7.0% up to 7.5%, by
12 including a 50 basis points adder. She argued that the adder was appropriate
13 because the historical market risk premium was based on the difference between a
14 10-year Treasury bond yield and a 20-year Treasury bond yield (McShane direct, pp.
15 33-34).

16 Her forward-looking equity risk premium was based on a DCF analysis of the
17 S&P 500 and her projected risk-free rate. Using a dividend yield on the S&P 500 of
18 1.9%, and a growth rate of 10.6%, she estimated a DCF return for the S&P 500 of
19 12.7%. From this, she subtracted her 10-year Treasury note forecasted yield of 5.0%
20 to 5.5%, to produce a forward-looking market risk premium in the range of 7.2% -
21 7.7%. Based on these two studies, she concludes the market risk premium is 7.5%
22 (McShane direct, p. 35).

1 Q IS MS. MCSHANE'S HISTORICAL MARKET RISK PREMIUM ESTIMATE OF 7.5%
2 REASONABLE?

3 A No. There are several flaws in Ms. McShane's historical market risk premium. First,
4 the source of her data, Ibbotson and Associates', estimates a historical total return on
5 equity securities above the achieved return on Treasury bonds to be 6.5% for the
6 period 1927 through 2005.⁵ This 6.5% equity risk premium is the actual historical
7 market risk premium earned on market investments (12.3%) relative to the returns
8 earned on long-term Treasury bond investments. (5.8%)

9 In contrast, Ms. McShane's market risk premium is overstated because she
10 used only income Treasury returns, not total returns on Treasury investment. This is
11 not reasonable for at least two reasons.. First, the income return on Treasury
12 securities is a forward-looking expected return if the Treasury bond is held to maturity.
13 The income return ignores annual capital gains/losses on Treasury securities. In
14 contrast, her total return on equities is a backward looking historical review that
15 includes both income return and capital gains/losses. Hence, her market risk
16 premium is based on the mismatch of a forward-looking expected income return on
17 Treasuries, and historical actual achieved total returns on market equity securities.
18 This mismatch of forward-looking income returns and historical achieved total returns
19 inflates her estimated market risk premium.

20 Second, her use of only the income return on Treasury bonds represents an
21 investment annual performance that cannot rationally be expected by investors.
22 Specifically, investors understand that investments in Treasury bond securities will
23 produce both cash coupon yields, based on the income return, and the expectations
24 of bond price changes on an annual basis over the expected holding period. Hence,

⁵ Ibbotson SBBI 2006 Yearbook at 31.

1 a risk free proxy based on an investment that is not reflective of investors'
2 expectations cannot rationally reflect the market's risk free rate built into market
3 security prices. Hence, her development of an equity risk premium is simply based
4 on an unrealistic premise and does not capture rational expectations.

5 Third, Ms. McShane's proposal to increase the market risk premium by 50
6 basis points to reflect the difference between a 20-year Treasury yield and a 10-year
7 Treasury yield is without merit and is a blatant manipulative adjustment designed to
8 increase her CAPM return estimate. The projected interest rates on 10-year 20-year
9 and 30-year long-term Treasury securities are currently nearly identical. For
10 example, the Blue Chip Financial Forecasts' return on 10-year Treasury bond yields
11 is 5.0%, and its projected return on 30-year Treasury bonds is 5.1% (The Blue Chip
12 Financial Forecasts, November 1, 2006 at 2). Hence, Ms. McShane's 0.50%
13 historical adder spread of 10-year and 20-year Treasury yields is not reflective of the
14 current market or forecasted yields next year. Therefore, adding the claimed
15 historical Treasury spread biases and inflates her CAPM return estimate.

16 **Q IS MS. MCSHANE'S FORWARD-LOOKING MARKET RISK PREMIUM ESTIMATE**
17 **REASONABLE?**

18 **A** No. Ms. McShane's forward-looking market risk premium is also inflated and
19 unreliable. Ms. McShane's DCF return on the market of 12.7% is wildly exaggerated
20 and not reasonable. Indeed, Ms. McShane's S&P 500 DCF return estimate is driven
21 by a growth rate estimate on the market of 10.6% (at 35). This S&P 500 growth rate
22 is over twice the expected long-term growth of the overall U.S. economy as measured
23 by the GDP of 5.1%. Further, this growth rate is significantly higher than the historical
24 growth rate of the market of approximately 7.8%, as measured from the capital gains

1 of Ibbotson & Associates over the period 1926 through the end of 2005 (SBBi 2006
2 Yearbook at 119).

3 This S&P 500 growth rate Ms. McShane relied on is not a reasonable long-
4 term sustainable growth rate projection for the S&P 500. By significantly overstating
5 the S&P 500 growth rate estimate as she has done, Ms. McShane has significantly
6 overstated the DCF return on the market, and thus significantly overstates the market
7 risk premium estimate.

8 **Q DOES VALUE LINE PROJECT A RETURN ON MARKET EQUITIES?**

9 **A** Yes. Value Line's data includes a current yield on 1,700 securities followed by the
10 Value Line Investment Survey of 1.6%, and three to five-year projected capital gains
11 for the same stock index of 35%.⁶ This data indicates an expected total market return
12 over the next three to five years of 9.4%. The Value Line projection is much different
13 than the 12.6% estimated by Ms. McShane. Using a 5.5% risk-free rate and market
14 expected return of 10.4%, indicates a market risk premium of 3.9%.

15 Using the Value Line market return projection and Ms. McShane's market
16 return projections as high/low estimates, indicates an average market return estimate
17 of approximately 11.1% $((12.7 + 9.4)/2)$. Subtracting from this the projected Treasury
18 bond yield of 5% would indicate a market risk premium of around 6.1%. This
19 projected market risk premium is very similar to the historical achieved market risk
20 premium of 6.5% that I used in my analysis and therefore corroborates the
21 reasonableness of that historical actual market risk premium.

⁶ The Value Line Investment Survey, November 24, 2006, Summary and Index.

1 Q PLEASE DESCRIBE MS. MCSHANE'S UTILITY EQUITY RISK PREMIUM
2 STUDIES.

3 A Ms. McShane estimated a return for AmerenUE of 11.5% based on her equity risk
4 premium studies. She conducted two studies, one based on historical achieved
5 returns on LDCs, and a second one based on forward looking DCF returns for electric
6 utilities.

7 In her historical equity risk premium study, Ms. McShane calculated the equity
8 risk premiums for the S&P and Moody's gas distribution index over the period 1947 -
9 2005 compared to the 10-year U.S. Treasury bond income return. Using this
10 methodology, she estimated a risk premium over Treasury bonds of 6.0%. To this
11 she added a 0.5% yield spread of 10-year versus 20-year Treasury bond yields to
12 produce a risk premium of 6.5% (McShane direct at 38).

13 In her forward looking DCF based equity premium estimates, she subtracted a
14 10-year Treasury yield from a DCF return estimate for a sample of electric utilities.
15 Based on this DCF risk premium study, she estimated a 5.3% equity risk premium
16 over 10-year Treasury bond yields over the period 1998 through the last quarter 2006
17 (McShane direct at 38-39).

18 Q IS MS. MCSHANE'S EQUITY RISK PREMIUM OF 6.5% BASED ON ELECTRIC
19 UTILITY DCF ACHIEVED RETURNS OVER THE PERIOD 1947-2005
20 REASONABLE?

21 A No. Ms. McShane estimates the risk premium for electric utilities by looking at the
22 achieved return on electric utility equity securities, relative to the income return on
23 U.S. Treasury bonds. This overstates the equity risk premium because she is
24 ignoring capital gains and losses on 20-year Treasury bonds over this time period.

1 The total achieved return on U.S. Treasury bonds over the period 1947-2005 is 6.3%,
2 not 6.1% as used by Ms. McShane in her study.

3 Using this actual historical investment return on U.S. Treasury bonds over this
4 time period would result in the electric equity risk premium of 5.0% based on a total
5 achieved return on electric stocks of 11.3%, less a total achieved return on Treasury
6 bonds of 6.3%. Similarly, Ms. McShane's estimated equity risk premium over
7 Moody's gas distribution stocks would decrease from 6% down to 5.8%, reflecting the
8 total achieved return on Treasury securities.

9 Reflecting these reduced equity risk premiums for electric utility stocks of 5%
10 and a projected long-term Treasury bond yield of 5.1% would indicate a return on
11 equity for AmerenUE in this proceeding of 11.1%.

12 **Q IS MS. MCSHANE'S DERIVED PROSPECTIVE EQUITY RISK PREMIUM OVER**
13 **ELECTRIC UTILITY STOCKS REASONABLE?**

14 **A** No. The range of equity risk premiums estimated by Ms. McShane of 3% up to 6% is
15 largely dependent on the IBES growth rate used to derive the DCF cost estimate.
16 This is shown on her Schedule KCM E8-1. As noted previously in this testimony, the
17 DCF growth rate must reflect the long-term sustainable growth rate estimate. A long-
18 term sustainable growth rate estimate can never exceed the nominal expected growth
19 of the U.S. economy, currently around 5.1%.

20 Further, Ms. McShane's forward-looking equity risk premium is largely
21 dependent on the result of a DCF return estimate. Hence, this methodology does not
22 provide a complementary estimate to her own DCF return estimate for her electric
23 utility stocks. As such, this risk premium study is not a complement to a DCF study,
24 but rather is in effect a more complicated and historical review of DCF returns relative
25 to bond yields.

1 Second, Ms. McShane's study estimated an equity risk premium over a short-
2 term 10-year Treasury bond yield. 10-year Treasury bond yields are more volatile
3 than a longer-term Treasury bond yield, and thus produce a more volatile equity risk
4 premium estimate. A shorter-term Treasury maturity is not as reasonable a bond
5 instrument to use to estimate equity risk premium because there is such a differential
6 in investment horizons. Specifically, common equity has an infinite investment
7 horizon, which is best proxied by long-term Treasury instruments, and not short-term
8 or intermediate term securities. Further, relying on long-term utility bond yields also
9 will produce meaningful input to estimate a risk premium return using this data.

10 **Q HOW WOULD MS. MCSHANE'S EQUITY RISK PREMIUM CHANGE IF LONG-**
11 **TERM TREASURY INSTRUMENTS WERE USED IN THE ANALYSIS, AS WELL**
12 **AS UTILITY BOND YIELDS?**

13 **A**As shown on my Schedule MPG-14, I adjusted Ms. McShane's Schedule KCM E8-1
14 to include 20-year Treasury yields, and on Page 2 of Schedule MPG-14 to include "A"
15 rated utility yields. Using 20-year Treasury securities produces an equity risk
16 premium of 4.7%, significantly lower than the 5.3% estimated by Ms. McShane.
17 Using "A" rated utility bond yields produces a risk premium over utility bond yields of
18 3.2%. Reflecting a projected Treasury bond yield of 5.1% and a current "A" rated
19 utility bond yield would produce return on equity estimates of 9.8% and 9.2%,
20 respectively. These estimates are far superior to Ms. McShane's estimate because
21 they reflect debt securities with comparable investment horizons to common equity
22 and develop a common equity return without an arbitrary adjustment for historical
23 Treasury yield spreads.

1 Q WITH YOUR ADJUSTMENT TO HER RISK PREMIUM STUDIES, WHAT RETURN
2 ON EQUITY IS A REASONABLE ESTIMATE FOR AMERENUE?

3 A As discussed above, with appropriate adjustments to Ms. McShane's risk premium
4 studies, the models would produce a reasonable and accurate return on equity for
5 AmerenUE in the range of 9.2% to 11.1%. The midpoint of this estimated range is
6 10.1%.

7 Q PLEASE DESCRIBE MS. MCSHANE'S COMPARABLE EARNINGS ANALYSIS.

8 A From a group of publicly traded competitive companies, followed by S&P's Research
9 Insight database, Ms. McShane identified several companies she believed to be
10 comparable in risk to electric utilities. To select companies she relied on the
11 following:

- 12 1. Removed growth companies of less than \$50 million common equity.
- 13 2. Value Line betas of one or more were removed.
- 14 3. Removed thinly traded companies.
- 15 4. Removed companies that had not paid dividends in any year 1999 through
16 2005.
- 17 5. Isolated the companies to remove companies whose earnings were outside
18 one standard deviation of the group average.
- 19 6. Eliminated companies that had Value Line safety rankings of 4 or higher, and
20 had below investment grade bond ratings.

21 This process produced a sample group of what she considered to be a low
22 risk U.S. competitive company group consisting of 139 companies. For the period
23 1994 through 2005, she estimated an average earned return on book equity of 14.0%
24 to 14.5% for her sample group, and a Value Line projected three to five-year return on
25 book equity for her proxy group of 14.6%.

1 Q DOES MS. MCSHANE'S COMPARABLE EARNINGS ANALYSIS PRODUCE
2 REASONABLE RESULTS FOR ESTIMATING AMERENUE'S AUTHORIZED
3 RETURNS ON EQUITY?

4 A No. Ms. McShane's comparable earnings result of 14.0% to 14.5% is seriously
5 flawed on its face. Importantly, this accounting-based return on equity method
6 produces returns that are significantly higher than the market-based (DCF and risk
7 premium) return on equity results. The accounting-based return does not measure
8 the current cost of capital necessary to attract capital in the marketplace. An
9 accounting return is not derived from the market valuation of security prices.
10 Consequently, it does not measure investors' return requirements. This is an
11 important distinction because if the accounting returns on equity are lower than the
12 market required return on equity, then the utility's ability to attract capital could be
13 impaired. Conversely, if the accounting return on equities significantly exceed the
14 utility's market cost of capital, then utility rates would be adjusted much higher than
15 necessary to fairly compensate investors and maintain their ability to attract capital.
16 Hence, the methodology is flawed because it does not estimate a fair risk adjusted
17 return on equity that fairly compensates the AmerenUE for making utility plant
18 investments.

19 Because of the severe deficiencies in this methodology, and her failure to
20 accurately account for AmerenUE's lower operating risk, Ms. McShane's comparable
21 earnings analysis should be rejected.

1 **RESPONSE TO DR. VANDER WEIDE**

2 **Q WHAT RETURN ON EQUITY DID DR. VANDER WEIDE ESTIMATE FOR**
3 **AMERENUE?**

4 A Dr. Vander Weide estimated AmerenUE's return on equity to be 12.2%. He arrived at
5 this recommended return by first estimating a return on equity for an electric and gas
6 proxy group of 11.5%. He then added 70 basis points to this proxy group estimated
7 return on equity to account for the difference between the proxy group's market
8 financial risk and AmerenUE's book financial risk.

9 As outlined in more detail above, the proposed equity return add-on should be
10 rejected because it is not based on an assessment of total investment risk. It is
11 based on a flawed assessment of differentials in financial risk between AmerenUE
12 and the proxy group, and is not an accepted adjustment normally used in regulatory
13 proceedings to authorize a fair return on equity for regulated utility operations.

14 **Q HOW DID DR. VANDER WEIDE ESTIMATE THE 11.5% RETURN ON EQUITY**
15 **BEFORE HIS FINANCIAL RISK ADJUSTMENT?**

16 A Dr. Vander Weide supports his return on equity based on a discounted cash flow
17 analysis, an ex-ante and ex-post risk premium analysis, and a capital asset pricing
18 model. Dr. Vander Weide applies these models to a proxy group of electric
19 companies and natural gas companies to develop his return estimates. These
20 models, as he has used them, develop a common equity return of 11.5%.

1 Q IS DR. VANDER WEIDE'S CURRENT MARKET REQUIRED RETURN ON EQUITY
2 OF 11.5% FOR HIS TWO PROXY GROUPS A REASONABLE RETURN ON
3 EQUITY ESTIMATE FOR AMERENUE?

4 A No. Dr. Vander Weide's 11.5% return on equity is excessive. His return on equity
5 results are shown below in Table 4, Column 1. In Column 2, I show my adjustments
6 to Dr. Vander Weide's analyses, which reduce his equity return from 11.5% to 9.9%.
7 Hence, as set forth below, with reasonable corrections, Dr. Vander Weide's own
8 analyses support my recommended return on equity for AmerenUE.

TABLE 4		
<u>Dr. Vander Weide's Return on Common Equity Summary</u>		
<u>Description</u>	<u>Dr. Vander Weide's Return*</u>	<u>Adjusted Results</u>
	(1)	(2)
DCF	10.7%	9.5%
Ex-Ante Risk Premium	11.0%	9.5%
Ex-Post Risk Premium	11.4%	10.4%
CAPM (Historical)	11.7%	10.3%
CAPM (DCF)	12.8%	Reject
Average	11.5%	9.9%

9 Q PLEASE DESCRIBE DR. VANDER WEIDE'S DCF ANALYSES.

10 A On his Schedules JVW-1 and JVW-2, Dr. Vander Weide performed a DCF analysis
11 on a broad based group of electric and LDC gas companies. Based on this
12 assessment, Dr. Vander Weide's electric group indicated an adjusted dividend yield
13 of 4.32% and an average growth rate of 6.29%, which produced a DCF return of
14 10.61%. His gas group produced an adjusted yield of 3.43% and an average growth
15 rate of 7.42% while supporting a DCF return of 10.84%. He then averaged the
16 results of these two analyses together to arrive at his estimated DCF return of 10.7%.

1 Q IS DR. VANDER WEIDE'S DCF RETURN A REASONABLE ESTIMATE FOR
2 AMERENUE IN THIS PROCEEDING?

3 A No. Dr. Vander Weide's DCF return analysis should be rejected for the following
4 reasons. First, Dr. Vander Weide provided no analysis that showed that either his
5 electric or LDC gas proxy groups reasonably approximate the investment risk of
6 AmerenUE. Indeed, a review of these companies clearly show that there are many
7 companies that have considerably more risk than AmerenUE.

8 Second, the average growth rate used to develop his two DCF numbers is
9 excessive. Indeed, the electric group average growth of 6.29% and gas LDC growth
10 rate of 7.84% are unreasonable estimates of long-term sustainable growth. A DCF
11 analysis requires a growth rate that reasonably reflects long-term sustainable growth.

12 Also, Dr. Vander Weide's average is based on the market weight, rather than
13 the simple average. By applying the market weight, he is giving inordinately high
14 weight to certain company's estimates based on their market valuation. Adjusting the
15 average of his return estimate to the simple average rather than the market weighted
16 average lowers his electric DCF return to 10.0% from 10.61% and his gas return to
17 9.96% from 10.84%. There is no rational reason to apply more weight to larger
18 companies than to smaller companies. As such, Dr. Vander Weide's market
19 weighted average is simply manipulating the value of the proxy group and inflated his
20 DCF return estimate. These adjustments are shown on my Schedule MPG-15.

21 Finally, Dr. Vander Weide used the quarterly version of the DCF model to
22 estimate a market required return. A quarterly DCF model reflects the reinvestment
23 of dividend returns throughout the year. The flaw in relying on the quarterly version of
24 the DCF model is that it allows investors to earn the reinvestment return on dividends
25 twice. Specifically, they earn it a first time by increasing the authorized return on

1 equity used to set the utility's rates. This increases the utility's earnings and provides
2 for the reinvestment return in the utility's allowed rate of return. Second, the investors
3 can earn the reinvestment return themselves after the utility pays dividends and the
4 investors reinvest those dividends in other enterprises of corresponding risk. Hence,
5 use of a quarterly version of the DCF return to estimate a regulatory authorized return
6 allows investors to earn the reinvestment return on dividends twice – once through
7 the regulatory authorized return on equity, and a second time after the dividends are
8 actually paid to investors and reinvested by investors.

9 The quarterly version of the DCF return overstates a fair rate of return to use
10 for setting rates. Therefore, Dr. Vander Weide's DCF return estimate should be
11 rejected.

12 **Q WHY HAVE YOU CONCLUDED THAT DR. VANDER WEIDE'S PROXY ELECTRIC**
13 **AND GAS GROUPS CONTAIN COMPANIES WITH MORE RISK THAN**
14 **AMERENUE?**

15 **A** Dr. Vander Weide's electric and gas groups contain companies that are not
16 reasonable risk proxies for AmerenUE. Specifically, the business risk and financial
17 risk of many of these companies is not a reasonable risk proxy for AmerenUE. For
18 example, S&P provides an independent assessment of AmerenUE's business risk.
19 S&P assigns AmerenUE a business profile score of 5, which indicates approximately
20 average integrated utility business risk. In contrast, many of the companies included
21 in Dr. Vander Weide's group have business profile scores of more than 6, more than
22 one notch greater than AmerenUE. Those companies include Dominion Resources,
23 Duke Energy, Great Plains Energy, MDU Resources, Otter Tail Corporation, PPL
24 Corp., Sempra Energy, and TXU Corp. Further, many of these companies are in the
25 process of either selling assets, or are in the process of merging. Those companies

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1 include Alliant Energy, Northeast Utilities, PNM Resources, and WPS Resources.
2 Finally, Entergy Corp.'s stock price likely reflects the bankruptcy protection filing of its
3 New Orleans operating subsidiary. This bankruptcy filing has most likely impacted
4 Entergy's stock price, and is adequate reason to exclude Entergy from the proxy
5 group in this proceeding.

6 **Q WHY DO YOU BELIEVE THAT DR. VANDER WEIDE'S ELECTRIC AND GAS**
7 **GROUP AVERAGE GROWTH RATES EXCEED A REASONABLE ESTIMATE OF**
8 **A LONG-TERM SUSTAINABLE GROWTH AND THUS HAVE OVERSTATED THE**
9 **DCF RESULTS?**

10 **A** Dr. Vander Weide's group average growth rates for his electric and gas groups are
11 6.29% and 7.84%, respectively. As noted above in response to Ms. McShane's
12 testimony, a long-term sustainable growth rate cannot exceed the nominal projected
13 growth in the GDP. The nominal GDP growth current is approximately 5.1%.
14 Because Dr. Vander Weide's group average growth rates exceed a reasonable and
15 rational assessment of what the utilities' long-term sustainable growth rates could be,
16 his DCF returns are inflated, are not reliable, and should be rejected.

17 **Q WHAT DCF RETURN WOULD BE PRODUCED USING ONLY COMPANIES**
18 **COMPARABLE IN RISK TO AMERENUE AND REASONABLE ESTIMATES OF**
19 **LONG-TERM SUSTAINABLE GROWTH?**

20 **A** Ms. McShane's DCF analysis provides a better review of proxy companies that
21 represent comparable risk companies to AmerenUE. Again, Dr. Vander Weide made
22 no effort at all to estimate proxy companies that reasonably represent AmerenUE's
23 investment risk. However, currently IBES growth rates are overstated for various
24 reasons discussed above in response to Ms. McShane. As discussed above, Ms.

1 McShane's two-stage DCF growth rate captures abnormally high short-term earnings
2 growth expectations for these companies, but also captures the rational expectation
3 that growth would later subside to a more sustainable lower level. Ms. McShane's
4 two-stage DCF analyses indicate a DCF return for AmerenUE of 9.4%. This is a
5 much superior DCF return estimate than that produced by Dr. Vander Weide.

6 **Q PLEASE DESCRIBE DR. VANDER WEIDE'S EX-ANTE RISK PREMIUM**
7 **ANALYSIS.**

8 **A** Based on a quarterly version of the discounted cash flow analysis of a group of
9 electric and gas companies in comparison to the contemporary "A" rated utility bond
10 yield, Dr. Vander Weide estimates a monthly risk premium for electric companies
11 during the period September 1999 through April 2006, and for gas utilities during the
12 period June 1998 through April 2006 (Schedules JVW-3 and JVW-4). Based on this
13 monthly data, he creates a regression analysis that he asserts explains the inverse
14 relationship between the equity risk premiums and the interest rates during the study
15 time periods.

16 Using a forecasted yield on "A" rated utility bonds of 6.64%, he estimates a
17 risk premium for electric companies of 4.24% and for gas companies of 4.43%.

18 Again, relying on his forecasted "A" rated utility bond yield of 6.64%, he
19 estimates a return on equity for the electric companies of 10.9%, and gas companies
20 of 11.1%. The midpoint of this estimated range is 11.0% (Vander Weide direct at 31).

21 **Q IS DR. VANDER WEIDE'S EX-ANTE RISK PREMIUM ANALYSIS REASONABLE?**

22 **A** No. This equity risk premium is overstated for several reasons. First, Dr. Vander
23 Weide employs a quarterly version of the DCF model that overstates a DCF return for
24 use in regulatory proceedings.

1 Second, Dr. Vander Weide arbitrarily chose his time periods for study.
2 Importantly, the time period he relied on to estimate the equity risk premiums for his
3 electric group is different than the time period he relied on for his gas group. This is
4 important because he appears to have intentionally removed calendar year 1998 from
5 his electric group risk premium study. This is likely because equity risk premiums
6 measured during 1998 were significantly lower than they were in 1999 and thereafter.
7 This is evident from a review of Ms. McShane's risk premium study as summarized
8 on her Schedule KCM E8-1. Further, the equity returns are somewhat questionable
9 because the accuracy of the equity risk premium depends entirely on the accuracy of
10 the DCF return estimate. In effect, this risk premium study is tied to the accuracy of a
11 DCF study. This is important because, as Ms. McShane found, in the Empire District
12 Electric Company case the Commission found it appropriate to rely on more than one
13 methodology to estimate the current market required return. (McShane direct at 2)
14 Dr. Vander Weide's risk premium study here is essentially an extension of the DCF
15 model, which does not provide a valid alternative test to a stand-alone DCF estimate.

16 Finally, Dr. Vander Weide's risk premium analysis overstates the cost of equity
17 because he uses a projected "A" rated utility bond yield of 6.64% rather than the
18 current yield of approximately 6.0%. As noted above, Treasury bond yield projections
19 for calendar year 2007 are approximately identical to current yields. Hence,
20 consensus economists are not expecting a significant change in long-term interest
21 rates. Therefore, Dr. Vander Weide's expectation of significant increases to interest
22 rates is unwarranted, unjust and should be rejected.

1 Q HOW DID DR. VANDER WEIDE'S USE OF A PROJECTED "A" RATED BOND
2 YIELD INFLATE HIS RISK PREMIUM RESULT?

3 A The current "A" rated utility bond yield is approximately 6.0%. Dr. Vander Weide's
4 projected yield of 6.64% is a 0.65 percentage point increase to the prevailing market
5 rate for "A" rated utility bonds. Using the more appropriate current yield would reduce
6 Dr. Vander Weide's ex-ante risk premium from 11.0% down to about 10.6%.

7 Q COULD AN EX-ANTE RISK PREMIUM ANALYSIS PRODUCE A REASONABLE
8 RETURN ON EQUITY FOR AMERENUE IN THIS PROCEEDING?

9 A Yes. In her presentation, Ms. McShane offered a similar risk premium study related
10 to 10-year Treasury bonds. Relying on Ms. McShane's ex-ante risk premium study
11 provided on her Schedule KCM-E8-1, but adjusting it for 20-year Treasury yield rather
12 than the 10-year Treasuries she used, and inserting Dr. Vander Weide's "A" rated
13 utility bond yields, indicates a utility equity risk premium for the period 1998 – 2006
14 over Treasury bonds of 4.7%, and over "A" rated utility bonds of 3.2 percentage
15 points.

16 Current and 2007 projected 30-year Treasury bond yields are approximately
17 5.1%. Currently using a risk premium of 4.7% indicates a return on equity of 9.8%.
18 Using a current "A" rated utility bond yield of 6.0% and an equity risk premium of 3.2%
19 indicates a market return on equity for AmerenUE of 9.2%. The average of these two
20 risk premium estimates is 9.5%. These estimates are far superior to the inflated
21 estimates produced by Dr. Vander Weide.

1 Q PLEASE DESCRIBE DR. VANDER WEIDE'S EX-POST RISK PREMIUM
2 ANALYSIS.

3 A Dr. Vander Weide's ex-post risk premium analysis consists of reviewing the historical
4 achieved returns on common equity investments from two proxy indexes, relative to
5 the achieved return from investing in Moody's "A" rated utility bonds. Dr. Vander
6 Weide estimates an equity risk premium in the range of 4.45% to 5.10%. The 4.45%
7 equity risk premium is based on the achieved return of the S&P utility stock index
8 relative to the achieved return on Moody's "A" rated utility bonds. The 5.10
9 percentage point equity risk premium is based on the achieved return of the S&P 500
10 relative to Moody's "A" rated utility bonds.

11 He adds these equity risk premiums to his projected "A" rated utility bond yield
12 of 6.64%. With this method he estimates a return on equity for AmerenUE in the
13 range of 11.1% to 11.7%, with a midpoint of 11.4% (Vander Weide direct at 37).

14 Q DOES DR. VANDER WEIDE'S EX-POST RISK PREMIUM ANALYSIS OVERSTATE
15 A FAIR RETURN FOR AMERENUE?

16 A In part, yes. His equity risk premium based on a comparison of the S&P 500 return to
17 "A" rated utility bond yields should be rejected because it does not produce an
18 appropriate risk-adjusted return for AmerenUE. Dr. Vander Weide has not shown any
19 evidence that the S&P 500 is an appropriate risk proxy index for AmerenUE's
20 investment risk. Indeed, his CAPM analysis is an implicit admission that AmerenUE
21 has a lower risk than the overall market. He admits AmerenUE has below market risk
22 at p. 33 of his testimony. But then opines that an S&P 500 risk premium is a
23 reasonable upper band.

24 However, the equity risk premium to the S&P 500 overstates a fair equity risk
25 premium for AmerenUE.

1 His second ex-post analysis also is flawed. It compares the S&P utilities index
2 to the yield on "A" rated utility bonds. The S&P utilities index also includes
3 companies that may not be risk comparable to AmerenUE. Dr. Vander Weide has not
4 shown that this index is an appropriate risk proxy for AmerenUE.

5 Nevertheless, applying the equity risk premium derived in this utility index
6 analysis to the current "A" rated utility bond yield of 6.0%, rather than Dr. Vander
7 Weide's exaggerated projected "A" rated utility bond yield of 6.64%, would produce
8 an ex-post risk premium cost projection of about 10.4%, not the 11.4% return
9 estimated by Dr. Vander Weide.

10 **Q PLEASE DESCRIBE DR. VANDER WEIDE'S CAPM ANALYSIS.**

11 A Dr. Vander Weide relies on a projected Treasury bond yield of 5.39%, a beta estimate
12 for utility companies of 0.90 for electric and 0.88 for gas, and estimates of the market
13 risk premium of 7.1% and 8.35%. With these parameters, Dr. Vander Weide
14 estimates a CAPM return in the range of 11.7% to 12.8%.

15 **Q IS DR. VANDER WEIDE'S CAPM ANALYSIS REASONABLE?**

16 A No. Dr. Vander Weide's CAPM result is overstated, largely because his estimated
17 risk premium for the marketplace is overstated and not supported, and he relies on
18 excessive beta estimates. First, his market risk premium estimate is based on
19 Ibbotson & Associates' market return relative to Treasury bond income returns. Ms.
20 McShane also used this analysis. Dr. Vander Weide's risk premium should be
21 rejected for the same reasons I listed above concerning Ms. McShane's historical
22 market risk premium based on Treasury income returns.

1 Q ARE THERE ANY FLAWS IN DR. VANDER WEIDE'S FORWARD LOOKING
2 RETURN ESTIMATE?

3 A Yes. Dr. Vander Weide estimates a second CAPM analysis and market risk premium
4 based on a DCF return for the S&P 500 of 13.75%, less his risk free rate estimate of
5 5.39%. This implies a market risk premium of 8.35%. Dr. Vander Weide's estimated
6 return of 13.75% reflects his DCF analysis on the dividend paying stocks in the S&P
7 500. Because he has only reflected a DCF analysis on the companies that are
8 currently paying dividends, he has likely overstated the growth prospects and
9 expected return on the S&P 500. Indeed, there are equity securities in the
10 marketplace that don't pay dividends, and are not expected to grow at the same rate
11 as other companies. Hence, his analysis of the S&P 500 is incomplete and likely
12 overstates the expected market return.

13 The dividend yield on the S&P 500 is approximately 1.9% currently, as
14 estimated by Ms. McShane at p. 35 of her direct testimony. Hence, a 13.75% DCF
15 return on the market implies a growth rate of approximately 11.85%. This growth rate
16 is more than two times the expected growth in the U.S. economy of 5.1%, and
17 therefore does not reflect a reasonable sustainable long-term growth rate for the
18 stock market that is required by the DCF model. Further, the expected growth of the
19 market of 11.85% is higher than the historical growth of the market of 7.8%, as
20 estimated by Ibbotson & Associates over the period 1926 - 2005 (SBBI 2006
21 Yearbook at 119). Dr. Vander Weide's growth rate projection for the S&P 500 is
22 excessive and irrational.

23 The stock market simply cannot grow at twice the rate of the U.S. economy
24 over an indefinite period of time. Further, there is no reasonable justification for the
25 assumption that the growth rate will be more than 50% stronger than the long-term
26 historical growth rate. Dr. Vander Weide's DCF return on the market is significantly

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1 overstated, which inflates his market risk premium and CAPM return estimates. Dr.
2 Vander Weide's DCF and CAPM are significantly overstated and should be rejected.

3 **Q DO YOU HAVE ANY EVIDENCE ON WHAT AN APPROPRIATE RETURN ON THE**
4 **MARKET WOULD BE?**

5 A Yes. As noted above, based on historical real returns on the market and forward
6 looking inflation expectations, the projected return on the market is around 12.3%.
7 Relying on Value Line's 1,700 stocks and Value Line's three to five-year capital
8 appreciation and current dividend yield implies a return on the market of 9% to 10%.
9 With these parameters, relative to a projected 2007 Treasury bond yield of around
10 5.1%, the indicated market risk premium would be approximately 6.5%. This market
11 risk premium is conservative in relationship to today's capital market cost and
12 produces a far more reasonable estimate of the CAPM return than the inflated risk
13 premiums relied on by Dr. Vander Weide.

14 **Q WHAT BETA ESTIMATES DID DR. VANDER WEIDE USE IN HIS CAPM**
15 **ANALYSIS?**

16 A Dr. Vander Weide used a beta estimate for his electric stocks of 0.90, and 0.88 for his
17 gas companies.

18 **Q WHY DO YOU BELIEVE THESE BETA ESTIMATES ARE OVERSTATED?**

19 A As discussed above, Dr. Vander Weide's two proxy groups contain companies that
20 have considerably higher risk than that of AmerenUE's regulated utility operations in
21 Missouri. Indeed, as shown on his Schedules JVW 8-2 and JVW-3, his proxy groups
22 include certain companies that have beta estimates of one or greater. This would
23 indicate that these regulated electric utility companies have greater risk than the

1 overall stock market. This conclusion contradicts most of Dr. Vander Weide's other
2 testimony, recognizing that regulated utility operations are low risk investments. The
3 high beta estimates, as I discussed earlier in my testimony, are largely the function of
4 two significant factors. First, utility betas have been increasing recently, not because
5 their risks have been increasing, but rather because utility stocks have out performed
6 the overall market over the last five years. These beta estimates are measured
7 based on stock price performance over the last five years, and a robust recovery in
8 utility stock performance over that time in relation to the marketplace has given the
9 false impression that utility stock risk is increasing. A careful review of more detailed
10 risk factors for utilities indicate that their risks are not increasing, but rather are
11 decreasing to consistent.

12 Second, and most importantly concerning Dr. Vander Weide's group, is that
13 many of the companies included in this group have risks much greater than that of
14 AmerenUE. Specifically, many of the companies have merchant generation affiliates
15 or commodity trading operations, which have caused significant price volatility in their
16 stocks, and uncertainty that is uncharacteristic of low risk regulated operations.
17 These higher operating risk investments expose these companies to greater market
18 risk which is reflected in their stock price volatility and higher beta estimates. Since
19 Dr. Vander Weide has included companies with greater risk than AmerenUE in his
20 proxy group, he has overstated the beta for use in this proceeding.

21 **Q WHAT WILL BE AN APPROPRIATE AND REASONABLE BETA ESTIMATE TO**
22 **USE IN THE CAPM STUDY FOR AMERENUE IN THIS PROCEEDING?**

23 **A** AmerenUE's beta, as shown on Dr. Vander Weide's schedule is currently 0.75. A
24 review of the median beta estimate for Dr. Vander Weide's group, Ms. McShane's

1 group and my proposed group, indicates a beta estimate of around 0.8 is currently
2 the most accurate assessment of electric utility systematic risk.

3 **Q WHAT IS A REASONABLE CAPM RETURN ESTIMATE USING THE**
4 **PARAMETERS YOU DISCUSSED ABOVE?**

5 **A** Using a beta estimate of 0.80, a market risk premium of 6.5% and a current Treasury
6 bond yield projection of 5.1%, indicates a reasonable CAPM return estimate for
7 AmerenUE in this proceeding to be 10.3%.

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

9 **A** Yes, it does.

Appendix A

Qualifications of Michael Gorman

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

2 A Michael P. Gorman. My business mailing address is P. O. Box 412000, 1215 Fern
3 Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000.

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. Continuing, I
2 have also 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; Corpus Christi, Texas; and Plano, 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 regulatory commissions in Arizona, California,
8 Delaware, Georgia, Illinois, Indiana, Iowa, Louisiana, Michigan, Missouri, New
9 Mexico, New Jersey, Oklahoma, Oregon, Tennessee, Texas, Utah, Vermont,
10 Washington, West Virginia, Wisconsin, Wyoming, and before the provincial regulatory
11 boards in Alberta and Nova Scotia, Canada. I have also sponsored testimony before
12 the Board of Public Utilities in Kansas City, Kansas; presented rate setting position
13 reports to the regulatory board of the municipal utility in Austin, Texas, and Salt River
14 Project, Arizona, on behalf of industrial customers; and negotiated rate disputes for
15 industrial customers of the Municipal Electric Authority of Georgia in the LaGrange,
16 Georgia district.

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

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

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Appendix A
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Comparable Group

<u>Line</u>	<u>Electric Utility</u>	<u>Bond Ratings</u>		<u>Business Profile Rating³</u>	<u>2005 Common Equity Ratios</u>	
		<u>S&P¹</u>	<u>Moody's¹</u>		<u>Value Line²</u>	<u>AUS</u>
		(1)	(2)	(3)	(4)	(5)
1	Alliant Energy	A-	A2	6	53%	54%
2	Ameren Corp.	A-	A3	6	53%	50%
3	DTE Energy	BBB+	A3	6	45%	40%
4	FirstEnergy Corp.	BBB	Baa1	6	52%	44%
5	IDACORP, Inc.	A-	A3	5	50%	49%
6	NiSource Inc.	BBB	Baa2	4	48%	45%
7	OGE Energy	BBB+	Baa2	6	51%	51%
8	Pinnacle West Capital	BBB-	Baa1	5	57%	52%
9	Puget Energy Inc.	BBB	Baa2	4	46%	43%
10	SCANA Corp.	A-	A1	4	47%	44%
11	Southern Co.	A	A2	4	44%	42%
12	Wisconsin Energy	A-	A1	5	47%	42%
13	Xcel Energy Inc.	A-	A3	5	47%	43%
14	Average	BBB+	A3	5	49%	46%
15	AmerenUE	BBB+	A2	5	52% ⁴	

Sources:

¹ AUS Utility Reports; October, 2006.

² The Value Line Investment Survey; September 1, September 29, November 10, 2006.

³ U.S. Utilities and Power Ranking List, March 24, 2006.

⁴ Schedule LRN -G1-1.

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Growth Rate Estimates

<u>Line</u>	<u>Electric Utility</u>	<u>Zacks Estimated Growth %¹</u> (1)	<u>Zacks Number of Estimates¹</u> (2)	<u>Reuters Estimated Growth %²</u> (3)	<u>Reuters Number of Estimates²</u> (4)	<u>Thomson Estimated Growth %³</u> (5)	<u>Thomson Number of Estimates³</u> (6)	<u>AVG of Growth Rates</u> (7)
1	Alliant Energy	4.00%	2	N/A	N/A	5.00%	1	4.50%
2	Ameren Corp.	6.10%	5	N/A	N/A	3.75%	4	4.93%
3	DTE Energy	4.33%	3	5.25%	4	4.50%	2	4.69%
4	FirstEnergy Corp.	5.67%	6	6.17%	6	6.40%	5	6.08%
5	IDACORP, Inc.	4.67%	3	4.67%	3	4.67%	3	4.67%
6	NiSource Inc.	3.33%	6	3.50%	8	3.33%	6	3.39%
7	OGE Energy	5.00%	1	N/A	N/A	6.17%	2	5.59%
8	Pinnacle West Capital	6.75%	4	6.10%	6	5.00%	3	5.95%
9	Puget Energy Inc.	7.00%	1	5.14%	7	4.83%	3	5.66%
10	SCANA Corp.	4.67%	6	4.35%	6	4.35%	6	4.46%
11	Southern Co.	4.67%	9	4.70%	10	4.78%	9	4.72%
12	Wisconsin Energy	7.40%	5	N/A	N/A	7.79%	6	7.60%
13	Xcel Energy Inc.	4.33%	5	5.14%	7	5.27%	6	4.91%
14	Average	5.22%	4	5.00%	6	5.06%	4	5.16%

Sources:

¹ www.zacksadvisor.com, Detailed Research on November 13, 2006.

² www.investor.reuters.com, Earnings Estimates on November 13, 2006.

³ <http://ec.thomsonfn.com>, Earnings Estimates on November 13, 2006.

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Constant Growth DCF Model

<u>Line</u>	<u>Electric Utility</u>	<u>13-Week AVG Stock Price¹</u> (1)	<u>AVG (%) Growth</u>	<u>Annual Dividend²</u> (3)	<u>Adjusted Yield</u> (4)	<u>Constant Growth DCF</u> (5)
1	Alliant Energy	\$ 36.82	4.50%	\$ 1.15	3.27%	7.77%
2	Ameren Corp.	\$ 52.95	4.93%	\$ 2.54	5.03%	9.96%
3	DTE Energy	\$ 42.55	4.69%	\$ 2.06	5.07%	9.76%
4	FirstEnergy Corp.	\$ 57.13	6.08%	\$ 1.80	3.34%	9.42%
5	IDACORP, Inc.	\$ 38.40	4.67%	\$ 1.20	3.27%	7.94%
6	NiSource Inc.	\$ 21.93	3.39%	\$ 0.92	4.34%	7.72%
7	OGE Energy	\$ 36.88	5.59%	\$ 1.33	3.81%	9.40%
8	Pinnacle West Capital	\$ 45.93	5.95%	\$ 2.00	4.61%	10.56%
9	Puget Energy Inc.	\$ 22.92	5.66%	\$ 1.00	4.61%	10.27%
10	SCANA Corp.	\$ 40.62	4.46%	\$ 1.68	4.32%	8.78%
11	Southern Co.	\$ 34.73	4.72%	\$ 1.55	4.68%	9.40%
12	Wisconsin Energy	\$ 43.61	7.60%	\$ 0.92	2.27%	9.86%
13	Xcel Energy Inc.	\$ 20.99	4.91%	\$ 0.89	4.46%	9.37%
14	Average	\$ 38.11	5.16%	\$ 1.47	4.08%	9.2%

Sources:

¹ <http://moneycentral.msn.com>, downloaded on November 13, 2006.

² The Value Line Investment Survey; September 1, September 29, November 10, 2006.

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GDP and Dividend Growth Rates

<u>Line</u>	<u>Electric Group</u>	<u>Dividend Growth</u>			<u>Inflation (CPI)*</u>			<u>Nominal GDP*</u>	
		<u>Past 5 Years¹</u> (1)	<u>Past 10 Years¹</u> (2)	<u>3-5 Years Projection¹</u> (3)	<u>Past 5 Years²</u> (4)	<u>Past 10 Years²</u> (5)	<u>3-5 Years Projection²</u> (6)	<u>Past 5 Years¹</u> (7)	<u>Past 10 Years¹</u> (8)
1	Alliant Energy	-12.5%	-6.0%	6.0%					
2	Ameren Corp.	N/A	0.5%	N/A					
3	DTE Energy	N/A	N/A	0.5%					
4	FirstEnergy Corp.	2.5%	1.5%	5.0%					
5	IDACORP, Inc.	-6.0%	-3.0%	-2.0%					
6	NiSource Inc.	1.0%	3.0%	0.5%					
7	OGE Energy	N/A	N/A	2.0%					
8	Pinnacle West Capital	6.5%	11.0%	5.0%					
9	Puget Energy Inc.	-11.5%	-6.0%	1.5%					
10	SCANA Corp.	2.0%	0.5%	4.5%					
11	Southern Co.	1.0%	2.0%	4.0%					
12	Wisconsin Energy	-11.0%	-5.0%	4.5%					
13	Xcel Energy Inc.	-11.0%	-5.0%	5.5%					
14	Average	-3.9%	-0.6%	3.1%	2.7%	2.5%	2.2%	5.2%	5.3%

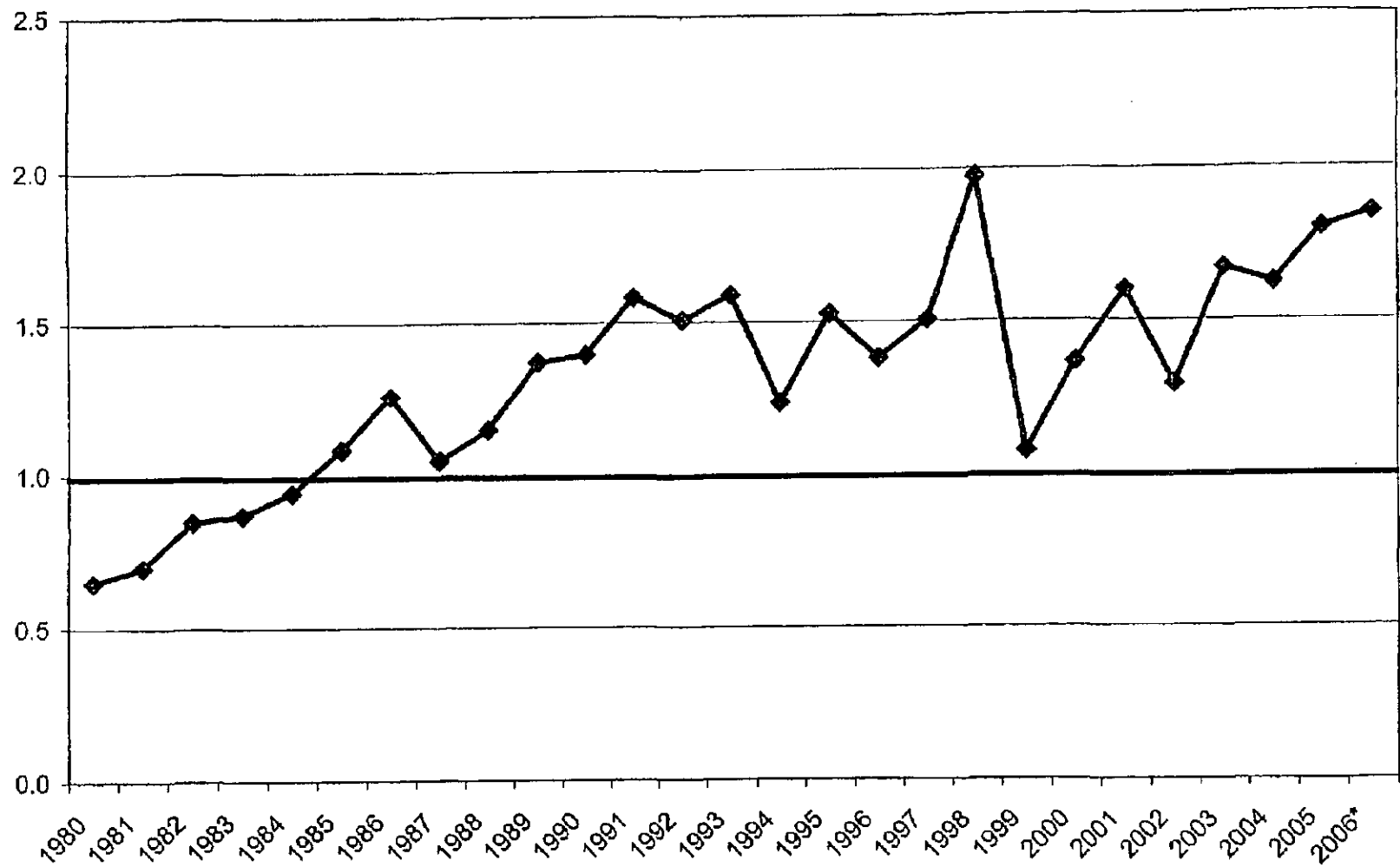
Sources:

¹ The Value Line Investment Survey; May 12, June 2, June 30, 2006.

² The Value Line Investment Survey; September 1, September 29, November 10, 2006.

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Electric Common Stock Market/Book Ratio



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Sources:
2002-2005: AUS Utility Reports.
1980 - 2000: Mergent Public Utility Manual, 2003; at a15, and a17.
* The data for 2006 includes the period Jan-Sept, 2006.

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Equity Risk Premium - Treasury Bond

<u>Line</u>	<u>Date</u>	<u>Treasury Bond Yield¹</u> (1)	<u>Authorized Electric Returns²</u> (2)	<u>Indicated Risk Premium</u> (3)
1	1986	7.78%	13.93%	6.15%
2	1987	8.59%	12.99%	4.40%
3	1988	8.96%	12.79%	3.83%
4	1989	8.45%	12.97%	4.52%
5	1990	8.61%	12.70%	4.09%
6	1991	8.14%	12.55%	4.41%
7	1992	7.67%	12.09%	4.42%
8	1993	6.59%	11.41%	4.82%
9	1994	7.37%	11.34%	3.97%
10	1995	6.88%	11.55%	4.67%
11	1996	6.71%	11.39%	4.68%
12	1997	6.61%	11.40%	4.79%
13	1998	5.58%	11.66%	6.08%
14	1999	5.87%	10.77%	4.90%
15	2000	5.94%	11.43%	5.49%
16	2001	5.49%	11.09%	5.60%
17	2002	5.42%	11.16%	5.74%
18	2003	5.02%	10.97%	5.95%
19	2004	5.05%	10.73%	5.68%
20	2005	4.65%	10.54%	5.89%
21	2006 ³	5.05%	10.34%	5.29%
22	Average	6.69%	11.70%	5.02%

Sources:

¹ Economic Report of the President, January, 2001 and the St. Louis Federal Reserve Bank Website.

² Regulatory Research Associates, Inc., Regulatory Focus, Jan.90-Dec.05.

³ The data for 2006 includes the period Jan-Sept, 2006.

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Equity Risk Premium - Utility Bond

<u>Line</u>	<u>Date</u>	<u>Average "A" Rating Utility Bond Yield¹</u> (1)	<u>Authorized Electric Returns²</u> (2)	<u>Indicated Risk Premium</u> (3)
1	1986	9.58%	13.93%	4.35%
2	1987	10.10%	12.99%	2.89%
3	1988	10.49%	12.79%	2.30%
4	1989	9.77%	12.97%	3.20%
5	1990	9.86%	12.70%	2.84%
6	1991	9.36%	12.55%	3.19%
7	1992	8.69%	12.09%	3.40%
8	1993	7.59%	11.41%	3.82%
9	1994	8.31%	11.34%	3.03%
10	1995	7.89%	11.55%	3.66%
11	1996	7.75%	11.39%	3.64%
12	1997	7.60%	11.40%	3.80%
13	1998	7.04%	11.66%	4.62%
14	1999	7.62%	10.77%	3.15%
15	2000	8.24%	11.43%	3.19%
16	2001	7.78%	11.09%	3.31%
17	2002	7.36%	11.16%	3.80%
18	2003	6.57%	10.97%	4.40%
19	2004	6.01%	10.73%	4.72%
20	2005	5.66%	10.54%	4.88%
21	2006 ³	6.14%	10.34%	4.20%
22	Average	8.16%	11.70%	3.64%

Sources:

¹ Mergent Public Utility Manual, Mergent Weekly News Reports, 2003.

² Regulatory Research Associates, Inc., Regulatory Focus, Jan.90-Dec.05.

³ The data for 2006 includes the period Jan-Sept, 2006.

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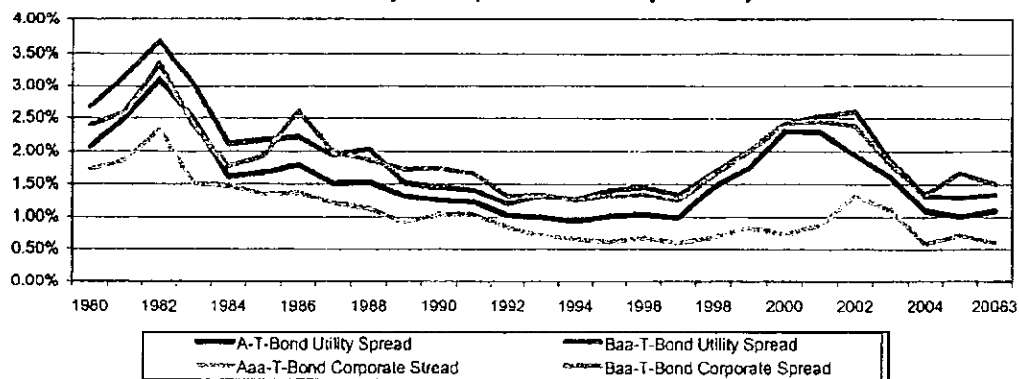
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Annual Average Yields

Line	Year	Public Utility Bond Yields					Corporate Bond Yields			
		T-Bond	A ²	Baa ²	A-T-Bond	Baa-T-Bond	Aaa ¹	Baa ¹	Aaa-T-Bond	Baa-T-Bond
		Yield ¹			Spread	Spread			Spread	Spread
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	1980	11.27%	13.34%	13.95%	2.07%	2.68%	11.94%	13.67%	1.73%	2.40%
2	1981	13.45%	15.95%	16.60%	2.50%	3.15%	14.17%	16.04%	1.87%	2.59%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	2.32%	3.35%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	1.51%	2.37%
5	1984	12.41%	14.03%	14.53%	1.62%	2.12%	12.71%	14.19%	1.48%	1.78%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	1.35%	1.93%
7	1986	7.78%	9.58%	10.00%	1.80%	2.22%	9.02%	10.39%	1.37%	2.61%
8	1987	8.59%	10.10%	10.53%	1.51%	1.94%	9.38%	10.58%	1.20%	1.99%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	1.12%	1.87%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.92%	1.73%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	1.04%	1.75%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	1.03%	1.66%
13	1992	7.67%	8.69%	8.86%	1.02%	1.19%	8.14%	8.98%	0.84%	1.31%
14	1993	6.59%	7.59%	7.91%	1.00%	1.32%	7.22%	7.93%	0.71%	1.34%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.66%	1.25%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.61%	1.32%
17	1996	6.71%	7.75%	8.17%	1.04%	1.46%	7.37%	8.05%	0.68%	1.34%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.60%	1.25%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.69%	1.64%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	0.83%	2.00%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	0.74%	2.42%
22	2001	5.49%	7.78%	8.02%	2.29%	2.53%	7.08%	7.95%	0.87%	2.46%
23	2002	5.42%	7.36%	8.02%	1.94%	2.60%	6.49%	7.80%	1.31%	2.38%
24	2003	4.96%	6.57%	6.83%	1.61%	1.87%	5.67%	6.77%	1.10%	1.81%
25	2004	5.05%	6.14%	6.37%	1.09%	1.32%	5.63%	6.39%	0.58%	1.34%
26	2005	4.65%	5.66%	5.93%	1.01%	1.29%	5.37%	6.32%	0.72%	1.67%
27	2006 ³	5.05%	6.14%	6.39%	1.09%	1.34%	5.65%	6.55%	0.60%	1.50%
28	Average	7.97%	9.57%	9.93%	1.60%	1.97%	8.79%	9.87%	1.07%	1.91%

Yield Spreads

Treasury Vs. Corporate & Treasury Vs. Utility



Notes:

¹ St. Louis Federal Reserve Bank.

² Mergent Public Utility Manual 2003. Moodys Daily News Reports.

³ The data for 2006 includes the period Jan-Sep, 2006.

Michael Gorman
Schedule MPG-8

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Series "A" and "Baa" Utility Bond Yields

<u>Line</u>	<u>Date</u>	<u>"A" Rating Utility Bond Yield</u> (1)	<u>"Baa" Rating Utility Bond Yield</u> (2)
1	11/10/06	5.80%	6.04%
2	11/03/06	5.93%	6.16%
3	10/27/06	5.92%	6.17%
4	10/20/06	6.04%	6.30%
5	10/13/06	6.06%	6.33%
6	10/06/06	5.97%	6.24%
7	09/29/06	5.90%	6.17%
8	09/22/06	5.92%	6.19%
9	09/15/06	6.06%	6.32%
10	09/08/06	6.07%	6.34%
11	09/01/06	6.06%	6.30%
12	08/25/06	6.13%	6.36%
13	08/18/06	6.19%	6.42%
14	Average	6.00%	6.26%

Source:

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

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Schedule MPG-9

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Comparable Group Beta

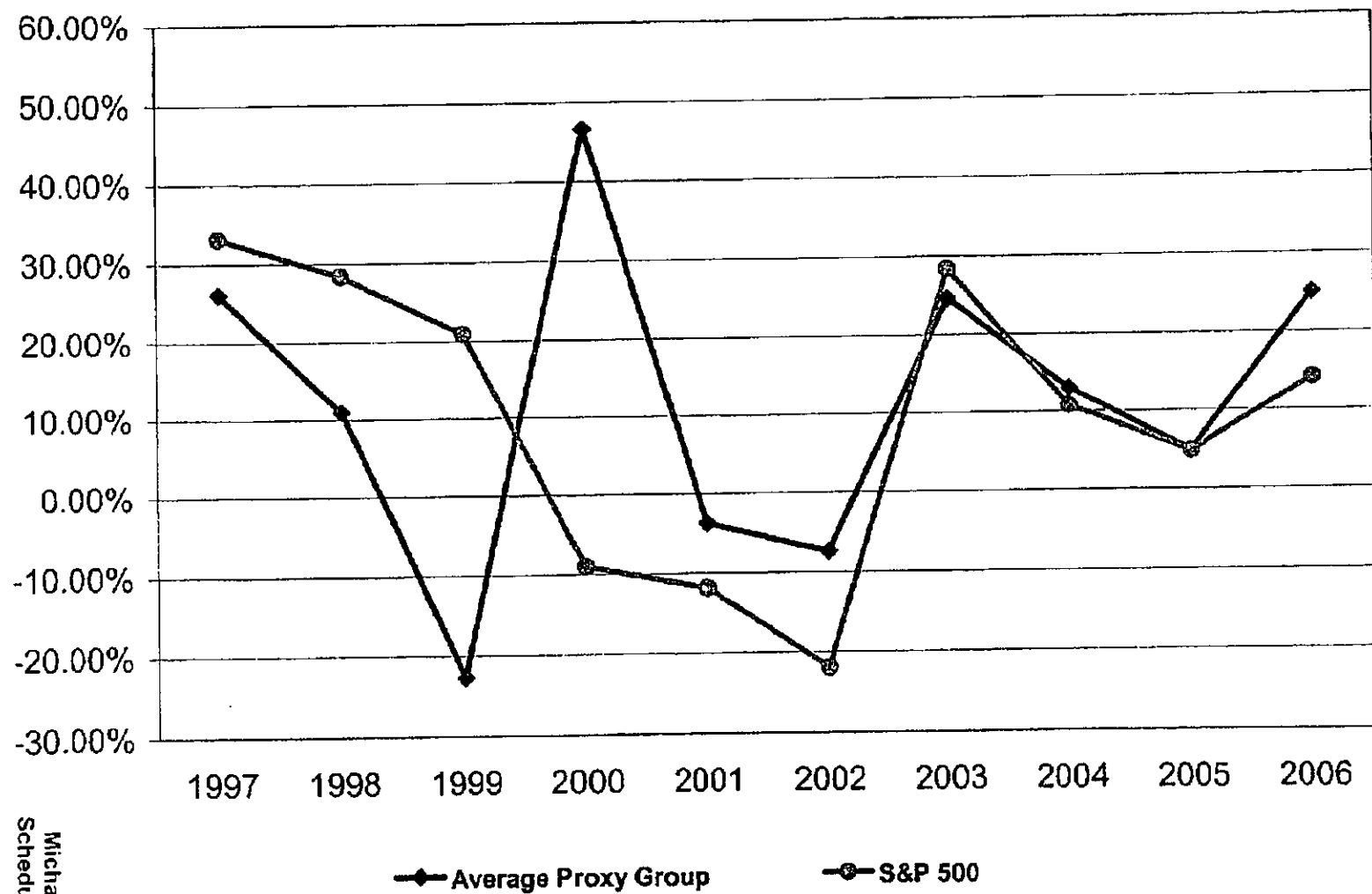
<u>Line</u>	<u>Electric Utility</u>	<u>Historical Beta</u>					<u>5-Yr. AVG</u>	<u>Current Beta</u>
		<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Alliant Energy	0.55	0.65	0.70	0.80	0.85	0.71	0.90
2	Ameren Corp.	0.55	0.60	0.65	0.75	0.75	0.66	0.75
3	DTE Energy	0.55	0.60	0.60	0.65	0.70	0.62	0.75
4	FirstEnergy Corp.	0.55	0.55	0.70	0.75	0.75	0.66	0.80
5	IDACORP, Inc.	0.50	0.60	0.75	0.85	0.95	0.73	1.00
6	NiSource Inc.	0.45	0.50	0.65	0.75	0.80	0.63	0.90
7	OGE Energy	0.45	0.55	0.60	0.70	0.75	0.61	0.75
8	Pinnacle West Capital	0.45	0.55	0.70	0.85	0.90	0.69	1.00
9	Puget Energy Inc.	0.55	0.60	0.65	0.75	0.80	0.67	0.80
10	SCANA Corp.	0.45	0.55	0.60	0.70	0.75	0.61	0.80
11	Southern Co.	N/A	N/A	0.65	0.65	0.65	0.65	0.65
12	Wisconsin Energy	0.50	0.55	0.60	0.70	0.70	0.61	0.80
13	Xcel Energy Inc.	N/A	0.60	0.70	0.80	0.80	0.73	0.90
14	Average	0.50	0.58	0.66	0.75	0.78	0.66	0.83
15	Median	0.50	0.58	0.65	0.75	0.75	0.66	0.80

Source:

The Value Line Investment Survey; September 1, September 29, November 10, 2006.

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Schedule MPG-10

Total Stock Return



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CAPM Return Estimate

<u>Line</u>	<u>Description</u>	<u>Historical Premium (1)</u>
1	Risk Free Rate ¹	5.1%
2	Risk Premium ²	6.5%
3	Beta ³	0.80
4	CAPM	10.3%

<u>Line</u>	<u>Description</u>	<u>Prospective Premium (1)</u>
5	Risk Free Rate ¹	5.1%
6	Risk Premium ²	6.5%
7	Beta ³	0.80
8	CAPM	10.3%
9	CAPM Average	10.3%

Sources:

¹ Blue Chip Financial Forecasts; August 1, 2006 at 2.

² SBBI; 2006 at pp. 31 & 120.

³ The Value Line Investment Survey; September 1, September 29,
November 10, 2006.

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Schedule MPG-12

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S&P Credit Rating Financial Ratios at ROE of 9.8%

Line	Description	Ratio at 9.8% Equity Return (1)	S&P "A" Rating (BP: 5) Benchmark*	S&P "BBB" Rating (BP: 5) Benchmark*	Reference (4)
1	Rate Base	\$ 5,854,574			SCHEDULE GSW-E36.
2	Weighted Common Return	5.12%			Page 2, Line 4, Col. 4.
3	Income to Common	\$ 299,634			Line 1 x Line 2.
4	Depreciation & Amortization	\$ 269,345			SCHEDULE GSW-E36 minus an adjustment of \$118.2 million**
5	Funds from Operations (FFO)	\$ 568,979			Sum of Line 3 and Line 4
6	Weighted Interest Rate	2.48%			Page 2, Sum of Line 1 and 2, Col. 4.
7	Interest Expense	\$ 145,240			Line 1 x Line 6.
8	FFO Plus Interest	\$ 714,219			Line 5 + Line 7.
9	FFO Interest Coverage	4.9x	4.5x - 3.8x	3.8x - 2.8x	Line 8 / Line 7.
10	Total Debt Ratio	45.8%	42% - 50%	50% - 60%	Page 2, Sum of Line 1 and 2, Col. 2.
11	FFO to Total Debt	21.2%	30% - 22%	22% - 15%	Line 5 / (Line 1 x Line 10).

Source:

* Standard and Poors. New Business Profile Scores Assigned to U.S. Utility and Power Companies; Financial Guidelines Revised; June 2, 2004.

** Depreciation adjustment proposed by MIEC witness James Selecky.

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Rate of Return at 9.8% ROE

<u>Line</u>	<u>Description</u>	<u>Amount</u> (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	<u>Weighted</u> <u>Cost</u> (4)
1	Long-Term Debt	\$ 2,551,919,839	44.964%	5.43%	2.44%
2	Short-Term Debt	\$ 45,093,124	0.795%	5.11%	0.04%
3	Preferred Stock	\$ 114,502,040	2.017%	5.19%	0.10%
4	<u>Common Equity</u>	<u>\$ 2,963,961,528</u>	<u>52.224%</u>	<u>9.80%</u>	<u>5.12%</u>
5	Total	\$ 5,675,476,531	100.00%		7.70%

Source:

Schedule LRN-E5-1.

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Equity Risk Premium - 20-Yr Treasury Yield (McShane)

<u>Line</u>	<u>Year</u>	<u>Quarter</u>	<u>Expected Dividend Yield (1)</u>	<u>I/B/E/S Growth Forecast (2)</u>	<u>DCF Cost (3)</u>	<u>20-Year Treasury Yield* (4)</u>	<u>Risk Premium (5)</u>
1	1998	q1	5.1	3.6	8.7	6.0	2.7
2		q2	5.1	3.8	8.9	5.9	2.9
3		q3	5.0	4.3	9.2	5.6	3.6
4		q4	4.8	4.4	9.1	5.4	3.8
5	1999	q1	5.4	4.4	9.8	5.7	4.1
6		q2	5.2	4.5	9.7	6.1	3.6
7		q3	5.5	4.5	10.1	6.4	3.7
8		q4	6.2	4.7	10.9	6.6	4.3
9	2000	q1	6.7	4.8	11.5	6.6	4.9
10		q2	6.0	5.2	11.3	6.3	4.9
11		q3	5.3	5.6	10.9	6.1	4.8
12		q4	4.4	6.0	10.4	5.9	4.5
13	2001	q1	4.5	6.1	10.6	5.6	5.0
14		q2	4.3	6.9	11.2	5.8	5.4
15		q3	4.6	7.4	12.0	5.6	6.3
16		q4	4.7	7.2	11.9	5.5	6.4
17	2002	q1	4.6	6.7	11.3	5.7	5.5
18		q2	4.7	6.6	11.3	5.8	5.6
19		q3	6.0	6.5	12.5	5.2	7.3
20		q4	5.6	6.2	11.8	5.0	6.8
21	2003	q1	5.2	5.8	10.9	4.9	6.0
22		q2	4.3	5.3	9.6	4.6	5.0
23		q3	4.2	4.9	9.2	5.2	4.0
24		q4	4.1	4.7	8.8	5.2	3.6
25	2004	q1	4.0	4.7	8.7	4.9	3.8
26		q2	4.0	5.0	9.0	5.4	3.6
27		q3	3.8	5.3	9.1	5.1	4.0
28		q4	3.8	5.2	9.0	4.9	4.1
29	2005	q1	3.9	5.4	9.2	4.8	4.5
30		q2	3.7	5.3	9.0	4.6	4.4
31		q3	3.5	5.5	9.1	4.5	4.6
32		q4	3.8	6.4	10.2	4.8	5.4
33	2006	q1	3.9	6.8	10.7	4.8	5.9
34	Mean		4.7	5.4	10.2	5.5	4.7
35	Median		4.6	5.3	10.1	5.6	4.5

Source:

WP KCM E8 G8

*St. Louis Federal Reserve Bank

Michael Gorman
Schedule MPG-14
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Equity Risk Premium - 'A' Utility Yield (McShane)

<u>Line</u>	<u>Year</u>	<u>Quarter</u>	<u>Expected Dividend Yield</u> (1)	<u>I/B/E/S Growth Forecast</u> (2)	<u>DCF Cost</u> (3)	<u>'A' Utility Yield</u> (4)	<u>Risk Premium</u> (5)
1	1998	q1	5.1	3.6	8.7	7.1	1.6
2		q2	5.1	3.8	8.9	7.1	1.8
3		q3	5.0	4.3	9.2	7.0	2.2
4		q4	4.8	4.4	9.1	7.0	2.2
5	1999	q1	5.4	4.4	9.8	7.1	2.7
6		q2	5.2	4.5	9.7	7.5	2.2
7		q3	5.5	4.5	10.1	7.9	2.2
8		q4	6.2	4.7	10.9	8.0	2.8
9	2000	q1	6.7	4.8	11.5	8.3	3.2
10		q2	6.0	5.2	11.3	8.5	2.8
11		q3	5.3	5.6	10.9	8.2	2.7
12		q4	4.4	6.0	10.4	8.0	2.3
13	2001	q1	4.5	6.1	10.6	7.7	2.9
14		q2	4.3	6.9	11.2	7.9	3.3
15		q3	4.6	7.4	12.0	7.6	4.3
16		q4	4.7	7.2	11.9	7.6	4.3
17	2002	q1	4.6	6.7	11.3	7.6	3.6
18		q2	4.7	6.6	11.3	7.5	3.8
19		q3	6.0	6.5	12.5	7.1	5.3
20		q4	5.6	6.2	11.8	7.1	4.7
21	2003	q1	5.2	5.8	10.9	6.8	4.1
22		q2	4.3	5.3	9.6	6.4	3.2
23		q3	4.2	4.9	9.2	6.6	2.6
24		q4	4.1	4.7	8.8	6.3	2.4
25	2004	q1	4.0	4.7	8.7	6.1	2.6
26		q2	4.0	5.0	9.0	6.4	2.5
27		q3	3.8	5.3	9.1	6.1	3.0
28		q4	3.8	5.2	9.0	5.9	3.0
29	2005	q1	3.9	5.4	9.2	5.7	3.5
30		q2	3.7	5.3	9.0	5.4	3.5
31		q3	3.5	5.5	9.1	5.5	3.6
32		q4	3.8	6.4	10.2	5.8	4.4
33	2006	q1	3.9	6.8	10.7	5.9	4.8
34	Mean		4.7	5.4	10.2	7.0	3.2
35	Median		4.6	5.3	10.1	5.6	3.0

Source:
WP KCM E8 G8

AmerenUE

Discounted Cash Flow Model - Electric (Vander Weide)

Line	Electric Utility	Last Dividend (1)	Dividend (2)	Stock Price (3)	Annual Growth (4)	Market Cap \$ (Mil) (5)	Cost of Equity (6)	Div. Yield (7)	1/4 DCF (8)	Annual Growth DCF Model (9)
1	Alliant Energy	0.288	1.22242	\$ 31.882	6.93%	3,827	10.76%	0.92%	10.85%	10.78%
2	Amer. Elec. Power	0.370	1.52123	\$ 35.117	2.93%	13,170	7.26%	1.06%	7.34%	7.27%
3	Ameren Corp.	0.635	2.77000	\$ 50.202	5.00%	10,181	10.52%	1.28%	10.41%	10.31%
4	Consolidated Edison	0.575	2.44117	\$ 44.473	3.44%	10,513	8.93%	1.30%	8.89%	8.79%
5	Dominion Resources	0.690	3.14322	\$ 72.980	10.50%	25,931	14.81%	0.97%	14.74%	14.68%
6	DTE Energy	0.515	2.22582	\$ 41.498	4.33%	7,207	9.68%	1.25%	9.61%	9.51%
7	Duke Energy	0.310	1.31297	\$ 28.598	5.26%	26,764	9.85%	1.10%	9.60%	9.82%
8	Empire	0.320	1.36266	\$ 22.277	3.00%	594	9.12%	1.45%	9.05%	8.92%
9	Energy East Corp.	0.290	1.21853	\$ 24.582	4.33%	3,580	9.29%	1.19%	9.35%	9.26%
10	Entergy Corp.	0.540	2.44340	\$ 70.012	8.40%	15,078	11.89%	0.79%	11.78%	11.74%
11	FirstEnergy Corp.	0.450	1.83761	\$ 48.913	4.60%	17,043	8.28%	0.91%	8.42%	8.37%
12	Great Plains Energy	0.415	1.75946	\$ 28.437	2.65%	2,114	8.64%	1.47%	8.77%	8.64%
13	Hawaiian Electric	0.310	1.32572	\$ 26.702	3.63%	2,180	8.59%	1.17%	8.53%	8.44%
14	IDACORP Inc.	0.300	1.29623	\$ 32.293	4.87%	1,468	8.68%	0.94%	8.61%	8.56%
15	MDU Resources	0.190	0.84321	\$ 35.019	8.25%	4,412	10.96%	0.55%	10.62%	10.60%
16	NiSource Inc.	0.230	0.97962	\$ 20.460	3.37%	5,752	8.16%	1.13%	8.10%	8.02%
17	Northeast Utilities	0.175	0.77932	\$ 19.658	8.50%	2,524	12.46%	0.91%	12.42%	12.36%
18	NSTAR	0.303	1.28722	\$ 28.462	5.00%	2,895	9.52%	1.08%	9.54%	9.47%
19	OGE Energy	0.333	1.40385	\$ 28.452	2.67%	2,704	7.60%	1.18%	7.56%	7.48%
20	Otter Tail Corp.	0.288	1.21949	\$ 29.433	4.75%	872	8.89%	0.99%	8.91%	8.85%
21	Pepco Holdings*	0.280	1.10534	\$ 23.192	5.50%	4,323	10.27%	1.14%	10.31%	10.23%
22	Pinnacle West Capital	0.500	2.15681	\$ 40.558	6.20%	3,994	11.52%	1.25%	11.53%	11.44%
23	PNM Resources	0.220	0.94614	\$ 24.292	9.95%	1,752	13.85%	0.93%	14.00%	13.94%
24	PPL Corp.	0.275	1.14567	\$ 30.157	9.09%	11,070	12.89%	0.93%	13.12%	13.07%
25	Progress Energy	0.605	2.55791	\$ 43.847	3.60%	10,713	9.33%	1.39%	9.33%	9.21%
26	Puget Energy Inc.	0.250	1.07486	\$ 21.060	4.00%	2,401	9.10%	1.20%	9.03%	8.94%
27	SCANA Corp.	0.420	1.71438	\$ 39.908	4.50%	4,447	8.80%	1.06%	8.97%	8.90%
28	Sempra Energy	0.300	1.27777	\$ 46.790	5.88%	11,656	8.61%	0.65%	8.52%	8.60%
29	Southern Co.	0.373	1.61655	\$ 33.115	4.67%	23,679	9.55%	1.14%	9.47%	9.39%
30	TXU Corp.	0.413	1.80955	\$ 49.153	10.88%	27,074	14.15%	0.86%	14.65%	14.61%
31	Vectren Corp.	0.305	1.26612	\$ 26.473	3.33%	2,053	8.11%	1.16%	8.17%	8.09%
32	Wisconsin Energy	0.230	0.99219	\$ 40.123	7.58%	4,810	10.03%	0.58%	10.05%	10.03%
33	WPS Resources	0.585	2.50613	\$ 51.597	8.83%	1,974	11.69%	1.11%	11.59%	11.51%
34	Xcel Energy Inc.	0.215	0.92755	\$ 18.582	4.29%	7,414	9.29%	1.17%	9.21%	9.12%
35	AVERAGE	0.366		\$ 35.568	5.54%		10.03%	1.07%	10.04%	9.97%
36	MKT WTG AVERAGE				6.29%		10.61%	1.03%	10.66%	10.59%

Source:

Vander Weide Direct, Schedule JWV-1.

AmerenUE

Discounted Cash Flow Model - Gas (Vander Weide)

<u>Line</u>	<u>Electric Utility</u>	<u>Last Dividend</u> (1)	<u>Dividend</u> (2)	<u>Stock Price</u> (3)	<u>Annual Growth</u> (4)	<u>Market Cap \$ (Mill)</u> (5)	<u>Cost of Equity</u> (6)	<u>Div. Yield</u> (7)	<u>1/4 DCF</u> (8)	<u>Annual Growth DCF Model</u> (9)
1	AGL Resources	0.370	1.46238	\$ 35.452	4.43%	2,766	8.55%	1.06%	8.86%	8.79%
2	Atmos Energy	0.315	1.36835	\$ 26.467	5.40%	2,159	10.57%	1.21%	10.51%	10.42%
3	Equitable Resources	0.210	0.96441	\$ 36.042	9.80%	4,279	12.48%	0.60%	12.38%	12.36%
4	New Jersey Resources	0.360	1.49790	\$ 44.517	5.25%	1,232	8.61%	0.82%	8.70%	8.65%
5	NICOR Inc.	0.465	1.97394	\$ 40.673	3.10%	1,788	7.95%	1.15%	7.90%	7.81%
6	Northwest Natural Gas	0.345	1.48345	\$ 34.468	5.38%	966	9.68%	1.01%	9.66%	9.60%
7	Oneok, Inc.	0.300	1.25910	\$ 30.940	6.42%	3,244	10.49%	0.98%	10.61%	10.55%
8	Peoples Energy	0.545	2.37092	\$ 36.498	4.53%	1,412	11.03%	1.51%	10.91%	10.77%
9	Questar, Inc.	0.225	1.05177	\$ 74.760	11.57%	6,972	12.98%	0.31%	12.92%	12.91%
10	South Jersey	0.225	0.95156	\$ 27.728	5.30%	775	8.73%	0.82%	8.76%	8.72%
11	WGL Holdings Inc.	0.338	1.42983	\$ 30.218	3.75%	1,440	8.48%	1.13%	8.47%	8.39%
12	AVERAGE	0.336		\$ 37.978	5.90%		9.96%	0.96%	9.97%	9.91%
13	MKT WTG AVERAGE				7.42%		10.84%	0.81%	10.85%	10.80%

Source:

Vander Weide Direct, Schedule JWV-2.