Exhibit No.:
Issue: Revenue Requirement
Witness: Michael P. Gorman
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: Midwest Energy Consumers Group
Case Nos.: ER-2018-0145 and ER-2018-0146
Date Testimony Prepared: July 27, 2018

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**
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**

Rebuttal Testimony and Schedules of

Michael P. Gorman

On behalf of

Midwest Energy Consumers Group

July 27, 2018

BRUBAKER & ASSOCIATES, INC.

MECG Exhibit No. 511
Date 9-25-18 Reporter JT
File No. ER-2018-0145
ER-2018-0146

Projects 10551.1 and 10552.1

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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

MARIA E. DECKER
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis City
My Commission Expires: May 5, 2021
Commission # 13706793

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Table of Contents to the Rebuttal Testimony of Michael P. Gorman

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Rebuttal Testimony of Michael P. Gorman

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q ARE YOU THE SAME MICHAEL P. GORMAN WHO PREVIOUSLY FILED TESTIMONY IN THIS CASE?

A Yes. On June 19, 2018, I filed revenue requirement direct testimony on behalf of the Midwest Energy Consumers Group ("MECG").

Q WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A I will respond to the June 19, 2018 Staff Report on Cost of Service concerning Kansas City Power & Light Company's ("KCPL" or "Company") and KCP&L Greater Missouri Operations Company's ("GMO" or "Company") (collectively, "Companies")

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

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

I. GENERAL COMMENTS

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

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

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

[1] In 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.

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

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

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

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

II. RESPONSE TO STAFF RECOMMENDED RETURN ON EQUITY

II.A. Recommended Return on Equity

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

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

1. Staff observed the last authorized return on equity for KCPL and GMO, 9.5% in its 2016 rate case in Case No. ER-2016-0285, and concluded that its DCF supports increasing this return by 25 basis points to 9.75%.[2]

2. Staff observed that the authorized return on equity was 9.8% in the Spire Missouri rate cases, Case Nos. GR-2017-0215 and GR-2017-0216.[3]

3. Staff noted that the industry allowed return on equity is in the range of 9.74% to 9.77%.[4]

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

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

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[2]Staff Report, ER-2018-0145/ER-2018-0146 at 5.
[3]*Id.* at 4.
[4]*Id.* at 12.

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

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

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

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

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

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

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

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

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

1. A change in DCF returns in this case compared to the last case does not support a 35 basis point increase in the authorized return on equity for KCPL / GMO. Indeed, reviewing the Companies' and Staff's DCF models in both cases demonstrates that no increase is warranted. Instead, a properly constructed DCF analysis actually justifies a decrease from the 9.5% authorized in the last case.

2. The authorized return on equity for Spire Missouri was an outlier within the industry when it was made, and, contrary to Staff's reliance on that return on equity authorization, would not result in a return on equity for KCPL / GMO that balances the interests of investors and customers. Indeed, this return on equity is substantially higher than that awarded to gas utilities and integrated electric utility companies in 2018. A 9.85% return on equity is simply an above market return.

3. An updated analysis of authorized returns on equity for the electric utility industry shows that a majority of these authorized returns have actually been at 9.5% or lower since 2016, the date of KCPL's / GMO's last rate order. This observable market evidence, in concert with a recent credit upgrade and stable credit outlook, as well as access to significant amounts of capital, is clear evidence that a return on equity of no higher than 9.5% is appropriate. Indeed, these facts in concert with observable market evidence, show that an authorized return on equity below 9.5% would be appropriate in this case.

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

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

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

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

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

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

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

[5]Staff Report, ER-2016-0285 at 43, Table 3.
[6]Staff Report, ER-2018-0145 at 11-12.
[7]*Id.*

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

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

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

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

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

TABLE 1

Gas Utility
Authorized Returns on Equity
2018

Line	Utility	Jur.	Order Date	Awarded
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.

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

II.B. Staff Comments on Capital Market Data

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

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

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

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

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

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

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

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

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

II.C. Staff Market Cost of Equity Estimates

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

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

TABLE 2

DCF Results

Description	Amount
DCF	7.46% - 8.26%
CAPM	6.11% - 7.01%

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

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

III. RESPONSE TO MR. ROBERT HEVERT

III.A. Summary of Rebuttal

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

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

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

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

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

[8] Hevert Direct at 4 and 68.

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

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

TABLE 3

Hevert's Return on Equity Estimates

Description	Mean[1] (1)	Adjusted[2] (2)
Constant Growth DCF		
30-Day Average	8.28%	8.28%
90-Day Average	8.31%	8.31%
180-Day Average	8.38%	8.38%
Average Constant Growth DCF	8.32%	8.32%
Multi-Stage DCF – Gordon Model		
30-Day Average	8.70%	8.01%
90-Day Average	8.74%	8.05%
180-Day Average	8.81%	8.13%
Average	8.75%	8.06%
Multi-Stage DCF – Terminal P/E		
30-Day Average	9.36%	8.01%
90-Day Average	9.46%	8.05%
180-Day Average	9.67%	8.13%
Average	9.50%	8.06%
DCF Range	8.3% to 9.5%	8.1% to 8.3%
CAPM Results (Bloomberg Beta)		
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%
CAPM Results (*Value Line* Beta)		
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%
Risk Premium		
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
Alternative Risk Premium		
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: [1]Hevert Direct at 24, 32, 37 and 40; Schedules RBH-1 through RBH-7.
[2]Schedule MPG-R-3.

III.B. Hevert DCF

III.B.1. Hevert Constant Growth DCF

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[9] Hevert Direct at 28-29.

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

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

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

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

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

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

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

[10] *Id.*, [1.0322 x 1.0209 – 1].

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

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

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

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

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

TABLE 4

GDP Projections

Description	GDP Inflation	Real GDP	Nominal GDP
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:

[1]Hevert Direct Testimony at 28-29.
[2]*Blue Chip Financial Forecasts*, June 1, 2018 at 14.

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

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

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

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

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

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

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

[11] *Id.* at 32.

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

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

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

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

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

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

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

[12] *Id.*
[13] Schedule RBH-2, pages 20-36.

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

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

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

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

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

TABLE 5

Hevert Multi-Stage Growth DCF Analysis

Terminal P/E Method	Gordon (1)	Terminal P/E (2)	Revised (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:
[1]Hevert Direct Testimony at 32.
[2]Schedule MPG-R-3.

III.C. Hevert CAPM Studies

Q PLEASE DESCRIBE MR. HEVERT'S CAPM ANALYSIS.

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

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

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

Q PLEASE DESCRIBE THE ISSUES YOU HAVE WITH MR. HEVERT'S CAPM STUDY.

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

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

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

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

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

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

[14]Hevert Direct Testimony at 34.
[15]*Id.* (13.78% = 11.86% + 1.91% and 14.67% = 12.64% + 2.02%).

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

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

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

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

Q PLEASE EXPLAIN.

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

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

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

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

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

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

[18]Schedule RBH-3.

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

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

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

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

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

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

[19]Schedule RBH-5.
[20]Gorman Direct Testimony at 58-59.

III.D.1. Primary BYP Risk Premium

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

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

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

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

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

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[21]Hevert Direct Testimony at 40.

[22]Robert 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.

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

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

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

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

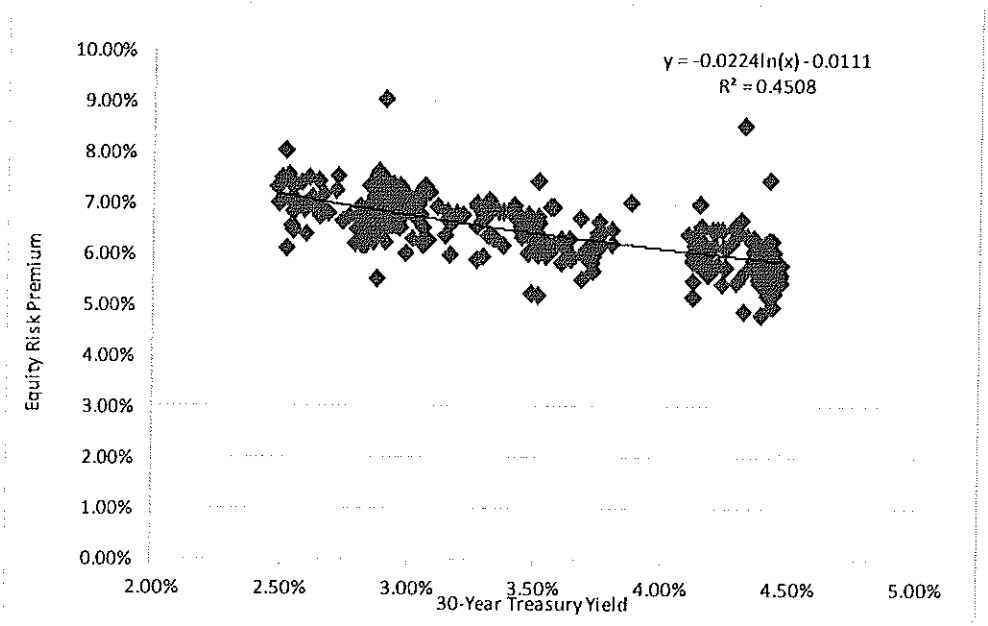
A No. The strength of a relationship between the dependent variable (risk premium) and the independent variable (nominal interest rates) in a regression analysis is explained in the R-squared factor. The R-squared factor measures how much

[23]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 44.

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

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

Figure 1



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

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

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

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

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

[24]Schedule RBH-6.

[25]KCPL 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.

III.D.2. Alternative BYP Risk Premium

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

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

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

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

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

[26]Hevert Direct Testimony at 42.
[27]*Id.* and Schedule RBH-7.

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

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

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

Q PLEASE COMMENT ON THE ALTERNATIVE BYP RISK PREMIUM STUDY.

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

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

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

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

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

III.D.3. Additional Risks

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

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

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

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

[28]Hevert Direct Testimony at 42-43.

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

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

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

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

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

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

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

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

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

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

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

[30]Hevert Direct Testimony at 52-62.
[31]*Id.* at 59-60.

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

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

Q WHAT IS THE MARKET SENTIMENT FOR UTILITY INVESTMENTS?

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

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

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

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

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

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

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

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

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

[32] *Id.* at 34, 40,57-58.

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

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

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

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

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

business. But the 35-year bond bull market has defied all skeptics and yields have fallen rather than risen."[33]

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

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

[33] *EEI Q4 2017 Financial Update*: "Stock Performance" at 6.

[34] The 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%).

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

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

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

A Mr. Hevert's regression analysis[36] is set up in a manner that tends to use corporate credit spreads as a method to "explain" utility yield spreads. He does this analysis by using corporate spreads as the independent variable, and the utility credit spreads as the dependent variable in his regression analysis. However, this regression analysis simply is not useful in observing whether current market valuations suggest that utility costs of capital are lower than non-regulated or corporate bond issuances.

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

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

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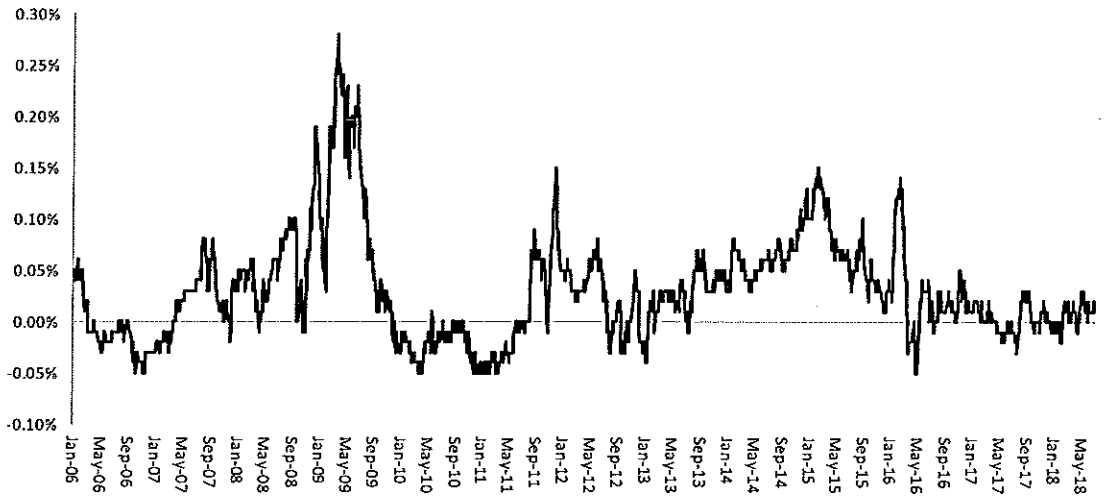
[35] Hevert Direct Testimony and 59-60.
[36] *Id.* at 60.

FIGURE 2

'A' Rated Bond Yield Spread
(Corporate vs. Utility)



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

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

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

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

Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

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 / ER-2018-0146
		Direct (1)	Rebuttal (2)	Direct[2] (3)
	Constant Growth DCF			
1	30-day Average	8.76%	8.99%	8.28%
2	90-day Average	8.82%	8.94%	8.31%
3	180-day Average	9.00%	8.96%	8.38%
4	Average Constant Growth DCF	8.86%	8.96%	8.32%
	Multi-Stage DCF - Gordon Model			
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	9.27%	8.99%	8.61%
14	Average Multi-Stage DCF - Gordon Model	9.24%	9.15%	8.75%
	Multi-Stage DCF - Terminal P/E			
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	9.78%	9.84%	9.13%
24	Average Multi-Stage DCF - Terminal P/E	9.70%	10.26%	9.51%
	Ex-Ante Market Risk Premium			
25	Market DCF, Bloomberg	10.50%	10.19%	11.00%
26	Market DCF, Value Line	11.10%	11.21%	11.89%
27	Average Ex-Ante Market Risk Premium	10.80%	10.70%	11.45%
	CAPM Results (Bloomberg Beta)			
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)	9.92%	9.75%	9.99%
32	Average Bloomberg Beta CAPM Results	9.52%	9.26%	9.47%
	CAPM Results (Value Line Beta)			
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)	11.62%	11.29%	11.78%
37	Average Bloomberg Beta CAPM Results	11.17%	10.73%	11.20%
	Bond Yield Plus Risk Premium			
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	10.39%	10.34%	10.25%
41	Average Bond Yield Plus Risk Premium	10.16%	10.13%	10.07%
	Alternative Risk Premium			
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	10.04%	N/A	9.70%
45	Average Alternative Risk Premium	9.84%		9.63%
46	**Sustainable Growth Return on Common Equity**	N/A	10.55%	N/A
	Constant Growth & Credit Rating			
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	8.32%	N/A
50	Average Constant Growth & Credit Rating		8.20%	

Sources:

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

[2]Hevert Direct Schedules, ER-2018-0145.

KCPL / GMO

Authorized ROE for Electric Utilities from 2016 to 2018

Line	Year	Company	State (1)	Rate Case Completion Date (2)	Authorized Return on Equity (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	9.95%
7		Massachusetts Electric Company	MA	Sep 30 2016	9.90%
8		Virginia Electric and Power Company	NC	Dec 22 2016	9.90%
9		Indianapolis Power & Light Company	IN	Mar 16 2016	9.85%
10		Kingsport Power Company	TN	Aug 9 2016	9.85%
11		Fitchburg Gas and Electric Light Company	MA	Apr 29 2016	9.80%
12		Madison Gas and Electric Company	WI	Nov 9 2016	9.80%
13		Entergy Arkansas, Inc	AR	Feb 23 2016	9.75%
14		Baltimore Gas and Electric Company	MD	Jun 3 2016	9.75%
15		Atlantic City Electric Company	NJ	Aug 24 2016	9.75%
16		Jersey Central Power & Light Company	NJ	Dec 12 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	9.55%
20		Avista Corporation	WA	Jan 6 2016	9.50%
21		UNS Electric, Inc	AZ	Aug 18 2016	9.50%
22		PacifiCorp	WA	Sep 1 2016	9.50%
23		Public Service Company of Oklahoma	OK	Nov 10 2016	9.50%
24		Avista Corporation	ID	Dec 28 2016	9.50%
25		El Paso Electric Company	NM	Jun 8 2016	9.45%
26		Black Hills Colorado Electric Utility Company, LP	CO	Dec 19 2016	9.37%
27		United Illuminating Company	CT	Dec 14 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		Emera Maine	ME	Dec 19 2016	9.00%
31		Commonwealth Edison Company	IL	Dec 8 2016	8.64%
32		Ameren Illinois Company	IL	Dec 8 2016	8.64%
33		Utilities with an Approved ROE > 9.70%			15
34		Utilities with an Approved ROE ≤ 9.70%			17
35		ROE Range of Utilities with an Approved ROE ≤ 9.70%			8.64% - 9.60%
	2017				
36		Alaska Electric Light and Power Company	AK	Nov 15 2017	11.65%
37		Southern California Edison Company	CA	Oct 26 2017	10.30%
38		Gulf Power Company	FL	Apr 4 2017	10.25%
39		Pacific Gas and Electric Company	CA	Oct 26 2017	10.25%
40		Tampa Electric Company	FL	Nov 6 2017	10.25%
41		San Diego Gas & Electric Co.	CA	Oct 26 2017	10.20%
42		DTE Electric Company	MI	Jan 31 2017	10.10%
43		Consumers Energy Company	MI	Feb 28 2017	10.10%
44		Arizona Public Service Company	AZ	Aug 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 28 2017	9.80%
48		Northern States Power Company - WI	WI	Dec 7 2017	9.80%
49		Tucson Electric Power Company	AZ	Feb 24 2017	9.75%
50		Delmarva Power & Light Company	DE	May 23 2017	9.70%
51		Kentucky Utilities Company	KY	Jun 22 2017	9.70%
52		Louisville Gas and Electric Company	KY	Jun 22 2017	9.70%
53		MDU Resources Group, Inc.	ND	Jun 16 2017	9.65%
54		El Paso Electric Company	TX	Dec 14 2017	9.65%
55		Electric Transmission Texas, LLC	TX	Jan 12 2017	9.60%
56		Delmarva Power & Light Company	MD	Feb 15 2017	9.60%
57		Rockland Electric Company	NJ	Feb 22 2017	9.60%
58		Atlantic City Electric Company	NJ	Sep 22 2017	9.60%
59		Southwestern Electric Power Company	TX	Dec 14 2017	9.60%
60		Public Service Company of New Mexico	NM	Dec 20 2017	9.58%
61		Oklahoma Gas and Electric Company	OK	Mar 20 2017	9.50%
62		Until Energy Systems, Inc.	NH	Apr 20 2017	9.50%
63		Kansas City Power & Light Company	MO	May 3 2017	9.50%
64		Oklahoma Gas and Electric Company	AR	May 18 2017	9.50%
65		Potomac Electric Power Company	DC	Jul 24 2017	9.50%
66		Potomac Electric Power Company	MD	Oct 20 2017	9.50%
67		Puget Sound Energy, Inc	WA	Dec 5 2017	9.50%
68		Portland General Electric Company	OR	Dec 18 2017	9.50%
69		Avista Corporation	ID	Dec 28 2017	9.50%
70		MDU Resources Group, Inc	WY	Jan 18 2017	9.45%
71		Otter Tail Power Company	MN	Mar 2 2017	9.41%
72		Liberty Utilities (Granite State Electric) Corp.	NH	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	9.15%
76		Consolidated Edison Company of New York, Inc.	NY	Jan 24 2017	9.00%
77		Commonwealth Edison Company	IL	Dec 8 2017	8.49%
78		Ameren Illinois Company	IL	Dec 8 2017	8.49%
79		Utilities with an Approved ROE > 9.70%			14
80		Utilities with an Approved ROE ≤ 9.70%			29
81		ROE Range of Utilities with an Approved ROE ≤ 9.70%			8.40% - 9.70%
	2018				
82		Consumers Energy Company	MI	Mar 29 2018	10.00%
83		DTE Electric Company	MI	Apr 18 2018	10.00%
84		Indiana Michigan Power Company	IN	May 30 2018	9.95%
85		Duke Energy Progress, LLC	NC	Feb 23 2018	9.90%
86		Indiana Michigan 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	9.73%
89		Kentucky Power Company	KY	Jan 18 2018	9.70%
90		Interstate Power and Light Company	IA	Feb 2 2018	9.60%
91		Avista Corporation	WA	Apr 26 2018	9.50%
92		Potomac Electric Power Company	MD	May 31 2018	9.50%
93		Hawaii Electric Light Company, Inc.	HI	Jun 29 2018	9.50%
94		Emera Maine	ME	Jun 28 2018	9.35%
95		Public Service Company of Oklahoma	OK	Jan 31 2018	9.30%
96		ALLETE (Minnesota Power)	MN	Mar 12 2018	9.25%
97		Connecticut Light and Power Company	CT	Apr 18 2018	9.25%
98		Niagara Mohawk Power Corporation	NY	Mar 15 2018	9.00%
99		Central Hudson Gas & Electric Corporation	NY	Jun 14 2018	8.60%
100		Utilities with an Approved ROE > 9.70%			7
101		Utilities with an Approved ROE ≤ 9.70%			11
102		ROE Range of Utilities with an Approved ROE ≤ 9.70%			8.60% - 9.70%

Source and Note:
S&P 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 (1)	Rate Case Completion Date (2)	Authorized Return on Equity (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 2016	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 26 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		Hawaii 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

Ticker	Stock Price (1)	EPS Growth Rate Estimates Zacks (2)	First Call (3)	Value Line (4)	Average (5)	Long-Term Growth (6)	Payout Ratio 2017 (7)	2021 (8)	2027 (9)	Iterative Solution Proof (10)	IRR (11)	Terminal P/E Ratio (12)	Terminal PEG Ratio (13)
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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	5.18
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
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
XEL	$50.21	5.50%	NA	4.50%	5.00%	4.20%	62.00%	66.00%	62.00%	$0.00	7.88%	21.30	5.07
											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

	Ticker	Stock Price (1)	EPS Growth Rate Estimates Zacks (2)	First Call (3)	Value Line (4)	Average (5)	Long-Term Growth (6)	Payout Ratio 2017 (7)	2021 (8)	2027 (9)	Iterative Solution Proof (10)	IRR (11)	Terminal P/E Ratio (12)	Terminal PEG Ratio (13)
	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
	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
	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
ıy, 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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
n	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
	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
ny	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
	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
	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
	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
												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

	Ticker	Stock Price (1)	EPS Growth Rate Estimates Zacks (2)	First Call (3)	Value Line (4)	Average (5)	Long-Term Growth (6)	Payout Ratio 2017 (7)	2021 (8)	2027 (9)	Iterative Solution Proof (10)	IRR (11)	Terminal P/E Ratio (12)	Terminal PEG Ratio (13)
	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
	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
	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
y, 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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
n	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
	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
ny	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
	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
	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
	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
												8.05%		

KCPL / GMO

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

Line	Date	Publication Data: Prior Quarter Actual Yield (1)	Publication Data: Projected Yield (2)	Publication Data: Projected Quarter (3)	Actual Yield in Projected Quarter (4)	Projected Yield Higher (Lower) Than Actual Yield* (5)
1	Dec-00	5.8%	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%	5.9%	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%	0.8%
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	5.2%	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%	0.5%
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%	4.8%	1Q, 09	3.5%	1.4%
30	Mar-08	4.6%	4.8%	2Q, 09	4.0%	0.8%
31	Jun-08	4.4%	4.9%	3Q, 09	4.3%	0.6%
32	Sep-08	4.6%	5.1%	4Q, 09	4.3%	0.8%
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%	0.8%
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	3.8%	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	2.8%	1.0%
61	Dec-15	2.8%	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	2.8%	0.6%
64	Sep-16	2.6%	3.1%	4Q 17	2.8%	0.3%
65	Dec-16	2.3%	3.4%	1Q 18	3.0%	0.4%
66	Jan-17	2.8%	3.7%	2Q 18		
67	Feb-17	2.8%	3.7%	2Q 18		
68	Mar-17	2.8%	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.