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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2010-0356

REBUTTAL TESTIMONY

OF

SAMUEL C. HADAWAY

ON BEHALF OF

KCP&L GREATER MISSOURI OPERATIONS COMPANY

December 2010

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OF

SAMUEL C. HADAWAY

Case No. ER-2010-0356

I. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

Q. Please state your name and business address.

A. My name is Samuel C. Hadaway and my business address is FINANCO, Inc., 3520 Executive Center Drive, Suite 124, Austin, Texas 78731.

Q. Are you the same Samuel C. Hadaway who filed Direct Testimony on behalf of KCP&L Greater Missouri Operations Company ("GMO") in this matter?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to the rate of return on equity ("ROE") recommendations of Missouri Public Service Commission Staff ("Staff") witness David Murray and Michael P. Gorman on behalf of Ag Processing, Inc., Sedalia Industrial Energy Users Association, and the Federal Executive Agencies (collectively "Industrials"). In my analysis, I will respond to their rate of return recommendations and demonstrate that their recommendations are not consistent with the ongoing effects of the recent financial turmoil or the continuing high cost of equity for electric utilities like GMO. I will also respond to the other witnesses' comments on the methodology I used in my Direct Testimony to estimate GMO's cost of equity and I will update my ROE analysis for current market costs and conditions.

II. OVERVIEW OF PARTIES' RECOMMENDATIONS

Q. What are the parties' ROE recommendations?

A. Mr. Murray recommends an ROE range of 8.5 percent to 9.5 percent and Mr. Gorman recommends an ROE of 9.5 percent. My updated DCF analysis indicates a range of 10.2 percent to 10.8 percent. As I will explain later, I discount the results of my risk premium analysis because those results are negatively skewed by the government's continuing expansionary monetary policies. As I will describe in my discussion of my updated ROE analysis, the Company is reducing its requested ROE from 11.0 percent to 10.75 percent.

Q. What is your general assessment of the other parties' ROE recommendations?

A. Their recommendations are well below GMO's market cost of equity capital. I will show that their recommendations are far below the recently allowed ROEs for other electric utilities around the country.[1] In fact, Staff's 9.0 percent midpoint ROE is more than 100 basis points below national average returns allowed by state regulatory commissions during the past 12 months. As such, under Commission policy, it should be rejected. My updated DCF range (10.2% - 10.8%) also shows the comparatively low level of Mr. Murray's and Mr. Gorman's recommendations. All these factors indicate that the other parties' ROE recommendations are unreasonably low.

The other parties' ROE recommendations are low because they fail to adequately consider the ongoing effects of the recent financial crisis. While they

[1] Regulatory Focus, Regulatory Research Associates, October 4, 2010.

acknowledge the economic difficulties that have existed, they offer recommendations more aligned with the artificially low, government policy-induced interest rates than with the market cost of equity capital. Their conclusion that the cost of equity has dropped in lockstep with falling interest rates is simply wrong. Under current market conditions, traditional rate of return models should be tempered with consideration for the widened equity risk premiums that have resulted from heightened equity market risk aversion. In the face of the tepid economic recovery, continuing high unemployment, and ongoing concerns about additional real estate foreclosures and other ongoing economic difficulties, the other parties' rate of return recommendations for GMO are unreasonably low.

III. RECENT ECONOMIC TRENDS

Q. In your Direct Testimony, you provided data to illustrate interest rate trends and the spreads between U.S. Treasury bond and triple-B rated utility bonds. Have you updated that information?

A. Yes. I provide that data in Schedule SCH2010-7, page 1. Table 1 below summarizes the results.

Table 1
Long-Term Interest Rate Trends

Month	Triple-B Utility Rate	30-Year Treasury Rate	Triple-B Utility Spread
Jan-08	6.35	4.33	2.02
Feb-08	6.60	4.52	2.08
Mar-08	6.68	4.39	2.29
Apr-08	6.81	4.44	2.37
May-08	6.79	4.60	2.19
Jun-08	6.93	4.69	2.24
Jul-08	6.97	4.57	2.40
Aug-08	6.98	4.50	2.48
Sep-08	7.15	4.27	2.88
Oct-08	8.58	4.17	4.41
Nov-08	8.98	4.00	4.98
Dec-08	8.11	2.87	5.24
Jan-09	7.90	3.13	4.77
Feb-09	7.74	3.59	4.15
Mar-09	8.00	3.64	4.36
Apr-09	8.03	3.76	4.27
May-09	7.76	4.23	3.53
Jun-09	7.31	4.52	2.79
Jul-09	6.87	4.41	2.46
Aug-09	6.36	4.37	1.99
Sep-09	6.12	4.19	1.93
Oct-09	6.14	4.19	1.95
Nov-09	6.18	4.31	1.87
Dec-09	6.26	4.49	1.77
Jan-10	6.16	4.60	1.56
Feb-10	6.25	4.62	1.63
Mar-10	6.22	4.64	1.58
Apr-10	6.19	4.69	1.50
May-10	5.97	4.29	1.68
Jun-10	6.18	4.13	2.05
Jul-10	5.98	3.99	1.99
Aug-10	5.55	3.80	1.75
Sep-10	5.53	3.77	1.76
Oct-10	5.62	3.87	1.75
3-Mo Avg	**5.57**	**3.81**	**1.75**
12-Mo Avg	**6.01**	**4.27**	**1.74**

Sources: Mergent Bond Record (Utility Rates); www.federalreserve.gov (Treasury Rates).

Three month average is for August 2010-October 2010.

Twelve month average is for November 2009-October 2010.

The data in Table 1 vividly illustrate the market turmoil that has occurred. Over the past two years, interest rates have fluctuated widely. The Federal Reserve's

efforts to reduce borrowing costs for banks (the Fed Funds rate) and lower rates on U.S. Treasury bonds have now extended to high quality corporate borrowers as well. While the effects of market turbulence may not be easily captured in financial models for estimating the rate of return, the continuing elevated risk aversion in the equities markets should be considered explicitly in estimates of the cost of equity capital.

Q. Do the smaller spreads between yields on triple-B bonds and U.S. Treasury bonds mean that the markets have fully recovered from the economic turmoil that resulted from the financial crisis?

A. No. While the credit markets have stabilized from the near-chaotic conditions that existed in late 2008, investors remain concerned about high unemployment, large federal deficits, and the potential for further fallout from foreclosures and other effects of the financial crisis. I will demonstrate below that the equity markets for utility shares have not recovered and returned to their prior levels. These lower utility prices reflect the heighted risk aversion that remains and show that the cost of equity capital for utilities has not declined as much as interest rates. Although it is difficult to measure these factors directly in typical cost of capital models, they should not be ignored in setting GMO's ROE.

Q. What do economic and interest rate forecasts show for the coming year?

A. In Schedule SCH2010-7, page 2, I provide Standard and Poor's (S&P) most recent economic forecast from its *Trends & Projection*s publication for October 2010. The S&P forecast reflects the significant economic contraction that occurred in 2009, with a drop in real GDP of 2.6 percent. For all of 2010 and 2011, S&P forecasts that real GDP will increase by 2.7 percent and 2.5 percent, respectively.

While this forecast does not reflect a full "double-dip" recession for the remainder of 2010 and into 2011, the lack of further expansion in 2011 is a more pessimistic outlook than S&P had previously provided. The S&P forecast now delays the resumption of more robust growth until the 3rd and 4th Quarters of 2011.

Consistent with S&P's pessimistic outlook for the economy, its long-term interest rate forecasts have also declined. Table 2 below summarizes the interest rate forecasts:

Table 2
Standard & Poor's Interest Rate Forecast

	Oct. 2010 Average	Average 2010 Est.	Average 2011 Est.
Treasury Bills	0.1%	0.1%	0.3%
10-Yr. T-Bonds	2.5%	3.1%	2.5%
30-Yr. T-Bonds	3.9%	4.1%	3.5%
Aaa Corporate Bonds	4.7%	4.8%	4.3%

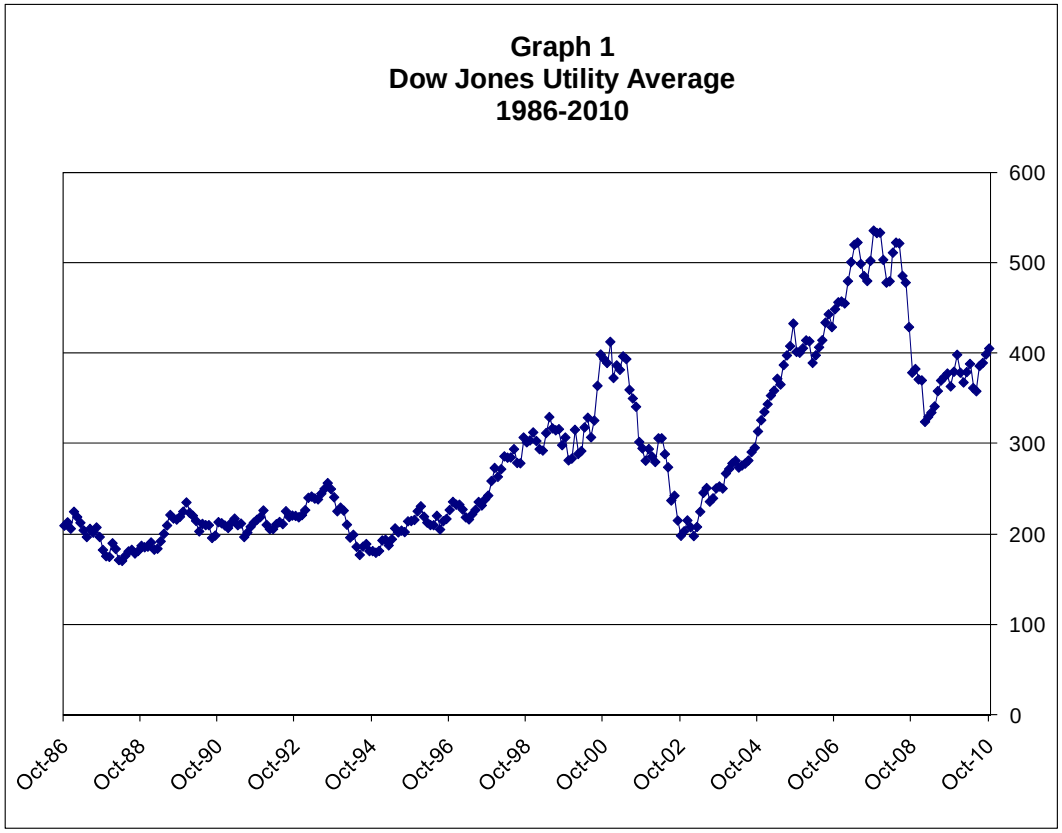
Sources: www.federalreserve.gov, (Current Rates). Standard & Poor's *Trends & Projections*, October 2010, page 8 (Projected Rates).

The data in Table 2 show that S&P expects during 2011 that long-term Treasury interest rates will drop an additional 40 basis points from their recent (October 2010) low levels. Although in the turbulent market environment it is difficult to project interest rates, a much slower economic recovery and continuing government "easy money" policies are reflected in the S&P projections.

Q. Have you updated the graph from your Direct Testimony that shows how utility stocks have performed during the past several years?

A. Yes. Utility stock prices have remained volatile and have recovered less, relative to the broader market indices, from the March 2009 low point. The wider utility stock price fluctuations in the more recent years are vividly illustrated in the

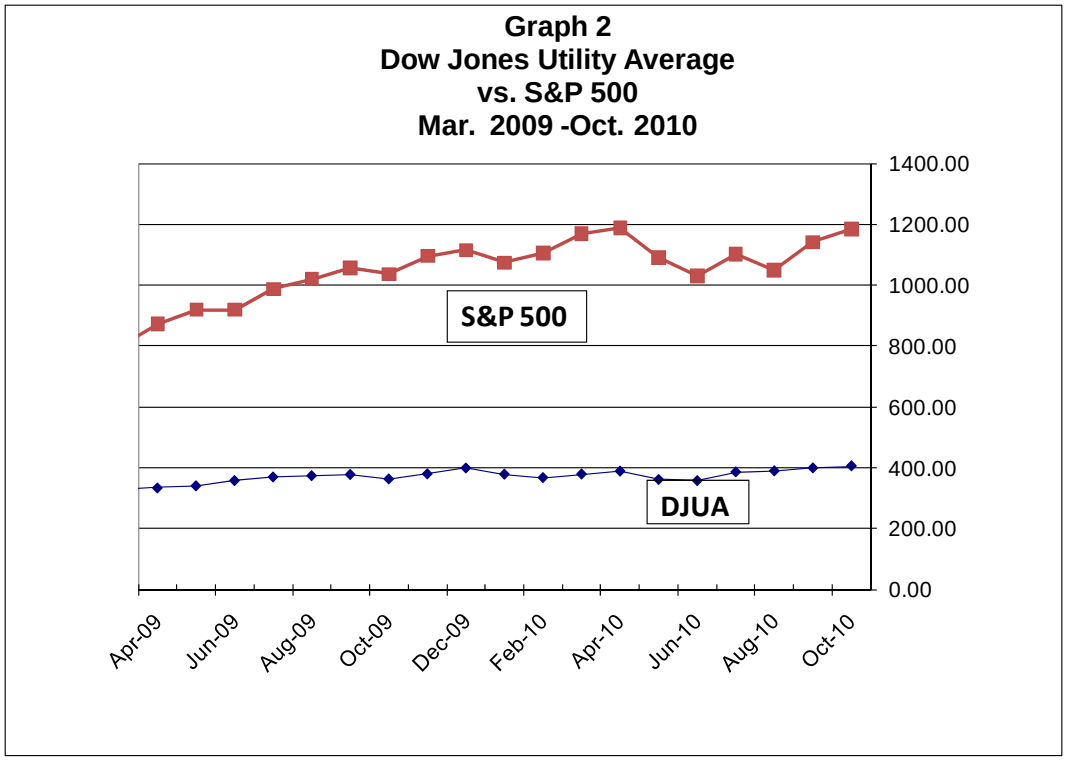
Graph 1 below, which depicts the Dow Jones Utility Average ("DJUA") over the past 25 years.



In this environment, investors' return expectations and requirements for providing capital to the utility industry remain high relative to the longer-term, traditional view of the utility industry. Increased market volatility for utility shares causes investors to require a higher rate of return.

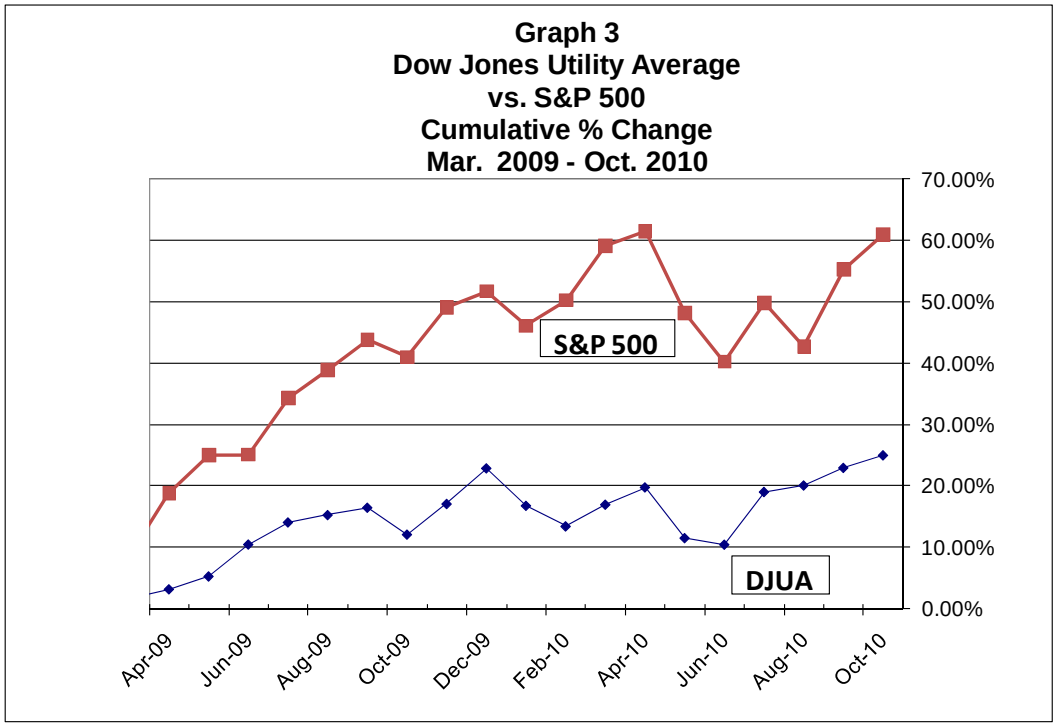
Q. How have utility stocks performed relative to the overall market recovery since March 2009?

A. Utility stock prices have lagged behind the overall market as well. Graph 2 shows the monthly levels for the DJUA versus the broader market S&P 500 index since the market lows that occurred in February and March of 2009.



While the S&P 500 has increased significantly since its lowest level in March 2009, utility prices have increased less than one-half as much. This result is a further indication that the cost of equity for utility companies has not declined to the same extent that interest rates have fallen or to the same extent that the cost of equity may have come down for the broader equity market. The relatively lower prices for utility shares indicate that the cost of capital for utilities is higher.

Graph 3 further illustrates this result by showing the cumulative percentage change in the two equity indexes since the March 2009 lows.



While the S&P 500 has recovered over 60 percent (60.97%) from its March 2009 lows, utility stock prices have increased by only about 25 percent (24.97%). This result again points out the market difficulties that utilities face and the continuing relatively higher cost of equity for utility companies.

Q. How do the other parties' ROE recommendations in this case compare to the rates of return authorized by other state utility commissions around the country?

A. As noted previously, they are much lower. Over the past five years, quarterly average allowed ROEs have generally been in the 10.4 percent to 10.5 percent range. For the first three quarters of 2010, allowed ROEs for integrated electric utilities have been approximately 10.4 percent.[2] Table 3 below summarizes the ROE data, including both distribution and fully integrated companies:

[2] See Schedule SCH2010-7, page 3.

Table 3

Authorized Electric Utility Equity Returns

	2006	2007	2008	2009	2010
1st Quarter	10.38%	10.27%	10.45%	10.29%	10.66%
2nd Quarter	10.68%	10.27%	10.57%	10.55%	10.08%
3rd Quarter	10.06%	10.02%	10.47%	10.46%	10.27%
4th Quarter	10.39%	10.56%	10.33%	10.54%	
Full Year Average	10.36%	10.36%	10.46%	10.48%	10.36%
Average Utility Debt Cost	6.08%	6.11%	6.65%	6.28%	5.59%
Indicated Average Risk Premium	4.28%	4.25%	3.81%	4.20%	4.77%

Source: Regulatory Focus, Regulatory Research Associates, Inc., Major Rate Case Decisions, October 4, 2010. Utility debt costs are the "average" public utility bond yields as reported by Moody's.

The average ROE for the most recent four quarters was 10.39% percent. (10.54% + 10.66% +10.08% + 10.27% = 41.55% / 4 = 10.39%). Mr. Murray's 9.0 percent recommendation is 139 basis points below this average and Mr. Gorman's 9.5 percent recommendation is 89 basis points below. These comparisons show that the other parties' ROE recommendations are unreasonably low and that they are not at all consistent with rates of return allowed for other electric utilities around the country.

IV. REBUTTAL OF STAFF WITNESS MURRAY

Q. Is Mr. Murray's 8.5 percent to 9.5 percent ROE range well supported?

A. Mr. Murray's recommendation is not supported by his analysis. He states that his constant growth DCF range is 8.7 percent to 9.7 percent (Staff Report at 27, line 19) and that his multi-stage DCF range is 8.7 percent to 9.4 percent (Staff Report at 29, line 2). As a test of reasonableness, he also provides a CAPM range of 6.69 percent to 7.72 percent (Staff Report at 34, line 17), and he offers a "rule of thumb" equity risk premium comparison, which indicates a range of 9.14 percent

to 9.71 percent (Staff Report at 35, line 13). Mr. Murray does not explain how he used these results to arrive at his final recommendation. In fact, other than his unrealistically low CAPM estimates, none of his results are as low as the 8.5 percent low end of his recommendation. Even with his own questionable data inputs, most of his other results support a considerably higher ROE.

Q. What are the principal differences between your and Mr. Murray's analysis?

A. We both provide DCF estimates from constant growth and multi-stage growth DCF models. While Mr. Murray uses a considerably smaller (10-company) comparable group, his dividend yield, at 4.7 percent, is only slightly lower than mine. The updated average and median dividend yields for my group are 4.73 percent to 4.83 percent (Schedule SCH2010-11). The differences in our results, therefore, are caused mostly by the differences in our growth rates. As I will explain below, I strongly disagree with both his constant growth rate range and the long-term growth rate he uses in his multi-stage model.

Q. How did Mr. Murray determine the growth rates in his constant growth model?

A. He subjectively picked a range of 4.0 percent to 5.0 percent. Although on page 27 he discusses several growth rate alternatives from Value Line and Reuters, his selected range is not consistent with the data he presents. In fact, only one data series in his growth rate summary table (Staff Schedule 9-4) is as low as 4 percent. The low data are from Value Line's reported 10-year historical average growth for dividends, earnings, and book value (1.32%). This low average is entirely dominated by significant dividend cuts for four of his 10 companies and other near-zero to negative data for some of earnings and book value growth rate

figures (Staff Schedule 9-1). The summary range for all his other growth rates is 4.55 percent to 6.09 percent and, for Value Line's and Reuters' projected growth rates, the range is 4.90 percent to 6.09 percent.

Q. Can you demonstrate what Mr. Murray's constant growth DCF model results would have been if he had used the growth rate range from his projected data?

A. Yes. In Schedule SCH2010-8, page 1, I have reproduced his constant growth rate analysis with growth rates of 4.90 percent to 6.09 percent. That analysis produces an ROE range of 9.59 percent to 10.55 percent. Had Mr. Murray taken a more balanced approach to the results of his own analysis, his constant growth DCF results would have been almost 100 basis points higher.

Q. If Mr. Murray had used the average of his Value Line and Reuters earnings growth projections, what would his constant growth DCF results have been?

A. In Schedule SCH2010-8, page 2, I have recalculated Mr. Murray's constant growth DCF results using his Value Line and Reuters earnings growth estimates (average 5.97 percent). That analysis produces an average ROE of 10.66 percent. Again, Mr. Murray's decision to exclude these higher growth rates resulted in his much lower estimates of ROE.

Q. How is Mr. Murray's multi-stage growth DCF model structured?

A. He applies a three-stage growth model. For near-term, stage 1 growth (years 1-5), he uses the Value Line/Reuters earnings growth estimates noted above. For stage 3 (years 11 and later), he uses a range of 3.0 percent to 4.0 percent, based on his analysis of historical dividend, earnings, and book value data from the 1947-2000

time period. Growth during the middle stage (years 6-10) is a linear interpolation of the growth rates in stages 1 and 3.

Q. What is your evaluation of Mr. Murray's 1947-2000 growth rate study?

A. The study is inaccurate and his conclusions, based on the study, are wrong. He states:

> Based on this data, there is no plausible reason to believe that investors would expect a perpetual growth rate for the electric utility industry to be much higher than 3.0 to 4.0%. These growth rates were less than 50% of the growth in nominal GDP of 7.53% over the same period. If electric utilities' EPS [earnings per share] and DPS [dividends per share] continue to grow at approximately half the expected nominal GDP growth, then investors are more likely to expect a perpetual growth rate in the 2.0% to 3.0% range. (Staff Report at 31, lines 5-10.)

Mr. Murray's study and conclusions can be evaluated from two perspectives: one, common sense and two, statistical accuracy. From a common sense or "smell test" perspective, Mr. Murray's conclusions are wrong because they imply that utility investors would hold utility shares with no expectation for real (after inflation) dividend growth. Alternatively, he would have investors ignore the fact that long-term inflation in the U.S. has exceeded three percent per year. With these facts in place, from the long-term growth rate perspective required by the DCF model, his conclusions imply that investors are irrational—that they would invest in utilities without believing that their dividends would keep up with inflation. Furthermore, using his group's 4.7 percent dividend yield, the total DCF return implied by his 2 percent, 3 percent, and 4 percent growth rates is 6.7 percent, 7.7 percent, and 8.7 percent, respectively (4.7% yield + 2% growth = 6.7% ROE, etc.). From a common sense perspective, Mr. Murray's study and conclusions are suspect.

Q. Why do you believe that Mr. Murray's data are inaccurate?

A. The data he reports are taken from a discontinued series that was initially compiled by Moody's (now Mergent) and reported annually in their Public Utility Manual. The collection effort and annual publication of the data was discontinued and has not been revised or updated since 2003. While it is not possible to know all the collection and reporting methods applied by Moody's over the years, it appears that the more recent years are not consistently reported with respect to the earlier data. This potential mismatch is seen in the drastic drop in earnings per share ("EPS") and to a lesser extent in dividends ("DPS") and book value per share ("BV") that Mr. Murray reports. Between 1995 and 2000, the reported EPS value drops from $12.10 to $5.54; DPS drops from $9.02 to $8.27; and NBV drops from $139.71 to $107.04. By comparison, the reported EPS value had not been as low as $5.54 since the $5.21 percent level reported in 1964.

Q. Are there other data that support your belief that Mr. Murray's data were not compiled consistently by Moody's/Mergent?

A. Yes. The 24 electric utilities used in the reported averages are shown at the end of the statistical section in the 2003 Mergent Public Utility and Transportation Manual, from which Mr. Murray obtained his data. To test for the reported negative growth in Mr. Murray's data between 1995 and 2000, in Schedule SCH2010-9 I have compiled the EPS and DPS levels for each of the 24 companies as reported contemporaneously by Value Line. Those data show that on average in the 1995-2000 time period there was no decline in EPS or DPS for those companies. In fact, the average total *growth* rate in earnings per share for

the 5-year period was 21.8 percent, not the more than 50 percent *drop* indicated by Mr. Murray's source. These data confirm that the values used in Mr. Murray's study are not consistently reported and, therefore, that his conclusions are not valid.

Q. If Mr. Murray had used your long-term 6.0 percent GDP growth rate forecast in his multi-stage DCF analysis, what would the ROE estimate have been?

A. I present that analysis in Schedule SCH2010-8, page 3. With a 6.0 percent long-term growth rate, the ROE estimate for Mr. Murray's group is 10.86 percent.

Q. What do you conclude from your review of Mr. Murray's analysis?

A. His analysis is dominated by his personal views of utility growth rates. As I have shown above, had he taken a more balanced approach to this issue, his ROE estimates would have been much higher. The midpoint of his recommended range is more than 100 basis points below ROEs granted during the past year for other electric utilities around the country. His lack of careful analysis and his subjective inputs cause this result. His low recommendations should be disregarded.

V. REBUTTAL OF INDUSTRIALS WITNESS GORMAN

Q. What is the basis for Mr. Gorman's 9.5 percent ROE recommendation?

A. Mr. Gorman summarizes the results of his analysis in Table 3 on page 39 of his testimony. He reports the average of the median results from two constant growth DCF models and one multi-stage growth model (9.82%), a risk premium analysis (9.58%), and the CAPM (9.2%). From those outcomes, he recommends an ROE

range of 9.2 percent to 9.8 percent with a midpoint of 9.5 percent (Gorman Direct at 39, lines 15-16).

Q. What is your general assessment of Mr. Gorman's ROE testimony and recommendation?

A. Mr. Gorman's recommendation is far below GMO's cost of equity. His recommendation is low because his models are negatively biased by low input data and he includes CAPM results that are currently unreliable. Additionally, even if current monetary policy were not distorting fixed income yields, his equity risk premium analysis is flawed because he fails to include the well-documented fact that equity risk premiums increase when interest rates are low (as they are now) and decrease when interest rates are higher. I will show that, but for these deficiencies, Mr. Gorman's analysis should have supported an ROE range of 10.22 percent to 10.26 percent.

Q. What are your specific areas of disagreement with Mr. Gorman's analysis?

A. Mr. Gorman and I disagree strongly on the principal inputs to several of his models and I disagree with his current reliance on the CAPM. In his analysis, he consistently applies inputs that produce the low ROE estimates. In his constant growth DCF models, he omits readily available data and summarizes the data in a way that shows a lower outcome. In his multi-stage DCF model, which is similar to the one I use, while he agrees that GDP growth is an appropriate input, he uses short-term GDP growth rates that are significantly dominated by recently low inflation rates. The inflation rates in his GDP forecast are almost a full percentage point lower than the longer-term historical averages. This approach is not consistent with the long-term growth rate requirement of the DCF model.

In his equity risk premium analysis, he selects data that are not consistent with the recent risk premiums allowed by regulators and he fails to include the well documented inverse relationship that exists between equity risk premiums and interest rates, i.e., equity risk premiums tend to increase when interest rates are low and decrease when interest rates are high. With this omission, in the currently low interest rate environment, his equity risk premiums are significantly understated and, therefore, his equity risk premium estimates of ROE are low.

His CAPM estimates are even lower. From that analysis, the ROE estimate is only 8.12 percent to 9.17 percent (Schedule MPG-16). Mr. Gorman rounds up the high end of his CAPM range to 9.20 percent and includes this low estimate in his summary Table 3 on page 39 of his testimony. Mr. Gorman's CAPM estimates are low because he mismatches the CAPM inputs for the risk-free rate (R_f) and the market risk premium ($R_m - R_f$). By using the current artificially low government bond interest rate for R_f and the historical Ibbotson/Morningstar estimates of $R_m - R_f$, Mr. Gorman, in effect, "cherry picks" the CAPM approach to produce a low estimate of ROE. His CAPM estimate is clearly an outlier that should be disregarded.

Q. Can you demonstrate what Mr. Gorman's results would have been if he had used more reasonable inputs?

A. Yes. I have redone both of Mr. Gorman's constant growth DCF models with simple corrections, and I have redone his multi-stage model with a higher long-term GDP growth rate. In his "analysts' growth" DCF model, he excludes Empire District Electric Company because apparently that company was not included in his growth rate sources. However, Value Line projects Empire District's earnings

growth rate to be 7.5 percent and the Thomson Financial Network (available at yahoo.com) indicates an Empire District growth rate of 6.0 percent. The average of these two growth rates is 6.75 percent. In my correction of Mr. Gorman's analysts' growth rate analysis (Schedule SCH2010-10, page 2), I include this growth rate for Empire District. The ROE range from that analysis is 10.38 percent to 10.50 percent, as compared to Mr. Gorman's range of 10.33 percent to 10.40 percent.

In his "sustainable growth" DCF analysis, Mr. Gorman uses methods that also reduce his results. In that analysis, the estimate for DPL Inc. is 19.96 percent, which Mr. Gorman correctly identifies to be an outlier. However, rather than simply eliminating DPL, Inc. from his group, Mr. Gorman uses only the group median, rather than average and median, to summarize all of his results. A more logical approach would have been simply to remove DPL, Inc. from the analysis. When both average and median results are included, as I show in Schedule SCH2010-10, page 1, the range is higher than Mr. Gorman reports. Although there is not a large effect when applied to all three of Mr. Gorman's models, his reporting of only the median DCF results in his summary table produces a slightly lower overall DCF estimate. When more reasonable inputs are used and both average and median results are reported, Mr. Gorman's DCF estimates are above 10.0 percent.

Q. What is your specific disagreement with Mr. Gorman's multi-stage DCF analysis?

A. In that analysis, Mr. Gorman uses analysts' growth rate forecasts in the first five years and a GDP growth rate forecast for years eleven and later. In the

intermediate years, years six through ten, he interpolates between stage 1 and stage 3. I disagree with his final result because it is dominated by his very low estimate of GDP growth. His GDP growth forecast is for five and ten-year periods published by the Blue Chip Financial Forecast service. The current Blue Chip consensus for GDP growth is low because it is dominated by low expected real growth in the economy (caused by the recent recession) and the assumed long-term inflation rate is only about 2.0 percent. As shown in my GDP forecast data (Hadaway Direct, Schedule SCH2010-4), this inflation rate is lower than for any ten-year period in the last 60 years. The nominal 4.75 percent growth rate that Mr. Gorman uses is itself lower than nominal GDP growth in any 10-year period, other than the most recent recession-dominated 10 years. For Mr. Gorman to base his long-term DCF growth estimate on currently depressed, near-term GDP growth is inconsistent with the DCF model's long-term growth rate requirement.

Q. If Mr. Gorman had used your updated GDP growth rate, what would the results of his multi-stage DCF analysis have been?

A. In Schedule SCH2010-10, page 4, I have reproduced Mr. Gorman's multi-stage analysis (from his Schedule MPG-9) with my 6.0 percent GDP growth forecast substituted for his growth rates in years eleven and later. In addition, I included Empire District in the analysis based on the discussion above. From that analysis, the average and median ROEs are 10.74 percent.

Q. What did you find with regard to Mr. Gorman's equity risk premium analysis?

A. In his equity risk premium analysis, he uses low average risk premiums that are not consistent with currently low interest rates. In the risk premium analysis from my Direct Testimony, I provided a detailed regression analysis of the past 30 years of data, which shows that risk premiums are higher when interest rates are low. Mr. Gorman ignores that relationship altogether. When his analysis is modified to properly reflect wider equity risk premiums, his equity risk premium estimate of ROE is much higher.

Q. What did Mr. Gorman's analysis conclude?

A. Mr. Gorman presents his equity risk premium data in Schedules MPG-11 through MPG-12. He discusses that analysis on pages 29-34 of his testimony. The analysis consists of two parts. In one approach, he adds equity risk premiums based on government bond interest rates of 4.40 percent to 6.08 percent to a projected Treasury bond yield of 4.50 percent. This analysis produces an ROE range of 8.90 percent to 10.58 (Gorman Direct at 33, lines 20-21). In his second approach he adds equity risk premiums of 3.03 percent to 4.59 percent over utility bond yields to the recent "Baa" utility bond yield of 5.60 percent. This analysis produces an ROE range of 8.63 percent to 10.19 percent, with a midpoint estimate of 9.41 percent. From these two results, he concludes that an ROE of 9.58 percent is appropriate (Gorman Direct at 34, lines 1-5).

Q. What does Mr. Gorman's equity risk premium data indicate when your regression analysis is included?

A. In Schedule SCH2010-10, pages 5-8, I have applied the standard regression analysis to calculate "interest rate adjustment" factors for his two equity risk premium studies. This approach properly takes into account the inverse

relationship between equity risk premiums and interest rates. With this adjustment, Mr. Gorman's Treasury bond equity risk premium analysis indicates an ROE of 10.46 percent, as shown in pages 5-6 of Schedule SCH-2010-10. His utility bond equity risk premium analysis indicates an ROE of 10.19 percent (pages 7-8). The midpoint of these revised risk premium results is 10.32 percent.

Q. Why do you disagree with Mr. Gorman's CAPM analysis?

A. I disagree with Mr. Gorman's 9.2 percent CAPM estimate because his analysis contains a mismatch between the risk-free rate and the market risk premium. Mr. Gorman's market risk premium is too low because it is based on the Ibbotson/Morningstar long-term averages, which cannot possibly take into account the current, artificially low government interest rates. On the one hand, Mr. Gorman relies on currently low Treasury bond rates for the risk-free rate (which pushes the CAPM result down) while, on the other hand, he does not incorporate that low rate into his market risk premium (which would have increased his result). This data mismatch causes his CAPM result to be much lower than it should have been.

Q. Please summarize the results of your adjustments to Mr. Gorman's ROE analysis.

A. The adjusted results are summarized in Table 5 below:

Table 5
Summary of Results

	Gorman Median DCF	Updated Median DCF	Updated Average DCF
DCF Models			
Constant Growth DCF (Analysts' Growth)	10.33%	10.38%	10.50%
Constant Growth DCF (Sustainable Growth)	9.33%	9.22%	9.34%
Multi-Stage DCF	9.80%	10.74%	10.74%
DCF	9.82%	10.11%	10.19%
Risk Premium Average	9.58%	10.32%	10.32%
CAPM	9.20%	NA	NA
ROE	9.50%	10.22%	10.26%

In the DCF model based on analysts' growth rates, the inclusion of readily available growth estimates for Empire District increases the range to 10.38 percent to 10.50 percent. In the multi-stage DCF analysis, the inclusion of a 6.0 percent long-term GDP growth rate increases that result to 10.74 percent. In the risk premium analysis, including the observed inverse relationship between interest rates and equity risk premiums increases the equity risk premium estimate to 10.32 percent. Based on these results and excluding Mr. Gorman's unreasonably low CAPM result altogether, the indicated ROE range increases to 10.22 percent to 10.26 percent. Had Mr. Gorman more reasonably considered these factors, his estimates would have been well above the 9.5 percent ROE he recommends.

VI. UPDATE OF ROE ESTIMATES

Q. Have you updated your ROE analysis to take into account recent data and the current conditions in the capital markets?

A. Yes. Consistent with my customary practice, I have updated my ROE analysis for current conditions using the same methodologies that I employed in my direct testimony.

Q. What are the results of your updated DCF analyses?

A. My updated DCF results are shown in Schedule SCH2010-11. The indicated DCF range is 10.2 percent to 10.8 percent, with a midpoint of 10.5 percent.

Q. What are the results of your updated bond yield plus equity risk premium analysis?

A. My equity risk premium studies are shown in Schedule SCH2010-12. These studies indicate an ROE range of 10.05 percent to 10.24 percent. Under current market conditions, I discount these results because current utility bond yields are artificially depressed by government monetary policy and investors' continuing flight to safety away from the ongoing turbulence in the equity capital market.

Q. What do you conclude from your updated ROE analyses?

A. My updated DCF analysis shows that GMO's current cost of equity capital is in the range of 10.2 percent to 10.8 percent. These results show that the Company's reduced ROE request of 10.75 percent is reasonable and that the recommendations of Mr. Murray and Mr. Gorman, as discussed herein, are unreasonably low.

Q. Are you providing a CAPM analysis in your ROE update?

A. No. As I explained previously, government monetary policies and recent flight to safety issues have pushed Treasury bond interest rates to artificially low levels. In this environment, CAPM estimates understate the market cost of equity capital.

For this reason, I do not include CAPM estimates in my ROE analysis and any results from a CAPM analysis should be disregarded.

Q. What is your recommendation based on your updated analysis?

A. As noted previously, based on my updated analysis the Company is reducing its requested ROE from 11.0 percent to 10.75 percent. This reduced request is reasonable based on my updated analysis, which incorporates the most recent market data. As was the case with the Company's initially requested ROE in this proceeding, the revised ROE is commensurate with the top of my DCF range to reflect the Company's reliability and customer satisfaction achievements. This is discussed further in the Direct Testimony of Company witness Curtis Blanc.

Q. Does this conclude your rebuttal testimony?

A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of KCP&L Greater Missouri Operations Company to Modify Its Electric Tariffs to Effectuate a Rate Increase	)))	Docket No. ER-2010-0356

AFFIDAVIT OF SAMUEL C. HADAWAY

STATE OF TEXAS)
) **ss**
COUNTY OF TRAVIS)

Samuel C. Hadaway, being first duly sworn on his oath, states:

1. My name is Samuel C. Hadaway. I am employed by FINANCO, Inc. in Austin, Texas. I have been retained by Great Plains Energy, Inc. to serve as an expert witness to provide cost of capital testimony on behalf of KCP&L Greater Missouri Operations Company.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of KCP&L Greater Missouri Operations Company consisting of twenty-four (24) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Samuel C. Hadaway
Samuel C. Hadaway

Subscribed and sworn before me this 13th day of December, 2010.

AMRITA SINGH
Notary Public
STATE OF TEXAS
My Comm Exp 01-14-2012

Notary Public

My commission expires: 01-14-2012

KCP&L Greater Missouri Operations Company
Long-Term Interest Rate Trends

Month	Triple-B Utility Rate	30-Year Treasury Rate	Triple-B Utility Spread
Jan-08	6.35	4.33	2.02
Feb-08	6.60	4.52	2.08
Mar-08	6.68	4.39	2.29
Apr-08	6.81	4.44	2.37
May-08	6.79	4.60	2.19
Jun-08	6.93	4.69	2.24
Jul-08	6.97	4.57	2.40
Aug-08	6.98	4.50	2.48
Sep-08	7.15	4.27	2.88
Oct-08	8.58	4.17	4.41
Nov-08	8.98	4.00	4.98
Dec-08	8.11	2.87	5.24
Jan-09	7.90	3.13	4.77
Feb-09	7.74	3.59	4.15
Mar-09	8.00	3.64	4.36
Apr-09	8.03	3.76	4.27
May-09	7.76	4.23	3.53
Jun-09	7.31	4.52	2.79
Jul-09	6.87	4.41	2.46
Aug-09	6.36	4.37	1.99
Sep-09	6.12	4.19	1.93
Oct-09	6.14	4.19	1.95
Nov-09	6.18	4.31	1.87
Dec-09	6.26	4.49	1.77
Jan-10	6.16	4.60	1.56
Feb-10	6.25	4.62	1.63
Mar-10	6.22	4.64	1.58
Apr-10	6.19	4.69	1.50
May-10	5.97	4.29	1.68
Jun-10	6.18	4.13	2.05
Jul-10	5.98	3.99	1.99
Aug-10	5.55	3.80	1.75
Sep-10	5.53	3.77	1.76
Oct-10	5.62	3.87	1.75
3-Mo Avg	**5.57**	**3.81**	**1.75**
12-Mo Avg	**6.01**	**4.27**	**1.74**

Sources: Mergent Bond Record (Utility Rates); www.federalreserve.gov (Treasury Rates).

Three month average is for August 2010-October 2010.

Twelve month average is for November 2009-October 2010.

Economic Indicators

Seasonally Adjusted Annual Rates — Dollar Figures in Billions

2009	E2010	E2011	2009	E2010	E2011		1Q	R2Q	E3Q	E4Q	1Q	2Q	3Q	4Q
			----- Annual % Change -----				---------- 2010 ----------				---------- E2011 ----------			
						Gross Domestic Product								
$14,119.0	$14,635.3	$15,197.6	(1.7)	3.7	3.8	GDP (current dollars)	$14,446.4	$14,578.7	$14,723.7	$14,792.3	$14,957.5	$15,095.1	$15,263.5	$15,474.3
(1.7)	3.7	3.8	-	-	-	Annual rate of increase (%)	4.8	3.7	4.0	1.9	4.5	3.7	4.5	5.6
(2.6)	2.7	2.5	-	-	-	Annual rate of increase–real GDP (%)	3.7	1.7	1.7	2.0	2.4	2.6	3.2	4.2
0.9	0.9	1.4	-	-	-	Annual rate of increase–GDP deflator (%	1.0	1.9	2.3	(0.1)	2.1	1.1	1.3	1.4
						***Components of Real GDP**								
$9,154.0	$9,299.8	$9,513.2	(1.2)	1.6	2.3	Personal consumption expenditures	$9,225.4	$9,275.7	$9,322.5	$9,375.8	$9,435.4	$9,477.9	$9,535.9	$9,603.5
(1.2)	1.6	2.3	-	-	-	% change	1.9	2.2	2.0	2.3	2.6	1.8	2.5	2.9
1,094.6	1,164.1	1,241.1	(3.7)	6.3	6.6	Durable goods	1,138.9	1,157.8	1,172.7	1,186.7	1,214.4	1,222.5	1,248.2	1,279.3
2,017.4	2,067.8	2,104.8	(1.2)	2.5	1.8	Nondurable goods	2,053.5	2,063.4	2,069.4	2,085.0	2,091.4	2,099.4	2,109.0	2,119.3
6,032.7	6,067.5	6,177.0	(0.8)	0.6	1.8	Services	6,029.6	6,053.4	6,081.0	6,106.1	6,135.8	6,162.7	6,189.2	6,220.5
1,290.8	1,354.0	1,445.4	(17.1)	4.9	6.7	Nonresidental fixed investment	1,302.6	1,355.3	1,368.1	1,390.1	1,409.3	1,434.1	1,458.2	1,479.9
(17.1)	4.9	6.7	-	-	-	% change	7.8	17.2	3.8	6.6	5.6	7.2	6.9	6.1
916.3	1,051.4	1,173.0	(15.3)	14.7	11.6	Producers durable equipment	989.7	1,046.0	1,069.2	1,100.7	1,129.2	1,161.8	1,189.1	1,211.7
333.9	319.2	341.0	(23.2)	(4.4)	6.8	Residental fixed investment	321.4	340.7	308.6	306.0	313.1	330.3	344.8	375.6
(23.2)	(4.4)	6.8	-	-	-	% change	(12.8)	26.2	(32.7)	(3.3)	9.6	23.9	18.6	40.9
(113.1)	68.5	38.6	-	-	-	Net change in business inventories	44.1	68.8	106.3	54.6	37.9	32.2	36.9	47.3
2,542.6	2,560.4	2,558.1	1.6	0.7	(0.1)	Gov't purchases of goods & services	2,540.2	2,564.9	2,568.5	2,568.0	2,565.9	2,562.7	2,555.8	2,547.8
1,027.6	1,063.7	1,051.4	5.7	3.5	(1.2)	Federal	1,048.4	1,071.5	1,069.4	1,065.4	1,060.3	1,054.3	1,049.3	1,041.8
1,518.8	1,502.1	1,511.4	(0.9)	(1.1)	0.6	State & local	1,496.8	1,499.1	1,504.7	1,507.9	1,510.7	1,513.3	1,511.3	1,510.5
(363.0)	(416.7)	(377.7)	-	-	-	Net exports	(338.4)	(449.0)	(462.8)	(416.6)	(401.3)	(386.5)	(371.6)	(351.2)
1,490.7	1,666.5	1,809.6	(9.5)	11.8	8.6	Exports	1,616.4	1,652.1	1,680.2	1,717.2	1,748.6	1,787.3	1,831.7	1,870.7
1,853.8	2,083.2	2,187.2	(13.8)	12.4	5.0	Imports	1,954.8	2,101.1	2,143.0	2,133.8	2,149.8	2,173.9	2,203.4	2,221.8
						****Income & Profits**								
$12,175.0	$12,516.2	$12,934.5	(1.7)	2.8	3.3	Personal income	$12,350.3	$12,473.8	$12,563.5	$12,677.4	$12,768.1	$12,867.3	$12,984.8	$13,117.7
11,035.0	11,365.9	11,681.8	0.7	3.0	2.8	Disposable personal income	11,215.6	11,336.5	11,407.8	11,503.9	11,543.9	11,629.0	11,721.0	11,833.4
5.9	5.7	4.8	-	-	-	Savings rate (%)	5.5	5.9	5.8	5.7	5.0	5.0	4.8	4.6
1,316.7	1,773.8	1,835.2	(1.2)	34.7	3.5	Corporate profits before taxes	1,772.9	1,788.2	1,775.5	1,758.6	1,782.1	1,816.7	1,852.1	1,890.0
1,061.8	1,368.1	1,334.4	3.6	28.8	(2.5)	Corporate profits after taxes	1,369.7	1,382.6	1,362.9	1,357.3	1,292.4	1,320.5	1,347.5	1,377.0
51.30	71.56	85.32	245.0	39.5	19.2	‡Earnings per share (S&P 500)	61.28	67.46	70.36	71.56	75.42	77.12	81.28	85.32
						†Prices & Interest Rates								
(0.3)	1.6	1.7	-	-	-	Consumer price index	1.5	(0.7)	1.6	1.9	2.1	1.6	1.9	2.0
0.2	0.1	0.3	-	-	-	Treasury bills	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.4
3.3	3.1	2.5	-	-	-	10-yr notes	3.7	3.5	2.8	2.5	2.4	2.4	2.6	2.7
4.1	4.1	3.5	-	-	-	30-yr bonds	4.6	4.4	3.9	3.6	3.5	3.5	3.5	3.6
5.3	4.8	4.3	-	-	-	New issue rate–corporate bonds	5.3	5.0	4.6	4.4	4.2	4.2	4.3	4.4
						Other Key Indicators								
550.0	596.0	786.4	(38.4)	7.5	31.9	Housing starts (1,000 units SAAR)	617.0	602.0	567.9	597.1	656.4	723.3	823.0	942.9
10.4	11.4	12.9	(21.2)	9.4	13.0	Auto & truck sales (1,000,000 units)	11.0	11.3	11.6	11.6	12.2	12.5	13.0	13.7
9.3	9.7	9.5	-	-	-	Unemployment rate (%)	9.7	9.7	9.6	9.8	9.7	9.6	9.5	9.3
4.3	(3.0)	(8.0)	-	-	-	§U.S. dollar	11.3	15.6	(8.4)	(15.1)	(10.9)	(7.6)	(3.3)	(3.9)

Note: Annual changes are from prior year and quarterly changes are from prior quarter. Figures may not add to totals because of rounding. A–Advance data. P–Preliminary. E–Estimated. R–Revised.
*2005 Chain-weighted dollars. **Current dollars. ‡Trailing 4 quarters. †Average for period. §Quarterly % changes at quarterly rates. This forecast prepared by Standard & Poor's.

KCP&L Greater Missouri Operations Company
Authorized Electric Utility Equity Returns

Average Authorized ROE	2006	No.	2007	No.	2008	No.	2009	No.	2010	No.
All Electric Utilities	10.36%	26	10.36%	39	10.46%	37	10.48%	39	10.36%	43
Vertically-Integrated Utilities	10.57%	15	10.56%	28	10.45%	25	10.63%	27	10.42%	27
Distribution Utilities	9.91%	10	9.86%	11	9.78%	7	10.15%	10	9.98%	14
Power Plant Only Cases	11.90%	1	NA	0	11.44%	5	10.18%	2	12.30%	2

Data Source:
Regulatory Focus , "Major Rate Case Decisions," Regulatory Research Associates, Oct 4, 2010; January 12, 2009; and January 30, 2007. Data for 2010 is through the 3rd Quarter.

KCP&L Greater Missouri Operations Company

Murray Constant Growth DCF Result (Considering His Projected High/Low Growth Rate Range)

No.	Company Name	(1) Expected Annual Dividend	(2) Average High/Low Stock Price	(3) Projected Dividend Yield	(4) Growth Rate Range Value Line DPS, EPS, BVPS	(5) Growth Rate Range Reuters	(6) ROE Range **Value Line**	(7) ROE Range **Reuters**
1	Alliant Energy	$1.63	$34.867	4.68%	5.33%	7.94%	**10.02%**	**12.62%**
2	American Electric Power	$1.69	$35.360	4.79%	3.33%	4.70%	**8.12%**	**9.49%**
3	Cleco Corp.	$1.06	$28.537	3.70%	8.33%	3.00%	**12.03%**	**~~6.70%~~**
4	DPL Inc.	$1.26	$25.520	4.95%	6.17%	11.80%	**11.11%**	**~~16.75%~~**
5	IDACORP, Inc.	$1.20	$35.287	3.40%	4.33%	4.00%	**7.73%**	**7.40%**
6	PG&E Corp.	$1.93	$44.955	4.28%	7.00%	6.63%	**11.28%**	**10.91%**
7	Pinnacle West Capital	$2.10	$39.433	5.33%	3.17%	7.62%	**8.49%**	**12.95%**
8	Progress Energy	$2.51	$41.678	6.02%	2.33%	3.83%	**8.36%**	**9.85%**
9	Southern Company	$1.86	$36.040	5.16%	4.50%	5.07%	**9.66%**	**10.23%**
10	Xcel Energy	$1.02	$22.198	4.61%	4.50%	6.34%	**9.11%**	**10.95%**
	Average			4.69%	4.90%	6.09%	**9.59%**	**10.55%**

Notes:
Columns 1-2: Murray Schedule 11.
Column 3: Column 1 divided by column 2.
Column 4: Murray Schedule 9-4, column 3 (average of Value Line 5-year projected DPS, EPS, BVPS growth rates).
Column 5: Murray Schedule 9-4, column 4 (Reuters 5-year projected EPS growth rate).
Column 6: Column 3 plus column 4.
Column 7: Column 3 plus column 5. The results for Cleco and DPL are considered outliers and are eliminated from the average calculation.

KCP&L Greater Missouri Operations Company

Murray Constant Growth DCF Result (Considering His Average Analysts' Growth Rates)

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Expected Annual	Average High/Low Stock	Projected Dividend	Analysts' EPS Growth Projections			
No.	Company Name	Dividend	Price	Yield	Reuters	Value Line	Average	**ROE**
1	Alliant Energy	$1.63	$34.867	4.68%	7.94%	7.00%	7.47%	**12.15%**
2	American Electric Power	$1.69	$35.360	4.79%	4.70%	3.00%	3.85%	**8.64%**
3	Cleco Corp.	$1.06	$28.537	3.70%	3.00%	9.50%	6.25%	**9.95%**
4	DPL Inc.	$1.26	$25.520	4.95%	11.80%	7.00%	9.40%	**14.35%**
5	IDACORP, Inc.	$1.20	$35.287	3.40%	4.00%	5.50%	4.75%	**8.15%**
6	PG&E Corp.	$1.93	$44.955	4.28%	6.63%	7.00%	6.82%	**11.10%**
7	Pinnacle West Capital	$2.10	$39.433	5.33%	7.62%	6.00%	6.81%	**12.14%**
8	Progress Energy	$2.51	$41.678	6.02%	3.83%	3.50%	3.67%	**9.69%**
9	Southern Company	$1.86	$36.040	5.16%	5.07%	4.50%	4.79%	**9.95%**
10	Xcel Energy	$1.02	$22.198	4.61%	6.34%	5.50%	5.92%	**10.53%**
	Average			4.69%	6.09%	5.85%	5.97%	**10.66%**

Notes:
Columns 1-2: Murray Schedule 11.
Column 3: Column 1 divided by column 2.
Column 4: Murray Schedule 9-4, column 4 (Reuters 5-year projected EPS growth rate).
Column 5: Murray Schedule 9-4, column 4 (Value Line 5-year projected EPS growth rate).
Column 6: Average of columns 4-5.
Column 7: Column 3 plus column 6.

KCP&L Greater Missouri Operations Company
Murray Multi-Stage DCF Result (Considering Long-Term GDP Growth)

No.	Company Name	(1) Annualized Quarterly Dividend	(2) Growth Years 1-5	(3) Growth Years 6	(4) Growth Years 7	(5) Growth Years 8	(6) Growth Years 9	(7) Growth Years 10	(8) Growth in Perpetuity	(9) **ROE**
1	Alliant Energy	$1.58	7.47%	7.23%	6.98%	6.74%	6.49%	6.25%	6.00%	**11.25%**
2	American Electric Power	$1.68	3.85%	4.21%	4.57%	4.93%	5.28%	5.64%	6.00%	**10.41%**
3	Cleco Corp.	$1.00	6.25%	6.21%	6.17%	6.13%	6.08%	6.04%	6.00%	**9.77%**
4	DPL Inc.	$1.21	9.40%	8.83%	8.27%	7.70%	7.13%	6.57%	6.00%	**12.14%**
5	IDACORP, Inc.	$1.20	4.75%	4.96%	5.17%	5.38%	5.58%	5.79%	6.00%	**9.32%**
6	PG&E Corp.	$1.82	6.82%	6.68%	6.54%	6.41%	6.27%	6.14%	6.00%	**10.51%**
7	Pinnacle West Capital	$2.10	6.81%	6.68%	6.54%	6.41%	6.27%	6.14%	6.00%	**11.92%**
8	Progress Energy	$2.48	3.67%	4.05%	4.44%	4.83%	5.22%	5.61%	6.00%	**11.48%**
9	Southern Company	$1.82	4.79%	4.99%	5.19%	5.39%	5.60%	5.80%	6.00%	**10.97%**
10	Xcel Energy	$1.01	5.92%	5.93%	5.95%	5.96%	5.97%	5.99%	6.00%	**10.80%**
	Average		5.97%						6.00%	**10.86%**

Notes:
Columns 1-2: Murray Schedule 13-1.
Columns 3-7: Transition growth period equal to annual interpolation between columns 2 and 8.
Column 8: Hadaway Direct Schedule 2010-4.
Column 9: The internal rate of return of the following cash flows: The price from page 1, column 2 and the dividends shown in column 1 growing for the first five years (Stage 1) at the growth rates shown in column 2; then growing for the next five years (Stage 2) at the growth rates shown in columns 6-10; then growing through year 200 (Stage 3) at the growth rate shown in column 8.

KCP&L Greater Missouri Operations Company

Historical Growth Rate Analysis

No.	Company	(1) EPS 1995	(2) EPS 2000	(3) Change	(4) DPS 1995	(5) DPS 2000	(6) Change
1	American Electric Power Inc.	*NA (AEP acquired CSW in 2000, prior data not comparable)*					
2	Constellation Energy Group Inc.	$2.02	$2.30	13.9%	$1.55	$1.68	8.4%
3	Progress Energy Inc.	$2.48	$2.34	-5.6%	$1.78	$2.08	16.9%
4	Ch Energy Group Inc.	$2.74	$3.05	11.3%	$2.10	$2.16	2.9%
5	Cinergy Corp.	$2.22	$2.50	12.6%	$1.72	$1.80	4.7%
6	Consolidated Edison Inc.	$2.93	$2.74	-6.5%	$2.04	$2.18	6.9%
7	DPL Inc.	$1.09	$1.50	37.6%	$0.83	$0.94	13.3%
8	DTE Energy Co.	$3.02	$3.27	8.3%	$2.06	$2.06	0.0%
9	Dominion Res. Inc. VA New	$2.45	$2.50	2.0%	$2.58	$2.58	0.0%
10	Duke Energy Corp.	$1.63	$2.01	23.3%	$1.00	$1.10	10.0%
11	Energy East Corp.	$1.25	$2.07	65.6%	$0.70	$0.88	25.7%
12	FirstEnergy Corp.	*N/A (FirstEnergy formed in 1997 from Ohio Ed/Centerior, prior data not comparable)*					
13	Reliant Energy Inc.	$1.60	$2.92	82.5%	$1.50	$1.50	0.0%
14	Idacorp Inc.	$2.10	$3.50	66.7%	$1.86	$1.86	0.0%
15	Ipalco Enterprises Inc.	$0.94	$0.93	-1.1%	$0.72	$0.65	-9.7%
16	Nisource Inc.	$1.36	$1.39	2.2%	$0.80	$0.81	1.3%
17	OGE Energy Corp.	$1.52	$1.89	24.3%	$1.33	$1.33	0.0%
18	Exelon Corp.	*N/A (Exelon formed in 2000 from PECO/Unicom, prior data not comparable)*					
19	PPL Corp.	$1.93	$3.28	69.9%	$1.67	$1.06	-36.5%
20	Potomac Elec. Power Co.	$1.69	$1.58	-6.5%	$1.66	$1.66	0.0%
21	Public Svc. Enterprise Group	$2.71	$3.55	31.0%	$2.16	$2.16	0.0%
22	Southern Co.	$1.66	$2.01	21.1%	$1.22	$1.34	9.8%
23	TECO Energy Inc.	$1.60	$1.97	23.1%	$1.05	$1.33	26.7%
24	Xcel Energy Inc.	$1.96	$1.60	-18.4%	$1.34	$1.48	10.4%
	Average			21.8%			4.3%

Notes:

Columns (1)-(2) & (4)-(5): Value Line Investment Survey, Electric Utility (East), December 7, 2001;
(Central), April 6, 2001; (West), November 16, 2001.AEP information from Value Line (Central), July 4, 2003.

Columns 3 & 6: Column 2 divided by column 1 less one and column 5 divided by column 4 less one, respectively.

KCP&L Greater Missouri Operations Company
Summary of Updated Gorman ROE Results

	(1)	(2)	(3)
	Summary of Results		
	Gorman Median DCF	Updated Median DCF	Updated Average DCF
DCF Models			
Constant Growth DCF (Analysts' Growth)	10.33%	10.38%	10.50%
Constant Growth DCF (Sustainable Growth)	9.33%	9.22%	9.34%
Multi-Stage DCF	9.80%	10.74%	10.74%
DCF	9.82%	10.11%	10.19%
Risk Premium Average	9.58%	10.32%	10.32%
CAPM	9.20%	NA	NA
Recommended ROE (High/Low Midpoint)	**9.50%**	**10.22%**	**10.26%**

Notes:
Column 1: Gorman, page 29 (DCF results) and page 39 (summary results). Mr. Gorman relied only on his median results.
Column 2: Only change to Analysts' Growth result is to include outcome for Empire District (see page 2 of this schedule).
Only change to Sustainable Growth is to remove the DPL outcome from the group (see page 3 of this schedule).
Only changes to Multi-Stage result are the use of a third-stage growth rate of 6.0% and the inclusion of Empire District (see page 4 of this schedule). Median results shown.
Risk Premium results are an average of Treasury Bond results (see from pages 5-6 of this schedule) and Utility Bond results (see pages 7-8 of this schedule).
CAPM results are not reliable and are excluded as discussed in my testimony.
ROE results are midpoint of DCF average and Risk Premium result.
Column 3: For updated DCF results, the averages are shown. No change to updated Risk Premium result.

KCP&L Greater Missouri Operations Company
Gorman Constant Growth DCF Analysis (including Empire District)

No.	Company	(1) Price P_0	(2) Analysts' Growth	(3) Dividend D_0	(4) Adjusted Yield	(5) Cost of Equity
1	ALLETE	$36.29	5.28%	$1.76	5.11%	10.38%
2	Alliant Energy Co.	$35.97	6.08%	$1.58	4.66%	10.74%
3	American Elec. Pwr.	$36.20	4.17%	$1.68	4.83%	9.00%
4	Avista Corp.	$21.15	4.39%	$1.00	4.94%	9.33%
5	Black Hills Corp	$31.40	6.00%	$1.44	4.86%	10.86%
6	Cleco Corporation	$29.54	4.33%	$1.00	3.53%	7.87%
7	Con. Edison	$48.28	4.33%	$2.38	5.14%	9.47%
8	DPL Inc.	$26.06	8.85%	$1.21	5.06%	13.91%
9	DTE Energy Co.	$46.69	4.86%	$2.24	5.03%	9.89%
10	Duke Energy	$17.61	3.63%	$0.98	5.77%	9.40%
11	Edison Internat.	$34.83	4.28%	$1.26	3.77%	8.05%
12	Empire District	$20.23	**6.75%**	$1.28	6.75%	13.50%
13	Entergy Corp.	$77.39	3.82%	$3.32	4.45%	8.27%
14	Nextera Energy	$54.24	6.31%	$2.00	3.92%	10.23%
15	Hawaiian Electric	$23.16	7.27%	$1.24	5.74%	13.01%
16	IDACORP	$35.88	4.78%	$1.20	3.50%	8.28%
17	Northeast Utilities	$29.79	7.44%	$1.03	3.70%	11.14%
18	NSTAR	$39.20	5.54%	$1.60	4.31%	9.85%
19	PG&E Corp.	$46.31	6.51%	$1.82	4.19%	10.70%
20	Pinnacle West	$40.84	6.97%	$2.10	5.50%	12.47%
21	Portland General	$20.31	5.63%	$1.04	5.41%	11.04%
22	Progress Energy	$43.67	3.87%	$2.48	5.90%	9.77%
23	SCANA Corp.	$40.13	4.67%	$1.90	4.96%	9.63%
24	Sempra Energy	$52.87	5.93%	$1.56	3.13%	9.06%
25	Southern Co.	$37.14	5.25%	$1.82	5.16%	10.41%
26	Teco Energy, Inc.	$17.21	5.91%	$0.82	5.05%	10.96%
27	UIL Holdings Co.	$27.64	3.78%	$1.73	6.49%	10.27%
28	Vectren Corp.	$25.68	5.28%	$1.36	5.58%	10.86%
29	Westar Energy	$24.34	8.31%	$1.24	5.52%	13.83%
30	Wisconsin Energy	$57.51	9.17%	$1.60	3.04%	12.21%
31	Xcel Energy Inc.	$22.97	6.35%	$1.01	4.68%	11.03%
	Average	**$35.50**	**5.67%**	**$1.57**	**4.83%**	**10.50%**
	Median					**10.38%**

Notes:

Columns 1-5: Schedule MPG-4, except for Empire District growth rate which comes from Schedule SCH2010-11, p. 2, column 7.

KCP&L Greater Missouri Operations Company
Gorman Sustainable Growth DCF Analysis (eliminating DPL)

No.	Company	(1) Price P_0	(2) Sustainable Growth	(3) Dividend D_0	(4) Adjusted Yield	(5) Cost of Equity
1	ALLETE	$36.29	3.71%	$1.76	5.03%	8.74%
2	Alliant Energy Co.	$35.97	5.94%	$1.58	4.65%	10.59%
3	American Elec. Pwr.	$36.20	5.00%	$1.68	4.87%	9.87%
4	Avista Corp.	$21.15	3.35%	$1.00	4.89%	8.24%
5	Black Hills Corp	$31.40	2.48%	$1.44	4.70%	7.18%
6	Cleco Corporation	$29.54	6.04%	$1.00	3.59%	9.63%
7	Con. Edison	$48.28	3.56%	$2.38	5.11%	8.67%
8	DPL Inc.	~~$26.06~~	~~14.63%~~	~~$1.21~~	~~5.33%~~	~~19.96%~~
9	DTE Energy Co.	$46.69	3.74%	$2.24	4.98%	8.72%
10	Duke Energy	$17.61	2.54%	$0.98	5.71%	8.25%
11	Edison Internat.	$34.83	4.55%	$1.26	3.78%	8.33%
12	Empire District	$20.23	2.97%	$1.28	6.52%	9.49%
13	Entergy Corp.	$77.39	4.62%	$3.32	4.49%	9.11%
14	Hawaiian Electric	$54.24	6.86%	$2.00	3.94%	10.80%
15	IDACORP	$23.16	4.61%	$1.24	5.60%	10.21%
16	Nextera Energy	$35.88	5.14%	$1.20	3.52%	8.66%
17	Northeast Utilities	$29.79	5.36%	$1.03	3.63%	8.99%
18	NSTAR	$39.20	4.04%	$1.60	4.25%	8.29%
19	PG&E Corp.	$46.31	7.41%	$1.82	4.22%	11.63%
20	Pinnacle West	$40.84	4.11%	$2.10	5.35%	9.46%
21	Portland General	$20.31	3.38%	$1.04	5.29%	8.67%
22	Progress Energy	$43.67	3.00%	$2.48	5.85%	8.85%
23	SCANA Corp.	$40.13	5.98%	$1.90	5.02%	11.00%
24	Sempra Energy	$52.87	4.93%	$1.56	3.10%	8.03%
25	Southern Co.	$37.14	5.70%	$1.82	5.18%	10.88%
26	Teco Energy, Inc.	$17.21	5.69%	$0.82	5.04%	10.73%
27	UIL Holdings Co.	$27.64	2.89%	$1.73	6.43%	9.32%
28	Vectren Corp.	$25.68	3.84%	$1.36	5.50%	9.34%
29	Westar Energy	$24.34	3.51%	$1.24	5.27%	8.78%
30	Wisconsin Energy	$57.51	7.08%	$1.60	2.98%	10.06%
31	Xcel Energy Inc.	$22.97	5.05%	$1.01	4.62%	9.67%
	Average	$35.82	4.57%	$1.58	4.77%	**9.34%**
	Median					**9.22%**

Notes:

Columns 1-5: Schedule MPG-8.

DPL result at 19.96% is considered an outlier and removed from the group average and median calculation.

KCP&L Greater Missouri Operations Company

Gorman Multi-Stage Growth DCF Analysis (with Long-Term GDP Growth)

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				First Stage	Second Stage Growth					Third Stage	Updated
No.	Company	Price P_0	Dividend D_0	Growth (EPS)	Year 6	Year 7	Year 8	Year 9	Year 10	Growth (GDP)	Cost of Equity
1	ALLETE	$36.29	$1.76	5.28%	5.40%	5.52%	5.64%	5.76%	5.88%	6.00%	10.92%
2	Alliant Energy Co.	$35.97	$1.58	6.08%	6.07%	6.05%	6.04%	6.03%	6.01%	6.00%	10.68%
3	American Elec. Pwr.	$36.20	$1.68	4.17%	4.48%	4.78%	5.09%	5.39%	5.70%	6.00%	10.39%
4	Avista Corp.	$21.15	$1.00	4.39%	4.66%	4.93%	5.20%	5.46%	5.73%	6.00%	10.54%
5	Black Hills Corp	$31.40	$1.44	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	10.86%
6	Cleco Corporation	$29.54	$1.00	4.33%	4.61%	4.89%	5.17%	5.44%	5.72%	6.00%	9.22%
7	Con. Edison	$48.28	$2.38	4.33%	4.61%	4.89%	5.17%	5.44%	5.72%	6.00%	10.72%
8	DPL Inc.	$26.06	$1.21	8.85%	8.38%	7.90%	7.43%	6.95%	6.48%	6.00%	11.83%
9	DTE Energy Co.	$46.69	$2.24	4.86%	5.05%	5.24%	5.43%	5.62%	5.81%	6.00%	10.74%
10	Duke Energy	$17.61	$0.98	3.63%	4.03%	4.42%	4.82%	5.21%	5.61%	6.00%	11.11%
11	Edison Internat.	$34.83	$1.26	4.28%	4.57%	4.85%	5.14%	5.43%	5.71%	6.00%	9.43%
12	Empire District	$20.23	$1.28	**6.75%**	6.63%	6.50%	6.38%	6.25%	6.13%	6.00%	13.00%
13	Entergy Corp.	$77.39	$3.32	3.82%	4.18%	4.55%	4.91%	5.27%	5.64%	6.00%	9.96%
14	Hawaiian Electric	$54.24	$2.00	6.31%	6.26%	6.21%	6.16%	6.10%	6.05%	6.00%	9.98%
15	IDACORP	$23.16	$1.24	7.27%	7.06%	6.85%	6.64%	6.42%	6.21%	6.00%	12.12%
16	Nextera Energy	$35.88	$1.20	4.78%	4.98%	5.19%	5.39%	5.59%	5.80%	6.00%	9.27%
17	Northeast Utilities	$29.79	$1.03	7.44%	7.20%	6.96%	6.72%	6.48%	6.24%	6.00%	9.99%
18	NSTAR	$39.20	$1.60	5.54%	5.62%	5.69%	5.77%	5.85%	5.92%	6.00%	10.20%
19	PG&E Corp.	$46.31	$1.82	6.51%	6.43%	6.34%	6.26%	6.17%	6.09%	6.00%	10.30%
20	Pinnacle West	$40.84	$2.10	6.97%	6.81%	6.65%	6.49%	6.32%	6.16%	6.00%	11.77%
21	Portland General	$20.31	$1.04	5.63%	5.69%	5.75%	5.82%	5.88%	5.94%	6.00%	11.31%
22	Progress Energy	$43.67	$2.48	3.87%	4.23%	4.58%	4.94%	5.29%	5.65%	6.00%	11.29%
23	SCANA Corp.	$40.13	$1.90	4.67%	4.89%	5.11%	5.34%	5.56%	5.78%	6.00%	10.62%
24	Sempra Energy	$52.87	$1.56	5.93%	5.94%	5.95%	5.97%	5.98%	5.99%	6.00%	9.10%
25	Southern Co.	$37.14	$1.82	5.25%	5.38%	5.50%	5.63%	5.75%	5.88%	6.00%	10.96%
26	Teco Energy, Inc.	$17.21	$0.82	5.91%	5.93%	5.94%	5.96%	5.97%	5.99%	6.00%	11.02%
27	UIL Holdings Co.	$27.64	$1.73	3.78%	4.15%	4.52%	4.89%	5.26%	5.63%	6.00%	11.81%
28	Vectren Corp.	$25.68	$1.36	5.28%	5.40%	5.52%	5.64%	5.76%	5.88%	6.00%	11.38%
29	Westar Energy	$24.34	$1.24	8.31%	7.93%	7.54%	7.16%	6.77%	6.39%	6.00%	12.18%
30	Wisconsin Energy	$57.51	$1.60	9.17%	8.64%	8.11%	7.59%	7.06%	6.53%	6.00%	9.59%
31	Xcel Energy Inc.	$22.97	$1.01	6.35%	6.29%	6.23%	6.18%	6.12%	6.06%	6.00%	10.76%
	Average	$35.50	$1.57	5.67%	5.72%	5.78%	5.83%	5.89%	5.94%	6.00%	**10.74%**
	Median										**10.74%**

Notes:

Columns 1-3: Schedule MPG-9.

Columns 4-8: Linear interpolation between columns 3 and 9.

Column 9: See Schedule SCH2010-4.

Column 10: The internal rate of return implied by the price in column 1 and dividends for 200 periods. The initial dividend shown in column 2 is assumed to grow for the first five periods at the rate in column 3, then at the rate in columns 4-8 for years 6-10, than at the rate in column 9 for the remaining periods.

KCP&L Greater Missouri Operations Company
Update of Gorman Risk Premium Analysis - Treasury Bond (Projected)

	(1) TREASURY BOND YIELD	(2) AUTHORIZED ELECTRIC RETURNS	(3) INDICATED RISK PREMIUM
1986	7.78%	13.93%	6.15%
1987	8.59%	12.99%	4.40%
1988	8.96%	12.79%	3.83%
1989	8.45%	12.97%	4.52%
1990	8.61%	12.70%	4.09%
1991	8.14%	12.55%	4.41%
1992	7.67%	12.09%	4.42%
1993	6.59%	11.41%	4.82%
1994	7.37%	11.34%	3.97%
1995	6.88%	11.55%	4.67%
1996	6.71%	11.39%	4.68%
1997	6.61%	11.40%	4.79%
1998	5.58%	11.66%	6.08%
1999	5.87%	10.77%	4.90%
2000	5.94%	11.43%	5.49%
2001	5.49%	11.09%	5.60%
2002	5.43%	11.16%	5.73%
2003	4.96%	10.97%	6.01%
2004	5.05%	10.75%	5.70%
2005	4.65%	10.54%	5.89%
2006	4.91%	10.36%	5.45%
2007	4.84%	10.36%	5.52%
2008	4.28%	10.46%	6.18%
2009	4.08%	10.48%	6.40%
Sep 2010	4.28%	10.36%	6.08%
AVERAGE	6.31%	11.50%	5.19%

INDICATED COST OF EQUITY

PROJECTED TREASURY BOND YIELD*	4.50%
TREASURY BOND AVG ANNUAL YIELD DURING STUDY	6.31%
INTEREST RATE DIFFERENCE	-1.81%
INTEREST RATE CHANGE COEFFICIENT	-42.39%
ADUSTMENT TO BASIC RISK PREMIUM	0.77%
BASIC RISK PREMIUM	5.19%
INTEREST RATE ADJUSTMENT	0.77%
EQUITY RISK PREMIUM	5.96%
PROJECTED TREASURY BOND YIELD*	4.50%
INDICATED EQUITY RETURN	**10.46%**

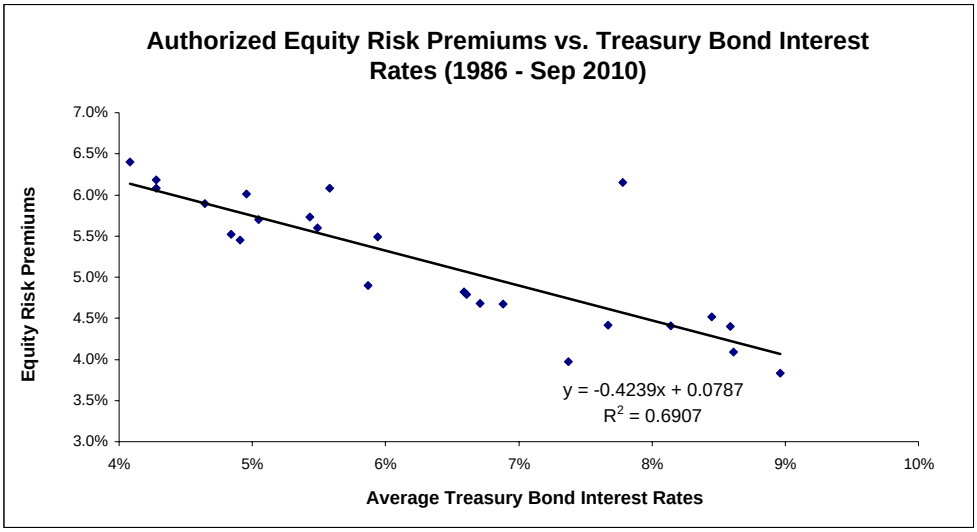
Notes:

Columns 1-3: Schedule MPG-11.

*See Gorman page 33, lines 18-19 for Projected Treasury Bond Yield .

See regression data on page 6 of this Schedule for derivation of "Interest Rate Change Coefficient."

KCP&L Greater Missouri Operations Company
Update of Gorman Risk Premium Analysis - Treasury Bond



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.831097186
R Square	0.690722533
Adjusted R Square	0.677275687
Standard Error	0.004467989
Observations	25

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.001025433	0.001025433	51.366879	2.68057E-07
Residual	23	0.000459147	1.99629E-05		
Total	24	0.00148458			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.078657109	0.003836624	20.50164634	2.816E-16	0.070720447	0.0865938	0.070720447	0.08659377
X Variable 1	-0.423896847	0.059145076	-7.16706907	2.681E-07	-0.546247758	-0.301546	-0.54624776	-0.3015459

KCP&L Greater Missouri Operations Company
Update of Gorman Risk Premium Analysis - Utility Bond

	(1) MOODY'S "A" RATED PUBLIC UTILITY BOND YIELD	(2) AUTHORIZED ELECTRIC RETURNS	(3) INDICATED RISK PREMIUM
1986	9.58%	13.93%	4.35%
1987	10.10%	12.99%	2.89%
1988	10.49%	12.79%	2.30%
1989	9.77%	12.97%	3.20%
1990	9.86%	12.70%	2.84%
1991	9.36%	12.55%	3.19%
1992	8.69%	12.09%	3.40%
1993	7.59%	11.41%	3.82%
1994	8.31%	11.34%	3.03%
1995	7.89%	11.55%	3.66%
1996	7.75%	11.39%	3.64%
1997	7.60%	11.40%	3.80%
1998	7.04%	11.66%	4.62%
1999	7.62%	10.77%	3.15%
2000	8.24%	11.43%	3.19%
2001	7.76%	11.09%	3.33%
2002	7.37%	11.16%	3.79%
2003	6.58%	10.97%	4.39%
2004	6.16%	10.75%	4.59%
2005	5.65%	10.54%	4.89%
2006	6.07%	10.36%	4.29%
2007	6.07%	10.36%	4.29%
2008	6.53%	10.46%	3.93%
2009	6.04%	10.48%	4.44%
Sep 2010	5.50%	10.36%	4.86%
AVERAGE	7.74%	11.50%	3.76%

INDICATED COST OF EQUITY

CURRENT "Baa" UTILITY BOND YIELD*	5.60%
MOODY'S AVG ANNUAL YIELD DURING STUDY	7.74%
INTEREST RATE DIFFERENCE	-2.14%
INTEREST RATE CHANGE COEFFICIENT	-38.83%
ADUSTMENT TO BASIC RISK PREMIUM	0.83%
BASIC RISK PREMIUM	3.76%
INTEREST RATE ADJUSTMENT	0.83%
EQUITY RISK PREMIUM	4.59%
CURRENT "Baa" UTILITY BOND YIELD*	5.60%
INDICATED EQUITY RETURN	**10.19%**

Notes:

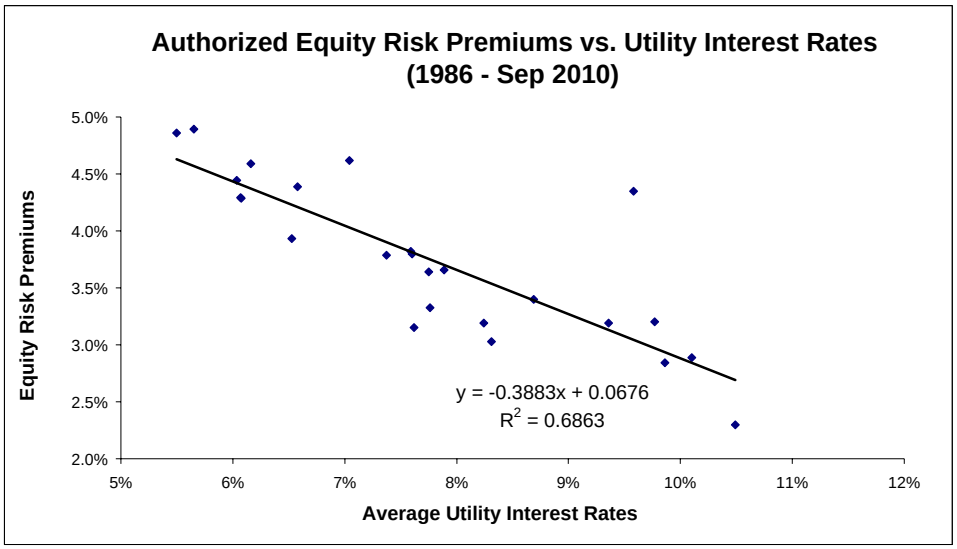
Columns 1-3: Schedule MPG-12.

*See Gorman page 34, lines 1-2 for Current "Baa" Utility Bond Yield.

See regression data on page 8 of this Schedule for derivation of "Interest Rate Change Coefficient."

KCP&L Greater Missouri Operations Company

Update of Gorman Risk Premium Analysis - Utility Bond



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.828457052
R Square	0.686341086
Adjusted R Square	0.672703742
Standard Error	0.003988851
Observations	25

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.0008008	0.0008008	50.328061	3.16023E-07
Residual	23	0.000366	1.591E-05		
Total	24	0.0011667			

	Coefficients	*tandard Erro*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.06762462	0.0043135	15.677279	9.037E-14	0.058701376	0.076547864	0.058701376	0.076547864
X Variable 1	-0.388300085	0.0547347	-7.094227	3.16E-07	-0.501527345	-0.27507282	-0.50152735	-0.275072825

KCP&L Greater Missouri Operations Company
Discounted Cash Flow Analysis
Summary Of DCF Model Results

	Company	Constant Growth DCF Model Analysts' Growth Rates	Constant Growth DCF Model Long-Term GDP Growth	Low Near-Term Growth Two-Stage Growth DCF Model
1	ALLETE	8.7%	10.8%	10.3%
2	Alliant Energy Co.	11.9%	10.6%	10.5%
3	American Elec. Pwr.	8.3%	10.7%	10.4%
4	Avista Corp.	10.9%	11.1%	11.2%
5	Black Hills Corp	10.2%	10.7%	10.3%
6	Cleco Corporation	10.2%	9.7%	10.1%
7	Con. Edison	8.9%	11.0%	10.3%
8	DPL Inc.	11.4%	10.9%	10.8%
9	DTE Energy Co.	10.4%	10.9%	10.9%
10	Duke Energy	9.1%	11.6%	11.1%
11	Edison Internat.	6.9%	9.9%	9.6%
12	Empire District	13.1%	12.4%	11.7%
13	Entergy Corp.	9.1%	10.6%	10.5%
14	Hawaiian Electric	15.0%	11.3%	10.7%
15	IDACORP	7.8%	9.3%	9.2%
16	Nextera Energy	10.0%	9.9%	9.7%
17	Northeast Utilities	10.8%	9.7%	9.7%
18	NSTAR	10.5%	10.4%	10.4%
19	PG&E Corp.	10.7%	10.2%	10.0%
20	Pinnacle West	11.3%	11.2%	10.8%
21	Portland General	11.4%	11.3%	11.0%
22	Progress Energy	9.6%	11.9%	11.1%
23	SCANA Corp.	9.0%	10.8%	10.2%
24	Sempra Energy	9.3%	9.2%	9.2%
25	Southern Co.	10.1%	11.1%	10.8%
26	Teco Energy, Inc.	11.4%	10.9%	10.6%
27	UIL Holdings Co.	9.8%	12.3%	11.4%
28	Vectren Corp.	10.2%	11.4%	10.9%
29	Westar Energy	13.8%	11.3%	10.9%
30	Wisconsin Energy	12.6%	9.1%	9.5%
31	Xcel Energy Inc.	10.5%	10.5%	10.2%
	GROUP AVERAGE	10.4%	10.7%	10.5%
	GROUP MEDIAN	10.2%	10.8%	10.5%

Sources: Value Line Investment Survey, Electric Utility (East), Aug 27, 2010; (Central), Sep 24, 2010; (West), Nov 5, 2010.

NOTE: SEE PAGE 5 OF THIS SCHEDULE FOR FURTHER EXPLANATION OF EACH COLUMN.

KCP&L Greater Missouri Operations Company
Constant Growth DCF Model
Analysts' Growth Rates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				Analysts' Estimated Growth				
Company	Recent Price(P0)	Next Year's Div(D1)	Dividend Yield	Value Line	Zacks	Thomson	Average Growth *(Cols 4-6)*	**ROE** K=Div Yld+G *(Cols 3+7)*
1 ALLETE	36.41	1.76	4.83%	1.00%	4.00%	6.50%	3.83%	8.7%
2 Alliant Energy Co.	35.78	1.65	4.61%	7.00%	5.00%	9.90%	7.30%	11.9%
3 American Elec. Pwr.	36.12	1.70	4.71%	3.00%	4.00%	3.90%	3.63%	8.3%
4 Avista Corp.	21.06	1.08	5.13%	8.50%	4.70%	4.00%	5.73%	10.9%
5 Black Hills Corp	31.48	1.48	4.70%	4.50%	6.00%	6.00%	5.50%	10.2%
6 Cleco Corporation	29.39	1.08	3.67%	9.50%	7.00%	3.00%	6.50%	10.2%
7 Con. Edison	48.15	2.40	4.98%	2.50%	4.60%	4.60%	3.90%	8.9%
8 DPL Inc.	26.09	1.28	4.91%	7.00%	NA	5.90%	6.45%	11.4%
9 DTE Energy Co.	46.74	2.30	4.92%	6.50%	5.00%	5.00%	5.50%	10.4%
10 Duke Energy	17.61	0.99	5.62%	5.00%	1.50%	3.80%	3.43%	9.1%
11 Edison Internat.	34.54	1.34	3.88%	NA	3.00%	3.02%	3.01%	6.9%
12 Empire District	20.09	1.28	6.37%	7.50%	NA	6.00%	6.75%	13.1%
13 Entergy Corp.	77.33	3.53	4.57%	4.50%	3.00%	6.03%	4.51%	9.1%
14 Hawaiian Electric	23.33	1.24	5.32%	11.50%	9.50%	8.03%	9.68%	15.0%
15 IDACORP	35.89	1.20	3.34%	5.50%	4.00%	4.00%	4.50%	7.8%
16 Nextera Energy	54.20	2.10	3.87%	5.00%	6.40%	6.83%	6.08%	10.0%
17 Northeast Utilities	29.62	1.10	3.71%	6.00%	7.90%	7.27%	7.06%	10.8%
18 NSTAR	39.12	1.73	4.42%	7.00%	6.00%	5.37%	6.12%	10.5%
19 PG&E Corp.	46.21	1.92	4.16%	6.00%	6.80%	6.70%	6.50%	10.7%
20 Pinnacle West	40.69	2.10	5.16%	6.00%	6.80%	5.50%	6.10%	11.3%
21 Portland General	20.20	1.07	5.30%	3.00%	9.60%	5.75%	6.12%	11.4%
22 Progress Energy	42.97	2.52	5.86%	3.50%	4.00%	3.63%	3.71%	9.6%
23 SCANA Corp.	40.06	1.92	4.79%	3.50%	4.30%	4.88%	4.23%	9.0%
24 Sempra Energy	52.47	1.68	3.20%	NA	7.00%	5.25%	6.13%	9.3%
25 Southern Co.	37.03	1.88	5.08%	4.50%	5.10%	5.32%	4.97%	10.1%
26 Teco Energy, Inc.	17.20	0.84	4.88%	8.00%	5.30%	6.26%	6.52%	11.4%
27 UIL Holdings Co.	27.49	1.73	6.29%	3.00%	3.60%	3.88%	3.49%	9.8%
28 Vectren Corp.	25.65	1.39	5.42%	4.50%	5.00%	4.85%	4.78%	10.2%
29 Westar Energy	24.35	1.28	5.26%	7.50%	8.00%	10.00%	8.50%	13.8%
30 Wisconsin Energy	57.21	1.80	3.15%	9.50%	8.70%	10.07%	9.42%	12.6%
31 Xcel Energy Inc.	22.80	1.03	4.52%	5.50%	5.70%	6.73%	5.98%	10.5%
GROUP AVERAGE	35.40	1.63	4.73%	5.72%	5.57%	5.74%	5.68%	10.4%
GROUP MEDIAN			4.83%					10.2%

Sources: Value Line Investment Survey, Electric Utility (East), Aug 27, 2010; (Central), Sep 24, 2010; (West), Nov 5, 2010.

NOTE: SEE PAGE 5 OF THIS SCHEDULE FOR FURTHER EXPLANATION OF EACH COLUMN.

KCP&L Greater Missouri Operations Company
Constant Growth DCF Model
Long-Term GDP Growth

	(9)	(10)	(11)	(12)	(13)
Company	Recent Price(P0)	Next Year's Div(D1)	Dividend Yield	GDP Growth	**ROE** K=Div Yld+G *(Cols 11+12)*
1 ALLETE	36.41	1.76	4.83%	6.00%	10.8%
2 Alliant Energy Co.	35.78	1.65	4.61%	6.00%	10.6%
3 American Elec. Pwr.	36.12	1.70	4.71%	6.00%	10.7%
4 Avista Corp.	21.06	1.08	5.13%	6.00%	11.1%
5 Black Hills Corp	31.48	1.48	4.70%	6.00%	10.7%
6 Cleco Corporation	29.39	1.08	3.67%	6.00%	9.7%
7 Con. Edison	48.15	2.40	4.98%	6.00%	11.0%
8 DPL Inc.	26.09	1.28	4.91%	6.00%	10.9%
9 DTE Energy Co.	46.74	2.30	4.92%	6.00%	10.9%
10 Duke Energy	17.61	0.99	5.62%	6.00%	11.6%
11 Edison Internat.	34.54	1.34	3.88%	6.00%	9.9%
12 Empire District	20.09	1.28	6.37%	6.00%	12.4%
13 Entergy Corp.	77.33	3.53	4.57%	6.00%	10.6%
14 Hawaiian Electric	23.33	1.24	5.32%	6.00%	11.3%
15 IDACORP	35.89	1.20	3.34%	6.00%	9.3%
16 Nextera Energy	54.20	2.10	3.87%	6.00%	9.9%
17 Northeast Utilities	29.62	1.10	3.71%	6.00%	9.7%
18 NSTAR	39.12	1.73	4.42%	6.00%	10.4%
19 PG&E Corp.	46.21	1.92	4.16%	6.00%	10.2%
20 Pinnacle West	40.69	2.10	5.16%	6.00%	11.2%
21 Portland General	20.20	1.07	5.30%	6.00%	11.3%
22 Progress Energy	42.97	2.52	5.86%	6.00%	11.9%
23 SCANA Corp.	40.06	1.92	4.79%	6.00%	10.8%
24 Sempra Energy	52.47	1.68	3.20%	6.00%	9.2%
25 Southern Co.	37.03	1.88	5.08%	6.00%	11.1%
26 Teco Energy, Inc.	17.20	0.84	4.88%	6.00%	10.9%
27 UIL Holdings Co.	27.49	1.73	6.29%	6.00%	12.3%
28 Vectren Corp.	25.65	1.39	5.42%	6.00%	11.4%
29 Westar Energy	24.35	1.28	5.26%	6.00%	11.3%
30 Wisconsin Energy	57.21	1.80	3.15%	6.00%	9.1%
31 Xcel Energy Inc.	22.80	1.03	4.52%	6.00%	10.5%
GROUP AVERAGE	35.40	1.63	4.73%	6.00%	10.7%
GROUP MEDIAN			4.83%		10.8%

Sources: Value Line Investment Survey, Electric Utility (East), Aug 27, 2010; (Central), Sep 24, 2010; (West), Nov 5, 2010.

NOTE: SEE PAGE 5 OF THIS SCHEDULE FOR FURTHER EXPLANATION OF EACH COLUMN.

KCP&L Greater Missouri Operations Company
Low Near-Term Growth
Two-Stage Growth DCF Model

	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
				CASH FLOWS							ROE=Internal
	2011	2014	Annual Change	Recent	Year 1	Year 2	Year 3	Year 4	Year 5	Year 5-150	Rate of Return
Company	Div	Div	to 2014	Price	Div	Div	Div	Div	Div	Div Growth	*(Yrs 0-150)*
1 ALLETE	1.76	1.85	0.03	-36.41	1.76	1.79	1.82	1.85	1.96	6.00%	10.3%
2 Alliant Energy Co.	1.65	1.92	0.09	-35.78	1.65	1.74	1.83	1.92	2.04	6.00%	10.5%
3 American Elec. Pwr.	1.70	1.90	0.07	-36.12	1.70	1.77	1.83	1.90	2.01	6.00%	10.4%
4 Avista Corp.	1.08	1.30	0.07	-21.06	1.08	1.15	1.23	1.30	1.38	6.00%	11.2%
5 Black Hills Corp	1.48	1.60	0.04	-31.48	1.48	1.52	1.56	1.60	1.70	6.00%	10.3%
6 Cleco Corporation	1.08	1.45	0.12	-29.39	1.08	1.20	1.33	1.45	1.54	6.00%	10.1%
7 Con. Edison	2.40	2.46	0.02	-48.15	2.40	2.42	2.44	2.46	2.61	6.00%	10.3%
8 DPL Inc.	1.28	1.50	0.07	-26.09	1.28	1.35	1.43	1.50	1.59	6.00%	10.8%
9 DTE Energy Co.	2.30	2.70	0.13	-46.74	2.30	2.43	2.57	2.70	2.86	6.00%	10.9%
10 Duke Energy	0.99	1.05	0.02	-17.61	0.99	1.01	1.03	1.05	1.11	6.00%	11.1%
11 Edison Internat.	1.34	1.50	0.05	-34.54	1.34	1.39	1.45	1.50	1.59	6.00%	9.6%
12 Empire District	1.28	1.35	0.02	-20.09	1.28	1.30	1.33	1.35	1.43	6.00%	11.7%
13 Entergy Corp.	3.53	4.15	0.21	-77.33	3.53	3.74	3.94	4.15	4.40	6.00%	10.5%
14 Hawaiian Electric	1.24	1.30	0.02	-23.33	1.24	1.26	1.28	1.30	1.38	6.00%	10.7%
15 IDACORP	1.20	1.40	0.07	-35.89	1.20	1.27	1.33	1.40	1.48	6.00%	9.2%
16 Nextera Energy	2.10	2.40	0.10	-54.20	2.10	2.20	2.30	2.40	2.54	6.00%	9.7%
17 Northeast Utilities	1.10	1.30	0.07	-29.62	1.10	1.17	1.23	1.30	1.38	6.00%	9.7%
18 NSTAR	1.73	2.05	0.11	-39.12	1.73	1.84	1.94	2.05	2.17	6.00%	10.4%
19 PG&E Corp.	1.92	2.20	0.09	-46.21	1.92	2.01	2.11	2.20	2.33	6.00%	10.0%
20 Pinnacle West	2.10	2.30	0.07	-40.69	2.10	2.17	2.23	2.30	2.44	6.00%	10.8%
21 Portland General	1.07	1.20	0.04	-20.20	1.07	1.11	1.16	1.20	1.27	6.00%	11.0%
22 Progress Energy	2.52	2.58	0.02	-42.97	2.52	2.54	2.56	2.58	2.73	6.00%	11.1%
23 SCANA Corp.	1.92	2.00	0.03	-40.06	1.92	1.95	1.97	2.00	2.12	6.00%	10.2%
24 Sempra Energy	1.68	2.05	0.12	-52.47	1.68	1.80	1.93	2.05	2.17	6.00%	9.2%
25 Southern Co.	1.88	2.10	0.07	-37.03	1.88	1.95	2.03	2.10	2.23	6.00%	10.8%
26 Teco Energy, Inc.	0.84	0.95	0.04	-17.20	0.84	0.88	0.91	0.95	1.01	6.00%	10.6%
27 UIL Holdings Co.	1.73	1.73	0.00	-27.49	1.73	1.73	1.73	1.73	1.83	6.00%	11.4%
28 Vectren Corp.	1.39	1.50	0.04	-25.65	1.39	1.43	1.46	1.50	1.59	6.00%	10.9%
29 Westar Energy	1.28	1.40	0.04	-24.35	1.28	1.32	1.36	1.40	1.48	6.00%	10.9%
30 Wisconsin Energy	1.80	2.40	0.20	-57.21	1.80	2.00	2.20	2.40	2.54	6.00%	9.5%
31 Xcel Energy Inc.	1.03	1.15	0.04	-22.80	1.03	1.07	1.11	1.15	1.22	6.00%	10.2%
GROUP AVERAGE											10.5%
GROUP MEDIAN											10.5%

Sources: Value Line Investment Survey, Electric Utility (East), Aug 27, 2010; (Central), Sep 24, 2010; (West), Nov 5, 2010.

NOTE: SEE PAGE 5 OF THIS SCHEDULE FOR FURTHER EXPLANATION OF EACH COLUMN.

KCP&L Greater Missouri Operations Company
Discounted Cash Flow Analysis
Column Descriptions

Column 1: Three-month Average Price per Share (Aug 2010-Oct 2010)

Column 2: Estimated 2011 Div per Share from Value Line

Column 3: Column 2 Divided by Column 1

Column 4: "Est'd '07-'09 to '13-'15" Earnings Growth Reported by Value Line

Column 5: "Next 5 Years" Company Growth Estimate as Reported by Zacks.com

Column 6: "Next 5 Years (per annum) Growth Estimate Reported by Thomson Financial Network (at Yahoo Finance)

Column 7: Average of Columns 4-6

Column 8: Column 3 Plus Column 7

Column 9: See Column 1

Column 10: See Column 2

Column 11: Column 10 Divided by Column 9

Column 12: Average of GDP Growth During the Last 10 year, 20 year, 30 year, 40 year, 50 year, and 60 year growth periods. See Schedule SCH2010-4

Column 13: Column 11 Plus Column 12

Column 14: Estimated 2011 Div per Share from Value Line

Column 15: Estimated 2014 Div per Share from Value Line

Column 16: (Column 15 Minus Column 14) Divided by Three

Column 17: See Column 1

Column 18: See Column 14

Column 19: Column 18 Plus Column 16

Column 20: Column 19 Plus Column 19

Column 21: Column 20 Plus Column 16

Column 22: Column 21 Increased by the Growth Rate Shown in Column 23

Column 23: See Column 12

Column 24: The Internal Rate of Return of the Cash Flows in Columns 17-22 along with the Dividends for the Years 6-150 Implied by the Growth Rates shown in Column 23

KCP&L Greater Missouri Operations Company

Risk Premium Analysis

(Based on Projected Interest Rates)

	MOODY'S AVERAGE PUBLIC UTILITY BOND YIELD (1)	AUTHORIZED ELECTRIC RETURNS (2)	INDICATED RISK PREMIUM
1980	13.15%	14.23%	1.08%
1981	15.62%	15.22%	-0.40%
1982	15.33%	15.78%	0.45%
1983	13.31%	15.36%	2.05%
1984	14.03%	15.32%	1.29%
1985	12.29%	15.20%	2.91%
1986	9.46%	13.93%	4.47%
1987	9.98%	12.99%	3.01%
1988	10.45%	12.79%	2.34%
1989	9.66%	12.97%	3.31%
1990	9.76%	12.70%	2.94%
1991	9.21%	12.55%	3.34%
1992	8.57%	12.09%	3.52%
1993	7.56%	11.41%	3.85%
1994	8.30%	11.34%	3.04%
1995	7.91%	11.55%	3.64%
1996	7.74%	11.39%	3.65%
1997	7.63%	11.40%	3.77%
1998	7.00%	11.66%	4.66%
1999	7.55%	10.77%	3.22%
2000	8.14%	11.43%	3.29%
2001	7.72%	11.09%	3.37%
2002	7.53%	11.16%	3.63%
2003	6.61%	10.97%	4.36%
2004	6.20%	10.75%	4.55%
2005	5.67%	10.54%	4.87%
2006	6.08%	10.36%	4.28%
2007	6.11%	10.36%	4.25%
2008	6.65%	10.46%	3.81%
2009	6.28%	10.48%	4.20%
3Q 2010	5.59%	10.36%	4.77%
AVERAGE	8.94%	12.21%	3.27%

INDICATED COST OF EQUITY

PROJECTED TRIPLE-B UTILITY BOND YIELD*	5.25%
MOODY'S AVG ANNUAL YIELD DURING STUDY	8.94%
INTEREST RATE DIFFERENCE	-3.69%
INTEREST RATE CHANGE COEFFICIENT	-41.30%
ADUSTMENT TO AVG RISK PREMIUM	1.52%
BASIC RISK PREMIUM	3.27%
INTEREST RATE ADJUSTMENT	1.52%
EQUITY RISK PREMIUM	4.80%
PROJECTED TRIPLE-B UTILITY BOND YIELD*	5.25%
INDICATED EQUITY RETURN	**10.05%**

(1) Moody's Investors Service

(2) Regulatory Focus, Regulatory Research Associates, Inc.

*Projected triple-B bond yield is 175 basis points over projected long-term Treasury bond rate of 3.5% from Schedule SCH2010-7, p. 2. The triple-B spread is for 3 months ended October 2010 from Schedule SCH2010-7, p. 1.

KCP&L Greater Missouri Operations Company

Risk Premium Analysis

(Based on Current Interest Rates)

	MOODY'S AVERAGE PUBLIC UTILITY BOND YIELD (1)	AUTHORIZED ELECTRIC RETURNS (2)	INDICATED RISK PREMIUM
1980	13.15%	14.23%	1.08%
1981	15.62%	15.22%	-0.40%
1982	15.33%	15.78%	0.45%
1983	13.31%	15.36%	2.05%
1984	14.03%	15.32%	1.29%
1985	12.29%	15.20%	2.91%
1986	9.46%	13.93%	4.47%
1987	9.98%	12.99%	3.01%
1988	10.45%	12.79%	2.34%
1989	9.66%	12.97%	3.31%
1990	9.76%	12.70%	2.94%
1991	9.21%	12.55%	3.34%
1992	8.57%	12.09%	3.52%
1993	7.56%	11.41%	3.85%
1994	8.30%	11.34%	3.04%
1995	7.91%	11.55%	3.64%
1996	7.74%	11.39%	3.65%
1997	7.63%	11.40%	3.77%
1998	7.00%	11.66%	4.66%
1999	7.55%	10.77%	3.22%
2000	8.14%	11.43%	3.29%
2001	7.72%	11.09%	3.37%
2002	7.53%	11.16%	3.63%
2003	6.61%	10.97%	4.36%
2004	6.20%	10.75%	4.55%
2005	5.67%	10.54%	4.87%
2006	6.08%	10.36%	4.28%
2007	6.11%	10.36%	4.25%
2008	6.65%	10.46%	3.81%
2009	6.28%	10.48%	4.20%
3Q 2010	5.59%	10.36%	4.77%
AVERAGE	8.94%	12.21%	3.27%

INDICATED COST OF EQUITY

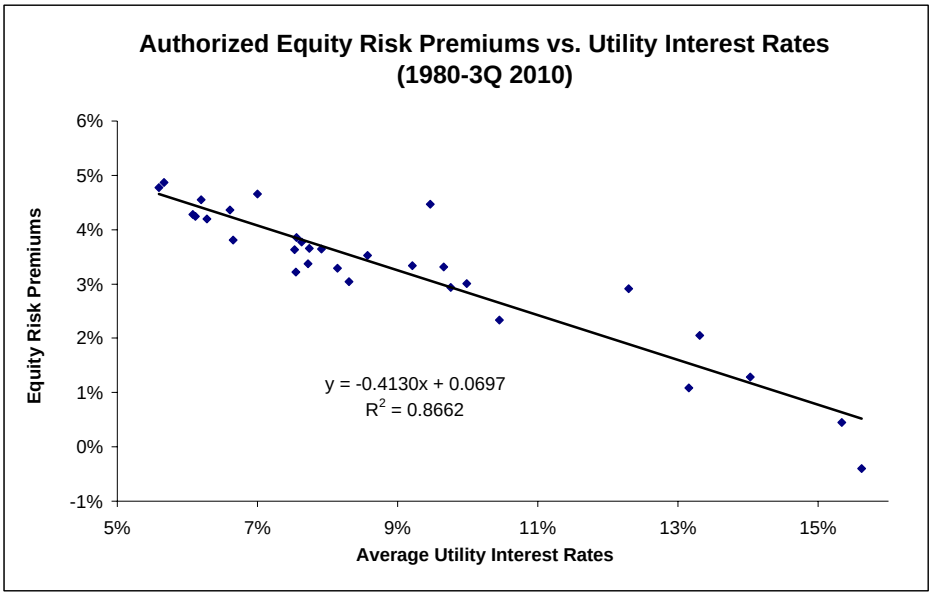
CURRENT TRIPLE-B UTILITY BOND YIELD*	5.57%
MOODY'S AVG ANNUAL YIELD DURING STUDY	8.94%
INTEREST RATE DIFFERENCE	-3.37%
INTEREST RATE CHANGE COEFFICIENT	-41.30%
ADUSTMENT TO AVG RISK PREMIUM	1.39%
BASIC RISK PREMIUM	3.27%
INTEREST RATE ADJUSTMENT	1.39%
EQUITY RISK PREMIUM	4.67%
CURRENT TRIPLE-B UTILITY BOND YIELD*	5.57%
INDICATED EQUITY RETURN	**10.24%**

(1) Moody's Investors Service

(2) Regulatory Focus, Regulatory Research Associates, Inc.

*Current triple-B utility bond yield is three month average of Moody's Triple-B Public Utility Bond Yield Average through October 2010 from Schedule SCH2010-7, p. 1.

KCP&L Greater Missouri Operations Company
Risk Premium Analysis
Regression Analysis & Interest Rate Change Coefficient



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.930715918
R Square	0.866232121
Adjusted R Square	0.861619435
Standard Error	0.004709045
Observations	31

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.004164339	0.004164339	187.7934496	3.37399E-14
Residual	29	0.000643078	2.21751E-05		
Total	30	0.004807417			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.069664074	0.002823484	24.67308594	5.1721E-21	0.0638894	0.075438748	0.0638894	0.075438748
X Variable 1	-0.413001655	0.030137802	-13.70377501	3.37399E-14	-0.47464038	-0.35136293	-0.47464038	-0.35136293