Exhibit No.:

Witness: Michael Gorman
Type of Exhibit: Rebuttal Testimony
Issue: Revenue Requirement
Sponsoring Party: The Office of Public Counsel

Case No.: ER-2009-0089

Before the Public Service Commission of the State of Missouri

In the Matter of the Application of Kansas City Power & Light Company for Approval to Make Certain Changes in its Charges for Electric Service to Continue the Implementation of Its Regulatory Plan.

Case No. ER-2009-0089

Rebuttal Testimony and Schedules of

Michael Gorman

On behalf of

The Office of Public Counsel

Project 9073 March 11, 2009



BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

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In the Matter of the Application of)
Kansas City Power & Light)
Company for Approval to Make)
Certain Changes in its Charges) Case No. ER-2009-0089
for Electric Service to Continue)
the Implementation of Its)
Regulatory Plan.)

AFFIDAVIT OF MICHAEL GORMAN

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

Michael Gorman, of lawful age and being first duly sworn, deposes and states:

- 1. My name is Michael Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Office of Public Counsel in this proceeding on its behalf.
- 2. Attached hereto and made a part hereof for all purposes are my rebuttal testimony and schedules.

3. I hereby swear and affirm that my statements contained in the attached testimony and schedules are true and correct to the best of my knowledge and belief.

Michael Gorman Consultant

Subscribed and sworn to me this 10th day of March, 2009.

Marja E. Decker Notary Public

My commission expires May 5, 2009.



Before the Public Service Commission of the State of Missouri

In the Matter of the Application of
Kansas City Power & Light
Company for Approval to Make
Certain Changes in its Charges
for Electric Service to Continue
the Implementation of Its
Regulatory Plan.

)

Case No. ER-2009-0089
)

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Rebuttal 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 16690 Swingley Ridge
- Road, Suite 140, Chesterfield, Missouri 63017.
- 4 Q ARE YOU THE SAME MICHAEL GORMAN WHO FILED TESTIMONY
- 5 **PREVIOUSLY IN THIS PROCEEDING?**
- 6 A Yes, I am.
- 7 Q WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS
- 8 **PROCEEDING?**
- 9 A I will respond to Kansas City Power & Light Company's ("KCPL" or "Company") cost
- 10 of capital witness Dr. Samuel C. Hadaway and his proposed return on equity. I will
- 11 also respond to KCPL witness Michael W. Cline concerning the Standard &
- Poor's (S&P) metrics targets in the Regulatory Plan.

1 Response to KCPL Witness Dr. Samuel Hadaway

- 2 Q WHAT RETURN ON COMMON EQUITY IS KCPL PROPOSING FOR THIS
- 3 **PROCEEDING?**
- 4 A KCPL is proposing to set rates based on a return on equity of 10.75%. KCPL's return
- 5 on equity proposal is based on the analysis and judgment of Dr. Samuel Hadaway.
- 6 Dr. Hadaway's results are summarized at page 35 of his direct testimony.
- 7 Q DO DR. HADAWAY'S METHODOLOGIES SUPPORT HIS 10.75% RETURN ON
- 8 **EQUITY FOR HIS PROXY GROUP?**
- 9 A No. As discussed in detail below, reflecting current market data and properly
- applying his models, Dr. Hadaway's own analyses would support a return on equity in
- the range of 9.4% to 10.8%. These adjustments to Dr. Hadaway's return on equity
- estimates support my recommended return on equity of 10.30%.
- 13 Q PLEASE DESCRIBE THE METHODOLOGY SUPPORTING DR. HADAWAY'S
- 14 RETURN ON COMMON EQUITY RECOMMENDATION.
- 15 A Dr. Hadaway develops his return on common equity recommendation using three
- 16 versions of the DCF model, and a utility risk premium analysis. Further, he tests his
- 17 results using risk premium analyses conducted by Ibbotson Associates as published
- in Morningstar. The results of Dr. Hadaway's return on equity analysis are shown at
- page 35 of his direct testimony. I have summarized Dr. Hadaway's results below in
- Table 1 under column 1. Under column 2, I show the results of Dr. Hadaway's
- analyses adjusted for updated data and more reasonable application of the models.

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As shown below in Table 1, using consensus economists' projection of GDP growth rather than Dr. Hadaway's inflated GDP growth estimates, Dr. Hadaway's own DCF analyses would support a return on equity for KCPL in the range of 9.4% to 11.2%, with a midpoint of 10.3%. Proper adjustments to Dr. Hadaway's Ibbotson risk premium estimate to reflect KCPL's below market risk would reduce this estimate from 11.49% to 10.41%.

TABLE 1 Summary of Dr. Hadaway's ROE Estimate					
Description	Hadaway <u>Results</u> (1)	Adjusted Hadaway <u>Results</u> (2)			
Electric DCF Analysis Constant Growth (Analysts' Growth) Constant Growth (GDP Growth) Multi-Stage Growth Model Reasonable DCF Range	11.1% - 11.2% 11.0% 10.8% 10.8% - 11.2%	9.4% 9.4%			
Risk Premium Analysis Utility Debt + Electric Risk Premium Ibbotson Risk Premium Analysis Average Risk Premium	11.10% 11.49%	11.10% <u>10.41%</u> 10.76%			
Source: Hadaway Direct at 35.					

7 Q PLEASE DESCRIBE DR. HADAWAY'S CONSTANT GROWTH DCF ANALYSES.

Dr. Hadaway developed two constant growth DCF analyses. The first one is based on a recent stock price and an average of three growth rates: (1) *Value Line*; (2) Zacks; and (3) Thomson. This version of the DCF model is shown on Dr. Hadaway's Schedule SCH-5, page 2 of 5.

The second constant growth DCF analysis is based on Dr. Hadaway's GDP growth rate projection and is shown on his Schedule SCH-5, page 3 of 5.

Q IN WHAT WAY DID DR. HADAWAY OVERSTATE HIS DCF ESTIMATES?

2 A In his constant growth DCF model based on the GDP growth and his multi-stage 3 growth model, Dr. Hadaway used a GDP growth rate of 6.5%. This GDP growth is 4 excessive and not reflective of current market expectations.

5 Q HOW DID DR. HADAWAY DEVELOP HIS GDP GROWTH RATE?

A He states that the GDP growth rate is based on the achieved GDP growth over the last 10, 20, 30, 40, 50, and 60-year periods. Dr. Hadaway's projected GDP growth rate is unreasonable. Historical GDP growth over the last 20 and 40-year periods was strongly influenced by the actual inflation rate experienced over that time period.

10 Q WHY IS DR. HADAWAY'S GDP GROWTH ESTIMATE EXCESSIVE IN 11 COMPARISON TO THAT OF PUBLISHED MARKET ANALYSTS?

The consensus economists' projected GDP growth rate is much lower than the GDP growth rate used by Dr. Hadaway in his DCF analysis. A comparison of Dr. Hadaway's GDP growth rate and consensus economists' projected GDP growth over the next five and ten years is shown below in Table 2. As shown in the table below, Dr. Hadaway's GDP rate of 6.5% reflects real GDP of 3.2% and an inflation GDP of 3.3%. However, consensus economists' projections of nominal GDP include real GDP and GDP inflation projections over the next five and ten years of 2.2%, and 2.1%, respectively.¹

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¹ Blue Chip Economic Indicators, October 10, 2008, at 15.

As is clearly evident in the table below, Dr. Hadaway's historical GDP growth reflects historical inflation, which is much higher than, and not representative of, consensus market expected forward-looking inflation.

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TABLE 2							
GDP Projections							
GDP Real Noming Description Inflation GDP GD							
Dr. Hadaway Consensus 5-Year Projection Consensus 10-Year Projection	3.3% 2.2% 2.1%	3.2% 2.8% 2.7%	6.5% 5.0% 4.8%				
Source: Blue Chip Economic Indicators, October 10, 2008, at 15.							

As such, Dr. Hadaway's 6.5% nominal GDP growth rate is not reflective of consensus market expectations, and should be rejected.

HOW DOES DR. HADAWAY'S GDP GROWTH RATE OF 6.5% COMPARE TO A LONG-TERM GDP GROWTH RATE PRODUCED USING MORNINGSTAR'S METHODOLOGY?

Morningstar's prescribed methodology for assessing the current market outlook for long-term GDP growth rate is tied to the historical real GDP growth rate of approximately 3.4%,² and a future inflation outlook as implied by Treasury Inflation-Protected Securities (TIPS). Specifically, the Treasury market inflation outlook can be approximated by reviewing the difference between the yield on 20-year Treasury bond securities, and 20-year TIPS, as discussed on pages 25 and 26 of my direct

² Morningstar, Inc., 2008 lbbotson® SBBI® Valuation Yearbook at 70.

testimony. As shown on the attached Rebuttal Schedule MPG-1, this methodology prescribes a long-term inflation outlook of 1.10%. The long-term sustainable GDP growth rate using Morningstar's methodology is then the sum of the historical real GDP growth rate of 3.40%, and the long-term inflation outlook of 1.10%, for a real nominal GDP growth rate of 4.5%.

Q DID YOU USE MORNINGSTAR'S METHODOLOGY?

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No. As I discussed in my direct testimony, the consensus GDP growth forecast represents the most likely views of market participants, because it is based on published economist projections, and is an explicit long-term consensus analysts' projection of GDP growth. Therefore, I propose the use of the long-term consensus economists' projected GDP growth rate.

HOW WOULD DR. HADAWAY'S DCF ANALYSES CHANGE IF CURRENT MARKET-BASED GDP GROWTH RATE PROJECTIONS ARE INCLUDED IN HIS ANALYSIS RATHER THAN HIS EXCESSIVE GDP GROWTH RATE?

As shown on Rebuttal Schedule MPG-2, I updated Dr. Hadaway's DCF analyses using a GDP growth rate of 4.9%. This GDP growth rate represents the average of the 5- and 10-year consensus economists' projected GDP growth rate of 5.0% and 4.8%, respectively, as published in the *Blue Chip Economic Indicators* on October 10, 2008.

As shown on page 1 of Rebuttal Schedule MPG-1, using this consensus economists' projected GDP growth rate reduces Dr. Hadaway's DCF results.

TABLE 3				
Adjusted Hadaway DCF				
Description	Hadaway DCF ¹	Adjusted DCF ²		
Constant Growth (Analysts' Growth) Constant Growth (GDP Growth) Multi-Stage Growth Model Range Midpoint	11.2% 11.0% <u>10.8%</u> 10.8% - 11.2% 11.0%	11.2% 9.4% <u>9.4%</u> 9.4% - 11.2% 10.3%		
Sources: 1 Hadaway Direct Testimony at 35. 2 Rebuttal Schedule MPG-2.				

1 Q DID YOU INCLUDE A QUARTERLY COMPOUNDING ADJUSTMENT TO THE DCF

NUMBERS SHOWN IN TABLE 3 ABOVE?

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No. For the reasons set out in my direct testimony, including a quarterly compounding adjustment to a DCF return will overstate the utility's cost of capital. As described in that testimony, the utility does not pay the reinvestment return on quarterly dividend payments, and therefore the reinvestment return or quarterly compounding of the dividend payment, is not a portion of the utility's cost of capital. Therefore, the quarterly dividend payment and the associated reinvestment return should not be included in the utility's authorized return on equity.

10 Q WITH THESE ADJUSTMENTS, WHAT RETURN ON EQUITY WOULD 11 DR. HADAWAY'S DCF MODELS SUGGEST IS A FAIR RETURN ON EQUITY FOR

12 KCPL IN THIS PROCEEDING?

A Reflecting a consensus economists' GDP growth forecast would reduce

Dr. Hadaway's average DCF result from 11.0% to 10.3%.

Q PLEASE DESCRIBE DR. HADAWAY'S UTILITY RISK PREMIUM ANALYSIS.

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Dr. Hadaway's utility bond yield versus authorized return on common equity risk premium is shown on his Schedule SCH-6, pages 1 and 2. As shown on this schedule, Dr. Hadaway compares the contemporary Moody's average public utility bond yield and the authorized regulatory commission return on common equity for electric utility companies over the period 1980 through 2007. Based on this analysis, Dr. Hadaway estimates an average indicated equity risk premium over contemporary utility bond yields of 3.17%.

Dr. Hadaway then adjusts this average equity risk premium using a regression analysis based on an expectation that there is an ongoing inverse relationship between interest rates and equity risk premiums. Based on this regression analysis, Dr. Hadaway increases his equity risk premium from the 3.17% reflected in his analysis, up to 4.11%. He then adds this inflated equity risk premium to a projected "BBB" bond yield of 6.99% to produce a return on equity of 11.10% for KCPL.

IS DR. HADAWAY'S UTILITY RISK PREMIUM ANALYSIS REASONABLE?

No. Dr. Hadaway adjusts his equity risk premium of 3.17% to reflect the inverse relationship between interest rates and utility risk premiums. This adjustment is inappropriate and not consistent with academic literature that finds this relationship should change with risk changes and not simply changes to interest rates.

1	Q	DOES DR. HADAWAY'S RISK PREMIUM ANALYSIS SUPPORT A RETURN ON
1	Q	
2		EQUITY OF 11.10%?
3	Α	No. His equity risk premium estimate of 4.11% is overstated. The common equity
4		risk premium is approximately 3.69% as shown on Schedule MPG-17 of my direct
5		testimony.
6	Q	WHY IS DR. HADAWAY'S USE OF A SIMPLE INVERSE RELATIONSHIP
7		BETWEEN INTEREST RATES AND EQUITY RISK PREMIUMS NOT
8		REASONABLE?
9	Α	Dr. Hadaway's belief that there is a simplistic inverse relationship between equity risk
10		premiums and interest rates is not supported by academic research. While academic
11		studies have shown that, in the past, there has been an inverse relationship with
12		these variables, researchers have found that the relationship changes over time and
13		is influenced by changes in perception of the risk of bond investments relative to
14		equity investments, and not simply changes to interest rates.3
15		In the 1980s, equity risk premiums were inversely related to interest rates but
16		that was likely attributable to the interest rate volatility that existed at that time. As
17		such, when interest rates were more volatile, the relative perception of bond

investment risk perception caused changes in equity risk premiums.

investment risk increased relative to the investment risk of equities. This changing

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³"The Market Risk Premium: Expectational Estimates Using Analysts' Forecasts," Robert S. Harris and Felicia C. Marston, *Journal of Applied Finance*, Volume 11, No. 1, 2001 and "The Risk Premium Approach to Measuring a Utility's Cost of Equity," Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *Financial Management*, Spring 1985.

1	In today's marketplace, interest rate variability is not as extreme as it was
2	during the 1980s. ⁴ Nevertheless, changes in the perceived risk of bond investments
3	relative to equity investments still drive changes in equity premiums. However, a
4	relative investment risk differential cannot be measured simply by observing nominal
5	interest rates. Changes in nominal interest rates are highly influenced by changes to
6	inflation outlooks, which also change equity return expectations. As such, the
7	relevant factor needed to explain changes in equity risk premiums is the relative
8	changes to the risk of equity versus debt securities investments, not simply changes
9	to interest rates.

Importantly, Dr. Hadaway's analysis simply ignores investment risk differentials. He bases his adjustment to the equity risk premium exclusively on changes in nominal interest rates. This is a flawed methodology and does not produce accurate or reliable risk premium estimates. His results should be rejected.

- 14 Q HAVE YOU ADJUSTED DR. HADAWAY'S RISK PREMIUM RETURN ON EQUITY,
 15 CORRECTING FOR HIS INAPPROPRIATE USE OF THE INVERSE
 16 RELATIONSHIP YOU DISCUSSED ABOVE?
 - A No, I have not. Even though I disagree with Dr. Hadaway's methodology of estimating his risk premium, the return on equity produced by his model is reasonable in light of the current market conditions.

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⁴Morningstar SBBI, 2007 Yearbook at 112.

1	Q	DID DR. HADAWAY PERFORM ANY TESTS OF HIS RISK PREMIUM ANALYSIS
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RESULTS?

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Yes. Dr. Hadaway compared his utility risk premium analysis to studies performed by Ibbotson Associates. Dr. Hadaway states that Ibbotson Associates studied the return on common stocks versus corporate bonds for the period 1926 through 2007. The Ibbotson study found that the arithmetic mean risk premium was 6.1%, and the geometric mean return was 4.5%. He states that using the geometric mean return of 4.5%, and his projected 6.99% "BBB" utility bond yield, would produce an indicated equity return of 11.49% for KCPL. (Hadaway Direct at 34).

DO THE INDICATED RISK PREMIUM RESULTS FROM THE IBBOTSON ASSOCIATES STUDY SUPPORT A RETURN ON COMMON EQUITY FOR KCPL

OF 11.49% AS ESTIMATED BY DR. HADAWAY?

No. There are several flaws in this analysis. First, the Ibbotson Associates study is based on common equity returns and equity risk premiums for the overall market. This study is based on the returns for the S&P 500, not electric utilities. Dr. Hadaway did not, and cannot, show that the S&P 500 companies reflect risk comparable to KCPL as a regulated electric utility.

In fact, it is widely recognized that electric utility risk is considerably lower than that of the overall market. This is evident by a review of the beta coefficients measured by *Value Line* for the comparable utility companies, as illustrated on Schedule MPG-20 of my direct testimony. As shown on this schedule, the average beta for my comparable group is 0.76. Therefore, utility company stock market risk is approximately 76% (beta estimate) of that of the overall market. Hence, while the equity risk premiums derived from the lbbotson study may be appropriate for the

overall market, they significantly overstate a reasonable equity risk premium for a low
risk regulated electric utility such as KCPL. Therefore, Dr. Hadaway's use of the
Ibbotson study's equity risk premium to produce a return on common equity for KCPL
is unreasonable and should be rejected.

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Q CAN THE RISK PREMIUM STUDY PUBLISHED BY IBBOTSON BE USED TO DEVELOP A COMMON EQUITY ESTIMATE FOR KCPL?

Only generally. By recognizing electric utilities like KCPL have much lower risk than the overall market, the equity risk premiums developed by Ibbotson (4.5%) should be adjusted by a factor of approximately 76% or the average beta of my comparable group as published by *The Value Line Investment Survey*. Using a 76% adjustment factor to reflect KCPL's lower than market risk, the equity risk premiums of these studies, adjusted for the lower risk, would be reduced to 3.42% (4.5% x 76%). Adding a 3.42% equity risk premium to Dr. Hadaway's cost of a "BBB" rated electric utility bond of 6.99% would indicate a return on common equity of 10.41%.

CONSIDERING THE ADJUSTMENTS YOU MADE TO DR. HADAWAY'S RETURN ON EQUITY STUDY RESULTS, WHAT IS A REASONABLE RANGE OF A RETURN ON EQUITY FOR KCPL?

A reasonable return on equity range for KCPL is 9.4% to 10.8%, based on my adjustments to Dr. Hadaway's DCF and risk premium studies. As discussed in detail above, when more prudent assessments of utilities' investment risk in today's marketplace are considered, I have estimated the current investor required return for an electric utility company such as KCPL and provided a reasonable and accurate range of returns demanded by the marketplace. Thus, my recommended return on

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1	equity of 10.30% will fairly compensate KCPL for its investment risk of providing
2	regulated integrated utility service in Missouri.

Response to KCPL Witness Michael W. Cline

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4 Q TO WHAT PORTIONS OF MR. CLINE'S TESTIMONY WILL YOU RESPOND?

Mr. Cline has observed that Standard & Poor's (S&P) has revised its credit rating benchmarks for regulated utility companies. S&P, in 2007, included utility companies with other corporate bond issuance, and revised the credit metric outlooks and scoring methodology for business and financial risk in determining appropriate credit metric guidelines for utilities.

10 Q HOW HAVE KCPL'S CREDIT METRIC GUIDELINES CHANGED AS A RESULT OF 11 S&P'S REVISED CREDIT METRIC GUIDELINES METHODOLOGIES?

As shown below in Table 4, KCPL's previous guidelines were based on a business profile score of "6," on a scale of "1" to "10," with "1" being the lowest risk and "10" being the highest risk. Currently, S&P has revised that to a five-point scale, where most utilities fall into the business risk category of "Strong" to "Excellent." KCPL's business risk outlook is "Strong," with an associated financial risk of "Aggressive." The current guidelines for S&P based on this assessment are shown in column 3 in the table below.

TABLE 4

S&P Credit Metrics

Description	Old Guidance Range		New Guidance Range	
	Range ¹ (1)	Upper <u>Third</u> (2)	Range ² (3)	Upper <u>Third</u> (4)
Funds From Operation (FFO)/Total Debt FFO/Interest Total Debt to Total Capital	18% - 28% 3.0x - 4.2x 48% - 58%	25% 3.8x	10% - 30% 2.0x - 3.5x 45% - 60%	23% 3.0x

Sources:

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As shown above, S&P has revised its credit metrics, and broadened the category that would be appropriate for KCPL in order to maintain its current investment grade bond rating.

Q DO YOU BELIEVE THAT KCPL'S TARGET CREDIT METRICS SHOULD BE REVISED DUE TO S&P'S CURRENT CREDIT METRIC GUIDELINES?

I believe that it would be appropriate to update the target metrics for KCPL as a result of S&P's modification. However, this would not have a significant impact on the targets included in KCPL's Regulatory Plan. Further, since KCPL has not elected to include all the regulatory amortization expense it would have been entitled to under the current targets in its revenue requirement, revising the targets in this case will not impact the indicated regulatory amortization in this rate case. Nevertheless, Public Counsel would request the Commission to direct the parties to make a recommendation, consensus if possible, as to whether or not the Regulatory Plan

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¹ Standard & Poor's: "New Business Profile Scores Assigned for U.S. Utility and Power Companies; Financial Guidelines Revisited," June 2, 2004.

² Standard & Poor's: "U.S. Utilities Ratings Analysis Now Portrayed in the S&P Corporate Ratings Matrix," November 30, 2007.

- should be modified to reflect new credit metrics. Public Counsel believes the credit
- 2 metric range based on current guidance should be changed to FFO/interest: 3.0x
- 3 and FFO/debt: 23%.
- 4 Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?
- 5 A Yes.

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Long-Term Sustainable GDP Growth Rate

		20-Year Yield ¹			
<u>Line</u> <u>Date</u>		Treasury	TIPS	<u>Inflation</u>	
		(1)	(2)	(3)	
1	02/27/09	3.87%	2.35%	1.52%	
2	02/20/09	3.80%	2.24%	1.56%	
3	02/13/09	3.80%	2.25%	1.55%	
4	02/06/09	3.86%	2.40%	1.46%	
5	01/30/09	3.74%	2.43%	1.31%	
6	01/23/09	3.52%	2.54%	0.98%	
7	01/16/09	3.23%	2.29%	0.94%	
8	01/09/09	3.40%	2.57%	0.83%	
9	01/02/09	3.02%	2.32%	0.70%	
10	12/26/08	2.93%	2.16%	0.77%	
11	12/19/08	3.04%	2.17%	0.87%	
12	12/12/08	3.38%	2.44%	0.94%	
13	12/05/08	3.44%	2.51%	0.93%	
14	Average	3.46%	2.36%	1.10%	
15	Real GDP (1	3.40%			
16	Long-Term	Sustainable C	OP Growth	<u>4.50%</u>	

Sources:

¹ St. Louis Federal Reserve Bank.

² Morningstar, Inc. 2008 Ibbotson SBBI Valuation Yearbook, at 70.

Summary of Adjusted Hadaway DCF

<u>Line</u>	<u>Description</u>	Hadaway ¹ (1)	Hadaway <u>Adjusted^{2/3}</u> (2)
	Constant Growth DCF		
1	Average	11.2%	11.2%
2	Median	11.1%	11.1%
3 4	Long-Term Constant Growth DCF Average Median	11.0% 11.0%	9.4% 9.4%
	Multi-Stage Growth DCF		
5	Average	10.8%	9.4%
6	Median	10.8%	9.4%

Sources & Notes:

¹ Schedule SCH-5, Page 1 of 5.

² Rebuttal Schedule MPG-2, Pages 2 to 4.

³ The adjustment reflects changing the GDP Growth Rate to 4.90%.

Adjusted Hadaway Constant Growth DCF Model Analysts' Growth Rates

		Recent Stock	Next Year's	Dividend	Analy	sts' Growth	Average Growth	Constant	
Line	Company	Price	Dividend	Yield	Value Line Zacks Thomso				Growth DCF
	<u></u>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	ALLETE	\$42.10	\$1.80	4.28%	2.50%	5.00%	6.00%	4.50%	8.8%
2	Alliant Energy	\$34.06	\$1.53	4.49%	6.00%	6.10%	5.40%	5.83%	10.3%
3	Ameren	\$41.94	\$2.54	6.06%	3.50%	5.00%	4.00%	4.17%	10.2%
4	Ameerican Elec. Power	\$40.08	\$1.80	4.49%	7.50%	6.30%	5.97%	6.59%	11.1%
5	Avista Corp.	\$21.85	\$0.78	3.57%	9.00%	5.00%	4.50%	6.17%	9.7%
6	Central Vermont P.S.	\$21.25	\$0.92	4.33%	7.50%	N/A	8.90%	8.20%	12.5%
7	Cleco Corp.	\$24.56	\$0.90	3.66%	10.50%	14.00%	12.04%	12.18%	15.8%
8	Consol. Edison	\$39.55	\$2.36	5.97%	1.00%	3.20%	3.00%	2.40%	8.4%
9	DTE Energy	\$42.34	\$2.12	5.01%	5.00%	6.30%	6.00%	5.77%	10.8%
10	Edison Int'l	\$49.22	\$1.34	2.72%	5.00%	8.80%	8.45%	7.42%	10.1%
11	Empire District	\$20.02	\$1.28	6.39%	10.00%	N/A	6.00%	8.00%	14.4%
12	Entergy Corp.	\$112.15	\$3.60	3.21%	10.00%	12.00%	12.18%	11.39%	14.6%
13	FPL Group	\$64.10	\$1.92	3.00%	9.50%	10.30%	9.84%	9.88%	12.9%
14	FirstEnergy	\$76.04	\$2.45	3.22%	11.00%	8.30%	8.33%	9.21%	12.4%
15	Hawaiian Electric	\$25.21	\$1.24	4.92%	7.50%	4.20%	12.20%	7.97%	12.9%
16	IDACORP Inc.	\$29.73	\$1.20	4.04%	2.00%	6.00%	6.00%	4.67%	8.7%
17	NiSource, Inc.	\$17.28	\$0.92	5.32%	5.00%	3.00%	2.91%	3.64%	9.0%
18	Niortheast Utilities	\$25.92	\$0.88	3.40%	11.50%	10.00%	8.22%	9.91%	13.3%
19	NSTAR	\$33.23	\$1.53	4.60%	7.50%	6.40%	6.00%	6.63%	11.2%
20	PG&E Corp.	\$39.10	\$1.68	4.30%	5.00%	7.80%	7.24%	6.68%	11.0%
21	Pinnacle West	\$32.83	\$2.12	6.46%	2.00%	6.70%	4.00%	4.23%	10.7%
22	Portland General	\$23.69	\$1.01	4.26%	7.00%	7.00%	6.65%	6.88%	11.1%
23	Progress Energy	\$42.33	\$2.49	5.88%	5.00%	4.70%	6.12%	5.27%	11.2%
24	Southern Co.	\$35.74	\$1.73	4.84%	5.50%	4.70%	5.36%	5.19%	10.0%
25	Teco Energy, Inc.	\$19.59	\$0.82	4.19%	7.00%	10.10%	6.85%	7.98%	12.2%
26	UIL Holdings	\$31.20	\$1.73	5.54%	4.50%	6.00%	8.00%	6.17%	11.7%
27	Vectren Corp.	\$29.58	\$1.35	4.56%	3.50%	6.10%	5.77%	5.12%	9.7%
28	Westar Energy	\$22.13	\$1.20	5.42%	1.50%	4.80%	4.61%	3.64%	9.1%
29	Wisconsin Energy	\$45.53	\$1.24	2.72%	8.00%	9.60%	9.19%	8.93%	11.7%
30	Xcel Energy Inc.	\$20.29	\$0.97	4.78%	7.50%	5.40%	6.12%	6.34%	11.1%
31	Average	\$36.75	\$1.58	4.52%	6.27%	6.89%	6.86%	6.70%	11.2%
32	Median			5.01%				5.77%	11.1%

Source:

Schedule SCH-5, Page 2.

Adjusted Hadaway Constant Growth DCF Model Long-Term GDP Growth

<u>Line</u>	<u>Company</u>	Recent Stock <u>Price</u> (1)	Next Year's <u>Dividend</u> (2)	Dividend <u>Yield</u> (3)	GDP Growth* (4)	Long-Term Constant Growth DCF (5)
1	ALLETE	\$42.10	\$1.80	4.28%	4.90%	9.2%
2	Alliant Energy	\$34.06	\$1.53	4.49%	4.90%	9.4%
3	Ameren	\$41.94	\$2.54	6.06%	4.90%	11.0%
4	Ameerican Elec. Power	\$40.08	\$1.80	4.49%	4.90%	9.4%
5	Avista Corp.	\$21.85	\$0.78	3.57%	4.90%	8.5%
6	Central Vermont P.S.	\$21.25	\$0.92	4.33%	4.90%	9.2%
7	Cleco Corp.	\$24.56	\$0.90	3.66%	4.90%	8.6%
8	Consol. Edison	\$39.55	\$2.36	5.97%	4.90%	10.9%
9	DTE Energy	\$42.34	\$2.12	5.01%	4.90%	9.9%
10	Edison Int'l	\$49.22	\$1.34	2.72%	4.90%	7.6%
11	Empire District	\$20.02	\$1.28	6.39%	4.90%	11.3%
12	Entergy Corp.	\$112.15	\$3.60	3.21%	4.90%	8.1%
13	FPL Group	\$64.10	\$1.92	3.00%	4.90%	7.9%
14	FirstEnergy	\$76.04	\$2.45	3.22%	4.90%	8.1%
15	Hawaiian Electric	\$25.21	\$1.24	4.92%	4.90%	9.8%
16	IDACORP Inc.	\$29.73	\$1.20	4.04%	4.90%	8.9%
17	NiSource, Inc.	\$17.28	\$0.92	5.32%	4.90%	10.2%
18	Niortheast Utilities	\$25.92	\$0.88	3.40%	4.90%	8.3%
19	NSTAR	\$33.23	\$1.53	4.60%	4.90%	9.5%
20	PG&E Corp.	\$39.10	\$1.68	4.30%	4.90%	9.2%
21	Pinnacle West	\$32.83	\$2.12	6.46%	4.90%	11.4%
22	Portland General	\$23.69	\$1.01	4.26%	4.90%	9.2%
23	Progress Energy	\$42.33	\$2.49	5.88%	4.90%	10.8%
24	Southern Co.	\$35.74	\$1.73	4.84%	4.90%	9.7%
25	Teco Energy, Inc.	\$19.59	\$0.82	4.19%	4.90%	9.1%
26	UIL Holdings	\$31.20	\$1.73	5.54%	4.90%	10.4%
27	Vectren Corp.	\$29.58	\$1.35	4.56%	4.90%	9.5%
28	Westar Energy	\$22.13	\$1.20	5.42%	4.90%	10.3%
29	Wisconsin Energy	\$45.53	\$1.24	2.72%	4.90%	7.6%
30	Xcel Energy Inc.	\$20.29	\$0.97	4.78%	4.90%	9.7%
31	Average	\$36.75	\$1.58	4.52%	4.90%	9.4%
32	Median					9.4%

Sources:

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* Blue Chip Economic Indicators, October 10, 2008.

Adjusted Hadaway Low Near-Term Growth Two-Stage Growth DCF Model

		Recent	2009	2009 2012	Annual	Cash Flows						
		Stock	Forecasted	Forecasted	Change	2009	2010	2011	2012	2013	GDP	Two-Stage
Line	<u>Company</u>	Price	<u>Dividend</u>	<u>Dividend</u>	to 2012	<u>Dividend</u>	<u>Dividend</u>	<u>Dividend</u>	<u>Dividend</u>	<u>Dividend</u>	Growth*	Growth DCF
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	ALLETE	\$42.10	\$1.80	\$2.00	\$0.07	\$1.80	\$1.87	\$1.93	\$2.00	\$2.10	4.90%	9.0%
2	Alliant Energy	\$34.06	\$1.53	\$1.92	\$0.13	\$1.53	\$1.66	\$1.79	\$1.92	\$2.01	4.90%	9.7%
3	Ameren	\$41.94	\$2.54	\$2.54	\$0.00	\$2.54	\$2.54	\$2.54	\$2.54	\$2.71	4.90%	10.2%
4	Ameerican Elec. Power	\$40.08	\$1.80	\$2.40	\$0.20	\$1.80	\$2.00	\$2.20	\$2.40	\$2.56	4.90%	10.0%
5	Avista Corp.	\$21.85	\$0.78	\$1.15	\$0.12	\$0.78	\$0.90	\$1.03	\$1.15	\$1.22	4.90%	9.4%
6	Central Vermont P.S.	\$21.25	\$0.92	\$0.92	\$0.00	\$0.92	\$0.92	\$0.92	\$0.92	\$0.98	4.90%	8.7%
7	Cleco Corp.	\$24.56	\$0.90	\$1.50	\$0.20	\$0.90	\$1.10	\$1.30	\$1.50	\$1.60	4.90%	10.0%
8	Consol. Edison	\$39.55	\$2.36	\$2.42	\$0.02	\$2.36	\$2.38	\$2.40	\$2.42	\$2.54	4.90%	10.3%
9	DTE Energy	\$42.34	\$2.12	\$2.30	\$0.06	\$2.12	\$2.18	\$2.24	\$2.30	\$2.41	4.90%	9.6%
10	Edison Int'l	\$49.22	\$1.34	\$1.64	\$0.10	\$1.34	\$1.44	\$1.54	\$1.64	\$1.72	4.90%	7.7%
11	Empire District	\$20.02	\$1.28	\$1.40	\$0.04	\$1.28	\$1.32	\$1.36	\$1.40	\$1.49	4.90%	11.0%
12	Entergy Corp.	\$112.15	\$3.60	\$4.80	\$0.40	\$3.60	\$4.00	\$4.40	\$4.80	\$5.04	4.90%	8.6%
13	FPL Group	\$64.10	\$1.92	\$2.34	\$0.14	\$1.92	\$2.06	\$2.20	\$2.34	\$2.45	4.90%	8.0%
14	FirstEnergy	\$76.04	\$2.45	\$3.05	\$0.20	\$2.45	\$2.65	\$2.85	\$3.05	\$3.25	4.90%	8.3%
15	Hawaiian Electric	\$25.21	\$1.24	\$1.30	\$0.02	\$1.24	\$1.26	\$1.28	\$1.30	\$1.38	4.90%	9.4%
16	IDACORP Inc.	\$29.73	\$1.20	\$1.20	\$0.00	\$1.20	\$1.20	\$1.20	\$1.20	\$1.26	4.90%	8.4%
17	NiSource, Inc.	\$17.28	\$0.92	\$1.00	\$0.03	\$0.92	\$0.95	\$0.97	\$1.00	\$1.07	4.90%	9.9%
18	Niortheast Utilities	\$25.92	\$0.88	\$1.03	\$0.05	\$0.88	\$0.93	\$0.98	\$1.03	\$1.10	4.90%	8.3%
19	NSTAR	\$33.23	\$1.53	\$1.85	\$0.11	\$1.53	\$1.64	\$1.74	\$1.85	\$1.97	4.90%	9.7%
20	PG&E Corp.	\$39.10	\$1.68	\$2.04	\$0.12	\$1.68	\$1.80	\$1.92	\$2.04	\$2.14	4.90%	9.4%
21	Pinnacle West	\$32.83	\$2.12	\$2.30	\$0.06	\$2.12	\$2.18	\$2.24	\$2.30	\$2.45	4.90%	11.0%
22	Portland General	\$23.69	\$1.01	\$1.20	\$0.06	\$1.01	\$1.07	\$1.14	\$1.20	\$1.28	4.90%	9.3%
23	Progress Energy	\$42.33	\$2.49	\$2.55	\$0.02	\$2.49	\$2.51	\$2.53	\$2.55	\$2.67	4.90%	10.2%
24	Southern Co.	\$35.74	\$1.73	\$2.00	\$0.09	\$1.73	\$1.82	\$1.91	\$2.00	\$2.10	4.90%	9.7%
25	Teco Energy, Inc.	\$19.59	\$0.82	\$0.90	\$0.03	\$0.82	\$0.85	\$0.87	\$0.90	\$0.96	4.90%	8.9%
26	UIL Holdings	\$31.20	\$1.73	\$1.73	\$0.00	\$1.73	\$1.73	\$1.73	\$1.73	\$1.84	4.90%	9.8%
27	Vectren Corp.	\$29.58	\$1.35	\$1.47	\$0.04	\$1.35	\$1.39	\$1.43	\$1.47	\$1.54	4.90%	9.2%
28	Westar Energy	\$22.13	\$1.20	\$1.32	\$0.04	\$1.20	\$1.24	\$1.28	\$1.32	\$1.41	4.90%	10.1%
29	Wisconsin Energy	\$45.53	\$1.24	\$1.60	\$0.12	\$1.24	\$1.36	\$1.48	\$1.60	\$1.68	4.90%	7.9%
30	Xcel Energy Inc.	\$20.29	\$0.97	\$1.06	\$0.03	\$0.97	\$1.00	\$1.03	\$1.06	\$1.11	4.90%	9.4%
31	Average	\$36.75	\$1.58	\$1.83	\$0.08	\$1.58	\$1.66	\$1.75	\$1.83	\$1.93	4.90%	9.4%
32	Median											9.4%

Sources:

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^{*} Blue Chip Economic Indicators, October 10, 2008.