

Exhibit No.:
Witness: Michael Gorman
Type of Exhibit: Surrebuttal Testimony
Issue: Return on Equity
Sponsoring Parties: Missouri Industrial Energy Consumers
Case No.: 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)	Case No. ER-2007-0002
Service Provided to Customers in the)	
Company's Missouri Service Area)	

Surrebuttal Testimony and Schedules of

Michael Gorman

On Behalf of

Missouri Industrial Energy Consumers

February 27, 2007



Project 8632

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

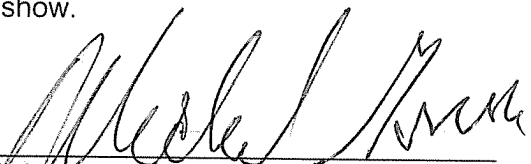
Affidavit of Michael Gorman

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.

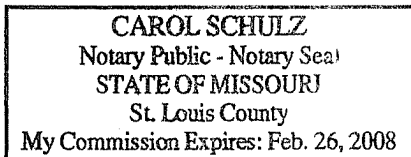
2. Attached hereto and made a part hereof for all purposes are my surrebuttal testimony and schedules, which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2007-0002.

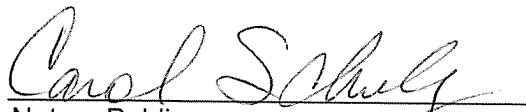
3. I hereby swear and affirm that the testimony and schedules are true and correct and that they show the matters and things they purport to show.



Michael Gorman

Subscribed and sworn to before this 27th day of February 2007.





Notary Public

My Commission Expires February 26, 2008.

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Service Provided to Customers in the)	
Company's Missouri Service Area)	

Surrebuttal 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 ARE YOU THE SAME MICHAEL GORMAN WHO HAS PREVIOUSLY FILED**
5 **TESTIMONY IN THIS PROCEEDING?**

6 A Yes. I have previously filed direct testimony on return on equity issues.

7 **Q ARE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE OUTLINED IN**
8 **THAT PRIOR TESTIMONY?**

9 A Yes. This information is included in Appendix A to my direct testimony on return on
10 equity issues.

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

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

**Michael Gorman Surrebuttal
Page 1**

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

2 A I will respond to the rebuttal testimony of AmerenUE witnesses Ms. Kathleen C.
3 McShane, Mr. Lee Nickloy, and Dr. James H. Vander Weide.

4 **Q PLEASE SUMMARIZE YOUR FINDINGS IN YOUR SURREBUTTAL TESTIMONY.**

5 A In my surrebuttal testimony, I respond to the arguments of AmerenUE witnesses Ms.
6 McShane and Dr. Vander Weide. The AmerenUE witnesses' continue to support a
7 financial risk return add-on to the traditional method of estimating a return on equity
8 for utility companies using DCF and risk premium studies. The witnesses' proposed
9 financial risk equity return add-on should be rejected. These witnesses have offered
10 no new evidence in support of this unconventional return on equity add-on premium,
11 and they have failed to provide adequate response to the criticisms offered by
12 intervenor witnesses in this proceeding. This return add-on is flawed, and inflates the
13 return on equity that AmerenUE would be allowed to earn on its Missouri utility
14 assets.

15 I also respond to the witnesses' contention that their proxy group produces a
16 more reliable return on equity estimate than my proxy group. As shown, the
17 witnesses' argument is a red herring. While the selection of the proxy group is
18 important, the differences between proxy groups do not produce significant
19 differentials in DCF results as long as the models are applied reasonably and
20 correctly. The systematic risk factor beta, used in the CAPM return estimate, can
21 however be impacted by the proxy group if the group contains many companies
22 which are predominantly exposed to non-regulated investment risk, such as the proxy
23 group used in particular by Dr. Vander Weide. The higher beta estimates produced

1 by the companies that are largely exposed to non-regulated investment risk is not an
2 appropriate beta to use for AmerenUE's regulated utility operations in Missouri.

3 Further, AmerenUE witnesses use excessive growth rates which inflate their
4 DCF return estimates. Hence, the AmerenUE witnesses' proposed return on equity
5 for AmerenUE is excessive, and a fair return on equity for AmerenUE in this
6 proceeding is around 9.8%.

7 I also take issue with AmerenUE witness Dr. Vander Weide's criticism of my
8 reliance on both projected and current observable interest rates. Dr. Vander Weide
9 proposes to use only projected interest rates because he believes those are the rates
10 that will reflect AmerenUE's cost of capital during 2007, the first year rates
11 determined in this proceeding will be in effect. I disagree. The accuracy of projected
12 interest rates is at best problematic. Indeed, for reasons set forth in my direct
13 testimony, current observable interest rates are just as likely a reflection of interest
14 rates that will prevail in 2007, as are projected interest rates. Again, I believe it is
15 appropriate to recognize both projected and current interest rates in order to
16 reasonably capture AmerenUE's cost of capital during the period rates determined in
17 this proceeding will be in effect.

18 I also respond to AmerenUE witness Mr. Nickloy's testimony which suggests
19 that the Commission should not give consideration to S&P's financial credit rating
20 metrics in evaluating a proposed return on equity in this proceeding. I disagree.
21 While the credit rating financial metrics are only a part of S&P's determination of
22 credit ratings for utility companies, it nevertheless provides meaningful information to
23 test whether a return on equity will support a utility's credit metrics and credit rating.
24 This test provides useful information to assist the Commission in its determination of
25 a rate of return that is fair compensation based on today's low-capital market cost,

1 and also supportive of the utility's financial integrity and credit standing. As such,
2 these credit rating financial metrics should be used by the Commission to evaluate
3 the reasonableness of rate of return recommendations in this proceeding.

4 **RESPONSE TO MS. MCSHANE**

5 **Q ON PAGE 12 OF MS. MCSHANE'S REBUTTAL TESTIMONY, SHE ARGUES THAT**
6 **ALL INTERVENOR WITNESSES, INCLUDING YOU, ARE IMPLICITLY**
7 **TARGETING A MARKET VALUE TO BOOK VALUE OF EQUITY OF ONE. IS SHE**
8 **CORRECT?**

9 **A** No. Ms. McShane argues that the intervener witnesses are implicitly targeting a
10 market-to-book ratio equal to 1 because we do not accept her financial risk return on
11 equity add-on adjustment of around 100 basis points. Ms. McShane's argument is
12 erroneous and is conceptually without merit.

13 Ms. McShane's financial risk equity return add-on is not necessary to maintain
14 a market to book ratio greater than 1, and excluding this adjustment will not drive
15 market price to book value. In fact, as I demonstrated in my direct testimony, utilities
16 have maintained market to book ratios greater than 1 for about the last twenty years –
17 see Schedule MPG-5 to my direct testimony. This market to book ratio premium has
18 been consistently preserved without the financial risk adjustment proposed in this
19 case by the AmerenUE witnesses.

20 **Q WHY DO YOU BELIEVE UTILITIES' MARKET PRICE PREMIUM TO BOOK VALUE**
21 **IS NOT THE RESULT OF RETURN ON EQUITY ADD-ONS AS PROPOSED BY**
22 **THE AMERENUE WITNESSES IN THIS CASE?**

1 A The financial risk equity return proposed by AmerenUE witnesses Dr. Vander Weide
2 and Ms. McShane is not based on the traditional practice of estimating a utility return
3 on equity. Indeed, such adjustments are normally either explicitly rejected by
4 regulatory commissions or not accepted.

5 **Q WHY DO YOU BELIEVE THESE EQUITY RETURN ADD-ON ADJUSTMENTS ARE**
6 **RELATIVELY NEW?**

7 A I have been testifying on rate of return in regulatory proceedings for almost 20 years.
8 Based on my experience, this type of return on equity add-on adjustment has evolved
9 over time, but has never been widely accepted.

10 For example, as Staff witness Stephen Hill points out in his rebuttal at 15-20,
11 Dr. Vander Weide only started in 2004 to include a financial risk adjustment to his
12 recommended return on equity for utility companies. Prior to 2004, Dr. Vander
13 Weide's recommendations were based on his DCF and risk premium studies, without
14 add-on return premiums (Rebuttal Stephen Hill at 15). Over the 30-year period prior
15 to 2004, Dr. Vander Weide did not include a financial risk return add-on to his
16 recommended return on equity.

17 In more recent cases, Ms. McShane's proposed financial risk adjustments (or
18 market to book ratio adjustments) have been rejected. For example, in Ameren's
19 recent utility filings for all three of its Illinois utility companies, Ms. McShane's financial
20 risk adjustment was rejected by the Illinois Commerce Commission (ICC). In that
21 docket, the ICC stated:

22 "Ameren argues that the authorized return on common equity needs to
23 be adjusted upward to maintain existing market-to-book ratios that
24 exceed 1.0. CUB, alternatively, argues that the existence of market-to-
25 book ratios exceeding 1.0 constitutes evidence that utilities are earning
26 returns on equity that exceed investor requirements. In the
27 Commission's view, these conflicting arguments demonstrate, in part,

1 the hazards a regulator might face if it attempted to use market-to-book
2 ratios as the basis for establishing the cost of common equity.
3 Additionally, the Commission observes that CILCO, CIPS, and IP do
4 not have market traded common stock and, therefore, do not have
5 observable market-to-book ratios. Finally, the Commission observes
6 that it has repeatedly rejected arguments in favor of using market-to-
7 book ratios as the basis for establishing cost of common equity. The
8 Commission rejects both of the contradictory arguments that market-to-
9 book ratios should be directly used in establishing CILCO's, CIPS', and
10 IP's cost of common equity in this proceeding." Emphasis added. (ICC
11 Docket 06-0070/06-0071/06-0072, November 21, 2006, at 141)

12 The standard practice by regulatory commissions is to rely on traditional
13 methods of estimating a fair return on common equity, which includes DCF and risk
14 premium studies without the "new" financial risk return add-on proposed in this case
15 by Ms. McShane and Dr. Vander Weide. This evidence clearly demonstrates that Ms.
16 McShane's argument that market prices would collapse to book value without the
17 financial risk return add-on is without merit and is inaccurate.

18 **Q ON PAGES 13 AND 14 OF MS. MCSHANE'S REBUTTAL TESTIMONY, SHE**
19 **ASSERTS THAT HER PROPOSED 100 BASIS POINT LEVERAGE ADD-ON TO**
20 **THE COST OF EQUITY WOULD NOT INCREASE A UTILITY'S STOCK PRICE**
21 **AND FURTHER INCREASE ITS MARKET-TO-BOOK RATIO. PLEASE RESPOND.**

22 A Ms McShane's assertion that a utility's market to book ratio would not increase if
23 regulatory commissions begin to accept her financial leverage adjustment to the
24 authorized return on equity is wrong. The example she offers at Pages 13-14 of her
25 testimony, while purporting to confirm her belief, actually does not address the issue
26 to which she purportedly is responding.

27 Ms. McShane's example assumes the constant authorized return on book
28 equity of 11.5%. However, the argument is something much different. Specifically,
29 Ms. McShane's financial market risk adjustment is non-traditional and not a widely

1 accepted methodology by regulatory commissions to determine the return on equity
2 for utility companies. Hence, the issue is what would happen to the market to book
3 ratio between the two events.

4 First, the traditional method of authorizing return on equity is based on DCF
5 and risk premium studies. Second, the valuation parameters are compared to the
6 impact on a utility's market value if the regulatory commission began to accept the
7 financial risk return on equity add-on proposed by Ms. McShane and Dr. Vander
8 Weide.

9 **Q PLEASE PROVIDE AN EXAMPLE THAT DEMONSTRATES THAT A UTILITY'S**
10 **MARKET TO BOOK RATIO WOULD INCREASE IF THE FINANCIAL RISK**
11 **ADJUSTMENT PROPOSED BY THE AMERENUE WITNESSES GAINS**
12 **ACCEPTANCE BY REGULATORY COMMISSIONS.**

13 **A** This is shown below in Table 1. In developing Table 1, I have accepted Ms.
14 McShane's illustrative assumptions of a cost of equity of 10%, a market to book ratio
15 of 1.5 (page 13) and constant payout ratio of 52%. Under these assumptions as
16 shown under Year 1, the utility's market to book ratio would be 1.5x, with a price to
17 earnings ratio of 15x, and a dividend yield of 3.5%.

18 Now, let us assume that instead of an authorized return cost of equity of 10%,
19 the regulatory commissions begin to authorize the utility an 11.5% return on equity,
20 which is composed of a DCF and risk premium cost of 10.0% and financial leverage
21 return add-on of 1.5%.

22 Note that if everything else is held constant, increasing the authorized return
23 on equity from 10% to 11.5% would increase the utility's market to book ratio from
24 1.50x up to 1.73x. However, the utility dividend yield of 3.5% and price to earnings

ratio of 15.0x would be held constant if the dividend payout ratio remains constant as assumed by Ms. McShane in her example.

This is a reasonable expectation because utility stock value is based on earnings, dividends and free cash flow, not book value. Hence, if a utility's earning increases, all else remaining constant including the price to earnings ratio and dividend yield, the utility's market to book ratio would increase because of the increased earnings.¹ This is illustrated in the example in Table 1 below.

TABLE 1				
Effect on Stock Price and Market/Book Ratio With Financial Leverage ROE Add-on				
Line	Description	Year 1	Year 2	
1	Book Value (1) _{t-1} + (6) _{t-1} - (7) _{t-1}	\$10.00	\$10.48	
2	Market Value (4) x (7)	\$15.00	\$18.08	
3	Market/Book Ratio (2)/(1)	1.50x	1.73x	
4	Price/Earnings (2)/(7)	15.0x	15.0x	
5	Payout Ratio	52%	52%	
6	Authorized Book Return on Equity	10.0%	11.5%	
7	Earnings per Share (1) x (6)	\$1.00	\$1.21	
8	Dividends per Share (5) x (7)	\$0.52	\$0.62	
9	Growth (6) x (1-(5))	4.8%	5.5%	
10	Dividend Yield (8)/(2)	3.5%	3.5%	
11	Annual Return [((2) + (7) _{t-1})/(2) _{t-1}] - 1		25%	

¹ It is likely the P/E ratio would also increase and dividend yield would decrease with an increase to the book equity return because the utility's internal earnings growth rate (Line 9) would increase due to the higher book return and constant payout ratio. An increase to the P/E ratio would widen the market to book ratio more than that estimated in the table.

1 As shown above, adjusting the regulatory authorized return on book equity
2 from 10.0% to 11.5% would increase the market to book ratio from 1.50x to 1.73x. A
3 utility's market to book ratio would expand if a regulatory commission began to
4 authorize a higher return on book equity by approving Ms. McShane's proposed
5 financial leverage return on equity add-on adjustment. This happens because the
6 utility's market price would adjust to the higher earnings and higher dividend paying
7 ability.

8 **Q AT PAGE 53 OF MS. MCSHANE'S TESTIMONY, SHE STATES THAT SHE HAS**
9 **NO PROBLEM WITH THE APPLICATION OF YOUR DCF MODEL, BUT**
10 **QUESTIONS WHETHER THE RESULTS ARE AS RELIABLE AS THAT WHICH**
11 **MAY HAVE BEEN PRODUCED THROUGH A LARGER SAMPLE GROUP.**
12 **PLEASE COMMENT.**

13 **A**The validity of Ms. McShane's argument is dubious at best, recognizing that her
14 sample is composed of 17 companies, while my sample is composed of 13. Further,
15 some of the companies included in her comparable group would have been dropped
16 at the time of my analysis due to recent merger activity. Hence, the number of
17 companies in my group, and the number of companies in her group, and the risk
18 selection criteria, do not produce significant differences in the size of the comparable
19 group. But, more importantly, the size of the sample group would not make a
20 significant difference in the results of a DCF return estimate, if the models were
21 applied correctly.

Q WHY DO YOU BELIEVE PROPER APPLICATION OF THE FINANCIAL MODELS IS MORE RELEVANT THAN THE DIFFERENCE IN PROXY GROUPS?

A As shown on my Surrebuttal Schedule MPG-1, I developed a DCF analysis using mine, Dr. Vander Weide's and Ms. McShane's sample groups in both a constant growth version of a DCF model and a two-stage growth DCF version. In the constant growth version, I used the consensus analysts' growth rate projections as a long-term sustainable growth rate estimate. In the non-constant growth version, I've used consensus analysts' growth rate projections over the first five years of the dividend growth period, and used the GDP long-term growth rate forecast of 5.1% reported by the Blue Chip Economic Indicators as the long-term sustainable growth rate estimate for all the companies included in all three groups.

The constant growth application of these models for Dr. Vander Weide's, Ms. McShane's and my group are 10.0%, 10.9% and 9.5% (pages 1-3), respectively. It is not surprising to see the variation in DCF return estimates because the average group growth rate estimate varies considerably. Specifically, Ms. McShane's group average growth rate is 7.46%, Dr. Vander Weide's is 6.06%, and mine is 5.63%.

Reflecting that many of the companies in these groups have extraordinarily high growth rates over the next three to five years, the two-stage growth model produces a more meaningful assessment of the long-term growth performance for the proxy companies. The multi-stage growth estimates for each of the proxy groups indicate a return of 8.8% for my group, 8.7% for Ms. McShane's group, and 9.0% for Dr. Vander Weide's group (pages 4-6). Combining all three of these groups, the two-stage growth DCF model would indicate a return of 8.9% (page 7).

Hence, application of a constant growth and DCF model on the three groups produces a variance in the DCF results largely because of the significant discrepancy

1 in the group average growth rate. Applying a two-stage growth model eliminates the
2 DCF result discrepancy almost completely. A two-stage growth DCF model for this
3 group indicates, convincingly, that a reasonable DCF return estimate for electric utility
4 companies in today's marketplace is around 9.0%.

5 **Q WHAT DO YOU CONCLUDE FROM YOUR DCF REVIEW OF THE VARIOUS**
6 **PROXY GROUPS IN THIS PROCEEDING?**

7 A While selecting a proxy group is necessary in order to reasonably estimate the fair
8 return on equity for AmerenUE in this proceeding, AmerenUE witnesses are simply
9 making inaccurate assertions that a larger proxy group produces a more reliable and
10 accurate return on equity estimate. Indeed, the estimate of an accurate and reliable
11 DCF return is most dependent on the use of data that reasonably reflects long-term
12 sustainable growth, and less dependent on the proxy group difference.

13 The group selection does have an impact on the beta estimate used in the
14 CAPM return estimate. However, those variations in beta are largely driven by the
15 non-regulated exposure of the companies included in the proxy group, and the fact
16 that utility betas are inflated currently due to abnormally strong price performance
17 over the last five years. I will discuss this issue later in this testimony in response to
18 Dr. Vander Weide.

19 Nevertheless, I still believe that the proxy groups used by Dr. Vander Weide in
20 particular contain many companies that are not reasonable risk proxies for
21 AmerenUE's low regulated operating and financial risk, which I will describe in more
22 detail later in this testimony.

1 **Q WHY WOULD THREE TO FIVE-YEAR EARNINGS OUTLOOKS EXCEED A**
2 **REASONABLE SUSTAINABLE LONG-TERM GROWTH RATE FOR THESE**
3 **COMPANIES?**

4 **A Many utility companies are in the middle of an abnormally large construction**
5 **expenditure period. Consequently, these capital expenditure programs are growing**
6 **utility rate base at an abnormally high rate. Utilities' earnings are tied to their rate**
7 **base. During periods where utilities are making significant improvements to existing**
8 **generating stations, constructing new generating stations, and adding transmission**
9 **capacity, their rate bases are growing at abnormally high rates.**

10 These abnormally high construction expenditures will not continue indefinitely.
11 After this current abnormally high construction period is completed, utility rate base
12 growth would slow to a more normalized sustainable level, and utilities' earnings
13 outlooks will contract to reflect normal levels of capital expenditures. As such, it is
14 reasonable to expect a utility's growth can be abnormally high over the next three to
15 five years, but will subsequently decline to a more reasonable long-term sustainable
16 level thereafter.

17 **Q HAS THE UTILITY INDUSTRY RECOGNIZED THE ABNORMALLY HIGH LEVEL**
18 **OF CAPITAL EXPENDITURES PROJECTED IN THE INDUSTRY OVER THE NEXT**
19 **THREE TO FIVE YEARS?**

20 **A Yes. In the fourth quarter 2006, the Edison Electric Institute (EEI), a utility company**
21 **trade organization, published a financial update for electric utilities. A portion of the**
22 **highlights identified by EEI is as follows:**

23 “■ Shareholder-owned electric utilities brought 5,857 MW of new
24 capacity online in 2006, 42% less than in 2005. Natural gas
25 generation has dropped from 98% of new plant construction in 2002 to

64% in 2006. In contrast, wind has increased from 1% to 32% over the same time period.

■ With reserve margins shrinking in several key regional electricity markets and nationwide power demand growing steadily, the industry is now planning a new round of plant construction. Announced new capacity additions totaled 33,998 MW in 2006, surpassing the total for each of the last four years, and over twice that of 2005.

■ EEI survey results indicate that the industry is planning to invest \$31.5 billion in the transmission system from 2006-2009, a 58% increase over the amount invested from 2002-2005. Transmission investment in 2005 totaled \$5.8 billion, an 18% increase over the \$4.9 billion invested in 2004.” (EEI, Construction, Q4 2006 Financial Update)

EEI also recognized that the large capital expenditure programs were triggering the need for many rate cases across the country. EEI stated as follows:

“■ Rate cases are quickly gaining in importance to an industry embarking on a new capital investment cycle, with rising spending on reliability, enhanced transmission infrastructure, emissions control equipment, and new generation in several power markets.

■ The 9 rate case filings in the fourth quarter of 2006 put the total number of cases filed during 2006 at 42, eight more than the 34 cases filed in 2005 and 18 more than the 24 cases filed in 2004.

■ Rate case filings in 2006 were largely driven by construction costs for new generation and reliability improvements, adjustments, surcharges, and rider mechanisms to counteract regulatory lag and rising fuel and purchased power costs.

■ Average awarded ROE in the fourth quarter rose slightly, to 10.44%, from 10.06% in the third quarter.” (EEI, Rate Case Summary, Q4 2006 Financial Summary)

As clearly identified by EEI, abnormally large capital expenditures going forward, which significantly exceed the capital expenditures over the last few years, are driving utilities to file rate cases in increasingly high numbers. This rate case activity increases utility rates to recover increasing capital expenditures that will increase utilities’ earnings over the next three to five-year period as these large capital expenditure projects are absorbed in the utilities’ cost and rate structures.

1 This expected increase in capital expenditures and increases in related utility
2 earnings and dividend paying ability is not a sustainable trend, but rather is the result
3 of abnormally high period of industry construction expenditures. Once generation
4 reserve margins are increased to or above target levels, transmission capacity
5 investments are made to alleviate transmission constraints and environmental
6 upgrades are complete, it is reasonable to expect that capital expenditures by utilities
7 will decline to a more normal and sustainable level. This will cause utility earnings to
8 drop to a sustainable level thereafter as well.

9 The assessment by EEI supports the use of a multi-stage growth DCF model
10 in this case, because three to five-year earnings growth projections are unsustainably
11 high because they are following the abnormally high construction expenditure period
12 of the utility industry.

13 **Q DID MS. MCSHANE MAKE COMMENTS CONCERNING YOUR EQUITY RISK**
14 **PREMIUM ANALYSIS?**

15 **A Yes.** The issue she takes with my equity risk premium analysis is described as
16 follows:

- 17 • She argues that inflation during the 1986 through 1995 period
18 averaged 3.5% with a high rate of 5.4%. Inflation during this period is
19 much higher than the current inflation and the inflation experienced
20 over 1996 through 2006 which ranged from 1.6% to 3.4% with an
21 average around 2.6%.
- 22 • She observes that inflation in the post-1996 period has been lower
23 than it was in the pre-1996 period. For this, she makes a leap of logic,
24 without any support, that inflation is more volatile in the post-1996
25 period because it is lower.
- 26 • She concludes from the two prior points that there is an inverse
27 relationship between interest rates and equity risk premiums.

1 She then conducts a regression analysis that suggests when nominal interest
2 rates are low, equity risk premiums should be high, based on authorized returns over
3 my studied historical period.

4 **Q DOES MS. MCSHANE'S ARGUMENT HAVE VALIDITY?**

5 A No. Inflation rates were very high in the 1970s and 1980s as reported by Ibbotson &
6 Associates (2006 Yearbook at 17). However, inflation in the 1990s and 2000s has
7 been relatively moderate at less than 3%.

8 **Q DOES THE FACT THAT INFLATION IS LOWER TODAY JUSTIFY AN INCREASE**
9 **IN THE EQUITY RISK PREMIUM AS MS. MCSHANE ASSERTS?**

10 A No. Indeed, the drop in inflation largely explains the change in interest rates today
11 relative to the early 1990s. Specifically, Treasury bond yields during the 1990s
12 ranged from a high of 8.61% to a low of 5.9%. Inflation projections during that time
13 ranged from approximately 3% to 5%. As such, the real returns for bond investments
14 (nominal yield less inflation expectations) during the 1990s moved approximately
15 within the range of 4.0% to 3.0% (see Exhibit MPG-2).

16 The current inflation outlook is about 2.5%. Current Treasury bond yields are
17 around 5.0%. This indicates a real return on Treasury bonds of about 2.5%.

18 Hence, interest rates today are lower than in the 1990s, but a significant
19 portion of the drop in interest rates was created by lower inflation outlooks. Since
20 inflation expectations are also built into equity returns, lower inflation outlooks have
21 reduced both debt and equity returns. All else equal, a reduction in the inflation
22 expectation built into debt and equity would decrease the expected return on both

1 securities by the same amount, and the equity risk premium would not increase
2 merely because of a decrease in bond interest rates.

3 The bottom line is that Ms. McShane's proposal to increase the equity risk
4 premium because of a decline in nominal interest rates ignores the reality that interest
5 rates have declined largely because of a significant drop in inflation expectations. A
6 drop in inflation would reduce both equity returns and bond returns.

7 **Q DO ACADEMIC STUDIES SUPPORT AN INVERSE RELATIONSHIP BETWEEN**
8 **EQUITY RISK PREMIUMS AND INTEREST RATES?**

9 A Academic studies have found certain periods of time where there has been an inverse
10 relationship between equity risk premiums and interest rates. I am familiar with
11 academic research conducted using data from the 1970s and 1980s. During that time
12 period, inflation and interest rate volatility was greater than it is today. While
13 academic studies did note an inverse relationship during this period of time, the
14 researchers clearly noted that the relationship between risk premiums and interest
15 rates can vary based on the time period studied. As an example, one study found
16 that the relationship between interest rates and equity risk premiums was positively
17 related in the period 1966 through 1977, and the relationship turned negative
18 beginning in 1980 (The Risk Premium Approach to Measuring Utilities' Cost of Equity,
19 Eugene F. Brigham, Dilip K. Shome, and Steve R. Binson, Financial
20 Management/Spring 1985).

21 A more recent study where this phenomena was reviewed a second time by
22 authors Robert S. Harris, and Felicia C. Marston, in The Market Risk Premium:
23 Expectational Estimates Using Analysts' Forecasts, the authors corroborated findings
24 in an earlier study and concluded in part as follows:

1 “Shareholder required rates of return and risk premia should be based
2 on theories about investors’ expectations for the future. In practice,
3 however, risk premia are typically estimated using averages of
4 historical returns. This paper applies an alternate approach to
5 estimating risk premia that employs publicly available expectational
6 data. The resultant average market equity risk premium over
7 government bonds is comparable in magnitude to long-term
8 differences (1926 to 1998) in historical returns between stocks and
9 bonds. As a result, our evidence does not resolve the equity premium
10 puzzle; rather, the results suggest investors still expect to receive large
11 spreads to invest in equity versus debt instruments.

12 “There is strong evidence, however, that the market risk premium
13 changes over time. Moreover, these changes appear linked to the level
14 of interest rates as well as ex ante proxies for risk drawn from interest
15 rate spreads in the bond market, consumer confidence in future
16 economic conditions, disagreement among financial analysts in their
17 forecasts and the volatility of equity returns implied by options data.
18 The significant economic links between the market premium and a
19 wide array of risk variables suggests that the notion of a constant risk
20 premium over time is not an adequate explanation of pricing in equity
21 versus debt markets.” (Page 15) (Emphasis added)

22 As noted by the authors, the level of interest rates and equity risk premiums do
23 have some impact on one another. The equity risk premium is, however, impacted by
24 changes in the expected investment risk of equity versus debt securities and
25 corporate bond spreads, as well as interest rates. These authors note that equity risk
26 premiums can be inversely related to government bond interest rates, but positively
27 related to corporate bond yield spread to Treasury bond yields.

28 **Q HOW DID YOU USE THIS RESEARCH IN YOUR RISK PREMIUM STUDY?**

29 A In my testimony, I measured the spread between utility bond yields and Treasury
30 bond yields. I observed that current utility bond yield spreads to Treasury yields are
31 at relatively low levels. This would indicate that utility equity risk premiums are not
32 high by historical standards as the AmerenUE witnesses suggest. Rather, this
33 abnormally low utility bond yield spread to Treasury yield indicates that utility equity

1 risk premiums may be below historical averages. However, the current interest rates
2 alone suggest that the risk premium may be above historical averages.

3 In my direct testimony, I recognize this conflicting conclusion based on relative
4 risk changes in the industry, and relative interest rate changes. As such, rather than
5 only relying on the drop in interest rates as the AmerenUE witnesses did, I instead
6 reviewed the data to develop a range of possible risk premiums that may be currently
7 prevailing. In contrast, the AmerenUE witnesses only reviewed changes in interest
8 rates.

9 For these reasons, the AmerenUE witnesses' equity risk premium adjustments
10 for interest rates significantly exaggerate reasonable equity risk premiums for utility
11 companies today. This simply does not capture the market's evaluation of utilities'
12 back to basics operating risk reduction achievements.

13 **Q WHAT COMMENTS DOES MS. MCSHANE HAVE REGARDING YOUR CAPM**
14 **STUDY?**

15 **A** Ms. McShane takes issue with my development of a market risk premium, and my
16 use of utility betas. Specifically, she asserts that my proposal to rely on a risk
17 premium type analysis to estimate a return on the market to arrive a market risk
18 premium is unreasonable. Second, she continues to support the use of an income
19 return on Treasury bonds compared to the total historical achieved market return
20 (income and capital appreciation) to derive a market risk premium.

1 **Q IS MS. MCSHANE’S ASSESSMENT OF YOUR CAPM ARGUMENTS REASON-**
2 **ABLE?**

3 A No. I relied on a risk premium method of estimating a market return, which is a
4 reasonable approach. Indeed, Ms. McShane is relying on risk premium type
5 analyses to estimate a return for AmerenUE in this proceeding. It is simply
6 contradictory and unreasonable for her to argue that it is inappropriate to use a risk
7 premium analysis to estimate a return on the market to derive a market risk premium,
8 but at the same time use a risk premium analysis to support her recommended return
9 for AmerenUE.

10 My market risk premium analysis is based on the well-documented premise
11 that investors expect returns that maintain the nominal value of their investment, plus
12 a real return. The real return would include an equity risk premium appropriate for the
13 security and real return characteristics of all the securities. Relying on the actual
14 achieved real return on the market provides relevant information for assessing the
15 real return opportunities by investing in the market going forward.

16 Ibbotson & Associates’ data indicates that investors have earned the real
17 return on the market of 9.1%, that is the return less the effects of inflation. If this real
18 return performance continues, then a reasonable estimate of an expected future
19 return on the market would be the real return of 9.1%, adjusted by the long-term
20 inflation rate of 2.3%. This produces an expected return on the market of 11.6%.

21 **Q MS. MCSHANE CRITICIZES YOUR REAL RETURN INFLATION RISK PREMIUM**
22 **STUDY BECAUSE THERE IS NOT A STRONG CORRELATION BETWEEN**
23 **INFLATION AND STOCK RETURNS IN THE PAST. IS SHE CONSISTENT IN**

1 **USING ONLY HISTORICAL DATA WHERE THERE IS A STRONG STATISTICAL**
2 **CORRELATION?**

3 A No. Ibbotson & Associates clearly finds that there is no relationship between stock
4 returns and the market risk premiums. Indeed, Ibbotson & Associates characterizes
5 the relationship between stock returns and market risk premiums to be “random”
6 (2006 Yearbook at 118). What this means is that historical equity risk premiums
7 estimated by Ibbotson are not correlated with historical stock returns.

8 Hence, Ms. McShane relied on data sets that are not strongly correlated in
9 order to draw inferences about market risk premiums going forward. As such, it is
10 contradictory for Ms. McShane to argue that my risk premium study is not reasonable
11 because there is not a strong correlation between historical inflation and stock
12 returns. Ms. McShane cannot have it both ways. If my proposed risk premium
13 estimate of a future market return is not reasonable, then equally, Ms. McShane’s risk
14 premium estimate using Ibbotson & Associates’ data should be rejected.

15 **Q DOES MS. MCSHANE CONTINUE TO SUPPORT HER DEVELOPMENT OF A**
16 **MARKET RISK PREMIUM FROM THE TOTAL ACHIEVED RETURNS ON MARKET**
17 **EQUITIES LESS THE INCOME RETURN ON TREASURY BONDS OVER THE**
18 **PERIOD 1926 THROUGH 2006?**

19 A Yes. For reasons discussed in my direct testimony, however, this methodology is
20 unreasonable. The reasons to reject her market risk premium are:

- 21 • It does not compare actual market to actual annual Treasury bond
22 returns for the same time period. An historical achieved return on the
23 market is a backward looking return estimate. In comparison, the
24 historical income return on Treasury bonds is the forward-looking
25 expected return. This methodology estimates a market risk premium
26 using a mismatch in return time periods.

- There is no risk free rate available in the market. As such, one must use a proxy to estimate the market risk premium. If Treasury bonds are used as the proxy, then the relevant question is "What return premium have market equities provided over the proxy risk free rate in historical data?" The answer to that questions is the difference between the actual total achieved return on the market, less the actual total achieved return on Treasury bonds. As discussed in my direct testimony, this indicates a market risk premium of 6.5%.

Neither Ms. McShane nor Dr. Vander Weide have added any new evidence to support their flawed method of estimating a market risk premium, and it is clear that their market risk premium is excessive and overstated.

Q IN SUPPORT OF HER DCF STUDY AT PAGE 58 OF HER REBUTTAL TESTIMONY, MS. MCSHANE ARGUES THAT CONSENSUS ANALYSTS' FIVE-YEAR GROWTH RATE SHOULD BE USED IN THE DCF STUDY IRRESPECTIVE OF WHETHER THOSE GROWTH RATES ARE REASONABLE PROXIES FOR LONG-TERM SUSTAINABLE GROWTH. DO YOU AGREE?

A No. A constant growth DCF study, that Ms. McShane relied on, requires a growth rate estimate that is a reasonable proxy for long-term sustainable growth. As Ms. McShane states, and I agree, analysts do not publish growth rate estimates beyond three to five years. In most instances, analysts' three to five year growth rate projections are reasonable proxies for long-term sustainable growth rates.

However, as discussed above, many utilities are involved in abnormally large capital programs which have caused the three to five-year growth to increase to abnormally high levels. During these periods, primary weight should be given to multi-stage growth DCF models.

Q DID YOU PERFORM A TEST TO SHOW THE REASONABLENESS OF THE GROWTH RATE USED IN YOUR CONSTANT GROWTH STUDY AND WHETHER

**A CONSTANT GROWTH MODEL IS A REASONABLE ESTIMATE OF A DCF
RETURN IN THIS PROCEEDING?**

A Yes. I specifically reviewed the growth rate of my DCF study to determine whether it is a reasonable proxy of a long-term sustainable growth. I concluded that for my proxy group, the growth rate was reasonable. However, I concluded that Ms. McShane and Dr. Vander Weide's proxy group growth rates were not reasonable sustainable growth rates. (See my direct testimony at pp. 10, 11, 31-34 and 47.)

**Q HAVE YOU RELIED ON MULTI-STAGE GROWTH DCF MODELS IN SUPPORT OF
YOUR RETURN ON EQUITY IN OTHER PROCEEDINGS?**

A Yes, in numerous cases. For example, in one case before the Illinois Commerce Commission in Docket No. 02-0432 cited by Ms. McShane, I found that the growth rates used in my constant growth DCF model were abnormally high. As a result, I used a multi-stage growth rate DCF model to produce a reasonable return on equity recommendation for Illinois Power Company. Contrary to Ms. McShane's inaccurate assertion, I did not rely on a constant growth DCF model using growth rate estimates that I found to be unreasonably high.

In other proceedings, primarily during the mid to early 1990s, I employed multi-stage growth DCF models because the growth rates used in a constant growth model were abnormally low² and used multi-growth DCF models with higher long-term growth.

² See for example, Central Power & Light Company, Public Utility Commission of Texas Docket No. 12820, October 1994; and Gulf States Utilities Company, Public Utility Commission of Texas Docket No. 12852, November 1994.

1 **Q DO YOU HAVE ANY COMMENTS RELATED TO MS. MCSHANE'S RISK**
2 **PREMIUM STUDIES?**

3 A Ms. McShane's risk premium studies are based on unreasonable market risk
4 estimates, and inordinately high utility beta estimates. I have already discussed Ms.
5 McShane's inflated risk premiums and inordinately high utility betas in my direct
6 testimony. Ms. McShane did not provide any additional support in her rebuttal
7 testimony.

8 Hence, I continue to assert that Ms. McShane's CAPM return estimates are
9 overstated because of reliance on excessive market risk premiums and inflated utility
10 betas.

11 **Q DOES MS. MCSHANE ALSO USE SELECTED DATA IN SUPPORTING HER**
12 **ESTIMATED RETURN ON THE MARKET AND DERIVING A MARKET RISK**
13 **PREMIUM FOR RISK PREMIUM STUDIES?**

14 A Yes. Ms. McShane's arguments are contradictory or do not support her inflated
15 market risk premium of 7.7%. Further, Ms. McShane argues that her method of
16 estimating a market return is superior to that of relying on Value Line data.

17 **Q ARE MS. MCSHANE'S ARGUMENTS REASONABLE?**

18 A No. Again, Ms. McShane is relying only on market data which supports high return
19 estimates, and rejects reasonable data that support more reasonable return
20 estimates. Specifically, Ms. McShane's contention that her market return of 12.7% is
21 reasonable in comparison to the historical achieved return of 12.3% simply ignores
22 the bottom line. Specifically, historical data supports a market risk premium of 6.5%,
23 the way I estimated it, and 7.1% the way Ms. McShane proposes to use historical

1 data. As such, Ms. McShane's market risk premium of 7.7% based on her DCF of the
2 market is inflated and unreasonable.

3 Further, Ms. McShane's argument that Value Line data does not provide a
4 meaningful assessment of the expected return on the market is not credible. Ms.
5 McShane relied on Value Line company-specific projections herself in her DCF study.
6 It is disingenuous of Ms. McShane to argue that Value Line data is not reliable when
7 she does not like the results, but in turn to rely on Value Line data when she does like
8 the results.

9 **Q DO YOU BELIEVE IT IS REASONABLE FOR MS. MCSHANE TO HAVE RELIED**
10 **ON A BETA ESTIMATE GREATER THAN 0.8 IN SUPPORTING HER CAPM**
11 **RETURN ESTIMATE?**

12 **A** No. I acknowledge that current electric utility betas for many companies are
13 increasing, but a beta of 0.8 reflects most utility betas. In my direct testimony (pp. 17-
14 18), I showed that the reason utility betas are increasing is not increasing risk, but
15 rather the fact that electric utility stock returns have outperformed the market over the
16 last five years. This is also true for gas utility returns.

17 Beta estimates are derived from a regression analysis that estimates the
18 correlation between utility stock returns and market stock returns. This recent strong
19 price performance of utility stocks is giving a false impression of utility stock return
20 volatility. A careful review of other utility risk indicators show that utility investment
21 risk is stabilizing to decreasing relative to the last five years. Hence, care should be
22 used to select a utility beta estimate that fairly reflects the utility investment risk.

1 **RESPONSE TO MR. LEE NICKLOY**

2 **Q TO WHAT ASPECTS OF MR. NICKLOY'S TESTIMONY DO YOU RESPOND?**

3 A Mr. Nickloy argues that S&P financial credit rating benchmarks should not be used to
4 judge the reasonableness of a recommended rate of return in this proceeding. Mr.
5 Nickloy acknowledges that these ratios are important, but he asserts that these
6 financial ratios are only part of S&P's credit rating evaluation.

7 Therefore, he takes issue with my use of the S&P financial ratios to support
8 the reasonableness of my return on equity recommendation. He states that use of
9 these ratios is inappropriate for the following reasons:

- 10 • They do not encapsulate the total credit rating review of S&P.
- 11 • Rating agencies are arbiters of credit ratings, and only credit rating
12 agencies know how much weight they give to the various factors
13 considered in establishing a utility's credit rating.
- 14 • As part of their ratio analysis, rating agencies typically make
15 adjustments. In order to provide meaningful ratio analysis, ratios
16 should consider comparable adjustments as the rating analysts would
17 make.
- 18 • The rating agencies use projected financial ratios 1.5 to 2 years in the
19 future, not test year financial periods.

20 **Q PLEASE RESPOND TO MR. NICKLOY'S CONCERN ABOUT USING S&P'S**
21 **CREDIT RATING FINANCIAL METRICS IN JUDGING THE REASONABLENESS**
22 **OF APPROVED RETURNS.**

23 A I disagree with Mr. Nickloy. S&P's credit rating financial metric calculations are
24 transparent and can reliably be used to demonstrate whether a proposed return on
25 equity will support a utility's credit rating financial metrics. This is meaningful
26 information to use in establishing whether a proposed return on equity is both fair
27 compensation given today's market cost of capital, and will also support the utility's

1 financial integrity, credit rating and access to capital. Indeed, these credit metrics are
2 an integral part of the Regulatory Plans this Commission has approved for Kansas
3 City Power & Light Company and Empire District Electric Company.

4 **Q HAS MR. NICKLOY PROPOSED AN ALTERNATIVE MEANS OF DETERMINING**
5 **WHETHER THE PROPOSED AUTHORIZED RETURN ON EQUITY WILL HELP**
6 **SUPPORT THE UTILITY'S CREDIT RATING AND FINANCIAL INTEGRITY?**

7 A No. Mr. Nickloy's objective appears to be to cloak the assessment of a utility's
8 financial integrity in an opaque shroud, thus removing all transparency in the
9 evaluation of whether a return will support a utility's credit rating and financial
10 integrity.

11 Mr. Nickloy's position is completely contrary to providing this Commission with
12 competent, transparent analysis to support sound decisions. Instead, Mr. Nickloy
13 appears to suggest that the Commission should believe the company on these
14 important issues, with no backup or credible evidence to support the utility's position.
15 I strongly encourage the Commission to reject Mr. Nickloy's efforts to try to eliminate
16 transparency in the rate setting process.

17 **Q DO OTHER UTILITIES USE S&P'S FINANCIAL RATIOS TO SUPPORT RATE OF**
18 **RETURN RECOMMENDATIONS?**

19 A Yes. Many other utility company witnesses recognize the information value of the
20 S&P credit metric ratios. For example, in the most recent Aquila Missouri utility rate
21 case, Aquila witness Dr. Samuel Hadaway relied on S&P financial credit metric ratio
22 calculations to show that his recommended return on equity would support a target

1 bond rating for Aquila³. Also, Wisconsin Power & Light Company witness Enrique
2 Bacalao has reviewed S&P's financial ratio benchmarks in support of his capital
3 structure and rate of return recommendations in its rate filings in the State of
4 Wisconsin⁴.

5 Further, in Ameren's Illinois utility rate filings, the Illinois Commerce
6 Commission Staff relied on S&P's credit rating financial benchmark calculations to
7 support the reasonableness of its rate of return on equity recommendations and
8 capital structure recommendations for Ameren's Illinois utilities⁵. The Illinois
9 Commerce Commission Staff made the same calculations in support of its rate of
10 return positions for Commonwealth Edison Company⁶.

11 The derivation of the S&P credit metrics is largely a transparent methodology
12 because S&P publishes reports that describe how these financial ratios are
13 calculated. As such, the S&P financial ratios should not be disregarded as
14 recommended by Mr. Nickloy, and the ratemaking process should be a transparent
15 and open process.

16 **RESPONSE TO DR. VANDER WEIDE**

17 **Q WHAT ISSUES DOES DR. VANDER WEIDE TAKE WITH YOUR RECOMMENDED**
18 **COST OF EQUITY FOR AMERENUE?**

19 **A** Dr. Vander Weide takes the following issues with my recommended return on equity
20 for AmerenUE:

- 21 • Dr. Vander Weide suggests that his proxy group provides a more
22 reliable estimate of AmerenUE's cost of equity because it is a larger
23 sample group.

³ Direct Testimony, Dr. Samuel C. Hadaway, Schedule 6, Case No. ER-2007-0004.

⁴ Prefiled Supplemental Direct Testimony, Enrique Bacalao, April 27, 2006, Docket 6680-UR-115.

⁵ Direct Testimony, Janis Freely, ICC Staff Ex. 4.0, Docket Nos. 06-0070, 06-0071, and 06-0072.

⁶ ICC Order, Docket No. 05-0597 at 124, July 26, 2006.

- 1 • Dr. Vander Weide is critical of me for not accepting his proxy group in
2 this case, while I relied on his proxy group in a Progress Energy case
3 in 2005.
- 4 • Dr. Vander Weide is critical of my risk premium model because it is
5 based on commission-authorized returns on equity.
- 6 • Dr. Vander Weide believes there is an inverse relationship between
7 commission-authorized returns on equity and the level of interest rates.
- 8 • Dr. Vander Weide believes I should have used only projected interest
9 rates, and ignored today's current observable real interest rate costs to
10 AmerenUE.
- 11 • Dr. Vander Weide believes my CAPM return estimate is too low
12 because of my market risk premium and the use of my proxy group
13 beta estimate.

14 **Q PLEASE RESPOND TO DR. VANDER WEIDE'S ARGUMENT THAT USING HIS**
15 **PROXY GROUP WOULD PROVIDE A MORE RELIABLE RETURN ON EQUITY**
16 **ESTIMATE FOR AMERENUE IN THIS CASE BECAUSE IT INCLUDES MORE**
17 **COMPANIES.**

18 A Dr. Vander Weide's proxy group contains many companies that are not reasonable
19 risk proxies for AmerenUE in this case. I would note that, importantly, Dr. Vander
20 Weide's proxy group in this case is different from the proxy group he used in the
21 Progress Energy case in 2005. The reason the proxy group has changed is that the
22 company-specific risk factors have changed, and the industry has changed. As a
23 result, some of the companies he used in 2005 failed his selection criteria in this
24 case. Further, more of the companies Dr. Vander Weide included in this case would
25 have failed his selection criteria at the time I filed my direct testimony due to
26 continued merger activity. This update would have reduced the size of his proxy
27 group in this case.

1 **Q WHY DID YOU REJECT DR. VANDER WEIDE’S PROXY GROUP IN THIS CASE?**

2 A I rejected his group because the group contains many companies that are simply not
3 reasonable risk proxies for AmerenUE. Specifically, his proxy group contained many
4 companies that are not predominately in regulated utility businesses. I identified
5 those companies that have S&P business profile scores out of line with typical ratings
6 for integrated electric utility companies. Non-regulated investment risk is not
7 comparable to AmerenUE’s low regulated investment risk.

8 This is evident based on just a general review of the industry. Indeed, the
9 electric utility industry has enjoyed a resurgence by capital markets because the
10 market is attracted to regulated utilities’ stable cash flows and low risk. In contrast,
11 many non-regulated businesses, particularly those in the energy industry, are faced
12 with managing commodity risk, limited access to capital, and have distinguishably
13 higher operating risk than regulated utility companies.

14 **Q DID YOU ACCEPT DR. VANDER WEIDE’S PROXY GROUP IN THE PROGRESS**
15 **ENERGY CASE WITHOUT INDEPENDENT REVIEW OF THE APPROPRIATE-**
16 **NESS OF THAT PROXY GROUP?**

17 A No. In that case, I applied the same proxy selection criteria I used in this case.
18 Because his group was larger in that case, because of the investment parameters of
19 Progress Energy in relationship to the group, I found his group to be reasonably
20 comparable to Progress Energy. However, in this case, many of the companies Dr.
21 Vander Weide had used in the Progress Energy case no longer met his selection
22 criteria. This resulted in a proxy group that is much more heavily weighted with
23 companies that are largely exposed to non-regulated investment risk. For these

1 reasons, I found his proxy group to be an unreasonable group to use to estimate
2 AmerenUE's return in this proceeding.

3 **Q IS THERE ADDITIONAL EVIDENCE THAT MANY OF THE COMPANIES**
4 **INCLUDED IN DR. VANDER WEIDE'S PROXY GROUP ARE SIGNIFICANTLY**
5 **INVOLVED IN NON-REGULATED BUSINESS ACTIVITIES?**

6 A Yes. This is shown on my attached Surrebuttal Schedule MPG-3. As shown on this
7 schedule, many of the companies have S&P business profile score rankings above 6.
8 AmerenUE's current ranking is 5. The significance of S&P's business profile score
9 ranking is that it indicates the operating risk of the underlying enterprise. S&P
10 generally rates integrated utility companies with business profile scores in the range
11 of 4 to 6⁷. AmerenUE's business profile score reflects a typical operating risk
12 integrated utility company. In significant contrast, many of the companies included in
13 Dr. Vander Weide's comparable group have operating risks significantly higher than
14 traditional integrated utility companies.

15 This conclusion is also supported by a report published by the Edison Electric
16 Institute (EEl), which ranked companies' exposure to regulated and non-regulated
17 business operations on the basis of the following classifications: (1) Regulated, (2)
18 Mostly Regulated, and (3) Diversified. EEl distinguishes the companies based on the
19 percentage of regulated assets to total assets. A Regulated designation indicates
20 that 80% or more of the companies' total assets are regulated, Mostly Regulated
21 indicates that 50% to 80% of total assets are regulated, and Diversified companies
22 are those with less than 50% of total assets that are regulated (Fourth Quarter 2006

⁷ S&P, New Business Profile Scores Assign for U.S. Utility and Power Companies; Financial Guidelines Revised, June 2004.

1 Financial Update Stock Performance, EEI). Based on EEI's evaluation of the
2 companies included in Dr. Vander Weide's group, only 15 of the 34 companies are
3 regarded as primarily involved in regulated operations. Ameren Corp is one company
4 that is regarded as primarily regulated.

5 Dr. Vander Weide's proxy group simply ignores the significant protection
6 regulation provides AmerenUE, and he proposes a return on equity that ignores
7 AmerenUE's lower risk attributable to its franchise service territory and cost-based
8 rate authority for its Missouri utility operation.

9 **Q SETTING ASIDE YOUR DISAGREEMENT WITH DR. VANDER WEIDE'S PROXY**
10 **GROUP, DOES THE SELECTION OF THE PROXY GROUP HAVE A SIGNIFICANT**
11 **IMPACT ON THE ESTIMATED DCF RETURN FOR AMERENUE IN THIS**
12 **PROCEEDING?**

13 **A** No. I addressed this assertion above in response to Ms. McShane. I also showed in
14 my direct testimony that a reasonable application of Ms. McShane's proxy group and
15 studies, and Dr. Vander Weide's studies on his proxy group, would support my return
16 on equity for AmerenUE of 9.8%. The reason my recommended return and that of
17 Ms. McShane and Dr. Vander Weide diverged so significantly is not a result of the
18 proxy group. Rather, it is the result of their use of excessive growth rates in DCF
19 studies, and inappropriate and inflated equity risk premiums. Correcting these
20 witnesses' excessive growth rates and equity risk premiums, applied to their own
21 proxy groups, would support a return on equity of around 9.8%, or my recommended
22 return in this proceeding.

1 **Q DR. VANDER WEIDE TOOK ISSUE WITH YOUR RISK PREMIUM STUDY AND**
2 **ARGUES THAT YOU SHOULD HAVE INCREASED YOUR EQUITY RISK**
3 **PREMIUM TO REFLECT AN INVERSE RELATIONSHIP BETWEEN INTEREST**
4 **RATES AND EQUITY RISK PREMIUMS. PLEASE RESPOND.**

5 **A**I have already addressed this false assertion in my response to Ms. McShane.
6 Importantly, academic evidence indicates that equity risk premiums will expand as the
7 difference between equity investment risk and debt investment risk change. Neither
8 Ms. McShane nor Dr. Vander Weide has shown that utility stock investment risk has
9 increased in comparison to bond investment risk. Neither Ms. McShane nor Dr.
10 Vander Weide provided a credible response to my evidence that showed that utility
11 bond yield spreads over Treasury bonds have narrowed in more recent years. Both
12 have simply relied on interest rate changes, even though academic research shows
13 that the risk premium relationship to interest rates changes in different market
14 conditions is not simply tied to interest changes. Therefore, the AmerenUE
15 witnesses' proposal to inflate historic equity risk premiums due only to interest rate
16 changes to estimate AmerenUE's cost of equity capital should be rejected.

17 **Q DR. VANDER WEIDE ALSO TOOK ISSUE WITH YOUR CAPM RESULTS IN**
18 **ASSERTING THAT YOUR MARKET RISK PREMIUM AND BETA ESTIMATES**
19 **WERE TOO LOW. PLEASE RESPOND.**

20 **A**I have already responded to Dr. Vander Weide's assertion that I should have
21 developed a market risk premium based on a total equity return on the market, less
22 the income return on Treasury bonds. This is the same argument made above and
23 discussed in response to Ms. McShane.

1 Dr. Vander Weide's proxy group produces a higher beta estimate because it
2 largely includes companies that are predominately in non-regulated businesses.
3 Many companies, including companies in the State of Missouri such as Aquila, have
4 non-regulated investment risk and are in the process of reducing debt in order to
5 revert to a back-to-basics strategy. This back-to-basics encompasses a movement
6 back to low-risk regulated utility operations. Dr. Vander Weide is relying on
7 companies that are predominately or largely influenced by non-regulated higher risk
8 activities and, thus, his proxy group beta is unreasonably high for AmerenUE's low-
9 risk utility operations.

10 For these reasons, Dr. Vander Weide's proposed beta estimate is excessive
11 for AmerenUE and inflates a fair return on equity estimate for AmerenUE. For all of
12 these reasons, Dr. Vander Weide's recommended return on equity for AmerenUE
13 should be rejected.

14 **Q DR. VANDER WEIDE INDICATES HIS GROUP AVERAGE BOND RATING AND**
15 **VALUE LINE SAFETY RANK ARE COMPARABLE TO YOURS, AND THEREFORE**
16 **HIS PROXY GROUP IS REASONABLY COMPARABLE IN RISK TO AMERENUE.**
17 **PLEASE RESPOND.**

18 **A** Many of the companies in Dr. Vander Weide's group are reverting to "back to basics"
19 and mitigating their significant exposure to unregulated investment risks. However,
20 as discussed above, many of these companies are still exposed to significant non-
21 regulated investment operations. Therefore, his group should be rejected.

22 **Q AT PAGE 80, DR. VANDER WEIDE STATES THAT YOU RELIED ON HIS USE OF**
23 **S&P BOND RATINGS AND VALUE LINE SAFETY RANKINGS IN DEVELOPMENT**

1 **OF A PROXY GROUP IN THE PROGRESS ENERGY CASE. IS THIS**
2 **ACCURATE?**

3 A No. In the Progress Energy case, I clearly stated in my testimony that I evaluated Dr.
4 Vander Weide's proposed proxy group and, based on my independent evaluation,
5 found that the proxy group was a reasonable proxy for Progress Energy in that case.
6 Hence, in order to limit the issues between Dr. Vander Weide and myself, I chose to
7 rely on his group. Dr. Vander Weide is inaccurate in contending that I relied on his
8 selection criteria in determining that that proxy group was a reasonable risk proxy for
9 estimating a fair return in that proceeding.

10 **Q DR. VANDER WEIDE DISAGREES WITH YOUR CONCLUSION THAT A LONG-**
11 **TERM SUSTAINABLE GROWTH RATE FOR A UTILITY CANNOT EXCEED THE**
12 **NOMINAL GROWTH IN GDP. PLEASE RESPOND.**

13 A Dr. Vander Weide contends that a utility's growth can exceed the GDP growth rate for
14 many years. I agree. But, the flaw in his analysis is, unfortunately, that his DCF
15 model is a constant growth model, which assumes that companies can grow at a rate
16 greater than the GDP growth rate over an indefinite period of time. It is this
17 assumption that is irrational and unreasonable.

18 If earnings were growing at a rate that exceeded the GDP for an indefinite
19 period of time, then eventually those companies would become a large percentage of
20 the total GDP economy. This is simply not a rational expectation.

21 Further, as I noted in my direct testimony, a utility's growth typically follows
22 the growth in the local service area economy. Utilities' earnings grow in this manner
23 because utilities make utility plant investment to meet sales growth. Sales growth is
24 triggered by economic service area growth. As such, it is not rational to expect that a

1 utility's earnings can grow faster than the economy in which it sells its services. As a
2 result, over the long-term, utility investment growth cannot exceed the growth rate of
3 the overall economy, that is simply not an achievable result.

4 It would be reasonable to recognize that utilities can grow faster than the
5 overall economy in the short term. This can be captured in a two-stage DCF model.
6 In fact, I used the model above that showed DCF results for Ms. McShane, Dr.
7 Vander Weide's and my proxy groups all produce approximately the same DCF return
8 estimates using a two-stage growth model. Unfortunately, Dr. Vander Weide did not
9 conduct a multi-stage growth DCF analysis. He only relied on a constant growth DCF
10 model assuming unrealistically high sustainable growth rates, which produced an
11 excessive, unrealistic and flawed DCF estimate.

12 **Q DR. VANDER WEIDE ARGUES THAT A QUARTERLY DCF MODEL IS**
13 **REASONABLE BECAUSE INVESTORS CAN ONLY REINVEST THEIR**
14 **QUARTERLY DIVIDENDS ONCE. PLEASE RESPOND.**

15 **A** The model overstates a DCF return by double counting the reinvestment return and
16 thus overstates the utility's cost of capital.

17 This is best illustrated by a simple example. Consider a bond investment with
18 a face value of \$1,000. This bond pays two semi-annual coupon payments of \$30,
19 yielding a coupon return on the bond investment of 6%. Hence, the utility's cost of
20 this bond would be 6%, which is a return adequate to fund the two semi-annual
21 coupon payments of \$30, or \$60 per year.

22 In contrast, the investors expected yield on the bond investment would be
23 6.09%. The increased return is realized because the investor would have reinvested
24 the \$30 coupon payment received in month six for the remaining six-months of the

1 year. Hence, the bond investor's expected annual return on the bond investment is
2 produced from (1) utility coupon payments, and (2) coupon reinvestment returns. Dr.
3 Vander Weide's quarterly compounding method would require utility customers to pay
4 the compound yield of the bond investment of 6.1%, when the utility's actual cost of
5 the bond is only 6.0%.

6 As such, Dr. Vander Weide's quarterly compounding DCF model would award
7 AmerenUE a rate of return that exceeds its cost of equity.

8 **Q DR. VANDER WEIDE ASSERTS THAT HE DID NOT INTENTIONALLY SELECT A**
9 **TIME PERIOD IN ORDER TO INCREASE HIS EX-ANTE RISK PREMIUM**
10 **ANALYSIS. PLEASE RESPOND.**

11 A The fact of the matter is that the time period Dr. Vander Weide used for his electric
12 utility risk premium did increase the equity risk premium. There is no rational basis to
13 have used a different time period for his electric sample than his gas sample. Had he
14 used comparable time periods, his electric risk premium would have been lower.

15 **Q DR. VANDER WEIDE ASSERTS THAT YOU SHOULD ONLY USE FORECASTED**
16 **INTEREST RATES FOR CALENDAR YEAR 2007, THE PERIOD AMERENUE'S**
17 **RATES WILL BE IN EFFECT. PLEASE RESPOND.**

18 A There is no way of knowing what interest rates will be in calendar year 2007. What is
19 certain is that forecasted interest rates are not known and measurable, and using
20 forecasted interest rates may significantly depart from AmerenUE's actual cost of
21 capital during the period rates are in effect. For these reasons, it is reasonable to
22 consider both actual and forecasted interest rates in arriving at a return on equity
23 recommendation.

1 Dr. Vander Weide's use of only forecasted rates ignores the fact that real
2 interest rates at the time he performed his analysis are much lower. As such, he is
3 using only high interest rate estimates to support his return on equity
4 recommendation. In my analysis, I considered both current observable interest rates
5 and projected interest rates. I also provided evidence that showed that current
6 observable interest rates are just as likely to be AmerenUE's actual cost of capital
7 during the period rates are in effect, as projected interest rates.

8 Using all pertinent information to derive a return on equity recommendation is
9 superior to only using high returns, as Dr. Vander Weide has done to support his
10 inflated return on equity recommendation.

11 **Q DR. VANDER WEIDE RESPONDS TO YOUR ASSERTION THAT HE MADE NO**
12 **EFFORT TO ENSURE THAT HIS PROXY GROUP WAS A REASONABLE RISK**
13 **PROXY TO AMERENUE. HE ASSETS THAT HE COMPARED HIS PROXY**
14 **GROUP'S VALUE LINE SAFETY RANK AND BOND RATING TO THAT OF**
15 **AMERENUE. THUS, HE DID ENSURE THAT THE GROUP WAS COMPARABLE**
16 **IN RISK TO AMERENUE (AT 78). PLEASE RESPOND.**

17 **A** Dr. Vander Weide's use of Value Line's safety rank is applied to Ameren Corp., not
18 AmerenUE. Ameren Corp. has an S&P business profile of 7, which indicates much
19 higher operating risk than that of AmerenUE, which has an S&P business profile
20 score of 5. As such, he is relying on Value Line parameters for Ameren Corp. as a
21 reasonable risk proxy for AmerenUE.

22 I would agree that Dr. Vander Weide's comparison of AmerenUE's bond rating
23 to the proxy group is a reasonable risk proxy factor. However, that one factor does
24 not explain the fundamental differences in investment risk. I believe additional

1 emphasis should be placed on selecting companies that are predominately regulated
2 utility operations, and are not heavily influenced by large investments in non-
3 regulated operations. As such, I believe Dr. Vander Weide's selection criteria did not
4 focus enough on AmerenUE's investment risk, and therefore resulted in the selection
5 of companies that are not reasonable risk proxies for AmerenUE.

6 **Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

7 **A** Yes, it does.

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AmerenUE

Constant Growth DCF Model (Gorman)

<u>Line</u>	<u>Electric Utility</u>	<u>13-Week AVG Stock Price¹</u> (1)	<u>AVG (%) Growth</u>	(2)	<u>Annual Dividend²</u> (3)	<u>Adjusted Yield</u> (4)	<u>Constant Growth DCF</u> (5)
1	Alliant Energy	\$ 38.14	5.33%		\$ 1.15	3.18%	8.51%
2	Ameren Corp.	\$ 53.66	6.48%		\$ 2.54	5.04%	11.52%
3	DTE	\$ 47.32	5.71%		\$ 2.06	4.60%	10.32%
4	FirstEnergy Corp.	\$ 60.24	7.29%		\$ 1.80	3.21%	10.50%
5	IDACORP Inc.	\$ 38.31	5.00%		\$ 1.20	3.29%	8.29%
6	NiSource Inc.	\$ 24.03	3.41%		\$ 0.92	3.96%	7.37%
7	OGE Energy	\$ 39.37	5.67%		\$ 1.36	3.65%	9.32%
8	Pinnacle West Capital	\$ 49.58	6.03%		\$ 2.10	4.49%	10.52%
9	Puget Energy Inc.	\$ 24.91	4.89%		\$ 1.00	4.21%	9.09%
10	SCANA Corp.	\$ 41.20	4.53%		\$ 1.68	4.26%	8.80%
11	Southern Co.	\$ 36.57	4.79%		\$ 1.55	4.45%	9.24%
12	Wisconsin Energy	\$ 47.18	8.35%		\$ 0.92	2.11%	10.47%
13	Xcel Energy Inc.	\$ 23.19	5.64%		\$ 0.89	4.06%	9.70%
14	Average	\$ 40.29	5.63%		\$ 1.48	3.89%	9.5%

Sources:

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

² The Value Line Investment Survey; December 1, December 29, February 9, 2007.

AmerenUE

Constant Growth DCF Model (McShane)

<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	Amer. Elec. Power	\$ 42.83	4.39%	\$ 1.56	3.80%	8.20%
2	Ameren Corp.	\$ 53.66	6.48%	\$ 2.54	5.04%	11.52%
3	Edison International	\$ 45.30	7.94%	\$ 1.16	2.76%	10.71%
4	Entergy Corp.	\$ 92.69	9.01%	\$ 2.16	2.54%	11.55%
5	Exelon Corp.	\$ 61.03	9.38%	\$ 1.60	2.87%	12.25%
6	FirstEnergy Corp.	\$ 60.24	7.29%	\$ 1.80	3.21%	10.50%
7	FPL Group	\$ 55.09	8.67%	\$ 1.50	2.96%	11.63%
8	G't Plains Energy	\$ 31.75	2.88%	\$ 1.66	5.38%	8.26%
9	PG&E Corp.	\$ 46.69	7.87%	\$ 1.32	3.05%	10.92%
10	Pinnacle West Capital	\$ 49.58	6.03%	\$ 2.10	4.49%	10.52%
11	PNM Resources	\$ 30.73	9.27%	\$ 0.88	3.13%	12.40%
12	PPL Corp.	\$ 35.77	10.50%	\$ 1.10	3.40%	13.90%
13	Sempra Energy	\$ 56.50	6.37%	\$ 1.20	2.26%	8.63%
14	Southern Co.	\$ 36.57	4.79%	\$ 1.55	4.45%	9.24%
15	TXU Corp.	\$ 55.27	11.87%	\$ 1.74	3.52%	15.39%
16	Wisconsin Energy	\$ 47.18	8.35%	\$ 0.92	2.11%	10.47%
17	Xcel Energy Inc.	\$ 23.19	5.64%	\$ 0.89	4.06%	9.70%
18	Average	\$ 48.48	7.46%	\$ 1.51	3.47%	10.9%

Sources:

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

² The Value Line Investment Survey; December 1, December 29, February 9, 2007.

AmerenUE

Constant Growth DCF Model (Vander Weide)

<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	\$ 38.14	5.33%	\$ 1.15	3.18%	8.51%
2	Amer. Elec. Power	\$ 42.83	4.39%	\$ 1.56	3.80%	8.20%
3	Ameren Corp.	\$ 53.66	6.48%	\$ 2.54	5.04%	11.52%
4	Consol. Edison	\$ 48.12	3.33%	\$ 2.30	4.94%	8.27%
5	Dominion Resources	\$ 82.59	10.11%	\$ 2.76	3.68%	13.79%
6	DTE	\$ 47.32	5.71%	\$ 2.06	4.60%	10.32%
7	Duke Energy	\$ 25.45	5.74%	\$ 1.28	5.32%	11.05%
8	Empire	\$ 24.35	3.00%	\$ 1.28	5.41%	8.41%
9	Energy East Corp.	\$ 24.60	3.67%	\$ 1.20	5.06%	8.72%
10	Entergy Corp.	\$ 92.69	9.01%	\$ 2.16	2.54%	11.55%
11	FirstEnergy Corp.	\$ 60.24	7.29%	\$ 1.80	3.21%	10.50%
12	G't Plains Energy	\$ 31.75	2.88%	\$ 1.66	5.38%	8.26%
13	Hawaiian Elec.	\$ 27.10	4.39%	\$ 1.24	4.78%	9.17%
14	IDACORP Inc.	\$ 38.31	5.00%	\$ 1.20	3.29%	8.29%
15	MDU Resources	\$ 25.77	7.40%	\$ 0.54	2.25%	9.65%
16	NiSource Inc.	\$ 24.03	3.41%	\$ 0.92	3.96%	7.37%
17	Northeast Utilities	\$ 27.93	10.37%	\$ 0.75	2.97%	13.34%
18	NSTAR	\$ 34.29	5.72%	\$ 1.30	4.01%	9.73%
19	OGE Energy	\$ 39.37	5.67%	\$ 1.36	3.65%	9.32%
20	Otter Tail Corp.	\$ 31.56	4.61%	\$ 1.15	3.82%	8.43%
21	Pepco Holdings	\$ 26.03	6.97%	\$ 1.04	4.27%	11.24%
22	Pinnacle West Capital	\$ 49.58	6.03%	\$ 2.10	4.49%	10.52%
23	PNM Resources	\$ 30.73	9.27%	\$ 0.88	3.13%	12.40%
24	PPL Corp.	\$ 35.77	10.50%	\$ 1.10	3.40%	13.90%
25	Progress Energy	\$ 48.30	4.22%	\$ 2.42	5.22%	9.44%
26	Puget Energy Inc.	\$ 24.91	4.89%	\$ 1.00	4.21%	9.09%
27	SCANA Corp.	\$ 41.20	4.53%	\$ 1.68	4.26%	8.80%
28	Sempra Energy	\$ 56.50	6.37%	\$ 1.20	2.26%	8.63%
29	Southern Co.	\$ 36.57	4.79%	\$ 1.55	4.45%	9.24%
30	TXU Corp.	\$ 55.27	11.87%	\$ 1.74	3.52%	15.39%
31	Vectren	\$ 28.26	4.28%	\$ 1.26	4.65%	8.93%
32	Wisconsin Energy	\$ 47.18	8.35%	\$ 0.92	2.11%	10.47%
33	WPS Resources	\$ 53.77	4.72%	\$ 2.30	4.48%	9.20%
34	Xcel Energy Inc.	\$ 23.19	5.64%	\$ 0.89	4.06%	9.70%
35	Average	\$ 40.51	6.06%	\$ 1.48	3.98%	10.0%

Sources:

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

² The Value Line Investment Survey; December 1, December 29, February 9, 2007.

AmerenUE

Two-Stage Growth DCF Model (Gorman)

<u>Line</u>	<u>Electric Utility</u>	<u>13-Week AVG Stock Price¹</u> (1)	<u>Annual Dividend²</u> (3)	<u>AVG (%) Growth</u> (2)	<u>GDP Growth³</u> (4)	<u>Two-Stage Growth DCF</u> (5)
1	Alliant Energy	\$ 38.14	\$ 1.15	5.33%	5.10%	8.14%
2	Ameren Corp.	\$ 53.66	\$ 2.54	6.48%	5.10%	10.11%
3	DTE	\$ 47.32	\$ 2.06	5.71%	5.10%	9.57%
4	FirstEnergy Corp.	\$ 60.24	\$ 1.80	7.29%	5.10%	8.38%
5	IDACORP Inc.	\$ 38.31	\$ 1.20	5.00%	5.10%	8.21%
6	NiSource Inc.	\$ 24.03	\$ 0.92	3.41%	5.10%	8.65%
7	OGE Energy	\$ 39.37	\$ 1.36	5.67%	5.10%	8.64%
8	Pinnacle West Capital	\$ 49.58	\$ 2.10	6.03%	5.10%	9.50%
9	Puget Energy Inc.	\$ 24.91	\$ 1.00	4.89%	5.10%	9.07%
10	SCANA Corp.	\$ 41.20	\$ 1.68	4.53%	5.10%	9.08%
11	Southern Co.	\$ 36.57	\$ 1.55	4.79%	5.10%	9.29%
12	Wisconsin Energy	\$ 47.18	\$ 0.92	8.35%	5.10%	7.32%
13	Xcel Energy Inc.	\$ 23.19	\$ 0.89	5.64%	5.10%	9.03%
14	Average	\$ 40.29	\$ 1.48	5.63%	5.10%	8.8%

Sources:

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

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

³ Blue Chip Economic Forecasts, October 10, 2006 at 15.

AmerenUE

Two-Stage Growth DCF Model (McShane)

<u>Line</u>	<u>Electric Utility</u>	<u>13-Week AVG Stock Price¹</u> (1)	<u>Annual Dividend²</u> (3)	<u>AVG (%) Growth</u> (2)	<u>GDP Growth³</u> (4)	<u>Two-Stage Growth DCF</u> (5)
1	Amer. Elec. Power	\$ 42.83	\$ 1.56	4.39%	5.10%	8.63%
2	Ameren Corp.	\$ 53.66	\$ 2.54	6.48%	5.10%	10.11%
3	Edison International	\$ 45.30	\$ 1.28	7.94%	5.10%	8.29%
4	Entergy Corp.	\$ 92.69	\$ 2.16	9.01%	5.10%	7.85%
5	Exelon	\$ 61.03	\$ 2.16	9.38%	5.10%	9.33%
6	FirstEnergy Corp.	\$ 60.24	\$ 1.80	7.29%	5.10%	8.38%
7	FPL Group	\$ 55.09	\$ 1.80	8.67%	5.10%	8.90%
8	G't Plains Energy	\$ 31.75	\$ 1.66	2.88%	5.10%	9.86%
9	PG&E	\$ 46.69	\$ 1.04	7.87%	5.10%	7.59%
10	Pinnacle West Capital	\$ 49.58	\$ 2.10	6.03%	5.10%	9.50%
11	PNM Resources	\$ 30.73	\$ 0.88	9.27%	5.10%	8.52%
12	PPL Corp.	\$ 35.77	\$ 1.10	10.50%	5.10%	8.96%
13	Sempra Energy	\$ 56.50	\$ 1.20	6.37%	5.10%	7.31%
14	Southern Co.	\$ 36.57	\$ 1.55	4.79%	5.10%	9.29%
15	TXU Corp.	\$ 55.27	\$ 1.74	11.87%	5.10%	9.27%
16	Wisconsin Energy	\$ 47.18	\$ 0.92	8.35%	5.10%	7.32%
17	Xcel Energy Inc.	\$ 23.19	\$ 0.89	5.64%	5.10%	9.03%
18	Average	\$ 48.48	\$ 1.55	7.46%	5.10%	8.7%

Sources:

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

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

³ Blue Chip Economic Forecasts, October 10, 2006 at 15.

AmerenUE

Two-Stage Growth DCF Model (Vander Weide)

<u>Line</u>	<u>Electric Utility</u>	<u>13-Week AVG Stock Price¹</u> (1)	<u>Annual Dividend²</u> (3)	<u>AVG (%) Growth</u> (2)	<u>GDP Growth³</u> (4)	<u>Two-Stage Growth DCF</u> (5)
1	Alliant Energy	\$ 38.14	\$ 1.15	5.33%	5.10%	8.14%
2	Amer. Elec. Power	\$ 42.83	\$ 1.56	4.39%	5.10%	8.63%
3	Ameren Corp.	\$ 53.66	\$ 2.54	6.48%	5.10%	10.11%
4	Consol. Edison	\$ 48.12	\$ 2.30	3.33%	5.10%	9.53%
5	Dominion Resources	\$ 82.59	\$ 2.76	10.11%	5.10%	9.22%
6	DTE	\$ 47.32	\$ 2.06	5.71%	5.10%	9.57%
7	Duke Energy	\$ 25.45	\$ 1.28	5.74%	5.10%	10.26%
8	Empire	\$ 24.35	\$ 1.28	3.00%	5.10%	9.91%
9	Energy East Corp.	\$ 24.60	\$ 1.20	3.67%	5.10%	9.69%
10	Entergy Corp.	\$ 92.69	\$ 2.16	9.01%	5.10%	7.85%
11	FirstEnergy Corp.	\$ 60.24	\$ 1.80	7.29%	5.10%	8.38%
12	G't Plains Energy	\$ 31.75	\$ 1.66	2.88%	5.10%	9.86%
13	Hawaiian Elec.	\$ 27.10	\$ 1.24	4.39%	5.10%	9.54%
14	IDACORP Inc.	\$ 38.31	\$ 1.20	5.00%	5.10%	8.21%
15	MDU Resources	\$ 25.77	\$ 0.54	7.40%	5.10%	7.39%
16	NiSource Inc.	\$ 24.03	\$ 0.92	3.41%	5.10%	8.65%
17	Northeast Utilities	\$ 27.93	\$ 0.75	10.37%	5.10%	8.46%
18	NSTAR	\$ 34.29	\$ 1.30	5.72%	5.10%	8.99%
19	OGE Energy	\$ 39.37	\$ 1.36	5.67%	5.10%	8.64%
20	Otter Tail Corp.	\$ 31.56	\$ 1.15	4.61%	5.10%	8.67%
21	Pepco Holdings	\$ 26.03	\$ 1.04	6.97%	5.10%	9.42%
22	Pinnacle West Capital	\$ 49.58	\$ 2.10	6.03%	5.10%	9.50%
23	PNM Resources	\$ 30.73	\$ 0.88	9.27%	5.10%	8.52%
24	PPL Corp.	\$ 35.77	\$ 1.10	10.50%	5.10%	8.96%
25	Progress Energy	\$ 48.30	\$ 2.42	4.22%	5.10%	9.93%
26	Puget Energy Inc.	\$ 24.91	\$ 1.00	4.89%	5.10%	9.07%
27	SCANA Corp.	\$ 41.20	\$ 1.68	4.53%	5.10%	9.08%
28	Sempra Energy	\$ 56.50	\$ 1.20	6.37%	5.10%	7.31%
29	Southern Co.	\$ 36.57	\$ 1.55	4.79%	5.10%	9.29%
30	TXU Corp.	\$ 55.27	\$ 1.74	11.87%	5.10%	9.27%
31	Vectren	\$ 28.26	\$ 1.26	4.28%	5.10%	9.40%
32	Wisconsin Energy	\$ 47.18	\$ 0.92	8.35%	5.10%	7.32%
33	WPS Resources	\$ 53.77	\$ 2.30	4.72%	5.10%	9.31%
34	Xcel Energy Inc.	\$ 23.19	\$ 0.89	5.64%	5.10%	9.03%
35	Average	\$ 40.51	\$ 1.48	6.06%	5.10%	9.0%

Sources:

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

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

³ Blue Chip Economic Forecasts, October 10, 2006 at 15.

AmerenUE

Two-Stage Growth DCF Model (Combined)

<u>Line</u>	<u>Electric Utility</u>	<u>13-Week AVG Stock Price¹</u> (1)	<u>Annual Dividend²</u> (3)	<u>AVG (%) Growth³</u> (2)	<u>GDP Growth³</u> (4)	<u>Two-Stage Growth DCF</u> (5)
1	Alliant Energy	\$ 38.14	\$ 1.15	5.33%	5.10%	8.14%
2	Amer. Elec. Power	\$ 42.83	\$ 1.56	4.39%	5.10%	8.63%
3	Ameren Corp.	\$ 53.66	\$ 2.54	6.48%	5.10%	10.11%
4	Consol. Edison	\$ 48.12	\$ 2.30	3.33%	5.10%	9.53%
5	Dominion Resources	\$ 82.59	\$ 2.76	10.11%	5.10%	9.22%
6	DTE	\$ 47.32	\$ 2.06	5.71%	5.10%	9.57%
7	Duke Energy	\$ 25.45	\$ 1.28	5.74%	5.10%	10.26%
8	Edison International	\$ 45.30	\$ 1.28	7.94%	5.10%	8.29%
9	Empire	\$ 24.35	\$ 1.28	3.00%	5.10%	9.91%
10	Energy East Corp.	\$ 24.60	\$ 1.20	3.67%	5.10%	9.69%
11	Entergy Corp.	\$ 92.69	\$ 2.16	9.01%	5.10%	7.85%
12	Exelon	\$ 61.03	\$ 2.16	9.38%	5.10%	9.33%
13	FirstEnergy Corp.	\$ 60.24	\$ 1.80	7.29%	5.10%	8.38%
14	FPL Group	\$ 55.09	\$ 1.80	8.67%	5.10%	8.90%
15	G't Plains Energy	\$ 31.75	\$ 1.66	2.88%	5.10%	9.86%
16	Hawaiian Elec.	\$ 27.10	\$ 1.24	4.39%	5.10%	9.54%
17	IDACORP Inc.	\$ 38.31	\$ 1.20	5.00%	5.10%	8.21%
18	MDU Resources	\$ 25.77	\$ 0.54	7.40%	5.10%	7.39%
19	NiSource Inc.	\$ 24.03	\$ 0.92	3.41%	5.10%	8.65%
20	Northeast Utilities	\$ 27.93	\$ 0.75	10.37%	5.10%	8.46%
21	NSTAR	\$ 34.29	\$ 1.30	5.72%	5.10%	8.99%
22	OGE Energy	\$ 39.37	\$ 1.36	5.67%	5.10%	8.64%
23	Otter Tail Corp.	\$ 31.56	\$ 1.15	4.61%	5.10%	8.67%
24	Pepco Holdings	\$ 26.03	\$ 1.04	6.97%	5.10%	9.42%
25	PG&E	\$ 46.69	\$ 1.04	7.87%	5.10%	7.59%
26	Pinnacle West Capital	\$ 49.58	\$ 2.10	6.03%	5.10%	9.50%
27	PNM Resources	\$ 30.73	\$ 0.88	9.27%	5.10%	8.52%
28	PPL Corp.	\$ 35.77	\$ 1.10	10.50%	5.10%	8.96%
29	Progress Energy	\$ 48.30	\$ 2.42	4.22%	5.10%	9.93%
30	Puget Energy Inc.	\$ 24.91	\$ 1.00	4.89%	5.10%	9.07%
31	SCANA Corp.	\$ 41.20	\$ 1.68	4.53%	5.10%	9.08%
32	Sempra Energy	\$ 56.50	\$ 1.20	6.37%	5.10%	7.31%
33	Southern Co.	\$ 36.57	\$ 1.55	4.79%	5.10%	9.29%
34	TXU Corp.	\$ 55.27	\$ 1.74	11.87%	5.10%	9.27%
35	Vectren	\$ 28.26	\$ 1.26	4.28%	5.10%	9.40%
36	Wisconsin Energy	\$ 47.18	\$ 0.92	8.35%	5.10%	7.32%
37	WPS Resources	\$ 53.77	\$ 2.30	4.72%	5.10%	9.31%
38	Xcel Energy Inc.	\$ 23.19	\$ 0.89	5.64%	5.10%	9.03%
39	Average	\$ 41.72	\$ 1.49	6.31%	5.10%	8.9%

Sources:

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

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

³ Blue Chip Economic Forecasts, October 10, 2006 at 15.

AmerenUE

Treasury Bond Inflation-Adjusted Yields

<u>Line</u>	<u>Date</u>	<u>Treasury Bond Yield¹</u> (1)	<u>Projected Value Line Inflation²</u> (2)	<u>Implied Real Return</u> (3)
1	1986	7.78%	4.50%	3.28%
2	1987	8.59%	4.70%	3.89%
3	1988	8.96%	4.63%	4.33%
4	1989	8.45%	4.90%	3.55%
5	1990	8.61%	4.70%	3.91%
6	1991	8.14%	4.50%	3.64%
7	1992	7.67%	4.10%	3.57%
8	1993	6.59%	3.40%	3.19%
9	1994	7.37%	3.50%	3.87%
10	1995	6.88%	3.30%	3.58%
11	1996	6.71%	3.30%	3.41%
12	1997	6.61%	2.80%	3.81%
13	1998	5.58%	2.80%	2.78%
14	1999	5.87%	2.80%	3.07%
15	2000	5.94%	2.70%	3.24%
16	2001	5.49%	2.80%	2.69%
17	2002	5.42%	2.80%	2.62%
18	2003	5.02%	2.50%	2.52%
19	2004	5.05%	2.50%	2.55%
20	2005	4.65%	2.70%	1.95%
21	2006	5.05%	2.50%	2.55%
22	Average	6.69%	3.45%	3.24%
23	1980s	8.45%	4.68%	3.76%
24	1990s	7.00%	3.52%	3.48%
25	2000s	5.23%	2.64%	2.59%

Sources:

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

² Value Line Investment Survey, Various Issues.

AmerenUE

Composite Comparable Group

<u>Line</u>	<u>Electric Utility</u>	<u>S&P Bond Rating¹</u>	<u>EEl Category²</u>	<u>Business Risk Profile (Dec'06)³</u>
		(1)	(2)	(3)
1	Alliant Energy	BBB+	Regulated	5
2	Amer. Elec. Power	BBB	Mostly Regulated	5
3	Ameren Corp.	BBB+	Regulated	7
4	Consol. Edison	A	Regulated	2
5	Dominion Resources	BBB	Diversified	7
6	DTE	BBB	Mostly Regulated	6
7	Duke Energy	BBB	Diversified	6
8	Empire District	BBB-	Regulated	6
9	Energy East Corp.	BBB+	Regulated	3
10	Entergy Corp.	BBB	Mostly Regulated	6
11	FirstEnergy Corp.	BBB	Mostly Regulated	7
12	G't Plains Energy	BBB	Regulated	7
13	Hawaiian Elec.	BBB	Diversified	6
14	IDACORP Inc.	BBB+	Regulated	5
15	MDU Resources	BBB+	Diversified	N/A
16	NiSource Inc.	BBB	Mostly Regulated	4
17	Northeast Utilities	BBB	Mostly Regulated	4
18	NSTAR	A+	Regulated	1
19	OGE Energy	BBB+	Diversified	6
20	Otter Tail Corp.	BBB+	Mostly Regulated	8
21	Pepeco Holdings	BBB+	Mostly Regulated	5
22	Pinnacle West Capital	BBB-	Regulated	6
23	PNM Resources	BBB	Mostly Regulated	6
24	PPL Corp.	BBB	Mostly Regulated	7
25	Progress Energy	BBB	Regulated	5
26	Puget Energy Inc.	BBB-	Regulated	4
27	SCANA Corp.	A-	Regulated	4
28	Sempra Energy	BBB+	Diversified	7
29	Southern Co.	A	Regulated	4
30	TXU Corp.	BBB-	Diversified	7
31	Vectren	A-	Mostly Regulated	4
32	Wisconsin Energy	BBB+	Regulated	5
33	WPS Resources	A	Diversified	5
34	Xcel Energy Inc.	BBB	Regulated	5
35	Average	BBB+	Mostly Regulated	5
36	AmerenUE	BBB+	Regulated	5

Source:

¹ Vander Weide Direct, Schedule JVW-1.

² Edison Electric Institute, Rate Case Summary; Q4, 2006 Financial Update.

³ Standard & Poor's, U.S. utility and Power Companies, Strongest to Weakest.
Dember 28, 2006

Michael Gorman Surrebuttal
Schedule MPG-3