

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

In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service)
Case No. ER-2018-0145)
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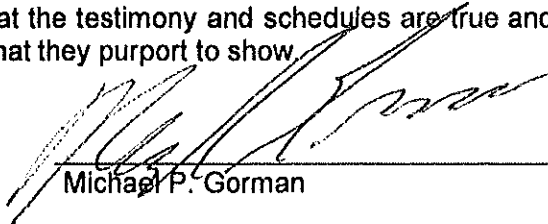
In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service)
Case No. ER-2018-0146)
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STATE OF MISSOURI)
) SS
COUNTY OF ST. LOUIS)

Affidavit of Michael P. Gorman

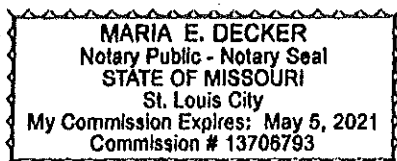
Michael P. Gorman, being first duly sworn, on his oath states:

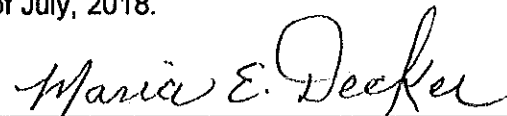
1. My name is Michael P. Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Missouri Energy Consumers Group in this proceeding on their behalf.
2. Attached hereto and made a part hereof for all purposes are my rebuttal testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case Nos. ER-2018-0145 and ER-2018-0146.
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 P. Gorman

Subscribed and sworn to before me this 27th day of July, 2018.





Notary Public

1 requested return on equity and overall rate of return. I will also respond to KCPL /
2 GMO witness Robert Hevert's proposed return on equity.

3 My silence in regard to any issue should not be construed as an endorsement
4 of KCPL / GMO's position.

5 I. GENERAL COMMENTS

6 **Q DO YOU HAVE ANY GENERAL COMMENTS ABOUT THE RETURNS ON EQUITY**
7 **RECOMMENDED BY STAFF AND THE COMPANIES AS WELL AS THE EFFECT**
8 **THAT IT WILL HAVE ON KCPL / GMO CUSTOMERS?**

9 **A** Yes. Staff and the Companies both recommend that the Commission authorize a
10 return on equity of 9.85%. The unreasonable nature of these recommendations is
11 demonstrated by my return on equity analyses, but more significantly by the fact that
12 KCPL has agreed that a return on equity of 9.30% is reasonable for its Kansas
13 operations.¹ The difference in revenue requirement associated with increasing the
14 return on equity from 9.30% to 9.85% is approximately \$16.7 million, for Missouri
15 retail operations. An unwarranted increase in the return on equity will further
16 exacerbate KCPL's uncompetitive rates.

17 As reflected in Mr. Meyer's direct testimony, where the national average
18 electric rate has increased by 32% since 2006, KCPL's average electric rate has
19 increased by 97%. Thus, while KCPL's average electric rate was 31% below the
20 national average in 2006, KCPL's rates are now above the national average.
21 Interestingly, at the same time that it is requesting an inflated return on equity, KCPL
22 also registers concerns with the competitiveness of its commercial and industrial
23 rates. (See, Lutz Direct, page 6). Recommendations such as those advanced by

¹In fact, as reflected in the Supplemental Direct Testimony of Mr. Ives in the KCPL Kansas rate case, KCPL has voluntarily reflected the 9.3% return on equity in its rate case.

1 Staff and the Companies with regards to return on equity will further hinder the KC
2 economy's ability to attract and retain business.

3 **Q DO YOU BELIEVE THERE IS A DIFFERENCE IN OPERATING RISK IN KANSAS**
4 **VERSUS MISSOURI THAT JUSTIFIES A DIFFERENT RETURN ON EQUITY?**

5 A No. In Kansas, KCPL has a transmission cost rider and a property tax surcharge that
6 decrease cost recovery risk. In Missouri, the General Assembly has recently
7 authorized the use of plant in-service accounting for electric utilities, which also
8 reduces cost recovery risk. In aggregate, regulatory risk between these jurisdictions
9 is comparable.

10 Moreover, the concessions agreed to by KCPL in the context of the recent
11 Kansas merger case place additional risk on KCPL in Kansas that is not present in
12 Missouri. For instance, KCPL has agreed to a five-year moratorium in Kansas.
13 Additionally, KCPL has agreed to minimum annual credits to customers during the
14 term of that moratorium as well as a sharing of any earnings above the 9.30% return
15 on equity. As the Kansas Commission Staff readily recognizes, these merger
16 concessions "presents additional risks to shareholders." Recognizing that KCPL
17 does not face similar risks in Missouri, the Missouri return on equity should actually
18 be lower than the Kansas return on equity, not higher as proposed by Staff and the
19 Companies.

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1 **II. RESPONSE TO STAFF RECOMMENDED RETURN ON EQUITY**

2 **II.A. Recommended Return on Equity**

3 **Q WHAT RETURN ON EQUITY IS STAFF PROPOSING TO USE TO DEVELOP**
4 **KCPL'S AND GMO'S OVERALL RATE OF RETURN?**

5 **A** While proposing a range of 9.0% to 10.0%, Staff recommends a return on common
6 equity of 9.85% as a fair and reasonable return on equity for setting KCPL / GMO's
7 rates. In reaching this conclusion, Staff considered the following findings:

- 8 1. Staff observed the last authorized return on equity for KCPL and GMO, 9.5% in its
9 2016 rate case in Case No. ER-2016-0285, and concluded that its DCF supports
10 increasing this return by 25 basis points to 9.75%.²
- 11 2. Staff observed that the authorized return on equity was 9.8% in the Spire Missouri
12 rate cases, Case Nos. GR-2017-0215 and GR-2017-0216.³
- 13 3. Staff noted that the industry allowed return on equity is in the range of 9.74% to
14 9.77%.⁴

15 **Q DO YOU HAVE ANY GENERAL POLICY COMMENTS ON STAFF'S**
16 **RECOMMENDED RETURN ON EQUITY IN THIS PROCEEDING?**

17 **A** Yes. I will comment on the specific factors Staff cites in support of its
18 recommendation to increase KCPL / GMO's return on equity in this proceeding below.
19 However, I believe there are relevant policy issues that should also be considered in
20 assessing an appropriate return on equity for this rate case. More specifically, the
21 Commission recently approved the Great Plains Energy application to merge with
22 Westar. As part of that merger approval the Joint Applicants, including KCPL and
23 GMO, made certain representations to the Commission about the benefits of the
24 proposed transaction. Those included the following:

²Staff Report, ER-2018-0145/ER-2018-0146 at 5.

³*Id.* at 4.

⁴*Id.* at 12.

- 1 1. The merger will create a stronger combined company with more customers, more
2 diversification, no transaction-related merger debt, and the prospects for higher
3 earnings growth rates for both GPE and Westar. Indeed, as a result of the
4 merger transaction, KCPL's and GMO's bond ratings were increased from BBB+
5 to A- by both Moody's and Standard & Poor's.

- 6 2. The Applicants represented that the merger provided an opportunity to reduce the
7 upward pressure on customers' rates from increasing cost and exacerbated by
8 flat or declining customer usage. Staff's recommendation runs counter to this
9 commitment.

- 10 3. The Applicants plan to undertake an integrated planning effort to develop a
11 business plan to create efficiencies that were expected to reduce its cost of
12 service. Indeed, this integration planning was believed to have the opportunity to
13 create merger-related savings of \$28 million in 2018, and increasing to
14 \$160 million for years 2022 and beyond.

- 15 4. As a method to incent customers from receiving benefits due to the combined
16 merger, the Applicants pledged to make merger-related credits to Missouri
17 customers in the amount of \$14.9 million to KCPL customers, and \$14.2 million to
18 GMO customers. Staff's recommended return on equity reverses this customer
19 benefit.

- 20 5. The Applicants also insisted that the merger would serve to reduce cost of service
21 and delay rate increases to retail customers. (Final Order No. EM-2018-0012,
22 paragraphs 15-24).

23 It is important to recognize that Staff's inflated return on equity is inconsistent
24 with these representations in the merger case. Specifically, the merger results in a
25 combined company with less risk than the predecessor company. Nevertheless,
26 despite the decreased risk, Staff proposes to increase the return on equity. This is
27 completely inconsistent with the basic tenets of finance as well as the Applicants'
28 assertion that the merger would reduce the upward pressure on rates. The
29 Applicants have started to deliver on the merger commitments, and KCPL / GMO's
30 Standard & Poor's ("S&P") bond rating has been upgraded, which should lower their
31 cost of capital. Nevertheless, Staff's position will set rates in this case, a rate
32 proceeding only months after the Commission approved the merger stipulation, and
33 increase KCPL / GMO's revenue requirement by approximately \$10.6 million per
34 year, by increasing KCPL / GMO's authorized return on equity from 9.5% previously

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1 authorized to these utilities, up to 9.85% in this proceeding. This position has the
2 practical effect of reversing one of the primary customer benefits of the merger
3 agreement (the upfront payment of merger-related credits) and will result in
4 customers paying back these merger-related credits in approximately a three-year
5 period. Staff's recommendation should be denied.

6 **Q DO YOU BELIEVE THAT ECONOMIC FACTORS JUSTIFY STAFF'S PROPOSAL**
7 **TO INCREASE KCPL / GMO'S AUTHORIZED RETURN ON EQUITY TO 9.85% AS**
8 **COMPARED TO THE 9.5% IN ITS LAST RATE CASE?**

9 **A** No. As reflected more thoroughly in the following questions, my response to Staff
10 includes the following:

- 11 1. A change in DCF returns in this case compared to the last case does not support
12 a 35 basis point increase in the authorized return on equity for KCPL / GMO.
13 Indeed, reviewing the Companies' and Staff's DCF models in both cases
14 demonstrates that no increase is warranted. Instead, a properly constructed DCF
15 analysis actually justifies a decrease from the 9.5% authorized in the last case.
- 16 2. The authorized return on equity for Spire Missouri was an outlier within the
17 industry when it was made, and, contrary to Staff's reliance on that return on
18 equity authorization, would not result in a return on equity for KCPL / GMO that
19 balances the interests of investors and customers. Indeed, this return on equity is
20 substantially higher than that awarded to gas utilities and integrated electric utility
21 companies in 2018. A 9.85% return on equity is simply an above market return.
- 22 3. An updated analysis of authorized returns on equity for the electric utility industry
23 shows that a majority of these authorized returns have actually been at 9.5% or
24 lower since 2016, the date of KCPL's / GMO's last rate order. This observable
25 market evidence, in concert with a recent credit upgrade and stable credit outlook,
26 as well as access to significant amounts of capital, is clear evidence that a return
27 on equity of no higher than 9.5% is appropriate. Indeed, these facts in concert
28 with observable market evidence, show that an authorized return on equity below
29 9.5% would be appropriate in this case.

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1 Q WHY DO YOU BELIEVE THAT THE DCF STUDIES PERFORMED BY BOTH THE
2 COMPANIES AND STAFF DO NOT SUPPORT AN INCREASED AUTHORIZED
3 RETURN ON EQUITY FOR KCPL / GMO IN THIS CASE COMPARED TO THEIR
4 LAST CASE?

5 A As shown on my Schedule MPG-R-1, I compare the results of the Companies' rate of
6 return methodologies offered by Mr. Hevert in direct and rebuttal testimonies in
7 KCPL / GMO's last rate case compared to those in his direct testimony in this case.

8 As shown on this schedule, a comparison of Mr. Hevert's DCF results in the
9 last case shows that KCPL / GMO's cost of equity is lower now than it was at the time
10 of its last case. In his constant growth DCF study and multi-stage growth DCF
11 models, the DCF returns are lower now than they were in the last rate case.
12 Specifically, while the constant growth and multi-stage growth DCF analyses resulted
13 in a return of equity of 8.86% and 9.24%, respectively, in the last case, the same
14 analyses only resulted in a return on equity of 8.32% and 8.75%, respectively, in this
15 case. This same phenomenon is also reflected in the risk premium analyses. While,
16 Mr. Hevert's ex-ante risk premium is slightly higher in this case, his bond yield plus
17 risk premium study is actually lower than the same study in the last case. Finally, Mr.
18 Hevert's CAPM results using both Bloomberg and *Value Line* betas are virtually
19 identical in this case as to the last case. Overall, most of Mr. Hevert's market models
20 in this case show a reduction in the return on equity in this case as compared to the
21 last case, with only the ex-ante risk premium showing any noticeable increase as
22 compared to the last case. Clearly, these models do not support an increase in the
23 authorized return on equity for KCPL and GMO in this proceeding.

1 Q DO STAFF METHODOLOGIES IN THIS CASE, COMPARED TO THE
2 METHODOLOGIES IN KCPL / GMO'S LAST RATE CASE, SUPPORT AN
3 INCREASE IN THE AUTHORIZED RETURN ON EQUITY?

4 A No. In the last case, Staff presented a DCF return range of 8.45% to 8.75%.⁵ In this
5 case, Staff's DCF methodologies indicate a return range of 7.46% to 8.26%.⁶ In the
6 last case, Staff's CAPM indicated a return of 7.9%, and in this case it is between
7 6.11% and 7.01%.⁷ Clearly then, Staff's methodologies actually demonstrate that the
8 Companies' return on equity should be reduced. Neither the Companies' nor the
9 Staff's methodologies in this case, relative to their findings in the last rate case,
10 indicate that KCPL / GMO's authorized return on equity has increased in this case
11 relative to the last case.

12 Q PLEASE DESCRIBE THE EVIDENCE YOU HAVE ON AUTHORIZED RETURNS
13 ON EQUITY FOR INTEGRATED ELECTRIC UTILITY COMPANIES THROUGH THE
14 SECOND QUARTER OF 2018 AND WHY YOU BELIEVE THAT THIS
15 DEMONSTRATES THAT AUTHORIZED RETURNS ON EQUITY HAVE NOT
16 INCREASED SINCE KCPL / GMO'S LAST RATE CASE.

17 A As shown on my attached Schedule MPG-R-2, the averaged authorized return for
18 electric utility companies in 2016 was 9.6%, which reasonably aligned with KCPL /
19 GMO's authorized return on equity of 9.5%. While the returns increased slightly in
20 2017, they have since declined below the level seen in 2016. This schedule shows a
21 greater acceptance of authorized returns on equity for electric utility companies.
22 Specifically, the industry average return on equity has been declining, but so too is

⁵Staff Report, ER-2016-0285 at 43, Table 3.

⁶Staff Report, ER-2018-0145 at 11-12.

⁷*Id.*

1 the frequency of authorized returns falling in the low end of total observations each
2 year. For example, in 2016, approximately half of the authorized returns on equity
3 were above 9.7%, with the other half below 9.7%. In 2017, approximately two-thirds
4 of authorized returns on equity were at 9.7% or less, with only one-third above 9.7%,
5 and in 2018, again approximately two-thirds of authorized returns on equity were
6 9.7% or less, with only one-third being above 9.7%.

7 More generally, the descriptions of authorized returns on equity also advise
8 investors that returns on equity have been declining, and now are generally and
9 predominantly around 9.5%. Specifically, *Regulatory Research Associates* describes
10 that the average authorized return on equity for electric utilities was 9.58% in the first
11 half of 2018, which was a decrease from the 9.68% during the full calendar year
12 2017.

13 Staff's proposal to increase KCPL / GMO's authorized return on equity in this
14 case, compared to the 2016 KCPL / GMO rate case, which was decided in May of
15 2017, is in diametric opposition to the trend in authorized returns on equity for electric
16 utility companies.

17 **Q WHY DO YOU BELIEVE THAT THE 9.8% AUTHORIZED RETURN ON EQUITY**
18 **FOR SPIRE MISSOURI WAS AN INDUSTRY OUTLIER AT THE TIME THE**
19 **COMMISSION AWARDED THIS RETURN ON EQUITY?**

20 **A** As shown below in Table 1, I have outlined the authorized returns on equity for
21 regulated gas utilities that were made in 2018. As shown in Table 1 below, out of the
22 13 observations, 7 of them were 9.5% or lower, and of the 6 at the high-end of the
23 range, 3 were from Missouri at 9.8%.

TABLE 1
Gas Utility
Authorized Returns on Equity
2018

<u>Line</u>	<u>Utility</u>	<u>Jur.</u>	<u>Order Date</u>	<u>Awarded</u>
1	Pivotal Utility Holdings, Inc.	FL	Mar 26 2018	10.19%
2	Spire Missouri Inc.	MO	Feb 21 2018	9.80%
3	Missouri Gas Energy	MO	Feb 21 2018	9.80%
4	Liberty Utilities (Midstates Natural Gas) Corp	MO	Jun 6 2018	9.80%
5	Northern Illinois Gas Company	IL	Jan 31 2018	9.80%
6	Atmos Energy Corporation	KY	May 3 2018	9.70%
7	Northern Utilities, Inc.	ME	Feb 28 2018	9.50%
8	Northern Utilities, Inc.	NH	May 2 2018	9.50%
9	Avista Corporation	WA	Apr 26 2018	9.50%
10	MDU Resources Group, Inc.	MT	May 29 2018	9.40%
11	Liberty Utilities (EnergyNorth Natural Gas) Corp.	NH	Apr 27 2018	9.30%
12	Niagara Mohawk Power Corporation	NY	Mar 15 2018	9.00%
13	Central Hudson Gas & Electric Corporation	NY	Jun 14 2018	8.80%
14	Average			9.55%
15	Median			9.50%

Source: S&P Global Market Intelligence, Regulatory Research Associates, "Major Rate Case Decisions: January - June 2018," July 17, 2018.

1 Had the Missouri Commission awarded a return on equity in line with market
2 evidence of Spire's market cost of equity in 2018, an overwhelming majority of the
3 industry-authorized returns on equity would have been at 9.5% or lower. Decisions in
4 Missouri clearly awarded returns on equity that were outliers relative to the rest of the
5 industry.

6 **II.B. Staff Comments on Capital Market Data**

7 **Q DID STAFF OBSERVE CERTAIN ECONOMIC CHANGES SINCE KCPL / GMO'S**
8 **LAST RATE CASE COMPARED TO THE CURRENT CASE?**

9 **A Yes.** At page 6 of its report, Staff observed that the 30-year Treasury bond yield was
10 around 2.9% in 2017. That increased to about 3.04% on average throughout the first
11 four months of 2018. During this same time period, Staff observed that average

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1 public utility rated bond yields in 2017 were around 4.07%, whereas they averaged
2 around 4.13% during the first four months of this year. Staff then observed the
3 spread between Treasury bonds and utility bond yields has decreased in 2018
4 relative to 2017, from 1.17% to 1.09%.

5 Staff also observed an increase in the Federal Funds Rate from around 0.25%
6 to 0.50% throughout most of 2016, to a rate of around 1.50% to 1.75% in March of
7 2018. Staff also observed historical real Gross Domestic Product ("GDP") in 2017
8 compared to 2018, and noted a slight uptick during the first four months of 2018.

9 **Q DOES THIS MARKET DATA SUPPORT STAFF'S PROPOSAL TO INCREASE**
10 **KCPL / GMO'S AUTHORIZED RETURN ON EQUITY IN THIS CASE?**

11 **A** No. Market data does reflect an increase in the Federal Funds Rate, which is a
12 relatively short interest rate instrument. While short-term interest rates have been
13 moving up, long-term interest rates have not. This has caused a relative flattening of
14 the yield curve.

15 Staff's reliance on the Federal Funds rate is misplaced. The cost of common
16 equity follows the long end of the yield curve, not the overnight rate as measured by
17 the Federal Funds Rate.

18 Also, while Treasury yields have been increasing, long-term interest rates for
19 utility bonds have remained fairly stable over the last few years. This is an indication
20 of the market's appetite for higher risk securities. This has the effect of shrinking the
21 spread between a corporate bond yield and a Treasury bond yield, because the
22 market is increasingly demanding higher yielding securities, which is causing a
23 shrinking of this yield spread. However, utility security costs have simply not
24 increased significantly since KCPL / GMO's last rate case.

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1 All of this market data does not support Staff's belief that KCPL / GMO's cost
2 of capital has increased since their last rate case.

3 **II.C. Staff Market Cost of Equity Estimates**

4 Q DO STAFF'S ESTIMATES OF A FAIR MARKET COST OF COMMON EQUITY FOR
5 KCPL AND GMO SUPPORT A RETURN ON EQUITY OF 9.85% IN THIS
6 PROCEEDING?

7 A No. Staff's market cost of equity for KCPL and GMO is estimated based on the
8 following:

TABLE 2	
<u>DCF Results</u>	
<u>Description</u>	<u>Amount</u>
DCF	7.46% - 8.26%
CAPM	6.11% - 7.01%

Source: June 19, 2018 Staff Report at pages 11 and 12.

9 Staff's estimates of the market-based cost of equity indicate that KCPL and
10 GMO's current market cost of equity is no higher than 8.26%.

1 **III. RESPONSE TO MR. ROBERT HEVERT**

2 **III.A. Summary of Rebuttal**

3 **Q WHAT RETURN ON COMMON EQUITY IS KCPL / GMO PROPOSING FOR THIS**
4 **PROCEEDING?**

5 **A** KCPL / GMO have requested a return on equity of 9.85% based on the
6 recommended range of 9.75% to 10.50% sponsored by their witness, Mr. Robert
7 Hevert.⁸ His recommended return on equity is based on: (1) a constant growth
8 Discounted Cash Flow ("DCF") analysis, (2) a multi-stage growth DCF analysis, (3) a
9 traditional Capital Asset Pricing Model ("CAPM"), and (4) a Bond Yield Plus Risk
10 Premium methodology.

11 **Q ARE MR. HEVERT'S RETURN ON EQUITY ESTIMATES REASONABLE?**

12 **A** No. Mr. Hevert's estimated return on equity is overstated and should be rejected.
13 Mr. Hevert's analyses produce excessive results for various reasons, including the
14 following:

- 15 1. His constant growth DCF result is based on unsustainably high growth rates.
- 16 2. His multi-stage growth DCF is based on:
 - 17 a. an unrealistic long-term Gross Domestic Product ("GDP") growth estimate that
18 is not aligned with market participants' outlooks;
 - 19 b. a manipulated dividend payout ratio adjustment; and
 - 20 c. a terminal stock price that is produced by an unjustified price-to-earnings
21 ("P/E") ratio assumption.
- 22 3. His CAPM is based on inflated market risk premiums; and
- 23 4. His Bond Yield Plus Risk Premium studies are based on inflated utility equity risk
24 premiums.

⁸Hevert Direct at 4 and 68.

1 Q PLEASE SUMMARIZE MR. HEVERT'S RETURN ON EQUITY ESTIMATES.

2 A Mr. Hevert's return on equity estimates are summarized in Table 3 below. In
3 Column 2, I show the results with prudent and sound adjustments to correct the flaws
4 referenced above. With such adjustments to his proxy group's DCF, CAPM, and Risk
5 Premium return estimates, Mr. Hevert's own studies show that my 9.30%
6 recommended return on equity for KCPL / GMO is reasonable.

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TABLE 3

Hevert's Return on Equity Estimates

Description	Mean ¹ (1)	Adjusted ² (2)
<u>Constant Growth DCF</u>		
30-Day Average	8.28%	8.28%
90-Day Average	8.31%	8.31%
180-Day Average	<u>8.38%</u>	<u>8.38%</u>
Average Constant Growth DCF	8.32%	8.32%
<u>Multi-Stage DCF – Gordon Model</u>		
30-Day Average	8.70%	8.01%
90-Day Average	8.74%	8.05%
180-Day Average	<u>8.81%</u>	<u>8.13%</u>
Average	8.75%	8.06%
<u>Multi-Stage DCF – Terminal P/E</u>		
30-Day Average	9.36%	8.01%
90-Day Average	9.46%	8.05%
180-Day Average	<u>9.67%</u>	<u>8.13%</u>
Average	9.50%	8.06%
DCF Range	8.3% to 9.5%	8.1% to 8.3%
<u>CAPM Results (Bloomberg Beta)</u>		
Current 30-Yr Treasury (BL – 2.77%)	8.95%	7.10%
Current 30-Yr Treasury (VL – 2.77%)	9.45%	7.10%
Near-Term Projected 30-Yr Treasury (BL – 3.32%)	9.50%	7.64%
Near-Term Projected 30-Yr Treasury (VL – 3.32%)	9.99%	7.64%
<u>CAPM Results (Value Line Beta)</u>		
Current 30-Yr Treasury (BL – 2.77%)	10.61%	8.25%
Current 30-Yr Treasury (VL – 2.77%)	11.24%	8.25%
Near-Term Projected 30-Yr Treasury (BL – 3.32%)	11.15%	8.80%
Near-Term Projected 30-Yr Treasury (VL – 3.32%)	11.78%	8.80%
<u>Risk Premium</u>		
Current 30-Yr Treasury (2.77%)	9.95%	8.87%
Near-Term Projected 30-Yr Treasury (3.32%)	10.01%	9.42%
Long-Term Projected 30-Yr Treasury (4.20%)	10.25%	Reject
<u>Alternative Risk Premium</u>		
Current 30-Yr Treasury (2.77%, revised to 3.09%)	9.61%	Reject
Near-Term Projected 30-Yr Treasury (3.32%)	9.59%	Reject
Long-Term Projected 30-Yr Treasury (4.20%)	9.70%	Reject
Range	9.75% to 10.50%	8.4% to 9.7%
Recommended ROE	9.85%	9.30%

Sources: ¹Hevert Direct at 24, 32, 37 and 40; Schedules RBH-1 through RBH-7.²Schedule MPG-R-3.

1 **III.B. Hevert DCF**

2 **III.B.1. Hevert Constant Growth DCF**

3 Q PLEASE DESCRIBE MR. HEVERT'S CONSTANT GROWTH DCF RETURN
4 ESTIMATES.

5 A His constant growth DCF returns are developed on his Schedule RBH-1.
6 Mr. Hevert's constant growth DCF models are based on consensus growth rates
7 published by Zacks and First Call and individual growth rate projections made by
8 *Value Line*.

9 Mr. Hevert relied on dividend yield calculations based on average stock prices
10 over three different time periods: 30-day, 90-day, and 180-day ending December 29,
11 2017 – all reflecting one-half year dividend growth adjustments.

12 Q ARE THE CONSTANT GROWTH DCF RESULTS PRODUCED BY MR. HEVERT
13 REASONABLE?

14 A Mr. Hevert's constant growth DCF mean results generally support a return on equity
15 no higher than 8.4%, which is similar to the results of my constant growth DCF study
16 discussed in my direct testimony.

17 Similar to my constant growth DCF result, Mr. Hevert's constant growth DCF
18 return estimates are reasonable high-end estimates because they are based on a
19 proxy group average growth rate of 5.04%. Recognizing that this growth rate is
20 higher in comparison to the consensus economists' long-term GDP growth of 4.20%,
21 Mr. Hevert's constant growth DCF return estimates should be considered as a
22 reasonable high-end estimate of the current market cost of equity.

1 **III.B.2. Hevert Multi-Stage Growth DCF**

2 **Q DID MR. HEVERT PERFORM A MULTI-STAGE GROWTH DCF ANALYSIS?**

3 A Yes, he did. Mr. Hevert developed two multi-stage DCF analyses. The first one, his
4 Gordon Model multi-stage DCF model incorporates a long-term steady-state growth
5 rate of 5.38%.⁹ In addition, this model is based on a flawed long-term payout
6 assumption. Specifically, Mr. Hevert assumes that the long-term projected payout
7 ratio will converge to the industry average dividend payout.

8 His second, terminal P/E DCF model, expands the Gordon model outlined
9 above, to also incorporate terminal price using the P/E ratio for each company in the
10 proxy group at 23x.

11 **Q WHAT ISSUES DO YOU HAVE WITH MR. HEVERT'S MULTI-STAGE GROWTH**
12 **DCF ANALYSES?**

13 A Mr. Hevert's multi-stage growth DCF analyses are impacted by various assumptions,
14 all of which produce a DCF return estimate that is simply inflated.

15 First, as I will discuss in detail below, I believe Mr. Hevert's multi-stage growth
16 DCF model is unreliable because he relied on a long-term GDP growth rate that does
17 not reflect consensus market participant outlooks for future GDP growth.

18 Second, the inflation of the multi-stage growth DCF results largely reflects
19 assumptions and inputs made by Mr. Hevert to manipulate dividend payout ratios and
20 hence cash flow projections during the transitional stage of his model. His dividend
21 payout assumption is flawed and simply inflates dividend payments and DCF results.

22 Finally, his terminal value P/E ratio is arbitrarily based on a flawed assumption
23 that the proxy group P/E ratio will not change as the growth rate outlook changes.

⁹Hevert Direct at 28-29.

1 Mr. Hevert's terminal P/E ratio assumption is not consistent with his long-term growth
2 rate assumption, and has the effect of further inflating his multi-stage growth DCF
3 return estimate.

4 The manipulative effect of these multi-growth DCF study assumptions is
5 clearly illustrated by Mr. Hevert's inflated results. For example, his Terminal P/E
6 Method results are 120 basis points higher than his constant growth DCF results.
7 This is simply not reliable and the results are highly inflated.

8 **Q HOW DID MR. HEVERT CALCULATE A LONG-TERM GROWTH RATE?**

9 A Mr. Hevert relied on the long-term historical real GDP growth of 3.22%, as measured
10 over the period 1929 through 2016, and a forward inflation rate outlook of 2.09%. Mr.
11 Hevert's forward inflation rate outlook is based on two projections. First, he derived
12 an inflation rate outlook of 1.97% based on the average of the 30-day average spread
13 between the yields on long-term nominal Treasuries and long-term Treasury
14 Inflation-Protected Securities ("TIPS"). Second, he used the Consumer Price Index
15 ("CPI") projection for 2024-2028 of 2.20% from *Blue Chip Financial Forecasts*. The
16 midpoint inflation rate outlook is 2.09% (1.97% to 2.20%).

17 Using an inflation factor of 2.09% and an historical real GDP growth of 3.22%,
18 Mr. Hevert produced a nominal GDP growth rate outlook of 5.38%.¹⁰

19 **Q IS MR. HEVERT'S LONG-TERM GROWTH RATE ESTIMATE OF 5.38%**
20 **REASONABLE?**

21 A No. The methodology used by Mr. Hevert to calculate this growth rate is not based
22 on market participants' outlooks for future GDP growth. Therefore, Mr. Hevert's GDP

¹⁰*Id.*, [1.0322 x 1.0209 – 1].

1 growth rate projection simply is an outlier from the consensus of economists'
2 projections of future GDP growth. It is generally recognized that it is better to use the
3 information utilized by investors in making their investment decisions. In this light, the
4 information published by a consensus of economists is much more reliable than that
5 produced by a single individual like Mr. Hevert. As such, Mr. Hevert's projections do
6 not reasonably reflect investors' outlooks that were used to make investment
7 decisions.

8 **Q WHY DO MR. HEVERT'S GDP GROWTH PROJECTIONS NOT ALIGN WITH**
9 **INDEPENDENT MARKET PARTICIPANTS' GDP GROWTH PROJECTIONS?**

10 **A** Mr. Hevert's long-term growth rate of 5.38% is based on the historical real GDP
11 growth rate of 3.22% and projected inflation. This historical real GDP growth rate of
12 3.22% is considerably higher than the real GDP growth projection of 2.1% provided
13 by consensus economists and published in the *Blue Chip Financial Forecasts*, and
14 also by most, if not all, market participants that are projecting real GDP going forward
15 to be 2.1% or less as outlined in my Table 4 below.

16 In order to measure the current market cost of equity demanded by investors
17 in today's marketplace, it is necessary to reasonably capture the outlooks by
18 investors that have formed evaluations of observable stock prices used in the various
19 time periods underlying Mr. Hevert's and my DCF studies. In this regard, historical
20 GDP growth rates dating back to 1929, as relied upon by Mr. Hevert, do not reflect
21 the outlooks of current market participants. Mr. Hevert's long-term growth rate simply
22 ignores current consensus independent market participants' outlooks for future
23 growth, and therefore he is neither reasonably nor accurately reflecting the data likely
24 relied upon by current market participants to value utility stocks in the current market.

1 As is clearly evident in Table 4 below, Mr. Hevert's historical GDP growth is
2 much higher than, and not representative of, consensus market expected forward-
3 looking GDP growth.

<u>Description</u>	<u>GDP Inflation</u>	<u>Real GDP</u>	<u>Nominal GDP</u>
Mr. Hevert ¹	2.1%	3.2%	5.38%
Consensus Economists (5-Year) ²	2.1%	2.0%	4.20%
Consensus Economists (10-Year) ²	2.1%	2.1%	4.20%

Sources:
¹Hevert Direct Testimony at 28-29.
²Blue Chip Financial Forecasts, June 1, 2018 at 14.

4 Q WHY IS IT IMPORTANT THAT A DCF MODEL REFLECT GROWTH
5 EXPECTATIONS OF MARKET PARTICIPANTS RATHER THAN THE GROWTH
6 EXPECTATIONS OF THE ANALYSTS IN A RATE CASE?

7 A In measuring a fair return on equity, the long-standing practice is to provide the utility
8 adequate earnings to meet the return demands of investors, not a rate case analyst.
9 This allows a utility to set rates that produce adequate cash flows to meet the
10 earnings and cash flow outlooks for investors. Accomplishing this objective allows a
11 utility to go to the market to sell new stock in the event it needs funding to make
12 infrastructure and utility plant investment. Critically, when a utility needs capital it
13 goes to the market, not to the rate of return analysts in a rate proceeding. Therefore,
14 meeting the return demands of the market is the controlling factor, not meeting the
15 growth outlook estimated by the individual analyst. Therefore, in accurately

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1 measuring a return on equity that is fair to both investors and ratepayers, it is
2 important to use parameters that reasonably reflect consensus market participant
3 outlooks of investment returns and not be skewed by the individual observations of
4 the return on equity analysts. For these reasons, to the extent that he relies upon
5 individual forecasts and projections instead of consensus economist estimates, Mr.
6 Hevert's analyses simply do not produce an accurate measurement of the current
7 market cost of common equity. Rather, Mr. Hevert's return on equity estimates are
8 largely biased by his development of growth outlooks that bear no reasonable
9 relationship to the consensus outlook of independent market participants.

10 **Q PLEASE EXPLAIN HOW MR. HEVERT'S MULTI-STAGE GROWTH DCF MODEL**
11 **OVERSTATED DIVIDEND CASH FLOWS BECAUSE OF HIS LONG-TERM**
12 **DIVIDEND PAYOUT RATIO ASSUMPTION.**

13 **A** Mr. Hevert modified the analysts' current dividend payout projections of approximately
14 64.24% for his proxy group and, instead, assumed that eventually they would
15 converge to the historical industry average dividend payout ratio of 65.91%.¹¹

16 **Q IS MR. HEVERT'S ASSUMPTION THAT THE PROXY GROUP'S PAYOUT RATIO**
17 **WILL INCREASE TOWARD THE INDUSTRY HISTORIC DIVIDEND PAYOUT**
18 **RATIO REASONABLE?**

19 **A** No. The proxy group's current dividend payout ratio is already reasonably consistent
20 with the projection for the industry average payout ratio expected over time. As such,
21 there is no basis to assume that every utility in the industry proxy group will converge
22 to the same payout ratio. Rather, it is more balanced and logical to assume that

¹¹*Id.* at 32.

1 payout ratios should be reasonably consistent with the target industry payout ratio
2 over time, and it is important to recognize that the proxy group is already at that
3 target. Because the proxy group is already reasonably aligned with outlooks for the
4 industry as a whole going forward, there is simply no logical basis to assume the
5 payout ratio will increase as Mr. Hevert assumed. Further, as I discuss below, this
6 assumption has a significant impact on the cash flows underlying Mr. Hevert's
7 projection. Therefore, this unsupported payout ratio model adjustment caused an
8 unjustified increase to the multi-stage growth DCF result.

9 **Q PLEASE EXPLAIN WHY MR. HEVERT'S ASSUMPTION OF AN INCREASED**
10 **PAYOUT RATIO FOR HIS PROXY GROUP INCREASES HIS MULTI-STAGE**
11 **GROWTH DCF ESTIMATE.**

12 **A**By assuming an increased payout ratio, Mr. Hevert is assuming that dividend growth
13 will exceed earnings growth during the intermediate stage growth period. This
14 elevated growth projection for dividends increases the cash flows in the DCF study,
15 which artificially increases the DCF return estimate. Because this estimate is not
16 based on any market participant's outlook for the proxy group generally, and since
17 Mr. Hevert has not provided any information that the proxy group is not reasonably
18 consistent with the range of expected payout ratios for the electric utility industry as a
19 whole, this assumption simply is unreliable and inflates the DCF return estimate.

1 Q PLEASE DESCRIBE MR. HEVERT'S ASSUMPTION IN DERIVING THE TERMINAL
2 GROWTH VALUE FOR THE COMPANIES IN HIS MULTI-STAGE GROWTH DCF
3 ANALYSIS.

4 A Mr. Hevert states that he relied on a terminal growth value based on the current P/E
5 ratio of the companies in his proxy group.¹² However, Mr. Hevert provided very
6 limited discussion concerning his terminal P/E ratio assumption. He simply used a
7 constant terminal P/E ratio of 23.56 for all of the companies included in his proxy
8 group.¹³

9 Q DID MR. HEVERT MAKE ANY COMMENTS CONCERNING THE SUSTAINABILITY
10 OF PRICE-TO-EARNINGS ("P/E") RATIOS IN MEASURING DCF RETURN
11 ESTIMATES?

12 A Yes. At page 18 of his testimony, Mr. Hevert notes that a constant growth DCF
13 model generally expects the P/E ratio to be constant over time. As most analysts
14 have recognized, however, when this assumption does not hold true, it is reasonable
15 to consider other methods to estimate the market cost of equity, including a multi-
16 stage growth DCF methodology. In a multi-stage growth DCF methodology, the DCF
17 model can be used without assuming a constant P/E ratio over time. As such, in
18 markets where P/E ratios are artificially low or artificially high, a non-constant growth
19 methodology can accommodate the assumptions that P/E ratios and growth can vary
20 over time. Importantly, if a P/E ratio is expected to remain constant in the short-term
21 stage to long-term growth stage, then it is more appropriate to use a constant growth
22 DCF analysis. The same argument could be made for short-term growth rates being

¹²*Id.*

¹³Schedule RBH-2, pages 20-36.

1 reasonable estimates of long-term growth rates. When this is true, then the constant
2 growth methodology should be given more weight.

3 Mr. Hevert turns these assumptions upon their heads by employing a multi-
4 stage growth DCF analysis that includes periods of accelerated growth, with periods
5 where the growth rate is moderating, but the P/E ratio used to estimate a terminal
6 value stock price is assumed to be held constant. These assumptions simply are
7 contradictory, and render Mr. Hevert's multi-growth stage DCF analysis unreliable
8 and susceptible to producing a flawed estimate.

9 **Q HOW CAN MR. HEVERT'S MODEL BE CORRECTED TO ELIMINATE HIS**
10 **UNREASONABLE ASSUMPTIONS?**

11 **A** This can be done through three adjustments. First, one should adjust the GDP
12 growth outlook for long-term sustainable growth down to the consensus economists'
13 outlooks for future nominal GDP growth of 4.20% (rather than Mr. Hevert's estimate
14 of 5.38% which does not reflect independent market participants' growth outlooks).
15 Second, one should correct the long-term dividend growth estimates in the multi-
16 stage DCF model for the erroneous payout ratio. Third, one should correct the P/E
17 ratio assumptions made by Mr. Hevert. Making these changes to Mr. Hevert's multi-
18 stage growth DCF model would produce a return more reflective of current market
19 participant investment outlooks.

20 Revising Mr. Hevert's multi-stage growth to correct all three of the identified
21 flaws produces the multi-stage growth DCF return estimates shown in Table 5 below.

TABLE 5
Hevert Multi-Stage Growth DCF Analysis

<u>Terminal P/E Method</u>	<u>Gordon</u> (1)	<u>Terminal</u> <u>P/E</u> (2)	<u>Revised</u> (3)
30-Day Average	8.70%	9.36%	8.01%
90-Day Average	8.74%	9.46%	8.05%
180-Day Average	8.81%	9.67%	8.13%
Average	8.75%	9.50%	8.06%

Sources:
¹Hevert Direct Testimony at 32.
²Schedule MPG-R-3.

1 **III.C. Hevert CAPM Studies**

2 **Q PLEASE DESCRIBE MR. HEVERT’S CAPM ANALYSIS.**

3 **A** As indicated in my direct testimony, the CAPM analysis is based upon the theory that
 4 the market required rate of return for a security is equal to the risk-free rate, plus a
 5 risk premium associated with the specific security. The risk premium associated with
 6 the specific security is expressed mathematically as:

7 $B_i \times (R_m - R_f)$ where:

- 8 B_i = Beta - Measure of the risk for stock
- 9 R_m = Expected return for the market portfolio
- 10 R_f = Risk-free rate

11 **Q PLEASE DESCRIBE THE ISSUES YOU HAVE WITH MR. HEVERT’S CAPM**
 12 **STUDY.**

13 **A** I have two primary issues with Mr. Hevert’s CAPM study. First, I believe the market
 14 risk premiums (R_m) he used in all of his CAPM studies are overstated because they

1 do not reflect a reasonable estimate of the expected return on the market. My
2 second concern, specifically with the market risk premium used in Mr. Hevert's CAPM
3 return estimates using a projected risk-free rate, is that he does not measure the
4 market risk premium in relationship to the projected risk-free rate. Rather, all market
5 risk premium estimates are based on his current risk-free rate projections. This
6 causes a mismatch in the market risk premium estimates used in Mr. Hevert's CAPM
7 projections that are based on projected risk-free rates.

8 **Q PLEASE DESCRIBE MR. HEVERT'S MARKET RISK PREMIUMS.**

9 A Mr. Hevert derived his market risk premiums by conducting a DCF analysis for the
10 market. Mr. Hevert used two market risk premium estimates. They are DCF-derived
11 market risk premiums of 11.00% (Bloomberg) and 11.89% (*Value Line*), which are
12 based on market DCF returns of 13.78% and 14.67%. He then calculates a market
13 risk premium by subtracting a risk free rate, the current 30-year Treasury bond yield
14 of 2.77%,¹⁴ from these estimated returns on the market.

15 **Q WHAT ISSUES DO YOU HAVE WITH MR. HEVERT'S DCF-DERIVED MARKET**
16 **RISK PREMIUM ESTIMATES?**

17 A Mr. Hevert's DCF-derived market risk premiums are based on market returns of
18 approximately 13.78% and 14.67%, which consist of growth rate components of
19 approximately 11.86% and 12.64% and a market-weighted expected dividend yield of
20 approximately 1.91% and 2.02%, respectively.¹⁵ As discussed in response to my own
21 DCF model, the DCF model requires a long-term sustainable growth rate.
22 Mr. Hevert's sustainable market growth rates of approximately 11.86% and 12.64%

¹⁴Hevert Direct Testimony at 34.

¹⁵*Id.* (13.78% = 11.86% + 1.91% and 14.67% = 12.64% + 2.02%).

1 are far too high to be a rational outlook for sustainable long-term market growth.
2 These growth rates are more than two times the growth rate of the U.S. GDP
3 long-term growth outlook of 4.20%.

4 As a result of these unreasonable long-term market growth rate estimates,
5 Mr. Hevert's market DCF returns used within his CAPM analysis are inflated and not
6 reliable. Consequently, Mr. Hevert's 11.00% (Bloomberg) and 11.89% (*Value Line*)
7 market risk premiums should be given minimal weight in estimating KCPL / GMO's
8 CAPM-based cost of common equity.

9 **Q DO HISTORICAL ACTUAL RETURNS ON THE MARKET SUPPORT**
10 **MR. HEVERT'S PROJECTED MARKET RETURNS?**

11 **A** No. This is significant because Mr. Hevert does rely on historical market returns to
12 produce real returns on the market for use in developing his GDP growth forecast in
13 his DCF study. Using the same line of logic, historical data shows just how
14 unreasonable Mr. Hevert's projected DCF return on the market is going forward.

15 **Q PLEASE EXPLAIN.**

16 **A** Duff & Phelps estimates the actual capital appreciation for the S&P 500 over the
17 period 1926 through 2017 to have been 6.0% to 7.8%.¹⁶ This is almost half of
18 Mr. Hevert's projected growth of the market of 11.86% to 12.64%.

19 Further, historically the geometric growth of the market was 6.0%¹⁷ which is
20 comparable to the geometric growth of GDP over this same time period of
21 approximately 6.4%.

¹⁶Duff & Phelps, *2018 SBBI Yearbook* at 6-17.

¹⁷*Id.*

1 This review of historical data establishes two facts very clearly. First,
2 historical, actual achieved growth has been substantially less than projected by Mr.
3 Hevert. Second, historical growth of the market has tracked historical growth of the
4 U.S. GDP. Projected growth of the U.S. GDP now is closer to the 4.0% to 4.5%
5 range. All of this information strongly supports the conclusion that Mr. Hevert's
6 projected growth on the market of 11.86% to 12.64% is substantially overstated.
7 While I do not endorse the use of an historical growth rate to draw assessments of
8 the market's forward-looking growth rate outlooks, this data can be used to show how
9 the market return estimates produced by Mr. Hevert are unreasonable and inflated.

10 **Q PLEASE EXPLAIN WHY MR. HEVERT'S MARKET RETURN ESTIMATES ARE**
11 **UNREASONABLE AND INFLATED.**

12 **A Mr. Hevert has made an error in the estimate of his market risk premium. Mr. Hevert**
13 **measures the market risk premium based on his DCF return on the market less his**
14 **current risk-free rate estimate of 2.77%.¹⁸ He then relies on the market risk premiums**
15 **of 11.00% and 11.89% as risk premium estimates used in his CAPM study on his**
16 **Schedule RBH-6. The error in his calculation is that the market risk premium that**
17 **corresponds with a risk-free rate of 2.77% should not be the same as the market risk**
18 **premium that corresponds with a risk-free rate of 3.32% as he uses on his Schedule**
19 **RBH-5. Rather, the market risk premium that corresponds with a risk-free rate of**
20 **3.32% should be the difference between his market return estimate of 13.78% and**
21 **3.32%, or 10.46%, and his market return estimate of 14.67% less his 3.32% risk-free**
22 **rate, or 11.35%. In other words, Columns 3 and 4 of lines "Near-Term Projected 30-**
23 **Year Treasury" of Mr. Hevert's Schedule RBH-6 are overstated. Overstating the**

¹⁸Schedule RBH-3.

1 market risk premium in his CAPM study where he uses a projected Treasury bond
2 yield produces a flawed and erroneous result that overstates a fair CAPM return
3 estimate for KCPL / GMO in this proceeding.

4 **Q CAN MR. HEVERT'S CAPM ANALYSIS BE REVISED TO REFLECT A MORE**
5 **REASONABLE MARKET RISK PREMIUM AND RECENT RISK-FREE RATES?**

6 A Yes. Using Mr. Hevert's risk-free rates of 2.77% and 3.32%, the average Bloomberg
7 and *Value Line* beta estimates of 0.561 and 0.712,¹⁹ respectively, and my calculated
8 high-end market risk premium of 7.7%,²⁰ Mr. Hevert's CAPM would be no higher than
9 8.8%.

10 **III.D. Bond Yield Plus ("BYP") Risk Premium**

11 **Q PLEASE DESCRIBE MR. HEVERT'S BOND YIELD PLUS RISK PREMIUM**
12 **STUDIES.**

13 A Mr. Hevert proposes two risk premium studies: (1) a Primary Bond Yield Plus ("BYP")
14 risk premium study; and (2) an Alternative BYP risk premium study. The Primary
15 BYP risk premium reflects a simple regression analysis based on a simple inverse
16 relationship between interest rates and equity risk premiums. His Alternative BYP
17 risk premium goes further by looking beyond simply a correlation between interest
18 rates and equity risk premiums. Specifically, this methodology uses a regression
19 study but explains risk premiums by changes in interest rates as well as market
20 volatility, and yield spreads between A-rated utility bonds and Treasury bond yields.

¹⁹Schedule RBH-5.

²⁰Gorman Direct Testimony at 58-59.

1 **III.D.1. Primary BYP Risk Premium**

2 **Q PLEASE DESCRIBE MR. HEVERT'S BYP RISK PREMIUM METHODOLOGY.**

3 A As shown on his Schedule RBH-6, Mr. Hevert constructs a risk premium return on
4 equity estimate based on the premise that equity risk premiums are inversely related
5 to interest rates. He estimates the average electric equity risk premium of 4.61% for
6 the period of January 1980 through December 2017. Then he applies a regression
7 formula to the current, near-term, and long-term projected 30-year Treasury bond
8 yields of 2.77%, 3.32%, and 4.20% to produce electric equity risk premiums of 7.18%,
9 6.69%, and 6.05%, respectively. Thus, he estimates a return on equity of 9.95%,
10 10.01%, and 10.25%, respectively.²¹

11 **Q IS MR. HEVERT'S BYP RISK PREMIUM METHODOLOGY REASONABLE?**

12 A No. Mr. Hevert's contention that a simplistic inverse relationship between equity risk
13 premiums and interest rates is the only factor that explains changes in equity risk
14 premiums is not supported by academic research. While academic studies have
15 shown that, in the past, there has been an inverse relationship among these
16 variables, researchers have found that the relationship changes over time and is
17 influenced by changes in perception of the investment risk of bond investments
18 relative to equity investments.²²

19 Hence, Mr. Hevert's own data indicates that there is not a strong relationship
20 in the current post-recession period. Therefore, I urge the Commission to reject Mr.
21 Hevert's simplistic relationship and his BYP Risk Premium analysis.

²¹Hevert Direct Testimony at 40.

²²Robert S. Harris and Felicia C. Marston, "The Market Risk Premium: "Expectational Estimates Using Analysts' Forecasts," *Journal of Applied Finance*, Volume 11, No. 1, 2001 at 10-13; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, "The Risk Premium Approach to Measuring a Utility's Cost of Equity," *Financial Management*, Spring 1985 at 42-43.

1 In the 1980s, equity risk premiums were inversely related to interest rates, but
2 that was likely attributable to the interest rate volatility that existed at that time. As
3 such, when interest rates were more volatile, perceptions of bond investment risk
4 increased relative to the investment risk of equities. This changing investment risk
5 perception caused changes in equity risk premiums.

6 In today's marketplace, interest rate volatility is not as extreme as it was
7 during the 1980s.²³ Nevertheless, changes in the perceived risk of bond investments
8 relative to equity investments still drive changes in equity premiums and cannot be
9 measured simply by observing nominal interest rates. Changes in nominal interest
10 rates are heavily influenced by changes to inflation outlooks, which also change
11 equity return expectations. As such, the relevant factor needed to explain changes in
12 equity risk premiums is the relative changes between the risk of equity versus debt
13 investments, and not simply changes in interest rates.

14 Importantly, Mr. Hevert's analysis simply ignores investment risk differentials.
15 He bases his adjustment to the equity risk premium exclusively on changes in
16 nominal interest rates. This is a flawed methodology that does not produce accurate
17 or reliable risk premium estimates.

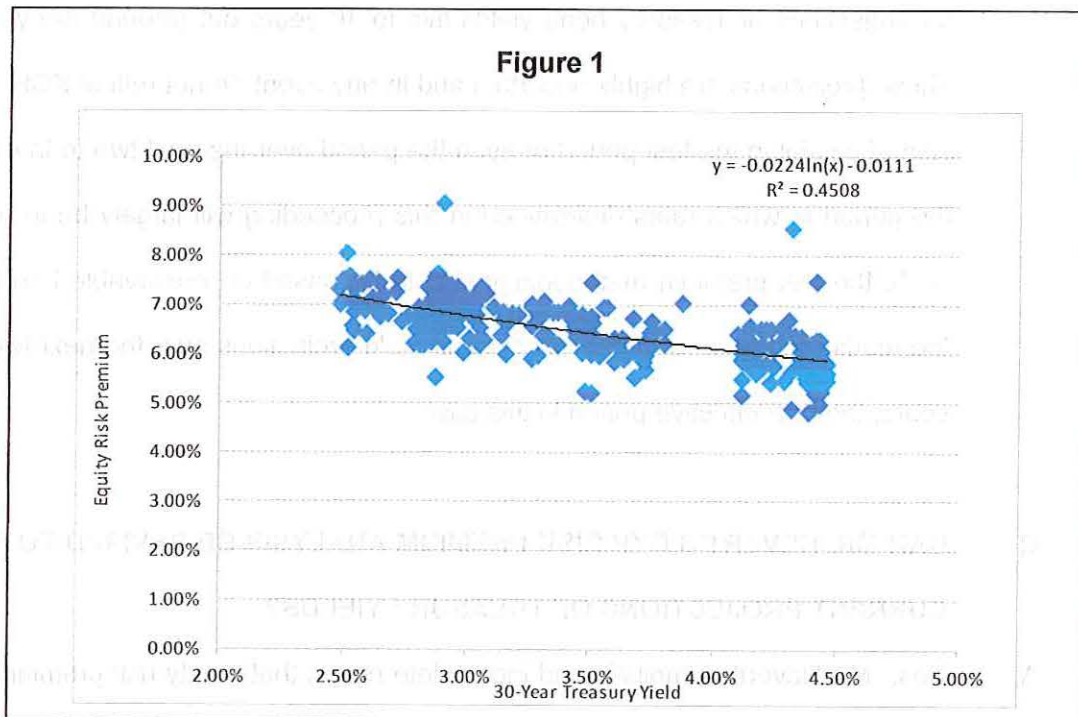
18 **Q DO YOU BELIEVE THE RELATIONSHIP SHOWN IN MR. HEVERT'S**
19 **REGRESSION ANALYSIS IS APPLICABLE TO THE CURRENT CAPITAL**
20 **MARKET ENVIRONMENT?**

21 **A** No. The strength of a relationship between the dependent variable (risk premium)
22 and the independent variable (nominal interest rates) in a regression analysis is
23 explained in the R-squared factor. The R-squared factor measures how much

²³Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, "The Risk Premium Approach to Measuring a Utility's Cost of Equity," *Financial Management*, Spring 1985 at 44.

1 explanatory power the independent variable has on the dependent variable. A higher
2 R-squared indicates a stronger explanatory relationship.

3 As shown in Mr. Hevert's testimony at page 40 (Chart 4), the R-squared factor
4 is 73.3% when measuring the time period from January 1980 through December
5 2017.



6 As shown in Figure 1, when only measuring the relationship between the risk
7 premium and interest rates over the 2010 through December 2017 post-recession
8 time-period, the R-squared measure declines to a mere 45.1%. This is clear
9 evidence that risk premiums are dependent on variables other than simply interest
10 rates.

1 Q DO YOU HAVE ANY OTHER COMMENTS CONCERNING MR. HEVERT'S BYP
2 RISK PREMIUM METHODOLOGY?

3 A Yes. Mr. Hevert's use of a long-term projected bond yield of 4.20%²⁴ is not reflective
4 of market participants' outlooks for KCPL / GMO's cost of capital during the period
5 rates determined in this proceeding will be in effect. This bond yield is largely based
6 on projections of Treasury bond yields five to 10 years out (around the year 2028).
7 Those projections are highly uncertain and in any event do not reflect KCPL / GMO's
8 cost of capital in the test period or even the period over the next two to three years,²⁵
9 the period in which rates determined in this proceeding will largely be in effect. As
10 such, the risk premium methodology should be based on observable bond yields in
11 the market today, or at most reflect bond yield projections over the next two to three
12 years, the rate-effective period in this case.

13 Q CAN MR. HEVERT'S BYP RISK PREMIUM ANALYSIS BE REVISED TO REFLECT
14 CURRENT PROJECTIONS OF TREASURY YIELDS?

15 A Yes. Mr. Hevert's simplistic and incomplete notion that equity risk premiums change
16 only with changes to nominal interest rates should be rejected. Adding my weighted
17 average equity risk premium over Treasury bonds of 6.1%, as described in my direct
18 testimony, to his Treasury yields of 2.77% and 3.32%, produces a BYP result of
19 8.87% to 9.42%.

²⁴Schedule RBH-6.

²⁵KCPL and GMO are both required to file regular rate cases under the Commission's requirements for electric utilities that have been authorized a fuel adjustment clause.

1 **III.D.2. Alternative BYP Risk Premium**

2 Q PLEASE DESCRIBE MR. HEVERT'S ALTERNATIVE BYP RISK PREMIUM
3 ANALYSIS?

4 A Mr. Hevert developed an Alternative BYP risk premium analysis to test how market
5 conditions affect the relationship between interest rates and equity risk premiums.
6 Specifically, he developed a regression analysis in which the equity risk premium was
7 the dependent variable and the independent variables include: (1) the Treasury bond
8 yields, (2) the spreads between Moody's A-rated yields and Treasury yields, and (3) a
9 stock market volatility index as measured by the Chicago Board Options Exchange
10 ("CBOE") Volatility Index ("VIX"). These three independent variables were used to
11 predict his risk premium based on the regression study.

12 Based on this analysis, he concluded two of these additional independent
13 factors (credit spreads, and the VIX volatility) did not add statistical significance to the
14 explanatory power of the alternate regression study compared to his primary risk
15 premium regression study.²⁶

16 However, his Alternative BYP risk premium supported a return on equity in the
17 range of 9.59% to 9.70%,²⁷ which was lower than the results of his primary risk
18 premium study – 9.95% to 10.25%.

19 Also of significance, Mr. Hevert's Alternative BYP indicates a return on equity
20 of around 9.6% for KCPL and GMO, if current observable Treasury bond yields, or
21 Treasury bond yields projected over the next two years are considered. Mr. Hevert's
22 projection of a 9.7% alternative BYP is based on a long-term Treasury bond projected
23 yield of 4.20%, which is more than 100 basis points above prevailing yields, and
24 those reasonably expected to occur over the next 24 months.

²⁶Hevert Direct Testimony at 42.

²⁷*Id.* and Schedule RBH-7.

1 **Q WHAT ISSUES DO YOU HAVE WITH MR. HEVERT'S ALTERNATIVE BYP RISK**
2 **PREMIUM METHODOLOGY?**

3 A Mr. Hevert's Alternative BYP risk premium is an improvement to his simplistic Primary
4 BYP risk premium, because it recognizes that risk premiums cannot be explained
5 simply by changes in interest rates. As noted above, a simple interest rate
6 relationship that explains risk premiums is not supported in academic literature, nor
7 consistent with fundamental security valuation principles.

8 As illustrated above, inflation outlooks can impact both equity returns and
9 bond yields in a similar manner. Hence, declines in inflation outlooks can impact the
10 equity return and bond interest rates in a similar manner which would, therefore, not
11 impact the equity risk premium spread. Mr. Hevert's Primary BYP risk premium
12 simply ignores this indisputable relationship.

13 **Q PLEASE COMMENT ON THE ALTERNATIVE BYP RISK PREMIUM STUDY.**

14 A Mr. Hevert's Alternative BYP risk premium study, while better than his Primary BYP
15 risk premium, still needs improvement. Mr. Hevert has not shown that the volatility
16 index (VIX) he uses can accurately describe the difference between expected returns
17 for utility securities and the general stock market. Investment return volatility for utility
18 investors is far more stable than that of the overall stock market. This is illustrated by
19 the fact utility companies have significantly lower betas than that of the overall
20 market. Also missing from his analysis is the accurate representation that the
21 volatility of returns to utility stockholders would be much lower than that of the overall
22 stock market as measured by the VIX Index because approximately 50% of the
23 expected return to utility shareholders is based on dividend payments. This
24 compares to approximately 10% to 15% of the expected return on a stock market

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1 investment. The stability to utility stockholders created by realizing approximately
2 50% of the expected annual return in dividend payments is material. Mr. Hevert's
3 analysis simply does not reflect the more stable and predictable investment return
4 outlooks for utility stocks in measuring an equity risk premium for utility stocks relative
5 to bond yields.

6 Rather, Mr. Hevert distorts his alternative BYP risk premium study by
7 reflecting stock market volatility risk which captures greater investment risk of the
8 stock market as a proxy for the investment risk of utility bonds, which distorts the
9 return and investment risk relationship, and results in a risk premium that is far too
10 high for a low risk regulated utility stock.

11 **Q DO YOU BELIEVE MR. HEVERT'S ALTERNATIVE BYP RISK PREMIUM STUDY**
12 **SHOULD BE RELIED UPON?**

13 **A** I do not believe his VIX has been shown to be an appropriate risk measurement for
14 utility stocks. Rather, it simply reflects the variation in prices for stock market
15 investments, which are known to be more volatile and more risky than utilities. As
16 such, his VIX factor introduces a volatility factor which measures a risk premium that
17 is higher than one that would be appropriate for a lower risk utility stock investment,
18 because it reflects the volatility investment risk of the overall stock market. For these
19 reasons, I believe Mr. Hevert's Alternative BYP methodology, while an improvement
20 from his Primary risk premium methodology, still produces a return on equity that is
21 too high for a low risk regulated utility company.

1 **III.D.3. Additional Risks**

2 **Q DID MR. HEVERT CONSIDER ADDITIONAL BUSINESS RISKS TO JUSTIFY A**
3 **RETURN ON EQUITY WITHIN HIS RANGE?**

4 **A** Mr. Hevert believes that KCPL / GMO are exposed to several additional risks that
5 should be accounted for including: (1) KCPL / GMO's regulatory environment; (2) the
6 Companies' generation portfolio; and (3) KCPL / GMO's capital expenditure plan. Mr.
7 Hevert believes that these additional risks should be considered, ex post to his return
8 analysis, in determining the return on equity for KCPL / GMO.²⁸ I disagree with Mr.
9 Hevert that these additional risks support a return on equity in his range because it
10 will place an unreasonable burden on ratepayers. As discussed below, KCPL /
11 GMO's relative risk is already considered within the return analyses in that KCPL and
12 GMO's risk is already comparable to the risk of the utility companies included in the
13 proxy group.

14 **Q WHY DO YOU BELIEVE THAT KCPL / GMO FACE RISKS THAT ARE**
15 **COMPARABLE TO THE RISKS FACED BY MR. HEVERT'S AND YOUR PROXY**
16 **GROUP COMPANIES?**

17 **A** The major business risks identified by Mr. Hevert are considered in the assigning of a
18 credit rating by the various credit rating agencies. As shown on my Schedule MPG-6
19 presented in my direct testimony, the average S&P credit rating for my proxy group of
20 BBB+ is one notch lower than KCPL / GMO's A- credit rating from S&P. The relative
21 risks discussed on pages 43-52 of Mr. Hevert's testimony are already incorporated in
22 the credit ratings of the proxy group companies. S&P and other credit rating
23 agencies go through great detail in assessing a utility's business risk and financial

²⁸Hevert Direct Testimony at 42-43.

1 risk in order to evaluate their assessment of its total investment risk. This total
2 investment risk assessment of KCPL / GMO, in comparison to the proxy group, is fully
3 absorbed into the market's perception of the Companies' risk, and therefore the proxy
4 group fully captures the investment risk of KCPL / GMO.

5 **Q HOW DOES S&P ASSIGN CORPORATE CREDIT RATINGS FOR REGULATED**
6 **UTILITIES?**

7 **A** In assigning corporate credit ratings, the credit rating agency considers both business
8 and financial risks. Business risks, among others, include a company's size,
9 competitive position, generation portfolio, and capital expenditure programs, as well
10 as consideration of the regulatory environment, current state of the industry, and the
11 economy as whole. Specifically, S&P states:

12 To determine the assessment for a corporate issuer's business risk
13 profile, the criteria combine our assessments of industry risk, country
14 risk, and competitive position. Cash flow/leverage analysis determines
15 a company's financial risk profile assessment. The analysis then
16 combines the corporate issuer's business risk profile assessment and
17 its financial risk profile assessment to determine its anchor. In general,
18 the analysis weighs the business risk profile more heavily for
19 investment-grade anchors, while the financial risk profile carries more
20 weight for speculative-grade anchors.²⁹

21 **Q DO YOU BELIEVE THAT KCPL / GMO'S CAPITAL EXPENDITURE FORECASTS**
22 **ARE OUT OF LINE WITH THE UTILITY INDUSTRY?**

23 **A** No. As shown on my Schedule MPG-2, page 6 presented in my direct testimony,
24 currently the industry as a whole is expected to require access to the external capital
25 markets due to producing less cash flow per share than capital spending per share.
26 Importantly, this is expected to change in the three- to five-year period. As can be

²⁹Standard & Poor's RatingsDirect: "Criteria/Corporates/General: Corporate Methodology,"
November 19, 2013.

1 seen on that schedule, the industry is expected to produce more internal cash relative
2 to projected capital expenditures during the 2020-2022 time period. Hence, Mr.
3 Hevert's assertion that KCPL / GMO will need to access the capital markets in the
4 near term is not unique to KCPL / GMO.

5 For these reasons, Mr. Hevert's assertion that KCPL / GMO's capital program
6 will place additional pressure on its cash flows is misguided. This internal cash flows
7 will increase going forward relative to the past, as KCPL / GMO's rate base grows
8 and rates are adjusted to reflect operating income on a larger rate base, and larger
9 depreciation expense on larger plant accounts.

10 **Q DID MR. HEVERT ALSO OFFER AN ASSESSMENT OF CURRENT MARKET**
11 **CONDITIONS IN SUPPORT OF HIS RECOMMENDED RETURN ON EQUITY**
12 **RANGE?**

13 **A Yes. Mr. Hevert observes a few factors that he believes gauge the capital market**
14 **environment and investor sentiment, including the relationship between the Federal**
15 **Reserve's balance sheet and market volatility, measured by the CBOE Volatility**
16 **Index, known as the VIX, as well as an assessment of the yield curve and credit**
17 **spreads.³⁰ He determines that there is no measurable difference between credit**
18 **spreads of A-rated utility debt and A-rated corporate debt.³¹ Mr. Hevert further**
19 **concludes that the current market conditions indicate that the constant growth DCF**
20 **results be given less weight than other methods in establishing a fair return on equity**
21 **for KCPL / GMO.**

³⁰Hevert Direct Testimony at 52-62.

³¹*Id.* at 59-60.

1 Q DO YOU BELIEVE THAT MR. HEVERT'S USE OF THESE MARKET SENTIMENTS
2 SUPPORTS HIS FINDINGS THAT KCPL / GMO'S MARKET COST OF EQUITY IS
3 CURRENTLY IN THE RANGE OF 9.75% TO 10.50%?

4 A No. In many instances, Mr. Hevert's analysis simply ignores market sentiments
5 favorable toward utility companies and instead lumps utility investments in with
6 general corporate investments. A fair analysis of utility securities shows the market
7 generally regards utility securities as low-risk investment instruments and supports
8 the finding that utilities' cost of capital is very low in today's marketplace.

9 Q WHAT IS THE MARKET SENTIMENT FOR UTILITY INVESTMENTS?

10 A I briefly responded to Mr. Hevert's assertions in my direct testimony. Currently, the
11 market sentiment toward utility investments, rather than just general corporate
12 investments, is that the market is placing high value on utility securities, recognizing
13 their low risk and stable characteristics.

14 This is illustrated by current utility bond yield spreads as discussed at length in
15 my direct testimony. The current strong utility bond valuation is an indication of the
16 market's sentiment that utility bonds are lower risk and are generally regarded as a
17 safe haven by the investment industry.

18 Further, other measures of utility stock valuations also support the conclusion
19 that there is a robust market for utility stocks. As shown on my Schedule MPG-2
20 presented in my direct testimony, financial valuation measures – e.g., P/E ratio and
21 market price to cash flow ratio – for the proxy group show that utility stock valuation
22 measures are robust.

23 For all these reasons, direct assessments of valuation measures and market
24 sentiment toward utility securities support the credit rating agencies' findings, as

Michael P. Gorman
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1 quoted in my direct testimony, that the utility industry is largely regarded as a low-risk,
2 safe haven investment. All of this supports my findings that utilities' market cost of
3 equity is very low in today's very low-cost capital market environment.

4 **Q DO YOU HAVE ANY COMMENTS CONCERNING MR. HEVERT'S CONTENTION**
5 **THAT INTEREST RATES ARE GOING TO INCREASE?**

6 A Yes. KCPL / GMO has routinely relied upon their claim of higher interest rates as
7 justification for recommending a higher return on equity. Mr. Hevert develops his risk
8 premium studies mainly relying on near-term and long-term projected interest rates,
9 which he believes are expected to increase.³² Mr. Hevert's primary reliance on
10 forecasted Treasury bond yields is unreasonable because he is not considering the
11 highly likely outcome that current observable interest rates will prevail during the
12 period in which rates determined in this proceeding will be in effect. This is important
13 because, while current observable interest rates are actual market data that provides
14 a measure of the current cost of capital, the accuracy of forecasted interest rates is
15 problematic at best.

16 **Q WHY DO YOU BELIEVE THAT THE ACCURACY OF FORECASTED INTEREST**
17 **RATES IS HIGHLY PROBLEMATIC?**

18 A Over the last several years, observable current interest rates have been a more
19 accurate predictor of future interest rates than economists' consensus projections.
20 Schedule MPG-R-4 illustrates this point. On this schedule, under Columns 1 and 2, I
21 show the actual market yield for Treasury bonds at the time a projection is made, and

³²*Id.* at 34, 40,57-58.

1 the corresponding projection for Treasury bond yields two years in the future,
2 respectively.

3 As shown in Columns 1 and 2, over the last several years, Treasury yields
4 were projected to increase relative to the actual Treasury yields at the time of the
5 projection. In Column 4, I show what the Treasury yield actually turned out to be two
6 years after the forecast. In Column 5, I show the actual yield change at the time of
7 the projections relative to the projected yield change.

8 As shown in this schedule, economists have consistently been projecting that
9 interest rates will increase over the near term. However, as shown in Column 5,
10 those yield projections have turned out to be overstated in almost every case.
11 Indeed, actual Treasury yields have decreased or remained flat over the last several
12 years rather than increasing as the economists' projections indicated. As such,
13 current observable interest rates are just as likely to accurately predict future interest
14 rates as are economists' projections.

15 **Q DO YOU HAVE ANY FURTHER COMMENTS IN REGARD TO MR. HEVERT'S**
16 **INTEREST RATE PROJECTIONS?**

17 **A** Yes. First, it is simply not known how much, if any, long-term interest rates will
18 increase from current levels or whether they have already fully accounted for the
19 termination of the Federal Reserve's Quantitative Easing ("QE") program and the
20 increase in the Federal Funds Rate. Nevertheless, I do agree that this Federal
21 Reserve program introduced risk or uncertainty in short-term interest rate markets.
22 However, the increase in short-term interest rates had no impact on longer-term
23 yields. In fact as the Edison Electric Institute ("EEI") pointed out: "Investors have
24 feared rising rates for longer than many professional investors have been in the

1 business. But the 35-year bond bull market has defied all skeptics and yields have
2 fallen rather than risen.”³³

3 Second, I would note KCPL / GMO is largely shielded from significant
4 changes in capital market costs. To the extent long-term interest rates ultimately
5 increase above current levels, which may have an impact on required returns on
6 common equity, at that point in time, KCPL / GMO, like all other utilities, can file to
7 change rates to restate their authorized rate of return at the prevailing market levels.³⁴

8 Third, Mr. Hevert argues at length that inputs in the DCF model as well as the
9 results, cannot be trusted in the current market environment and then relies on option
10 prices on bonds to indicate investor expectations for increases in long-term interest
11 rates. The salient question that immediately comes to mind is why are option prices
12 reliable sources of investor expectations, but utility stock prices and resulting
13 dividends are not. Mr. Hevert errantly disregards current utility stock prices and
14 dividend yields as proof of investor expectations. Equity prices are the present value
15 of expected future cash flows. In other words, utility stock investors have assessed
16 the probability of future cash flows and have placed a present value on utility equity
17 securities. As I explain in detail in my direct testimony, utility valuations are robust
18 and well supported in the current market environment.

³³*EEI Q4 2017 Financial Update: “Stock Performance”* at 6.

³⁴The fact that KCPL is precluded from filing a rate case in Kansas for five years demonstrates the heightened risk that KCPL faces in Kansas and the reason that the Missouri return on equity should be below the return on equity authorized in Kansas (9.3%).

1 Q PLEASE COMMENT ON MR. HEVERT'S OBSERVATIONS CONCERNING THE
2 YIELD SPREAD BETWEEN A-RATED CORPORATE BONDS AND A-RATED
3 UTILITY BONDS.

4 A Mr. Hevert's analysis suggests that there is no discernible difference in current yield
5 spreads of A-rated corporate bonds and A-rated utility bonds. He concludes that the
6 yield spread differential is not meaningful and not statistically significant.³⁵

7 Q PLEASE RESPOND TO MR. HEVERT'S ANALYSIS OF THE YIELD DIFFERENCE
8 BETWEEN A-RATED UTILITY BONDS AND A-RATED CORPORATE BONDS.

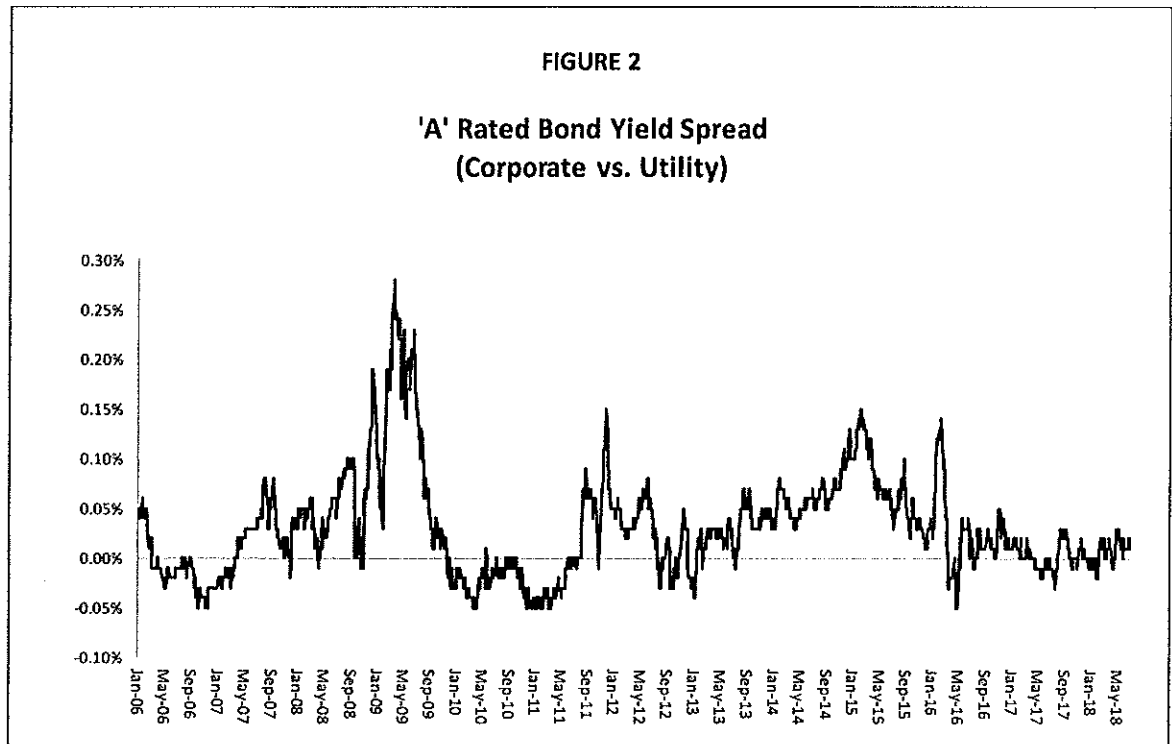
9 A Mr. Hevert's regression analysis³⁶ is set up in a manner that tends to use corporate
10 credit spreads as a method to "explain" utility yield spreads. He does this analysis by
11 using corporate spreads as the independent variable, and the utility credit spreads as
12 the dependent variable in his regression analysis. However, this regression analysis
13 simply is not useful in observing whether current market valuations suggest that utility
14 costs of capital are lower than non-regulated or corporate bond issuances.

15 The question is not whether the yield spreads of corporate and utility bonds
16 can be predicted. Rather, the question is simply whether or not there is an
17 observable difference in the current yields of A-rated utility bonds relative to those of
18 A-rated corporate bonds.

19 I show the A-utility and A-Corporate credit spreads in Figure 2 below. By
20 observing changes in the yield spread from corporate to utility bond yields, the data
21 shows that corporate bond yields are more expensive than utility bond yields in the
22 current market. This yield spread is a clear indication that utilities' cost of capital is
23 currently lower than the cost of a corporate issuer.

³⁵ Hevert Direct Testimony and 59-60.

³⁶ *Id.* at 60.



1 As shown in Figure 2 above, for almost all periods since 2009, the spread
 2 between corporate yields and utility yields has been above zero. This indicates that
 3 corporate yields are higher than those of utility yields. While the relationship varies
 4 over time, predominantly, utility yields have been lower than those of corporate
 5 issuers over the last two to four years.

6 **Q DO YOU HAVE ANY COMMENTS CONCERNING MR. HEVERT'S CONCLUSIONS**
 7 **IN REGARD TO THE TAX CUTS AND JOBS ACT ("TCJA")?**

8 **A** Yes. As discussed in my direct testimony, even though the cash flows for some
 9 utilities will be impacted by the TCJA, this impact is not significant enough to trigger
 10 credit downgrade for a utility with a stable outlook and solid financial metrics. My
 11 recommended return on equity reflects all relevant market factors, including the
 12 reduction in the federal tax rate. Further, it is consistent with the return on equity

1 agreed to by KCPL and Westar in the recent Kansas merger proceeding and I believe
2 that a return on equity above my recommendation of 9.30% is simply designed to
3 inflate corporate profits at the cost of Missouri ratepayers and should be rejected.

4 **Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

5 **A Yes, it does.**

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KCPL / GMO

Hevert ROE Recommendations

Line	Description	Hevert Recommended ROE		
		ER-2016-0285 ¹		ER-2018-0145 /
		Direct ² (1)	Rebuttal (2)	Direct ² (3)
<u>Constant Growth DCF</u>				
1	30-day Average	8.76%	8.99%	8.28%
2	90-day Average	8.82%	8.94%	8.31%
3	180-day Average	<u>9.00%</u>	<u>8.96%</u>	<u>8.38%</u>
4	Average Constant Growth DCF	8.86%	8.96%	8.32%
<u>Multi-Stage DCF - Gordon Model</u>				
5	30-day Average - Average EPS	9.13%	9.18%	8.70%
6	90-day Average - Average EPS	9.19%	9.13%	8.74%
7	180-day Average - Average EPS	9.40%	9.14%	8.81%
8	30-day Average - High EPS	9.25%	9.35%	8.91%
9	90-day Average - High EPS	9.32%	9.29%	8.95%
10	180-day Average - High EPS	9.53%	9.31%	9.03%
11	30-day Average - Low EPS	9.01%	9.03%	8.50%
12	90-day Average - Low EPS	9.07%	8.97%	8.54%
13	180-day Average - Low EPS	<u>9.27%</u>	<u>8.99%</u>	<u>8.61%</u>
14	Average Multi-Stage DCF - Gordon Model	9.24%	9.15%	8.75%
<u>Multi-Stage DCF - Terminal P/E</u>				
15	30-day Average - Average EPS	9.45%	10.34%	9.36%
16	30-day Average - High EPS	9.73%	10.74%	9.93%
17	30-day Average - Low EPS	9.15%	9.94%	8.82%
18	90-day Average - Average EPS	9.60%	10.20%	9.46%
19	90-day Average - High EPS	9.88%	10.60%	10.03%
20	90-day Average - Low EPS	9.30%	9.81%	8.92%
21	180-day Average - Average EPS	10.08%	10.24%	9.67%
22	180-day Average - High EPS	10.36%	10.64%	10.24%
23	180-day Average - Low EPS	<u>9.78%</u>	<u>9.84%</u>	<u>9.13%</u>
24	Average Multi-Stage DCF - Terminal P/E	9.70%	10.26%	9.51%
<u>Ex-Ante Market Risk Premium</u>				
25	Market DCF, Bloomberg	10.50%	10.19%	11.00%
26	Market DCF, Value Line	<u>11.10%</u>	<u>11.21%</u>	<u>11.89%</u>
27	Average Ex-Ante Market Risk Premium	10.80%	10.70%	11.45%
<u>CAPM Results (Bloomberg Beta)</u>				
28	Current 30-Yr Treasury (BL)	9.11%	8.77%	8.95%
29	Current 30-Yr Treasury (VL)	9.49%	9.37%	9.45%
30	Near-Term Projected 30-Yr Treasury (BL)	9.55%	9.15%	9.50%
31	Near-Term Projected 30-Yr Treasury (VL)	<u>9.92%</u>	<u>9.75%</u>	<u>9.99%</u>
32	Average Bloomberg Beta CAPM Results	9.52%	9.26%	9.47%
<u>CAPM Results (Value Line Beta)</u>				
33	Current 30-Yr Treasury (BL)	10.72%	10.17%	10.61%
34	Current 30-Yr Treasury (VL)	11.18%	10.91%	11.24%
35	Near-Term Projected 30-Yr Treasury (BL)	11.15%	10.55%	11.15%
36	Near-Term Projected 30-Yr Treasury (VL)	<u>11.62%</u>	<u>11.29%</u>	<u>11.78%</u>
37	Average Bloomberg Beta CAPM Results	11.17%	10.73%	11.20%
<u>Bond Yield Plus Risk Premium</u>				
38	Current 30-Yr Treasury	10.04%	10.01%	9.95%
39	Near-Term Projected 30-Yr Treasury	10.05%	10.03%	10.01%
40	Long-Term Projected 30-Yr Treasury	<u>10.39%</u>	<u>10.34%</u>	<u>10.25%</u>
41	Average Bond Yield Plus Risk Premium	10.16%	10.13%	10.07%
<u>Alternative Risk Premium</u>				
42	Current 30-Yr Treasury	9.74%	N/A	9.61%
43	Near-Term Projected 30-Yr Treasury	9.75%	N/A	9.59%
44	Long-Term Projected 30-Yr Treasury	<u>10.04%</u>	N/A	<u>9.70%</u>
45	Average Alternative Risk Premium	9.84%		9.63%
46	Sustainable Growth Return on Common Equity	N/A	10.55%	N/A
<u>Constant Growth & Credit Rating</u>				
47	30-Day Dividend Yield	N/A	8.12%	N/A
48	90-Day Dividend Yield	N/A	8.17%	N/A
49	180-Day Dividend Yield	N/A	<u>8.32%</u>	N/A
50	Average Constant Growth & Credit Rating		8.20%	

Sources:

¹Hevert Direct and Rebuttal Schedules, ER-2016-0285.

²Hevert Direct Schedules, ER-2018-0145.

KCP/L / G/MO

Authorized ROE for Electric Utilities from 2016 to 2017

Rate Case
State
Utility
Return on Equity

(1)
(2)
(3)

Year
Company
ROE

2016
1 Florida Power & Light Company FL Nov 29 2015 10.95%
2 Duke Energy Progress, LLC SC Dec 7 2016 10.10%
3 Upper Merisela Power Company MI Sep 8 2016 10.00%
4 Wisconsin Power and Light Company WI Nov 13 2016 10.00%
5 Northern Indiana Public Service Company IN Dec 15 2016 10.00%
6 Hartford Nuclear Public Service Company CT Sep 30 2016 9.90%
7 Massachusetts Electric Company MA Sep 30 2016 9.90%
8 Virginia Electric and Power Company VA Dec 22 2016 9.90%
9 Indianapolis Power & Light Company IN Mar 16 2016 9.85%
10 Kiewit Power Company TN Aug 9 2016 9.85%
11 Potomac Electric Power Light Company MD Aug 23 2016 9.85%
12 Hudson Gas and Electric Company NJ Feb 23 2016 9.75%
13 Entergy Missouri, Inc. MO Jun 3 2016 9.75%
14 Baltimore Gas and Electric Company MD Jun 3 2016 9.75%
15 Arcelor City Electric Company NJ Aug 24 2016 9.75%
16 Sierra Central Power & Light Company NJ Dec 17 2016 9.60%
17 Sierra Pacific Power Company NV Dec 22 2016 9.60%
18 Public Service Company of New Mexico NM Sep 28 2016 9.58%
19 Potomac Electric Power Company MD Nov 15 2016 9.50%
20 AES Corporation VA Jun 5 2016 9.50%
21 AES Electric, Inc. AZ Aug 18 2016 9.50%
22 PacifiCorp VA Sep 1 2016 9.50%
23 Public Service Company of Oklahoma OK Nov 1 2016 9.50%
24 Avista Corporation ID Dec 29 2016 9.50%
25 El Paso Electric Company NM Jun 15 2016 9.45%
26 Black Hills Electric Utility Company, LP CO Dec 15 2016 9.37%
27 United Brotherhood Company CT Dec 15 2016 9.10%
28 New York State Electric & Gas Corporation NY Jun 15 2016 9.00%
29 Rochester Gas and Electric Corporation NY Jun 15 2016 9.00%
30 Entera Water ME Dec 6 2016 9.00%
31 Commonwealth Edison Company IL Dec 6 2016 8.64%
32 Ameren Illinois Company IL Dec 6 2016 8.64%
33 Utilities with an Approved ROE > 9.70% IL 15
34 ROE Range of Utilities with an Approved ROE < 9.70% 17
35 8.64% - 9.60%

2017
36 Avista Electric Light and Power Company AK Nov 15 2017 11.95%
37 Southern Indiana Edison Company CA Oct 26 2017 10.30%
38 Gulf Power Company FL Apr 4 2017 10.20%
39 Pacific Gas and Electric Company CA Oct 26 2017 10.20%
40 Tampa Electric Company FL Mar 8 2017 10.20%
41 San Diego Gas & Electric Co. CA Oct 26 2017 10.20%
42 DTE Electric Company MI Jun 31 2017 10.10%
43 Consumers Energy Company MI Apr 15 2017 10.00%
44 Arizona Public Service Company AZ May 15 2017 10.00%
45 NSTAR Electric Company MA Nov 30 2017 10.00%
46 Western Massachusetts Electric Company MA Nov 30 2017 10.00%
47 Oncor Electric Delivery Company LLC TX Sep 29 2017 9.80%
48 Northern States Power Company - WI VA Dec 7 2017 9.60%
49 Tucson Electric Power Company AZ Feb 24 2017 9.75%
50 Dominion Power & Light Company KY May 23 2017 9.70%
51 Kentucky Utilities Company KY Jun 22 2017 9.70%
52 MDU Resources Group, Inc. ND Jun 16 2017 9.65%
53 El Paso Electric Company TX Dec 14 2017 9.65%
54 Electric Transmission Texas, LLC TX Jan 12 2017 9.60%
55 DTE Energy Power & Light Company MI Feb 15 2017 9.60%
56 American Electric Company MI Sep 22 2017 9.60%
57 Arcelor City Electric Company MI May 22 2017 9.60%
58 American City Electric Company MO May 22 2017 9.60%
59 Southern Indiana Edison Company IN Dec 14 2017 9.58%
60 Public Service Company of New Mexico NM Dec 20 2017 9.58%
61 Oklahoma Gas and Electric Company OK Apr 20 2017 9.50%
62 United Energy Partners, Inc. NH Apr 20 2017 9.50%
63 Kansas City Power & Light Company MO May 3 2017 9.50%
64 Potomac Electric Power Company DC Jul 24 2017 9.50%
65 Potomac Electric Power Company MD May 18 2017 9.50%
66 PJM Sound Energy, Inc. VA Dec 5 2017 9.50%
67 Portland General Electric Company OR Dec 18 2017 9.50%
68 AES Corporation ID Dec 28 2017 9.50%
69 MDU Resources Group, Inc. WI Mar 2 2017 9.41%
70 NRG Energy, Inc. NY May 18 2017 9.43%
71 United Power Company NH Apr 12 2017 9.40%
72 United Utilities (Central State Electric) Corp. VT Apr 12 2017 9.40%
73 Nevada Power Company NV Dec 29 2017 9.40%
74 Northern States Power Company - MN MN May 11 2017 9.20%
75 Green Mountain Power Corporation VT Dec 21 2017 9.10%
76 Consolidated Edison Company of New York, Inc. NY Jan 24 2017 9.00%
77 Commonwealth Edison Company IL Dec 6 2017 8.40%
78 Ameren Illinois Company IL Dec 6 2017 8.40%
79 Utilities with an Approved ROE > 9.70% 29
80 ROE Range of Utilities with an Approved ROE < 9.70% 14
81 8.40% - 9.70%

2018
82 Conocochee Energy Company MI Mar 29 2018 10.00%
83 DTE Electric Company MI Apr 18 2018 10.00%
84 Indiana Midway Power Company IN May 30 2018 9.98%
85 Duke Energy Progress, LLC NC Feb 23 2018 9.90%
86 Indiana Midway Power Company MI Apr 12 2018 9.90%
87 Duke Energy Carolinas, LLC NC Jun 22 2018 9.90%
88 Duke Energy Kentucky, Inc. KY Apr 13 2018 9.75%
89 Kentucky Power and Light Company KY Feb 2 2018 9.60%
90 Avista Corporation VA Apr 26 2018 9.50%
91 Potomac Electric Power Company MD May 31 2018 9.50%
92 Hawaii Electric Light Company, Inc. HI Jun 29 2018 9.50%
93 Entera Water ME Jun 28 2018 9.50%
94 AllTE (Midwest Energy) MI Jun 12 2018 9.50%
95 Connecticut Light and Power Company CT Apr 18 2018 9.25%
96 Major Midwest Power Corporation NY Mar 15 2018 9.00%
97 Central Hudson Gas & Electric Corporation NY Jun 14 2018 8.60%
98 Utilities with an Approved ROE > 9.70% 7
99 ROE Range of Utilities with an Approved ROE < 9.70% 11
100 8.60% - 9.70%

Source and Note:
101 Utilities with an Approved ROE < 9.70%
102 ROE Range of Utilities with an Approved ROE < 9.70%
SAP Global Market Intelligence
2018 data through July 16, 2018

KCPL / GMO

Authorized ROE for Vertically Integrated Electric Cases from 2016 to 2018

Line	Year	Company	State	Rate Case	Authorized
				Completion Date	Return on Equity
			(1)	(2)	(3)
2016					
1		Florida Power & Light Company	FL	Nov 29 2016	10.55%
2		Duke Energy Progress, LLC	SC	Dec 7 2016	10.10%
3		Upper Peninsula Power Company	MI	Sep 8 2016	10.00%
4		Wisconsin Power and Light Company	WI	Nov 18 2016	10.00%
5		Liberty Utilities (CalPeco Electric) LLC	CA	Dec 1 2016	10.00%
6		Northern Indiana Public Service Company	IN	Jul 18 2016	9.98%
7		Virginia Electric and Power Company	NC	Dec 22 2016	9.90%
8		Indianapolis Power & Light Company	IN	Mar 16 2018	9.85%
9		Kingsport Power Company	TN	Aug 9 2016	9.85%
10		Madison Gas and Electric Company	WI	Nov 9 2016	9.80%
11		Entergy Arkansas, Inc.	AR	Feb 23 2016	9.75%
12		Sierra Pacific Power Company	NV	Dec 22 2016	9.60%
13		Public Service Company of New Mexico	NM	Sep 28 2016	9.58%
14		Avista Corporation	WA	Jan 6 2016	9.50%
15		UNS Electric, Inc.	AZ	Aug 18 2016	9.50%
16		PacifiCorp	WA	Sep 1 2016	9.50%
17		Public Service Company of Oklahoma	OK	Nov 10 2016	9.50%
18		Avista Corporation	ID	Dec 28 2016	9.50%
19		El Paso Electric Company	NM	Jun 8 2016	9.48%
20		Black Hills Colorado Electric Utility Company, LP	CO	Dec 19 2016	9.37%
21		Utilities with an Approved ROE > 9.70%			11
22		Utilities with an Approved ROE ≤ 9.70%			9
23		ROE Range of Utilities with an Approved ROE ≤ 9.70%			9.37% - 9.60%
2017					
24		Alaska Electric Light and Power Company	AK	Nov 15 2017	11.95%
25		Southern California Edison Company	CA	Oct 26 2017	10.30%
26		Gulf Power Company	FL	Apr 4 2017	10.25%
27		Pacific Gas and Electric Company	CA	Oct 28 2017	10.25%
28		Tampa Electric Company	FL	Nov 6 2017	10.25%
29		San Diego Gas & Electric Co.	CA	Oct 26 2017	10.20%
30		DTE Electric Company	MI	Jan 31 2017	10.10%
31		Consumers Energy Company	MI	Feb 28 2017	10.10%
32		Arizona Public Service Company	AZ	Aug 15 2017	10.00%
33		Northern States Power Company - WI	WI	Dec 7 2017	9.80%
34		Tucson Electric Power Company	AZ	Feb 24 2017	9.75%
35		Kentucky Utilities Company	KY	Jun 22 2017	9.70%
36		Louisville Gas and Electric Company	KY	Jun 22 2017	9.70%
37		MDU Resources Group, Inc.	ND	Jun 16 2017	9.65%
38		El Paso Electric Company	TX	Dec 14 2017	9.65%
39		Southwestern Electric Power Company	TX	Dec 14 2017	9.60%
40		Public Service Company of New Mexico	NM	Dec 20 2017	9.58%
41		Oklahoma Gas and Electric Company	OK	Mar 20 2017	9.50%
42		Kansas City Power & Light Company	MO	May 3 2017	9.50%
43		Oklahoma Gas and Electric Company	AR	May 18 2017	9.50%
44		Puget Sound Energy, Inc.	WA	Dec 5 2017	9.50%
45		Portland General Electric Company	OR	Dec 18 2017	9.50%
46		Avista Corporation	ID	Dec 28 2017	9.50%
47		MDU Resources Group, Inc.	WY	Jan 18 2017	9.45%
48		Otter Tail Power Company	MN	Mar 2 2017	9.41%
49		Nevada Power Company	NV	Dec 29 2017	9.40%
50		Northern States Power Company - MN	MN	May 11 2017	9.20%
51		Green Mountain Power Corporation	VT	Dec 21 2017	9.10%
52		Utilities with an Approved ROE > 9.70%			11
53		Utilities with an Approved ROE ≤ 9.70%			17
54		ROE Range of Utilities with an Approved ROE ≤ 9.70%			9.10% - 9.70%
2018					
55		Consumers Energy Company	MI	Mar 29 2018	10.00%
56		DTE Electric Company	MI	Apr 18 2018	10.00%
57		Indiana Michigan Power Company	IN	May 30 2018	9.95%
58		Duke Energy Progress, LLC	NC	Feb 23 2018	9.90%
59		Indiana Michigan Power Company	MI	Apr 12 2018	9.90%
60		Duke Energy Carolinas, LLC	NC	Jun 22 2018	9.90%
61		Duke Energy Kentucky, Inc.	KY	Apr 13 2018	9.73%
62		Kentucky Power Company	KY	Jan 18 2018	9.70%
63		Interstate Power and Light Company	IA	Feb 2 2018	9.60%
64		Avista Corporation	WA	Apr 26 2018	9.50%
65		Hawai Electric Light Company, Inc.	HI	Jun 29 2018	9.50%
66		Public Service Company of Oklahoma	OK	Jan 31 2018	9.30%
67		ALLETE (Minnesota Power)	MN	Mar 12 2018	9.25%
68		Utilities with an Approved ROE > 9.70%			7
69		Utilities with an Approved ROE ≤ 9.70%			6
70		ROE Range of Utilities with an Approved ROE ≤ 9.70%			9.25% - 9.70%

Source and Note:
S&P Global Market Intelligence.
2018 data through July 16, 2018.

KCPL / GMO

Revised Hevert Multi-Stage Growth Discounted Cash Flow Model - Terminal P/E
30 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage

Line	Company	Ticker	Stock Price (1)	EPS Growth Rate Estimates				Long-Term Growth (6)	Payout Ratio			Iterative Solution		Terminal P/E Ratio (12)	Terminal PEG Ratio (13)
				Zacks (2)	First Call (3)	Value Line (4)	Average (5)		2017 (7)	2021 (8)	2027 (9)	Proof (10)	IRR (11)		
1	ALLETE, Inc.	ALE	\$77.37	7.20%	5.00%	5.00%	5.73%	4.20%	63.00%	61.00%	63.00%	\$0.00	7.78%	22.21	5.29
2	Alliant Energy Corporation	LNT	\$43.95	6.40%	7.05%	6.00%	6.48%	4.20%	66.00%	66.00%	66.00%	\$0.00	7.80%	22.59	5.38
3	Ameren Corporation	AEE	\$61.69	7.00%	7.00%	6.00%	6.67%	4.20%	64.00%	60.00%	64.00%	\$0.00	8.23%	19.54	4.65
4	American Electric Power Company, Inc.	AEP	\$75.90	4.80%	2.77%	4.00%	3.86%	4.20%	69.00%	63.00%	69.00%	\$0.00	8.67%	18.09	4.31
5	Black Hills Corporation	BKH	\$58.88	4.90%	4.26%	7.50%	5.55%	4.20%	51.00%	51.00%	51.00%	\$0.00	7.61%	21.03	5.01
6	CMS Energy Corporation	CMS	\$48.93	6.50%	7.44%	6.50%	6.81%	4.20%	61.00%	61.00%	61.00%	\$0.00	7.94%	20.78	4.95
7	Dominion Energy, Inc.	D	\$82.55	5.60%	3.64%	6.50%	5.25%	4.20%	83.00%	87.00%	83.00%	\$0.00	8.51%	20.91	4.98
8	DTE Energy Company	DTE	\$112.59	6.00%	4.91%	6.00%	5.64%	4.20%	56.00%	64.00%	56.00%	\$0.00	7.74%	21.13	5.03
9	Duke Energy Corporation	DUK	\$87.23	4.00%	3.23%	4.50%	3.91%	4.20%	81.00%	79.00%	81.00%	\$0.00	8.14%	22.83	5.44
10	El Paso Electric Company	EE	\$58.40	5.20%	5.30%	5.00%	5.17%	4.20%	50.00%	57.00%	50.00%	\$0.00	7.31%	23.26	5.54
11	Hawaiian Electric Industries, Inc.	HE	\$37.06	4.20%	4.50%	1.50%	3.40%	4.20%	77.00%	70.00%	77.00%	\$0.00	9.37%	16.34	3.89
12	IDACORP, Inc.	IDA	\$95.25	5.00%	4.00%	3.50%	4.17%	4.20%	54.00%	61.00%	54.00%	\$0.00	7.29%	24.36	5.80
13	NorthWestern Corporation	NWE	\$61.63	1.50%	2.25%	4.50%	2.75%	4.20%	62.00%	62.00%	62.00%	\$0.00	8.10%	19.93	4.75
14	OGE Energy Corp.	OGE	\$34.24	4.30%	3.90%	6.00%	4.73%	4.20%	67.00%	70.00%	67.00%	\$0.00	8.41%	19.05	4.54
15	Otter Tail Corporation	OTTR	\$46.05	NA	5.20%	7.00%	6.10%	4.20%	72.00%	58.00%	72.00%	(\$0.00)	7.60%	25.30	6.02
16	Pinnacle West Capital Corporation	PNW	\$88.73	3.20%	5.46%	5.50%	4.72%	4.20%	63.00%	63.00%	63.00%	\$0.00	7.87%	21.56	5.13
17	PNM Resources, Inc.	PNM	\$43.71	5.50%	6.05%	7.50%	6.35%	4.20%	48.00%	57.00%	48.00%	\$0.00	7.25%	23.33	5.55
18	Portland General Electric Company	POR	\$47.86	3.80%	4.00%	6.00%	4.60%	4.20%	59.00%	57.00%	59.00%	\$0.00	7.73%	21.76	5.16
19	Southern Company	SO	\$50.56	4.50%	2.33%	3.50%	3.44%	4.20%	75.00%	73.00%	75.00%	\$0.00	8.88%	17.98	4.28
20	WEC Energy Group, Inc.	WEC	\$67.80	5.40%	5.27%	6.00%	5.56%	4.20%	66.00%	67.00%	66.00%	\$0.00	8.11%	20.59	4.90
21	Xcel Energy Inc.	XEL	\$50.21	5.50%	NA	4.50%	5.00%	4.20%	62.00%	66.00%	62.00%	\$0.00	<u>7.88%</u>	21.30	5.07
22	Average												8.01%		

KCPL / GMO

Revised Hevert Multi-Stage Growth Discounted Cash Flow Model - Terminal P/E
90 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage

Line	Company	Ticker	Stock Price (1)	EPS Growth Rate Estimates				Long-Term Growth (6)	Payout Ratio			Iterative Solution		Terminal P/E Ratio (12)	Terminal PEG Ratio (13)
				Zacks (2)	First Call (3)	Value Line (4)	Average (5)		2017 (7)	2021 (8)	2027 (9)	Proof (10)	IRR (11)		
1	ALLETE, Inc.	ALE	\$77.72	7.20%	5.00%	5.00%	5.73%	4.20%	63.00%	61.00%	63.00%	\$0.00	7.76%	22.31	5.31
2	Alliant Energy Corporation	LNT	\$43.28	6.40%	7.05%	6.00%	6.48%	4.20%	66.00%	66.00%	66.00%	(\$0.00)	7.85%	22.25	5.30
3	Ameren Corporation	AEE	\$60.87	7.00%	7.00%	6.00%	6.67%	4.20%	64.00%	60.00%	64.00%	\$0.00	8.28%	19.28	4.59
4	American Electric Power Company, Inc.	AEP	\$74.10	4.80%	2.77%	4.00%	3.86%	4.20%	69.00%	63.00%	69.00%	\$0.00	8.77%	17.65	4.20
5	Black Hills Corporation	BKH	\$64.26	4.90%	4.26%	7.50%	5.55%	4.20%	51.00%	51.00%	51.00%	(\$0.00)	7.37%	22.91	5.45
6	CMS Energy Corporation	CMS	\$48.25	6.50%	7.44%	6.50%	6.81%	4.20%	61.00%	61.00%	61.00%	(\$0.00)	7.98%	20.49	4.88
7	Dominion Energy, Inc.	D	\$80.26	5.60%	3.64%	6.50%	5.25%	4.20%	83.00%	87.00%	83.00%	\$0.00	8.62%	20.30	4.83
8	DTE Energy Company	DTE	\$111.40	6.00%	4.91%	6.00%	5.64%	4.20%	56.00%	64.00%	56.00%	\$0.00	7.78%	20.91	4.98
9	Duke Energy Corporation	DUK	\$87.07	4.00%	3.23%	4.50%	3.91%	4.20%	81.00%	79.00%	81.00%	\$0.00	8.15%	22.79	5.43
10	El Paso Electric Company	EE	\$57.15	5.20%	5.30%	5.00%	5.17%	4.20%	50.00%	57.00%	50.00%	\$0.00	7.36%	22.77	5.42
11	Hawaiian Electric Industries, Inc.	HE	\$35.42	4.20%	4.50%	1.50%	3.40%	4.20%	77.00%	70.00%	77.00%	\$0.00	9.59%	15.57	3.71
12	IDACORP, Inc.	IDA	\$92.20	5.00%	4.00%	3.50%	4.17%	4.20%	54.00%	61.00%	54.00%	\$0.00	7.37%	23.58	5.61
13	NorthWestern Corporation	NWE	\$59.96	1.50%	2.25%	4.50%	2.75%	4.20%	62.00%	62.00%	62.00%	\$0.00	8.20%	19.38	4.61
14	OGE Energy Corp.	OGE	\$35.55	4.30%	3.90%	6.00%	4.73%	4.20%	67.00%	70.00%	67.00%	(\$0.00)	8.27%	19.80	4.71
15	Otter Tail Corporation	OTTR	\$44.86	NA	5.20%	7.00%	6.10%	4.20%	72.00%	58.00%	72.00%	\$0.00	7.68%	24.64	5.87
16	Pinnacle West Capital Corporation	PNW	\$88.35	3.20%	5.46%	5.50%	4.72%	4.20%	63.00%	63.00%	63.00%	\$0.00	7.88%	21.47	5.11
17	PNM Resources, Inc.	PNM	\$42.64	5.50%	6.05%	7.50%	6.35%	4.20%	48.00%	57.00%	48.00%	\$0.00	7.31%	22.77	5.42
18	Portland General Electric Company	POR	\$47.20	3.80%	4.00%	6.00%	4.60%	4.20%	59.00%	57.00%	59.00%	(\$0.00)	7.77%	21.46	5.11
19	Southern Company	SO	\$50.41	4.50%	2.33%	3.50%	3.44%	4.20%	75.00%	73.00%	75.00%	\$0.00	8.89%	17.92	4.27
20	WEC Energy Group, Inc.	WEC	\$66.46	5.40%	5.27%	6.00%	5.56%	4.20%	66.00%	67.00%	66.00%	\$0.00	8.18%	20.17	4.80
21	Xcel Energy Inc.	XEL	\$49.41	5.50%	NA	4.50%	5.00%	4.20%	62.00%	66.00%	62.00%	(\$0.00)	7.94%	20.95	4.99
22	Average												8.05%		

KCPL / GMO

Revised Hevert Multi-Stage Growth Discounted Cash Flow Model - Terminal P/E
90 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage

Line	Company	Ticker	Stock Price (1)	EPS Growth Rate Estimates				Long-Term Growth (6)	Payout Ratio			Iterative Solution		Terminal P/E Ratio (12)	Terminal PEG Ratio (13)
				Zacks (2)	First Call (3)	Value Line (4)	Average (5)		2017 (7)	2021 (8)	2027 (9)	Proof (10)	IRR (11)		
1	ALLETE, Inc.	ALE	\$77.72	7.20%	5.00%	5.00%	5.73%	4.20%	63.00%	61.00%	63.00%	\$0.00	7.76%	22.31	5.31
2	Alliant Energy Corporation	LNT	\$43.28	6.40%	7.05%	6.00%	6.48%	4.20%	66.00%	66.00%	66.00%	(\$0.00)	7.85%	22.25	5.30
3	Ameren Corporation	AEE	\$60.87	7.00%	7.00%	6.00%	6.67%	4.20%	64.00%	60.00%	64.00%	\$0.00	8.28%	19.28	4.59
4	American Electric Power Company, Inc.	AEP	\$74.10	4.80%	2.77%	4.00%	3.86%	4.20%	69.00%	63.00%	69.00%	\$0.00	8.77%	17.65	4.20
5	Black Hills Corporation	BKH	\$64.26	4.90%	4.26%	7.50%	5.55%	4.20%	51.00%	51.00%	51.00%	(\$0.00)	7.37%	22.91	5.45
6	CMS Energy Corporation	CMS	\$48.25	6.50%	7.44%	6.50%	6.81%	4.20%	61.00%	61.00%	61.00%	(\$0.00)	7.98%	20.49	4.88
7	Dominion Energy, Inc.	D	\$80.26	5.60%	3.64%	6.50%	5.25%	4.20%	83.00%	87.00%	83.00%	\$0.00	8.62%	20.30	4.83
8	DTE Energy Company	DTE	\$111.40	6.00%	4.91%	6.00%	5.64%	4.20%	56.00%	64.00%	56.00%	\$0.00	7.78%	20.91	4.98
9	Duke Energy Corporation	DUK	\$87.07	4.00%	3.23%	4.50%	3.91%	4.20%	81.00%	79.00%	81.00%	\$0.00	8.15%	22.79	5.43
10	El Paso Electric Company	EE	\$57.15	5.20%	5.30%	5.00%	5.17%	4.20%	50.00%	57.00%	50.00%	\$0.00	7.36%	22.77	5.42
11	Hawaiian Electric Industries, Inc.	HE	\$35.42	4.20%	4.50%	1.50%	3.40%	4.20%	77.00%	70.00%	77.00%	\$0.00	9.59%	15.57	3.71
12	IDACORP, Inc.	IDA	\$92.20	5.00%	4.00%	3.50%	4.17%	4.20%	54.00%	61.00%	54.00%	\$0.00	7.37%	23.58	5.61
13	NorthWestern Corporation	NWE	\$59.96	1.50%	2.25%	4.50%	2.75%	4.20%	62.00%	62.00%	62.00%	\$0.00	8.20%	19.38	4.61
14	OGE Energy Corp.	OGE	\$35.55	4.30%	3.90%	6.00%	4.73%	4.20%	67.00%	70.00%	67.00%	(\$0.00)	8.27%	19.80	4.71
15	Otter Tail Corporation	OTTR	\$44.86	NA	5.20%	7.00%	6.10%	4.20%	72.00%	58.00%	72.00%	\$0.00	7.68%	24.64	5.87
16	Pinnacle West Capital Corporation	PNW	\$88.35	3.20%	5.46%	5.50%	4.72%	4.20%	63.00%	63.00%	63.00%	\$0.00	7.88%	21.47	5.11
17	PNM Resources, Inc.	PNM	\$42.64	5.50%	6.05%	7.50%	6.35%	4.20%	48.00%	57.00%	48.00%	\$0.00	7.31%	22.77	5.42
18	Portland General Electric Company	POR	\$47.20	3.80%	4.00%	6.00%	4.60%	4.20%	59.00%	57.00%	59.00%	(\$0.00)	7.77%	21.46	5.11
19	Southern Company	SO	\$50.41	4.50%	2.33%	3.50%	3.44%	4.20%	75.00%	73.00%	75.00%	\$0.00	8.89%	17.92	4.27
20	WEC Energy Group, Inc.	WEC	\$66.46	5.40%	5.27%	6.00%	5.56%	4.20%	66.00%	67.00%	66.00%	\$0.00	8.18%	20.17	4.80
21	Xcel Energy Inc.	XEL	\$49.41	5.50%	NA	4.50%	5.00%	4.20%	62.00%	66.00%	62.00%	(\$0.00)	<u>7.94%</u>	20.95	4.99
22	Average												8.05%		

KCPL / GMO

Accuracy of Interest Rate Forecasts (Long-Term Treasury Bond Yields - Projected Vs. Actual)

Line	Date	Publication Data			Actual Yield in Projected Quarter	Projected Yield Higher (Lower) Than Actual Yield*
		Prior Quarter Actual Yield (1)	Projected Yield (2)	Projected Quarter (3)		
1	Dec-00	5.6%	5.8%	1Q, 02	5.6%	0.2%
2	Mar-01	5.7%	5.6%	2Q, 02	5.8%	-0.2%
3	Jun-01	5.4%	5.8%	3Q, 02	5.2%	0.6%
4	Sep-01	5.7%	5.6%	4Q, 02	5.1%	0.8%
5	Dec-01	5.5%	5.7%	1Q, 03	5.0%	0.7%
6	Mar-02	5.3%	5.9%	2Q, 03	4.7%	1.2%
7	Jun-02	5.6%	6.2%	3Q, 03	5.2%	1.0%
8	Sep-02	5.8%	5.9%	4Q, 03	5.2%	0.7%
9	Dec-02	5.2%	5.7%	1Q, 04	4.9%	0.6%
10	Mar-03	5.1%	5.7%	2Q, 04	5.4%	0.3%
11	Jun-03	5.0%	5.4%	3Q, 04	5.1%	0.3%
12	Sep-03	4.7%	5.8%	4Q, 04	4.9%	0.9%
13	Dec-03	6.2%	5.9%	1Q, 05	4.8%	1.1%
14	Mar-04	5.2%	5.9%	2Q, 05	4.6%	1.4%
15	Jun-04	4.9%	6.2%	3Q, 05	4.5%	1.7%
16	Sep-04	5.4%	6.0%	4Q, 05	4.8%	1.2%
17	Dec-04	5.1%	5.8%	1Q, 06	4.6%	1.2%
18	Mar-05	4.9%	5.6%	2Q, 06	5.1%	0.5%
19	Jun-05	4.8%	5.5%	3Q, 06	5.0%	0.5%
20	Sep-05	4.6%	5.2%	4Q, 06	4.7%	0.5%
21	Dec-05	4.5%	5.3%	1Q, 07	4.8%	0.6%
22	Mar-06	4.8%	5.1%	2Q, 07	5.0%	0.1%
23	Jun-06	4.6%	5.3%	3Q, 07	4.9%	0.4%
24	Sep-06	5.1%	5.2%	4Q, 07	4.6%	0.6%
25	Dec-06	5.0%	5.0%	1Q, 08	4.4%	0.6%
26	Mar-07	4.7%	5.1%	2Q, 08	4.6%	0.5%
27	Jun-07	4.8%	5.1%	3Q, 08	4.5%	0.7%
28	Sep-07	5.0%	5.2%	4Q, 08	3.7%	1.5%
29	Dec-07	4.9%	4.6%	1Q, 09	3.5%	1.4%
30	Mar-08	4.6%	4.6%	2Q, 09	4.0%	0.6%
31	Jun-08	4.4%	4.9%	3Q, 09	4.3%	0.6%
32	Sep-08	4.6%	5.1%	4Q, 09	4.3%	0.6%
33	Dec-08	4.5%	4.6%	1Q, 10	4.6%	0.0%
34	Mar-09	3.7%	4.1%	2Q, 10	4.4%	-0.3%
35	Jun-09	3.5%	4.6%	3Q, 10	3.9%	0.6%
36	Sep-09	4.0%	5.0%	4Q, 10	4.2%	0.8%
37	Dec-09	4.3%	5.0%	1Q, 11	4.6%	0.4%
38	Mar-10	4.3%	5.2%	2Q, 11	4.3%	0.9%
39	Jun-10	4.6%	5.2%	3Q, 11	3.7%	1.5%
40	Sep-10	4.4%	4.7%	4Q, 11	3.0%	1.7%
41	Dec-10	3.9%	4.6%	1Q, 12	3.1%	1.5%
42	Mar-11	4.2%	5.1%	2Q, 12	2.9%	2.2%
43	Jun-11	4.6%	5.2%	3Q, 12	2.8%	2.5%
44	Sep-11	4.3%	4.2%	4Q, 12	2.9%	1.3%
45	Dec-11	3.7%	3.8%	1Q, 13	3.1%	0.7%
46	Mar-12	3.0%	3.8%	2Q, 13	3.2%	0.7%
47	Jun-12	3.1%	3.7%	3Q, 13	3.7%	0.0%
48	Sep-12	2.9%	3.4%	4Q, 13	3.8%	-0.4%
49	Dec-12	2.8%	3.4%	1Q, 14	3.7%	-0.3%
50	Mar-13	2.9%	3.6%	2Q, 14	3.4%	0.2%
51	Jun-13	3.1%	3.7%	3Q, 14	3.3%	0.4%
52	Sep-13	3.2%	4.2%	4Q, 14	3.0%	1.2%
53	Dec-13	3.7%	4.2%	1Q, 15	2.6%	1.7%
54	Mar-14	3.6%	4.4%	2Q, 15	2.9%	1.5%
55	Jun-14	3.7%	4.3%	3Q, 15	2.8%	1.5%
56	Sep-14	3.4%	4.3%	4Q, 15	3.0%	1.3%
57	Dec-14	3.3%	4.0%	1Q, 16	2.7%	1.3%
58	Mar-15	3.0%	3.7%	2Q, 16	2.6%	1.1%
59	Jun-15	2.6%	3.7%	3Q, 16	2.3%	1.4%
60	Sep-15	2.9%	3.8%	4Q, 16	2.6%	1.0%
61	Dec-15	2.6%	3.7%	1Q, 17	3.0%	0.7%
62	Mar-16	3.0%	3.5%	2Q, 17	2.9%	0.6%
63	Jun-16	2.7%	3.4%	3Q, 17	2.6%	0.6%
64	Sep-16	2.6%	3.1%	4Q, 17	2.6%	0.3%
65	Dec-16	2.3%	3.4%	1Q, 18	3.0%	0.4%
66	Jan-17	2.6%	3.7%	2Q, 18		
67	Feb-17	2.8%	3.7%	2Q, 18		
68	Mar-17	2.6%	3.7%	2Q, 18		
69	Apr-17	3.1%	3.8%	3Q, 18		
70	May-17	3.0%	3.7%	3Q, 18		
71	Jun-17	3.0%	3.7%	3Q, 18		
72	Jul-17	2.9%	3.7%	4Q, 18		
73	Aug-17	2.9%	3.7%	4Q, 18		
74	Sep-17	2.9%	3.6%	4Q, 18		
75	Oct-17	2.8%	3.6%	1Q, 19		
76	Nov-17	2.8%	3.6%	1Q, 19		
77	Dec-17	2.8%	3.6%	1Q, 19		
78	Jan-18	2.8%	3.6%	2Q, 19		
79	Feb-18	2.8%	3.6%	2Q, 19		
80	Mar-18	2.8%	3.7%	2Q, 19		
81	Apr-18	3.0%	3.8%	3Q, 19		
82	May-18	3.0%	3.8%	3Q, 19		
83	Jun-18	3.0%	3.8%	3Q, 19		
84	Jul-18	3.1%	3.8%	4Q, 19		

Source:
Blue Chip Financial Forecasts, Various Dates.
* Col. 2 - Col. 4.