Exhibit No.:

Issues: Revenue Requirement
Witness: Michael P. Gorman
Type of Exhibit: Surrebuttal Testimony
Sponsoring Party: Office of Public Counsel

Case No.: ER-2012-0175
Date Testimony Prepared: October 10, 2012

DEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service **Case No. ER-2012-0175** Tracking No. YE-2012-0405

Surrebuttal Testimony and Schedule of

Michael P. Gorman

Revenue Requirement

On behalf of

The Office of Public Counsel

NON-PROPRIETARY VERSION

** *

October 10, 2012



Project 9606

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

Operations Compa	ment a General Rate)	Case No. ER-2012-0175 Tracking No. YE-2012-0405
STATE OF MISSOURI)) ss	

Affidavit of Michael P. Gorman

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

- 1. My name is Michael P. 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 surrebuttal testimony and schedule which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2012-0175.
- 3. I hereby swear and affirm that the testimony and schedule are true and correct and that they show the matters and things that they purport to show?

Michael P. Gorman

Subscribed and sworn to before me this 9th day of October, 2012.

MARIA E. DECKER
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis City
My Commission Expires: May 5, 2013
Commission # 09706793

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BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service **Case No. ER-2012-0175** Tracking No. YE-2012-0405

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BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service **Case No. ER-2012-0175** Tracking No. YE-2012-0405

Surrebuttal Testimony of Michael P. Gorman

PLEASE STATE YOUR NAME AND BUSINESS ADDRESS. 1 Q 2 Α Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140, 3 Chesterfield, MO 63017. ARE YOU THE SAME MICHAEL P. GORMAN WHO PREVIOUSLY FILED 4 Q TESTIMONY IN THIS CASE ON BEHALF OF THE OFFICE OF PUBLIC COUNSEL 5 ("OPC")? 6 7 Α Yes. Q PLEASE DESCRIBE YOUR SURREBUTTAL TESTIMONY IN THIS CASE. 8 9 Α I will respond to the rebuttal testimonies of KCP&L Greater Missouri Operations 10 Company's ("KCP&L GMO" or "Company") witnesses Kevin Bryant and Dr. Samuel 11 Hadaway.

Response to Mr. Bryant

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2 Q PLEASE DESCRIBE THE PORTION OF MR. BRYANT'S REBUTTAL TESTIMONY

3 TO WHICH YOU WILL RESPOND.

Mr. Bryant responds to my criticisms of the Company's significant increase in its common equity ratio between its June 30, 2012 actual and its projection for the August 2012 true-up. Mr. Bryant argues that the significant increase is associated with the conversion of equity units – recorded as debt on the Company's June 30, 2012 capital structure – to common equity in July 2012. Mr. Bryant also argues that the equity the Company issued at that time was also used to reduce long-term debt on July 2 related to the maturity of the KCP&L GMO 11.875% senior notes.

11 Q PLEASE RESPOND TO MR. BRYANT'S TESTIMONY.

I agree with Mr. Bryant that conversion of the equity units to common equity in July 2012 largely explains the difference between the Company's March 2012 actual common equity ratio and its Pro Forma capital structure equity ratio. However, the conversion of the equity units does not explain the entire significant increase in the common equity ratio.

As Mr. Bryant notes, the equity units represent about 4.5% of the Company's capital structure in March 2012 (Bryant Rebuttal Testimony at 3-4), and reflecting those as equity capital rather than debt capital would produce debt and common equity ratios of 50.0% and 49.4%, respectively – the preferred stock ratio remains at 0.60%. This capital structure mix is reasonably consistent with the 50.8% common

¹Case No. ER-2010-0356, True-Up Direct Testimony of Michael Cline, page 1, also see Missouri Public Service Commission Report and Order, May 4, 2011, page 151.





1 2 3		KCP&L GMO's refinancing of this above-market cost security actually increased its capital cost when it finally had an opportunity to reduce its cost of capital related to this above-market debt cost.
4 5 6 7 8 9 10 11		3. KCPL's and KCP&L GMO's decision not to minimize its cost of capital is particularly disturbing given the significant regulatory plan that helped support its credit rating during its last major construction program. During that time period, customers paid higher rates to support regulatory amortization to support cash flow metrics which in turn supported KCPL/KCP&L GMO's bond rating. KCPL and KCP&L GMO's investors benefitted significantly through this regulatory plan, but the Company is failing now to reciprocate by making every effort available to minimize its cost of capital going forward.
12	Q	IN HIS REBUTTAL TESTIMONY, MR. BRYANT ASSERTS THAT THE EQUITY
13		UNIT CONVERSION HAS BEEN REFLECTED BY STANDARD & POOR'S ("S&P")
14		IN ITS BOND RATING ASSESSMENT, AND ITS PROPOSED TRUE-UP CAPITAL
15		STRUCTURE IS LARGELY CONSISTENT WITH S&P'S CREDIT REVIEW.
16		PLEASE RESPOND.
17	Α	S&P's current credit rating outlook for KCP&L GMO's parent company (Great Plains
18		Energy) and KCPL and KCP&L GMO is "BBB" with a "Stable" outlook.
19		At page 5 of the Highly Confidential S&P report attached to Mr. Bryant's
20		testimony (Schedule KEB-1), it lists the credit metrics considered by S&P in arriving
21		at Great Plains' bond rating. There, it shows an adjusted debt to debt and equity ratio
22		for S&P over the period 2007 through 2011. The S&P adjusted debt ratio for this
23		company has consistently been substantially higher than the 46.918% debt ratio the
24		Company is proposing to use to set rates in this proceeding. ³
25		Admittedly, the S&P debt ratio includes significant off-balance sheet debt
26		items. However, the S&P report can be used to develop a debt and equity ratio

³Hadaway Direct Testimony at 6.

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comparable to that used for setting rates. Reflecting only the conversion of the equity

units, which is specifically listed by S&P in its Table 3 of that report, along with the

unadjusted debt and equity balances, would show that S&P's credit rating reflects a common equity ratio of less than 50% of investor capital. Again, this is generally consistent with KCP&L GMO's last rate case, and its March 30, 2011 capital structure adjusted for the equity units. Importantly, S&P found Great Plains' credit rating to be "Stable" and at an investment grade bond rating level with this capital structure mix.

Hence, there is no justification for Great Plains' effort to increase its common equity ratio in this proceeding. I state this simply because its credit rating is already stable without an increase to its common equity ratio. Therefore, KCPL's and KCP&L GMO's proposed capital structure with an increased common equity ratio is not reasonable.

DO YOU HAVE ANY RECOMMENDATIONS?

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Α

Yes. The Company's effort appears to be directed at increasing its common equity ratio which increases its overall cost of capital and income tax expense. The Company's investors directly benefit from this by growing the Company's equity base, and its earnings and dividend paying ability. I believe this is an unnecessary increase to its cost of service, and the Company's proposal to increase its common equity ratio should be justified. Absent complete justification, I recommend the Commission consider using a hypothetical capital structure (50% debt/50% equity) in this case rather than the Company's projected actual capital structure at the end of August 2012.

Response to Dr. Hadaway

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	2	Q	DID DR. HADAWAY	TAKE ISSUE W	ITH YOUR RECOMMENDE	D RETURN ON
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3 **EQUITY IN THIS PROCEEDING?**

- Yes. Dr. Hadaway believes that my return on equity was negatively skewed by my assumptions and the application of my models. In support of this, Dr. Hadaway offers criticisms of my constant growth Discounted Cash Flow ("DCF") study, my multi-stage
- 8 Q WHAT ARE DR. HADAWAY'S CRITICISMS OF YOUR CONSTANT GROWTH DCF

growth DCF study and my risk premium analysis.

9 **ANALYSIS?**

- Dr. Hadaway believes I should have eliminated the results of Edison International, and Cleco Corporation from my analysis because he believes these results were unreasonably low. He concludes that if I would have eliminated these two companies from my constant growth DCF study, the results would have increased from 9.5% up to 9.8% to 9.9%.
- 15 Q ARE DR. HADAWAY'S CRITICISMS OF YOUR CONSTANT GROWTH DCF
 16 STUDY REASONABLE?
- No. Dr. Hadaway's arguments are severely flawed and biased. Corrections to
 Dr. Hadaway's misspecified model inputs continue to show that KCP&L GMO's
 current market cost of equity in this case is approximately 9.3% to 9.5%. Corrected
 versions of Dr. Hadaway's updated adjustments to my models are shown in my
 Schedule MPG-SR-1, page 2 of 5.

1 Q DOES DR. HADAWAY OFFER REASONS TO EXCLUDE THE TWO LOW DCF

ESTIMATES?

Α

Yes. Dr. Hadaway recommends eliminating the two lowest results from my proxy group because the results are too low. However, he does not even comment on whether there are skewed high-end estimates. Dr. Hadaway recommends eliminating the result for Cleco Corporation of 6.14% and Edison International of 5.19% because they are only up to 123 basis points above the "BBB" utility debt cost of 4.91%. He also believes that Cleco Corporation stock is being artificially inflated by merger speculation.

10 Q ARE THESE REASONS ADEQUATE SUPPORT FOR ELIMINATING THESE 11 COMPANIES FROM THE PROXY GROUP AS DR. HADAWAY RECOMMENDS?

I do not disagree that it is appropriate to eliminate outlier estimates to enhance the integrity and reliability of the return on equity estimate. However, Dr. Hadaway has applied recommended methodologies to eliminate only <u>low</u> DCF return estimates. He has not proposed a methodology to identify and eliminate the high-end DCF return estimates. As such, his proposed modification is one-sided and biased.

For example, if one were to eliminate DCF return estimates which are 125 basis points or less of the 4.91% utility bond yield return, then it would also be appropriate to eliminate DCF estimates which are substantially higher than the current observable "BBB" utility bond yield. The two highest return estimates in my proxy group are Great Plains Energy ("GPE") at 13.03% and Hawaiian Electric ("HE") at 12.34%. These estimates are more than 2.5x the "BBB" bond yield. Clearly, these estimates are skewed on the high side.

Further, it is appropriate to eliminate GPE and HE as an offset to the low-end DCF return estimates, because the growth rates of these two companies are substantially in excess of the U.S. GDP growth rate of 4.9%. GPE and HE's three- to five-year growth rates (8.42% and 7.46%, respectively) of these DCF returns are more than 255 basis points higher than the prevailing 4.9% "BBB" utility bond yield.

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HOW WOULD YOUR DCF RESULT CHANGE IF LOW AND HIGH OUTLIER RESULTS ARE ELIMINATED?

Eliminating the two lowest return estimates as Dr. Hadaway proposes and also eliminating the two highest DCF estimates would produce a proxy group average of 9.53% as shown on my Schedule MPG-SR-1, page 2 of 5. Hence, a symmetrical removal of high and low skewed DCF estimates shows that my recommended return on equity from my constant growth DCF analysis of 9.5% is reasonable.

An alternative method to smooth skewed results within the group is to rely on the group median as opposed to the group average result. The median return estimate may be a better approximation of the central tendency of this proxy group because of these outlier (high and low) DCF estimates. My proxy group median return estimate is 9.54% as shown in my direct testimony Schedule MPG-4. Again, a balanced assessment of my constant growth DCF analysis indicates a fair return on equity for KCP&L GMO in this case of around 9.5%.

Q WHAT ARE DR. HADAWAY'S CONCERNS RELATED TO YOUR MULTI-STAGE GROWTH DCF ESTIMATE?

Dr. Hadaway takes issue with the GDP growth rate used as a sustainable long-term growth rate. He does not agree with the consensus of independent security analysts'

1		projections of long-term GDP growth rate that I used in my direct testimony. Instead,
2		he recommends using the GDP growth rate he projects in his testimony of 5.7%.
3	Q	IS DR. HADAWAY'S PROPOSAL TO USE HIS LONG-TERM GDP GROWTH RATE
4		IN LIEU OF THE CONSENSUS ECONOMISTS' LONG-TERM GDP GROWTH
5		RATE APPROPRIATE FOR ACCURATELY ESTIMATING KCP&L GMO'S
6		MARKET COST OF EQUITY IN THIS PROCEEDING?
7	Α	No. Dr. Hadaway's proposal is inappropriate for several reasons. First, the objective
8		of analyzing the current market cost of equity is to attempt to measure economic and
9		financial factors used by investors to value stocks. Hence, it is the market's general
0		expectation of future GDP growth which is relevant, not the individual opinion of
1		Dr. Hadaway or me.
2		My GDP growth forecast is based on consensus published independent
3		economists' projections of future GDP growth. This information is available to
4		investors, and likely used by investors to make investment decisions. In significant
5		contrast, Dr. Hadaway's GDP growth forecast is found only in his testimony and is
6		highly unlikely to be reflective of consensus investors and that used by investors to
7		value utility securities. It is known with certainty that Dr. Hadaway's GDP outlook is
8		far higher than the consensus of independent economists.
9		Dr. Hadaway's methodology is simply not a method that reliably captures the
20		consensus of investors' current outlooks. Therefore, he has not produced a reliable
21		estimate of the market's current cost of equity for assuming the investment risk of
22		KCP&L GMO and the proxy companies.
23		Second, Dr. Hadaway's method of estimating future GDP growth is tied to
24		historical actual realized GDP growth. Dr. Hadaway's analysis is unreliable because

he has not captured the expectation of changes in U.S. GDP growth going forward relative to the past. The U.S. economy is now facing significant competition from other countries around the world which likely will impact its growth going forward relative to the growth experienced in the past. Therefore, using only historical data to form expectations of the future, does not reflect likely changes in the world economic and competitive position, and, therefore, does not reflect the consensus of investors' outlooks.

8 Q WHAT IS A REASONABLE ESTIMATE OF A MULTI-STAGE GROWTH DCF

9 MODEL?

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Α Using the consensus analysts' GDP growth forecast rather than Dr. Hadaway's individual estimate, my multi-stage growth DCF model produces a 9.30% result as I indicated in my direct testimony. This is developed on my Schedule MPG-SR-1, page 13 3 of 5.

14 Q PLEASE DESCRIBE DR. HADAWAY'S CRITICISMS OF YOUR RISK PREMIUM 15 ANALYSIS.

Dr. Hadaway believes I have understated the equity risk premium because I have not relied on a simple inverse relationship between interest rates and equity risk Dr. Hadaway believes that if I would have embraced his proposed simplistic relationship, that the equity risk premium would consistently understate the Company's current cost of equity.

Q ARE DR. HADAWAY'S RISK PREMIUM ARGUMENTS ACCURATE?

Α

Α

No. The clear finding in academic research on equity risk premiums is that the relationship between interest rates and risk premiums changes over time based on a multitude of factors. Second, academic research concludes that the relationship between equity risk premiums and interest rates changes based on the perception of the risk difference between equity investments and fixed income investments, and not simply interest rates.

This relationship is not based on a simple inverse relationship between risk premiums and interest rates, but rather is tied to perceived risk differentials between the two competing investments, as described in my direct testimony.

Q PLEASE DESCRIBE THE ACADEMIC RESEARCH ON THE RELATIONSHIP BETWEEN EQUITY RISK PREMIUMS AND INTEREST RATES.

The academic literature on the inverse relationship between interest rates and equity risk premiums has observed that there has been a transient inverse relationship that was not tied to changes in nominal interest rates. It was caused by changes to perceived risk differentials between debt and equity investments. Further, the relationship between interest rates and equity risk premiums is not constant, but rather can change materially over time.

Most of the academic literature addressing this issue that I am familiar with is based on market data from the 1980s and very early 1990s. During the 1980s and very early 1990s, an inverse relationship did exist. However, that relationship did not exist prior to 1980, and it has not been shown to be the case since the early 1990s. For example, in a paper written by Eugene Brigham, Dilip K. Shome and Steve R.

1	Vinson, entitled "The Risk Premium Approach to Measuring a Utility's Cost of Equity,"
2	published in Financial Management/Spring 1985, the authors stated:
3 4 5 6 7 8 9	Any number of events could occur to cause the perceived riskiness of stocks versus bonds to change, but probably the most pervasive factor, over the 1966-1984 period, is related to inflation. Inflationary expectations are, of course, reflected in interest rates. Therefore, one might expect to find a relationship between risk premiums and interest rates. As we noted in our discussion of Exhibit 3, risk premiums were positively correlated with interest rates from 1966 through 1979, but, beginning in 1980, the relationship turned negative.
11	These academics found that there was a positive relationship between interest
12	rates and equity risk premiums before 1980, and an inverse relationship from
13	1980-1984. This study does not establish a consistent relationship between interest
14	rates and equity risk premiums over the entire period.
15	In the more recent, yet still outdated, study by Robert S. Harris and Felicia C.
16	Marston published in the Journal of Applied Finance - 2001, "The Market Risk
17	Premium: Expectational Estimates Using Analysts Forecasts," the authors expanded
18	an earlier study of risk premiums to cover the period of 1982-1998. In this study, the
19	authors did note a historical inverse relationship between equity risk premiums and
20	interest rates. However, the authors went into detail to explain why that historica
21	relationship was likely affected more by relative investment risk changes, and not
22	simply changes to nominal interest rates as Dr. Hadaway implies in his testimony
23	The authors state as follows:
24 25 26 27	The market risk premium changes over time and appears inversely related to government interest rates but is positively related to the bond yield spread, which proxies for the incremental risk of investing in equities as opposed to government bonds.
28	Importantly, the authors in that same study concluded as follows:
29 30 31	As a result, our evidence does not resolve the equity premium puzzle; rather, the results suggest investors still expect to receive large spreads to invest in equity versus debt instruments.

There is strong evidence, however, that the market risk premium
changes over time. Moreover, these changes appear linked to the
level of interest rates as well as ex ante proxies for risk drawn from
interest rate spreads in the bond market.

Clearly, the academic literature does not support a simplistic inverse relationship between interest rates and equity risk premiums. Rather, the authors of these studies recognize that equity risk premiums change with perceived changes in investment risk. Dr. Hadaway's simplistic analysis takes no account of changes to perceived risk, and inappropriately increases equity risk premiums for no other reason than a reduction in nominal interest rates.

11 Q ARE REDUCTIONS IN NOMINAL INTEREST RATES AN ADEQUATE REASON

FOR INCREASES TO EQUITY RISK PREMIUMS?

Α

No, they are not. Reductions to nominal interest rates are simply not an adequate reason for increases to equity risk premiums. Indeed, decreases to interest rates over the last ten years have been likely caused by reduced inflation expectations, which would decrease both bond interest rates and common equity required returns. Reduced inflation expectations alone should not change relative debt to equity investment risk, and thus would not cause equity risk premiums to increase. Consequently, Dr. Hadaway's proposal to reflect an inverse relationship between equity risk premiums and bond interest rates is flawed and unreliable, and it should be rejected.

22 Q USING DR. HADAWAY'S METHODOLOGY, WHAT DO YOU BELIEVE TO BE A 23 REASONABLE EQUITY RISK PREMIUM ESTIMATE IN THIS CASE?

Because spreads have widened between utility and Treasuries and "A" and "Baa" utility bond yields, I do agree with Dr. Hadaway that the equity risk premium in this

case should be higher than under more normal market conditions. Reflecting the high and low equity risk premium for my Treasury bond yield as developed on Schedule MPG-SR-1, page 4 of 5, would indicate a return on equity for KCP&L GMO in the range of 10.01% and 7.43%. Again, I recommend giving greater weight (75%) to the high-end estimate and 25% weight to the low-end estimate. Using this weighting scheme, I believe an equity risk premium over Treasury bonds indicates a fair return on equity of 9.37%.

Similarly, using the highest equity risk premium over utility bond yields, would indicate a return on equity in the range of 10.13% to 7.25% as developed on my Schedule MPG-SR-1, page 5 of 5. Giving more weight to the high-end estimate than the low-end estimate, I again believe a fair return on equity in this case would be 9.41%. Giving due consideration to a larger than normal equity risk premium in this case for greater risk securities would indicate a fair return on equity for KCP&L GMO in this case of 9.4%.

15 Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

16 A Yes.

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Summary of Updated Gorman ROE Results

		Gorman Analysis			
<u>Line</u>	Gorman Models	Direct (1)	Hadaway <u>Corrected</u> (2)		
	DCF Models				
1	Constant Growth DCF (Analysts' Growth)	9.46%	9.53%		
2	Constant Growth DCF (Sustainable Growth)	9.15%	NA		
3	Multi-Stage DCF	9.30%	9.30%		
4	DCF (Constant Growth DCF)	9.50%	9.40%		
	Risk Premium Average	9.10%			
5	Treasury		9.37%		
6	Utility		9.41%		
7	CAPM	8.50%	NA		
8	Average excluding CAPM (Recommended ROE)	9.30%	9.40%		

Source:

Gorman Constant Growth DCF Analysis (Excluding Outliers)

				Analysts'		Adjusted	Constant
Li	ine	Company	Price	Growth	Dividend	Yield	Growth DCF
			(1)	(2)	(3)	(4)	(5)
			()	()	(-)	` '	(-)
	1	ALLETE	\$40.45	5.40%	\$1.84	4.79%	10.19%
	2	Alliant Energy Co.	\$44.57	6.12%	\$1.80	4.29%	10.41%
	3	American Elec. Pwr.	\$39.03	3.86%	\$1.88	5.00%	8.86%
	4	Avista Corp.	\$26.03	4.72%	\$1.16	4.67%	9.39%
	5	Black Hills Corp	\$32.37	6.00%	\$1.48	4.85%	10.85%
	6	Cleco Corporation	\$40.96	3.00%	\$1.25	3.14%	6.14%
	7	DTE Energy Co.	\$57.28	4.38%	\$2.35	4.28%	8.66%
	8	Edison Internat.	\$44.67	2.22%	\$1.30	2.97%	5.19%
	9	Great Plains Energy	\$20.46	8.42%	\$0.87	4.61%	13.03%
1	10	Hawaiian Electric	\$27.34	7.46%	\$1.24	4.87%	12.33%
1	11	IDACORP	\$40.29	4.67%	\$1.32	3.43%	8.10%
1	12	Pinnacle West	\$49.65	5.67%	\$2.10	4.47%	10.14%
1	13	Portland General	\$25.67	4.28%	\$1.06	4.31%	8.59%
1	14	SCANA Corp.	\$46.69	4.69%	\$1.98	4.44%	9.13%
1	15	Sempra Energy	\$65.75	6.10%	\$2.40	3.87%	9.97%
1	16	Southern Co.	\$46.21	5.32%	\$1.96	4.47%	9.79%
1	17	Teco Energy, Inc.	\$17.77	4.37%	\$0.88	5.17%	9.54%
1	18	Vectren Corp.	\$29.24	5.00%	\$1.40	5.03%	10.03%
1	19	Westar Energy	\$28.90	5.79%	\$1.32	4.83%	10.62%
2	20	Wisconsin Energy	\$37.83	5.58%	\$1.20	3.35%	8.93%
2	21	Xcel Energy Inc.	\$27.77	4.94%	<u>\$1.04</u>	3.93%	<u>8.87%</u>
2	22	Average (Excl. Outliers)	\$37.02	5.41%	\$1.54	4.46%	9.53%
2	23	Median					9.54%

Source: Hadaway Rebuttal, Schedule SCH-9

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

				Eirot Stono						Third	Updated
			'	First Stage Growth		Saca	nd Stage Gi	owth		Stage Growth	Cost of
Line	Company	Price	Dividend	(EPS)	Year 6	Year 7	Year 8	Year 9	Year 10	(GDP)	Equity
LIIIC	<u>company</u>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		(1)	(2)	(0)	(+)	(0)	(0)	(,,	(0)	(5)	(10)
1	ALLETE	\$40.45	\$1.84	5.40%	5.32%	5.23%	5.15%	5.07%	4.98%	4.90%	9.82%
2	Alliant Energy Co.	\$44.57	\$1.80	6.12%	5.92%	5.71%	5.51%	5.31%	5.10%	4.90%	9.47%
3	American Elec. Pwr.	\$39.03	\$1.88	3.86%	4.03%	4.21%	4.38%	4.55%	4.73%	4.90%	9.64%
4	Avista Corp.	\$26.03	\$1.16	4.72%	4.75%	4.78%	4.81%	4.84%	4.87%	4.90%	9.52%
5	Black Hills Corp	\$32.37	\$1.48	6.00%	5.82%	5.63%	5.45%	5.27%	5.08%	4.90%	10.03%
6	Cleco Corporation	\$40.96	\$1.25	3.00%	3.32%	3.63%	3.95%	4.27%	4.58%	4.90%	7.71%
7	DTE Energy Co.	\$57.28	\$2.35	4.38%	4.47%	4.55%	4.64%	4.73%	4.81%	4.90%	9.06%
8	Edison Internat.	\$44.67	\$1.30	2.22%	2.67%	3.11%	3.56%	4.01%	4.45%	4.90%	7.43%
9	Great Plains Energy	\$20.46	\$0.87	8.42%	7.83%	7.25%	6.66%	6.07%	5.49%	4.90%	10.41%
10	Hawaiian Electric	\$27.34	\$1.24	7.46%	7.03%	6.61%	6.18%	5.75%	5.33%	4.90%	10.45%
11	IDACORP	\$40.29	\$1.32	4.67%	4.71%	4.74%	4.78%	4.82%	4.86%	4.90%	8.28%
12	Pinnacle West	\$49.65	\$2.10	5.67%	5.54%	5.41%	5.29%	5.16%	5.03%	4.90%	9.55%
13	Portland General	\$25.67	\$1.06	4.28%	4.38%	4.49%	4.59%	4.69%	4.80%	4.90%	9.06%
14	SCANA Corp.	\$46.69	\$1.98	4.69%	4.73%	4.76%	4.80%	4.83%	4.87%	4.90%	9.29%
15	Sempra Energy	\$65.75	\$2.40	6.10%	5.90%	5.70%	5.50%	5.30%	5.10%	4.90%	9.03%
16	Southern Co.	\$46.21	\$1.96	5.32%	5.25%	5.18%	5.11%	5.04%	4.97%	4.90%	9.47%
17	Teco Energy, Inc.	\$17.77	\$0.88	4.37%	4.46%	4.55%	4.64%	4.72%	4.81%	4.90%	9.93%
18	Vectren Corp.	\$29.24	\$1.40	5.00%	4.98%	4.97%	4.95%	4.93%	4.92%	4.90%	9.95%
19	Westar Energy	\$28.90	\$1.32	5.79%	5.64%	5.49%	5.35%	5.20%	5.05%	4.90%	9.96%
20	Wisconsin Energy	\$37.83	\$1.20	5.58%	5.47%	5.35%	5.24%	5.13%	5.01%	4.90%	8.37%
21	Xcel Energy Inc.	\$27.77	\$1.04	4.94%	4.93%	4.93%	4.92%	4.91%	4.91%	4.90%	8.84%
22	Average	\$37.57	\$1.52	5.14%	5.10%	5.06%	5.02%	4.98%	4.94%	4.90%	9.30%
23	Median										9.47%

Source:

Update of Gorman Risk Premium Analysis - Proj. Treasury Bond

<u>Line</u>	<u>Year</u>	Treasury <u>Bond Yield</u> (1)	Authorized Electric <u>Returns</u> (2)	Indicated Risk <u>Premium</u> (3)
1	1986	7.80%	13.93%	6.13%
2	1987	8.58%	12.99%	4.41%
3	1988	8.96%	12.79%	3.83%
4	1989	8.45%	12.97%	4.52%
5	1990	8.61%	12.70%	4.09%
6	1991	8.14%	12.55%	4.41%
7	1992	7.67%	12.09%	4.42%
8	1993	6.60%	11.41%	4.81%
9	1994	7.37%	11.34%	3.97%
10	1995	6.88%	11.55%	4.67%
11	1996	6.70%	11.39%	4.69%
12	1997	6.61%	11.40%	4.79%
13	1998	5.58%	11.66%	6.08%
14	1999	5.87%	10.77%	4.90%
15	2000	5.94%	11.43%	5.49%
16	2001	5.49%	11.09%	5.60%
17	2002	5.43%	11.16%	5.73%
18	2003	4.96%	10.97%	6.01%
19	2004	5.05%	10.75%	5.70%
20	2005	4.65%	10.54%	5.89%
21	2006	4.99%	10.36%	5.37%
22	2007	4.83%	10.36%	5.53%
23	2008	4.28%	10.46%	6.18%
24	2009	4.07%	10.48%	6.41%
25	2010	4.25%	10.34%	6.09%
26	2011	<u>3.91%</u>	<u>10.22%</u>	<u>6.31%</u>
27	Average	6.22%	11.45%	5.23%
28	Max			6.41%
29	Min			3.83%
20				0.0070
	INDICATED CO	OST OF EQUITY		
30		REASURY BOND YIELD	3.60%	3.60%
31		OND Risk Premium	6.41%	3.83%
32	Cost of Equity		10.01%	7.43%
52	JOSE OF Equity		10.01/0	1.73/0
33	Weight		0.75	0.25
34	Weighted Com	ponent	7.51%	1.86%
35	Recommende	d	9.37%	

Source:

Update of Gorman Risk Premium Analysis - Utility Bond

		Moody's "A" Rated Public Utility	Authorized Electric	Indicated Risk
<u>Line</u>	<u>Year</u>	Bond Yield	<u>Returns</u>	<u>Premium</u>
		(1)	(2)	(3)
1	1986	9.58%	13.93%	4.35%
2	1987	10.10%	12.99%	2.89%
3	1988	10.49%	12.79%	2.30%
4	1989	9.77%	12.97%	3.20%
5	1990	9.86%	12.70%	2.84%
6	1991	9.36%	12.55%	3.19%
7	1992	8.69%	12.09%	3.40%
8	1993	7.59%	11.41%	3.82%
9	1994	8.31%	11.34%	3.03%
10	1995	7.89%	11.55%	3.66%
11	1996	7.75%	11.39%	3.64%
12	1997	7.60%	11.40%	3.80%
13	1998	7.04%	11.66%	4.62%
14	1999	7.62%	10.77%	3.15%
15	2000	8.24%	11.43%	3.19%
16	2001	7.76%	11.09%	3.33%
17	2002	7.37%	11.16%	3.79%
18	2003	6.58%	10.97%	4.39%
19	2004	6.16%	10.75%	4.59%
20	2005	5.65%	10.54%	4.89%
21	2006	6.07%	10.36%	4.29%
22	2007	6.07%	10.36%	4.29%
23	2008	6.53%	10.46%	3.93%
24	2009	6.04%	10.48%	4.44%
25	2010	5.46%	10.34%	4.88%
26	2011	5.04%	10.22%	5.18%
20	2011	3.0470	10.22 /0	3.1070
27	Average	7.64%	11.45%	3.81%
28	Max			5.18%
29	Min			2.30%
29	WIIII			2.30 /6
	INDICATED	COST OF FOURTY		
20		COST OF EQUITY	4.050/	A 050/
30		Baa" UTILITY BOND YIELD	4.95%	4.95%
31	Utility Risk Pr		<u>5.18%</u>	<u>2.30%</u>
32	Cost of Equi	ty	10.13%	7.25%
33	Weight		0.75	0.25
34	Weighted Co	mponent	7.60%	1.81%
35	Recommend	lod T	9.41%	
33	Recommend	leu _	J.4170	

Source: