Exhibit No.:

Issue:

Witness:

Type of Exhibit:

Sponsoring Parties:

Revenue Requirement Michael Gorman

Surrebuttal Testimony

Ag Processing, Inc., SIEUA,

and Federal Executive Agencies ER-2010-0356

Case No.:

Date Testimony Prepared:

January 12, 2011

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

In the Matter of the Application of KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service

Case No. ER-2010-0356

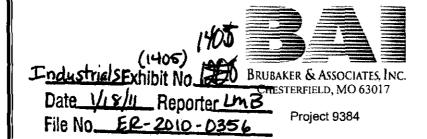
Surrebuttal Testimony and Schedules of

**Michael Gorman** 

On behalf of

Ag Processing, Inc.
Sedalia Industrial Energy Users Association
Federal Executive Agencies

January 12, 2011



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

In the Matter of the Application of KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service

Case No. ER-2010-0356

STATE OF MISSOURI ) SS COUNTY OF ST. LOUIS )

#### Affidavit of Michael Gorman

Michael Gorman, being first duly sworn, on his oath states:

- 1. My name is Michael Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by Ag Processing, Inc., Sedalia Industrial Energy Users Association and Federal Executive Agencies in this proceeding on their behalf.
- 2. Attached hereto and made a part hereof for all purposes are my surrebuttal testimony and schedules which were prepared in written form for introduction into evidence in the Missouri Public Service Commission's Case No. ER-2010-0356.
- 3. I hereby swear and affirm that the testimony and schedules are true and correct and that they show the matters and things that they purport to show.

Michael Gorman

Subscribed and sworn to before me this 11th day of January, 2011.

TAMMY S. KLOSSNER

Notary Public - Notary Seal
STATE OF MISSOUR!
St. Charles County

ly Commission Expires: Mar. 14, 2011
Commission # 07024862

Notary Public

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

In the Matter of the Application of KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service

Case No. ER-2010-0356

#### Surrebuttal Testimony of Michael Gorman

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS. 1 2 Michael Gorman. My business address is 16690 Swingley Ridge Road, Suite 140, 3 Chesterfield, MO 63017. ARE YOU THE SAME MICHAEL GORMAN WHO PREVIOUSLY FILED 4 Q 5 **TESTIMONY IN THIS PROCEEDING?** 6 Α Yes. 7 Q **PLEASE** SUMMARIZE YOUR **EDUCATIONAL** BACKGROUND AND 8 EXPERIENCE. 9 Α This information was provided in Appendix A of my direct testimony. 10 Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING? 11 Α I am appearing on behalf of Ag Processing, Inc., Sedalia Industrial Energy Users 12 Association and the Federal Executive Agencies ("FEA") (collectively "Industrials"). 13 These customers purchase substantial amounts of electricity from KCP&L Greater

1		Missouri Operations Company ("KCPL-GMO") and the outcome of this proceeding will					
2		have an impact on their cost of electricity.					
3	Q	WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN THIS					
4		PROCEEDING?					
5	Α	I will respond to certain positions taken in the rebuttal testimony of KCPL-GMO					
6		witness Dr. Samuel Hadaway.					
7	Q	PLEASE IDENTIFY THE PORTIONS OF DR. HADAWAY'S REBUTTAL					
8		TESTIMONY TO WHICH YOU WILL RESPOND IN YOUR SURREBUTTAL					
9		TESTIMONY.					
10	Α	Dr. Hadaway makes arguments that contest the reasonableness of my return on					
11		equity ("ROE") recommendation. He also updates all three of his DCF and two risk					
12		premium analyses. I will respond to Dr. Hadaway's assertions and show that they are					
13		erroneous or unreasonable. I will also comment on his updated DCF analyses, revise					
14		them by using more reasonable data, and show that an ROE of approximately 9.5%					
15		is reasonable for KCPL-GMO in this case.					
16	Q	WHAT ELEMENTS OF YOUR ROE STUDIES DID DR. HADAWAY DISPUTE?					
17	Α	At pages 16-17 of Dr. Hadaway's rebuttal testimony, he summarizes his					
18		disagreement with my ROE studies as follows:					
19 20		<ol> <li>He states that I generally biased my constant growth DCF return studies by selecting data or results that decreased the ROE estimate.</li> </ol>					
21 22 23 24 25		<ol> <li>For my multi-stage DCF study, he contends that I was wrong to use a consensus GDP growth rate that takes account of current economic conditions; in his view that biased downward the determination of an appropriate ROE because it should reflect his own longer term GDP growth outlooks, which he derives from historical data.</li> </ol>					

2		because I did not adjust the estimated equity risk premium for a simplistic inverse relationship between equity risk premiums and interest rates.
4 5 6		<ol> <li>He asserts that my CAPM return estimate was biased downward because I "cherry picked" certain data related to the market risk premium and estimate of the risk-free rate.</li> </ol>
7		For the reasons outlined below, all of Dr. Hadaway's arguments are without
8		merit and should be disregarded.
9		I will also comment on Dr. Hadaway's updated ROE study.
10	Macı	roeconomic Factors
11	Q	DID DR. HADAWAY REVIEW THE YIELD SPREADS BETWEEN "BBB" UTILITY
12		BONDS AND U.S. TREASURY BONDS, TO SUPPORT HIS CONCERN THAT
13		UTILITY CAPITAL MARKET COSTS ARE HIGHER TODAY DUE TO THE
14		CURRENT FINANCIAL CRISIS?
15	Α	Yes. At pages 3-5 of his rebuttal testimony, he shows the yield spread between
16		"BBB" utility bonds and 30-year Treasury bonds over the period January 2008
17		through October 2010. On that table, he shows a declining yield spread during this
18		time period, but concludes that utility bond yield spreads are still wide, which is an
19		indication that credit markets have not stabilized.
20	Q	DO YOU BELIEVE THAT DR. HADAWAY'S REVIEW OF UTILITY/TREASURY
21		BOND YIELD SPREADS SUPPORTS HIS BELIEF THAT KCPL-GMO'S COST OF
22		CAPITAL IS STILL REFLECTING FROM THE FINANCIAL CRISIS?
23	Α	No. Indeed, I provided a longer term view of yield spreads for "A" and "Baa" utility
24		bond yields as compared to Treasury bond yields in my direct testimony on my

Schedule MPG-14, page 3. As shown on that schedule, "A" utility bond yield spreads

(difference between the "A" utility bond yield and Treasury bond yields) (difference between the "A" utility currently have largely recovered since the beginning of the financial crisis which started in late 2007 or 2008. Indeed, "A" rated utility bond yield spreads are now comparable to the pre-2007 levels. In a similar comparison, the "Baa" utility bond yield spreads are still modestly higher than pre-2007 levels, but have significantly recovered since the financial crisis.

This indicates that while the financial crisis still has lingering effects, utility securities have largely recovered, and utilities' cost of capital has declined significantly from the financial crisis levels.

I also note that in my direct testimony, on my Schedule MPG-13, I compare the utility bond yield spreads to Treasuries as well as similarly rated general corporate bond yield spreads to Treasuries. As shown on that schedule, "Baa" utility bond yield spreads (Column 5) in 2009 (2.98%) were lower than the "Baa" corporate bond yield spreads to Treasuries (Column 9) (3.22%). Indeed, "Baa" utility bond yield spreads have been consistently lower than general corporate bond yields with the same bond rating for most of the last 10 years. This is a clear indication that the market values the low-risk nature of public utility bonds relative to general corporate bonds, which supports the notion that utility companies are low-risk investments, and have low capital costs.

In conclusion, it is clear that while the financial crisis may have lingering effects for the economy in general, utilities have recovered from the crisis. As such, Dr. Hadaway's criticism is misplaced.

1	Q	AT PAGES 6-8 OF HIS REBUTTAL TESTIMONY, DR. HADAWAY REVIEWS
2		UTILITY STOCK PRICES AND CONCLUDES THAT THEY HAVE REMAINED
3		VOLATILE RELATIVE TO THE MARKET INDICES. PLEASE RESPOND.
4	Α	On page 7 of his rebuttal testimony, Dr. Hadaway provides a graph of Dow Jones
5		Utility Averages over the period October 1986 through October 2010 (Graph 1). On
6		his Graph 2 at page 8 of his rebuttal testimony, he argues that the Dow Jones utility
7		average over the period April 2009 through October 2010 has lagged the recovery of
8		the S&P 500. He concludes that this result indicates the market differences utilities
9		face result in higher cost of capital for utility companies.
10		In reality, however, Dr. Hadaway's conclusions are contrary to market
11		participants.
12	Q	PLEASE EXPLAIN.
13	Α	As discussed in my direct testimony at pages 5-9, many market participants conclude
14		the exact opposite of Dr. Hadaway with respect to the utility security prices.
15		Specifically, market participants have stated the following concerning utility stock
16		price performance during the financial crisis:
17		1. Standard & Poor's states:
18 19 20 21		a. that regulated electric utilities have been and are expected to continue to weather the difficult economy without lasting effect on the collective financial risk profile of the industry, and S&P assesses ratings and outlooks based on its stable view of industry and company-specific factors; and
22 23 24 25 26		b. throughout 2009, U.S. electric utilities performed well and continued favorable access to capital compared to most corporate issuers. Despite difficult market conditions last year, external financing activity for the U.S. electric utility industry was about \$49.8 billion, roughly matching 2008 activity (Gorman Direct at 6).
27 28 29		2. Fitch Ratings Services stated that companies in the utility sector weathered the recession and financial crisis of 2008-2009 with considerably less pain than sectors such as financial institutions, cyclical industrials and retailers ( <i>Id.</i> at 7).

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Further, a comparison of the Edison Electric Institute ("EEI") index of electric utilities relative to the S&P 500, shows that the electric utilities held their price during the economic downturn of 2007 and 2008 better than the S&P 500. The Utility Index price recovery was less robust than that of the S&P 500 in 2009. In the third quarter of 2010, the S&P 500 and EEI Electric Utility Index were generally about the same level.

This price performance shows again that electric utilities' stock price was more stable through the financial crisis than non-regulated companies' securities. Indeed, EEI stated, as I quoted at page 9 of my direct testimony, that "Defensive stocks typically lag early in the market rebounds coming out of a recession and EEI index surpassed broad market returns in each year for 2004 through 2008." This is precisely what we have seen for utility stocks.

While the financial crisis has caused problems for all companies, utility companies have fared better than non-regulated companies. This is clearly evident from observable low bond yields, a recovery of yield spreads of Treasury bonds and utility bonds, particularly higher rated utility bonds, and stable stock prices for utility stocks relative to a broader market index. Hence, Dr. Hadaway's belief that macroeconomic factors indicate a utility's cost of capital has increased, is without merit and should be dis regarded.

1	Q	DR. HADAWAY ALSO ARGUES THAT DUE TO THE FEDERAL RESERVE
2		MONETARY EFFORTS AS TO SHORT-TERM BORROWING, THAT TREASURY
3		BONDS AND CREDIT MARKETS ARE ABNORMALLY LOW (AT PAGE 5).
4		PLEASE RESPOND.

Federal Reserve monetary policy has a direct impact on **short-term** interest rates as the Federal Reserve implements policy that changes money supply, the Fed Funds Rate and indirectly short-term interest rates. However, the Federal Reserve does not have significant control of **long-term** interest rates. Long-term interest rates are controlled by the market, not the Federal Reserve.

Both Dr. Hadaway and I use long-term interest rate securities in estimating KCPL-GMO's cost of equity in this case. We do not rely on short-term borrowing instruments that are highly impacted by Federal Reserve policies. As such, observable interest rates on long-term bonds are useful in assessing where utilities' cost of capital is at any point in time, including the current market environment.

#### **ROE Estimation Methods**

Α

Α

## Q WHY DOES DR. HADAWAY BELIEVE THAT YOU UNDERSTATED A FAIR ROE USING YOUR CONSTANT GROWTH DCF STUDY?

My constant growth DCF study used consensus analysts' growth rates from three publications. For one of the utilities in my sample of comparable firms, Empire District, consensus analysts' growth rates were not available from my data sources. Dr. Hadaway asserts in his rebuttal testimony (at 17-18) that I should supplement my study with the use of Thomson Financial Network's consensus analysts' growth rate estimates (available at Yahoo.com) and growth rate projections made by *The Value Line Investment Survey*.

#### Q IS DR. HADAWAY'S PROPOSAL REASONABLE?

Q

Α

No, not with respect to the *Value Line* data. My constant growth DCF model is based on consensus analysts' growth rates. *Value Line* does not publish consensus analysts' growth rate estimates. Rather, *Value Line* publishes a single analyst's forecast. Therefore, it is not an appropriate source of inputs for use in my constant growth DCF model.

As explained in my direct testimony (at 20-21), I used consensus analysts' growth rate estimates because it is not known whether any particular analyst has the most influence in the market. Therefore, it is reasonable to use the consensus of security analysts as the best measure of consensus investor outlooks over the period the growth rates were designed to reflect. In a constant growth DCF model, based on consensus analysts' growth rate estimates, growth rates from a single analyst like the *Value Line* data are not proper inputs.

# IS DR. HADAWAY'S REVISION TO YOUR CONSTANT GROWTH DCF STUDY REASONABLE?

No. His use of *Value Line* data was a self-serving effort to increase my constant growth DCF return estimate by inserting data that did not meet the parameters of the model. Further, the *Value Line* growth rate estimate of 7.50% was clearly higher than the consensus analysts' growth rate estimate of 6.0% published by the Thomson Financial Network which he cited (Hadaway Rebuttal at 17-18). Dr. Hadaway used the average of these two growth rate estimates, which in effect used a growth rate estimate higher than his consensus analysts' growth rate projections. Therefore, his conclusion that my constant growth DCF model would have increased the proxy

group return to an average of 10.50% and a median of 10.41%. This compares to my proxy group result of 10.40% (average) and 10.39% (median).

Q

Α

In any event, Dr. Hadaway's proposal to include Empire District in the results of my constant growth DCF study has a very small impact on the proxy group median estimate.

#### DID YOU AVOID THE USE OF VALUE LINE DATA IN YOUR DCF STUDIES?

No. As explained above, I only excluded the *Value Line* data source in my constant growth DCF model because that model was designed to reflect consensus analysts' growth rate estimates. However, I did use *Value Line* data in my sustainable growth rate DCF study. Therefore, I did not ignore *Value Line* data in a DCF study. Rather, I used *Value Line* data appropriately, in a DCF study that was designed to use that type of data. I used *Value Line* data in my sustainable growth DCF analysis because it is the only data source that I am aware of that provides the proxy group information needed to forecast data from which one derives a sustainable growth rate.

# Q DID DR. HADAWAY HAVE ANY COMMENTS RELATED TO YOUR SUSTAINABLE GROWTH RATE DCF STUDY?

Yes. At page 18 of his rebuttal testimony, he took issue with my decision to rely on the median (middle of the proxy group range) group estimate rather than the group mean (proxy group average) growth estimate. Dr. Hadaway does not take issue with my conclusion that the DPL Inc. DCF return of 19.96% is an outlier. Rather, he says that, instead of using a more representative statistical measure (i.e., group median) to remove the distortion an outlier would cause, I should have disregarded that firm's data entirely. Here, Dr. Hadaway recalculated the proxy group average DCF return,

excluding the DPL Inc. return. According to Dr. Hadaway, the study thus would have yielded average and median proxy group DCF return estimates of 9.40% and 9.22%, respectively. Dr. Hadaway's results compare to those found in my direct testimony on Exhibit MPG-8 for the proxy group average and median returns of 9.68% and 9.33%, respectively.

Q

Α

## IS DR. HADAWAY CORRECT IN HIS ASSERTION THAT USE OF A PROXY GROUP MEDIAN REDUCED YOUR DCF ESTIMATE?

I do not contest Dr. Hadaway's math. I do disagree with his logic. My use of the group median gives consideration to all DCF estimates in the sample group Dr. Hadaway defined. Dr. Hadaway simply ignores the result for DPL Inc. Regardless, the DCF return estimates produced from Dr. Hadaway's recalculation of results for this DCF study (in a manner I reject) produces, as he acknowledges (*Id.* at 18) "not a large effect" in the models and only "a slightly lower overall DCF estimate." The range of DCF estimates from Dr. Hadaway's unwarranted modification of my study, still supports my DCF ROE estimate for KCPL-GMO in this case.

In any event, Dr. Hadaway's proposed changes to my sustainable growth DCF return would result in a decrease in the results of the proxy group using this methodology. For example, on my Schedule MPG-8, I estimated a proxy group average return of 9.68%, and a median return of 9.33%. Dr. Hadaway's proposal to exclude DPL Inc., results in a proxy group average return of 9.40%, and a group median return of 9.22%. As a result, Dr. Hadaway's proposal shows that my ROE from this model is overstated, and not understated as he asserts in his testimony.

1	Q	WHAT IS DR. HADAWAY'S DISAGREEMENT WITH YOUR MULTI-STAGE DCF
2		ANALYSIS?
3	Α	Dr. Hadaway asserts at pages 18-19 of his rebuttal testimony that I should not have
4		relied on the consensus published economists' GDP growth forecast over the next 5
5		and 10 years. He states the consensus forecast of the GDP growth rate published
6		and available to investors today, understates long-term outlooks for future inflation.
7		Therefore, he believes the consensus Blue Chip Economic Indicators' outlook of GDP
8		growth rate out over the next 5 and 10 years is too low. Instead, he continues to
9		support use of the GDP growth rate forecast he developed especially for this case in
0		a long-term multi-stage growth DCF study, because he believes it reflects a higher
1		inflation outlook, which, in his view, is more likely to prevail over time.
2	Q	ARE YOU AWARE OF ANY INSTANCE WHERE DR. HADAWAY'S GROWTH
3		RATE ESTIMATES AND DCF ANALYSES HAVE BEEN ADOPTED BY
4		REGULATORY COMMISSIONS?
5	Α	No. I cited several regulatory commissions' findings on the unreasonableness of
16		Dr. Hadaway's GDP growth rate assessments in my direct testimony. I recommend
17		that the Missouri Public Service Commission continue to reject Dr. Hadaway's DCF
18		analyses in this case.
19	Q	DOES DR. HADAWAY MAKE REASONABLE ASSERTIONS IN SUPPORT OF HIS
20		USE OF A HIGHER GDP GROWTH OUTLOOK IN A MULTI-STAGE GROWTH
21		DCF STUDY?
22	Α	No. The information that should be used in such a DCF study should be information
วจ		that is available to investors since it likely reflects consensus investors' outlooks

Dr. Hadaway has not provided any information that refutes my conclusion that such
published analyst growth rate data is more likely influential and reflective of investors
outlooks than his growth rate data derived from historical data by Dr. Hadaway and
specifically for this proceeding. My GDP growth rate forecast reflects published
consensus economists' projections of future long-term GDP growth. In significan
contrast, the GDP growth forecast recommended by Dr. Hadaway reflects his singula
assessment of historical GDP growth rates and is based on his private calculations
and outlooks.

Q

Dr. Hadaway has provided no evidence that any market participant, much less a consensus of market participants, shares his belief that the GDP growth rate will increase over the long-term to reflect an increase in inflation outlooks relative to that included in published consensus economists' projections of future inflation.

Dr. Hadaway's GDP growth rate forecast is a self-serving projection designed to inflate the DCF return estimate. For this reason, it should be rejected.

# PLEASE DESCRIBE DR. HADAWAY'S CRITICISMS OF YOUR RISK PREMIUM ANALYSES.

Dr. Hadaway argues that my equity risk premiums used in my analyses are understated because they were not adjusted by the simplistic assessment that he endorses that equity risk premiums will move inversely with interest rates.

1	Q	ARE	DR.	HADAWAY'S	CRITICISMS	OF	YOUR	RISK	PREMIUM	STUDIES

#### **REASONABLE?**

Α

No. As outlined in my direct testimony at pages 29-31, the market risk premium should be measured relative to current perception of the risk of debt versus equity securities, and not simply movements to nominal interest rates.

As I discussed at pages 12-14 of my rebuttal testimony, Dr. Hadaway's use of a simplistic inverse relationship between interest rates and equity risk premiums is inconsistent with academic literature and does not properly estimate an appropriate equity risk premium. I will not repeat my disagreements and arguments in support of my position as outlined in my rebuttal testimony. It is sufficient to state, that Dr. Hadaway's proposed inverse relationship does nothing more than inflate the equity risk premium estimate, and does not produce a reasonable ROE for KCPL-GMO in this proceeding.

# 14 Q PLEASE DESCRIBE DR. HADAWAY'S CRITICISMS OF YOUR CAPM 15 ANALYSES.

Dr. Hadaway asserts that the market risk premium I used was based on historical Treasury bond yields, which is inconsistent with the Treasury bond yield I used as a risk-free rate in my CAPM. He asserts that, had I used current Treasury bond yields, the market risk premiums would have been higher which would have increased my CAPM return estimate.

### Q ARE DR. HADAWAY'S CRITICISMS OF YOUR CAPM RETURN ESTIMATE

#### 2 ACCURATE?

Α

No. Dr. Hadaway's arguments are erroneous. First, I incorporated two measures of a market risk premium in my CAPM analyses. One measure of the market risk premium was derived from historical data and is based on the premium investors actually achieved by investing in the stock market rather than Treasury bonds. Hence, from a historical perspective, market investors have earned a premium of approximately 5.2% to 6.7% by investing in the stock market rather than Treasury bond investments over the period 1929-2009. Incorporating this historical perspective mitigates the effect of what Dr. Hadaway describes as "the current, artificially low government interest rates." Further, it provides the actual historical realized risk premium results that can be used to form expectations of forward-looking risk premiums.

In my other CAPM study, I derived a forward-looking expected return on the market of 10.77%. I used this projected market return to derive an expected market risk premium by subtracting my risk-free rate from the projected market return. This produced a market risk premium of 6.07% (10.77% - 4.7%). Contrary to Dr. Hadaway's erroneous contention, this market risk premium was derived using the same risk-free rate that I used as the risk-free input to my CAPM analysis. This market risk premium is developed in a manner very similar to Staff witness McNally's development of his market risk premium, which Dr. Hadaway adopts in his inappropriate revision of my CAPM study. Dr. Hadaway's criticism appears more result-oriented than focused on my study's analytical approach.

1		Dr. Hadaway's suggestion that my use of historical data to measure a market
2		risk premium was the result of an intentional downward bias of the market risk
3		premium is unfounded.
4	Q	ARE DR. HADAWAY'S ADJUSTMENTS TO YOUR ROE ESTIMATES, SHOWN AT
5		PAGE 21 OF HIS REBUTTAL TESTIMONY, BASED ON REASONABLE
6		APPLICATIONS OF DCF AND CAPM STUDIES?
7	Α	No. His adjustments to my consensus analysts' growth rate DCF study included
8		Value Line data for Empire District Company. Value Line is not a consensus
9		analysts' growth rate estimate, and therefore is not appropriate to include in this
0		particular study. His adjustments to my consensus analysts' growth rate DCF study
11		do not support his overall assertion that my DCF estimates are understated. As
12		shown on page 22, his adjustments to my DCF (sustainable growth) results actually
13		decreased my DCF estimate.
14		Dr. Hadaway's adjustment to my multi-stage DCF study to increase the 4.75%
15		consensus economists GDP growth outlook published in the Blue Chip Economic
16		Indicators up to his historical data derived GDP growth outlook of 6.0% is a more
17		significant error. His assessment is not reflective of current market expectations, nor
18		investors' outlooks, and as a result overstates investors' return requirements.
19		Finally, Dr. Hadaway's proposal to reject my CAPM return estimate in favor of
20		Staff's is without merit and unsupported. Indeed, his arguments to reject my CAPM

return estimates are based on the erroneous evaluations of my CAPM study

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discussed above.

#### Q DID DR. HADAWAY UPDATE HIS DCF STUDIES IN THIS CASE?

- 2 A Yes, his rebuttal testimony presents updated elements of his earlier ROE studies in
- 3 his Schedule SCH2010-11 and Schedule SCH2010-12.

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#### 4 Q DID YOU CORRECT DR. HADAWAY'S UPDATED STUDIES?

Yes. I reproduce his updated results in the following table. I also show the results of revising Dr. Hadaway's DCF studies to reflect the consensus economists' outlook of GDP growth, rather than the use of Dr. Hadaway's derivation of a GDP growth rate estimate strictly from historical data. My revised results, I believe, are more accurate than Dr. Hadaway's updated results because they better reflect investor outlooks.

TABLE 1

Revisions to Dr. Hadaway's Updated DCF Studies

Description	Hadaway Updated DCF <u>Estimates<sup>1</sup></u>	Revised Hadaway Updated DCF Estimates <sup>2</sup>
Constant Growth (Analysts' Growth)	10.4% - 10.2%	10.4% - 10.2%
Constant Growth (Long-Term GDP Growth)	10.7% - 10.8%	9.5% - 9.6%
Two-Stage Growth DCF	<u> 10.5% - 10.5%</u>	<u>9.4% - 9.4%</u>
Range	10.5% - 10.5%	9.8% - 9.7%
Sources:		
<sup>1</sup> Hadaway Rebuttal Schedule SCH2010-11. <sup>2</sup> Schedule MPG-SR-1, page 1 of 4.		

This one data adjustment (GDP) reduces Dr. Hadaway's DCF return from 10.5% to 9.75%, and supports my DCF study results and recommended ROE for KCPL-GMO.

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#### 2 RESULTS?

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3 No. The equity risk premiums Dr. Hadaway uses to derive his ROE (as shown on his Schedule SCH2010-12) range from 4.8% to 4.67%. However, a review of that same 4 5 schedule shows that risk premiums over the last five years fall in the range of 6 approximately 3.8% up to 4.8%, and reasonably reflect current capital market costs. 7 Using the midpoint of this range, or 4.3%, along with Dr. Hadaway's current and forecasted "BBB" bond yields of 5.25% and 5.57%, respectively, would indicate an 8 ROE in the range of 9.05% to 10.37%. This equity return range supports my 9 10 recommended ROE of 9.5% for KCPL-GMO.

#### 11 Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

12 A Yes.

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### **Summary of Adjusted Hadaway DCF**

<u>Line</u>	<u>Description</u>	Hadaway (1)	Hadaway <u>Adjusted*</u> (2)
	Constant Growth DCF (Analysts' Growth Rates)		
1	Average	10.4%	10.4%
2	Median	10.2%	10.2%
	Constant Growth DCF (Long-Term GDP Growth)		
3	Average	10.7%	9.5%
4	Median	10.8%	9.6%
	Two-Stage Growth DCF		
5	Average	10.5%	9.4%
6	Median	10.5%	9.4%

Sources:

Pages 2 to 4.

<sup>\*</sup> The adjustment reflects changing the GDP Growth Rate to 4.75%.

# Adjusted Hadaway Constant Growth DCF Model (Analysts' Growth Rates)

<u>Line</u>	<u>Company</u>	Recent Stock <u>Price</u> (1)	Next Year's <u>Dividend</u> (2)	Dividend <u>Yield</u> (3)	Average Analyst Growth Rate (4)	Constant Growth DCF (5)
1	ALLETE	\$36.41	\$1.76	4.83%	3.83%	8.7%
2	Alliant Energy Co.	\$35.78	\$1.65	4.61%	7.30%	11.9%
3	American Elec. Pwr.	\$36.12	\$1.70	4.71%	3.63%	8.3%
4	Avista Corp.	\$21.06	\$1.08	5.13%	5.73%	10.9%
5	Black Hills Corp	\$31.48	\$1.48	4.70%	5.50%	10.2%
6	Cleco Corporation	\$29.39	\$1.08	3.67%	6.50%	10.2%
7	Con. Edison	\$48.15	\$2.40	4.98%	3.90%	8.9%
8	DPL Inc.	\$26.09	\$1.28	4.91%	6.45%	11.4%
9	DTE Energy Co.	\$46.74	\$2.30	4.92%	5.50%	10.4%
10	Duke Energy	\$17.61	\$0.99	5.62%	3.43%	9.1%
11	Edison Internat.	\$34.54	<b>\$</b> 1.34	3.88%	3.01%	6.9%
12	Empire District	\$20.09	\$1.28	6.37%	6.75%	13.1%
13	Entergy Corp.	\$77.33	\$3.53	4.56%	4.51%	9.1%
14	Hawaiian Electric	\$23.33	\$1.24	5.32%	9.68%	15.0%
15	IDACORP	\$35.89	\$1.20	3.34%	4.50%	7.8%
16	NextEra Energy	\$54.20	\$2.10	3.87%	6.08%	10.0%
17	Northeast Utilities	\$29.62	\$1.10	3.71%	7.06%	10.8%
18	NSTAR	\$39.12	\$1.72	4.40%	6.12%	10.5%
19	PG&E Corp.	\$46.21	\$1.92	4.15%	6.50%	10.7%
20	Pinnacle West	\$40.69	\$2.10	5.16%	6.10%	11.3%
21	Portland General	\$20.20	\$1.07	5.30%	6.12%	11.4%
22	Progress Energy	\$42.97	\$2.52	5.86%	3.71%	9.6%
23	SCANA Corp.	\$40.06	\$1.92	4.79%	4.23%	9.0%
24	Sempra Energy	\$52.47	\$1.68	3.20%	6.13%	9.3%
25	Southern Co.	\$37.03	\$1.88	5.08%	4.97%	10.1%
26	Teco Energy, Inc.	\$17.20	\$0.84	4.88%	6.52%	11.4%
27	UIL Holdings Co.	\$27.49	\$1.73	6.29%	3.49%	9.8%
28	Vectren Corp.	\$25.65	\$1.39	5.42%	4.78%	10.2%
29	Westar Energy	\$24.35	\$1.28	5.26%	8.50%	13.8%
30	Wisconsin Energy	\$57.21	\$1.80	3.15%	9.42%	12.6%
31	Xcel Energy Inc.	\$22.80	\$1.03	4.52%	5.98%	10.5%
32	Average	\$35.40	\$1.63	4.73%	5.68%	10.4%
33	Median			4.83%	5.98%	10.2%

Source

Schedule SCH2010-11, page 2 of 5.

## 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 <u>Growth*</u> (4)	Long-Term Constant <u>Growth DCF</u> (5)	
1	ALLETE	\$36.41	\$1.76	4.83%	4.75%	9.6%	
2	Alliant Energy Co.	\$35.78	\$1.65	4.61%	4.75%	9.4%	
3	American Elec. Pwr.	\$36.12	\$1.70	4.71%	4.75%	9.5%	
4	Avista Corp.	\$21.06	\$1.08	5.13%	4.75%	9.9%	
5	Black Hills Corp	\$31.48	\$1.48	4.70%	4.75%	9.5%	
6	Cleco Corporation	\$29.39	\$1.08	3.67%	4.75%	8.4%	
7	Con. Edison	\$48.15	\$2.40	4.98%	4.75%	9.7%	
8	DPL Inc.	\$26.09	\$1.28	4.91%	4.75%	9.7%	
9	DTE Energy Co.	\$46.74	\$2.30	4.92%	4.75%	9.7%	
10	Duke Energy	\$17.61	\$0.99	5.62%	4.75%	10.4%	
11	Edison Internat.	\$34.54	\$1.34	3.88%	4.75%	8.6%	
12	Empire District	\$20.09	\$1.28	6.37%	4.75%	11.1%	
13	Entergy Corp.	\$77.33	\$3.53	4.56%	4.75%	9.3%	
14	Hawaiian Electric	\$23.33	\$1.24	5.32%	4.75%	10.1%	
15	IDACORP	\$35.89	\$1.20	3.34%	4.75%	8.1%	
16	NextEra Energy	\$54.20	\$2.10	3.87%	4.75%	8.6%	
17	Northeast Utilities	\$29.62	\$1.10	3.71%	4.75%	8.5%	
18	NSTAR	\$39.12	\$1.72	4.40%	4.75%	9.1%	
19	PG&E Corp.	\$46.21	\$1.92	4.15%	4.75%	8.9%	
20	Pinnacle West	\$40.69	\$2.10	5.16%	4.75%	9.9%	
21	Portland General	\$20.20	\$1.07	5.30%	4.75%	10.0%	
22	Progress Energy	\$42.97	\$2.52	5.86%	4.75%	10.6%	
23	SCANA Corp.	\$40.06	\$1.92	4.79%	4.75%	9.5%	
24	Sempra Energy	\$52.47	\$1.68	3.20%	4.75%	8.0%	
25	Southern Co.	\$37.03	\$1.88	5.08%	4.75%	9.8%	
26	Teco Energy, Inc.	\$17.20	\$0.84	4.88%	4.75%	9.6%	
27	UIL Holdings Co.	\$27.49	\$1.73	6.29%	4.75%	11.0%	
28	Vectren Corp.	\$25.65	\$1.39	5.42%	4.75%	10.2%	
29	Westar Energy	\$24.35	\$1.28	5.26%	4.75%	10.0%	
30	Wisconsin Energy	\$57.21	\$1.80	3.15%	4.75%	7.9%	
31	Xcel Energy Inc.	\$22.80	\$1.03	4.52%	4.75%	9.3%	
32	Average	\$35.40	\$1.63	4.73%	4.75%	9.5%	
33	Median			4.83%		9.6%	

Sources:

Schedule SCH2010-11, page 3 of 5.

<sup>\*</sup> Blue Chip Economic Indicators, October 10, 2010 at 15.

## Adjusted Hadaway Low Near-Term Growth (Two-Stage Growth DCF Model)

		Recent	Next	2014	Annual	Cash Flows						
		Stock	Year's	Forecasted	Change	Year 1	Year 2	Year 3	Year 4	Year 5	GDP	Two-Stage
Line	Сотрапу	<u>Price</u>	<u>Dividend</u>	<u>Dividend</u>	to 2014	<u>Dividend</u>	<u>Dividend</u>	<u>Dividend</u>	<u>Dividend</u>	<u>Dividend</u>	<u>Growth</u>	Growth DCF
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	ALLETE	\$36,41	\$1,7 <del>6</del>	\$1,85	\$0.03	\$1.76	\$1.79	\$1.82	\$1.85	\$1.94	4.75%	9.2%
2	Alliant Energy Co.	\$35.78	\$1.65	\$1,92	\$0.09	\$1.65	\$1.74	\$1.83	\$1.92	\$2.01	4.75%	9.4%
3	American Elec, Pwr.	\$36.12	\$1,70	\$1,90	\$0.07	\$1.7D	\$1.77	\$1.83	\$1.90	\$1.99	4.75%	9.3%
4	Avista Corp.	\$21.06	\$1.08	\$1,30	\$0.07	\$1.08	\$1.15	\$1.23	\$1.30	\$1.36	4.75%	10.1%
5	Black Hills Corp	\$31.48	\$1.48	\$1.60	\$0.04	\$1.48	\$1.52	\$1.56	\$1.60	\$1.68	4.75%	9.2%
6	Cleco Corporation	\$29.39	\$1.08	\$1.45	\$0.12	\$1.08	\$1.20	\$1.33	\$1.45	\$1.52	4.75%	9.0%
7	Con. Edison	\$48,15	\$2.40	\$2.46	\$0.02	\$2.40	\$2.42	\$2.44	\$2.46	\$2.58	4.75%	9.2%
8	DPL Inc.	\$26.09	\$1.28	\$1.50	\$0.07	\$1.28	\$1.35	\$1.43	\$1.50	\$1.57	4.75%	9.7%
9	DTE Energy Co.	\$46.74	\$2.30	\$2,70	\$0.13	\$2.30	\$2.43	\$2.57	\$2.70	\$2.83	4.75%	9.8%
10	Duke Energy	\$17.61	\$0.99	\$1,05	\$0.02	\$0.99	\$1.01	\$1.03	\$1.05	\$1.10	4.75%	10.0%
11	Edison Internat.	\$34.54	\$1.34	\$1,50	\$0.05	\$1.34	\$1.39	\$1.45	\$1.50	\$1.57	4.75%	8.5%
12	Empire District	\$20,09	\$1,28	\$1,35	\$0.02	\$1.28	\$1.30	\$1.33	\$1.35	\$1.41	4.75%	10.6%
13	Entergy Corp.	\$77.33	\$3.53	\$4.15	\$0.21	\$3,53	\$3.74	\$3.94	\$4.15	\$4.35	4.75%	9.4%
14	Hawaiian Electric	\$23,33	\$1,24	\$1,30	\$0.02	\$1.24	\$1.26	\$1.28	\$1.30	\$1.36	4,75%	9.6%
15	IDACORP	\$35,89	\$1,20	\$1,40	\$0.07	\$1.20	\$1.27	\$1.33	\$1.40	\$1.47	4.75%	8.1%
16	NextEra Energy	\$54.20	\$2.10	\$2,40	\$0.10	\$2.10	\$2.20	\$2.30	\$2.40	\$2.51	4.75%	8.6%
17	Northeast Utilities	\$29,62	\$1,10	\$1,30	\$0.07	\$1.10	\$1.17	\$1.23	\$1.30	\$1.36	4.75%	8.5%
18	NSTAR	\$39.12	\$1.72	\$2,05	\$0.11	\$1.72	\$1.83	\$1.94	\$2.05	\$2.15	4.75%	9.3%
19	PG&E Corp.	\$46.21	\$1.92	\$2.20	\$0.09	\$1.92	\$2.01	\$2.11	\$2.20	\$2.30	4.75%	8.9%
20	Pinnacle West	\$40.69	\$2,10	\$2.30	\$0.07	\$2.10	\$2.17	\$2.23	\$2.30	\$2.41	4.75%	9.7%
21	Portland General	\$20,20	\$1,07	\$1,20	\$0.04	\$1.07	\$1.11	\$1.16	\$1.20	\$1.26	4,75%	9.9%
22	Progress Energy	\$42.97	\$2.52	\$2.58	\$0.02	\$2.52	\$2.54	\$2.56	\$2.58	\$2.70	4.75%	10.0%
23	SCANA Corp.	\$40,06	\$1.92	\$2,00	\$0,03	\$1.92	\$1.95	\$1.97	\$2.00	\$2.10	4.75%	9,1%
24	Sempra Energy	\$52.47	\$1.68	\$2.05	\$0.12	\$1.68	\$1.80	\$1.93	\$2.05	\$2.15	4.75%	8.1%
25	Southern Co.	\$37.03	\$1.88	\$2,10	\$0.07	\$1.88	\$1.95	\$2.03	\$2.10	\$2.20	4.75%	9.7%
26	Teco Energy, Inc.	\$17.20	\$0.84	\$0,95	\$0.04	\$0.84	\$0.88	\$0.91	\$0.95	\$1,00	4.75%	9.6%
27	UIL Holdings Co.	\$27.49	\$1.73	\$1,73	\$0.00	\$1.73	\$1.73	\$1.73	\$1.73	\$1.B1	4.75%	10.3%
28	Vectren Corp.	\$25.65	\$1.39	\$1.50	\$0.04	\$1.39	\$1.43	\$1.46	\$1.50	\$1.57	4.75%	9.9%
29	Westar Energy	\$24.35	\$1.28	\$1,40	\$0.04	\$1.28	\$1,32	\$1,36	\$1.40	\$1.47	4.75%	9.8%
30	Wisconsin Energy	\$57.21	\$1.80	\$2.40	\$0.20	\$1.80	\$2.00	\$2.20	\$2.40	\$2.51	4.75%	8.3%
31	Xcel Energy Inc.	\$22.80	\$1.03	<b>\$1</b> .15	\$0.04	\$1.03	\$1.07	\$1.11	\$1.15	\$1.20	4.75%	9.1%
32	Average	\$35,40	\$1.63	\$1.83	\$0.07	\$1.63	\$1.69	\$1.76	\$1.83	\$1,92	4.75%	9.4%
33	Median											9.4%

Sources:

Schedule SCH2010-11, page 4 of 5.

<sup>\*</sup> Blue Chip Economic Indicators, October 10, 2010 at 15.

### **Summary of Adjusted Hadaway DCF**

<u>Line</u>	<u>Description</u>	Hadaway (1)	Hadaway <u>Adjusted*</u> (2)
	Constant Growth DCF (Analysts' Growth Rates)		
1	Average	10.4%	10.4%
2	Median	10.2%	10.2%
	Constant Growth DCF (Long-Term GDP Growth)		
3	Average	10.7%	9.5%
4	Median	10.8%	9.6%
	Two-Stage Growth DCF		
5	Average	10.5%	9.4%
6	Median	10.5%	9.4%

Sources:

Pages 2 to 4.

<sup>\*</sup> The adjustment reflects changing the GDP Growth Rate to 4.75%.

# Adjusted Hadaway Constant Growth DCF Model (Analysts' Growth Rates)

<u>Line</u>	Company	Recent Stock <u>Price</u> (1)	Next Year's <u>Dividend</u> (2)	Dividend <u>Yield</u> (3)	Average Analyst Growth <u>Rate</u> (4)	Constant Growth DCF (5)	
1	ALLETE	\$36.41	\$1.76	4.83%	3.83%	8.7%	
2	Alliant Energy Co.	\$35.78	\$1.65	4.61%	7.30%	11.9%	
3	American Elec. Pwr.	\$36.12	\$1.70	4.71%	3.63%	8.3%	
4	Avista Corp.	\$21.06	\$1.08	5.13%	5.73%	10.9%	
5	Black Hills Corp	\$31.48	\$1.48	4.70%	5.50%	10.2%	
6	Cleco Corporation	\$29.39	\$1.08	3.67%	6.50%	10.2%	
7	Con. Edison	\$48.15	\$2.40	4.98%	3.90%	8.9%	
8	DPL Inc.	\$26.09	\$1.28	4.91%	6.45%	11.4%	
9	DTE Energy Co.	\$46.74	\$2.30	4.92%	5.50%	10.4%	
10	Duke Energy	\$17.61	\$0.99	5.62%	3.43%	9.1%	
11	Edison Internat.	\$34.54	\$1.34	3.88%	3.01%	6.9%	
12	Empire District	\$20.09	\$1.28	6.37%	6.75%	13.1%	
13	Entergy Corp.	\$77.33	\$3.53	4.56%	4.51%	9.1%	
14	Hawaiian Electric	\$23.33	\$1.24	5.32%	9.68%	15.0%	
15	IDACORP	\$35.89	\$1.20	3.34%	4.50%	7.8%	
16	NextEra Energy	\$54.20	\$2.10	3.87%	6.08%	10.0%	
17	Northeast Utilities	\$29.62	\$1.10	3.71%	7.06%	10.8%	
18	NSTAR	\$39.12	\$1.72	4.40%	6.12%	10.5%	
19	PG&E Corp.	\$46.21	\$1.92	4.15%	6.50%	10.7%	
20	Pinnacle West	\$40.69	\$2.10	5.16%	6.10%	11.3%	
21	Portland General	\$20.20	\$1.07	5.30%	6.12%	11.4%	
22	Progress Energy	\$42.97	\$2.52	5.86%	3.71%	9.6%	
23	SCANA Corp.	\$40.06	\$1.92	4.79%	4.23%	9.0%	
24	Sempra Energy	\$52.47	\$1.68	3.20%	6.13%	9.3%	
25	Southern Co.	\$37.03	\$1.88	5.08%	4.97%	10.1%	
26	Teco Energy, Inc.	\$17.20	\$0.84	4.88%	6.52%	11.4%	
27	UIL Holdings Co.	\$27.49	\$1.73	6.29%	3.49%	9.8%	
28	Vectren Corp.	\$25.65	\$1.39	5.42%	4.78%	10.2%	
29	Westar Energy	\$24.35	\$1.28	5.26%	8.50%	13.8%	
30	Wisconsin Energy	\$57.21	\$1.80	3.15%	9.42%	12.6%	
31	Xcel Energy Inc.	\$22.80	\$1.03	4.52%	5.98%	10.5%	
32	Average	\$35.40	\$1.63	4.73%	5.68%	10.4%	
33	Median			4.83%	5.98%	10.2%	

Schedule SCH2010-11, page 2 of 5.

Source:

## 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 <u>Growth DCF</u> (5)	
1	ALLETE	\$36,41	\$1.76	4.83%	4.75%	9.6%	
2	Alliant Energy Co.	\$35.78	\$1.65	4.61%	4.75%	9.4%	
3	American Elec. Pwr.	\$36.12	\$1.70	4.71%	4.75%	9.5%	
4	Avista Corp.	\$21.06	\$1.08	5.13%	4.75%	9.9%	
5	Black Hills Corp	\$31.48	\$1.48	4.70%	4.75%	9.5%	
6	Cleco Corporation	\$29.39	\$1.08	3.67%	4.75%	8.4%	
7	Con. Edison	\$48.15	\$2.40	4.98%	4.75%	9.7%	
8	DPL Inc.	\$26.09	\$1.28	4.91%	4.75%	9.7%	
9	DTE Energy Co.	\$46.74	\$2.30	4.92%	4.75%	9.7%	
10	Duke Energy	\$17.61	<b>\$</b> 0. <del>99</del>	5.62%	4.75%	10.4%	
11	Edison Internat.	\$34.54	\$1.34	3.88%	4.75%	8.6%	
12	Empire District	\$20.09	\$1.28	6.37%	4.75%	11.1%	
13	Entergy Corp.	\$77.33	\$3.53	4.56%	4.75%	9.3%	
14	Hawaiian Electric	\$23.33	\$1.24	5.32%	4.75%	10.1%	
15	IDACORP	\$35.89	\$1.20	3.34%	4.75%	8.1%	
16	NextEra Energy	\$54.20	\$2.10	3.87%	4.75%	8.6%	
17	Northeast Utilities	\$29.62	<b>\$1</b> .10	3.71%	4.75%	8.5%	
18	NSTAR	\$39.12	\$1.72	4.40%	4.75%	9.1%	
19	PG&E Corp.	\$46.21	\$1.92	4.15%	4.75%	8.9%	
20	Pinnacle West	\$40.69	\$2.10	5.16%	4.75%	9.9%	
21	Portland General	\$20.20	\$1.07	5.30%	4.75%	10.0%	
22	Progress Energy	\$42.97	\$2.52	5.86%	4.75%	10.6%	
23	SCANA Corp.	\$40.06	\$1.92	4.79%	4.75%	9.5%	
24	Sempra Energy	\$52.47	\$1.68	3.20%	4.75%	8.0%	
25	Southern Co.	\$37.03	\$1.88	5.08%	4.75%	9.8%	
26	Teco Energy, Inc.	\$17.20	\$0.84	4.88%	4.75%	9.6%	
27	UIL Holdings Co.	\$27.49	\$1.73	6.29%	4.75%	11.0%	
28	Vectren Corp.	\$25.65	\$1.39	5.42%	4.75%	10.2%	
29	Westar Energy	\$24.35	\$1.28	5.26%	4.75%	10.0%	
30	Wisconsin Energy	\$57.21	\$1.80	3.15%	4.75%	7.9%	
31	Xcel Energy Inc.	\$22.80	\$1.03	4.52%	4.75%	9.3%	
32	Average	\$35.40	\$1.63	4.73%	4.75%	9.5%	
33	Median			4.83%		9.6%	

Sources:

Schedule SCH2010-11, page 3 of 5.

<sup>\*</sup> Blue Chip Economic Indicators, October 10, 2010 at 15.

## Adjusted Hadaway Low Near-Term Growth (Two-Stage Growth DCF Model)

		Recent	Next	2014	Annual			Cash Flows				
		Stock	Year's	Forecasted	Change	Year 1	Year 2	Year 3	Year 4	Year 5	GDP	Two-Stage
<u>Line</u>	Company	<u>Price</u>	<u>Dividend</u>	<u>Dividend</u>	to 2014	<u>Dividend</u>	<u>Dividend</u>	<u>Dividend</u>	<u>Dividend</u>	<u>Dividend</u>	<u>Growth</u>	Growth DCF
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	ALLETE	\$36.41	\$1.76	\$1.85	\$0.03	\$1.76	\$1.79	\$1.82	\$1.85	\$1.94	4.75%	9.2%
2	Alliant Energy Co.	\$35.78	\$1.65	\$1.92	\$0.09	\$1.65	\$1.74	\$1.83	\$1.92	\$2.01	4.75%	9.4%
3	American Elec. Pwr.	\$36.12	\$1.70	\$1.90	\$0.07	\$1.70	\$1.7 <b>7</b>	\$1.83	\$1.90	\$1.99	4.75%	9.3%
4	Avista Corp.	\$21.06	\$1.08	\$1.30	\$0.07	\$1.08	\$1.15	\$1.23	\$1.30	\$1.36	4.75%	10.1%
5	Black Hills Corp	\$31.48	\$1.48	\$1.60	\$0.04	\$1.48	\$1.52	\$1.56	\$1.60	\$1.68	4.75%	9.2%
6	Cleco Corporation	\$29.39	\$1.08	\$1.45	\$0.12	\$1.08	\$1.20	\$1.33	\$1.45	\$1.52	4.75%	9.0%
7	Con. Edison	\$48.15	\$2.40	\$2.46	\$0.02	\$2.40	\$2.42	\$2.44	\$2.46	\$2.58	4.75%	9.2%
8	DPL Inc.	\$26.09	\$1,28	\$1.50	\$0.07	\$1.28	\$1.35	\$1.43	\$1.50	\$1.57	4.75%	9.7%
9	DTE Energy Co.	\$46.74	\$2,30	\$2.70	\$0.13	\$2.30	\$2.43	\$2.57	\$2.70	\$2.83	4.75%	9.8%
10	Duke Energy	\$17.61	\$0.99	\$1.05	\$0.02	\$0.99	\$1.01	\$1.03	\$1.05	\$1.10	4.75%	10.0%
11	Edison Internat.	\$34.54	\$1,34	\$1.50	\$0.05	\$1.34	\$1.39	\$1.45	\$1.50	\$1.57	4.75%	8.5%
12	Empire District	\$20.09	\$1.28	\$1.35	\$0.02	\$1.28	\$1.30	\$1.33	\$1.35	\$1.41	4.75%	10.6%
13	Entergy Corp.	\$77.33	\$3.53	\$4.15	\$0.21	\$3.53	\$3.74	\$3.94	\$4.15	\$4.35	4.75%	9.4%
14	Hawaiian Electric	\$23.33	\$1.24	\$1.30	\$0.02	\$1.24	\$1.26	\$1.28	\$1.30	\$1.36	4.75%	9.6%
15	IDACORP	\$35.89	\$1.20	\$1.40	\$0.07	\$1.20	\$1.27	\$1.33	\$1.40	\$1.47	4.75%	8.1%
16	NextEra Energy	\$54.20	\$2.10	\$2.40	\$0.10	\$2.10	\$2.20	\$2.30	\$2.40	\$2.51	4.75%	8.6%
17	Northeast Utilities	\$29.62	\$1.10	\$1.30	\$0.07	\$1.10	\$1.17	\$1.23	\$1.30	\$1,36	4.75%	8.5%
18	NSTAR	\$39.12	\$1.72	\$2.05	\$0.11	\$1.72	\$1.83	\$1.94	\$2.05	\$2.15	4.75%	9.3%
19	PG&E Corp.	\$46.21	\$1.92	\$2.20	\$0.09	\$1.92	\$2.01	\$2.11	\$2.20	\$2.30	4.75%	8.9%
20	Pinnacle West	\$40.69	\$2.10	\$2.30	\$0.07	\$2.10	\$2.17	\$2.23	\$2.30	\$2.41	4.75%	9.7%
21	Portland General	\$20.20	\$1.07	\$1.20	\$0.04	\$1.07	\$1.11	\$1.16	\$1.20	\$1.26	4.75%	9.9%
22	Progress Energy	\$42.97	\$2.52	\$2.58	\$0.02	\$2.52	\$2.54	\$2.56	\$2.58	\$2.70	4.75%	10.0%
23	SCANA Corp.	\$40.06	\$1.92	\$2.00	\$0.03	\$1.92	\$1.95	\$1.97	\$2.00	\$2.10	4.75%	9.1%
24	Sempra Energy	\$52.47	\$1.68	\$2.05	\$0.12	\$1.68	\$1.80	\$1.93	\$2.05	\$2.15	4.75%	8.1%
25	Southern Co.	\$37.03	\$1.88	\$2.10	\$0.07	\$1.88	\$1.95	\$2.03	\$2.10	\$2.20	4.75%	9.7%
26	Teco Energy, Inc.	\$17.20	\$0.84	\$0.95	\$0.04	\$0.84	\$0.88	\$0.91	\$0.95	\$1.00	4.75%	9.6%
27	UIL Holdings Co.	\$27.49	\$1,73	\$1.73	\$0.00	\$1.73	\$1.73	\$1.73	\$1.73	\$1.81	4.75%	10.3%
28	Vectren Corp.	\$25.65	\$1.39	\$1.50	\$0.04	\$1.39	\$1.43	\$1.46	\$1.50	\$1.57	4.75%	9.9%
29	Westar Energy	\$24.35	\$1.28	\$1.40	\$0.04	\$1.28	\$1.32	\$1.36	\$1.40	\$1.47	4.75%	9.8%
30	Wisconsin Energy	\$57,21	\$1.80	\$2.40	\$0.20	<b>\$</b> 1.80	\$2.00	\$2.20	\$2.40	\$2.51	4.75%	8.3%
31	Xcel Energy Inc.	\$22.80	\$1.03	\$1.15	\$0.04	\$1.03	\$1.07	\$1.11	\$1.15	\$1.20	4.75%	9.1%
32	Average	\$35.40	\$1.63	\$1.83	\$0.07	\$1.63	\$1.69	\$1.76	\$1.83	\$1.92	4.75%	9.4%
33	Median											9.4%

Sources:

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<sup>\*</sup> Blue Chip Economic Indicators, October 10, 2010 at 15.