

Exhibit No.: OPCON

Issue: Witness: Type of Exhibit: Sponsoring Party: Case No.: Date Testimony Prepared: Revenue Requirement Michael P. Gorman Direct Testimony Public Counsel ER-2016-0156 July 15, 2016

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

SEP 22 2016

FILED

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service Missouri Public Service Commission Case No. ER-2016-0156

Direct Testimony and Schedules of

Michael P. Gorman

On behalf of

The Office of Public Counsel

NON-PROPRIETARY VERSION

July 15, 2016



BRUBAKER & ASSOCIATES, INC.

Project 10265

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement A General Rate Increase for Electric Service

Case No. ER-2016-0156

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 Office of Public Counsel in this proceeding on its behalf.

2. Attached hereto and made a part hereof for all purposes are my direct testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2016-0156.

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 14th day of July, 2016.

Notary Public

Jaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa	,
MARIA E. DECKER	>
Notary Public - Notary Seat	>
STATE OF MISSOURI	>
9 St. Louis City	>
My Commission Expires: May 5, 2017	•
Commission # 13706793	•

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement A General Rate Increase for Electric Service

Case No. ER-2016-0156

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BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement A General Rate Increase for Electric Service

Case No. ER-2016-0156

Direct Testimony of Michael P. Gorman

1	I.	INTRODUCTION AND SUMMARY

- 2 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 3 A Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,
- 4 Chesterfield, MO 63017.

5 Q WHAT IS YOUR OCCUPATION?

- 6 A I am a consultant in the field of public utility regulation and a Managing Principal of
- 7 Brubaker & Associates, Inc., energy, economic and regulatory consultants.
- 8 Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.
- 9 A This information is included in Appendix A to this testimony.

10 Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A This testimony is presented on behalf of the Office of Public Counsel ("Public
Counsel").

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WHAT IS THE SUBJECT MATTER OF YOUR TESTIMONY?

A My testimony will address the current market cost of equity, and resulting overall rate of return, for KCP&L Greater Missouri Operations Company's ("GMO" or the "Company"). In my analyses, I consider the results of several market models and the current economic environment and outlook for the electric utility industry as well as the financial integrity of GMO given my recommended return on equity and overall rate of return.

8 I will also respond to GMO witness Mr. Robert Hevert's recommended return
9 on equity range of 9.75% to 10.50% and GMO's requested return on equity of 9.90%.

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

12 Q PLEASE SUMMARIZE YOUR RECOMMENDATIONS AND CONCLUSIONS ON 13 RATE OF RETURN.

A I recommend the Missouri Public Service Commission (the "Commission") award a
return on common equity of 9.25%, which is the midpoint of my recommended range
of 8.90% to 9.60%. My recommended return on equity will fairly compensate GMO
for its current market cost of common equity, and it will mitigate the claimed revenue
deficiency in this proceeding by fairly balancing the interests of all stakeholders.

19 I also propose adjustments to the Company's proposed ratemaking capital 20 structure. To the extent the Commission believes it is appropriate to use the 21 Company's proposed actual ratemaking capital structure, I recommend the amount of 22 common equity supporting the Company's goodwill asset be removed from the capital 23 structure for rate-setting purposes. As outlined in my testimony below, goodwill is an 24 asset that has no economic value and does not produce cash flows and therefore

> Michael P. Gorman Page 2

cannot be supported by debt capital. Goodwill can only be supported by common
 equity investment. Goodwill represents transactions taken between investors for
 acquisition of GMO-related utility plant in the past. Hence, the equity supporting the
 goodwill asset does not reflect capital used by the utility to make investments in utility
 plant and equipment. Therefore, the common equity supporting the goodwill asset is
 not a cost of providing utility service. Rather, it reflects the costs incurred by existing
 shareholders for acquiring GMO from its previous owners.

8 I also comment on the reasonableness of the Commission imposing 9 restrictions on a capital structure which will preserve GMO's financial integrity but 10 minimize the cost to retail customers. From this standpoint, I recommend the 11 Commission impose a capital structure limit. For example, a 50% common equity 12 ratio of total investor capital may be an appropriate limit for rate-setting purposes 13 based on current market and credit conditions. A capital structure with this equity 14 component will support credit metrics that will help maintain GMO's current 15 investment grade bond rating and support GMO's access to external capital needed 16 to fund infrastructure improvements under reasonable terms and prices. A capital 17 structure limited to a reasonable common equity ratio of total capital will accomplish 18 these objectives at a much lower cost to retail customers than GMO's capital 19 structure.

l also comment on how the Commission's decision to implement these capital
 structure restrictions will provide Company management clear pricing instructions to
 modify its actual capital structure cost to conform to the capital costs found
 reasonable by the Commission and included in its retail rates. By providing these
 clear price signals to Company management, they can adjust GMO's actual capital
 costs to conform to its Commission-approved cost of service and thus preserve its

ability to have a fair opportunity to earn the Commission-approved return on common
 equity.

3 Q WHAT IS YOUR RECOMMENDED OVERALL RATE OF RETURN?

A Based on my recommended return on equity of 9.25% and capital structure, and the
Company's embedded cost of debt, I recommend an overall rate of return of 7.23%
as developed on my Schedule MPG-1.

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II. RATE OF RETURN

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Q PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.

9 А In this section of my testimony, I will explain the analysis I performed to determine the reasonable rate of return in this proceeding and present the results of my analysis. I 10 begin my estimate of a fair return on equity by reviewing the authorized returns 11 approved by the regulatory commissions in various jurisdictions, the market 12 13 assessment of the regulated utility industry investment risk, credit standing, and stock price performance. I used this information to get a sense of the market's perception 14 of the risk characteristics of regulated utility investments in general, which is then 15 used to produce a refined estimate of the market's return requirement for assuming 16 17 investment risk similar to GMO's utility operations.

As described below, I find the credit rating outlook of the industry to be strong, supportive of the industry's financial integrity, and access to capital. Further, regulated utilities' stocks have exhibited strong price performance over the last several years, which is evidence of utility access to capital.

22 Based on this review of credit outlooks and stock price performance, I 23 conclude that the market continues to embrace the regulated utility industry as a

safe-haven investment and views utility equity and debt investments as low-risk
 securities.

II.A. Electric Industry Authorized Returns on Equity, <u>Access to Capital, and Credit Strength</u>

5 Q DO YOU AGREE WITH MR. HEVERT THAT CURRENT MARKET CONDITIONS 6 SHOULD BE REFLECTED IN GMO'S AUTHORIZED RETURN?

7 А Yes, I do, By reviewing recent regulatory decisions and the current market 8 environment, I conclude that my estimated return on equity range of 8.90% to 9.60% 9 will fairly compensate GMO's investors and allow the utility to access capital without 10 unnecessarily increasing the revenue requirements and placing a burden on 11 ratepayers. Mr. Hevert's own testimony, with balanced adjustments and interpretation 12 of his results, supports my return on equity of no higher than 9.6%. Further, the 13 evidence in this case continues to support the reasonableness of the 9.5% and 9.3% 14 return on equity authorized by the Missouri and Kansas Commissions for KCP&L in 15 2015, respectively.

16 Q HOW DOES YOUR RECOMMENDED RETURN ON EQUITY RANGE COMPARE

- 17 TO KCP&L'S RECENT AUTHORIZED RETURN ON EQUITY OF 9.5%?
- A On September 15, 2015, the Commission issued its final order in KCP&L's rate case
 (Missouri Public Service Commission, Case No. ER-2014-0370) which included a
 return on equity of 9.5%. In KCP&L's recent rate case in Kansas, it was awarded a
 return on common equity of 9.3%.¹

¹State Corporation Commission of the State of Kansas Docket No. 15-KCPE-116-RTS, September 10, 2015.

1 This return on equity falls above the midpoint toward the upper end of my 2 recommended return on equity range. This also clearly shows the Company's 3 requested return on equity of 9.90% is excessive.

Q IN HIS DIRECT TESTIMONY, GMO WITNESS MR. HEVERT OUTLINED 4 FOR VERTICALLY 5 AUTHORIZED RETURNS INDUSTRY ON EQUITY 6 INTEGRATED ELECTRIC UTILITY COMPANIES. HE FINDS THAT HALF THE AUTHORIZED RETURNS ON EQUITY IN 2015 WERE 9.75% AND HALF OF THE 7 8 EIGHT RETURNS ON EQUITY AUTHORIZED IN THE FOURTH QUARTER OF 2015 WERE 10% OR HIGHER.² PLEASE COMMENT. 9

A As shown in Table 1 below, I outline the individual authorized returns on equity for vertically integrated electric utilities in 2015 and the first quarter of 2016. This data includes most of the data used by Mr. Hevert but also reflects additional data for the first quarter of 2016. Like Mr. Hevert, I excluded the Virginia decisions based on their rider return on equity obligations.

²Hevert Direct Testimony at 5.

TABLE 1

2015 and 2016 Vertically Integrated Electric Utility Rate Case Authorized Returns on Equity

<u>Line</u>	Company	<u>State</u>	Return on Equity	Date	S&P Credit <u>Rating</u>
	(1)	(2)	(3)	(4)	(5)
1	KCP&L	KS	9.30%	9/10/2015	BBB+
2	PacifiCorp	WY	9.50%	1/23/2015	A
3	PacifiCorp	WA	9.50%	3/25/2015	А
4	KCP&L	MO	9.50%	9/2/2015	BBB+
5	Avista Corp.	ID	9.50%	12/18/2015	BBB
6	PacifiCorp	WY	9.50%	12/30/2015	Α
7	Avista Corp.	WA	9.50%	1/6/2016	BBB
8	Union Electric Co.	MO	9.53%	4/29/2015	BBB+
. 9	Portland General Electric Co.	OR	9.60%	12/15/2015	BBB
10	Southwestern Pub. Svc. Co.	ΤX	9.70%	12/17/2015	A-
11	Northern States Power Co.	MN	9.72%	3/26/2015	A-
12	Appalachian Power Co.	WV	9.75%	5/26/2015	BBB
13	Entergy Arkansas, Inc.	AR	9.75%	2/23/2016	BBB
14	Pub. Svc. CoColorado	CO	9.83%	2/24/2015	A-
15	Indianapolis Power & Light Co.	IN	9.85%	3/16/2016	BBB-
16	Wisconsin Pub. Svc. Corp.	Wl	10.00%	11/19/2015	A-
17	Northern States Power CoWI	WI	10.00%	12/3/2015	A-
18	Wisconsin Public Service Corporation	MI	10.20%	4/23/2015	A-
19	Consumers Energy Company	MI	10.30%	11/19/2015	BBB+
20	DTE Electric Company	MI	10.30%	12/11/2015	BBB+

Source: SNL Financial, June 15, 2016.

Notes:

¹Rate Cases without return on equity authorization and Virginia limited issue cases for Riders are excluded.

²Rate Cases decided by settlement have been eliminated.

As shown in the table above, the industry authorized returns on equity have predominantly ranged between 9.3% and 9.75%. There were 20 total observations and 13 were below 9.75%, and 8 at or below 9.53%. The data illustrates that authorized returns on equity in Michigan and Wisconsin are well above industry

average authorized returns on equity. The Michigan and Wisconsin rate decisions were the only return awards above 10% in 2015 and 2016.

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3 Other awards are also notable. Specifically, the return on equity for 4 Indianapolis Power & Light Co. was for a utility with a minimum investment grade 5 bond rating of BBB-, and whose parent company is actually a below investment grade entity (AES Corporation - BB from S&P and Ba3 from Moody's). Entergy Arkansas, 6 7 Inc.'s return on equity corresponded with a new regulatory policy implementing 8 formula rates. Excluding these notable decisions, along with the Wisconsin and 9 Michigan decisions, an overwhelming majority of authorized returns on equity in 2015 10 and the first quarter of 2016 were approximately 9.5% plus or minus 20 basis points.

11 Q SHOULD THE COMMISSION GIVE MUCH CONSIDERATION TO THE 12 AUTHORIZED RETURNS ON EQUITY FOR THE WISCONSIN AND MICHIGAN 13 UTILITIES?

14 А No. In my experience, these jurisdictions often award utilities well above industry 15 average authorized returns on equity. What is significant about this observation is, 16 while these utilities get above industry average returns on equity, their bond ratings 17 are generally consistent with industry average credit standings. As shown in the table 18 above, Wisconsin Public Service and Northern States Power Co. both have A- bond 19 ratings. In Michigan, Consumers Energy Company and DTE Electric Company have 20 BBB+ bond ratings. These bond ratings are comparable to GMO's BBB+, which is 21 the same bond rating from S&P for Ameren Missouri. While these utilities' investors are receiving the benefit of well-above industry average authorized returns on equity, 22 23 these return on equity awards are not supporting stronger credit standing or reduced 24 cost of debt for these utilities. Indeed, the authorized returns on equity in Wisconsin

and Michigan are simply inflating these utilities' cost of service and providing above
market returns to investors with no measurable benefit to their retail customers. As
shown on my Schedule MPG-2, Wisconsin and Michigan rates are amongst the
highest in the central United States region for integrated electric utilities.

5 Q HOW SHOULD THE COMMISSION INTERPRET THIS DATA ON AUTHORIZED 6 RETURNS ON EQUITY FOR ELECTRIC UTILITIES?

A I recommend the Commission find that its past decisions have struck a better balance
 between investors and customers by mitigating the unnecessary increases in cost of
 service, while preserving the financial integrity of Missouri utilities and supporting their
 access to large amounts of capital under reasonable terms and conditions than the
 Company's proposal in this regulatory proceeding.

12 Q PLEASE DESCRIBE THE OBSERVABLE EVIDENCE ON TRENDS IN 13 AUTHORIZED RETURNS ON EQUITY FOR ELECTRIC UTILITIES, ELECTRIC 14 UTILITIES' CREDIT STANDING, AND ELECTRIC UTILITIES' ACCESS TO 15 CAPITAL TO FUND INFRASTRUCTURE INVESTMENT.

A Authorized returns on equity for electric utilities have been steadily declining over the last 10 years as illustrated in the graph below. More recent authorized returns on equity for electric utilities have declined down to about the 9.6% to 9.7% area, which approaches the high-end of my recommended range in this proceeding.

> Michael P. Gorman Page 9



1 As illustrated on the graph above, excluding these Virginia rider decisions, the 2 authorized return on equity for electric utilities has steadily declined in 2015/2016 3 from preceding periods.

While the declines in authorized returns on equity is public knowledge, and align with declining capital market costs, utilities are maintaining strong investment grade credit standing, and have been able to attract large amounts of capital at low costs to fund very large capital programs.

> Michael P. Gorman Page 10

1QPLEASE DESCRIBE THE TREND IN CREDIT RATING CHANGES IN THE2ELECTRIC UTILITY INDUSTRY OVER THE LAST FIVE YEARS.

A As shown below in Table 2, over the period 2010-2015, the electric utility industry has
experienced a significant number of upgrades in credit ratings by all of the major
credit rating agencies (Fitch Ratings, Moody's, and Standard & Poor's).



6 As noted above in Table 2, the upgrades in utility credit ratings started 7 outpacing downgrades in 2011, and more recently, the number of upgrades 8 substantially exceeds the amount of downgrades. For example, in 2014, there were 9 103 upgrades and only three downgrades. In 2015, the number of upgrades were 10 more than twice the number of downgrades (at 35 upgrades and 15 downgrades).

> Michael P. Gorman Page 11

1 Q HAVE CREDIT RATING AGENCIES COMMENTED ON DECLINING AUTHORIZED

2 RETURNS ON EQUITY?

- 3 A Yes. Credit rating agencies recognize the declining trend in authorized returns and
- 4 the expectation that regulators will continue lowering the returns for U.S. utilities while
- 5 maintaining a stable credit profile. Specifically, Moody's states:
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Lower Authorized Equity Returns Will Not Hurt Near-Term Credit Profiles

- 8 The credit profiles of US regulated utilities will remain intact over the 9 next few years despite our expectation that regulators will continue to 10 trim the sector's profitability by lowering its authorized returns on equity 11 (ROE).³
- 12 Further, in a recent report, S&P states:

2. Earned returns will remain in line with authorized returns

Authorized returns on equity granted by U.S. utility regulators in rate cases this year have been steady at about 9.5%. Utilities have been adept at earning at or very near those authorized returns in today's economic and fiscal environment. A slowly recovering economy, natural gas and electric prices coming down and then stabilizing at fairly low levels, and the same experience with interest rates have led to a perfect "non-storm" for utility ratepayers and regulators, with utilities benefitting alongside those important constituencies. Utilities have largely used this protracted period of favorable circumstances to consolidate and institutionalize the regulatory practices that support earnings and cash flow stability. We have observed and we project continued use of credit-supportive policies such as short lags between rate filings and final decisions, up-todate test years, flexible and dynamic tariff clauses for major expense items, and alternative ratemaking approaches that allow faster rate recognition for some new investments.⁴

³*Moody's Investors Service*, "US Regulated Utilities: Lower Authorized Equity Returns Will Not Hurt Near-Term Credit Profiles," March 10, 2015.

⁴Standard & Poor's Ratings Services: "Corporate Industry Credit Research: Industry Top Trends 2016, Utilities," December 9, 2015, at 23, emphasis added.

1 Q HAVE UTILITIES BEEN ABLE TO ACCESS EXTERNAL CAPITAL TO SUPPORT 2 INFRASTRUCTURE CAPITAL PROGRAMS?

A Yes. While cost of capital and authorized returns on equity were declining, the utility
 industry has been able to fund substantial increases in capital investments needed for
 infrastructure modernization and expansion. The Edison Electric Institute ("EEI")
 reported in a 2015 financial review of the electric industry financial performance that
 in 2011 electric "industry-wide capex has more than doubled since 2005."⁵

8 EEI also observed that, despite this nearly tripling of capital expenditures 9 during the period 2005-2015, a majority of the funding for utilities' capital 10 expenditures has been provided by internal funds. EEI reports approximately 25% of 11 funding needed to meet these increasing capital expenditures has been derived from 12 external sources and 75% of these capital expenditures have been funded by internal 13 cash. Further, despite nearly tripling capital expenditures, the electric utility industry debt interest expense has declined by approximately 1.9% despite increases in the 14 15 amount of outstanding debt.⁶ This is clear proof that capital market costs have 16 declined.

17 QIS THERE EVIDENCE OF ROBUST VALUATIONS OF ELECTRIC UTILITY18SECURITIES?

19 A Yes. These robust valuations are an indication that utilities can sell securities at high 20 prices, which is a strong indication that they can access capital under reasonable 21 terms and conditions, and at relatively low cost. As shown on my Schedule MPG-3, 22 the historical valuation of the electric utilities included in Mr. Hevert's proxy group

⁵Edison Electric Institute, 2015 Financial Review, Annual Report of the U.S. Investor-Owned Electric Utility Industry, page 17. ⁶Id., pages 8 and 11. based on a price-to-earnings ratio, price-to-cash flow ratio and market price-to-book
value ratio, indicates utility security valuations today are very strong and robust
relative to the last 10 to 15 years. These strong valuations of utility stocks indicate
that utilities have access to equity capital under reasonable terms and costs.

5 Q HOW SHOULD THE COMMISSION USE THIS MARKET INFORMATION IN 6 ASSESSING A FAIR RETURN FOR GMO?

7 A Market evidence is quite clear that capital market costs are near historically low 8 levels. Authorized returns on equity have fallen to the low to mid 9.0% area, and 9 utilities continue to have access to large amounts of external capital to fund large 10 capital programs, and utilities' investment grade credit standings are stable to 11 improving. The Commission should carefully weigh all this important observable 12 market evidence in assessing a fair return on equity for GMO.

13 II.B. Regulated Utility Industry Market Outlook

14 Q PLEASE DESCRIBE THE CREDIT RATING OUTLOOK FOR REGULATED 15 UTILITIES.

16 A Regulated utilities' credit ratings have improved over the last few years and the 17 outlook has been labeled "Stable" by credit rating agencies. Credit analysts have 18 also observed that utilities have strong access to capital at attractive pricing (i.e., low 19 capital costs), which has supported very large capital programs.

20 Standard & Poor's ("S&P") recently published a report titled "Corporate 21 Industry Credit Research: Industry Top Trends 2016, Utilities." In that report, S&P 22 noted the following: Ratings Outlook. <u>Stable</u> with a slight bias toward the negative. Utilities in the U.S. continue to enjoy a confluence of financial, economic, and regulatory environments that are tailor-made for supporting credit quality. Low interest rates, modest economic growth, and relatively stable commodity costs make for little pressure on rates and therefore on the sunny disposition of regulators.

 Credit Metrics. We see credit metrics remaining within historic norms for the industry as a whole and do not project overall financial performance that would affect the industry's creditworthiness.

 Industry Trends. Taking advantage of the favorable market conditions, utilities have been maintaining aggressive capital spending programs to bolster system safety and reliability, as well as technological advances to make the systems "smarter." The elevated spending has not led to large rate increases, but if macro conditions reverse and lead to rising costs that command higher rates, we would expect utilities to throttle back on spending to manage regulatory risk.⁷

17 Similarly, Fitch states:

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34 35 Stable Financial Performance: The stable financial performance of Utilities, Power & Gas (UPG) issuers continues to support a sound credit profile for the sector, with 93% of the UPG portfolio carrying investment-grade ratings as of June 30, 2015, including 65% in the 'BBB' rating category. Second-quarter 2015 LTM [Long-Term Maturity] leverage metrics remained relatively unchanged year over year (YOY) while interest coverage metrics modestly improved. Fitch Ratings expects this trend to broadly sustain for the remainder of 2015, driven by positive recurring factors.

Low Debt-Funded Costs: The sustained low interest rate environment has allowed UPG companies to refinance high-coupon legacy debt with lower coupon new debt. Gross interest expense on an absolute value represented approximately 4.6% of total adjusted debt as of June 30, 2015, a decline of about 150 bps from the 6.1% recorded in the midst of the recession. Fitch believes a rise in interest rates would largely be neutral to credit quality, as issuers have generally built enough headroom in coverage metrics to withstand higher financing costs.

⁷Standard & Poor's Ratings Services: "Corporate Industry Credit Research: Industry Top Trends 2016, Utilities," December 9, 2015, at 22, emphasis added.

Capex Moderately Declining: Fitch expects the capex/depreciation ratio to be at the lower end of its five-year historical range of 2.0x–2.5x in the near term, reflecting a moderate decline in projected capex from the 2011–2014 highs. The capex depreciation ratio was relatively flat YOY at about 2.4x. Capex targets investments toward base infrastructure upgrades, utility-scale renewables and transmission investments.

Key credit metrics for IUCs [investor-owned utility companies] remained relatively stable YOY and continue to support the sound credit profiles and <u>Stable Outlooks</u> characteristic of the sector. EBITDAR [Earnings Before Interest, Taxes, Depreciation, Amortization and Rent] and FFO [Funds From Operations] coverage ratios were 5.6x and 5.9x, respectively, for the LTM ended second-quarter 2015, while adjusted debt/EDITDAR and FFO-adjusted leverage were 3.5x and 3.4x, respectively.⁸

Moody's recent comments on the U.S. Utility Sector state as follows:

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18Our outlook for the US regulated utilities industry is stable. This outlook19reflects our expectations for fundamental business conditions in the20industry over the next 12 to 18 months.

» The credit-supportive regulatory environment is the main reason for our stable outlook. We expect that the relationship between regulators and utilities in 2016 will remain credit-supportive, enabling utilities to recover costs in a timely manner and maintain stable cash flows.

» We estimate that the ratio of cash flow from operations (CFO) to debt will hold steady at about 21%, on average for the industry, over the next 12 to 18 months. The use of timely cost-recovery mechanisms and continued expense management will help utilities offset a lack of growth in electricity demand and lower allowed returns on equity, enabling financial metrics to remain stable. Tax benefits tied to the expected extension of bonus depreciation will also support CFOto-debt ratios.

» Utilities are increasingly using holding company leverage to drive returns, a credit negative. Although not a driver of our outlook, utilities are using leverage at the holding company level to invest in

⁸*Fitch Ratings*: "U.S. Utilities, Power & Gas Data comparator," September 21, 2015, at 1 and 7, emphasis added.

other businesses, make acquisitions and earn higher returns on equity, which could have negative implications across the whole family.⁹

3 Q PLEASE DESCRIBE UTILITY STOCK PRICE PERFORMANCE OVER THE LAST 4 SEVERAL YEARS.

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5 A As shown in the graph below, SNL Financial has recorded utility stock price 6 performance compared to the market. The industry's stock performance data from 7 2004 through March 2016 shows that the SNL Electric Company Index has 8 outperformed the market in downturns and trailed the market during recovery. This 9 relatively stable price performance for utilities supports my conclusion that utility stock 10 investments are regarded by market participants as a moderate- to low-risk 11 investment.



⁹*Moody's Investors Service*: "2016 Outlook – US Regulated Utilities: Credit-Supportive Regulatory Environment Drives Stable Outlook," November 6, 2015, at 1, emphasis added.

1 Q HAVE ELECTRIC UTILITY INDUSTRY TRADE ORGANIZATIONS COMMENTED

2 ON ELECTRIC UTILITY STOCK PRICE PERFORMANCE?

- 3 A Yes. In its 4th Quarter 2015 Financial Update, The Edison Electric Institute ("EEI")
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stated the following concerning the EEI Electric Utility Stock Index ("EEI Index"):

EEI Index returns during 2015 embodied the larger pattern seen in Table I since the 2008/2009 financial crisis, as industry business models have migrated to an increasingly regulated emphasis. The industry has generated consistent positive returns but has lagged the broader markets when markets post strong gains, which in turn have been sparked both by slow but steady U.S. economic growth and corporate profit gains and by the willingness of the Federal Reserve to bolster markets with historically unprecedented monetary support in the form of three rounds of quantitative easing and near-zero shortterm interest rates. While the Fed did raise short-term rates in December 2015 for the first time since 2006 (from zero to a range of 0.25% to 0.50%), this hardly effects longer-term yields, which remain at historically low levels and are influenced more by the level of inflation and economic strength than by the Fed's short-term rate policy.

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Regulated Fundamentals Remain Stable

The rate stability offered by state regulation and the ability to recover rising capital spending in rate base shield regulated utilities from the volatility in the competitive power arena and turn the growth of renewable generation (and the resulting need for new and upgraded transmission lines) into a rate base growth opportunity for many industry players.

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In the shorter-term, analysts continue to see opportunity for 4-6% earnings growth for regulated utilities in general along with prospects for slightly rising dividends (with a dividend yield now at about 4% for the industry overall). That formula has served utility investors quite well in recent years, delivering long-term returns equivalent to those of the broad markets but with much lower volatility. Provided state regulation remains fair and constructive in an effort to address the interests of ratepayers and investors, it would appear that the industry can continue to deliver success for all stakeholders, even in an environment of flat demand and considerable technological change.¹⁰

¹⁰EEI Q4 2015 Financial Update: "Stock Performance" at 4 and 6, emphasis added.

1 Q WHAT ARE THE IMPORTANT TAKEAWAY POINTS FROM THIS ASSESSMENT 2 OF UTILITY INDUSTRY CREDIT AND INVESTMENT RISK OUTLOOKS?

3 А Credit rating agencies consider the regulated utility industry to be "Stable" and believe investors will continue to provide an abundance of low-cost capital to support utilities' 4 5 large capital programs at attractive costs and terms. All of this reinforces my belief 6 utility investments are generally regarded as safe-haven or low-risk investments and 7 the market continues to embrace and demand low-risk investments such as utility 8 securities. The ongoing demand for low-risk investments can reasonably be 9 expected to continue to provide attractive low-cost capital for regulated utilities.

10 II.C. GMO Investment Risk

11 Q PLEASE DESCRIBE THE MARKET'S ASSESSMENT OF THE INVESTMENT RISK 12 OF GMO.

13 A The market's assessment of GMO's investment risk is described by credit rating 14 analysts' reports. GMO's current corporate bond ratings from S&P and Moody's are 15 BBB+ and A3, respectively. GMO's outlook from both credit rating agencies is 16 "Negative" due to its parent company Great Plains Energy ("GPE") announced its 17 intent to acquire Westar Energy on May 16, 2016. Specifically, S&P states:

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Outlook: Negative

Our outlook on GMO reflects that on parent Great Plains Energy Inc. (GPE). The negative outlook on GPE and its subsidiaries reflects the potential for lower ratings if GPE's financial risk profile, which will deteriorate due to the financing used in the Westar Energy Inc. acquisition, does not improve after the transaction closes such that funds from operations (FFO) to total debt is well over 13% after 2018.

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1 Business Risk: Strong

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We base our assessment of GMO's business risk profile on the company's satisfactory competitive position, very low industry risk stemming from the regulated utility industry, and the very low country risk of the U.S., where the utility operates. GMO's competitive position reflects the company's fully regulated integrated electric utility operations and our expectation for continued solid operational performance and generally credit-supportive regulation. The utility serves roughly 300,000 customers in western Missouri and owns about 2,100 megawatts of generating capacity. The utility operates with generally supportive regulation, cash flow stability from its customer base, and no competition. GMO recently filed for a rate increase, requesting \$59 million to recover capital spending for infrastructure improvements.

15 Financial Risk: Significant

16 Based on our medial volatility financial ratio benchmarks, our 17 assessment of GMO's financial risk profile is significant, reflecting our 18 view of the vertically integrated utility model and the recurring cash flow from selling electricity. As a utility, capital spending is ongoing for 19 maintenance purposes and for new projects. Recovery of these costs 20 21 through rates has generally been supportive. The company will 22 require steady cost recovery through the regulatory process to 23 maintain cash flow measures, including FFO to debt greater than 17%.11 24

III. GMO'S PROPOSED CAPITAL STRUCTURE

- 26 Q WHAT IS GMO'S PROPOSED CAPITAL STRUCTURE?
- 27 A GMO's proposed capital structure is shown below in Table 3. This capital structure
- 28 ending the pro forma period July 31, 2016 is sponsored by GMO witnesses Mr. Bryant
- and Mr. Hevert. Mr. Bryant proposes using GMO's actual capital structure instead of
- 30 GPE's consolidated capital structure as used in GMO's last rate case

¹¹ Standard & Poor's RatingsDirect: "Summary: KCP&L Greater Missouri Operations Co.," June 17, 2016, at 3-4.

TABLE 3 <u>GMO's Proposed Capital Structure</u> (July 31, 2016)		
Description	Weight	
Long-Term Debt	45.17%	
Common Equity	<u>54.83%</u>	
Total	100.00%	
Source: Schedule RBH	-10, Page 1 of 3.	

1 Q IS GMO'S PROPOSED CAPITAL STRUCTURE REASONABLE?

A No. Mr. Bryant's proposed capital structure contains an unreasonably high common
equity ratio of total capital. A capital structure with too much common equity
unjustifiably inflates the Company's cost of service, and retail rates. Therefore, I
recommend a reasonable capital structure which contains a balanced amount of debt
and equity be used to set rates.

Q IF THE COMMISSION FINDS THE COMPANY'S ACTUAL CAPITAL STRUCTURE
 TO NOT BE REASONABLE, IS IT APPROPRIATE FOR THE COMMISSION TO
 ADJUST THE RATEMAKING CAPITAL STRUCTURE?

10 A Yes. GMO can adjust its actual capital structure to conform with what the 11 Commission finds to be a reasonable capital structure for ratemaking purposes. This 12 price-setting mechanism encourages GMO to make efficient least-cost management 13 decisions in managing its overall cost of service. GMO can modify its actual capital

structure to conform with what the Commission finds to be reasonable when the rates
 are in effect.

3 A reasonable capital structure would contain no more common equity than 4 necessary to support strong credit standing and maintain the utility's financial 5 integrity, credit rating and, thus, access to capital. For the reasons outlined below, a capital structure for ratemaking purposes in line with 50% equity and 50% debt will 6 7 likely achieve this objective. More specifically, however, I believe reasonable 8 adjustments to GMO's actual capital structure support a ratemaking capital structure 9 around 51.4% common equity. This will be the capital structure I recommend, 10 however, the Commission should consider imposing more stringent requirements on 11 GMO to do a better job of managing its overall cost of capital.

12 Q WHY DO YOU BELIEVE GMO'S PROPOSED CAPITAL STRUCTURE CONTAINS

13 TOO MUCH COMMON EQUITY?

14 A The Company's proposed capital structure has an excessive balance of common

- 15 equity for the following reasons:
- 16 1. Its capital structure has considerably more common equity than used in its last rate case. Increasing the common equity ratio will increase its cost of service and 17 erode its competitive position. Maintaining a competitive position, with reasonable 18 19 operational performance, is consistent with what S&P regarded as "generally 20 credit-supportive regulation" GMO received in its last rate case. Because of this acknowledgement from S&P, there is clearly no need to increase GMO's equity 21 component of total capital while maintaining its strong credit rating, and access to 22 23 large amounts of capital.
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 2. Increasing the common equity ratio is unnecessary in light of other utilities with similar bond ratings even when considering off-balance sheet debt obligations.
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- Adjusting GMO's capital structure to remove the common equity supporting a
 goodwill asset will produce a more balanced capital structure and reduce its
 equity ratio to be in line with what the Commission previously found to be

1appropriate in GMO's last rate case. This was a capital structure S&P found to2support GMO's competitive position and support solid operational performance as3well as being generally regarded as "credit supportive regulation."

- 4 Q PLEASE DESCRIBE THE CAPITAL STRUCTURE APPROVED BY THE MISSOURI
- 5 PUBLIC SERVICE COMMISSION ("MPSC") IN GMO'S LAST RATE CASE.
- 6 A GMO's approved ratemaking capital structures in its last two rate cases are shown
- 7 below in Table 4.

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TABLE 4 <u>Approved Capital Structure</u>		
Description	Case No. <u>ER-2012-0175</u>	
Long-Term Debt	47.1%	
Preferred Stock	0.6%	
Common Equity	52.3%	
Total	100.0%	
Sources: MPSC Case No. ER-2012-0175, Report and Order, January 9, 2013 at 24.		

In GMO's 2012 rate case, the Commission approved a capital structure including a common equity ratio of approximately 52.3%. (Bryant Direct at 4).

10QWASTHISCAPITALSTRUCTUREBASEDONGMO'SSTAND-ALONE11FINANCIALSTATEMENTS FROM THE LAST CASE?

A No. GMO witness Mr. Bryant stated that, after the 2008 acquisition of GMO from
 Aquila, GMO was not able to access financial markets and finance its stand-alone
 capital requirements. Mr. Bryant stated this was due to lack of audited historical

financial statements and credit history. He further states that, due to the Company's diligent efforts to establish GMO's stand-alone financial history and improve its credit profile since the acquisition, GMO now has stand-alone financial capability as of 2013 and was able to issue private placement debt. He says these efforts supported the Company's ability to refinance some of the legacy issue debt of Aquila at attractive rates, which supported the Company's efforts to reduce GMO's embedded cost of debt.

8 Mr. Bryant also advocated in support of the Company's use of GMO's stand-9 alone credit metrics in establishing its overall rate of return. He states using the 10 Company's own capital structure rather than the capital structure of the parent 11 company will be more in line with providing the utility an opportunity to earn the rate 12 of return or earnings permitted by the regulatory commission in setting rates. (Bryant 13 Direct at 4).

14 Q HAS THE COMPANY ASSERTED THAT GMO'S FINANCIAL STRENGTH HAS 15 SUPPORTED ITS ACCESS TO CAPITAL SINCE IT WAS ACQUIRED BY GPE?

16 A No. GMO witness Mr. Bryant states GMO was not able to access capital on a stand-17 alone basis immediately after the acquisition. He states most of the financing activity 18 at GMO was conducted through the parent company GPE's financial position and 19 credit standing. As such, all the refinancing of debt and access to capital at GMO has 20 largely reflected the financial risk of GPE and not GMO on a stand-alone basis.¹²

¹²Bryant Direct at 4.

Michael P. Gorman Page 24

Q MR. BRYANT ALSO STATES IT WOULD BE APPROPRIATE TO SET GMO'S
 RATE OF RETURN BASED ON ITS OWN CAPITAL STRUCTURE TO ENSURE
 THE COMPANY HAS AN OPPORTUNITY TO EARN THE COMMISSION AUTHORIZED RETURN.¹³ PLEASE RESPOND.

The Commission should set a ratemaking capital structure to provide clear signals to 5 А 6 the Company on how to manage its cost of service in order to provide it with an 7 opportunity to earn its authorized return on equity. To the extent GMO finances its 8 capital structure with an excessively high balance of common equity, then 9 management will have to respond by modifying its actual capital structure to bring it down to a mix of debt and equity that the Commission finds to be reasonable. 10 11 Therefore, Mr. Bryant simply has it backwards. Company management needs to 12 respond to the ratemaking signals provided by the Commission for managing its 13 capital structure in order to provide the Company a reasonable opportunity to earn its authorized return on equity. It is not appropriate for the Company to make these 14 15 decisions and preclude the Commission from making necessary ratemaking 16 adjustments that ensure rates charged to retail customers are just and reasonable.

17 Q CAN GMO ADJUST ITS CAPITAL STRUCTURE TO REFLECT WHAT THE 18 COMMISSION FINDS TO BE A REASONABLE RATEMAKING CAPITAL 19 STRUCTURE IN THIS PROCEEDING?

20 A Yes. GMO can adjust its common equity balance of total capital by paying dividends 21 to the Company to reduce common equity and issuing more debt to its affiliate 22 companies or to the market to modify its actual capital structure to correspond to what 23 the Commission finds to be a reasonable mix of debt and equity capital. As such,

¹³Id.

1 GMO management does have the ability to modify its actual capital structure to 2 accommodate what the Commission finds to be a reasonable balanced capital 3 structure for ratemaking purposes.

4 I would note that this pricing signal is consistent with what would take place in 5 a competitive marketplace. If GMO were taking market prices at market cost it would 6 have to modify its actual cost of service in order to be reasonably profitable at current 7 market prices. The market price sets the cost signal, not vice versa. This pricing 8 discipline should not be foregone in a regulatory price-setting construct. GMO's 9 capital structure is simply not reasonable and the Commission should implement a 10 pricing signal that provides GMO's management an incentive to modify its actual 11 capital structure and bring its weights down to a more reasonable mix of debt and 12 equity.

Q WHY WOULD A CAPITAL STRUCTURE TOO HEAVILY WEIGHTED WITH COMMON EQUITY UNNECESSARILY INCREASE GMO'S COST OF SERVICE IN THIS PROCEEDING?

16 А A capital structure too heavily weighted with common equity unnecessarily increases 17 GMO's claimed revenue deficiency because common equity is the most expensive 18 form of capital and is subject to income tax expense. For example, if GMO's 19 authorized return on equity is set at 9.0%, the revenue requirement cost to customers 20 would be approximately 14.4%, or 9.0% adjusted by a tax revenue conversion factor 21 of approximately 1.6x. In contrast, the cost of debt capital is not subject to an income 22 tax expense. GMO's current marginal cost of debt is around 5.50%. Common equity 23 is more than twice as expensive on a revenue requirement basis than debt capital.

A reasonable mix of debt and equity, as already approved by the Commission in the prior rate cases, is necessary in order to balance GMO's financial risk, support an investment grade credit rating, and permit GMO access to capital under reasonable terms and prices. However, a capital structure too heavily weighted with common equity will unnecessarily increase its cost of capital and revenue requirement for ratepayers.

- Q IF THE COMMISSION RELIES ON GMO'S SPECIFIC CAPITAL STRUCTURE TO
 SET RATES, SHOULD IT MAKE ADJUSTMENTS TO REFLECT ITS COST OF
 CAPITAL FOR UTILITY OPERATIONS?
- 10 A Yes. The Commission should set up clear directives to the Company in what capital 11 structure would be reasonable for setting rates. This capital structure should contain 12 a reasonable balance of debt and equity supporting the Company's investment grade 13 bond rating and financial integrity but minimize cost to customers. The utility should 14 not have free discretion in unjustifiably increasing its common equity ratio without 15 clear proof to the Commission that its capital structure decisions result in clear 16 benefits to retail customers.
- Further, the Commission should ensure that only common equity being used to support investments in utility plant and equipment would be recognized in developing a utility's cost of capital in ratemaking procedures. It is the utility's cost of capital that should be included in rates and not capital that is supporting investments in assets that are not part of the utility's cost of utility service.

1 Q DO YOU HAVE EVIDENCE THAT GMO HAS CAPITAL ASSOCIATED WITH 2 MAJOR INVESTMENTS IN ASSETS THAT ARE NOT RELATED TO UTILITY 3 RATE BASE INVESTMENTS?

4 А Yes. On its balance sheet, GMO has a goodwill asset of approximately \$169 million. 5 Goodwill is an accounting "paper" asset created due to a past acquisition. A goodwill 6 asset is not related to providing utility services. Rather, goodwill simply reflects an 7 accounting entry when GPE acquired other assets at prices above their fair market or 8 book value. Further, a goodwill asset can only be supported by equity capital 9 because it is an accounting asset that has no economic value. Specifically, a 10 goodwill asset does not produce cash flows and therefore cannot be supported by 11 debt service payments. Therefore, GPE's common equity supporting the goodwill 12 asset should be removed in establishing the capital structure supporting utility 13 operations.

14 Q HOW WOULD GMO'S PROPOSED CAPITAL STRUCTURE BE IMPACTED IF THE
 15 COMMON EQUITY SUPPORTING ITS GOODWILL ASSET IS REMOVED FROM
 16 THE RATEMAKING CAPITAL STRUCTURE?

A Adjusting GMO's actual common equity balance to remove the common equity
supporting its goodwill asset would reduce GMO's common equity ratio from 54.83%
proposed down to 51.4% (See Schedule MPG-1, page 2).

Q WOULD A CAPITAL STRUCTURE WITH A LOWER AMOUNT OF COMMON
 EQUITY PRODUCE CREDIT METRICS THAT WOULD REASONABLY BE
 EXPECTED TO SUPPORT GMO'S INVESTMENT GRADE BOND RATING?

A Yes. The adjusted debt ratio of companies followed by S&P for various bond ratings
is shown below in Table 5. As shown in this table, the <u>adjusted</u> debt ratio for A- and
BBB debt ratios are all aligned at approximately 50.6% to 53.4%, respectively. These
ratios reflect off-balance sheet debt. As discussed later in this testimony, reflecting
my goodwill adjustment to GMO's capital structure will produce an adjusted debt ratio
for GMO less than 50%.¹⁴ This adjusted debt ratio for GMO makes its adjusted debt
ratio comparable to industry medians for A- and BBB rated utilities.

TABLE 5			
Electric Operating Utility Subsidiaries (Industry Medians)			
S&P Rating	Adj. Debt Ratio		
A-	50.6%		
BBB	53.4%		
GMO ¹	** **		
¹ GMO Highly Confidential response to OPC 6009, before my adjustment.			

11 This table shows that GMO's actual capital structure has much less debt, and

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more equity, than other electric utility companies with comparable bond ratings.

¹⁴See Table 11 to this testimony.

1 Q WHAT IS YOUR PROPOSED CAPITAL STRUCTURE TO BE USED FOR

2 RATEMAKING PURPOSES IN THIS CASE?

3 A My proposed capital structure is shown in Table 6 below.

TABLE 6 <u>Gorman's Proposed Ca</u> (July 31, 20	a <u>pital Structure</u> 16)
Description	Weight
Long-Term Debt	48.6%
Common Equity	<u> 51.4% </u>
Total	100.0%
Source: Schedule MPG	i-1.

4 Q WILL YOUR PROPOSED CAPITAL STRUCTURE ALLOW GMO TO MAINTAIN ITS

5 FINANCIAL INTEGRITY?

A Yes. My capital structure contains less common equity and more long-term debt
capital than GMO's proposed capital structure. As discussed later in my testimony,
my proposed capital structure will support the Company's financial integrity for
regulated utility operations and its current investment grade bond rating as well as will
mitigate cost to customers.

11 III.A. Embedded Cost of Debt

12 Q WHAT IS THE COMPANY'S EMBEDDED COST OF DEBT?

13 A Mr. Hevert is proposing an embedded cost of debt of 5.09% as developed on page 3
14 of his Schedule RBH-10. However, I would point out this embedded cost of debt

includes several legacy debt issuances ranging from 7.636% to 9.745%. Considering
 the current low capital costs, the inclusion of these debt instruments significantly
 increases the embedded cost of debt.

4 If GMO were issuing additional debt in order to bring its capital structure 5 balances in line with a more reasonable debt/equity spread, issuing debt at current 6 low capital market cost would reduce its embedded debt cost and mitigate its 7 embedded debt cost. This action would again lower its cost of service because it 8 would produce a lower cost capital structure but would also reduce GMO's embedded 9 cost of debt. Hence, the Commission should carefully consider the benefits to retail 10 customers without detriments to the Company of modifying its capital structure in an 11 effort to reduce its overall cost of service.

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IV. RETURN ON EQUITY

13 Q PLEASE DESCRIBE WHAT IS MEANT BY A "UTILITY'S COST OF COMMON 14 EQUITY."

A utility's cost of common equity is the expected return that investors require on an
 investment in the utility. Investors expect to earn their required return from receiving
 dividends and through stock price appreciation.

18 Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED
 19 UTILITY'S COST OF COMMON EQUITY.

A In general, determining a fair cost of common equity for a regulated utility has been
 framed by two hallmark decisions of the U.S. Supreme Court: Bluefield Water Works

- 22 <u>& Improvement Co. v. Pub. Serv. Comm'n of W. Va.</u>, 262 U.S. 679 (1923) and <u>Fed.</u>
- 23 Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944).

1 These decisions identify the general financial and economic standards to be 2 considered in establishing the cost of common equity for a public utility. Those 3 general standards provide the authorized return should: (1) be sufficient to maintain 4 financial integrity; (2) attract capital under reasonable terms; and (3) be 5 commensurate with returns investors could earn by investing in other enterprises of 6 comparable risk.

7 Q PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE GMO'S 8 COST OF COMMON EQUITY.

A I have used several models based on financial theory to estimate GMO's cost of
common equity. These models are: (1) a constant growth Discounted Cash Flow
("DCF") model using consensus analysts' growth rate projections; (2) a constant
growth DCF using sustainable growth rate estimates; (3) a multi-stage growth DCF
model; (4) a Risk Premium model; and (5) a Capital Asset Pricing Model ("CAPM"). I
have applied these models to a group of publicly traded utilities with investment risk
similar to GMO.

16 IV.A. Risk Proxy Group

17 Q PLEASE DESCRIBE HOW YOU IDENTIFIED A PROXY UTILITY GROUP THAT
 18 COULD BE USED TO REASONABLY REFLECT THE INVESTMENT RISK OF
 19 GMO AND USED TO ESTIMATE ITS CURRENT MARKET COST OF EQUITY.

A I relied on the same proxy group developed by GMO witness Mr. Hevert with a few
 exceptions. I excluded Otter Tail because it did not have analysts' growth rates from
 Zacks, SNL Financial, or Reuters at the time I developed my studies. I eliminated
 Dominion Resources because, in February 2016, it confirmed its intent to purchase

Questar Corp. Finally, I excluded Westar Energy because it is in the process of being
 acquired by GMO's parent company, GPE, as announced on May 31, 2016.

3 Q WHY IS IT IMPORTANT TO LIMIT THE PROXY GROUP COMPANIES TO THOSE
4 THAT HAVE CONSENSUS ANALYSTS' GROWTH RATES PUBLISHED BY
5 ZACKS, SNL FINANCIAL OR REUTERS?

6 A Selecting companies that have consensus analysts' growth rate projections from at 7 least one of these three sources is an indication that market participants are following 8 the security and there is adequate liquidity and market demand for the security to 9 support the assumption that the market valuation of the security is based on 10 fundamental valuation principles. A stock that is thinly traded, or is not widely 11 followed by the market, may have an observable market price inconsistent with 12 fundamental valuation principles.

13 Q WHY IS IT APPROPRIATE TO EXCLUDE COMPANIES WHICH ARE INVOLVED

14 IN MERGER AND ACQUISITION ("M&A") ACTIVITY FROM THE PROXY GROUP?

A M&A activity can distort the market factors used in DCF and risk premium studies. M&A activity can have impacts on stock prices, growth outlooks, and relative volatility in historical stock prices if the market was anticipating or expecting the M&A activity prior to it actually being announced. This distortion in the market data thus impacts the reliability of the DCF and risk premium estimates for a company involved in M&A.

20 Moreover, companies generally enter into M&A in order to produce greater 21 shareholder value by combining companies. The enhanced shareholder value 22 normally could not be realized had the two companies not combined.
1 When companies announce an M&A, the public assesses the proposed 2 merger and develops outlooks on the value of the two companies after the 3 combination based on expected synergies or other value adds created by the M&A.

4 As a result, the stock value before the merger is completed may not reflect the 5 forward-looking earnings and dividend payments for the company absent the merger 6 or on a stand-alone basis. Therefore, an accurate DCF return estimate on 7 companies involved in M&A activities cannot be produced because their stock prices 8 do not reflect the stand-alone investment characteristics of the companies. Rather, 9 the stock price more likely reflects the shareholder enhancement produced by the 10 proposed transaction. For these reasons, it is appropriate to remove companies 11 involved in M&A activity from a proxy group used to estimate a fair return on equity for 12 a utility.

Q PLEASE DESCRIBE WHY YOU BELIEVE YOUR PROXY GROUP IS
 REASONABLY COMPARABLE IN INVESTMENT RISK TO GMO.

15 A The proxy group is shown in Schedule MPG-4. The proxy group has an average 16 corporate credit rating from S&P of BBB+, which is identical to S&P's corporate credit 17 rating for GMO. The proxy group has an average corporate credit rating from 18 Moody's of Baa1, one notch higher than GMO's corporate credit rating from Moody's 19 of Baa2. Based on this information, I believe my proxy group is reasonably 20 comparable in investment risk to GMO.

The proxy group has an average common equity ratio of 46.9% (including short-term debt) from SNL Financial ("SNL") and 49.5% (excluding short-term debt) from *The Value Line Investment Survey* ("*Value Line*") in 2015.

1 My recommended 51.4% common equity ratio is higher than the proxy group 2 common equity ratio, which means that my proxy group has lower financial risk and 3 will produce a conservative return on equity for GMO. Based on these risk factors, I 4 conclude the proxy group reasonably approximates the investment risk of GMO.

5 IV.B. Discounted Cash Flow Model

6 Q PLEASE DESCRIBE THE DCF MODEL.

7 A The DCF model posits that a stock price is valued by summing the present value of
8 expected future cash flows discounted at the investor's required rate of return or cost
9 of capital. This model is expressed mathematically as follows:

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$$P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} \dots \frac{D_n}{(1+K)^n}$$
 (Equation 1)

D = Dividends in periods 1 - ∞

12 P_0 = Current stock price

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· · · · ·

14 K = Investor's required return

15 This model can be rearranged in order to estimate the discount rate or 16 investor-required return otherwise known as "K." If it is reasonable to assume that 17 earnings and dividends will grow at a constant rate, then Equation 1 can be 18 rearranged as follows:

19 $K = D_1/P_0 + G$ (Equation 2)

20 K = Investor's required return

21 D₁ = Dividend in first year

22 $P_0 = Current stock price$

23 G = Expected constant dividend growth rate

24 Equation 2 is referred to as the annual "constant growth" DCF model.

1 Q

PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF MODEL.

A As shown in Equation 2 above, the DCF model requires a current stock price,
expected dividend, and expected growth rate in dividends.

4 Q WHAT STOCK PRICE HAVE YOU RELIED ON IN YOUR CONSTANT GROWTH 5 DCF MODEL?

A I relied on the average of the weekly high and low stock prices of the utilities in the
proxy group over a 13-week period ending on June 10, 2016. An average stock price
is less susceptible to market price variations than a price at a single point in time.
Therefore, an average stock price is less susceptible to aberrant market price
movements, which may not reflect the stock's long-term value.

A 13-week average stock price reflects a period that is still short enough to contain data that reasonably reflects current market expectations but the period is not so short as to be susceptible to market price variations that may not reflect the stock's long-term value. In my judgment, a 13-week average stock price is a reasonable balance between the need to reflect current market expectations and the need to capture sufficient data to smooth out aberrant market movements.

17 Q WHAT DIVIDEND DID YOU USE IN YOUR CONSTANT GROWTH DCF MODEL?

18 A I used the most recently paid quarterly dividend as reported in *Value Line*.¹⁵ This 19 dividend was annualized (multiplied by 4) and adjusted for next year's growth to 20 produce the D_1 factor for use in Equation 2 above.

¹⁵*The Value Line Investment Survey*, April 29, May 20, and June 17, 2016.

1 Q WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR CONSTANT 2 GROWTH DCF MODEL?

A There are several methods that can be used to estimate the expected growth in
dividends. However, regardless of the method, for purposes of determining the
market-required return on common equity, one must attempt to estimate investors'
consensus about what the dividend, or earnings growth rate, will be and not what an
individual investor or analyst may use to make individual investment decisions.

8 As predictors of future returns, security analysts' growth estimates have been 9 shown to be more accurate than growth rates derived from historical data.¹⁶ That is, 10 assuming the market generally makes rational investment decisions, analysts' growth 11 projections are more likely to influence investors' decisions which are captured in 12 observable stock prices than growth rates derived only from historical data.

For my constant growth DCF analysis, I have relied on a consensus, or mean, of professional security analysts' earnings growth estimates as a proxy for investor consensus dividend growth rate expectations. I used the average of analysts' growth rate estimates from three sources: Zacks, SNL, and Reuters. All such projections were available on June 10, 2016, and all were reported online.

Each consensus growth rate projection is based on a survey of security analysts. There is no clear evidence whether a particular analyst is most influential on general market investors. Therefore, a single analyst's projection does not as reliably predict consensus investor outlooks as does a consensus of market analysts' projections. The consensus estimate is a simple arithmetic average, or mean, of surveyed analysts' earnings growth forecasts. A simple average of the growth forecasts gives equal weight to all surveyed analysts' projections. Therefore, a

¹⁶See, e.g., David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating Share Yield," *The Journal of Portfolio Management*, Spring 1989.

simple average, or arithmetic mean, of analyst forecasts is a good proxy for market
 consensus expectations.

3 Q WHAT ARE THE GROWTH RATES YOU USED IN YOUR CONSTANT GROWTH 4 DCF MODEL?

5 A The growth rates I used in my DCF analysis are shown in Schedule MPG-5. The 6 average growth rate for my proxy group is 5.38%.

7 Q WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF MODEL?

A As shown in Schedule MPG-6, the average and median constant growth DCF returns
for my proxy group for the 13-week analysis are 8.83% and 8.89%, respectively.

10 Q DO YOU HAVE ANY COMMENTS ON THE RESULTS OF YOUR CONSTANT 11 GROWTH DCF ANALYSIS?

12 A Yes. The constant growth DCF analysis for my proxy group is based on a group 13 average long-term sustainable growth rate of 5.40%. The three- to five-year growth 14 rates are higher than my estimate of a maximum long-term sustainable growth rate of 15 4.35%, which I discuss later in this testimony. I believe the constant growth DCF 16 analysis produces a reasonable high-end return estimate.

17 Q HOW DID YOU ESTIMATE A MAXIMUM LONG-TERM SUSTAINABLE GROWTH 18 RATE?

A long-term sustainable growth rate for a utility stock cannot exceed the growth rate
 of the economy in which it sells its goods and services. Hence, the long-term
 maximum sustainable growth rate for a utility investment is best proxied by the

projected long-term Gross Domestic Product ("GDP"). *Blue Chip Financial Forecasts* projects that over the next 5 and 10 years, the U.S. nominal GDP will grow approximately 4.35%. These GDP growth projections reflect a real growth outlook of around 2.2% and an inflation outlook of around 2.1% going forward. As such, the average growth rate over the next 10 years is around 4.35%, which I believe is a reasonable proxy of long-term sustainable growth.¹⁷

In my multi-stage growth DCF analysis, I discuss academic and investment
practitioner support for using the projected long-term GDP growth outlook as a
maximum sustainable growth rate projection. Hence, recognizing the long-term GDP
growth rate as a maximum sustainable growth is logical, and is generally consistent
with academic and economic practitioner accepted practices.

12 IV.C. Sustainable Growth DCF

13QPLEASE DESCRIBE HOW YOU ESTIMATED A SUSTAINABLE LONG-TERM14GROWTH RATE FOR YOUR SUSTAINABLE GROWTH DCF MODEL.

A sustainable growth rate is based on the percentage of the utility's earnings that is retained and reinvested in utility plant and equipment. These reinvested earnings increase the earnings base (rate base). Earnings grow when plant funded by reinvested earnings is put into service, and the utility is allowed to earn its authorized return on such additional rate base investment.

The internal growth methodology is tied to the percentage of earnings retained in the company and not paid out as dividends. The earnings retention ratio is 1 minus the dividend payout ratio. As the payout ratio declines, the earnings retention ratio

¹⁷Blue Chip Financial Forecasts, June 1, 2016, at 14.

increases. An increased earnings retention ratio will fuel stronger growth because
 the business funds more investments with retained earnings.

The payout ratios of the proxy group are shown in my Schedule MPG-7. These dividend payout ratios and earnings retention ratios then can be used to develop a sustainable long-term earnings retention growth rate. A sustainable long-term earnings retention ratio will help gauge whether analysts' current three- to five-year growth rate projections can be sustained over an indefinite period of time.

8 The data used to estimate the long-term sustainable growth rate is based on 9 the Company's current market-to-book ratio and on *Value Line*'s three- to five-year 10 projections of earnings, dividends, earned returns on book equity, and stock 11 issuances.

As shown in Schedule MPG-8, the average sustainable growth rate for the
 proxy group using this internal growth rate model is 4.26%.

14 Q WHAT IS THE DCF ESTIMATE USING THESE SUSTAINABLE LONG-TERM 15 GROWTH RATES?

A DCF estimate based on these sustainable growth rates is developed in Schedule
 MPG-9. As shown there, a sustainable growth DCF analysis produces proxy group
 average and median DCF results for the 13-week period of 7.67% and 7.34%,
 respectively.

20 IV.D. Multi-Stage Growth DCF Model

21 Q HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?

A Yes. My first constant growth DCF is based on consensus analysts' growth rate
 projections so it is a reasonable reflection of rational investment expectations over the

next three to five years. The limitation on this constant growth DCF model is that it
cannot reflect a rational expectation that a period of high or low short-term growth can
be followed by a change in growth to a rate that is more reflective of long-term
sustainable growth. Hence, I performed a multi-stage growth DCF analysis to reflect
this outlook of changing growth expectations.

6 Q WHY DO YOU BELIEVE GROWTH RATES CAN CHANGE OVER TIME?

A Analyst-projected growth rates over the next three to five years will change as utility
earnings growth outlooks change. Utility companies go through cycles in making
investments in their systems. When utility companies are making large investments,
their rate base grows rapidly, which in turn accelerates earnings growth. Once a
major construction cycle is completed or levels off, growth in the utility rate base
slows and its earnings growth slows from an abnormally high three- to five-year rate
to a lower sustainable growth rate.

14 As major construction cycles extend over longer periods of time, even with an 15 accelerated construction program, the growth rate of the utility will slow simply 16 because rate base growth will slow and the utility has limited human and capital 17 resources available to expand its construction program. Therefore, the three- to five-18 year growth rate projection should be used as a long-term sustainable growth rate but 19 not without making a reasonable informed judgment to determine whether it 20 considers the current market environment, the industry, and whether the three- to 21 five-year growth outlook is sustainable.

1 Q PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.

A The multi-stage growth DCF model reflects the possibility of non-constant growth for a company over time. The multi-stage growth DCF model reflects three growth periods: (1) a short-term growth period consisting of the first five years; (2) a transition period, consisting of the next five years (6 through 10); and (3) a long-term growth period starting in year 11 through perpetuity.

For the short-term growth period, I relied on the consensus analysts' growth projections described above in relationship to my constant growth DCF model. For the transition period, the growth rates were reduced or increased by an equal factor reflecting the difference between the analysts' growth rates and the long-term sustainable growth rate. For the long-term growth period, I assumed each company's growth would converge to the maximum sustainable long-term growth rate.

13QWHY IS THE GDP GROWTH PROJECTION A REASONABLE PROXY FOR THE14MAXIMUM SUSTAINABLE LONG-TERM GROWTH RATE?

15 A Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the 16 economy in which they sell services. Utilities' earnings/dividend growth is created by 17 increased utility investment or rate base. Such investment, in turn, is driven by 18 service area economic growth and demand for utility service. In other words, utilities 19 invest in plant to meet sales demand growth. Sales growth, in turn, is tied to 20 economic growth in their service areas.

The U.S. Department of Energy, Energy Information Administration ("EIA") has observed utility sales growth tracks the U.S. GDP growth, albeit at a lower level, as shown in Schedule MPG-10. Utility sales growth has lagged behind GDP growth for more than a decade. As a result, nominal GDP growth is a very conservative

proxy for utility sales growth, rate base growth, and earnings growth. Therefore, the
 U.S. GDP nominal growth rate is a conservative proxy for the highest sustainable
 long-term growth rate of a utility.

4 Q IS THERE RESEARCH THAT SUPPORTS YOUR POSITION THAT, OVER THE 5 LONG TERM, A COMPANY'S EARNINGS AND DIVIDENDS CANNOT GROW AT

6 A RATE GREATER THAN THE GROWTH OF THE U.S. GDP?

- 7 A Yes. This concept is supported in published analyst literature and academic work.
- 8 Specifically, in a textbook titled "Fundamentals of Financial Management," published
- 9 by Eugene Brigham and Joel F. Houston, the authors state as follows:
- 10The constant growth model is most appropriate for mature companies11with a stable history of growth and stable future expectations.12Expected growth rates vary somewhat among companies, but13dividends for mature firms are often expected to grow in the future at14about the same rate as nominal gross domestic product (real GDP15plus inflation).
- 16 The use of the economic growth rate is also supported by investment
- 17 practitioners as outlined as follows:
- 18 Estimating Growth Rates

19One of the advantages of a three-stage discounted cash flow model is20that it fits with life cycle theories in regards to company growth. In21these theories, companies are assumed to have a life cycle with22varying growth characteristics. Typically, the potential for extraordinary23growth in the near term eases over time and eventually growth slows24to a more stable level.

25 * * *

Another approach to estimating long-term growth rates is to focus on estimating the overall economic growth rate. Again, this is the approach used in the *Ibbotson Cost of Capital Yearbook*. To obtain the economic growth rate, a forecast is made of the growth rate's

¹⁸*"Fundamentals of Financial Management,*" Eugene F. Brigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298, emphasis added.

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component parts. Expected growth can be broken into two main parts: expected inflation and expected real growth. By analyzing these components separately, it is easier to see the factors that drive growth.¹⁹

1 2

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5 Q IS THERE ANY ACTUAL INVESTMENT HISTORY THAT SUPPORTS THE 6 NOTION THAT THE CAPITAL APPRECIATION FOR STOCK INVESTMENTS WILL 7 NOT EXCEED THE NOMINAL GROWTH OF THE U.S. GDP?

8 A Yes. This is evident by a comparison of the compound annual growth of the U.S. 9 GDP compared to the geometric growth of the U.S. stock market. Morningstar 10 measures the historical geometric growth of the U.S. stock market over the period 11 1926-2015 to be approximately 5.8%. During this same time period, the U.S. nominal 12 compound annual growth of the U.S. GDP was approximately 6.2%.²⁰

As such, the compound geometric growth of the U.S. nominal GDP has been higher but comparable to the nominal growth of the U.S. stock market capital appreciation. This historical relationship indicates the U.S. GDP growth outlook is a conservative estimate of the long-term sustainable growth of U.S. stock investments.

17 Q HOW DID YOU DETERMINE A SUSTAINABLE LONG-TERM GROWTH RATE

18 THAT REFLECTS THE CURRENT CONSENSUS OUTLOOK OF THE MARKET?

A I relied on the consensus analysts' projections of long-term GDP growth. Blue Chip
 Economic Indicators publishes consensus economists' GDP growth projections twice
 a year. These consensus analysts' GDP growth outlooks are the best available
 measure of the market's assessment of long-term GDP growth. These analyst
 projections reflect all current outlooks for GDP and are likely the most influential on

¹⁹Morningstar, Inc., Ibbotson SBBI 2013 Valuation Yearbook at 51 and 52.

²⁰Duff & Phelps 2016 Valuation Handbook inflation rate of 3.0% at 2-4, and U.S. Bureau of Economic Analysis, January 29, 2016.

investors' expectations of future growth outlooks. The consensus economists'
 published GDP growth rate outlook is 4.35% over the next 10 years.²¹

Therefore, I propose to use the consensus economists' projected 5- and 10-year average GDP consensus growth rates of 4.35%, as published by *Blue Chip Financial Forecasts*, as an estimate of long-term sustainable growth. *Blue Chip Financial Forecasts* projections provide real GDP growth projections of 2.2% and GDP inflation of 2.1%²² over the 5-year and 10-year projection periods. These consensus GDP growth forecasts represent the most likely views of market participants because they are based on published consensus economist projections.

10 Q DO YOU CONSIDER OTHER SOURCES OF PROJECTED LONG-TERM GDP 11 GROWTH?

12 A Yes, and these sources corroborate my consensus analysts' projections, as shown
13 below in Table 7.

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²¹Blue Chip Financial Forecasts, June 1, 2016, at 14. ²²Id.

TABLE 7 GDP Forecasts				
Source	Term	Real <u>GDP</u>	<u>Inflation</u>	Nominal GDP
EIA – Annual Earnings Outlook ²³	25 Yrs	2.4%	1.8%	4.2%
Congressional Budget Office ²⁴	10 Yrs	2.0%	2.0%	4.0%
Moody's Analytics ²⁵	30 Yrs	2.0%	2.0%	4.1%
Social Security Administration ²⁶	50 Yrs			4.5%
The Economist Intelligence Unit ²⁷	35 Yrs	1.9%	2.0%	3.9%
Blue Chip Financial Forecasts	5-10 Yrs	2.2%	2.1%	4.3%

1 The EIA in its *Annual Energy Outlook* projects real GDP out until 2040. In its 2 2015 Annual Report, the EIA projects real GDP through 2040 to be in the range of 3 1.8% to 2.9% with a midpoint or reference case of 2.4% and a long-term GDP price 4 inflation projection of 1.8%. The EIA data supports a long-term nominal GDP growth 5 outlook of 4.2%.²³

Also, the Congressional Budget Office ("CBO") makes long-term economic
projections. The CBO is projecting real GDP growth to be 2.0% during the next
10 years with a GDP price inflation outlook of 2.0%.²⁴ The CBO 10-year outlook for
nominal GDP based on this projection is 4.0%.

10Moody's Analytics also makes long-term economic projections. In its recent1130-year outlook to 2045, Moody's Analytics is projecting real GDP growth of 2.0%

²³DOE/EIA Annual Energy Outlook 2015 With Projections to 2040, January 2016, at 4 and A-38.
 ²⁴CBO: The Budget and Economic Outlook: 2016 to 2026, January 2016, at 140.

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with GDP inflation of 2.0%.²⁵ Based on these projections, Moody's is projecting
 nominal GDP growth of 4.1% over the next 30 years.

The Social Security Administration ("SSA") makes long-term economic projections out to 2090. The SSA's nominal GDP projection, under its intermediate cost scenario of 50 years, is 4.5%.²⁶ This projection is in line with the consensus economists.

7 The Economist Intelligence Unit, a division of *The Economist* and a third-party 8 data provider to SNL Financial, makes a long-term economic projection out to 2050.²⁷ 9 The Economist Intelligence Unit is projecting real GDP growth of 1.9% with an 10 inflation rate of 2.0% out to 2050. The real GDP growth projection is in line with the 11 consensus economists. The long-term nominal GDP projection based on these 12 outlooks is approximately 3.9%.

13 The real GDP and nominal GDP growth projections made by these 14 independent sources support the use of the consensus economist 5-year and 10-year 15 projected GDP growth outlooks as a reasonable estimate of market participants' 16 long-term GDP growth outlooks.

17 Q WHAT STOCK PRICE, DIVIDEND, AND GROWTH RATES DID YOU USE IN YOUR

18 MULTI-STAGE GROWTH DCF ANALYSIS?

A I relied on the same 13-week average stock prices and the most recent quarterly
 dividend payment data discussed above. For stage one growth, I used the
 consensus analysts' growth rate projections discussed above in my constant growth
 DCF model. The first stage growth covers the first five years, consistent with the term

²⁵<u>www.economy.com</u>, *Moody's Analytics Forecast*, January 6, 2016.

²⁶www.ssa.gov, "2015 OASDI Trustees Report," Table VI.G4.

²⁷ SNL Financial, Economist Intelligence Unit, downloaded on January 13, 2016.

of the analyst growth rate projections. The second stage, or transition stage, begins in year 6 and extends through year 10. The second stage growth transitions the growth rate from the first stage to the third stage using a linear trend. For the third stage, or long-term sustainable growth stage, starting in year 11, I used a 4.35% long-term sustainable growth rate based on the consensus economists' long-term projected nominal GDP growth rate.

7 Q WHAT ARE THE RESULTS OF YOUR MULTI-STAGE GROWTH DCF MODEL?

A As shown in Schedule MPG-11, the average and median DCF returns on equity for
my proxy group using the 13-week average stock price are 8.00% and 8.01%,
respectively.

11 Q PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.

12 A The results from my DCF analyses are summarized in Table 8 below:

TABLE 8 Summary of DCF Results		
Description	Proxy Average	<u>Group</u> <u>Median</u>
Constant Growth DCF Model (Analysts' Growth)	8.83%	8.89%
Constant Growth DCF Model (Sustainable Growth)	7.67%	7.34%
Multi-Stage Growth DCF Model	<u>8.00%</u>	<u>8.01%</u>
Average	8.17%	8.08%

I concluded my DCF studies support a return on equity of 8.9%, primarily
based on my constant growth DCF result, which I find as a reasonable high-end DCF
return estimate.

1 IV.E. Risk Premium Model

2 Q PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.

A This model is based on the principle investors require a higher return to assume greater risk. Common equity investments have greater risk than bonds because bonds have more security of payment in bankruptcy proceedings than common equity and the coupon payments on bonds represent contractual obligations. In contrast, companies are not required to pay dividends or guarantee returns on common equity investments. Therefore, common equity securities are considered to be riskier than bond securities.

10 This risk premium model is based on two estimates of an equity risk premium. 11 First, I estimated the difference between the required return on utility common equity 12 investments and U.S. Treasury bonds. The difference between the required return on 13 common equity and the Treasury bond yield is the risk premium. I estimated the risk 14 premium on an annual basis for each year over the period January 1986 through March 2016. The common equity required returns were based on regulatory 15 16 commission-authorized returns for electric utility companies. Authorized returns are 17 typically based on expert witnesses' estimates of the contemporary investor-required 18 return.

19 The second equity risk premium estimate is based on the difference between 20 regulatory commission-authorized returns on common equity and contemporary 21 "A" rated utility bond yields by Moody's. I selected the period January 1986 through 22 March 2016 because public utility stocks consistently traded at a premium to book 23 value during that period. This is illustrated in Schedule MPG-12, which shows the 24 market-to-book ratio since 1986 for the electric utility industry was consistently above 25 a multiple of 1.0x. Over this period, regulatory authorized returns were sufficient to

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support market prices that at least exceeded book value. This is an indication that
regulatory authorized returns on common equity supported a utility's ability to issue
additional common stock without diluting existing shares. It further demonstrates
utilities were able to access equity markets without a detrimental impact on current
shareholders.

Based on this analysis, as shown in Schedule MPG-13, the average indicated
equity risk premium over U.S. Treasury bond yields has been 5.46%. Since the risk
premium can vary depending upon market conditions and changing investor risk
perceptions, I believe using an estimated range of risk premiums provides the best
method to measure the current return on common equity for a risk premium
methodology.

12 I incorporated five-year and 10-year rolling average risk premiums over the 13 study period to gauge the variability over time of risk premiums. These rolling 14 average risk premiums mitigate the impact of anomalous market conditions and 15 skewed risk premiums over an entire business cycle. As shown on my Schedule 16 MPG-13, the five-year rolling average risk premium over Treasury bonds ranged from 17 4.25% to 6.71%, while the 10-year rolling average risk premium ranged from 4.38% 18 to 6.38%.

As shown on my Schedule MPG-14, the average indicated equity risk premium over contemporary Moody's utility bond yields was 4.08%. The five-year and 10-year rolling average risk premiums ranged from 2.88% to 5.53% and 3.20% to 5.01%, respectively.

1QDO YOU BELIEVE THAT THE TIME PERIOD USED TO DERIVE THESE EQUITY2RISK PREMIUM ESTIMATES IS APPROPRIATE TO FORM ACCURATE3CONCLUSIONS ABOUT CONTEMPORARY MARKET CONDITIONS?

A Yes. The time period I use in this risk premium study is a generally accepted period
to develop a risk premium study using "expectational" data.

6 Contemporary market conditions can change dramatically during the period that rates determined in this proceeding will be in effect. A relatively long period of 7 8 time where stock valuations reflect premiums to book value is an indication the 9 authorized returns on equity and the corresponding equity risk premiums were 10 supportive of investors' return expectations and provided utilities access to the equity 11 markets under reasonable terms and conditions. Further, this time period is long 12 enough to smooth abnormal market movement that might distort equity risk 13 premiums. While market conditions and risk premiums do vary over time, this historical time period is a reasonable period to estimate contemporary risk premiums. 14

15 Alternatively, some studies, such as Duff & Phelps referred to later in this 16 testimony, have recommended that use of "actual achieved investment return data" in 17 a risk premium study should be based on long historical time periods. The studies 18 find that achieved returns over short time periods may not reflect investors' expected 19 returns due to unexpected and abnormal stock price performance. Short-term, 20 abnormal actual returns would be smoothed over time and the achieved actual 21 investment returns over long time periods would approximate investors' expected returns. Therefore, it is reasonable to assume that averages of annual achieved 22 23 returns over long time periods will generally converge on the investors' expected 24 returns.

1

2

My risk premium study is based on expectational data, not actual investment returns, and, thus, need not encompass a very long historical time period.

3 Q BASED ON HISTORICAL DATA, WHAT RISK PREMIUM HAVE YOU USED TO 4 ESTIMATE GMO'S COST OF COMMON EQUITY IN THIS PROCEEDING?

The equity risk premium should reflect the relative market perception of risk in the 5 А 6 utility industry today. I have gauged investor perceptions in utility risk today in 7 Schedule MPG-15, where I show the yield spread between utility bonds and Treasury 8 bonds over the last 36 years. As shown in this schedule, the average utility bond yield spreads over Treasury bonds for "A" and "Baa" rated utility bonds for this 9 historical period are 1.52% and 1.97%, respectively. The utility bond yield spreads 10 over Treasury bonds for "A" and "Baa" rated utilities for 2016 were 1.46% and 2.58%, 11 12 respectively. The current average "A" rated utility bond yield spread over Treasury 13 bond yields is now lower than the 36-year average spread. The current "Baa" rated 14 utility bond yield spread over Treasury bond yields is higher than the 36-year average 15 spread.

16 A current 13-week average "A" rated utility bond yield of 3.96% when 17 compared to the current Treasury bond yield of 2.60% as shown in Schedule 18 MPG-16, page 1, implies a yield spread of around 136 basis points. This current utility bond yield spread is lower than the 36-year average spread for "A" rated utility 19 20 bonds of 1.52%. The current spread for the "Baa" rated utility bond yield of 2.09% is 21 higher than the 36-year average spread of 1.97%. However, when compared to the 22 projected Treasury bond yield of 3.40%, the current "Baa" utility spread is around 23 1.29%, lower than the 36-year average of 1.97%.

1 These utility bond yield spreads are evidence that the market perception of 2 utility risk is about average relative to this historical time period and demonstrate that 3 utilities continue to have strong access to capital in the current market.

4

5

Q HOW DO YOU DETERMINE WHERE A REASONABLE RISK PREMIUM IS IN THE CURRENT MARKET?

A I observed the spread of Treasury securities relative to public utility bonds and
corporate bonds in gauging whether or not the risk premium in current market prices
is relatively stable relative to the past. What this observation of market evidence
clearly provides is that the valuations in the current market place an above average
risk premium on securities that have greater risk.

11 This market evidence is summarized below in Table 9, which shows the utility 12 bond yield spreads over Treasury bond yields on average for the period 1980 through 13 2016 and the spreads for the first quarter of 2016. I also show the corporate bond 14 yield spreads for Aaa corporates and Baa corporates.

TABLE 9				
Comparison of Yield Spreads Over Treasury Bonds				
Description	Util	ity Baa	<u>Corp</u> Aaa	orate Baa
Average Historical Spread	1.52%	1.97%	0.84%	1.95%
Q1, 2016 Spread	1.46%	2.58%	1.21%	2.59%
Source: Schedule MPG-15.				4 - - - - - - - - - - - - - - - - - - -

15

16

The observable yield spreads shown in the table above illustrate securities of greater risk have above average risk premiums relative to the long-term historical

average risk premium. Specifically, A-rated utility bonds to Treasuries, a relatively
low-risk investment, have a yield spread in 2016 that has been very comparable to
that of its long-term historical yield spread. The Aaa corporate bond yield spread is
actually below the yield spread over the last 36 years. This is an indication that low
risk investments like Aaa corporate bond yield and A-rated utility bond yield have
premium values relative to minimal risk Treasury securities.

In contrast, the higher risk Baa utility and corporate bond yields currently have
an above-average yield spread of approximately 60 basis points (2.58% vs. 1.97%).
The higher risk Baa utility bond yields do not have the same premium valuations as
their lower risk A-rated utility bond yields, and thus the yield spread for greater risk
investments is wider than lower risk investments.

This illustrates securities with greater risk such as Baa yields versus A yields are commanding above average risk premium spreads in the current marketplace. Utility equity securities are greater risk than Baa utility bonds. Because greater risk securities appear to support an above-average risk premium relative to historical averages, this would support an above-average risk premium in measuring a fair return on equity for a utility stock or equity security.

18 Q WHAT IS YOUR RECOMMENDED RETURN FOR GMO BASED ON YOUR RISK
 19 PREMIUM STUDY?

A To be conservative, I am recommending more weight to the high-end risk premium estimates than the low-end. I state this because of the relatively low level of interest rates now but relative upward movements of utility yields more recently. Hence, I propose to provide 75% weight to my high-end risk premium estimates and 25% to the low-end. Applying these weights, the risk premium for Treasury bond yields

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would be approximately 6.1%,²⁸ which is considerably higher than the 31-year 1 2 average risk premium of 5.46% and reasonably reflective of the 3.4% projected 3 Treasury bond yield. A Treasury bond risk premium of 6.1% and projected Treasury bond vield of 3.4% produce a risk premium estimate of 9.50%. Similarly, applying 4 5 these weights to the utility risk premium indicates a risk premium of 4.9%²⁹. This risk 6 premium is above the 31-year historical average risk premium of 4.08%. This risk 7 premium in connection with the current Baa observable utility bond yield of 4,69% 8 produces an estimated return on equity of 9,60%,

Based on this methodology, my Treasury bond risk premium is 9.50% and my
utility bond risk premium indicates a return of 9.60%. Hence, this methodology
produces a return on equity in the range of 9.50% to 9.60% with a midpoint of 9.55%.

12 IV.F. Capital Asset Pricing Model ("CAPM")

13 Q PLEASE DESCRIBE THE CAPM.

14 A The CAPM method of analysis is based upon the theory that the market-required rate 15 of return for a security is equal to the risk-free rate, plus a risk premium associated 16 with the specific security. This relationship between risk and return can be expressed 17 mathematically as follows:

18	$R_i = R_f + B_i \times (R_m - R_f)$ where:
19 20 21 22	R_i = Required return for stock i R_f = Risk-free rate R_m = Expected return for the market portfolio B_i = Beta - Measure of the risk for stock
23	The stock-specific risk term in the above equation is beta. Beta represents
24	the investment risk that cannot be diversified away when the security is held in a

 $^{28}(4.25\% * 25\%) + (6.71\% * 75\%) = 6.09\%.$ $^{29}(2.88\% * 25\%) + (5.53\% * 75\%) = 4.87\%.$

diversified portfolio. When stocks are held in a diversified portfolio, firm-specific risks
 can be eliminated by balancing the portfolio with securities that react in the opposite
 direction to firm-specific risk factors (e.g., business cycle, competition, product mix,
 and production limitations).

5 The risks that cannot be eliminated when held in a diversified portfolio are 6 non-diversifiable risks. Non-diversifiable risks are related to the market in general 7 and referred to as systematic risks. Risks that can be eliminated by diversification are 8 non-systematic risks. In a broad sense, systematic risks are market risks and nonsystematic risks are business risks. The CAPM theory suggests the market will not 9 compensate investors for assuming risks that can be diversified away. Therefore, the 10 11 only risk investors will be compensated for are systematic or non-diversifiable risks. The beta is a measure of the systematic or non-diversifiable risks. 12

13 Q PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.

A The CAPM requires an estimate of the market risk-free rate, the Company's beta, and
the market risk premium.

16 Q WHAT DID YOU USE AS AN ESTIMATE OF THE MARKET RISK-FREE RATE?

A As previously noted, *Blue Chip Financial Forecasts*' projected 30-year Treasury bond
 yield is 3.40%.³⁰ The current 30-year Treasury bond yield is 2.60%, as shown in
 Schedule MPG-16. I used *Blue Chip Financial Forecasts*' projected 30-year Treasury
 bond yield of 3.40% for my CAPM analysis.

³⁰Blue Chip Financial Forecasts, June 1, 2016 at 2.

1 Q WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN ESTIMATE 2 OF THE RISK-FREE RATE?

3 Treasury securities are backed by the full faith and credit of the United States А 4 government so long-term Treasury bonds are considered to have negligible credit risk. Also, long-term Treasury bonds have an investment horizon similar to that of 5 6 common stock. As a result, investor-anticipated long-run inflation expectations are reflected in both common stock required returns and long-term bond yields. 7 8 Therefore, the nominal risk-free rate (or expected inflation rate and real risk-free rate) 9 included in a long-term bond yield is a reasonable estimate of the nominal risk-free 10 rate included in common stock returns.

11 Treasury bond yields, however, do include risk premiums related to 12 unanticipated future inflation and interest rates. A Treasury bond yield is not a 13 risk-free rate. Risk premiums related to unanticipated inflation and interest rates are 14 systematic of market risks. Consequently, for companies with betas less than 1.0, 15 using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis 16 can produce an overstated estimate of the CAPM return.

17 Q WHAT BETA DID YOU USE IN YOUR ANALYSIS?

18 A As shown in Schedule MPG-17, the proxy group average *Value Line* beta estimate is
0.75.

20 Q HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?

A I derived two market risk premium estimates: a forward-looking estimate and one
based on a long-term historical average.

1 The forward-looking estimate was derived by estimating the expected return 2 on the market (as represented by the S&P 500) and subtracting the risk-free rate from 3 this estimate. I estimated the expected return on the S&P 500 by adding an expected 4 inflation rate to the long-term historical arithmetic average real return on the market. 5 The real return on the market represents the achieved return above the rate of 6 inflation.

7 Duff & Phelps' 2016 Valuation Handbook estimates the historical arithmetic average real market return over the period 1926 to 2015 as 8.7%.³¹ A current 8 9 consensus analysts' inflation projection, as measured by the Consumer Price Index. is 2.3%.³² Using these estimates, the expected market return is 11.20%.³³ The 10 11 market risk premium then is the difference between the 11.20% expected market 12 return and my 3.40% risk-free rate estimate, or approximately 7.8%.

13 My historical estimate of the market risk premium was also calculated by using 14 data provided by Duff & Phelps in its 2016 Valuation Handbook. Over the period 15 1926 through 2015, the Duff & Phelps study estimated that the arithmetic average of the achieved total return on the S&P 500 was 12.0%34 and the total return on 16 long-term Treasury bonds was 6.00%.³⁵ The indicated market risk premium is 6.0% 17 (12.0% - 6.0% = 6.0%).18

 ³³{ [(1 + 0.087) * (1 + 0.023)] - 1 } * 100.
 ³⁴Duff & Phelps, 2016 Valuation Handbook: Guide to Cost of Capital at 2-4. ³⁵Id.

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³¹Duff & Phelps, 2016 Valuation Handbook: Guide to Cost of Capital at 2-4. Calculated as [(1+0.12) / (1+0.03)] – 1. ³²Blue Chip Financial Forecasts, June 1, 2016 at 2.

1 Q HOW DOES YOUR ESTIMATED MARKET RISK PREMIUM RANGE COMPARE TO 2 THAT ESTIMATED BY DUFF & PHELPS?

A The Duff & Phelps analysis indicates a market risk premium falls somewhere in the
range of 5.5% to 6.9%. My market risk premium falls in the range of 6.0% to 7.8%.
My average market risk premium of 6.9% is the same as the high-end of the Duff &
Phelps range.

7 Q HOW DOES DUFF & PHELPS MEASURE A MARKET RISK PREMIUM?

8 А Duff & Phelps makes several estimates of a forward-looking market risk premium 9 based on actual achieved data from the historical period of 1926 through 2015 as well 10 as normalized data. Using this data, Duff & Phelps estimates a market risk premium 11 derived from the total return on large company stocks (S&P 500), less the income 12 return on Treasury bonds. The total return includes capital appreciation, dividend or 13 coupon reinvestment returns, and annual yields received from coupons and/or 14 dividend payments. The income return, in contrast, only reflects the income return 15 received from dividend payments or coupon yields. Duff & Phelps claims the income 16 return is the only true risk-free rate associated with Treasury bonds and is the best approximation of a truly risk-free rate.³⁶ I disagree with this assessment from Duff & 17 18 Phelps because it does not reflect a true investment option available to the 19 marketplace and therefore does not produce a legitimate estimate of the expected 20 premium of investing in the stock market versus that of Treasury bonds. 21 Nevertheless, I will use Duff & Phelps' conclusion to show the reasonableness of my 22 market risk premium estimates.

³⁶*Id.* at 3-28.

Duff & Phelps' range is based on several methodologies. First, Duff & Phelps estimates a market risk premium of 6.9% based on the difference between the total market return on common stocks (S&P 500) less the income return on Treasury bond investments over the 1926-2015 period.

5 Second, Duff & Phelps updated the lbbotson & Chen supply-side model which 6 found that the 6.9% market risk premium based on the S&P 500 was influenced by an 7 abnormal expansion of price-to-earnings ("P/E") ratios relative to earnings and 8 dividend growth during the period, primarily over the last 25 years. Duff & Phelps 9 believes this abnormal P/E expansion is not sustainable.³⁷ Therefore, Duff & Phelps 10 adjusted this market risk premium estimate to normalize the growth in the P/E ratio to 11 be more in line with the growth in dividends and earnings. Based on this alternative 12 methodology, Duff & Phelps published a long-horizon supply-side market risk 13 premium of 6.03%.38

14 Finally, Duff & Phelps develops its own recommended equity, or market, risk 15 premium by employing an analysis that takes into consideration a wide range of 16 economic information, multiple risk premium estimation methodologies, and the 17 current state of the economy by observing measures such as the level of stock 18 indices and corporate spreads as indicators of perceived risk. Based on this 19 methodology, and utilizing a "normalized" risk-free rate of 4.0%, Duff & Phelps 20 concludes the current expected, or forward-looking, market risk premium is 5.5%, implying an expected return on the market of 9.5%.³⁹ 21

> ³⁷*Id.* at 3-30. ³⁸*Id.* at 3-31. ³⁹*Id.* at 3-40.

1 Q WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

A As shown in Schedule MPG-18, based on my low market risk premium of 6.0% and my high market risk premium of 7.8%, a risk-free rate of 3.40%, and a beta of 0.75, my CAPM analysis produces a return of 7.90% to 9.25%. Based on my assessment of risk premiums in the current market, as discussed above, I recommend giving 75% weight to my high-end CAPM return estimate and 25% weight to the low-end return estimate. This produces a recommended CAPM return estimate of approximately 8.91%.⁴⁰

9 IV.G. Return on Equity Summary

10QBASED ON THE RESULTS OF YOUR RETURN ON COMMON EQUITY11ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO12YOU RECOMMEND FOR GMO?

13 A Based on my analyses, I estimate GMO's current market cost of equity to be 9.3%.

TABLE 10			
Return on Common Equity Summary			
Description	<u>Results</u>		
DCF	8.90%		
Risk Premium	9.55%		
CAPM	8.90%		

14

15

My recommended return on common equity of 9.25% is at the approximate midpoint of my estimated range of 8.90% to 9.60%. As shown in Table 10 above, the

⁴⁰(7.90% * 25%) + (9.25% * 75%) = 8.91%.

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high-end of my estimated range is based on my risk premium studies. The low-end is
 based on my DCF studies and CAPM return.

My return on equity estimates reflect observable market evidence, the impact on Federal Reserve policies on current and expected long-term capital market costs, an assessment of the current risk premium built into current market securities, and a general assessment of the current investment risk characteristics of the electric utility industry, and the market's demand for utility securities.

8 IV.H. Financial Integrity

9 Q WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT AN 10 INVESTMENT GRADE BOND RATING FOR GMO?

11 A Yes. I have reached this conclusion by comparing the key credit rating financial 12 ratios for GMO at my proposed return on equity and the Company's actual test-year-13 end capital structure to S&P's benchmark financial ratios using S&P's new credit 14 metric ranges.

- 15 Q PLEASE DESCRIBE THE MOST RECENT S&P FINANCIAL RATIO CREDIT 16 METRIC METHODOLOGY.
- A S&P publishes a matrix of financial ratios corresponding to its assessment of the
 business risk of utility companies and related bond ratings. On May 27, 2009, S&P
 expanded its matrix criteria by including additional business and financial risk
 categories.⁴¹

⁴¹S&P updated its 2008 credit metric guidelines in 2009, and incorporated utility metric benchmarks with the general corporate rating metrics. *Standard & Poor's RatingsDirect*. "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

Based on S&P's most recent credit matrix, the business risk profile categories
 are "Excellent," "Strong," "Satisfactory," "Fair," "Weak," and "Vulnerable." Most
 utilities have a business risk profile of "Excellent" or "Strong."

The financial risk profile categories are "Minimal," "Modest," "Intermediate," Significant," "Aggressive," and "Highly Leveraged." Most of the utilities have a financial risk profile of "Aggressive." GMO has a "Strong" business risk profile and a "Significant" financial risk profile.

8 Q PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS IN 9 ITS CREDIT RATING REVIEW.

10 A S&P evaluates a utility's credit rating based on an assessment of its financial and 11 business risks. A combination of financial and business risks equates to the overall 12 assessment of GMO's total credit risk exposure. On November 19, 2013, S&P 13 updated its methodology. In its update, S&P published a matrix of financial ratios that 14 defines the level of financial risk as a function of the level of business risk.

S&P publishes ranges for primary financial ratios that it uses as guidance in its
credit review for utility companies. The two core financial ratio benchmarks it relies
on in its credit rating process include: (1) Debt to Earnings Before Interest, Taxes,
Depreciation and Amortization ("EBITDA"); and (2) Funds From Operations ("FFO") to
Total Debt.⁴²

⁴²Standard & Poor's RatingsDirect: "Criteria: Corporate Methodology," November 19, 2013.

1QHOWDIDYOUAPPLYS&P'SFINANCIALRATIOSTOTESTTHE2REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS?

I calculated each of S&P's financial ratios based on GMO's cost of service for its retail 3 A 4 jurisdictional operations. While S&P would normally look at total consolidated GMO 5 financial ratios in its credit review process, my investigation in this proceeding is not 6 the same as S&P's. I am attempting to judge the reasonableness of my proposed 7 cost of capital for rate-setting in GMO's retail regulated utility operations. Hence, I am 8 attempting to determine whether my proposed rate of return will in turn support cash 9 flow metrics, balance sheet strength, and earnings that will support an investment 10 grade bond rating and GMO's financial integrity.

11 Q DID YOU INCLUDE ANY OFF-BALANCE SHEET DEBT EQUIVALENTS?

A Yes, I did. The off-balance sheet debt related to purchased power agreements and
 operating leases was provided in a Highly Confidential data response to OPC 6009.

14 Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS AS IT 15 RELATES TO GMO.

16 A The S&P financial metric calculations for GMO at a 9.25% return are developed on a 17 Highly Confidential workpaper. Therefore, I am only providing the results of my 18 calculation in Table 11 below. The credit metrics produced below, with this financial 19 and business risk outlook by S&P, will be used to assess the strength of the credit 20 metrics based on GMO's retail operations in Missouri.

	TABLE 11					
	Standard & Poor's Credit Metrics					
Line	Description	Retail Cost of Service <u>S&P Benchmark (Medial Volatility)^{1/2}</u> <u>ription Amount Intermediate Significant Aggressive</u> (1) (2) (3) (4)				
1 2 3	Total Debt Ratio Debt to EBITDA FFO to Total Debt	49% 3.1x 24%	2.5x - 3.5x 23% - 35%	3.5x - 4.5x 13% - 23%	4.5x - 5.5x 9% - 13%	
Sources: ¹ Standard & Poor's RatingsDirect: "Criteria: Corporate Methodology," November 19, 2013. ² Standard & Poor's RatingsDirect: "KCP&L Greater Missouri Operations Co.," April 28, 2015. ³ Calculated from data included in the Highly Confidential data response to OPC 6009.						

1 GMO's adjusted total debt ratio is approximately 49%. As shown on Table 11, 2 this adjusted debt ratio is significantly lower than S&P's median debt ratio of 3 approximately 54% for BBB-rated utilities and comparable to the S&P median debt 4 ratio of approximately 52% for A-rated utilities. Hence, I concluded this capital 5 structure reasonably supports GMO's current investment grade bond rating. This 6 adjusted total debt ratio will support an investment grade bond rating.

Based on an equity return of 9.25%, GMO will be provided an opportunity to
produce a debt to Earnings Before Interest, Taxes, Depreciation, and Amortization
("EBITDA") ratio of 3.1x. This is within S&P's "Intermediate" guideline range of 2.5x
to 3.5x,⁴³ which reflects less risk and a stronger metric than needed to support GMO's
financial risk ranking of "Significant." This ratio also supports an investment grade
credit rating.

⁴³Id.

- GMO's retail operations FFO to total debt coverage at a 9.25% equity return is
 24%, which is within S&P's "Intermediate" metric guideline range of 23% to 35%.
 This FFO/total debt ratio will support an investment grade bond rating.
- 4 At my recommended return on equity of 9.25% and capital structure, and the 5 Company's proposed embedded debt cost, GMO's financial credit metrics continue to 6 be supportive of its investment grade utility bond rating.

7 V. RESPONSE TO GMO WITNESS MR. ROBERT B. HEVERT

8 V.A. Summary of Rebuttal

9 Q WHAT RETURN ON COMMON EQUITY IS GMO PROPOSING FOR THIS 10 PROCEEDING?

11 A The Company has requested a return on equity of 9.90% based on the recommended 12 range of 9.75% to 10.50% sponsored by its witness, Mr. Robert Hevert.⁴⁴ Mr. Hevert 13 concludes his recommended return on equity range is reasonable, if not 14 conservative.⁴⁵ Mr. Hevert's recommended return is based on: (1) a constant growth 15 DCF analysis, (2) a multi-stage DCF analysis, (3) CAPM studies, and (4) a Bond 16 Yield Plus Risk Premium methodology.

17 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 results are based on excessive, unsustainable
 growth rates; (2) his multi-stage DCF is based on an unrealistic GDP growth estimate

⁴⁴Hevert Direct Testimony at 3. ⁴⁵Id. at 4. and unsustainable payout ratio assumptions; (3) his CAPM is based on inflated
 market risk premiums; (4) his Bond Yield Plus Risk Premium is based on inflated
 utility equity risk premiums; and (5) his risk premium studies are based on stale
 Treasury yields.

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

A Mr. Hevert's return on equity estimates are summarized in Table 12 below. In
Column 2, I show the results with prudent and sound adjustments to his common
equity return estimates. With such adjustments to his proxy groups' DCF, CAPM,
and Risk Premium return estimates, Mr. Hevert's own studies show my
recommended return on equity for GMO is reasonable.

TABLE 12			
Hevert's Return on Equity Estimates			
Description	<u>Mean¹</u>	Adjusted ²	
N N	(1)	(2)	
Constant Growth DCF:			
30-Day Average	9.19%	9.19%	
90-Day Average	9.22%	9.22%	
180-Day Average	<u>9.29%</u>	<u>9.19%</u>	
Average Constant Growth DCF	9.23%	9.23%	
Multi-Stage Growth DCF:			
30-Day Average	9.72%	8.64%	
90-Day Average	9.76%	8.68%	
180-Day Average	<u>9.84%</u>	8.76%	
Average Multi-Stage Growth DCF	9.77%	8.69%	
DCF Range	9.2% to 9.8%	8.7% to 9.2%	
CAPM Results (Bloomberg Beta)			
Current 30-Yr Treasury (BL – 2.96% Rev. to 2.72%)	9.46%	7.47%	
Current 30-Yr Treasury (VL – 2.96% Rev. to 2.72%)	8.97%	7.47%	
Projected 30-Yr Treasury (BL – 3.45% Rev. to 3.08%)	9.95%	7.83%	
Near-Term Projected 30-Yr Treasury (VL - 3.45% Rev. to 3.08%)	9.46%	7.83%	
CAPM Results (Value Line Beta)			
Current 30-Yr Treasury (BL - 2.96% Rev. to 2.72%)	11.20%	8.74%	
Current 30-Yr Treasury (VL – 2.96% Rev. to 2.72%)	10.57%	8.74%	
Projected 30-Yr Treasury (BL – 3.45% Rev. to 3.08%)	11.69%	9.10%	
Near-Term Projected 30-Yr Treasury (VL – 3.45% Rev. to 3.08%)	11.07%	9.10%	
Rick Dromium			
Current 30-Yr Treasury (2.96% Rev. to 2.72%)	10 04%	8 81%	
Near-Term Projected 30-Yr Treasury (3 45% Rev. to 3 08%)	10.10%	9 17%	
Long-Term Projected 30-Yr Treasury (4.65% Rev. to 3.4%)	10.47%	9.49%	
	70.1770	0.4070	
Range	9.75% to 10.50%	8.7% to 9.5%	
Recommended Return on Equity ³	9.9%	9.3%	
Sources: ¹ Hevert Direct Testimony at 22, 30, 37 and 40. ² Schedule MPG-19. ³ Mr. Hevert recommends a return on equity in the range of 9.75% to 10.50%, however the Company has requested a return on equity of 9.9%.			

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1 V.B.1. Hevert Constant Growth DCF

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

A His constant growth DCF returns are developed in 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*.

He relied on dividend yield calculations based on average stock prices over
three different periods: 30-day, 90-day, and 180-day - all reflect one-half year
dividend growth adjustments.

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

A Mr. Hevert's constant growth DCF studies generally support a mean return on equity
 of approximately 9.20%, similar to my constant growth DCF study.

However, Mr. Hevert's DCF return estimates are overstated because they are based on an average growth rate of approximately 5.40% from all of his sources. This growth rate is a very optimistic future growth in comparison to long-term GDP growth of 4.35% as I described above in regard to my own DCF studies. As such, his constant growth DCF return estimates should be considered as a high-end estimate of the current market cost of equity.

19 V.B.2. Hevert Multi-Stage Growth DCF

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

A Yes, he did. His multi-stage DCF model is developed on Schedule RBH-2 of his
testimony. However, his multi-stage DCF analysis is flawed for at least two reasons.
First, Mr. Hevert relied on a long-term growth rate of 5.35%. This is not a reasonable
estimate of long-term growth. Mr. Hevert's long-term growth rate is considerably
 higher than the market GDP growth outlooks as reflected in the consensus analysts'
 projections. Second, his assumption of an increasing dividend payout ratio in the
 second stage is unfounded, and simply inflated dividend payments.

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

Mr. Hevert relied on the long-term historical real GDP growth of 3.25%, as measured 6 А 7 over the period 1929 through 2014. He then adjusted this to a nominal GDP growth 8 by an inflation rate of 2.04%, which is the average of the 180-day average projected 9 inflation measured as the difference, or the spread, between yields on long-term 10 nominal Treasuries and long-term Treasury Inflation Protect Securities ("TIPS") of 11 1.87% and the CPI projection for 2022-2026 of 2.20% from Blue Chip Financial Forecasts. Using an inflation factor of 2,04% and an historical real GDP growth of 12 3.25%, Mr. Hevert produced a nominal GDP growth rate outlook of 5.35% 13 (1.0325 x 1.0204 - 1).46 14

15 Q IS MR. HEVERT'S LONG-TERM GROWTH RATE ESTIMATE OF 5.35% 16 REASONABLE?

17 A No. The methodology used by Mr. Hevert to calculate this growth rate simply is not 18 based on market participants' outlooks for future growth opportunities of the proxy 19 companies specifically, or even general industry growth. Therefore, Mr. Hevert's 20 GDP growth rate projection simply is not comparable to independent consensus 21 analysts' projections of future GDP growth and, therefore, does not reasonably reflect 22 investors' outlook used to make investment decisions.

⁴⁶Hevert Direct Testimony at 26-27.

1QWHY DO MR. HEVERT'S GDP GROWTH PROJECTIONS NOT REASONABLY2ALIGN WITH INDEPENDENT MARKET PARTICIPANTS?

A Mr. Hevert's growth rate of 5.35% is based on an historical real GDP growth rate of
3.25%. This real GDP growth rate is considerably higher than the real GDP growth
provided by consensus analysts in projections of future real GDP growth.

6 In order to measure the current market cost of equity demanded by investors 7 in today's marketplace, it is necessary to reasonably capture the outlooks by 8 investors that have formed evaluations of observable stock prices used in the various 9 time periods underlying Mr. Hevert's and my DCF studies. Mr. Hevert's long-term 10 growth rate simply ignores current consensus analysts' outlooks for future growth, 11 and therefore is not a reasonable estimate of what market participants have relied on 12 in order to produce those market valuations, for example.

The consensus economists' projected GDP growth rate is much lower than the GDP growth rate used by Mr. Hevert in his DCF analysis. A comparison of Mr. Hevert's GDP growth rate and consensus economists' projected growth over the next 5 and 10 years is shown in Table 13 below. As shown in this table, Mr. Hevert's GDP rate of 5.35% reflects real GDP of 3.25% and an inflation adjusted GDP of 2.04%. However, consensus economists' projections of nominal GDP over the next 5 and 10 years are 4.35%.

As is clearly evident in Table 13, Mr. Hevert's historical GDP growth is much
higher than, and not representative of, consensus market expected forward-looking
GDP growth.

TABLE 13										
GDP Projections										
Description	GDP <u>Inflation</u>	Real GDP	Nominal <u>GDP</u>							
Mr. Hevert	2.0%	3.3%	5.35%							
Consensus Economists (5-Year) Consensus Economists (10-Year)	2.1% 2.1%	2.2% 2.2%	4.35% 4.35%							
Source: Blue Chip Financial Forecasts	s, June 1, 20	16 at 14.								

1 Mr. Hevert's 5.35% nominal GDP growth rate is not reflective of consensus 2 market expectations and should be rejected. Indeed, Mr. Hevert's 5.35% GDP 3 growth rate outlook is inconsistent with the consensus of economists' independent 4 projections of future long-term GDP growth and is also inconsistent with projections 5 made by the U.S. EIA and CBO (as referenced in my testimony above where I 6 describe the parameters used in my own multi-stage growth DCF analyses). Those 7 agencies also project nominal GDP much more consistent with the consensus 8 independent economists' projections shown in Table 13 above. For all these 9 reasons, Mr. Hevert's GDP growth outlook is out of line and out of touch with the 10 consensus market outlooks.

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 analysts' three- to five-year dividend payout projections of
61.78% for his proxy group and assumed that eventually they would converge to the
historical industry average dividend payout ratio of 67.30%.⁴⁷

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

10 A No. There is simply no reason to expect the dividend payout ratio of the proxy group 11 will increase toward the utility industry historical average. The going-forward payout 12 ratio of the proxy group will be controlled by funding requirements and dividend 13 growth outlook for the future.

Utilities are reducing dividend payout ratios in order to increase retained earnings as a means to increase internal cash flow. This increased internal cash flow supports the utility's ability to fund larger capital expenditure programs with internal funding. Since the capital expenditure program for the industry is expected to remain large, there is no reasonable basis to assume that the industry payout ratio will increase during transition period growth stage as assumed by Mr. Hevert.

Further, there should be a tie between the growth rate in the short-term stage and the long-term stage. Changes in the payout ratio may explain these differences in growth rates. However, Mr. Hevert's assumption for changes in the dividend payout ratio is not tied to transitioning from a short-term growth stage to a long-term

⁴⁷Hevert Direct Testimony at 30.

growth stage. There is simply no basis for the assumption that the dividend payout
 ratio will increase or change between growth stages of this model.

For all these reasons, his changing payout ratio assumptions seem to only
 result in enhancing cash flows during the transition phase through the terminal phase
 and artificially increasing his multi-stage growth DCF return estimate.

- 6 Q HOW CAN MR. HEVERT'S MODEL BE CORRECTED TO ELIMINATE HIS 7 UNREASONABLE ASSUMPTIONS?
- 8 A Simply eliminating his assumption that the utility payout ratio will revert from the 9 analysts' three- to five-year growth rate projections to the higher long-term historical 10 growth rate will correct this problem.
- 11QHOW WOULD MR. HEVERT'S MULTI-STAGE GROWTH DCF MODEL CHANGE IF12THE CORRECTIONS YOU DESCRIBED ABOVE ARE MADE TO HIS RETURN
- 13 ESTIMATE?

A As shown below in Table 14, revising the GDP growth rate to the consensus analysts'
 projection and coordinating the payout ratio assumption with the long-term earnings
 growth rate assumption reduces Mr. Hevert's multi-stage growth DCF return from
 9.77% to 8.69% for his proxy group.

TABLE 14 <u>Hevert Multi-Stage Growth DCF Analysis</u>										
Description	<u>Mean¹</u> (1)	Adjusted ² (2)								
30-Day Average 90-Day Average 180-Day Average Average	9.72% 9.76% <u>9.84%</u> 9.77%	8.64% 8.68% <u>8.76%</u> 8.69%								
Sources: ¹ Hevert Direct Testimony at 30. ² Schedule MPG-19.										

1QWHAT IS A REASONABLE DCF RETURN FOR GMO BASED ON MR. HEVERT'S2CONSTANT GROWTH DCF ESTIMATES AND YOUR SOUND ADJUSTMENTS TO3HIS MULTI-STAGE DCF RESULTS?

A Giving equal weight to Mr. Hevert's mean constant growth DCF estimates and my
revision of his multi-stage DCF estimates, the return on equity falls in the range of
8.7% to 9.2%.

7 V.C. Mr. Hevert's CAPM

8 Q PLEASE DESCRIBE THE ISSUES YOU TAKE WITH MR. HEVERT'S CAPM

- 9 ANALYSES.
- 10 A My major concern with Mr. Hevert's CAPM analysis is his inflated market risk
- premium estimates. I also take issue with Mr. Hevert's stale risk-free rates based on
 Blue Chip Financial Forecasts as of January 1, 2016.

1 Q

PLEASE DESCRIBE MR. HEVERT'S MARKET RISK PREMIUMS.

A Mr. Hevert developed two market risk premium estimates. They are DCF-derived market risk premiums of 10.68% (Bloomberg) and 9.87% (*Value Line*), which are based on market DCF returns of 13.63% and 12.82%, respectively, less the current 30-year Treasury bond yields of 2.96%.⁴⁸

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

Mr. Hevert's DCF-derived market risk premiums are based on market returns of 8 А 9 approximately 13.63% and 12.82%, which consist of growth rate components of approximately 11.24% and 10.58% and a market weighted expected dividend yield of 10 11 approximately 2.39% and 2.24%, respectively.49 As discussed above, the DCF model 12 requires a long-term sustainable growth rate. Mr. Hevert's sustainable market growth 13 rates of approximately 11.24% and 10.58% are far too high to be a rational outlook 14 for sustainable long-term market growth. These growth rates are more than two 15 times the growth rate of the U.S. GDP long-term growth outlook of 4.4%.

As a result of this unreasonable long-term market growth rate estimate, Mr. Hevert's market DCF returns are inflated and not reliable. Consequently, Mr. Hevert's 10.68% (Bloomberg) and 9.87% (*Value Line*) market risk premiums should be given minimal weight in estimating the Company's required cost of common equity.

⁴⁸Hevert Direct Testimony at 33 and Schedule RBH-3.

⁴⁹Schedule RBH-3. (13.63% = 11.24% + 2.39% and 12.82% = 10.58% + 7.24%)

1 QDOHISTORICALACTUALRETURNSONTHEMARKETSUPPORT2MR. 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.

7 Q PLEASE EXPLAIN.

A Duff & Phelps estimates the actual capital appreciation for the S&P 500 over the
 period 1926 through 2014 to have been 5.8% to 7.7%.⁵⁰ This compares to
 Mr. Hevert's projected growth of the market of 11.24% to 10.58%.

Further, historically the geometric growth of the market of 5.8%⁵¹ has reflected
 geometric growth of GDP over this same time period of approximately 6.2%.⁵²

This review of historical data establishes two facts very clearly. 13 First. historical, actual achieved growth has been substantially less than projected by Mr. 14 Hevert. Second, historical growth on the market has tracked historical growth of the 15 U.S. GDP. Projected growth of the U.S. GDP now is closer to the 4% to 5% area. All 16 17 of this information strongly supports the conclusion Mr. Hevert's projected growth on the market of 11.24% to 10.58% is substantially overstated. While I do not endorse 18 the use of an historical growth rate to draw assessments of the market's forward-19 20 looking growth rate outlooks, this data can be used to show how the market return 21 estimates produced by Mr. Hevert are unreasonable and inflated.

⁵⁰Duff & Phelps, 2016 Valuation Handbook: Guide to Cost of Capital at 2-4.

⁵¹Real historical growth 3.25% (Hevert Direct Testimony at 35) and historical inflation of 2.9% (Duff & Phelps, 2016 Valuation Handbook: Guide to Cost of Capital at 2-4).

⁵²Hevert Direct Testimony at 26, and note 47. Real GDP of 3.25% and historical inflation of 2.9%.

1 Q WHAT ISSUES DO YOU HAVE WITH MR. HEVERT'S RISK-FREE RATES?

A Mr. Hevert's risk-free rates are based on *Blue Chip* current (2.96%) and projected
(3.45%) 30-year Treasury yields, which are 5 months old. Based on the most recent *Blue Chip* publication the current and near-term projected 30-year Treasury yields are
2.72% and 3.08%, respectively.⁵³

6 Q CAN MR. HEVERT'S CAPM ANALYSIS BE REVISED TO REFLECT A MORE 7 REASONABLE MARKET RISK PREMIUM AND RECENT RISK-FREE RATES?

8 A Yes. Using the updated risk-free rates of 2.72% and 3.08%, the average published 9 Bloomberg and *Value Line* beta estimates of 0.609 and 0.772,⁵⁴ respectively; and my 10 calculated high-end market risk premium of 7.8%, Mr. Hevert's CAPM would be no 11 higher than 9.1%.

12 V.D. Bond Yield Plus Risk Premium

13 Q PLEASE DESCRIBE MR. HEVERT'S BOND YIELD PLUS RISK PREMIUM 14 STUDIES.

15 A Mr. Hevert proposes two risk premium studies: (1) a bond yield plus ("Primary BYP") 16 risk premium study; and (2) an Alternative BYP risk premium study. The Primary 17 BYP risk premium reflects a simple regression analysis based on a simple inverse 18 relationship between interest rates and equity risk premiums. His Alternative BYP 19 risk premium also uses a regression study but explains risk premiums by changes in 20 interest rates, market volatility, and yield spreads between A-rated utility bonds and 21 Treasury bond yields.

⁵³Blue Chip Financial Forecasts, June 1, 2016 at 4.
 ⁵⁴Schedule RBH-5.

Mr. Hevert supports his risk premium findings by placing primary reliance on
 his Primary BYP risk premium. He concludes his risk premium methodology supports
 a return on equity in the range of 10.04% to 10.47%. I will comment on both Mr.
 Hevert's BYP risk premium studies and his conclusion on what these methodologies
 support as a fair return on equity on GMO.

6

V.D.1. Primary BYP Risk Premium

7 Q PLEASE DESCRIBE MR. HEVERT'S PRIMARY BYP RISK PREMIUM.

8 А As shown on 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 9 10 interest rates. He estimates an average electric risk premium of 4.50% over the 11 period January 1980 through January 6, 2016. Then he applies a regression formula 12 to the current, near-term, and long-term projected 30-year Treasury bond yields of 13 2.96%, 3.45%, and 4.65% to produce electric risk premiums of 7.08%, 6.65%, and 14 5.82%, respectively. Thus, he calculates return on equity estimates of 10.04%, 10.10%, and 10.47%, respectively. 15

16 Q IS MR. HEVERT'S PRIMARY BYP RISK PREMIUM METHODOLOGY 17 REASONABLE?

18 A No. Mr. Hevert's contention that there is a simplistic inverse relationship between 19 equity risk premiums and interest rates is not supported by academic research. While 20 academic studies have shown that, in the past, there has been an inverse 21 relationship among these variables, researchers have found that the relationship

changes over time and is influenced by changes in perception of the risk of bond investments relative to equity investments, and not simply changes to interest rates.⁵⁵

1

2

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, the relative perception of bond investment risk increased relative to the investment risk of equities. This changing investment risk perception caused changes in equity risk premiums.

8 In today's marketplace, interest rate volatility is not as extreme as it was during the 1980s.⁵⁶ Nevertheless, changes in the perceived risk of bond investments 9 10 relative to equity investments still drive changes in equity premiums and cannot be 11 measured simply by observing nominal interest rates. Changes in nominal interest 12 rates are heavily influenced by changes to inflation outlooks, which also change 13 equity return expectations. As such, the relevant factor needed to explain changes in 14 equity risk premiums is the relative changes to the risk of equity versus debt 15 securities investments, and not simply changes in interest rates.

16 Importantly, Mr. Hevert's analysis simply ignores investment risk differentials. 17 He bases his adjustment to the equity risk premium exclusively on changes in 18 nominal interest rates. This is a flawed methodology that does not produce accurate 19 or reliable risk premium estimates.

⁵⁵ The Market Risk Premium: Expectational Estimates Using Analysts' Forecasts," Robert S. Harris and Felicia C. Marston, *Journal of Applied Finance*, Volume 11, No. 1, 2001 and "The Risk Premium Approach to Measuring a Utility's Cost of Equity," Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *Financial Management*, Spring 1985.

⁵⁶ The Risk Premium Approach to Measuring a Utility's Cost of Equity," Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *Financial Management*, Spring 1985, at 44.

1 Q DO YOU HAVE ANY OTHER ISSUES WITH MR. HEVERT'S BYP 2 METHODOLOGY?

3 А Yes. As discussed above, his current near-term and long-term Treasury yields are 4 stale and need updating. Further, Mr. Hevert's long-term projected Treasury bond 5 yield of 4.65% is simply too high and is unreasonable. Mr. Hevert's projected 4.65% 6 vield is approximately 193 basis points higher than the current Treasury bond vield of 7 2.72% and approximately 125 basis points higher than the projected Treasury yield of 3.4%⁵⁷ that will cover the rate effective period as projected by the consensus 8 9 economists. Mr. Hevert's long-term projected Treasury yield of 4.65% is well beyond 10 the rate effective period, and as such, is not a reasonable interest rate to use in a risk 11 premium study. For these reasons, Mr. Hevert's BYP risk premium analysis should 12 be disregarded or revised as described below.

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

A Yes. Disregarding Mr. Hevert's simplistic and inaccurate notion of a continuing
inverse relationship between interest rates and the risk premium will produce more
realistic results. Adding my weighted average equity risk premium over Treasury
bonds of 6.09% to his updated current (2.72%), near-term (3.08%) and long-term
(3.4%) projected Treasury yields will produce a return on equity estimate no higher
than 9.5% for GMO.

⁵⁷Blue Chip Financial Forecasts, June 1, 2016 at 4.

1 V.D.2. Alternative BYP Risk Premium

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

4 А Mr. Hevert developed an Alternative BYP risk premium analysis to test how market 5 conditions affect the relationship between interest rates and equity risk premiums. 6 Specifically, he developed a regression analysis in which the equity risk premium was 7 the dependent variable and the Treasury bond yields, the spreads between Moody's 8 A-rated yields and treasury yields, and a market volatility index as measured by the 9 CBOE Volatility Index ("VIX") were the independent variables. Based on this 10 analysis, he concluded these additional variables (the credit spreads and the VIX) did not add statistical significance to the explanatory power of his Primary BYP risk 11 12 premium study rates.58

His Alternative BYP risk premium supported a return on equity in the range of9.89% to 10.01%.

15 Q WHAT ISSUES DO YOU HAVE WITH MR. HEVERT'S ALTERNATIVE BYP RISK 16 PREMIUM METHODOLOGY?

17 Mr. Hevert's Alternative BYP risk premium was a substantial improvement to his А 18 simplistic Primary BYP risk premium. As noted above, the Primary BYP risk premium 19 assumes current risk premiums in the market can be measured by simply changes in 20 interest rates. This simplistic relationship simply is not supported in academic 21 literature nor a reasonable outlook for changes in invested capital. As illustrated 22 above, inflation outlooks can impact both equity returns and bond yields in a similar 23 manner. Hence, declines in inflation outlooks can impact the equity return in bond

⁵⁸Hevert Direct Testimony at 41.

interest rates without impacting the equity risk premium. Mr. Hevert's Primary BYP
 risk premium simply ignores this indisputable relationship.

3 Mr. Hevert applies his regression analysis to risk premiums based on 4 individual rate case decisions with contemporary Treasury yields, A-rated utility bond 5 and Treasury yield spreads, and the VIX market volatility index. He adjusted for rate 6 case lag based on when the case was filed and when the case was decided. His 7 analysis had 614 individual observations since December 1992. By including all of 8 these individual observations with his speculative lag adjustment, his analysis 9 produced a result with limited explanatory power (measured through the Adjusted 10 R-Squared measure) and a higher standard error.

11 Q PLEASE COMMENT ON THE ALTERNATIVE BYP RISK PREMIUM STUDY.

12 Mr. Hevert's Alternative BYP risk premium study, while better than his Primary BYP А risk premium, still needs improvement. Mr. Hevert has not shown that the volatility 13 14 index he uses can accurately describe the difference between expected returns for 15 utility securities and the general stock market. Investment return volatility for utility 16 investors is far more stable than that of the overall stock market. This is illustrated by 17 the fact utility companies have lower betas than that of the overall market. Hence, 18 market volatility may explain increases in market return, but may overstate a fair 19 return for a lower risk utility stock.

A spread between a utility bond security and Treasury market is a much better indication of changes in investment risk outlooks by the marketplace for utility versus general market investments. Had Mr. Hevert's Alternative BYP risk premium regressed changes in interest rates and utility to Treasury yield spread, it would have substantially improved the reasonableness of Mr. Hevert's BYP risk premium study.

Q HOW WOULD MR. HEVERT'S ALTERNATIVE BYP RISK PREMIUM STUDY BE
 IMPACTED IF YOU REMOVE MR. HEVERT'S LAG ADJUSTMENT AND EXCLUDE
 THE VIX INDEX IN THE REGRESSION ANALYSIS?

A I reproduced two versions of a multi-factor regression analysis. In my first analysis, I
regressed risk premium (dependent) to (1) 30-year Treasury yield; and (2) yield
spreads (A-rated utility to Treasury bond). This regression study produced stronger
regression metrics than Mr. Hevert's risk premium study – an adjusted R-squared of
84.5% and a standard error of approximately 0.0036, compared to Mr. Hevert's
adjusted R-squared and standard error of 68.4% and 0.0054, respectively.

When applying the current 13-week average 30-Year Treasury yield of 2.60%,
the current A utility/Treasury bond spread is 1.36%. This data produces a risk
premium of 7.18% and a cost of equity of 9.78% (7.18% plus 2.60%).

In my second analysis, I again regressed risk premium against two variables:
(1) Treasury bond yields; and (2) yield spread (Baa utility to Treasury). This analysis
produced very similar results to my first study regression -- adjusted R-squared of
83.2% and standard error of 0.0038.

Applying the current 13-week average 30-Year Treasury yield of 2.60% and a
Baa utility bond/Treasury yield spread of 2.09%, produces an estimated risk premium
of 7.17% and a cost of equity of 9.77%.

This revised Alternative BYP risk premium study supports a return on equity
for GMO no higher than 9.80%, as shown on Schedule MPG-20.

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1 Q WOULD IT BE APPROPRIATE TO USE PROJECTED TREASURY BOND YIELDS 2 IN THIS REGRESSION STUDY TO MEASURE EQUITY RISK PREMIUMS?

A No. This model is specifically designed to capture relationships between observable
 Treasury bond yields and utility bond to Treasury bond yield spreads. If a projected
 Treasury bond yield was used, it would be necessary to also project the yield spreads
 between utility bond yields and Treasury yields. This yield spread data simply is not
 available. Therefore, this model can only be reliably applied to current observable
 Treasury bond yields, and yield spreads.

9 V.E. Additional Risks

10QDID MR. HEVERT CONSIDER ADDITIONAL BUSINESS RISKS TO JUSTIFY A11RETURN ON EQUITY ABOVE THE MIDPOINT OF HIS RANGE?

A Mr. Hevert believes GMO's regulatory environment, the environmental regulations associated with its generation portfolio, and its substantial capital expenditure plan relative to the proxy group conservatively support a return on equity within Mr. Hevert's range. I disagree. Setting the return on equity within Mr. Hevert's range will place an unreasonable burden on the ratepayers and should be rejected. As discussed below, GMO's relative risk is comparable to the risk of the utility companies included in the proxy group.

19QWHY DO YOU BELIEVE THAT GMO FACES RISKS THAT ARE COMPARABLE20TO THE RISKS FACED BY MR. HEVERT'S AND YOUR PROXY GROUP21COMPANIES?

A As shown on my Schedule MPG-4, the average S&P credit rating for my proxy group
 of "BBB+" is the same as GMO's credit rating. The relative risks discussed on pages

42-52 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 risk in order to evaluate their
assessment of its total investment risk. Therefore, this total risk investment
assessment of GMO, in comparison to a proxy group, is fully absorbed into the
market's perception of GMO's risk and the proxy group fully captures the investment
risk of GMO.

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

9 UTILITIES?

10 A In assigning corporate credit ratings, the credit rating agency considers both business 11 and financial risks. Business risks among others include company's size and 12 competitive position, generation portfolio, capital expenditure programs, consideration 13 of the regulatory environment, current state of the industry, and the economy as

14 whole. Specifically, S&P states:

15 To determine the assessment for a corporate issuer's business risk 16 profile, the criteria combine our assessments of industry risk, country 17 risk, and competitive position. Cash flow/leverage analysis determines a company's financial risk profile assessment. The analysis then 18 19 combines the corporate issuer's business risk profile assessment and its financial risk profile assessment to determine its anchor. In general, 20 21 the analysis weighs the business risk profile more heavily for 22 investment-grade anchors, while the financial risk profile carries more 23 weight for speculative-grade anchors.⁵⁹

⁵⁹Standard & Poor's RatingsDirect: "Criteria/Corporates/General: Corporate Methodology," November 19, 2013.

DID MR. HEVERT ALSO OFFER AN ASSESSMENT OF CURRENT MARKET 1 Q 2 CONDITIONS IN SUPPORT OF HIS RECOMMENDED RETURN ON EQUITY? 3 Yes. Mr. Hevert suggests a few factors that gauge investor sentiment, including the А 4 relationship between the Federal Reserve's balance sheet and market volatility, measured by the CBOE Volatility Index, known as the VIX.⁶⁰ He concludes these 5 6 metrics indicate that current levels of instability and risk aversion are at historically 7 low levels and that the Constant Growth DCF results are at odds with market 8 conditions.

9 Q DO YOU BELIEVE THAT MR. HEVERT'S USE OF THESE MARKET SENTIMENTS 10 SUPPORTS HIS FINDINGS THAT GMO'S MARKET COST OF EQUITY IS 11 CURRENTLY IN THE RANGE OF 9.75% TO 10.50%?

12 A No. In many instances Mr. Hevert's analysis simply ignores market sentiments 13 favorable toward utility companies and instead lumps utility investments in with 14 general corporate investments. A fair analysis of utility securities shows the market 15 generally regards utility securities as low-risk investment instruments and supports 16 the finding that utilities' cost of capital is very low in today's marketplace.

17 Q WHAT IS THE MARKET SENTIMENT FOR UTILITY INVESTMENTS?

A 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.

For example, this is illustrated by my Schedule MPG-15, under column 11 showing the spread between "A" rated utility bond yields and "Aaa" rated corporate

⁶⁰Hevert Direct Testimony at 52-56.

1 bond vields. Currently, the spread is approximately 0.25%. This is a relatively low 2 spread over the 36-year time horizon. Indeed, current spreads of utility versus high-3 grade corporate bond yields are at the lowest level they have been in most periods 4 over the last 36 years. This is also reflective of the spreads between "Baa" utility 5 bond yields relative to "Baa" corporate bond yields. Currently, utility bonds are 6 trading at a premium to corporate bonds. This has been largely the case during the 7 significant market turbulence that has occurred over the last five to eight years. 8 However, over longer periods of time, utility bond yields on average trade at parity to 9 a premium to corporate "Baa" rated bond yields. The current strong utility bond 10 valuation is an indication of the market's sentiment that utility bonds have lower risk than general corporate bonds and are generally regarded as a safe haven by the 11 12 investment industry.

Further, other measures of utility stock valuations also support a robust market for utility stocks. As shown on my Schedule MPG-3, utility valuation measures – *e.g.*, price-to-earnings ratio and market price to cash flow ratio – show stock valuation measures for the proxy groups are robust. For example, for the proxy group, the current price-to-earnings ratio is comparable to and the cash flow ratio is stronger than the 14-year average valuation metrics.

For all these reasons, direct assessments of valuation measures and market sentiment toward utility securities support the credit rating agencies' findings, as quoted above, that the utility industry is largely regarded as a low-risk, safe haven investment. All of this supports my findings utilities' market cost of equity is very low in today's very low cost capital market environment. 1 Q DO YOU HAVE ANY COMMENTS CONCERNING MR. HEVERT'S CONTENTION 2 THAT INTEREST RATES ARE GOING TO INCREASE?

3 A Yes. Mr. Hevert develops his risk premium studies mainly relying on near-term and 4 long-term projected interest rates, which he believes are expected to increase (Hevert 5 Direct Testimony at 56-57). Mr. Hevert's proposal to rely mainly on forecasted 6 Treasury bond yields is unreasonable because he is not considering the highly likely 7 outcome that current observable interest rates will prevail during the period rates 8 determined in this proceeding will be in effect. This is important because, while 9 current observable interest rates are actual market data that provides a measure of 10 the current cost of capital, the accuracy of forecasted interest rates is problematic at 11 best.

12 Q WHY DO YOU BELIEVE THAT THE ACCURACY OF FORECASTED INTEREST 13 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-21 illustrates this point. On this exhibit, under Columns 1 and 2, 1 show the actual market yield at the time a projection is made for Treasury bond yields two years in the future. In Column 1, I show the actual Treasury yield. In Column 2, I show the projected yield two years out.

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 exhibit, economists consistently have been projecting that interest rates will increase over several years. 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 increased 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.

8 Q DO YOU HAVE ANY FURTHER COMMENTS IN REGARD TO MR. HEVERT'S 9 INTEREST RATE PROJECTIONS?

10 А Yes. First, it is simply not known how much, if any, long-term interest rates will 11 increase from current levels or whether they have already fully accounted for the 12 termination of the Federal Reserve's Quantitative Easing program and the increase in 13 the Federal Funds rate. Nevertheless, I do agree this Federal Reserve program 14 introduced risk or uncertainty in long-term interest rate markets. Because of this 15 uncertainty, caution should be taken in estimating GMO's current return on common 16 equity in this case. However, as noted in the EEI guote above, the increase in short-17 term interest rates had no impact on longer-term yields that "remain at historically low 18 levels and are influenced more by the level of inflation and economic strength than by the Fed's short-term rate policy.⁶¹" 19

20 Second, I would note GMO is largely shielded from significant changes in 21 capital market costs. To the extent interest rates ultimately increase above current 22 levels, which may have an impact on required returns on common equity, at that point

⁶¹EEI Q4 2015 Financial Update: "Stock Performance" at 6.

- in time, GMO, like all other utilities, can file to change rates to restate its authorized
 rate of return at the prevailing market levels.
- 3 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
- 4 A Yes.

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BRUBAKER & ASSOCIATES, INC.

Qualifications of Michael P. Gorman

1 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.

4 Q PLEASE STATE YOUR OCCUPATION.

5 A I am a consultant in the field of public utility regulation and a Managing Principal with 6 the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory 7 consultants.

8 Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK 9 EXPERIENCE.

A In 1983 I received a Bachelors of Science Degree in Electrical Engineering from
 Southern Illinois University, and in 1986, I received a Masters Degree in Business
 Administration with a concentration in Finance from the University of Illinois at
 Springfield. I have also completed several graduate level economics courses.

14 In August of 1983, I accepted an analyst position with the Illinois Commerce 15 Commission ("ICC"). In this position, I performed a variety of analyses for both formal 16 and informal investigations before the ICC, including: marginal cost of energy, central 17 dispatch, avoided cost of energy, annual system production costs, and working 18 capital. In October of 1986, I was promoted to the position of Senior Analyst. In this 19 position, I assumed the additional responsibilities of technical leader on projects, and

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1 my areas of responsibility were expanded to include utility financial modeling and 2 financial analyses.

In 1987, I was promoted to Director of the Financial Analysis Department. In
this position, I was responsible for all financial analyses conducted by the Staff.
Among other things, I conducted analyses and sponsored testimony before the ICC
on rate of return, financial integrity, financial modeling and related issues. I also
supervised the development of all Staff analyses and testimony on these same
issues. In addition, I supervised the Staff's review and recommendations to the
Commission concerning utility plans to issue debt and equity securities.

In August of 1989, I accepted a position with Merrill-Lynch as a financial
 consultant. After receiving all required securities licenses, I worked with individual
 investors and small businesses in evaluating and selecting investments suitable to
 their requirements.

14 In September of 1990, I accepted a position with Drazen-Brubaker & 15 Associates, Inc. ("DBA"). In April 1995, the firm of Brubaker & Associates, Inc. was 16 formed. It includes most of the former DBA principals and Staff. Since 1990, I have 17 performed various analyses and sponsored testimony on cost of capital, cost/benefits 18 of utility mergers and acquisitions, utility reorganizations, level of operating expenses 19 and rate base, cost of service studies, and analyses relating to industrial jobs and 20 economic development. I also participated in a study used to revise the financial 21 policy for the municipal utility in Kansas City, Kansas.

At BAI, I also have extensive experience working with large energy users to distribute and critically evaluate responses to requests for proposals ("RFPs") for electric, steam, and gas energy supply from competitive energy suppliers. These analyses include the evaluation of gas supply and delivery charges, cogeneration

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and/or combined cycle unit feasibility studies, and the evaluation of third-party
asset/supply management agreements. I have participated in rate cases on rate
design and class cost of service for electric, natural gas, water and wastewater
utilities. I have also analyzed commodity pricing indices and forward pricing methods
for third party supply agreements, and have also conducted regional electric market
price forecasts.

In addition to our main office in St. Louis, the firm also has branch offices in
Phoenix, Arizona and Corpus Christi, Texas.

9 Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

10 А Yes. I have sponsored testimony on cost of capital, revenue requirements, cost of 11 service and other issues before the Federal Energy Regulatory Commission and 12 numerous state regulatory commissions including: Arkansas, Arizona, California, Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, 13 14 Louisiana, Michigan, Mississippi, Missouri, Montana, New Jersey, New Mexico, New 15 York, North Carolina, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, Texas, 16 Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and before 17 the provincial regulatory boards in Alberta and Nova Scotia, Canada. I have also 18 sponsored testimony before the Board of Public Utilities in Kansas City, Kansas; 19 presented rate setting position reports to the regulatory board of the municipal utility 20 in Austin, Texas, and Salt River Project, Arizona, on behalf of industrial customers; 21 and negotiated rate disputes for industrial customers of the Municipal Electric 22 Authority of Georgia in the LaGrange, Georgia district.

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BRUBAKER & ASSOCIATES, INC.

1 Q PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR 2 ORGANIZATIONS TO WHICH YOU BELONG.

A I earned the designation of Chartered Financial Analyst ("CFA") from the CFA
Institute. The CFA charter was awarded after successfully completing three
examinations which covered the subject areas of financial accounting, economics,
fixed income and equity valuation and professional and ethical conduct. I am a
member of the CFA Institute's Financial Analyst Society.

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Rate of Return (July 31, 2016)

<u>Line</u>	<u>Description</u>	<u>Amount</u> (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	Weighted <u>Cost</u> (4)
1	Long-Term Debt	\$ 1,081,364	48.60%	5.09%	2.47%
2	Common Equity*	\$ 1,143,587	<u>51.40%</u>	9.25%	<u>4.75%</u>
3	Total	\$ 2,224,951	100.00%		7.23%

Source:

Schedule RBH-10.

* Goodwill adjusted.

* MPSC Docket No. ER2015-0175, Report and Order, January 9, 2013 at 26 and Great Plains Energy, December 2015 Investor Presentation at 18, provided as Attachment B to Mr. Hevert's direct testimony.

Rate of Return (July 31, 2016)

<u>Line</u>	Description	<u>Amount</u> (1)	<u>Weight</u> (2)	<u>Goodwill**</u> (3)	Adjusted <u>Amount</u> (4)
1	Long-Term Debt	\$ 1,081,364	45.17%		\$ 1,081,364
2	Common Equity*	<u>\$ 1,312,557</u>	<u>54.83%</u>	<u>\$ 168,970</u>	<u>\$ 1,143,587</u>
3	Total	\$ 2,393,921	100.00%		\$ 2,224,951

Source:

Schedule RBH-10.

* MPSC Docket No. ER2015-0175, Report and Order, January 9, 2013 at 26 and Great Plains Energy, December 2015 Investor Presentation at 18, provided as Attachment B to Mr. Hevert's direct testimony.

** FERC Form 1, December 31, 2015 at 233.

Schedule MPG-1 Page 2 of 2

Ranking of Industrial Electric Rates for KCP&L Greater Missouri Operations and State Averages of Investor Owned Utilities <u>50 MW Demand and 90% Load Factor</u>

		2015
Rank	State or Utility	<u>¢/kWh</u>
1	Wisconsin	7.28
2	Michigan	6.92
3	Minnesota	6.73
4	North Dakota	6.59
5	Indiana	6.54
6	Kansas	6.54
7	KCP&L Greater Missouri Operations	6.47
8	South Dakota	6.28
9	Missouri	5.87
10	lowa	4.80

<u>Rank</u>	State or Utility	2014 <u>¢/kWh</u>
1	Wisconsin	7.11
2	Michigan	6,99
3	Minnesota	6.78
4	Indiana	6.54
5	North Dakota	6.47
6	Kansas	6.35
7	KCP&L Greater Missouri Operations	6.30
8	South Dakota	5.89
9	Missouri	5.65
10	lowa	4.61

<u>Rank</u>	State or Utility	2013 <u>¢/kWh</u>
1	Michigan	7.15
2	Wisconsin	7.03
3	Kansas	6.86
4	Minnesota	6.48
5	Indiana	6.18
6	North Dakota	6.02
7	KCP&L Greater Missouri Operations	6.01
8	South Dakota	5.70
9	Missouri	5.33
10	lowa	4.64

Ranking of Industrial Electric Rates for KCP&L Greater Missouri Operations and State Averages of Investor Owned Utilities 50 MW Demand and 90% Load Factor

<u>Rank</u>	State or Utility	2012 <u>¢/kWh</u>
1	Michigan	7.20
2	Wisconsin	7.00
3	Minnesota	6.27
4	North Dakota	6.22
5	KCP&L Greater Missouri Operations	6.03
6	Indiana	5.80
7	Kansas	5.69
8	South Dakota	5.37
9	Missouri	5.06
10	lowa	4.08

<u>Rank</u>	State or Utility	2011 <u>¢/kWh</u>
1	Wisconsin	6.85
2	Michigan	6.82
3	Minnesota	6.33
4	Indiana	6.04
5	North Dakota	5.90
6	Kansas	5.41
7	KCP&L Greater Missouri Operations	5.34
8	South Dakota	5.16
9	Missouri	4.91
10	lowa	4.55

<u>Rank</u>	State or Utility	2010 <u>¢/kWh</u>
1	KCP&L Greater Missouri Operations	6.53
2	Michigan	6.30
3	Wisconsin	6.29
4	Minnesota	6.13
5	Indiana	5.58
6	North Dakota	5.51
7	South Dakota	5.17
8	Kansas	5.06
9	Missouri	4.55
10	lowa	3.67

Schedule MPG-2 Page 2 of 3

Ranking of Industrial Electric Rates for KCP&L Greater Missouri Operations and State Averages of Investor Owned Utilities <u>50 MW Demand and 90% Load Factor</u>

		2009
<u>Rank</u>	State or Utility	<u>¢/kWh</u>
1	Michigan	6.47
2	Wisconsin	6.22
3	Minnesota	5.74
4	Indiana	5.64
5	KCP&L Greater Missouri Operations	5.57
6	North Dakota	5.52
7	South Dakota	4.90
8	lowa	4.50
9	Kansas	4.43
10	Missouri	4.08

Source:

This report was prepared by Brubaker & Associates, Inc. using Edison Electric Institute Typical Bills and Average Rates Reports.

> Schedule MPG-2 Page 3 of 3

Valuation Metrics

Libe Camazay Average 2015 2014 2013 2014 2013 2014 2013 2014 2019 2008 2007 2005 2004 2004 2004 2004 2004 2004 2004 2004 2004			Price to Earnings (P/E) Ratio ¹															
Line Comments Average 2015 2015 2016 2017 2010 2002 2002 2002 2002 2002 2002 2002 2002 2003 2004 2002 2002 2003 2004 2003 2004 2003 2004 2003 2004 2004 2003 2004 2003 2004 2003 2004 2003 2004			15-Year	_												· · · ·		
10 (3) (3) (4) (5) (6) (7) (8) (7) (7) (8) (7) <th(7)< th=""> <th(7)< th=""> <th(7)< th=""></th(7)<></th(7)<></th(7)<>	Line	Company	Average	2016 2	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
1 Aller Emergy 15.27 16.97 16.07 16.08 14.46 15.28 14.46 15.28 14.45 15.26 14.20			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
2 Alliant Energy 15.37 20.80 16.00 15.28 14.50 14.45 15.08 16.20 12.29 14.00 12.29 14.00 12.29 14.00 12.29 14.00 12.29 14.00 12.29 14.00 15.77 15.88 14.49 13.77 11.23 13.06 16.27 12.01 13.70 12.44 10.86 12.24 13.06 16.27 12.01 13.70 12.44 10.86 12.24 13.06 16.27 12.01 13.06 16.27 12.01 13.06 16.27 12.01 15.21 15.01 13.02 15.01 13.06 16.27 15.00 10.27 17.04 6.05 5.59 2 Control Manon 16.27 15.30 16.32 15.07 13.26 12.25 12.29 13.71 15.40 15.21 13.20 12.29 13.24 13.25 12.24 13.24 13.24 13.24 13.24 13.24 13.24 13.24 13.24 13.24 13.24 13.24 13.24 13.24 13.24 13.24 13.24 13.24	1	ALLETE	16,97	18.70	15,06	17.23	18.59	15.88	14.66	15.98	16.08	13.95	14 78	16 55	17 91	25 21	61/A	NUA
3 Ameren Corp. 15.21 16.20 17.25 16.71 16.52 11.33 11.32 12.33 11.32 12.34 12.35 12.36 12.37 13.45 12.35 12.35 12.35 12.35 12.37 13.44 13.35 12.35 12.37 13.44 13.35 12.35 12.37 13.44 13.35 12.35 12.37 13.45 12.37 13.45 12.35 12.37 13.45 12.35 12.37 13.45 12.37 13.45 12.35 12.37 13.45 12.35 12.35 12.38	2	Alliant Energy	15,37	20.80	18.07	16,60	15.28	14.50	14.45	12.47	13.66	13 43	15.08	16 82	12 59	14.00	12.65	10.07
4 American Electric Power 13,65 17,80 15,77 11,52 13,06 15,27 12,24 10,26 12,24 10,26 12,24 10,26 12,24 10,26 12,24 10,26 12,24 10,26 12,24 10,26 12,24 10,26 12,24 10,26 12,24 10,26 12,24 10,26 12,24 10,26 12,24 10,26 12,24 10,26 12,26 10,26 12,26 <td>3</td> <td>Amaren Corp,</td> <td>15,21</td> <td>19.80</td> <td>17.55</td> <td>16.71</td> <td>16.52</td> <td>13.35</td> <td>11.93</td> <td>9.66</td> <td>9.25</td> <td>14 21</td> <td>17 45</td> <td>10 30</td> <td>16 72</td> <td>16 28</td> <td>12.08</td> <td>15.50</td>	3	Amaren Corp,	15,21	19.80	17.55	16.71	16.52	13.35	11.93	9.66	9.25	14 21	17 45	10 30	16 72	16 28	12.08	15.50
5 Avista Corp. 17.72 20.50 17.60 17.28 14.46 19.20 12.74 11.27 12.47 12.42 12.37 15.38 10.45 24.43 10.24 16.32 7 CenterFolnt Entry 14.21 16.30 16.10 16.66 18.75 14.28 14.31 11.31 18.10 16.32 15.07 13.22 12.38 15.30 12.39 12.30 12.39 12.30 12.39 12.30 12.31 13.30 12.74 13.22 12.38 15.40 13.28 13.30 12.74 13.78 15.49 15.81 14.22 17.41 14.41 18.27 17.43 17.43 13.28 12.74 13.78 15.49 13.50 16.04 13.69 11.28 Dube Entry 15.12 16.50 18.11 17.42 17.45 17.44 13.75 12.27 10.41 14.41 18.27 17.44 13.80 16.22 12.28 16.03 10.00 0.00 N/A N/A N/A 10 Dube Entry 15.21 16.01 17.75	4	American Electric Power	13.65	17,80	15.77	15,88	14.49	13.77	11.92	13.42	10.03	13.06	16 27	12.00	13 70	10,40	10.01	13.70
6 Black Hills 16.46 23.50 15.14 19.03 18.24 17.13 31.33 18.10 18.02 18.77 17.27 17.33 15.36 12.45 C Constance Edmon 14.36 13.26 13.26 13.24 13.36 13.81 11.27 15.00 17.27 17.33 15.36 15.36 O Constance Edmon 14.35 13.24 12.26 12.36 13.35 12.24 12.36 13.35 12.22 13.78 12.46 15.36 13.30 13.24 12.26 13.36 13.36 12.26 13.36 15.48 15.37 15.36 15.37 15.36 15.36 15.36 15.36 15.37 15.37 15.37 15.37 15.37 15.37 15.37 15.37 15.37 15.37 15.37 15.37	5	Avista Corp.	17.72	20.50	17.60	17,28	14.64	19.30	14.0B	12.74	11.42	14.97	30.88	15.30	19.45	24 43	13.84	12.00
7 CenterPolt Entry 14.21 19.30 18.10 16.08 18.75 14.85 14.26 12.72 15.00 11.27 16.06 17.24 16.00 17.24 16.00 17.24 16.00 17.24 16.00 17.24 16.00 17.24 16.00 17.24 16.00 17.24 16.00 17.24 16.00 17.24 16.30 17.24 16.30 17.24 16.30 17.24 16.30 17.25 17.24 16.30 15.88 17.24 16.30 17.25 17.24 16.30 15.88 17.24 16.30 17.24 16.30 15.88 17.24 16.30 17.24 16.30 17.24 16.30 17.24 16.30 17.24 16.30 17.24 16.30 17.24 16.30 17.24 16.30 17.24 16.30 17.24 16.30 17.24 16.30 17.24 16.30 17.24 16.30 17.24 16.30 17.24 17.30 17.22 17.24 17.24 17.31 17.35 17.34 17.34 17.35 17.34 17.34 17.35 17.34	6	Black Hills	16,46	23.50	15.14	19,03	18,24	17.13	31.13	18.10	9.93	0.00	15 02	15 77	17 27	17 13	15.04	12.52
B CMS Energy Corp. 16.37 21.30 16.27 17.30 16.32 15.07 13.26 10.87 22.89 12.20	7	CenterPoint Energy	14.21	19,30	18,10	16,96	18.75	14,85	14.58	13.78	11.81	11.27	15.00	10.27	19.06	17.84	6.05	5 50
9 Consol. Edison 14.96 19.20 15.39 15.39 12.35 12.35 12.36 12.36 13.36 12.44 15.13 12.21 14.20 11.20 Dominion Resources 17.9 20.10 21.4 22.47 22.79 13.51 12.27 10.41 14.81 12.27 14.43 12.44 13.60 11.00 Dite Energy 15.12 10.50 16.11 14.41 17.42 13.60 17.43 13.80 16.04 13.60 11.20 Like Energy 13.26 17.70 14.77 13.05 12.70 9.71 11.80 10.22 17.61 15.80 15.76 </td <td>6</td> <td>CMS Energy Corp.</td> <td>16,37</td> <td>21.30</td> <td>16,29</td> <td>17.30</td> <td>16.32</td> <td>15.07</td> <td>13.62</td> <td>12.46</td> <td>13.56</td> <td>10.87</td> <td>26.84</td> <td>22 1B</td> <td>12 60</td> <td>12 30</td> <td>N74</td> <td>NIA</td>	6	CMS Energy Corp.	16,37	21.30	16,29	17.30	16.32	15.07	13.62	12.46	13.56	10.87	26.84	22 1B	12 60	12 30	N74	NIA
10 Dominion Resources 17.89 20.10 22.14 22.97 19.25 18.91 17.27 14.35 12.27 10.71 14.81 13.80 15.07 15.24 12.07 15.24 12.07 15.24 12.07 15.24 12.07 15.24 12.07 15.24 12.07 15.24 12.07 15.24 12.07 15.24 12.07 15.24 12.07 14.07 13.08 15.27 17.41 14.81 15.26 15.26 15.27 17.2 12.28 16.03 12.99 11.74 17.75 15.28 15.27 15.28 15.26 15.26 15.26 15.26 15.26 15.26 15.26 15.27 15.28 15.26 15.27 15.28 15.26 15.27 15.36 15.26 15.27 15.26 15.26 15.27 15.28 15.26 15.27 15.28 15.27 15.28 15.27 15.28 15.27 15.28 15.27 15.28 15.27 15.28 <th15.27< th=""> 15.28</th15.27<>	9	Consol, Edison	14.95	19.20	15.59	15,90	14.72	15.39	15.08	13.30	12.55	12.29	13.78	15 49	15.13	18 71	14 30	19 28
11 DTE Energy 15.12 19.50 18.11 14.91 17.92 14.84 13.21 12.22 17.43 13.80 16.04 13.66 11.28 Dute Energy 13.82 16.00 18.22 17.71 17.77 13.05 12.70 9.71 11.61 10.32 9.72 12.38 16.33 10.00 0.00 NA NA NA 13 Edison Inti 13.84 15.40 18.77 13.33 10.83 15.88 14.47 12.60 10.72 10.72 10.72 10.72 15.22 24.50 24.61 15.83 15.18 15.18 15.35 11.57 14.34 17.28 16.82 16.52 15.37 15.35 13.42 11.88 16.36 15.37 13.77 15.36 13.77 15.43 15.22 12.96 13.31 17.29 16.44 17.80 15.83 15.35 13.42 11.88 16.52 15.35 15.35 12.96 15.23 15.37 13.42 11.86 15.89 13.24 11.97 13.46 15.24 13.41 15.5	10	Dominion Resources	17,69	20.10	22.14	22.97	19.25	18.91	17.27	14.35	12.74	13.7B	20.63	15.98	24 89	15.07	15 24	12.05
12 Dute Energy 13.52 17.01 17.45 17.45 17.45 13.76 12.86 13.32 17.28 16.13 10.00 N/A N/A N/A 14 El Paso Electric 17.13 23.70 18.33 10.36 15.77 15.82 15.07 15.87 14.34 17.92 20.77 15.77 15.82 15.07 15.87 15.81 15.77 15.85 15.77 15.85 15.77 15.85 15.77 15.75 17.70 16.77 15.82 15.77 15.75 15.77 15.75 15.77 15.75 15.77 15.75 15.77 15.75 15.77 15.75 15.77 15.75 15.77 15.75 15.77 15.75 15.77 15.75 15.77 15.75 15.77 15.75 15.77 15.75	11	DTE Energy	15.12	19,50	18.11	14.91	17.92	14.89	13.51	12.27	10.41	14.81	18.27	17.43	13.80	16.04	13.69	11 28
13 Edison Infi 13.46 17.70 14.77 13.05 12.70 9.71 11.81 10.32 9.72 12.28 10.03 12.29 11.74 97.58 8.87 7.79 15 Emple Diatric Electric 16.19 24.10 16.21 15.28 15.20 15.76 16.75 <td>12</td> <td>Duke Energy</td> <td>13.52</td> <td>18.00</td> <td>18,22</td> <td>17.91</td> <td>17,45</td> <td>17.46</td> <td>13,76</td> <td>12.69</td> <td>13.32</td> <td>17.28</td> <td>16.13</td> <td>0.00</td> <td>0.00</td> <td>N/A</td> <td>N7A</td> <td>N/A</td>	12	Duke Energy	13.52	18.00	18,22	17.91	17,45	17.46	13,76	12.69	13.32	17.28	16.13	0.00	0.00	N/A	N7A	N/A
14 El Paso Electric 17,13 23.70 18.33 16.38 15.88 14.47 12.60 10.72 10.70 11.89 15.28 16.20 22.75 18.20 22.95 18.20 22.95 18.20 22.95 18.20 22.95 18.20 12.95 16 Entropy Corp. 13.64 15.40 12.51 12.53 12.53 12.53 13.64 13.64 13.65 19.20 14.25 12.85 14.25 13.65 11.57 11.65 11.67 11.65 11.65 14.25 12.20 13.35 13.37 13.36 13.35 13.42 11.96 13.36 13.76 11.33 13.35 13.42 11.96 13.36 15.76 15.76 15.77 13.02 15.37 13.36 13.35 16.30 13.35 16.30 13.35 16.30 13.36 <td>13</td> <td>Edison Int'l</td> <td>13.68</td> <td>17.70</td> <td>14.77</td> <td>13.05</td> <td>12.70</td> <td>9.71</td> <td>11.81</td> <td>10.32</td> <td>9.72</td> <td>12.36</td> <td>16.03</td> <td>12.09</td> <td>11 74</td> <td>37.59</td> <td>6 97</td> <td>7 78</td>	13	Edison Int'l	13.68	17.70	14.77	13.05	12.70	9.71	11.81	10.32	9.72	12.36	16.03	12.09	11 74	37.59	6 97	7 78
15 Empte Diatric Electric 18,71 16,71 16,72 15,76 16,75 14,34 17,28 21,70 15,82 24,80 16,83 14,83 17 Eversource Energy 17,80 19,80 16,11 17,22 16,23 14,28 15,35 11,33 17 Eversource Energy 17,40 19,50 18,11 17,92 16,04 18,86 15,35 11,44 17,87 18,22 16,53 15,37 12,39 18 Evelon Corp. 17,48 13,00 17,02 39,77 16,44 13,85 15,35 11,44 17,87 18,22 16,53 15,37 12,49 11,47 10,46 19 FirstEnergy Corp. 17,48 13,00 17,02 39,77 16,47 13,16 11,17 10,02 15,84 12,29 16,15 12,23 11,17 10,02 15,84 13,87 14,22 16,53 15,37 12,29 11,32 11,32 13,32 16,31 12,29 16,35 12,30 13,38 13,36 13,40 13,42 14,43 13,4	14	El Paso Electric	17.13	23,70	18.33	16.38	15.88	14.47	12.60	10.72	10.79	11.89	15.26	16.92	26.72	22.03	18 26	22.00
16 Entrogy Corp. 13.84 15.40 12.53 12.21 11.22 9.06 11.57 11.88 16.56 10.30 14.28 16.22 15.05 14.28 16.26 10.30 14.28 16.26 10.30 14.38 16.26 10.30 11.33 11.34 11.38 16.26 10.30 11.33 11.34 11.38 16.26 10.30 10.30 11.33 11.34 11.38 10.36 11.37 11.38 10.36 11.37 11.38 10.36 11.37 11.38 10.36 11.37 11.38 10.36 11.37 11.38 10.36 11.37 11.38 10.36 11.37 11.38 10.36 11.37 11.38 10.30 11.31 10.30 11.31 11.31 11.32 10.36 11.31 11.31 11.32 11.31 11.32 11.34 11.38 11.32 11.34 11.32 11.32 11.34 11.36 11.32 11.34 11.36 11.32 11.34 11.34 11.36 11.35 11.34 11.36 11.35 11.34 11.35 11.35	15	Empire District Electric	18,19	24.10	18,71	16.21	15,00	15.76	15,76	18,75	14.34	17.26	21.70	15.92	24.50	24 81	15.83	16 19
17 Eversource Energy 17.50 19.50 18.11 17.22 16.94 15.35 13.42 11.86 10.25 10.77 10.75 11.77 10.75	16	Entergy Corp.	13,64	15.40	12,53	12.89	13,21	11.22	9.06	11.57	11.98	16.58	19.30	14.28	16.28	15.09	13.77	11 52
8 Exclon Corp. 14.36 17.20 12.28 16.02 13.40 10.30 10.37 11.49 17.07 18.22 18.53 15.37 12.99 11.77 10.46 20 Great Plains Energy 15.52 18.00 17.02 39.79 13.06 21.10 22.39 11.75 13.02 16.64 15.59 14.23 16.07 14.13 22.47 12.99 21 Hawailan Elec. 18.38 21.80 19.37 16.47 15.81 15.70 16.07 15.48 13.76 13.76 13.76 13.76 13.76 13.76 13.76 13.76 13.76 13.76 13.76 13.76 13.76 13.76 13.76 13.76 13.85 17.79 15.82 16.51 15.07 16.70 15.48 26.51 15.88 13.76 13.7	17	Eversource Energy	17.50	19.50	18.11	17.92	16,94	19.86	15,35	13.42	11.96	13.65	18.75	27.07	19 76	20.77	13 35	18.07
19 FirstEnergy Corp. 17.48 13.00 17.02 39.79 13.06 21.10 22.39 11.75 13.02 16.64 15.29 14.23 16.07 14.13 22.47 12.85 20 Great Plains Energy 15.52 18.00 19.37 16.47 14.19 15.53 16.01 12.59 12.59 12.29 12.29 12.29 12.29 12.29 12.29 12.29 12.29 12.29 12.29 12.29 12.29 12.29 12.29 12.29 12.29 12.29 12.29 12.38 15.27 16.81 17.09 13.80 12.59 12.57 16.37 16.37 13.47 13.47 13.47 13.47 13.47 13.47 13.47 13.47 13.47 13.47 13.47 15.48 13.50 12.59 12.57 13.83 15.24 14.88 15.24 15.85 14.32 15.61 15.38 17.08 13.85 17.69 15.27 15.85 14.10 13.65 17.68 13.85 17.69 15.27 16.57 14.43 13.65 13.65 17	18	Exelon Corp.	14.36	17.20	12,58	16.02	13.43	19.08	11,30	10,97	11.49	17.97	18.22	16.53	15.37	12.99	11 77	10.46
20 Great Plains Energy 15.52 18.00 19.37 16.47 14.19 15.53 16.11 12.10 16.03 20.55 18.35 18.30 11.05 <td>19</td> <td>FirstEnergy Corp.</td> <td>17.48</td> <td>13.00</td> <td>17.02</td> <td>39.79</td> <td>13.06</td> <td>21.10</td> <td>22.39</td> <td>11.75</td> <td>13.02</td> <td>15.64</td> <td>15.59</td> <td>14 23</td> <td>16.07</td> <td>14 13</td> <td>22 47</td> <td>12.95</td>	19	FirstEnergy Corp.	17.48	13.00	17.02	39.79	13.06	21.10	22.39	11.75	13.02	15.64	15.59	14 23	16.07	14 13	22 47	12.95
121 Hawallan Elec. 18.36 21.80 20.40 15.81 17.90 18.59 10.79 23.18 21.77 10.83 13.27 13.27 13.27 13.27 13.27 13.27 13.27 13.27 13.27 13.27 13.27 13.28 13.27 13.27 13.28 13.27 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.27 13.28 13.28 13.28 13.28 13.28 13.28 13.28 13.27	20	Great Plzins Energy	15.52	18.00	19.37	16.47	14.19	15.53	16,11	12.10	16.03	20.55	16.35	18.30	13.98	12.59	12 23	11.00
22 IDACORP, Inc. 15.59 18.80 16.22 14.67 13.45 12.41 11.54 11.63 10.20 13.83 18.19 15.07 16.70 15.49 26.51 18.88 23 ITC Holdings 18.84 22.84 23.75 20.38 20.71 21.44 19.85 17.06 22.21 27.59 32.94 26.37 0.00 0.00 0.00 24 MGE Energy 17.38 24.10 22.84 23.75 20.38 20.71 21.44 19.85 16.14 14.42 15.01 15.88 24.40 17.98 17.55 15.86 25 NextEra Energy, Inc. 15.39 19.80 16.85 15.72 12.26 12.60 11.54 13.87 17.48 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85<	21	Hawailan Elec.	18.36	21.90	20.40	15.88	16.21	15.81	17.09	18,59	19.79	23.16	21.57	20.33	18 27	19 18	13.76	13.47
23 ITC Holdings 18.68 23.90 22.44 23.75 20.88 20.71 21.44 19.95 17.06 23.21 27.55 32.44 26.37 0.00 0.00 24 MGE Energy 17.38 24.10 20.28 17.19 17.23 15.82 14.98 15.14 14.42 15.01 15.88 22.40 17.88 17.55 15.86 25 NextEra Energy, Inc. 15.33 19.80 16.89 17.25 16.87 17.25 15.72 12.62 12.00 11.54 13.87 21.74 25.95 17.08 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.88 13.85 17.85 13.86 14.95 14.12 14.83 14.33 13.87 13.87 13.86 14.95 14.12 14.77 15.37 13.68 14.95 14.33 14.65 13.89 <td>22</td> <td>IDACORP, Inc.</td> <td>15.59</td> <td>18,80</td> <td>16.22</td> <td>14,67</td> <td>13,45</td> <td>12.41</td> <td>11.54</td> <td>11.83</td> <td>10.20</td> <td>13.93</td> <td>18.19</td> <td>15.07</td> <td>16 70</td> <td>15.49</td> <td>26.51</td> <td>18.88</td>	22	IDACORP, Inc.	15.59	18,80	16.22	14,67	13,45	12.41	11.54	11.83	10.20	13.93	18.19	15.07	16 70	15.49	26.51	18.88
24 MGE Energy 17.38 24.10 20.28 17.19 17.01 17.23 15.82 14.98 16.14 14.22 15.01 15.88 22.40 17.98 17.55 15.36 25 NextEra Energy, Inc. 15.39 19.80 16.59 17.25 16.57 14.43 11.54 10.83 13.42 14.48 18.90 13.65 17.08 17.36 13.80 26 NorthWestern Corp 17.01 17.29 15.24 16.56 15.72 12.82 12.80 11.54 13.87 13.65 17.36 14.87 17.34 14.87 17.35 15.40 17.75 13.68 14.95 14.13 11.84 14.12 26 Oter Tail Corp. 24.42 19.70 18.20 18.84 21.12 21.75 47.48 55.10 31.16 30.06 18.02 17.35 15.40 17.34 14.95 14.43 13.81 60.01 0.00 35.65 15.57 17.38 15.00 13.96 14.43 27 Portland General 14.33 18.92 16.88	23	ITC Holdings	18,68	23,90	22,84	23.75	20,38	20.71	21,44	19,95	17.06	23.21	27.59	32.94	26.37	0.00	0.00	0.00
25 NextEra Energy, Inc. 15.39 19.80 16.89 17.25 16.57 14.43 11.54 10.83 13.42 14.48 19.90 13.65 17.88 13.85 17.99 N/A	24	MGE Energy	17.38	24.10	20.28	17,19	17.01	17.23	15.82	14,98	15.14	14.22	15.01	15.68	22.40	17.98	17.55	15 98
26 NorthWestern Corp 17.01 21.20 18.36 15.72 12.82 12.80 11.54 13.87 21.74 25.95 17.09 N/A N/A N/A 27 OGE Enorgy 14.67 17.69 18.24 16.86 15.72 12.82 12.80 11.54 13.87 21.74 25.95 17.09 N/A N/A N/A 28 Otter Tail Corp. 24.42 19.70 18.20 18.44 21.12 21.75 47.48 55.10 13.01 12.08 16.85 14.84 15.37 13.81 9.50 0.00 30 Pinnacle West Capital 15.25 21.00 23.87 20.70 15.46 15.80 13.01 12.08 16.85 14.84 15.37 13.86 19.24 15.08 13.96 19.24 15.80 13.96 19.24 15.80 13.96 19.24 15.80 13.96 19.24 15.80 13.96 19.24 15.80 13.96 19.24 15.80 13.96 14.43 14.80 13.97 12.90 14.40 16.30 11.94 <td>25</td> <td>NextEra Energy, Inc.</td> <td>15.39</td> <td>19.80</td> <td>16.69</td> <td>17.25</td> <td>16.57</td> <td>14.43</td> <td>11.54</td> <td>10.83</td> <td>13.42</td> <td>14,48</td> <td>18.90</td> <td>13.65</td> <td>17.88</td> <td>13.65</td> <td>17.88</td> <td>13.60</td>	25	NextEra Energy, Inc.	15.39	19.80	16.69	17.25	16.57	14.43	11.54	10.83	13.42	14,48	18.90	13.65	17.88	13.65	17.88	13.60
27 OGE Energy 14.67 17.69 16.7 17.69 15.16 14.37 13.31 10.83 12.41 13.75 13.68 14.95 14.13 11.84 14.12 28 Olter Tail Corp. 15.57 21.10 28.00 18.84 21.12 21.75 47.48 55.10 31.16 30.06 19.02 17.35 15.40 17.34 17.77 16.01 29 PG&E Corp. 15.57 21.10 28.40 15.02 21.75 47.48 55.10 31.16 30.06 19.02 17.35 15.40 17.34 17.77 16.01 30 Planacle West Capital 15.28 18.60 16.04 15.99 15.27 14.35 14.60 13.61 14.97 14.53 13.01 12.08 16.85 14.84 15.37 13.74 16.07 14.93 13.89 19.24 15.80 13.96 14.43 31 Philand General 14.33 18.80 17.71 15.32 16.88 13.92 14.40 15.27 14.43 14.40 15.20 15.47 <	26	NorthWestern Corp	17.01	21.20	18,36	15.24	16,86	15.72	12,62	12,90	11.54	13,87	21.74	25.95	17.09	N/A	N/A	N/A
28 Olier Tail Corp. 24.42 19.70 18.20 18.42 21.12 21.75 47.48 55.10 31.16 30.06 19.02 17.35 15.40 17.34 17.77 16.01 29 PO&ECorp. 15.57 21.10 28.60 15.00 23.87 20.70 15.46 15.60 13.01 12.08 16.85 14.84 15.37 13.81 9.60 0.00 30 Pinnacle West Capital 15.35 20.40 0.00 18.68 16.13 14.97 14.53 14.60 18.09 0.00 35.65 15.57 17.36 15.02 14.73 15.08 29 Portland General 14.33 18.00 17.71 15.32 16.88 13.98 12.27 14.40 16.30 11.42 23.35 0.00 N/A N/A N/A 30 Policorp. 14.30 18.40 13.92 14.08 10.52 11.93 25.69 17.64 17.26 14.10 15.12 11.06 14.42 10.35 12.57 14.46 15.46 15.57 17.38 <td>27</td> <td>OGE Energy</td> <td>14.67</td> <td>17.80</td> <td>17.69</td> <td>18,27</td> <td>17.69</td> <td>15,16</td> <td>14.37</td> <td>13,31</td> <td>10,83</td> <td>12.41</td> <td>13,75</td> <td>13,68</td> <td>14,95</td> <td>14.13</td> <td>11.84</td> <td>14.12</td>	27	OGE Energy	14.67	17.80	17.69	18,27	17.69	15,16	14.37	13,31	10,83	12.41	13,75	13,68	14,95	14.13	11.84	14.12
29 PG&E Corp. 15.57 21.10 28.40 15.09 23.87 20.70 15.46 15.60 13.01 12.08 16.85 14.84 15.37 13.81 9.50 0.00 30 Pinnacle West Capital 15.28 18.60 15.09 15.27 14.95 14.60 12.67 13.74 16.07 14.93 13.69 19.24 15.00 13.96 14.43 31 PMM Resources 15.35 20.40 0.00 18.68 18.13 14.97 14.35 14.60 15.07 17.48 16.02 14.73 15.08 32 Portland General 14.38 18.00 17.71 15.32 16.88 13.98 12.37 12.00 14.40 16.30 11.94 23.35 0.00 N/A N/A N/A 33 PPL Corp. 14.30 18.60 17.71 15.32 16.88 13.67 12.93 11.83 12.67 14.10 15.12 12.51 10.59 11.06 34 Public Serv. Enterprise 13.17 12.61 13.50 12.79	28	Otter Tail Corp.	24.42	19.70	18.20	18,84	21.12	21.75	47.48	55,10	31.16	30.06	19.02	17.35	15,40	17.34	17.77	16.01
30 Pinnacle West Capital 15.28 18.00 16.04 15.97 14.35 14.60 12.67 13.74 16.07 14.93 13.89 19.24 15.80 13.96 14.43 31 PMIR Resources 15.35 20.40 0.00 18.68 18.13 14.97 14.53 14.05 18.09 0.00 35.65 15.57 17.38 15.02 14.73 15.08 32 Portland General 14.38 18.30 17.71 15.32 16.88 13.98 12.00 14.40 15.30 15.57 17.38 15.02 14.73 15.08 34 PpL Corp. 14.30 18.40 13.92 14.88 15.80 12.41 10.82 11.83 25.69 17.64 17.61 15.12 12.51 10.59 11.06 35 SCANA Corp. 14.00 17.90 14.67 13.68 14.43 14.80 13.67 12.63 16.54 17.81 16.74 14.26 10.59 11.06 15.21 12.17 36 ScANA Corp. 13.73 20.40 <t< td=""><td>29</td><td>PG&E Corp.</td><td>15.57</td><td>21.10</td><td>26,40</td><td>15.00</td><td>23,67</td><td>20.70</td><td>15,46</td><td>15.80</td><td>13,01</td><td>12.08</td><td>16,85</td><td>14,84</td><td>15.37</td><td>13.81</td><td>9.50</td><td>0.00</td></t<>	29	PG&E Corp.	15.57	21.10	26,40	15.00	23,67	20.70	15,46	15.80	13,01	12.08	16,85	14,84	15.37	13.81	9.50	0.00
31 PMM Resources 15.35 20.40 0.00 18.68 16.13 14.95 18.09 0.00 35.65 15.57 17.38 15.02 14.73 15.08 32 Portland General 14.38 18.30 17.71 15.32 16.88 13.98 12.37 12.00 14.44 16.30 11.94 23.35 0.00 N/A N/A N/A 33 PPL Corp. 14.30 18.40 13.92 14.71 15.30 12.79 10.00 10.44 16.53 11.94 23.35 0.00 N/A N/A N/A 34 PUblic Serv. Enterprise 13.17 15.90 12.41 12.61 13.50 12.79 10.40 10.37 10.04 13.65 16.54 17.81 16.74 14.26 10.58 10.00 35 ScANA Corp. 14.00 19.73 21.47 18.80 14.81 14.80 13.67 12.83 11.83 12.67 14.44 13.57 13.05 12.17 36 Sempra Energy 13.73 20.40 19.73 21.87 <td>30</td> <td>Pinnacie West Capital</td> <td>15.28</td> <td>18.60</td> <td>16,04</td> <td>15,89</td> <td>15.27</td> <td>14,35</td> <td>14.60</td> <td>12,57</td> <td>13,74</td> <td>16.07</td> <td>14,93</td> <td>13.89</td> <td>19,24</td> <td>15.80</td> <td>13,96</td> <td>14.43</td>	30	Pinnacie West Capital	15.28	18.60	16,04	15,89	15.27	14,35	14.60	12,57	13,74	16.07	14,93	13.89	19,24	15.80	13,96	14.43
32 Portland General 14.38 18.30 17.71 15.32 16.88 13.98 12.37 12.00 14.40 16.30 11.94 23.35 0.00 N/A N/A N/A 33 PPL Corp. 14.30 16.40 13.92 14.08 12.84 10.88 10.52 11.93 25.69 17.64 17.26 14.10 15.12 12.11 10.58 11.06 34 Public Serv. Enterprise 13.17 15.90 12.41 12.54 13.50 12.79 10.40 10.37 10.04 13.85 16.54 17.81 16.74 14.42 13.57 13.05 12.17 36 Sempra Energy 13.73 20.40 19.73 21.87 19.86 14.89 11.77 12.60 10.09 11.80 14.01 11.59 8.89 8.19 37 Southern Co. 15.70 17.90 15.85 16.04 16.19 16.97 13.52 14.40 14.53 14.63 14.63 14.63 14.63 14.63 14.63 14.63 14.63 14.64 14.6	31	PNM Resources	15.35	20.40	0.00	18.68	18,13	14.97	14.53	14.05	18.09	0.00	35,65	15,57	17.38	15.02	14.73	15.08
33 PPL Corp. 14.30 18.40 13.92 14.08 10.82 11.03 25.69 17.64 17.26 14.10 15.12 12.51 10.59 11.06 34 Public Serv. Enterprise 13.17 15.90 12.41 12.61 13.50 12.79 10.40 10.37 10.04 13.65 16.54 17.81 16.74 14.26 10.58 10.00 35 SCANA Corp. 14.00 17.90 12.41 12.61 13.65 12.79 10.40 10.37 10.04 13.65 16.54 17.81 16.74 14.26 10.58 10.00 35 SCANA Corp. 14.00 17.90 12.41 13.68 14.80 11.77 12.80 10.04 13.65 16.14 11.50 11.79 8.65 8.96 8.19 36 Scenprationergy 13.73 20.40 19.73 21.87 18.48 14.89 11.77 12.60 10.00 11.80 14.01 11.59 14.68 14.93 37 Southern Co. 15.70 17.90 15.85	32	Portland General	14.38	18.30	17.71	15,32	15.88	13.98	12.37	12.00	14.40	16.30	11.94	23.35	0.00	N/A	N/A	N/A
34 Public Serv. Enterprise 13,17 15,90 12,41 12,50 12,79 10,40 10,37 10,04 13,65 16,54 17,81 16,74 14,26 10,38 10,00 35 SCANA Corp. 14,00 17,90 14,67 13,68 14,43 14,80 13,67 12,93 11,83 12,67 14,44 13,57 13,05 12,17 36 Sempra Energy 13,73 20,40 19,73 21,87 18,68 14,80 13,67 12,93 11,80 14,01 11,50 11,79 8,65 8,96 8,19 37 Southem Co. 15,70 17,90 15,85 16,04 16,19 16,97 15,85 16,10 15,59 16,18 15,92 14,86 14,83 14,63 38 TECD Energy 15,16 23,20 18,82 15,49 14,43 14,58 12,89 16,79 15,33 18,92 15,11 17,70 19,90 NMF 10,97	33	PPL Corp.	14.30	18,40	13.92	14,08	12.84	10,88	10,52	11,93	25,69	17.84	17,26	14.10	15,12	12,51	10,59	11.06
35 SCANA Corp. 14.00 17.90 14.67 13.68 14.80 13.67 12.93 11.83 12.67 14.06 15.42 14.44 13.57 13.05 12.17 36 Sempra Energy 13.73 20.40 19.73 21.87 19.68 14.77 12.80 10.09 11.80 14.01 11.50 11.79 8.68 8.96 8.19 37 Southern Co. 15.70 17.90 15.85 16.04 16.19 16.07 15.82 14.80 13.52 16.13 15.95 16.16 15.92 14.68 14.63 14.63 38 TECO Energy 16.86 24.10 21.37 18.81 18.49 14.43 14.53 12.63 21.22 13.35 13.79 17.09 19.30 NMF 10.97 39 Vectren Corp. 16.70 20.40 17.92 19.98 20.66 15.02 15.83 15.10 12.89 16.79 15.33 18.92 15.11 17.75 14.80 14.46 40 Westar Energy 15.16 23.20	34	Public Serv. Enterprise	13,17	15.90	12.41	12.51	13.50	12.79	10.40	10,37	10.04	13.65	16,54	17.81	16,74	14.26	10.58	10.00
36 Sempra Energy 13.73 20.40 19.73 21.87 18.88 11.77 12.80 10.09 11.80 14.01 11.50 11.79 8.65 8.96 8.19 37 Southern Co. 15.70 17.90 15.85 16.04 16.19 15.95 14.90 13.52 16.13 15.95 16.18 15.92 14.86 14.83 38 TECO Energy 16.88 24.10 21.37 18.81 18.88 15.49 14.43 14.53 15.79 17.90 19.86 14.83 39 Vactren Corp. 16.70 20.40 17.92 19.88 20.66 15.02 15.83 15.10 12.89 16.79 15.33 18.92 15.11 17.57 14.80 14.43 0 Wester Energy 15.18 21.33 17.71 16.50 15.76 14.25 14.01 12.18 14.77 14.47 15.97 14.40 14.43 14 WEC Energy Group 15.73	35	SCANA Corp,	14,00	17.90	14.67	13.68	14.43	14.80	13.67	12.93	11.63	12.67	14. 0 6	15.42	14.44	13.57	13.05	12.17
37 Southern Co. 15.70 17.90 15.85 16.04 16.19 16.07 15.85 14.90 13.52 16.13 15.95 16.19 15.92 14.68 14.83 14.63 38 TECO Energy 16.86 24.10 21.37 18.81 18.88 15.49 14.43 14.53 12.63 21.22 13.35 13.79 17.09 19.30 NMF 10.97 39 Vactren Corp. 16.70 20.40 17.92 19.88 20.66 15.02 15.83 16.179 15.33 18.92 15.11 17.70 14.80 14.63 40 Westar Energy 15.16 23.20 18.45 15.36 14.04 13.43 14.78 12.98 16.79 15.33 18.92 15.11 17.71 14.40 14.42 41 WEC Energy Group 15.73 21.00 21.33 17.71 16.50 15.76 14.25 14.01 13.35 14.77 16.47 15.97 14.46 17.51 12.43 10.46 42 Xcel Energy Inc. 16.55 <t< td=""><td>36</td><td>Sempra Energy</td><td>13.73</td><td>20.40</td><td>19.73</td><td>21,87</td><td>19.66</td><td>14.89</td><td>11.77</td><td>12.60</td><td>10,09</td><td>11.80</td><td>14.01</td><td>11.50</td><td>11,79</td><td>8,65</td><td>8.96</td><td>8.19</td></t<>	36	Sempra Energy	13.73	20.40	19.73	21,87	19.66	14.89	11.77	12.60	10,09	11.80	14.01	11.50	11,79	8,65	8.96	8.19
38 TECO Energy 16,86 24,10 21,37 18,81 18,88 15,49 14,43 14,58 12,83 21,22 13,35 13,79 17,09 19,30 NMF 10,97 39 Vectren Corp. 16,70 20,40 17,92 19,98 20,66 15,02 15,83 16,70 15,33 18,92 15,11 17,75 14,80 14,46 40 Westar Energy 15,16 23,20 18,45 15,02 15,83 14,96 18,96 14,10 12,18 14,79 17,44 10,78 14,02 41 WEC Energy Group 15,73 21,00 21,33 17,71 16,50 15,76 14,25 14,01 13,35 14,77 15,47 15,36 13,65 13,65 13,65 13,65 13,65 13,65 14,02 14,11 13,35 14,77 16,47 15,37 14,46 17,51 12,43 10,46 42 Xcel Energy Inc. 16,55 16,42 15,44	37	Southern Co.	15,70	17,90	15.85	16,04	16,19	16,97	15,85	14,90	13,52	15.13	15,95	15,19	15,92	14,68	14.83	14.63
39 Vectren Corp. 16,70 20.40 17.92 19.98 20.66 15.02 15.83 15.10 12.89 16.79 15.33 18.92 15.11 17.57 14.80 14.16 40 Westar Energy 15.16 23.20 18.45 15.36 14.04 13.43 14.78 12.88 14.95 18.96 14.10 12.18 14.79 17.44 10.76 14.02 41 WEC Energy Group 15.73 21.00 21.33 17.71 16.50 15.76 14.25 14.01 13.35 14.77 16.47 15.97 14.46 17.51 12.43 10.46 42 Xcel Energy Inc. 16.55 18.69 16.54 15.44 15.04 14.82 14.24 14.13 12.66 13.69 16.55 14.80 15.36 13.65 11.62 40.80 42 Xcel Energy Inc. 15.89 19.73 17.27 17.38 16.42 14.24 14.13 12.66 13.69 16.5	36	TECO Energy	16,86	24.10	21,37	18.61	18,88	15,49	14,43	14,58	12,63	21,22	13.35	13,79	17,09	19.30	NME	10.97
40 Wester Energy 15.16 23.20 16.45 15.36 14.04 13.43 14.76 12.98 14.95 16.96 14.10 12.18 14.79 17.44 10.76 14.02 41 WEC Energy Group 15.73 21.00 21.33 17.71 16.50 15.76 14.25 14.01 13.35 14.77 15.87 14.46 17.51 12.43 10.46 42 Xcel Energy Inc. 16.55 18.80 16.54 15.44 15.04 14.82 14.24 14.13 12.66 13.69 16.55 13.65 11.62 40.80 43 Average 15.79 19.73 17.27 17.38 16.70 15.38 14.39 13.57 14.78 16.87 16.17 16.42 13.38 13.50 44 Merge 15.89 19.73 17.27 17.38 16.72 15.70 15.38 14.39 13.57 14.78 16.17 16.42 13.38 13.50 <td>39</td> <td>Vectren Corp.</td> <td>16,70</td> <td>20.40</td> <td>17,92</td> <td>19,98</td> <td>20.66</td> <td>15.02</td> <td>15.83</td> <td>15,10</td> <td>12.89</td> <td>16.79</td> <td>15,33</td> <td>18.92</td> <td>15.11</td> <td>17.57</td> <td>14.80</td> <td>14.16</td>	39	Vectren Corp.	16,70	20.40	17,92	19,98	20.66	15.02	15.83	15,10	12.89	16.79	15,33	18.92	15.11	17.57	14.80	14.16
41 WEC Energy Group 15.73 21.00 21.33 17.71 16.50 15.76 14.25 14.01 13.35 14.77 16.47 15.97 14.46 17.51 12.43 10.46 42 Xcel Energy Inc. 18.55 18.80 18.54 15.44 15.04 14.82 14.24 14.13 12.66 13.69 16.55 14.80 15.36 13.65 11.62 40.80 43 Average 15.89 19.73 17.27 17.38 16.42 15.70 15.38 14.39 13.57 14.78 18.37 16.17 16.42 13.35 44 Median 15.70 17.38 16.42 15.70 15.38 14.39 13.57 14.78 18.37 16.17 16.42 13.35	40	Wester Energy	15.18	23.20	18.45	15.35	14,04	13.43	14.78	12.96	14.95	16.96	14.10	12.18	14,79	17.44	10.78	14.02
42 Xcel Energy Inc. 16.55 18.80 16.54 15.44 15.04 14.82 14.24 14.13 12.66 13.69 16.55 14.80 15.36 13.65 11.62 40.80 43 Average 15.89 19.73 17.27 17.38 16.42 15.70 15.38 14.39 13.57 14.78 17.88 16.37 16.17 16.42 13.50 44 Machen 15.25 17.27 17.38 16.42 15.70 15.38 14.39 13.57 14.78 16.37 16.17 16.42 13.50	41	WEC Energy Group	15.73	21.00	21.33	17.71	16.50	15.76	14,25	14.01	13.35	14.77	16,47	15,97	14,46	17.51	12.43	10.46
43 Average 15,89 19,73 17,27 17,38 18,42 15,70 15,38 14,39 13,57 14,78 17,88 18,37 16,17 18,42 13,38 13,50	42	Xcel Energy Inc.	16.55	18,80	16.54	15.44	15.04	14.82	14.24	14.13	12.66	13.69	16.65	14.80	15.36	13.65	11.62	40.80
44 Madlan 45.05 10.00 17.00 10.01 10.00 10.00 10.03 10.01 10.17 10.42 13,36 13.50	43	Average	15,89	19.73	17.27	17.38	16.42	15.70	15.36	14 39	13.57	14 78	17.88	18 37	16 17	18.40	12.00	10.50
19.60 17.82 16.54 16.27 15.11 14.40 12.95 12.82 14.21 16.41 15.82 15.99 16.49 13.60 13.28 14.21	44	Median	15,35	19,60	17,82	16,54	16,27	15,11	14.40	12,95	12.82	14.21	16.41	15.82	15,99	15.49	13.60	13.28

Sources:

¹ The Value Line Investment Survey Investment Analyzer Software, downloaded on June 28, 2016.

² The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

Valuation Metrics

								Market Pr	ice to Cas	h Flow (MP	(CF) Ratio	·					
		15-Year	2/0														
Line	Company	Average (1)	(2)	(3)	<u>2014</u> (4)	2013 (5)	(6)	(7)	2010 (8)	<u>2009</u> (9)	(10)	(11)	(12)	<u>2005</u> (13)	2004 (14)	2003 (15)	2002 (16)
45	ALLETE	9 .21	7.96	7 49	8.80	9.15	8 1R	7.91	8 04	8.51	9.29	10 30	11.06	11.54	11.46	N/A	N/A
46	Alliant Energy	7 04	9.34	8.86	8 40	7.52	7.50	7.21	6.59	6.23	7.49	7.92	8.00	5.09	5.52	4 76	5.20
47	Ameren Com	6 71	7 12	6.67	8.95	6.61	5 48	5.02	4 23	4 25	6.35	7.69	8.57	8.57	8 24	6.74	7.96
48	American Electric Power	5.97	7.65	7.09	7.00	6.57	5.93	5.46	5.54	4 71	571	6.84	5 54	6.07	5 50	4.69	5 19
49	Avista Corp.	6.32	7.97	6.76	7.30	6.21	6.88	6.40	5.80	4.06	5.12	7.58	5.30	6.58	7.58	5.36	5.90
50	Block Hills	7.32	7 72	8.06	8.81	8.03	8.04	7.85	6 16	4 25	11.26	7.62	6 92	7.57	6.69	6.89	5.92
51	CenterPoint Energy	4.66	5 50	5.75	6.25	6.56	5.15	6.39	4.70	4.05	4.29	5.17	3.94	4.70	4.26	2.08	2.16
52	CMS Energy Corp.	5.18	8.05	7.53	7.13	6.68	6,03	5,41	4.48	3,84	3,45	5.57	4,40	4,04	3.20	2.88	NMF
53	Consol, Edison	8.04	9.14	7.96	7.89	7.77	8.31	8,15	7.39	6.72	6.89	8.31	8.65	8.59	9.31	7.90	7.64
54	Dominion Resources	9.14	11.08	11.84	12.27	10.88	9.92	9.45	8.12	6.98	8.27	8.65	7.B1	10.09	7.68	7.51	6.53
55	DTE Energy	5.84	5.40	8.52	5.42	6.65	5.91	5,18	4.69	3,59	4,90	5.73	5.21	5,54	6,00	5.82	5.20
56	Duke Energy	7.42	7.70	7.95	8,12	8.11	9,53	6,56	6,01	5,96	7,13	7,16	N/A	N/A	N/A	N/A	N/A
57	Edison Int'l	5.13	6.27	5.92	5.68	5.48	4.59	4.22	4.11	3,95	5.63	7.01	5.87	5.61	5.84	2.82	2.96
58	El Paso Electric	5.51	7.22	6.47	6.33	6.19	5.78	5.16	4.31	3.98	4,95	6.44	6.25	6.67	4.65	3,90	4,39
59	Empire District Electric	7,69	8,35	7.27	7,29	7,07	6,97	6,43	6,86	6,23	6,94	8,78	8,17	9,20	9,60	8,22	7.93
60	Entergy Corp.	5.86	4.42	4.11	4.21	4.03	4.23	3.90	4,66	5.68	7.96	9.21	7.16	8.76	7.12	6.84	5.57
61	Eversource Energy	6,28	10.80	10.12	10,14	8.08	9,30	6,89	4.97	4,61	4.12	6.18	6,02	3.55	3,78	2.85	2,75
62	Exelon Corp.	6,28	4.29	4,70	5.09	4.61	5,54	5,86	5,10	5.98	9.65	9.89	8.62	7.97	6.29	5.71	4.97
63	FirstEnergy Corp.	6,27	4.69	5.38	7,43	6,15	7.42	7.33	4.49	4.91	7.58	7.89	7.53	8.04	5.15	6.90	5.10
64	Great Plains Energy	5.24	6.58	6.66	6.45	5.73	6.09	5.74	4.49	5.05	7.71	7.13	7.68	6.70	6.52	5.92	5.14
65	Hawailan Elec.	7.95	9.03	9.25	7.64	8.15	8.05	7.73	7.81	6.95	9.10	7.95	8.47	8.29	8.44	6.12	6.20
66	IDACORP, Inc.	7,60	10,22	9,37	8,59	7,78	7,05	6.64	6,52	5,31	7,10	8,23	7.73	7.65	7,15	7,27	7.53
67	ITC Holdings	10.91	13,92	14.06	15,25	13,43	13.23	13.65	12.36	10.17	12.37	14.08	17.53	13.67	0.00	0,00	0.00
68	MGE Energy	10.34	14.25	12.53	11.42	11.20	10.77	8.48	9.05	8.40	8.42	9.23	9.30	11.73	11.04	10.20	8.09
69	NextEra Energy, Inc.	7.00	8.46	7.93	7.98	7.60	7.58	5,98	5.33	6.09	7.34	9.02	6,51	6.71	6,71	5.97	5,77
70	NorthWestern Corp	7.48	0,18	8.99	9.01	7.61	6.85	5.89	5.79	5.05	5.57	8,45	9.39	7.31	8.13	N/A	N/A
71	OGE Energy	7.41	B.19	8,25	10.65	9,93	7.35	7.48	6,61	5.37	6,43	7.58	7.50	7.04	6,73	5.62	5.39
72	Otter Tail Corp.	8.90	8.38	9.04	0.45	9,58	8.43	9.04	8,07	8.01	11.65	9,53	8.66	8,18	9.01	8.13	8.33
73	PG&E Corp.	8,13	6.10	7.24	5.65	6,84	5,86	5,32	5.42	4.71	4,61	5.84	5,28	5.07	5,13	4,05	14,69
74	Pinnacle West Capital	5.78	7,40	5.91	7.03	6.85	6,34	5.80	5,65	3.84	4.19	4,76	4.48	7.48	5,88	4.80	5.21
75	PNM Resources	6.93	8.22	10.95	7.48	6.47	5.80	4.94	4.58	4.53	7.10	10.67	7.50	7.62	6.84	5.55	5.72
76	Portland General	5.39	6.48	6.73	5.49	6.06	5.06	4.86	4.13	4.63	4.81	5,34	5.74	N/A	N/A	N/A	N/A
77	PPL Corp.	7,38	9.22	8,73	7.32	6,59	5,87	5.68	7.46	8,82	9.17	8.90	7.58	7.57	6,49	5.41	5.30
78	Public Serv. Enterprise	7,12	7.10	6.56	8.48	6.40	6.40	6,03	6.04	6,20	8,46	9.83	8,41	8,59	7.17	6,79	6.24
79	SCANA Corp.	7.03	9.76	8,33	7.50	7.49	7.40	6.75	6.52	5.88	6,38	7.15	7.03	5.40	6.86	6.59	6.36
80	Sempre Energy	7.30	9.50	9,99	10.77	9,37	7.26	6,13	6.53	6.07	7.07	8.61	7.22	6.96	5.16	4.85	4.00
81	Southern Co.	8,26	9,05	8.23	8.42	8,30	8,75	8.22	7,79	7,08	8,16	8,62	8,47	8,41	8,28	8,28	7.83
62	TECO Energy	7.11	10,25	8.76	7.58	7.16	6.55	6.62	6.37	5.38	8.12	6,75	6.42	7.21	6,41	6,39	6.68
63	Vectren Corp.	6.83	8,14	7.82	7.57	6,82	5,79	5.81	5.58	5.24	6,90	6.53	7,37	7.06	7.63	7.27	6.92
84	Wester Energy	6,62	10,45	9,05	7.93	7.23	6.71	6.67	5.51	5.32	7.09	6.88	5.81	7.00	6.64	4.24	2.94
85	WEC Energy Group	8.02	10.39	12.90	10.27	9.58	9.24	8,43	8.15	6,87	7.57	7.84	7.27	6.40	6,27	4.91	4.27
86	Xcel Energy Inc.	6.20	7.64	7.62	7.31	7.00	6.85	6.47	6.28	5.43	5.71	6.51	5.54	5.62	5.31	4.27	5.46
87	Average	7,03	8,37	8,23	7.97	7.51	7.09	6.66	6.15	5.68	7.10	7.84	7.36	7.34	6.66	5.84	5.77
88	Median	6.84	8.21	7.95	7.53	7.11	6.85	6.42	5,91	5,37	7.09	7.76	7.37	7.14	6.70	5,66	5,57

Sources;

¹ The Value Line investment Survey investment Analyzer Software, downloaded on June 28, 2016.

² The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

Note:

⁶ Based on the average of the high and low price for 2016 and the projected 2016 cash flow per share, published in The Value Line Invostment Survey, April 29, May 20, and June 17, 2016.

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Valuation Metrics

		Market Price to Book Value (MP/BV) Ratio 1													
		12-Year												· · · · · · · · · · · · · · · · · · ·	
Flus	Company	<u>Average</u>	2016 2/4	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
89	ALLETE	1 55		4.97	4.40	4.54									
90	Allinot Eperav	1.00	1,41	3.37	1.42	1.51	1,34	1.35	1,28	1.15	1,55	1.89	2,09	2.22	
91	Ameren Com	1.00	1.51	1.60	1.86	1.70	1.57	1.46	1.31	1.04	1.33	1,67	1.52	1.33	
92	American Electric Dounc	1.50	1.57	1,40	1.40	1.29	1,10	0.90	0,83	0.78	1,25	1.60	1.62	1.68	
93	Aviate Com	1,43	1.04	1,55	1.04	1.40	1.31	1.23	1.23	1.08	1.48	1,85	1.56	1,57	
94	Black Hills	1.41	1.49	1.30	1,33	1.25	1.21	1.19	1.07	0.94	1.11	1.29	1.30	1.13	
95	CenterPoint Energy	1.91	1.73	1,59	1.78	1.62	1.21	1.14	1.07	0.83	1.22	1.57	1.47	1.63	
90	CMS Energy Com	2,37	4.51	2,43	2.27	2,30	1.09	1.87	1.96	1.77	2.49	3.13	2.75	3.06	
97	Cossol Edison	1.77	2.09	2.43	2.26	2,09	1.81	1.66	1.48	1.10	1.23	1.82	1.42	1.32	
98	Dominion Resources	1.07	1.01	2.92	1.34	1.38	1.47	1.38	1.22	1.08	1.17	1.47	1.47	1.52	
99	DTE Energy	2.02	1.54	3.34	3,55	2.97	2,84	2.37	2.01	1.80	2.42	2.69	2.07	2.50	
100	Duke Energy	1.00	1,68	1.55	1.62	1.51	1,35	1.20	1,16	0,89	1.10	1.35	1.29	1.39	
101	Ediano Infil	1,04	1.20	1,29	1.28	1,19	1.12	1,13	1,00	0,91	1.06	1,15	0,00	N/A	
107		1.50	1.78	1.76	1.68	1.57	1.53	1.24	1.07	1.04	1.56	2.05	1.80	1.93	
102	Empire District Electric	1.50	1.62	1.48	1.52	1.49	1.59	1.64	1,17	0,98	1.33	1.69	1.71	1.76	
104	Enternu Care	1.34	1.62	1,32	1.39	1,27	1.23	1,25	1.24	1.07	1.30	1.47	1,45	1,49	
105	Energy Corp.	1.68	1.35	1.40	1.33	1.21	1.31	1.35	1.62	1.66	2.44	2.65	1,89	2.01	
100	Everadurce Energy	1.37	1.61	1,63	1.47	1,38	1.28	1.50	1.31	1.12	1.31	1.60	1.22	1.05	
100	Execon Corp.	2.45	1.08	1.14	1,28	1.17	1.46	1.95	2.07	2.57	4,39	4.70	3.89	3.60	
100	Cristerby Corp.	1.56	1.10	1,16	1.15	1,28	1,44	1.33	1,36	1.54	2.52	2,23	1.92	1.64	
100	Great Plains Energy	1.20	1.21	1.12	1.11	1.02	0,96	0.93	0,87	0.80	1.11	1.65	1.77	1.85	
110	Hawalan Elec.	1,59	1.65	1.71	1.48	1.54	1,62	1.54	1,44	1.16	1.81	1.57	2.01	1.78	
110	IDAGORP, Inc.	1.28	1.64	1.54	1.45	1.33	1.19	1.17	1.13	0,92	1.09	1,26	1,37	1.22	
111	LIC Holdings	2.95	3,34	3.18	3.40	2.93	2,75	2.89	2,57	2.18	2,72	3.53	2,42	3.52	
112	MGE Energy	1.89	2.32	2.10	2.10	2.06	1,92	1.75	1.65	1.54	1.62	1.75	1.83	2.09	
113	Nextera Energy, Inc.	1.91	2.15	2.09	2.15	1.93	1.74	1.55	1.49	1.70	2.06	2.34	1.80	1,93	
104	North Western Corp	1.43	1.68	1.60	1.54	1.56	1,42	1.35	1.22	1.07	1.15	1.48	1.65	1.42	
115	OGE Energy	1.83	1.59	1.79	2,22	2,24	1,94	1,90	1.70	1.37	1.52	1,98	1.91	1,60	
116	Otter Tall Corp.	1.64	1.67	1.78	1.90	1.96	1.58	1.35	1.19	1.18	1.71	1.93	1.76	1.74	
11/	FG&E Corp.	1,57	1.55	1.57	1.39	1.38	1,41	1.46	1.56	1.41	1.50	1.94	1,83	1.84	
118	Pinnacle West Capital	1.29	1.62	1.52	1.44	1.47	1,39	1,25	1.14	0,95	1.00	1,28	1.26	1,25	
119	PNM Resources	1.05	1.39	1.33	1.21	1.09	0.98	0.80	0.69	0.55	0.66	1.23	1.21	1.45	
120	Portland General	1.11	1.44	1.42	1.37	1,28	1.14	1.09	0.94	0,92	1.05	1.32	1.36	0.00	
121	PPL Corp.	2.13	2.28	2,24	1.64	1.55	1,58	1.47	1.61	2.10	3,19	3.05	2.43	2.50	
122	Public Serv. Enterprise	1.93	1,57	1.58	1,57	1.44	1,46	1.59	1.67	1.78	2,58	2,99	2.46	2.45	
123	SCANA Corp.	1.49	1.65	1.47	1.48	1.48	1.48	1.36	1.33	1.20	1.45	1.62	1.64	1.72	
124	Sempra Energy	1.71	1.96	2.17	2.20	1.84	1.53	1.28	1,35	1.32	1.60	1.87	1.70	1.73	
125	Southern Co.	2,06	2.06	1,99	2,02	2.04	2.15	1,99	1.83	1.73	2.12	2.24	2.23	2 35	
126	TECO Energy	1.81	2.46	2,02	1.63	1,62	1.67	1.75	1.63	1.30	1.73	1.77	1.96	2 23	
127	Vectren Corp.	1.74	2.04	2.11	2,08	1.82	1.57	1.53	1.41	1.34	1.64	1.74	1.77	1.82	
128	Wester Energy	1.31	1.82	1.49	1.44	1.33	1.26	1.20	1.10	0.93	1.10	1.36	1.30	1.41	
129	WEC Energy Group	1.83	1.98	1.82	2.34	2,21	2,05	1,81	1.85	1.40	1.57	1.77	1.71	1.62	
130	Xcel Energy Inc.	1.46	1.78	1.66	1.55	1.50	1.51	1.41	1.32	1.19	1.30	1.53	1.40	1.38	
131	Average	1.64	1 79	1 73	1 70	1.65	4 5 4	4 47	4.00	4 67					
132	Median	150	185	1.10	1.12	1.0.2	1.04	1.4/	1.38	1,27	1.65	1,93	1.74	1.80	
	(, J.A.	1.00	1.28	1,09	1.00	1,47	1.37	1.31	1.15	1.49	1.74	1.71	1.73	

Sources:

¹ The Value Line Investment Survey Investment Analyzer Software, downloaded on June 28, 2016.

² The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

Note:

⁶ Based on the average of the high and low price for 2018 and the projected 2018 cash flow per share, published in The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

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Proxy Group

		Credit	Ratings ¹	Common Equity Ratios			
<u>Line</u>	<u>Company</u>	<u>S&P</u>	Moody's	<u>SNL¹</u>	Value Line ²		
		(1)	(2)	(3)	(4)		
1	ALLETE, Inc.	8BB+	A3	53.3%	53.7%		
2	Alliant Energy Corporation	A-	A3	46.5%	51.4%		
3	Ameren Corporation	BBB+	Baa1	47.4%	49.7%		
4	American Electric Power Company, Inc.	BBB	Baa1	46.3%	50.2%		
5	Avista Corporation	BBB	Baa1	46.9%	50.0%		
6	CMS Energy Corporation	BBB+	Baa2	29.3%	31.4%		
7	DTE Energy Company	8BB+	A3	47.3%	49.8%		
8	IDACORP, Inc.	BBB	Baa1	54.0%	54.4%		
9	NorthWestern Corporation	BBB	A3	44.0%	46.9%		
10	OGE Energy Corp.	A-	A3	54.8%	55.7%		
11	Pinnacle West Capital Corporation	A-	A3	53.7%	57.0%		
12	PNM Resources, Inc.	BBB+	Baa3	40.6%	45.6%		
13	Portland General Electric Company	BBB	A3	50.7%	52.2%		
14	SCANA Corporation	BBB+	Baa3	45.5%	48.1%		
15	Xcel Energy Inc.	A-	A3	43.3%	45.9%		
16	Average	BBB+	Baa1	46.9%	49.5%		
17	KCP&L Greater Missouri Operations	BBB+ ¹	Baa2 ¹		51.4% ³		

Sources:

¹ SNL Financial, Downloaded on June 10, 2016.

² The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

³ Schedule MPG-1.

Zacks SNL Reuters Average of Estimated Estimated Number of Number of Estimated Number of Growth Growth %² Growth %¹ Growth %3 Estimates Estimates Line Company Estimates Rates (1) (2) (4) (6) (7) (3) (5) ALLETE, Inc. 4.50% N/A 4.50% 3.00% 1. 1 2 4.00% 2 Alliant Energy Corporation 6.10% N/A 7.20% 2 6.60% 2 6.63% 3 Ameren Corporation 6.10% N/A 7.00% 2 5.20% 1 6.10% 4 American Electric Power Company, Inc. 4.90% N/A 3.50% 4 4.10% 3 4.17% 5 Avista Corporation 5.00% N/A 5.00% 1 NA NA 5.00% 6 6.30% 2 3 6.65% CMS Energy Corporation 6.40% N/A 7.24% 7 DTE Energy Company 5.80% N/A 5.20% 4 5.35% 4 5.45% 8 IDACORP, Inc. 4.00% N/A N/A N/A NA NA 4.00% 9 NorthWestern Corporation 5.00% N/A 5.00% 3 5.00% 2 5.00% OGE Energy Corp. 2 10 N/A 5.30% 2 4.30% 4.93% 5.20% Pinnacle West Capital Corporation 3 3.73% 3 11 4.00% N/A 4.20% 3.98% 2 12 PNM Resources, Inc. 7.60% N/A 7.00% 2 8.76% 7.79% 4 6.39% 13 Portland General Electric Company 6.40% N/A 6.20% 4 6.57% SCANA Corporation 5.40% 2 5.43% 14 5.30% N/A 5.60% 2 15 Xcel Energy Inc. 5.30% N/A 5.00% 4 5.27% 3 5.19% 5.44% N/A 5.50% 3 5.42% 2 5.38% 16 Average

Consensus Analysts' Growth Rates

Sources:

¹ Zacks Elite, http://www.zackselite.com/, downloaded on June 10, 2016.

² SNL Interactive, http://www.snl.com/, downloaded on June 10, 2016.

³ Reuters, http://www.reuters.com/, downloaded on June 10, 2016.
Constant Growth DCF Model (Consensus Analysts' Growth Rates)

<u>Line</u>	Company	13-Week AVG <u>Stock Price¹</u> (1)	Analysts' <u>Growth²</u> (2)	Annualized <u>Dividend³</u> (3)	Adjusted <u>Yield</u> (4)	Constant <u>Growth DCF</u> (5)
1	ALLETE, Inc.	\$56.58	4.00%	\$2.08	3.82%	7.82%
2	Alliant Energy Corporation	\$36.46	6.63%	\$1.18	3.45%	10.08%
3	Ameren Corporation	\$48.54	6.10%	\$1.70	3.72%	9.82%
4	American Electric Power Company, Inc.	\$64.91	4.17%	\$2.24	3.59%	7.76%
5	Avista Corporation	\$40.35	5.00%	\$1.37	3.57%	8.57%
6	CMS Energy Corporation	\$41.45	6.65%	\$1.24	3.19%	9.84%
7	DTE Energy Company	\$89.58	5.45%	\$2.92	3.44%	8.89%
8	IDACORP, Inc.	\$73.17	4.00%	\$2.04	2.90%	6.90%
9	NorthWestern Corporation	\$59.04	5.00%	\$2.00	3.56%	8.56%
10	OGE Energy Corp.	\$29.21	4.93%	\$1.10	3.95%	8.89%
11	Pinnacle West Capital Corporation	\$73.43	3.98%	\$2.50	3.54%	7.52%
12	PNM Resources, Inc.	\$32.76	7.79%	\$0.88	2.90%	10.68%
13	Portland General Electric Company	\$40.02	6.39%	\$1.20	3.19%	9.58%
14	SCANA Corporation	\$69.15	5.43%	\$2.30	3.51%	8.94%
15	Xcel Energy Inc.	\$40.92	5.19%	\$1.36	3.50%	8.69%
16	Average	\$53.04	5.38%	\$1.74	3.45%	8.83%
17	Median					8.89%

Sources:

¹ SNL Financial, Downloaded on June 13, 2016.

² Schedule MPG-5.

³ The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

Payout Ratios

		Dividend	s Per Share	Earnings	Per Share	Payout Ratio		
<u>Line</u>	Company	2015	Projected	<u>2015</u>	Projected	<u>2015</u>	Projected	
		(1)	(2)	(3)	(4)	(5)	(6)	
1	ALLETE, Inc.	\$2.02	\$2.40	\$3.38	\$3.75	59.76%	64.00%	
2	Alliant Energy Corporation	\$1.10	\$1.50	\$1.69	\$2.45	65.09%	61.22%	
3.	Ameren Corporation	\$1.66	\$2.05	\$2.38	\$3.25	69.75%	63.08%	
4	American Electric Power Company, Inc.	\$2.15	\$2.75	\$3.59	\$4.25	59.89%	64.71%	
5	Avista Corporation	\$1.32	\$1.60	\$1.89	\$2.50	69.84%	64.00%	
6	CMS Energy Corporation	\$1.16	\$1.60	\$1.89	\$2.50	61.38%	64.00%	
7	DTE Energy Company	\$2.84	\$3.70	\$4.45	\$6.00	63.82%	61.67%	
8	IDACORP, Inc.	\$1.92	\$2.70	\$3.87	\$4.50	49.61%	60.00%	
9	NorthWestern Corporation	\$1.92	\$2.32	\$2.90	\$4.00	66.21%	58.00%	
10	OGE Energy Corp.	\$1.05	\$1.65	\$1.69	\$2.25	62.13%	73.33%	
1 1	Pinnacle West Capital Corporation	\$2.44	\$3.10	\$3.92	\$4.75	62.24%	65.26%	
12	PNM Resources, Inc.	\$0.80	\$1.30	\$1.64	\$2.35	48.78%	55.32%	
13	Portland General Electric Company	\$1.18	\$1.60	\$2.04	\$2.75	57.84%	58.18%	
14	SCANA Corporation	\$2.18	\$2.60	\$3.81	\$4.75	57.22%	54.74%	
15	Xcel Energy Inc.	\$1.28	\$1.70	\$2.10	\$2.75	60.95%	61.82%	
16	Average	\$1.67	\$2.17	\$2.75	\$3.52	60.97%	61.96%	

Source: The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

Schedule MPG-7

Sustainable Growth Rate

						3 to 5 Year	Projections					Sustainable
		Dividends	Earnings	Book Value	Book Value		Adjustment	Adjusted	Payout	Retention	Internal	Growth
<u>Line</u>	Company	Per Share	Per Share	Per Share	Growth	ROE	Factor	ROE	<u>Ratio</u>	Rate	Growth Rate	Rate
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	ALLETE, Inc.	\$2.40	\$3.75	\$43.75	3.37%	8.57%	1.02	8.71%	64.00%	36.00%	3.14%	3.45%
2	Alliant Energy Corporation	\$1.50	\$2.45	\$20.00	4.04%	12.25%	1.02	12.49%	61.22%	38.78%	4.84%	5.17%
3	Ameren Corporation	\$2.05	\$3.25	\$33.75	3.35%	9.63%	1.02	9,79%	63.08%	36.92%	3.61%	3.61%
4	American Electric Power Company, Inc.	\$2.75	\$4.25	\$44.00	3.84%	9.66%	1.02	9.84%	64.71%	35.29%	3.47%	3.76%
5	Avista Corporation	\$1.60	\$2,50	\$28,50	3.05%	8.77%	1.01	8.90%	64.00%	36.00%	3.21%	3.95%
6	CMS Energy Corporation	\$1.60	\$2.50	\$19.25	6.26%	12,99%	1.03	13.38%	64.00%	36.00%	4.82%	6.29%
7	DTE Energy Company	\$3.70	\$6.00	\$60,75	4.44%	9.88%	1.02	10.09%	61.67%	38.33%	3.87%	4.38%
8	IDACORP, Inc.	\$2.70	\$4,50	\$49.75	4.01%	9.05%	1.02	9.22%	60.00%	40.00%	3.69%	3.77%
9	NorthWestern Corporation	\$2.32	\$4.00	\$39.50	3.52%	10.13%	1.02	10.30%	58.00%	42.00%	4,33%	4.75%
10	OGE Energy Corp.	\$1.65	\$2.25	\$19.75	3.46%	11.39%	1.02	11.59%	73.33%	26.67%	3.09%	3.22%
11	Pinnacle West Capital Corporation	\$3.10	\$4,75	\$48,75	3.37%	9.74%	1.02	9.91%	65.26%	34,74%	3.44%	3.79%
12	PNM Resources, Inc.	\$1.30	\$2.35	\$25.50	4.20%	9.22%	1.02	9,41%	55.32%	44.68%	4.20%	4.25%
13	Portland General Electric Company	\$1.60	\$2.75	\$31.00	4.04%	8.87%	1.02	9.05%	58.18%	41.82%	3.78%	3.78%
14	SCANA Corporation	\$2,60	\$4,75	\$47.50	4.51%	10.00%	1.02	10.22%	54.74%	45.26%	4.63%	5.42%
15	Xcel Energy Inc.	\$1.70	\$2.75	\$25,50	4.07%	10.78%	1.02	11.00%	61.82%	38.18%	4.20%	4.22%
16	Average	\$2.17	\$3.52	\$35.82	3.97%	10.06%	1.02	10.26%	61.96%	38.04%	3.89%	4.26%

Sources and Notes:

Cols. (1), (2) and (3): The Value Line Investment Survey, April 29, May 20, and June 17, 2016. Col. (4): [Col. (3) / Page 2 Col. (2)] ^ (1/5) - 1. Col. (5): Col. (2) / Col. (3). Col. (6): [2 * (1 + Col. (4))] / (2 + Col. (4)). Col. (7): Col. (6) * Col. (5). Col. (8): Col. (6) * Col. (5). Col. (8): Col. (6) * Col. (2). Col. (9): 1 - Col. (8). Col. (10): Col. (9) * Col. (7). Col. (11): Col. (10) + Page 2 Col. (9).

> Schedule MPG-8 Page 1 of 2

Sustainable Growth Rate

		13-Week	2015	Market	Commo	n Shares				
		Average	Book Value	to Book	Outstanding	g (in Millions) ²				
<u>Line</u>	<u>Company</u>	Stock Price ¹ (1)	Per Share ² (2)	<u>Ratio</u> (3)	<u>2015</u> (4)	<u>3-5 Years</u> (5)	<u>Growth</u> (6)	<u>S Factor³</u> (7)	<u>V Factor⁴</u> (8)	<u>S * V</u> (9)
1	ALLETE, Inc.	\$56.58	\$37.07	1.53	49.10	50.60	0.60%	0.92%	34.49%	0.32%
2	Alliant Energy Corporation	\$36.46	\$16.41	2,22	226.92	230.00	0.27%	0.60%	54.99%	0.33%
3	Ameren Corporation	\$48.54	\$28.63	1.70	242.63	242.63	0.00%	0.00%	41.02%	0.00%
4	American Electric Power Company, Inc.	\$64.91	\$36.44	1.78	491.05	500.00	0.36%	0.64%	43.86%	0.28%
5	Avista Corporation	\$40,35	\$24.53	1.64	62.31	66.00	1.16%	1,90%	39,20%	0.75%
6	CMS Energy Corporation	\$41.45	\$14.21	2.92	277.16	288.00	0.77%	2.25%	65.72%	1.48%
7.	DTE Energy Company	\$89.58	\$48.88	1.83	179.47	185.00	0.61%	1.12%	45.43%	0.51%
8	IDACORP, Inc.	\$73.17	\$40.88	1.79	50.34	50.60	0.10%	0.18%	44.13%	0.08%
9	NorthWestern Corporation	\$59.04	\$33,22	1.78	48,17	49.50	0.55%	0.97%	43.73%	0.42%
10	OGE Energy Corp.	\$29.21	\$16.66	1.75	199.70	201.50	0.18%	0.31%	42.96%	0.14%
11	Pinnacle West Capital Corporation	\$73,43	\$41.30	1.78	110.98	113,50	0.45%	0,80%	43.76%	0.35%
12	PNM Resources, Inc.	\$32.76	\$20,76	1.58	79.65	80.00	0.09%	0.14%	36.63%	0.05%
13	Portland General Electric Company	\$40.02	\$25.43	1.57	89.79	89.80	0.00%	0.00%	36.45%	0.00%
14	SCANA Corporation	\$69.15	\$38.09	1.82	142,90	150.00	0.97%	1.77%	44.92%	0.79%
15	Xcel Energy Inc.	\$40.92	\$20.89	1,96	507,54	508.00	0.02%	0.04%	48.95%	0.02%
16	Average	\$53.04	\$29.56	1.84	183.85	187.01	0.41%	0.78%	44.42%	0.37%

Sources and Notes:

¹ SNL Financial, Downloaded on June 13, 2016.

² The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

³ Expected Growth in the Number of Shares, Column (3) * Column (6).

⁴ Expected Profit of Stock Investment, [1 - 1 / Column (3)].

Schedule MPG-8 Page 2 of 2

Constant Growth DCF Model (Sustainable Growth Rate)

Line	<u>Company</u>	13-Week AVG <u>Stock Price¹</u> (1)	Sustainable <u>Growth²</u> (2)	Annualized <u>Dividend³</u> (3)	Adjusted <u>Yield</u> (4)	Constant <u>Growth DCF</u> (5)
1	ALLETE, Inc.	\$56.58	3.45%	\$2.08	3.80%	7.26%
2	Alliant Energy Corporation	\$36.46	5.17%	\$1.18	3.40%	8.58%
3	Ameren Corporation	\$48.54	3.61%	\$1.70	3.63%	7.24%
4	American Electric Power Company, Inc.	\$64.91	3.76%	\$2.24	3.58%	7.34%
5	Avista Corporation	\$40.35	3.95%	\$1.37	3.53%	7.48%
6	CMS Energy Corporation	\$41.45	6.29%	\$1.24	3.18%	9.47%
7	DTE Energy Company	\$89.58	4.38%	\$2.92	3.40%	7.78%
8	IDACORP, Inc.	\$73.17	3.77%	\$2.04	2.89%	6.66%
9	NorthWestern Corporation	\$59.04	4.75%	\$2.00	3.55%	8.30%
10	OGE Energy Corp.	\$29.21	3.22%	\$1.10	3.89%	7.11%
11	Pinnacle West Capital Corporation	\$73.43	3.79%	\$2.50	3.53%	7.32%
12	PNM Resources, Inc.	\$32.76	4.25%	\$0.88	2.80%	7.05%
13	Portland General Electric Company	\$40.02	3.78%	\$1.20	3.11%	6.90%
14	SCANA Corporation	\$69.15	5.42%	\$2.30	3.51%	8.93%
15	Xcel Energy Inc.	\$40.92	4.22%	\$1.36	3.46%	7.68%
16	Average	\$53.04	4.26%	\$1.74	3.42%	7.67%
17	Median					7.34%

Sources:

¹ SNL Financial, Downloaded on June 13, 2016.

² Schedule MPG-8, page 1.

³ The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

Electricity Sales Are Linked to U.S. Economic Growth



Note:

1988 represents the base year. Graph depicts increases or decreases from the base year.

Sources:

U.S. Energy Information Administration Federal Reserve Bank of St. Louis

Schedule MPG-10

Multi-Stage Growth DCF Model

		13-Week AVG	Annualized	Annualized First Stage Second Stage Growth						Third Stage Mul	
<u>Line</u>	Company	Stock Price ¹	Dividend ²	Growth ³	Year 6	Year 7	Year 8	Year 9	Year 10	Growth ⁴	Growth DCF
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	ALLETE, Inc.	\$56,58	\$2.08	4.00%	4.06%	4.12%	4.18%	4.23%	4.29%	4.35%	8.10%
2	Alliant Energy Corporation	\$36.46	\$1.18	6.63%	6.25%	5.87%	5.49%	5.11%	4.73%	4.35%	8.25%
3	Ameren Corporation	\$48,54	\$1.70	6.10%	5.81%	5.52%	5.23%	4,93%	4.64%	4,35%	8.43%
4	American Electric Power Company, Inc.	\$64.91	\$2.24	4.17%	4.20%	4.23%	4.26%	4,29%	4.32%	4,35%	7.90%
5	Avista Corporation	\$40.35	\$1.37	5,00%	4.89%	4,78%	4.68%	4.57%	4.46%	4,35%	8.04%
6	CMS Energy Corporation	\$41.45	\$1.24	6.65%	6.26%	5.88%	5.50%	5.12%	4.73%	4,35%	7.96%
7	DTE Energy Company	\$89.58	\$2.92	5.45%	5.27%	5.08%	4,90%	4.72%	4,53%	4,35%	8,00%
8	IDACORP, Inc.	\$73.17	\$2.04	4.00%	4.06%	4.12%	4.18%	4.23%	4.29%	4,35%	7.18%
9	NorthWestern Corporation	\$59.04	\$2.00	5.00%	4.89%	4.78%	4.68%	4.57%	4.46%	4.35%	8.03%
10	OGE Energy Corp.	\$29,21	\$1,10	4,93%	4.84%	4.74%	4.64%	4.54%	4,45%	4,35%	8.43%
11	Pinnacle West Capital Corporation	\$73.43	\$2.50	3.98%	4.04%	4.10%	4.16%	4.23%	4,29%	4.35%	7.81%
12	PNM Resources, Inc.	\$32.76	\$0,88	7.79%	7.21%	6.64%	6.07%	5,50%	4.92%	4,35%	7.84%
13	Portland General Electric Company	\$40.02	\$1.20	6,39%	6.05%	5,71%	5.37%	5.03%	4.69%	4.35%	7,91%
14	SCANA Corporation	\$69.15	\$2,30	5.43%	5,25%	5.07%	4.89%	4.71%	4,53%	4,35%	8.07%
15	Xcel Energy Inc.	\$40.92	\$1.36	5.19%	5.05%	4.91%	4.77%	4.63%	4,49%	4.35%	8.01%
16 17	Average Median	\$53.04	\$1.74	5.38%	5.21%	5.04%	4.87%	4.69%	4.52%	4,35%	8.00% 8.01%

Sources:

¹ SNL Financial, Downloaded on June 13, 2016.

² The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

³ Schedule MPG-5.

⁴ Blue Chip Financial Forecasts, June 1, 2016 at 14.



Source:

1980 - 2000: Mergent Public Utility Manual.

2001 - 2015: AUS Utility Reports, various dates.

Schedule MPG-12

Equity Risk Premium - Treasury Bond

		Authorized Electric	30 yr. Treasury	Indicated Risk	Rolling 5 - Year	Rolling 10 - Year
<u>Line</u>	<u>Year</u>	Returns ¹	Bond Yield ²	Premium	Average	Average
		(1)	(2)	(3)	(4)	(5)
1	1986	13.93%	7.80%	6.13%		
2	1987	12.99%	8.58%	4.41%	•	
3	1988	12.79%	8.96%	3.83%		
4	1989	12.97%	8.45%	4.52%		
5	1990	12.70%	8.61%	4.09%	4.60%	
6	1991	12.55%	8.14%	4.41%	4.25%	
7	1992	12.09%	7.67%	4.42%	4.26%	
8	1993	11.41%	6.60%	4.81%	4.45%	
9	1994	11.34%	7.37%	3.97%	4.34%	
10	1995	11.55%	6.88%	4.67%	4.46%	4.53%
11	1996	11.39%	6.70%	4.69%	4.51%	4.38%
12	1997	11.40%	6.61%	4.79%	4.59%	4.42%
13	1998	11.66%	5.58%	6.08%	4.84%	4.65%
14	1999	10.77%	5.87%	4.90%	5.03%	4.68%
15	2000	11.43%	5.94%	5.49%	5.19%	4.82%
16	2001	11.09%	5.49%	5.60%	5.37%	4.94%
17	2002	11.16%	5.43%	5.73%	5.58%	5.07%
18	2003	10.97%	4.96%	6.01%	5.55%	5.19%
19	2004	10.75%	5.05%	5.70%	5.71%	5.37%
20	2005	10.54%	4.65%	5.89%	5.79%	5.49%
21	2006	10.36%	4.99%	5.37%	5.74%	5.56%
22	2007	10.36%	4.83%	5.53%	5.70%	5.63%
23	2008	10.46%	4.28%	6.18%	5.73%	5.64%
24	2009	10.48%	4.07%	6.41%	5.88%	5.79%
25	2010	10.24%	4.25%	5.99%	5.89%	5.84%
26	2011	10.07%	3.91%	6.16%	6.05%	5.90%
27	2012	10.01%	2.92%	7.09%	6.37%	6.03%
28	2013	9.79%	3.45%	6.34%	6.40%	6.07%
29	2014	9.76%	3.34%	6.42%	6.40%	6.14%
30	2015	9.58%	2.84%	6.74%	6.55%	6.22%
31	2016 ³	9,68%	2.72%	6.96%	6.71%	6.38%
32	Average	11.17%	5.71%	5.46%	5.40%	5.40%
33	Minimum				4.25%	4.38%
34	Maximum				6.71%	6.38%

Sources:

¹ Regulatory Research Associates, Inc., Regulatory Focus, Major Rate Case Decisions, multiple publication dates. In 2010 forward, the Virginia cases, which are subject to an adjustment for certain generation assets up to 200 basis points, are excluded.

 ² St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

³ The data includes the period Jan - Mar 2016.

		Authorized	Average	Indicated Risk	Rolling 5 - Year	Rolling
l ine	Year	Returns ¹	Bond Yield ²	Premium	Average	Average
Line	<u>1641</u>	(1)	(2)	(3)	(4)	(5)
1	1986	13.93%	9.58%	4.35%		
2	1987	12.99%	10.10%	2.89%		
3	1988	12.79%	10.49%	2.30%		
4	1989	12.97%	9.77%	3.20%		
5	1990	12.70%	9.86%	2.84%	3.12%	
6	1991	12.55%	9.36%	3.19%	2.88%	
7	1992	12.09%	8.69%	3.40%	2.99%	
8	1993	11.41%	7.59%	3.82%	3.29%	
9	1994	11.34%	8.31%	3.03%	3.26%	
10	1995	11.55%	7.89%	3.66%	3.42%	3.27%
11	1996	11.39%	7.75%	3.64%	3.51%	3.20%
12	1997	11.40%	7.60%	3.80%	3.59%	3.29%
13	1998	11.66%	7.04%	4.62%	3.75%	3.52%
14	1999	10.77%	7.62%	3.15%	3.77%	3.52%
15	2000	11.43%	8.24%	3.19%	3.68%	3.55%
16	2001	11.09%	7.76%	3.33%	3.62%	3.56%
17	2002	11.16%	7.37%	3.79%	3.61%	3.60%
18	2003	10.97%	6.58%	4.39%	3.57%	3.66%
19	2004	10.75%	6.16%	4.59%	3.86%	3.81%
20	2005	10.54%	5.65%	4.89%	4.20%	3.94%
21	2006	10.36%	6.07%	4.29%	4.39%	4.00%
22	2007	10.36%	6.07%	4.29%	4.49%	4.05%
23	2008	10.46%	6.53%	3.93%	4.40%	3.98%
24	2009	10.48%	6.04%	4.44%	4.37%	4.11%
25	2010	10.24%	5.46%	4.78%	4.35%	4.27%
26	2011	10.07%	5.04%	5.03%	4.49%	4.44%
27	2012	10.01%	4.13%	5.88%	4.81%	4.65%
28	2013	9.79%	4.48%	5.31%	5.09%	4.74%
29	2014	9.76%	4.28%	5.48%	5.30%	4.83%
30	2015	9.58%	4.12%	5.46%	5.43%	4.89%
31	2016 ³	9.68%	4.18%	5.50%	5.53%	5.01%
32	Average	11.17%	7.09%	4.08%	4.03%	4.00%
33	Minimum				2.88%	3.20%
34	Maximum				5.53%	5.01%

Equity Risk Premium - Utility Bond

Sources:

¹ Regulatory Research Associates, Inc., Regulatory Focus, Major Rate Case Decisions, multiple publication dates. In 2010 forward, the Virginia cases, which are subject to an adjustment for certain generation assets up to 200 basis points, are excluded.

² Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields . for the period 2001-2009 were obtained from the Mergent Bond Record. The utility yields from 2010-2015 were obtained from http://credittrends.moodys.com/.

³ The data includes the period Jan - Mar 2016.

Bond Yield Spreads

				Publ	ic Utility Bond	L	Corporate E			and Utility to		Corporate
		T-Bond	-		A-T-Bond	Baa-T-Bond			Aaa-T-Bond	Baa-T-Bond	Baa	A-Aga
Line	Year	Yield ¹	A ²	Baa ²	Spread	Spread	Aaa ¹	Baa ¹	Spread	Spread	Spread	Spread
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	1980	11.30%	13.34%	13.95%	2.04%	2.65%	11.94%	13.67%	0.64%	2.37%	0.28%	1,40%
2	1981	13,44%	15.95%	16.60%	2.51%	3,16%	14.17%	16.04%	0.73%	2.60%	0.56%	1.78%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	1.03%	3.35%	0.34%	2.07%
4	1983	11.18%	13.66%	14.20%	2.48%	3,02%	12.04%	13.55%	0.86%	2.38%	0.65%	1.62%
5	1984	12.39%	14.03%	14.53%	1.64%	2.14%	12.71%	14.19%	0.32%	1.80%	0.34%	1.32%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	0.58%	1.93%	0.24%	1.10%
7	1986	7.80%	9.58%	10.00%	1.78%	2.20%	9.02%	10.39%	1.22%	2.59%	-0.39%	0.56%
8	1987	8,58%	10.10%	10.53%	1.52%	1.95%	9.38%	10.58%	0.80%	2.00%	-0.05%	0.72%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	0.75%	1.87%	0.17%	0.78%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.81%	1.73%	-0.21%	0.51%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	0.71%	1.75%	-0.29%	0.54%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	0.63%	1.67%	-0.25%	0.59%
13	1992	7.67%	8.69%	8.86%	1.02%	1.19%	8.14%	8.98%	0.47%	1.31%	-0.12%	0.55%
14	1993	6.60%	7.59%	7.91%	0.99%	1.31%	7.22%	7.93%	0.62%	1.33%	-0.02%	0.37%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.59%	1.25%	0.01%	0.35%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.71%	1.32%	0.09%	0.30%
17	1996	6.70%	7.75%	8.17%	1.05%	1.47%	7.37%	8.05%	0.67%	1.35%	0.12%	0.38%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.66%	1.26%	0.09%	0.34%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.95%	1.64%	0.04%	0.51%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	1.18%	2.01%	0.01%	0.58%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	1.68%	2.42%	-0.01%	0.62%
22	2001	5,49%	7.76%	8.03%	2.27%	2.54%	7.08%	7.95%	1.59%	2.45%	0.08%	0.68%
23	2002	5.43%	7.37%	8.02%	1.94%	2.59%	6.49%	7.80%	1.06%	2.37%	0.22%	0.88%
24	2003	4.96%	6.58%	6.84%	1.62%	1.89%	5.67%	6.77%	0.71%	1.81%	0.08%	0.91%
25	2004	5.05%	6.16%	6.40%	1.11%	1.35%	5.63%	6.39%	0.58%	1.35%	0.00%	0.53%
26	2005	4.65%	5.65%	5.93%	1.00%	1.28%	5.24%	6.06%	0.59%	1.42%	-0.14%	0.41%
27	2006	4.99%	6,07%	6.32%	1.08%	1.32%	5.59%	6.48%	0.60%	1.49%	-0,16%	0.48%
28	2007	4.83%	6.07%	6.33%	1.24%	1.50%	5.56%	6.48%	0.72%	1.65%	-0.15%	0.52%
29	2003	4.28%	6.53%	7.25%	2.25%	2.97%	5.63%	7.45%	1.35%	3,17%	-0.20%	0.90%
30	2009	4.07%	6.04%	7.06%	1.97%	2.99%	5.31%	7.30%	1.24%	3.23%	-0.24%	0.72%
31	2010	4.25%	5.46%	5.96%	1.21%	1.71%	4.94%	6.04%	0.69%	1.79%	-0.08%	0.52%
32	2011	3.91%	5.04%	5,56%	1.13%	1.65%	4.64%	5.66%	0.73%	1.75%	-0.10%	0,40%
33	2012	2.92%	4.13%	4.83%	1.21%	1.91%	3.67%	4.94%	0.75%	2.01%	-0.11%	0.46%
34	2013	3 45%	4.48%	4.98%	1.03%	1.53%	4.24%	5 10%	0.79%	1.65%	-0 12%	0.24%
35	2014	3.34%	4.28%	4.80%	0.94%	1.46%	4.16%	4.85%	0.82%	1 51%	-0.06%	0.11%
36	2015	2 84%	4.12%	5.03%	1.27%	2 19%	3.89%	5 00%	1.05%	2 16%	0.03%	0.23%
37	2016 3	2.72%	4.18%	5.30%	1.46%	2.58%	3.93%	5.31%	1.21%	2.59%	-0.01%	0.25%
38	Average	6.72%	8.25%	8.70%	1.52%	1.97%	7.56%	8.68%	0.84%	1,95%	0.02%	0.68%

Yield Spreads Treasury Vs. Corporate & Treasury Vs. Utility



Sources:

1 St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/.

- ² Mergent Public Utility Manual, Mergent Weeky News Reports, 2003. The utility yields
- for the period 2001-2009 were obtained from the Mergent Bond Record. The utility
- yields from 2010-2015 were obtained from http://credittrends.moodys.com/. ³ The data includes the period Jan Mar 2016.

Treasury and Utility Bond Yields

		Treasury	"A" Rated Utility	"Baa" Rated Utility
<u>Line</u>	<u>Date</u>	Bond Yield ¹	Bond Yield ²	<u>Bond Yield²</u>
		(1)	(2)	(3)
1	06/10/16	2 1 1 %	3 75%	A AA%
י 2	06/03/16	2.44 /0	3.82%	4 51%
2	05/27/16	2.52 %	3.02%	4.51%
4	05/19/16	2.64%	3 92%	4.60%
5	05/13/16	2.55%	3 85%	4.51%
6	05/06/16	2.62%	3.93%	4.58%
7	04/29/16	2.66%	3.99%	4.66%
8	04/22/16	2.70%	4.05%	4.74%
9	04/15/16	2.56%	3.94%	4.70%
10	04/08/16	2.55%	3.96%	4.74%
11	04/01/16	2.62%	4.04%	4.87%
12	03/24/16	2.67%	4.11%	4.98%
13	03/18/16	2.68%	4.15%	5.05%
14	Average	2.60%	3.96%	4.69%
15	Spread To Treasury		1.36%	2.09%

Sources:

¹ St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org.

² http://credittrends.moodys.com/.

Trends in Bond Yields



Sources:

Mergent Bond Record.

www.moodys.com, Bond Yields and Key Indicators.

St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

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Yield Spread Between Utility Bonds and 30-Year Treasury Bonds



Sources:

Mergent Bond Record.

www.moodys.com, Bond Yields and Key Indicators.

St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

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Value Line Beta

Line	Company	Beta
1	ALLETE, Inc.	0.75
2	Alliant Energy Corporation	0.75
3	Ameren Corporation	0.75
4	American Electric Power Company, Inc.	0.70
5	Avista Corporation	0.75
6	CMS Energy Corporation	0.70
7	DTE Energy Company	0.70
8	IDACORP, inc.	0.80
9	NorthWestern Corporation	0.70
10	OGE Energy Corp.	0.95
11	Pinnacle West Capital Corporation	0.75
12	PNM Resources, Inc.	0.80
13	Portland General Electric Company	0.80
14	SCANA Corporation	0.70
15	Xcel Energy Inc.	0.65
16	Average	0.75

Source:

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The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

CAPM Return

<u>Line</u>	Description	High Market Risk <u>Premium</u> (1)	Low Market Risk <u>Premium</u> (2)
1	Risk-Free Rate ¹	3.40%	3.40%
2	Risk Premium ²	7.80%	6.00%
3	Beta ³	0.75	0.75
4	CAPM	9.25%	7.90%

Sources:

¹ Blue Chip Financial Forecasts; June 1, 2016, at 2.

² Duff & Phelps, 2016 Valuation Handbook Guide to Cost of Capital at 2-4, 3-31, and 3-40.

³ Schedule MPG-17.

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

	Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]				
		Stock	EP	Growth Ra	ate Estim	ates		Pi	ayout Rati	0	Iterative	Solution	Terminal	Terminal				
					Value		Long-Term						P/E	PEG				
	Company	Price	Zacks	First Call	Line	Average	Growth	2016	2019	2025	Proof	IRR	Ratio	Ratio				
1	ALLETE, Inc.	\$50.12	5.00%	5.00%	6.50%	5.50%	4.35%	66,00%	59,00%	66,00%	(\$0,00)	8.98%	14.88	3.42				
2	Alliant Energy Corporation	\$61,59	5.40%	5.55%	6.00%	5.65%	4.35%	61.00%	63,00%	61.00%	\$0,00	8,66%	14.75	3.39				
3	Ameren Corporation	\$43,18	6.30%	6.00%	7.00%	6,43%	4,35%	62,00%	56.00%	62,00%	\$0.00	B.82%	14.46	3.32				
4	American Electric Power Company, Inc.	\$57.34	4.70%	4.43%	5.00%	4.71%	4.35%	64.00%	65,00%	64.00%	(\$0.00)	8,70%	15.35	3.53				
5	Avista Corporation	\$34.97	5.00%	5.00%	5.00%	5.00%	4.35%	69.00%	65.00%	69.00%	(\$0.00)	8.63%	16.83	3.87				
6	CMS Energy Corporation	\$35.77	6.10%	6.72%	5.50%	6.11%	4.35%	60.00%	62.00%	60.00%	\$0.00	8.12%	16.60	3.82				
7	Dominion Resources, Inc.	\$67.46	6.10%	5.49%	8.00%	6.53%	4.35%	74.00%	72,00%	74.00%	\$0.00	8.77%	17.46	4.01				
8	DTE Energy Company	\$79.78	5.60%	5.12%	5.00%	5.24%	4.35%	61.00%	60.00%	61.00%	\$0.00	9.06%	13.52	3.11				
9	IDACORP, Inc.	\$67.89	4.00%	4.00%	1.00%	3.00%	4.35%	53.00%	58.00%	53.00%	(\$0.00)	7.45%	17.84	4.10				
10	NorthWestern Corporation	\$54.03	5.00%	6.81%	6.50%	6.10%	4.35%	61.00%	59.00%	61.00%	\$0.00	8.67%	14.72	3.38				
11	OGE Energy Corp.	\$25.52	5.70%	2.17%	3.00%	3.62%	4,35%	63.00%	72.00%	63.00%	(\$0.00)	9.78%	12.11	2.78				
12	Otter Tail Corporation	\$26.51	NA	6.00%	9.00%	7.50%	4.35%	71.00%	59.00%	71.00%	\$0.00	10.06%	12.97	2.98				
13	Pinnacle West Capital Corporation	\$63.57	4.80%	4.95%	4.00%	4.58%	4.35%	64.00%	64.00%	64.00%	(\$0.00)	8.50%	16.07	3.70				
14	PNM Resources, Inc.	\$29.89	7,70%	9,30%	9.00%	8.67%	4.35%	51.00%	55.00%	51.00%	(\$0.00)	8.22%	13,75	3.16				
15	Portland General Electric Company	\$36,42	4.40%	4.14%	6.00%	4.85%	4.35%	52.00%	53.00%	52.00%	(\$0,00)	8.01%	14,82	3.41				
16	SCANA Corporation	\$60,15	4.50%	4.45%	4.50%	4.48%	4.35%	56.00%	55.00%	56.00%	(\$0.00)	8.38%	14.52	3.34				
17	Westar Energy, Inc.	\$41.90	3.60%	3.50%	6,00%	4.37%	4.35%	61.00%	55.00%	61.00%	\$0.00	8,17%	16,65	3,83				
18	Xcel Energy Inc.	\$35.81	5.00%	4.68%	4,50%	4.73%	4.35%	63,00%	65.00%	63.00%	\$0,00	8.53%	15.73	3.61				
19				***************************************		5.39%					Mean	8.64%	15.17			•		
20											Max	10.06%						
											Min	7.45%						
	Projected Annual																	
	Earnings per Share	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
				······						·····								
	Company	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
21	ALLETE, Inc.	\$2.90	\$3,06	\$3.23	\$3.41	\$3,59	\$3.79	\$4.00	\$4.21	\$4.43	\$4.64	\$4.86	\$5.09	\$5.31	\$5.54	\$5.78	\$6.03	\$6.29
22	Alliant Energy Corporation	\$3.48	\$3.68	\$3.88	\$4.10	\$4.34	\$4.58	\$4.84	\$5.10	\$5.37	\$5.64	\$5.91	\$6.18	\$6.45	\$6.73	\$7.02	\$7.32	\$7.64
23	Ameren Corporation	\$2.40	\$2,55	\$2.72	\$2.89	\$3.08	\$3.28	\$3.49	\$3.70	\$3.91	\$4.12	\$4.33	\$4.54	\$4.73	\$4.94	\$5.15	\$5.38	\$5.61
24	American Electric Power Company, Inc.	\$3.34	\$3,50	\$3.66	\$3.83	\$4.02	\$4.20	\$4.40	\$4.61	\$4.82	\$5.04	\$5.26	\$5.49	\$5,73	\$5.98	\$6.24	\$6.51	\$6.80
25	Avista Corporation	\$1.84	\$1.93	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.71	\$2.84	\$2.97	\$3,10	\$3.23	\$3.37	\$3.52	\$3,67	\$3.83
26	CMS Energy Corporation	\$1.74	\$1.85	\$1.96	\$2.08	\$2.21	\$2,34	\$2,48	\$2.63	\$2.77	\$2.92	\$3.06	\$3.20	\$3.34	\$3.49	\$3.64	\$3.80	\$3.96
27	Dominion Resources, Inc.	\$3.05	\$3,25	\$3,46	\$3,69	\$3,93	\$4,18	\$4,46	\$4.73	\$5.01	\$5.28	\$5.55	\$5.81	\$6.06	\$6.33	\$6,60	\$6.89	\$7,19
28	DTE Energy Company	\$5.10	\$5.37	\$5.65	\$5,94	\$6.26	\$6,58	\$6,93	\$7.28	\$7.64	\$8,01	\$8.38	\$8,76	\$9,14	\$9.54	\$9.95	\$10.38	\$10.83
29	IDACORP. Inc.	\$3.85	\$3.97	\$4.08	\$4.21	\$4.33	\$4.46	\$4.60	\$4.75	\$4.91	\$5.09	\$5.29	\$5.51	\$5.75	\$6.00	\$6.26	\$6.53	\$6.81
30	NorthWestern Corporation	\$2.99	\$3.17	\$3.37	\$3.57	\$3,79	\$4.02	\$4.27	\$4.51	\$4,76	\$5.01	\$5.26	\$5.50	\$5.74	\$5,99	\$6.25	\$6.53	\$6.81
31	OGE Energy Corp.	\$1.98	\$2.05	\$2.13	\$2.20	\$2.28	\$2.37	\$2.45	\$2.54	\$2.64	\$2.75	\$2.86	\$2.98	\$3.11	\$3.25	\$3.39	\$3.53	\$3.69
32	Otter Tail Corporation	\$1.55	\$1.67	\$1.79	\$1.93	\$2.07	\$2.23	\$2.39	\$2.56	\$2.72	\$2.89	\$3.04	\$3,19	\$3.33	\$3.47	\$3.62	\$3.78	\$3.95
33	Pinnacle West Capital Corporation	\$3.58	\$3.74	\$3.92	\$4.10	\$4.28	\$4.48	\$4.68	\$4.90	\$5.12	\$5.35	\$5.58	\$5.83	\$6.08	\$6.35	\$6.62	\$6,91	\$7.21
34	PNM Resources Inc.	\$1.45	\$1.58	\$1 71	\$1.86	\$2.02	\$2 20	\$2.39	\$2.58	\$2.76	\$2.94	\$3.11	\$3.27	\$3.41	\$3.56	\$3.72	\$3.86	\$4.05
35	Portland General Electric Company	\$2.18	\$2.29	\$2.40	\$2.51	\$2.63	\$2.76	\$2.90	\$3.03	\$3.18	\$3.32	\$3.47	\$3.63	\$3.78	\$3.95	\$4 12	\$4.30	\$4.49
36	SCANA Corporation	\$3.79	\$3.96	\$4.14	\$4.32	\$4.52	\$4.72	\$4.93	\$5.15	\$5.38	\$5.62	\$5.86	\$6.12	\$6.39	\$6.66	\$6.95	\$7.26	\$7.57
37	Westar Energy, Inc.	\$2.35	\$2.45	\$2.56	\$2.67	\$2.79	\$2.91	\$3.04	\$3.17	\$3.31	\$3.45	\$3.60	\$3.76	\$3.92	\$4.09	\$4.27	\$4.46	\$4.65
38	Xcel Energy Inc	\$2.03	\$2 13	\$2.23	\$2.33	\$2.44	\$2.56	\$2.68	\$2.80	\$2.93	\$3.07	\$3.20	\$3.34	\$3.49	\$3.64	\$3.80	\$3.96	\$4 14
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Revised Hevert Multi-Stage Growth Discounted Cash Flow Model 30 Day Average Stock Price Average EPS Growth Rate Estimate in First Stage

	Projected Annual															
	Dividend Payout Ratio	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]
	^	0040		0040	0040		0004	0000			0005	0000			0000	0000
••	Company	2016	2017	2018	2019	2020	ZUZ1	2022	2023	2024	2025	2025	2021	2028	2029	2030
39	ALLETE, Inc.	65,00%	63.57%	61,33%	59,00%	50.00%	61.00%	62.00%	63.00%	64.00%	65.00%	66.00%	65,00%	66.00%	66,00%	66,00%
40	Alliant Energy Corporation	61,00%	61,67%	62.33%	63,00%	62,71%	62.43%	62,14%	61.86%	61.57%	61,29%	61.00%	61.00%	61.00%	61.00%	61.00%
41	Ameren Corporation	62,00%	60.00%	58.00%	56.00%	56.86%	57.71%	58.57%	59,43%	60.29%	61.14%	62.00%	62.00%	62.00%	62,00%	62.00%
42	American Electric Power Company, Inc.	64.00%	64,33%	64.67%	65,00%	64,86%	64,71%	64.57%	64.43%	64.29%	64.14%	64.00%	64.00%	64.00%	64,00%	64.00%
43	Avista Corporation	69,00%	67.67%	66,33%	65,00%	65.57%	66,14%	66,71%	67.29%	67.86%	68.43%	69,00%	69.00%	69.00%	69.00%	69.00%
44	CMS Energy Corporation	60,00%	60.67%	61.33%	62.00%	61.71%	61.43%	61,14%	60.86%	60.57%	60.29%	60.00%	60.00%	60.00%	60.00%	60.00%
45	Dominion Resources, Inc.	74.00%	73.33%	72.67%	72.00%	72.29%	72.57%	72.86%	73.14%	73.43%	73.71%	74.00%	74.00%	74.00%	74.00%	74.00%
46	DTE Energy-Company	61.00%	60.67%	60.33%	60.00%	60.14%	60.29%	60.43%	60,57%	60.71%	60.86%	61.00%	61.00%	61.00%	61.00%	61.00%
47	IDACORP, Inc.	53,00%	54.67%	56.33%	58,00%	57.29%	56.57%	55.86%	55.14%	54.43%	53.71%	53.00%	53.00%	53.00%	53.00%	53.00%
48	NorthWestern Corporation	61.00%	60.33%	59.67%	59.00%	59.29%	59.57%	59.86%	60.14%	60.43%	60.71%	61.00%	61.00%	61.00%	61.00%	61.00%
49	OGE Energy Corp.	63.00%	66.00%	69.00%	72.00%	70.71%	69.43%	68,14%	66.86%	65,57%	64.29%	63.00%	63.00%	63.00%	63.00%	63.00%
50	Otter Tail Corporation	71,00%	67.00%	63.00%	59.00%	60.71%	62.43%	64.14%	65.86%	67,57%	69.29%	71.00%	71.00%	71.00%	71.00%	71.00%
51	Pinnacle West Capital Corporation	64.00%	64.00%	64.00%	64.00%	64.00%	64.00%	64,00%	64.00%	64.00%	64.00%	64.00%	64.00%	64.00%	64.00%	64.00%
52	PNM Resources, Inc.	51.00%	52.33%	53.67%	55.00%	54.43%	53.86%	53.29%	52.71%	52.14%	51.57%	51.00%	51.00%	51.00%	51.00%	51.00%
53	Portland General Electric Company	52,00%	52.33%	52,67%	53,00%	52.86%	52.71%	52.57%	52.43%	52.29%	52.14%	52.00%	52.00%	52.00%	52.00%	52.00%
54	SCANA Corporation	56.00%	55.67%	55.33%	55,00%	55.14%	55.29%	55.43%	55.57%	55.71%	55.86%	56.00%	56.00%	56.00%	56.00%	56.00%
55	Westar Energiy, Inc.	61.00%	59,00%	57.00%	55.00%	55,86%	56.71%	57.57%	58.43%	59.29%	60,14%	61.00%	61.00%	61.00%	61.00%	61,00%
56	Xcel Energy Inc.	63.00%	63.67%	64.33%	65.00%	64.71%	64.43%	64.14%	63.86%	63.57%	63.29%	63.00%	63.00%	63.00%	63.00%	63.00%

	Projected Annual																
	Cash Flows	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]
																	Terminal
	Company	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Value
57	ALLETE, Inc.	\$2.13	\$2.17	\$2.20	\$2,24	\$2.40	\$2.57	\$2,74	\$2.93	\$3.11	\$3.31	\$3.50	\$3,65	\$3.81	\$3.98	\$4.15	\$93.61
58	Alliant Energy Corporation	\$2.37	\$2.53	\$2.70	\$2.89	\$3.04	\$3.19	\$3.34	\$3,49	\$3.64	\$3.79	\$3.93	\$4.10	\$4.28	\$4.47	\$4.66	\$112.73
59	Ameren Corporation	\$1.69	\$1.74	\$1.79	\$1.84	\$1.98	\$2.14	\$2,29	\$2,45	\$2.61	\$2.77	\$2.93	\$3.06	\$3.20	\$3.33	\$3.48	\$81.16
60	American Electric Power Company, Inc.	\$2.34	\$2.47	\$2.60	\$2.73	\$2.86	\$2.98	\$3,11	\$3.25	\$3.38	\$3.52	\$3.67	\$3.83	\$4,00	\$4.17	\$4.35	\$104.35
61	Avista Corporation	\$1.40	\$1.44	\$1.48	\$1,53	\$1.62	\$1.71	\$1.81	\$1.91	\$2.01	\$2.12	\$2.23	\$2,33	\$2.43	\$2.54	\$2.65	\$64.54
62	CMS Energy Corporation	\$1.18	\$1.26	\$1,35	\$1.45	\$1.53	\$1.61	\$1.70	\$1.78	\$1.85	\$1.93	\$2.01	\$2.09	\$2.18	\$2.28	\$2.38	\$65.79
63	Dominion Resources, Inc.	\$2.56	\$2.70	\$2.85	\$3.01	\$3.22	\$3.43	\$3.65	\$3.86	\$4.07	\$4.28	\$4.49	\$4,68	\$4.68	\$5.10	\$5.32	\$125.53
64	DTE Energy Company	\$3.45	\$3.61	\$3.77	\$3,95	\$4.17	\$4.39	\$4.62	\$4.85	\$5.09	\$5.33	\$5.57	\$5,82	\$6.07	\$6.33	\$6.61	\$146.50
65	IDACORP, Inc.	\$2.16	\$2.30	\$2.44	\$2.59	\$2.63	\$2.68	\$2.74	\$2,81	\$2.88	\$2.96	\$3.05	\$3.18	\$3,32	\$3.46	\$3.61	\$121.53
66	NorthWestern Corporation	\$2.05	\$2,15	\$2,26	\$2.37	\$2.53	\$2.69	\$2.85	\$3.01	\$3.18	\$3.34	\$3.50	\$3.66	\$3.81	\$3,98	\$4.15	\$100.26
67	OGE Energy Corp.	\$1.34	\$1.45	\$1.58	\$1,70	\$1.73	\$1.77	\$1,80	\$1.84	\$1.88	\$1.92	\$1.96	\$2.04	\$2,13	\$2.23	\$2.32	\$44.65
68	Otter Tail Corporation	\$1.27	\$1.29	\$1.30	\$1,31	\$1.45	\$1.60	\$1,75	\$1.90	\$2.06	\$2.21	\$2,36	\$2.47	\$2.57	\$2.69	\$2.80	\$51.20
69	Pinnacle West Capital Corporation	\$2.51	\$2.62	\$2,74	\$2.87	\$3.00	\$3.13	\$3,28	\$3.42	\$3.57	\$3,73	\$3.89	\$4.06	\$4.24	\$4.42	\$4.62	\$115. 9 1
70	PNM Resources, Inc.	\$0.87	\$0.97	\$1.09	\$1.21	\$1.30	\$1.39	\$1.47	\$1.55	\$1.62	\$1.69	\$1.74	\$1.82	\$1.90	\$1.98	\$2.06	\$55.66
71	Portland General Electric Company	\$1,25	\$1.31	\$1.39	\$1,46	\$1.53	\$1,60	\$1.67	\$1.74	\$1.82	\$1,89	\$1.97	\$2.05	\$2.14	\$2.24	\$2.33	\$66.49
72	SCANA Corporation	\$2.32	\$2.41	\$2.50	\$2,60	\$2.72	\$2.85	\$2,98	\$3.12	\$3.27	\$3.42	\$3.58	\$3.73	\$3.89	\$4.06	\$4.24	\$109.92
73	Westar Energy, Inc.	\$1.56	\$1,58	\$1.59	\$1.60	\$1,70	\$1.80	\$1,90	\$2,02	\$2.14	\$2,26	\$2.39	\$2,50	\$2,61	\$2.72	\$2.84	\$77.43
74	Xcel Energy Inc.	\$1,40	\$1.48	\$1.57	\$1.66	\$1.73	\$1.81	\$1,88	\$1.96	\$2.04	\$2.12	\$2.20	\$2,29	\$2.39	\$2.50	\$2.61	\$65.05

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

	Projected Annual Data																	
	Investor Cash Flows	[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
		Initial																
1	Company	Outflow	1/15/16	12/31/16	6/30/17	6/30/18	<u>6/30/19</u>	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
75	ALLETE, Inc.	(\$50.12)	\$0.00	\$2.05	\$2,19	\$2,20	\$2.24	\$2.40	\$2,57	\$2.74	\$2,93	\$3.11	\$3,31	\$3.50	\$3.65	\$3,81	\$3,98	\$97.77
76	Alliant Energy Corporation	(\$61.59)	\$0.00	\$2.28	\$2.44	\$2,70	\$2.89	\$3.04	\$3.19	\$3.34	\$3.49	\$3.64	\$3.79	\$3.93	\$4,10	\$4.28	\$4.47	\$117.39
77	Ameren Corporation	(\$43.18)	\$0.00	\$1.62	\$1.74	\$1.79	\$1.84	\$1,98	\$2.14	\$2,29	\$2.45	\$2.61	\$2,77	\$2,93	\$3.06	\$3.20	\$3,33	\$84.64
78	American Electric Power Company, Inc.	(\$57.34)	\$0.00	\$2.25	\$2,40	\$2,60	\$2.73	\$2,86	\$2.98	\$3.11	\$3,25	\$3.38	\$3.52	\$3.67	\$3.83	\$4.00	\$4.17	\$108.70
79	Avista Corporation	(\$34.97)	\$0.00	\$1.35	\$1,43	\$1,48	\$1.53	\$1.62	\$1,71	\$1.81	\$1.91	\$2.01	\$2.12	\$2.23	\$2.33	\$2.43	\$2,54	\$67,18
80	CMS Energy Corporation	(\$35.77)	\$0.00	\$1.13	\$1.21	\$1.35	\$1.45	\$1.53	\$1.61	\$1.70	\$1.78	\$1.85	\$1.93	\$2.01	\$2.09	\$2.18	\$2,28	\$68,17
81	Dominion Resources, Inc.	(\$67.46)	\$0.00	\$2.46	\$2.65	\$2.85	\$3.01	\$3,22	\$3.43	\$3,65	\$3.86	\$4.07	\$4.28	\$4.49	\$4.68	\$4.88	\$5.10	\$130.85
82	DTE Energy Company	(\$79.78)	\$0.00	\$3.31	\$3,54	\$3.77	\$3.95	\$4.17	\$4.39	\$4.62	\$4.85	\$5.09	\$5.33	\$5.57	\$5.82	\$6.07	\$6.33	\$153.10
83	IDACORP, Inc.	(\$67.89)	\$0,00	\$2.08	\$2.20	\$2.44	\$2.59	\$2.63	\$2.68	\$2.74	\$2.81	\$2.88	\$2.96	\$3.05	\$3.18	\$3.32	\$3.46	\$125.14
84	NorthWestern Corporation	(\$54.03)	\$0.00	\$1.97	\$2.12	\$2.26	\$2.37	\$2.53	\$2.69	\$2,85	\$3.01	\$3.18	\$3,34	\$3.50	\$3.66	\$3.81	\$3.98	\$104.41
85	OGE Energy Corp.	(\$25.52)	\$0,00	\$1.29	\$1.36	\$1,58	\$1.70	\$1.73	\$1.77	\$1.80	\$1.84	\$1.88	\$1.92	\$1.96	\$2.04	\$2.13	\$2.23	\$46.97
86	Otter Tail Corporation	(\$26.51)	\$0.00	\$1.22	\$1.32	\$1.30	\$1.31	\$1.45	\$1.60	\$1.75	\$1.90	\$2.06	\$2.21	\$2.36	\$2.47	\$2.57	\$2.69	\$54.00
87	Pinnacle West Capital Corporation	(\$63.57)	\$0.00	\$2.41	\$2.56	\$2,74	\$2.87	\$3.00	\$3.13	\$3,28	\$3.42	\$3.57	\$3.73	\$3.89	\$4.06	\$4.24	\$4.42	\$120.53
88	PNM Resources, Inc.	(\$29.89)	\$0.00	\$0.84	\$0.91	\$1.09	\$1.21	\$1.30	\$1.39	\$1.47	\$1.55	\$1.62	\$1,69	\$1.74	\$1.82	\$1.90	\$1.98	\$57.73
89	Portland General Electric Company	(\$36.42)	\$0,00	\$1.20	\$1.28	\$1.39	\$1.46	\$1.53	\$1,60	\$1.67	\$1.74	\$1.82	\$1.89	\$1.97	\$2,05	\$2.14	\$2.24	\$68.83
90	SCANA Corporation	(\$60.15)	\$0.00	\$2.23	\$2.37	\$2,50	\$2,60	\$2.72	\$2.85	\$2,98	\$3.12	\$3.27	\$3.42	\$3.58	\$3.73	\$3,89	\$4.06	\$114.16
91	Westar Energy, Inc.	(\$41.90)	\$0.00	\$1.50	\$1.60	\$1.59	\$1.60	\$1.70	\$1.80	\$1,90	\$2.02	\$2.14	\$2,26	\$2,39	\$2,50	\$2,61	\$2.72	\$80.26
92	Xcel Energy Inc.	(\$35.81)	\$0.00	\$1.35	\$1.44	\$1.57	\$1.66	\$1.73	\$1.81	\$1,88	\$1.96	\$2.04	\$2.12	\$2.20	\$2.29	\$2.39	\$2.50	\$67.66

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

	Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]				
		Stock	EPS	Growth F	Rate Estin	nates	Long-Term	Pé	yout Rat	io	Iterative	Solution	Terminal	Terminal				
				First	Value								P/E	PEG				
:	Company	Price	Zacks	Call	Line	Average	Growth	2016	2019	2025	Proof	IRR	Ratio	Ratio				
1	ALLETE, Inc.	\$50.31	5.00%	5.00%	6.50%	5.50%	4.35%	66.00%	59,00%	66.00%	(\$0.00)	8.96%	14.94	3.43				
2	Alliant Energy Corporation	\$59.72	5.40%	5.55%	6.00%	5.65%	4.35%	61.00%	63.00%	61.00%	\$0.D0	8.80%	14.30	3,29				
3	Ameren Corporation	\$42.83	6.30%	6.00%	7.00%	6,43%	4.35%	62.00%	56.00%	62.00%	\$0,00	8.86%	14.35	3.30				
4	American Electric Power Company, Inc.	\$56.58	4.70%	4.43%	5.00%	4.71%	4.35%	64.00%	65,00%	64.00%	(\$0.00)	8.76%	15.14	3.48				
5	Avista Corporation	\$33.87	5.00%	5.00%	5.00%	5,00%	4.35%	69.00%	65.00%	69.00%	(\$0,00)	8.77%	16.30	3.75				
6	CMS Energy Corporation	\$35.33	6.10%	6.72%	5.50%	6.11%	4.35%	60.00%	62.00%	60.00%	\$0.00	8.17%	16.39	3.77				
7	Dominion Resources, Inc.	\$69.01	6.10%	5.49%	8.00%	6.53%	4.35%	74.00%	72.00%	74.00%	\$0.00	8.67%	17.86	4.11				
8	DTE Energy Company	\$80.17	5.60%	5.12%	5.00%	5.24%	4.35%	61.00%	60.00%	61.00%	\$0.00	9.03%	13.59	3.12				
9	IDACORP, Inc.	\$66.25	4.00%	4.00%	1.00%	3,00%	4.35%	53.00%	58.00%	53.00%	(\$0.00)	7.53%	17.39	4.00				
10	NorthWestern Corporation	\$53.77	5.00%	6.81%	6.50%	6.10%	4.35%	61.00%	59.00%	61,00%	\$0.00	8.69%	14.65	3.37				
11	OGE Energy Corp.	\$26,72	5.70%	2.17%	3.00%	3.62%	4.35%	63.00%	72,00%	63.00%	(\$0.00)	9.52%	12.70	2.92				
12	Otter Tail Corporation	\$26,61	NA	6.00%	9.00%	7.50%	4.35%	71.00%	59.00%	71.00%	\$0.00	10.04%	13.02	2.99				
13	Pinnacle West Capital Corporation	\$63.35	4.80%	4.95%	4.00%	4,58%	4.35%	64,00%	64.00%	64.00%	(\$0.00)	8.52%	16,02	3,68				
14	PNM Resources, Inc.	\$28.43	7.70%	9.30%	9.00%	8,67%	4.35%	51,00%	55.00%	51.00%	(\$0,00)	8.42%	13.08	3.01				
15	Portland General Electric Company	\$36,56	4.40%	4.14%	6.00%	4.85%	4.35%	52.00%	53.00%	52.00%	(\$0.00)	8.00%	14.88	3.42				
16	SCANA Corporation	\$57.82	4.50%	4.45%	4.50%	4.48%	4.35%	56,00%	55.00%	56.00%	(\$0.00)	8.54%	13.95	3,21				
17	Westar Energy, Inc.	\$40.32	3.60%	3.50%	6.00%	4.37%	4.35%	61.00%	55.00%	61.00%	\$0,00	8.32%	16.02	3.68				
18	Xcel Energy Inc.	\$35.44	5.00%	4.68%	4.50%	4.73%	4.35%	63.00%	65.00%	63.00%	\$0,00	B.57%	15.56	3.58				
19											Mean	8.68%						
20											Max	10.04%						
21	.										Min	7.53%						
	Projected Annual		r															
	Earnings per Share	14	[15]	[16]	[17]	[78]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	26	[27]	[28]	[29]	[30]
	Company	2014	2015	2016	2017	2019	2010	2020	2024	2022	2022	2024	2025	2026	2027	0000	0000	0020
22		2014	2015	2010	2017	£2.50	2019	2020		2022	2023	2024	2025	2026	2021	2028	2029	2030
22	Alliant Energy Composition	\$2,50 \$2.40	\$3.00 \$3.60	- ⊅-3.∠3 © 2.00	⊅0,41 ¢4.10	\$3,5 5 \$4,24	43,19 CAE0	\$4.00 \$4.04	ው ት ት ድር 10	04,40 65 97	\$4.04 \$5.64	04.00 05.01	\$0,09 \$6.19	40.01 66 / F	40.04 66.79	00,/0 87.00	\$0,03 \$7,00	00.20 67.64
24	Ameren Cornoration	\$0,40 \$0,40	\$2.55	\$3.00	\$2.80	\$3.08	\$3.28	94.04 93.79	\$3.70	\$3.01	\$3.04	6133 90.01	\$0,10 \$4.54	\$0.45 \$1.72	\$4.04	\$5.15	\$7.52	\$7.04 ¢5.61
25	American Electric Power Company, Inc.	\$3.34 ·	\$3.50	\$3.66	¢3.63	\$4.02	\$4.20	\$4.40	\$4.64	\$4.82 \$4.82	\$5.0A	\$5.26 \$5.26	94.J4 85.40	\$5.72	\$5 D0	\$6.24	\$5.55 \$6.51	40.01 66.90
26	Avista Corporation	\$1.04 ·	\$1.03	\$0.00 \$0.00	¢0.00 ¢0.13	\$2.02	\$7.20	ውሳ.ሳሀ ድኅ ለፖ	\$7.01 \$7.50	\$97.0Z	\$3.04 \$3.04	¢0.20 ¢0.07	\$3.40 \$2.10	\$3.75 \$3.33	40.00 60 07	40.24 \$3.50	\$0,01 \$2,27	40.00 63.63
20	CMS Energy Composition	¢1,0∾1. €1.74	. ¢1.35	92.00 91.06	\$2.13	\$2.21	\$2.33	\$2.41 \$2.40	\$2.53 \$2.53	92.71 \$2.77	92,0 4 \$7,67	\$2,57 \$2,06	\$3,10	\$3.20 \$3.34	40.07 \$3.40	\$3.5Z	\$3.07 \$3.00	40.00 62.00
28	Dominion Resources Inc	\$2.05	\$3.25	\$3.46	\$3.60 \$3.60	\$3.03	\$4.18	\$4.40 \$4.46	\$4.73	\$5.01	φ <u>2</u> ,3 <u>2</u> \$5,29	\$3.00 \$5.55	\$5.20	90,0 9 90,32	40.43 \$6.22	40,64 03 32	\$5.00	\$3.50
29	DTE Energy Company	\$5.00	\$5.37	\$5.65	\$5.94	\$6.26	\$6.58	\$6.93	\$7.28	\$7.64	\$8.01	\$8,38 \$8,38	\$8.76	\$9.14	\$9.53	\$9.95	\$10.38	\$10.83
30	IDACORP Inc	\$3.85	\$3.97	\$4.08	\$4.21	\$4.33	\$4.46	\$4.60	\$4 75	\$4.91	\$5.09	\$5.29	\$5.51	\$5.75	\$6.00	\$6.26	\$6.53	\$6.81
31	NorthWestern Corporation	\$2.00	\$3.17	\$3.37	\$3.57	\$3.79	\$4.02	\$4.00	\$4.51	\$4.76	\$5,05	\$5,25	\$5.50	\$5.74	\$5.00 \$5.90	\$6.25	\$6.53	\$6.81
32	OGE Energy Corp.	\$1.98	\$2.05	\$2.13	\$2.20	\$2.28	\$2.37	\$2.45	\$2.54	\$2.64	\$2.75	\$2.86	\$2.98	\$3.11	\$3.25	\$3.39	\$3.53	\$3.69
33	Otter Teil Corporation	\$1,50 \$1,50	\$1.67	\$1.70	Ψ2.20 \$1 03	\$2.07	\$2,01	\$2.70	\$2.54	\$2.07	\$2.10	\$3.04	\$2.00 \$2.10	φ0.11 ¢3 33	\$3.47	\$3.62	\$3.78	¢3.00 ¢3.95
34	Pinnacle West Capital Corporation	\$3.58	\$3.74	\$3.92	\$4.10	\$4.28	\$4 48	\$4.68	54 90	\$5.12	\$5.35	\$5.58	\$5.83	\$6.08	\$6.35	\$6.62	\$5.91	\$7.21
35	PNM Resources Inc.	\$1.45	\$1.58	\$1.71	\$1.86	\$2.02	\$2.20	\$2.30	\$2.58	\$2.76	\$2.00	\$3.11	\$3.27	\$3.41	\$3.56	\$3.72	\$3.88	\$4.05
36	Portland General Electric Company	\$2.18	\$2.29	\$2.40	\$2.50	\$2.62	\$2.20	\$2.05 \$2.05	\$3.03	\$3.18	\$3.37	\$2.47	\$3.63	\$3.72	\$3.00	\$4.12	\$4.30	\$4.00 \$4.40
37	SCANA Comoration	\$3.79	\$3.96	\$4.14	\$4.32	\$4.52	\$4 72	\$4.07	\$5.15	\$5.38	\$5.62	\$5.86	\$6.12	90.70 SG 30	90.55 \$6.66	SE 05	\$7.26	\$7.57
38	Westar Energy Inc.	\$2.35	\$2.45	\$2.56	\$2.67	\$2.79	\$2.91	\$3.04	\$3.17	\$3.31	\$3.45	\$3.60	\$3.76	\$3.92	\$4.09	\$4.00	\$4.46	\$4.65
39	Xcel Energy Inc	\$2.03	\$2.13	\$2.23	\$2.33	\$2.44	\$2.56	\$2.68	\$2.80	52.93	\$3.07	\$3.20	\$3.34	\$3.49	\$3.64	\$3.80	\$3.96	\$4.14
		42.00	+··*	÷	w		w~.~~	+=	<i>42,00</i>	~~~~~		Ψ 0 ,~0	Ψ Φ. Ψ 7	40.70	40.0 -	+0.00	Ψ0.00	Ψτ. Τ

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

	Projected Annual															
	Dividend Payout Ratio	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]
	Сотралу	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
40	ALLETE, Inc.	66.00%	63.67%	61.33%	59.00%	60.00%	61.00%	62,00%	63.00%	64,00%	65,00%	66.00%	66,00%	66.00%	66.00%	66.00%
41	Alliant Energy Corporation	61.00%	61.67%	62.33%	63.00%	62.71%	62.43%	62.14%	61.86%	61.57%	61.29%	61.00%	61,00%	61.00%	61.00%	61.00%
42	Ameren Corporation	62,00%	60.00%	58.00%	56.00%	56.86%	57.71%	58,57%	59.43%	60,29%	61.14%	62.00%	62.00%	62.00%	62.00%	62.00%
43	American Electric Power Company, Inc.	64.00%	64.33%	64.67%	65.00%	64.86%	64.71%	64.57%	64.43%	64.29%	64.14%	64.00%	64.00%	64.00%	64.00%	64.00%
44	Avista Corporation	69.00%	67.67%	66.33%	65.00%	65.57%	66.14%	66.71%	67.29%	67.86%	68.43%	69.00%	69.00%	69.00%	69.00%	69.00%
45	CMS Energy Corporation	60.00%	60.67%	61.33%	62.00%	61.71%	61.43%	61.14%	60.86%	60.57%	60.29%	60.00%	60,00%	60.00%	60.00%	60.00%
46	Dominion Resources, Inc.	74.00%	73.33%	72.67%	72.00%	72.29%	72.57%	72.86%	73.14%	73.43%	73.71%	74.00%	74.00%	74.00%	74.00%	74.00%
47	DTE Energy Company	61.00%	60.67%	60.33%	60.00%	60.14%	60.29%	60.43%	60.57%	60.71%	60.86%	61.00%	61.00%	61.00%	61.00%	61.00%
48	(DACORP, Inc.	53,00%	54.67%	56.33%	58.00%	57.29%	56.57%	55.86%	55.14%	54.43%	53.71%	53.00%	53,00%	53.00%	53.00%	53.00%
49	NorthWestern Corporation	61.00%	60.33%	59.67%	59.00%	59.29%	59.57%	59.86%	60.14%	60.43%	60.71%	61.00%	61,00%	61.00%	61.00%	61.00%
50	OGE Energy Corp.	63,00%	66.00%	69.00%	72.00%	70.71%	69.43%	68.14%	66.86%	65.57%	64.29%	63.00%	63.00%	63.00%	63.00%	63.00%
51	Otter Tail Corporation	71,00%	67.00%	63.00%	59.00%	60.71%	62.43%	64.14%	65,86%	67.57%	69.29%	71.00%	71.00%	71.00%	71.00%	71.00%
52	Pinnacle West Capital Corporation	64.00%	64.00%	64.00%	64.00%	64.00%	64.00%	64.00%	64.00%	64.00%	64.00%	64.00%	64,00%	64.00%	64.00%	64.00%
53	PNM Resources, Inc.	\$1.00%	52.33%	53.67%	55.00%	54.43%	53.86%	53.29%	52.71%	52.14%	51.57%	51.00%	51.00%	51.00%	51.00%	51.00%
54	Portland General Electric Company	52,00%	52,33%	52.67%	53.00%	52.86%	52.71%	52.57%	52.43%	52,29%	52.14%	52,00%	52,00%	52.00%	52.00%	52,00%
55	SCANA Corporation	56.00%	55.67%	55.33%	55.00%	55.14%	55.29%	55.43%	55.57%	55.71%	55.86%	56.00%	56.00%	56.00%	56.00%	56.00%
56	Westar Energy, Inc.	61.00%	59.00%	57.00%	55.00%	55.86%	56.71%	57.57%	58.43%	59.29%	60.14%	61.00%	61.00%	61.00%	61.00%	61.00%
57	Xcel Energy Inc.	63.00%	63,67%	64.33%	65.00%	64.71%	64.43%	64.14%	63.86%	63,57%	63.29%	63,00%	63,00%	63.00%	63.00%	63.00%

	Projected Annual																
	Cash Flows	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]
																	Terminal
	Company	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Value
58	ALLETE, Inc.	\$2,13	\$2.17	\$2.20	\$2.24	\$2.40	\$2,57	\$2.74	\$2,93	\$3,11	\$3,31	\$3,50	\$3.65	\$3.81	\$3.98	\$4.15	\$93.97
59	Alliant Energy Corporation	\$2,37	\$2.53	\$2.70	\$2.89	\$3.04	\$3.19	\$3.34	\$3.49	\$3.64	\$3.79	\$3.93	\$4,10	\$4.28	\$4.47	\$4.66	\$109.27
60	Ameren Corporation	\$1.69	\$1.74	\$1.79	\$1.84	\$1,98	\$2.14	\$2.29	\$2.45	\$2.61	\$2.77	\$2.93	\$3,06	\$3.20	\$3.33	\$3.48	\$80.52
61	American Electric Power Company, Inc.	\$2.34	\$2.47	\$2.60	\$2.73	\$2.86	\$2.98	\$3.11	\$3.25	\$3.38	\$3,52	\$3.67	\$3,83	\$4.00	\$4.17	\$4.35	\$102.94
62	Avista Corporation	\$1.40	\$1.44	\$1.48	\$1.53	\$1.62	\$1.71	\$1.81	\$1,91	\$2,01	\$2.12	\$2.23	\$2.33	\$2.43	\$2,54	\$2.65	\$62.50
63	CMS Energy Corporation	\$1,18	\$1.26	\$1.35	\$1.45	\$1.53	\$1.61	\$1.70	\$1.78	\$1.85	\$1,93	\$2.01	\$2.09	\$2.18	\$2.28	\$2.38	\$64.97
64	Dominion Resources, Inc.	\$2.56	\$2.70	\$2.85	\$3.01	\$3.22	\$3.43	\$3.65	\$3.86	\$4.07	\$4.28	\$4.49	\$4.68	\$4.88	\$5.10	\$5,32	\$128.40
65	DTE Energy Company	\$3.45	\$3.61	\$3,77	\$3,95	\$4.17	\$4.39	\$4.62	\$4,85	\$5.09	\$5,33	\$5.57	\$5.82	\$6.07	\$6,33	\$6.61	\$147.21
66	IDACORP, Inc.	\$2.16	\$2.30	\$2.44	\$2,59	\$2.63	\$2.68	\$2,74	\$2.81	\$2.88	\$2.96	\$3.05	\$3.18	\$3.32	\$3.46	\$3,61	\$118.49
67	NorthWestern Corporation	\$2,05	\$2.15	\$2,26	\$2.37	\$2.53	\$2.69	\$2.85	\$3.01	\$3,18	\$3.34	\$3.50	\$3.66	\$3.61	\$3,98	\$4.15	\$99.78
68	OGE Energy Corp.	\$1.34	\$1.45	\$1.58	\$1.70	\$1,73	\$1,77	\$1.80	\$1,84	\$1.88	\$1.92	\$1.96	\$2.04	\$2,13	\$2.23	\$2,32	\$46.85
69	Otter Tall Corporation	\$1.27	\$1.29	\$1.30	\$1.31	\$1.45	\$1.60	\$1.75	\$1.90	\$2.06	\$2.21	\$2.36	\$2.47	\$2.57	\$2.69	\$2.80	\$51.39
70	Pinnacle West Capital Corporation	\$2.51	\$2.62	\$2.74	\$2.87	\$3.00	\$3,13	\$3.28	\$3.42	\$3.57	\$3.73	\$3.89	\$4.06	\$4.24	\$4.42	\$4.62	\$115.51
71	PNM Resources, Inc.	\$0.87	\$0.97	\$1.09	\$1.21	\$1.30	\$1.39	\$1.47	\$1.55	\$1.62	\$1.69	\$1.74	\$1.82	\$1,90	\$1.98	\$2.06	\$52.96
72	Portland General Electric Company	\$1.25	\$1.31	\$1.39	\$1.46	\$1.53	\$1.60	\$1.67	\$1.74	\$1.82	\$1.89	\$1.97	\$2.05	\$2.14	\$2.24	\$2.33	\$66.74
73	SCANA Corporation	\$2.32	\$2.41	\$2.50	\$2.60	\$2.72	\$2.85	\$2,98	\$3.12	\$3.27	\$3.42	\$3.58	\$3.73	\$3,89	\$4.06	\$4.24	\$105.61
74	Westar Energy, Inc.	\$1.56	\$1.58	\$1.59	\$1.60	\$1.70	\$1.80	\$1.90	\$2.02	\$2.14	\$2.26	\$2.39	\$2,50	\$2.61	\$2.72	\$2.84	\$74.50
75	Xcel Energy Inc.	\$1.40	\$1.48	\$1.57	\$1.66	\$1.73	\$1.81	\$1.88	\$1.96	\$2.04	\$2.12	\$2,20	\$2,29	\$2.39	\$2.50	\$2.61	\$64.38

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

	Projected Annual Data																	
	Investor Cash Flows	[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
		Initia																
	Company	Outflow	1/15/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
76	ALLETE, Inc.	(\$50.31)	\$0,00	\$2.05	\$2.19	\$2.20	\$2.24	\$2.40	\$2.57	\$2.74	\$2.93	\$3,11	\$3.31	\$3,50	\$3.65	\$3.81	\$3.98	\$98.12
77	Alliant Energy Corporation	(\$59.72)	\$0.00	\$2.28	\$2.44	\$2.70	\$2.89	\$3.04	\$3,19	\$3.34	\$3.49	\$3.64	\$3.79	\$3.93	\$4.10	\$4.28	\$4.47	\$113.93
78	Ameren Corporation	(\$42.83)	\$0.00	\$1.62	\$1.74	\$1.79	\$1.84	\$1,98	\$2.14	\$2.29	\$2.45	\$2.61	\$2.77	\$2.93	\$3.06	\$3.20	\$3.33	\$84.00
79	American Electric Power Company, Inc.	(\$56.58)	\$0.00	\$2.25	\$2.40	\$2.60	\$2.73	\$2.86	\$2.98	\$3.11	\$3.25	\$3.38	\$3,52	\$3.67	\$3.83	\$4.00	\$4.17	\$107.29
80	Avista Corporation	(\$33.87)	\$0.00	\$1.35	\$1.43	\$1,48	\$1.53	\$1.62	\$1.71	\$1.81	\$1.91	\$2,01	\$2.12	\$2,23	\$2.33	\$2,43	\$2.54	\$65.15
81	CMS Energy Corporation	(\$35.33)	\$0.00	\$1.13	\$1.21	\$1.35	\$1.45	\$1.53	\$1.61	\$1.70	\$1.78	\$1.85	\$1.93	\$2.01	\$2.09	\$2.18	\$2.28	\$67.35
82	Dominion Resources, Inc.	(\$69.01)	\$0.00	\$2.46	\$2.65	\$2.85	\$3.01	\$3.22	\$3.43	\$3.65	\$3.86	\$4.07	\$4.28	\$4,49	\$4.68	\$4.88	\$5.10	\$133.72
83	DTE Energy Company	(\$80.17)	\$0.00	\$3.31	\$3.54	\$3.77	\$3.95	\$4.17	\$4.39	\$4.62	\$4.85	\$5.09	\$5.33	\$5.57	\$5.82	\$6.07	\$6.33	\$153.82
84	IDACORP, Inc.	(\$66.25)	\$0.00	\$2.08	\$2.20	\$2.44	\$2,59	\$2.63	\$2.68	\$2,74	\$2.81	\$2,88	\$2,96	\$3,05	\$3.18	\$3.32	\$3.46	\$122,10
85	NorthWestern Corporation	(\$53.77)	\$0.00	\$1.97	\$2.12	\$2,26	\$2.37	\$2.53	\$2.69	\$2.85	\$3.01	\$3.18	\$3,34	\$3,50	\$3.66	\$3.81	\$3.98	\$103,94
86	OGE Energy Corp.	(\$26.72)	\$0.00	\$1.29	\$1.36	\$1,58	\$1.70	\$1,73	\$1.77	\$1,80	\$1.84	\$1.88	\$1,92	\$1,96	\$2.04	\$2.13	\$2.23	\$49,17
87	Otter Tail Corporation	(\$26.61)	\$0.00	\$1.22	\$1,32	\$1.30	\$1.31	\$1.45	\$1.60	\$1.75	\$1.90	\$2.06	\$2.21	\$2.36	\$2.47	\$2.57	\$2,69	\$54.20
88	Pinnacle West Capital Corporation	(\$63.35)	\$0.00	\$2.41	\$2.56	\$2.74	\$2.87	\$3,00	\$3.13	\$3,28	\$3.42	\$3,57	\$3.73	\$3,89	\$4.06	\$4.24	\$4.42	\$120.12
89	PNM Resources, Inc.	(\$28.43)	\$0.00	\$0.84	\$0.91	\$1,09	\$1,21	\$1.30	\$1.39	\$1.47	\$1.55	\$1.62	\$1.69	\$1,74	\$1,82	\$1.90	\$1.98	\$55.02
90	Portland General Electric Company	(\$36.56)	\$0.00	\$1.20	\$1.28	\$1.39	\$1,46	\$1,53	\$1.60	\$1.67	\$1.74	\$1.82	\$1.89	\$1,97	\$2.05	\$2.14	\$2,24	\$69.08
91	SCANA Corporation	(\$57.82)	\$0.00	\$2.23	\$2.37	\$2.50	\$2,60	\$2.72	\$2.85	\$2,98	\$3.12	\$3.27	\$3.42	\$3.58	\$3,73	\$3,89	\$4.06	\$109.85
92	Westar Energy, Inc.	(\$40.32)	\$0.00	\$1,50	\$1.60	\$1.59	\$1.60	\$1.70	\$1.80	\$1.90	\$2.02	\$2.14	\$2.26	\$2.39	\$2.50	\$2.61	\$2.72	\$77.34
93	Xcel Energy Inc.	(\$35.44)	\$0.00	\$1.35	\$1,44	\$1.57	\$1.66	\$1.73	\$1.81	\$1.88	\$1.96	\$2.04	\$2.12	\$2.20	\$2,29	\$2.39	\$2.50	\$66.99

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Revised Hevert Multi-Stage Growth Discounted Cash Flow Model 180 Day Average Stock Price Average EPS Growth Rate Estimate in First Stage

Biock EPS (Crewith Rate Estimates) Long-Term Payout Ratio Term (all Terminal Termin		Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]				
Price Zankar First Call Other Solity Constraint 2016 2015 2015 2015 Price First Call Constraint 1 ALLETE intry Constraint 54.04 5.00%			Stock	EP	S Growth R	ate Estin	ates	Long-Term	P	ayout Rat	io	Iterative	Solution	Terminal	Terminal				
Company Price Labox Price Labox Read Line Company Company Price Line Line <thline< th=""> <thline< th=""> <thline< th=""></thline<></thline<></thline<>		•	.	7	Circle O all	Value		A					100	P/E	PEG				
1 ALLE 1; Dr. 94.97 5.00% 5.00% 5.00% 6.00% 50.00% 60.00% 50.00%		Company	Price	Zacks	Pirst Call	Line	Average	Growth	2016	2019	2025	Proof	IRR	Ratio	Ratio				
2 Anime Energy Corporation 30:16 340% 3.00% 3.00% 4.00% 3.00% 50.	1	ALLE I E, Inc.	\$49.47	5.00%	5.00%	6.50%	5.50%	4,35%	66.00%	59.00%	66.00%	(\$0.00)	9.04%	14.69	3.38				
a matter of polation \$1.3 5.00% 6.00% 7.00% 6.00% <td>2</td> <td>Amaraa Corporation</td> <td>\$09.07 \$44.04</td> <td>5,40%</td> <td>5,55%</td> <td>5,00%</td> <td>0.00% C 420/</td> <td>4.35%</td> <td>61,00%</td> <td>63,00%</td> <td>61,00%</td> <td>\$0,00</td> <td>8.61%</td> <td>14.29</td> <td>3.25</td> <td></td> <td></td> <td></td> <td></td>	2	Amaraa Corporation	\$09.07 \$44.04	5,40%	5,55%	5,00%	0.00% C 420/	4.35%	61,00%	63,00%	61,00%	\$0,00	8.61%	14.29	3.25				
Availability Inc. Substant Becault, Yene Substant Becault, Yene Substant Becault, Yene Substant	3	American Electric Rower Company, Inc.	941.34 \$55.04	4 70%	0.00%	F 00%	0.40%	4.00%	64.00%	55,00%	64.00%	\$0.00 (f0.00)	9.02%	14.00	3.10				
A resta Comparison Substa County County <thcounty< th=""> <thcounty< th=""> Coun</thcounty<></thcounty<>		American Elecand Fower Company, Inc.	400.91 \$30.05	4.70% 6.00%	4.4070 E 0.004	5.00%	5 0004	4.3376	60.0076	65.00%	60.00%	(\$0.00)	0.0170	15 21	2.44				
Doministressuress. Seg. 7 ELONG 6.49% 4.20% 7.400% 9.20% 6.40% 10.01 4.14 8 DTE Energy Company 579.11 5.60% 6.10% 4.35% 61.00% 62.00% 62.00% 6.30% 6.30% 63.00% 64.00% 43.00% 64.00% 43.00% 64.00% 43.00% 64.00% 43.00% 64.00% 43.00% 64.00% 43.00% 64.00% 43.00% 64.00% 43.00% 64.00% 43.00% 64.00% 43.00% 64.00% 43.00% 64.00% 43.00% 64.00%	e e	CMS Epergy Corporation	00,200 \$34.36	6 10%	6 7 9%	5.50%	6 1 1 %	4.0070	60.00%	62.00%	60.00%	(#0.00)	8 28%	15.01	3.66				
8 DTE Energy Company. \$77.11 5.00% 5.12% \$5.00% 5.00% 60.00% 61.00% 61.00% 1.41 3.08 9 DACCPR P.Inc. 55.26% 4.00% 4.00% 1.00% 5.00% 62.00% 62.00% 7.2% 1.41 3.08 10 ORE Frequencies 55.00% 6.01% 4.35% 61.00% 50.00% 62.00% 7.2% 1.45 3.07 11 ORE Frequencies 55.00% 6.00% 7.00% 6.20% 6.00% 6	7	Dominion Resources Inc	\$69.57	6 10%	5 40%	8.00%	6 53%	4.35%	74 00%	72.00%	74 00%	\$0.00	8 64%	18.01	A 14				
9 DACOPF, Inc. 19 DACOPF, Inc. 100% 100% 100% 920% 52.00% 62.00% 52.00%	, 8	OTE Energy Company	\$79.11	5.60%	5 12%	5.00%	5 24%	4 35%	61.00%	60.00%	61.00%	\$0.00	9 10%	13.41	3.08				
IO NorthWestern Corporation \$\$2,75 5,00% 6,10% 4,36% 61,00% 50,00% 61,00% 50,00% 61,00% 50,00% 7,20% 63,00% 61,00% 50,00% 63,00% 61,00% 50,00% 63,00% 61,00% 50,00% 7,20% 63,00% 61,00% 63,00% 61,00% 63,00% 61,00% 63,00% 61,00% 63,00% 61,00% 63,00% 61,00% 63,00% 61,00% 63,00% 61,00% 63,00% 61,00% 63,00% 61,00% 63,00% 61,00% 63,00% 61,00% 63,00% 61,00% 61,00% 63,00% 61,0	9	IDACORP. Inc.	\$62.69	4.00%	4.00%	1.00%	3.00%	4.35%	53.00%	58.00%	53.00%	(\$0.00)	7.72%	16.43	3.78				
11 OBE Energy Corp. 528.22 5.70% 2.17% 3.00% 3.63% 4.35% 6.30% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% 7.00% 50.00% </td <td>10</td> <td>NorthWestern Corporation</td> <td>\$52.75</td> <td>5.00%</td> <td>6.81%</td> <td>6.50%</td> <td>6,10%</td> <td>4.35%</td> <td>61.00%</td> <td>59.00%</td> <td>61.00%</td> <td>\$0.00</td> <td>8.78%</td> <td>14.38</td> <td>3.30</td> <td></td> <td></td> <td></td> <td></td>	10	NorthWestern Corporation	\$52.75	5.00%	6.81%	6.50%	6,10%	4.35%	61.00%	59.00%	61.00%	\$0.00	8.78%	14.38	3.30				
12 Oter Tail Corporation \$22.76 NA 6.00% 4.03% 4.35% 64.00% 64.00% 64.00% 45.00% 10.01% 13.00 3.01 13 Pinnack West Capital Corporation \$27.23 7.70% 9.30% 9.00% 4.55% 4.35% 64.00% 65.00% 55.00% 55.00% 55.00% 55.00% 55.00% 55.00% 55.00% 55.00% 55.00% 55.00% 50.00% 55.00%	11	OGE Energy Corp.	\$28.22	5.70%	2.17%	3.00%	3.62%	4.35%	63.00%	72,00%	63.00%	(\$0.00)	9,24%	13.45	3.09				
13 Pinnacle West Capital Corporation \$51,66 4,80% 4,80% 4,50% 4,30% 51,00% 64,00% 65,00% 65,00% 65,00% 65,00% 65,00% 63,00%	12	Otter Tail Corporation	\$26.76	NA	6.00%	9.00%	7.50%	4,35%	71.00%	59.00%	71.00%	\$0.00	10.01%	13.09	3,01				
14 PMIN Resources, Inc. \$27.23 7.70% 9.30% 9.00% 8.67% 4.35% \$51.00% 651.00% 61.00% 62.00% 52.00% 52.00% 52.00% 52.00% 52.00% 52.00% 52.00% 52.00% 52.00% 52.00% 52.00% 52.00% 52.00% 62.00%	13	Pinnacle West Capital Corporation	\$61.66	4.80%	4.95%	4.00%	4,58%	4.35%	64.00%	64.00%	64,00%	(\$0.00)	8.64%	15.58	3,58				
15 Portland General Electric Company \$25,66 4.40% 4.14% 6.00% 4.85% 4.30% 52,00% 52,00% 62,00%	14	PNM Resources, Inc.	\$27.23	7.70%	9.30%	9.00%	8.67%	4.35%	51.00%	55.00%	51.00%	(\$0,00)	8.60%	12.53	2.68				
16 SCANA Corporation \$55.9 4.50% 4.46% 4.46% 4.35% 55.00% 65.00% 60.00 8.73% 13.35 3.07 17 Westar Energy, Inc. \$38.22 3.60% 4.60% 4.73% 4.35% 65.00% 65.00% 61.00% 50.00% 15.22 3.50 18 Xcel Energy Inc. \$38.45 5.00% 4.68% 4.73% 4.35% 63.00% 65.00% 63.00% (50.00) 8.58% 15.16 3.49 19 Mean 8.76% 20 Mean 8.76% Company 2014 2015 2016 2017 2018 2019 2022 2022 2024 2025 2026 2027 2028 2029 2030 22 ALLETE, Inc. \$2.00 \$3.06 \$3.23 \$3.41 \$3.45 \$4.88 \$3.10 \$5.37 \$5.64 \$5.19 \$6.4 \$6.70 \$5.18 \$6.4 \$6.70 \$5.18 \$6.4 \$6.70 \$5.18 \$6.4 \$6.70 \$5.18 \$6.6 \$6.20 \$6.20% \$6.20% <td>15</td> <td>Portland General Electric Company</td> <td>\$35.66</td> <td>4.40%</td> <td>4.14%</td> <td>6.00%</td> <td>4.85%</td> <td>4.35%</td> <td>52,00%</td> <td>53.00%</td> <td>52.00%</td> <td>(\$0.00)</td> <td>8.09%</td> <td>14.51</td> <td>3.33</td> <td></td> <td></td> <td></td> <td></td>	15	Portland General Electric Company	\$35.66	4.40%	4.14%	6.00%	4.85%	4.35%	52,00%	53.00%	52.00%	(\$0.00)	8.09%	14.51	3.33				
17 Westar Energy, Inc. \$38,32 3.60% 3.50% 6.00% 4.37% 4.35% 61.00% 50.00% 61.00% 50.00% 63.00% 65.00% 63.00% 65.00% 50.00% 51.6 3.49 19 Mean 8.76% 20 Mean 8.76% Mean 8.76% 50.00% 63.00%	16	SCANA Corporation	\$55.39	4.50%	4.45%	4.50%	4.48%	4.35%	56.00%	55.00%	56.00%	(\$0.00)	8,73%	13.35	3,07				
18 Xcel Energy Inc. \$34.55 5.00% 4.68% 4.50% 4.73% 4.35% 63.00% 65.00% 63.00% (80.00) 8.69% 15.16 3.49 19 Mean 8.76% Max 0.01% Max 0.01% Max 0.01% 20 Earnings per Share [14] [15] [16] [17] [18] 201 202 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 22 ALLETE, Inc. \$2.09 \$3.06 \$3.23 \$3.41 \$3.55 \$4.63 \$4.44 \$4.46 \$4.66 \$5.09 \$5.31 \$5.54 \$5.75 \$6.03 \$6.29 24 Allant Energy Corporation \$3.48 \$3.86 \$3.41 \$4.58 \$4.84 \$5.10 \$5.37 \$5.64 \$5.51 \$5.16 \$5.78 \$6.03 \$7.64 24 American Electric Power Company, Inc. \$3.48 \$3.65 \$3.08 \$3.28 \$3.79 \$5.44 \$5.15 \$5.78 \$6.03 \$5.61 \$5.61 \$6.03 \$6.04 </td <td>17</td> <td>/ Westar Energy, Inc.</td> <td>\$38.32</td> <td>3.60%</td> <td>3.50%</td> <td>6.00%</td> <td>4.37%</td> <td>4.35%</td> <td>61,00%</td> <td>55.00%</td> <td>61.00%</td> <td>\$0.00</td> <td>8,53%</td> <td>15.22</td> <td>3,50</td> <td></td> <td></td> <td></td> <td></td>	17	/ Westar Energy, Inc.	\$38.32	3.60%	3.50%	6.00%	4.37%	4.35%	61,00%	55.00%	61.00%	\$0.00	8,53%	15.22	3,50				
19 Mean 8,76% 20 Max 10.01% Projected Annual Earnings per Share [14] [15] [16] [17] [18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [29] [30] 22 ALLETE, Inc. \$2,90 \$3.06 \$3.23 \$3.41 \$3.59 \$3.79 \$4.00 \$4.21 \$4.43 \$4.64 \$4.66 \$5.09 \$5.31 \$5.54 \$5.78 \$6.03 \$6.29 23 ALLETE, Inc. \$2.90 \$3.06 \$3.23 \$3.41 \$3.59 \$3.79 \$4.00 \$4.21 \$4.43 \$4.64 \$4.64 \$4.64 \$6.73 \$7.02 \$7.23 \$7.74 24 America Electric Power Company, Inc. \$3.34 \$3.66 \$3.83 \$4.00 \$4.25 \$2.17 \$2.24 \$2.55 \$2.77 \$2.84 \$2.97 \$3.10 \$3.23 \$3.37 \$3.64 \$3.83 \$4.02 \$4.40 \$4.61 \$4.82 \$5.04 \$5.73 \$5.84 \$6.73 \$5.70 \$5.64 \$6.73 \$5.70 \$5.2	18	3 Xcel Energy Inc.	\$34.55	5.00%	4.68%	4.50%	4.73%	4,35%	63.00%	65.00%	63.00%	(\$0,00)	8.69%	15.16	3.49				
Max 10.01% Max 10.01% Projected Annual Earnings per Share [14] [15] [16] [17] [18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [29] [30] 20 company 2014 2015 2016 2017 2018 2019 2002 2022 2023 2026 2027 2028 2028 2029 2020 2021 2021 2024 2025 2026 2027 2028 2029 2030 20 Alliant Energy Corporation \$3.48 \$3.88 \$4.10 \$4.43 \$4.44 \$4.46 \$4.56 \$5.09 \$5.13 \$5.64 \$5.71 \$5.44 \$5.74 \$5.73 \$5.64 \$5.71 \$5.49 \$5.73 \$5.64 \$5.91 \$5.13 \$5.64 \$5.91 \$5.16 \$5.33 \$5.61 \$5.73 \$5.64 \$5.91 \$5.16 \$5.38 \$5.61 \$5.64 \$5.91 \$5.61 \$5.73 \$5.64 \$5.91 \$5.61 \$5.61 \$5.73 \$5.63 \$6.24 \$6.61	19)										Mean	8.76%						
Projected Annual Earnings per Share [14] [15] [16] [17] [18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [29] [30] 22 ALLETE, Inc. \$2.90 \$3.06 \$3.23 \$3.41 \$3.59 \$3.79 \$4.00 \$4.21 \$4.43 \$4.64 \$4.66 \$6.09 \$6.31 \$5.54 \$5.78 \$6.03 \$6.29 23 Alliant Energy Corporation \$3.46 \$3.68 \$3.88 \$4.10 \$4.34 \$4.58 \$4.44 \$5.10 \$5.37 \$5.64 \$5.73 \$5.70 \$5.38 \$5.61 24 American Electric Power Company, Inc. \$3.34 \$3.50 \$3.24 \$2.42 \$2.44 \$2.65 \$2.77 \$2.89 \$3.08 \$3.28 \$3.70 \$3.31 \$4.12 \$4.33 \$4.54 \$4.73 \$5.44 \$5.73 \$5.88 \$6.24 \$6.60 25 American Electric Power Company, Inc. \$3.34 \$3.40 <	20)										Max	10.01%						
Projected Annual Earnings per Share [14] [15] [16] [17] [18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [29] [30] Company 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 22 ALLETE, Inc. \$2,20 \$3,48 \$3,48 \$3,48 \$3,48 \$3,48 \$3,48 \$3,48 \$3,48 \$5,17 \$5,64 \$5,71 \$5,58 \$6,73 \$7,02 \$7,32 \$7,64 24 America Deprotation \$1,84 \$1,93 \$2,03 \$2,12 \$2,42 \$4,10 \$4,15 \$4,46 \$4,71 \$4,49 \$4,51 \$4,52 \$5,73 \$5,58 \$6,29 \$5,73 \$5,58 \$6,24 \$8,61 \$6,80 25 America Deprotation \$1,84 \$1,93 \$2,03 \$2,21 <	21											Min	7.72%						
Lamings per Share [14] [15] [16] [17] [18] [19] [20] [21] [22] [23] [24] [25] [27] [28] [29] [29] [20] 2 mings per Share 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 22 ALLETE, inc. \$2.90 \$3.06 \$3.23 \$3.41 \$3.56 \$3.79 \$4.00 \$4.21 \$4.43 \$4.64 \$4.64 \$6.46 \$5.91 \$6.14 \$6.73 \$7.02 \$7.32 \$7.64 4 American Electric Power Company, Inc. \$3.34 \$3.50 \$3.86 \$3.48 \$5.19 \$6.16 \$5.73 \$5.88 \$6.24 \$4.61 \$4.61 \$4.61 \$4.61 \$4.61 \$4.61 \$4.73 \$4.94 \$5.15 \$5.38 \$5.15 \$5.38 \$6.20 \$3.21 \$2.24 \$2.35 \$2.77 \$2.29 \$3.10<		Projected Annual	74.55	14 - 1			14.01	14.00	10.03	10.43	(00)	[00]		10 51	10.01	(07)	loot	10.01	10.03
Company2014201520162017201820192020202120222023202420252026202720282029203022ALLETE, Inc.\$2.90\$3.06\$3.23\$3.41\$3.59\$3.79\$4.00\$4.21\$4.43\$4.64\$4.66\$5.09\$5.31\$5.54\$5.78\$6.03\$6.2923Alliant Energy Corporation\$3.48\$3.88\$4.10\$4.34\$4.58\$3.49\$3.70\$3.91\$4.12\$4.33\$4.54\$4.73\$4.94\$5.15\$5.73\$5.64\$5.91\$6.18\$6.73\$7.02\$7.32\$7.6424Ameren Corporation\$2.40\$2.65\$2.72\$2.29\$3.08\$3.28\$3.49\$3.70\$3.91\$4.12\$4.33\$4.54\$4.73\$4.94\$5.15\$5.38\$5.6125American Electric Power Company, Inc.\$3.34\$3.50\$3.66\$3.83\$4.02\$4.20\$4.40\$4.61\$4.22\$5.04\$5.26\$5.79\$3.10\$3.23\$3.37\$3.52\$3.67\$3.8327CMS Energy Corporation\$1.74\$1.85\$1.96\$2.08\$2.21\$2.34\$2.48\$2.65\$2.77\$2.92\$3.06\$3.20\$3.46\$3.80\$3.93\$4.18\$4.46\$4.73\$5.10\$5.28\$5.55\$5.14\$6.60\$6.83\$6.60\$6.89\$7.1929DTE Energy Corporation\$1.74\$1.85\$1.96\$6.26\$6.55 <t< td=""><td></td><td>Earnings per Snare</td><td>[14]</td><td>[15]</td><td>[16]</td><td>[17]</td><td>[18]</td><td>[19]</td><td>[20]</td><td>[21]</td><td>[22]</td><td>[23]</td><td>[24]</td><td>[25]</td><td>[26]</td><td>[27]</td><td>[28]</td><td>[29]</td><td>[30]</td></t<>		Earnings per Snare	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
22 ALLETE, Inc. \$2,90 \$3,06 \$3,23 \$3,41 \$3,59 \$4,00 \$4,21 \$4,43 \$4,64 \$4,86 \$5,09 \$5,31 \$5,54 \$5,78 \$6,03 \$6,29 23 Alliant Energy Corporation \$3,48 \$3,68 \$4,10 \$4,34 \$4,58 \$4,84 \$5,10 \$5,51 \$5,54 \$5,78 \$6,10 \$6,18 \$6,46 \$8,73 \$4,94 \$5,15 \$5,38 \$7,22 \$7,32 \$7,74 24 Ameren Corporation \$1,84 \$1,93 \$2,03 \$2,13 \$2,24 \$4,40 \$4,61 \$4,73 \$4,94 \$5,15 \$5,58 \$5,61 \$5,88 \$6,24 \$6,51 \$6,61 \$6,80 \$6,81 \$6,60 \$6,83 \$6,63 \$3,83 \$2,40 \$2,44 \$4,61 \$4,73 \$2,97 \$3,10 \$3,23 \$3,37 \$3,52 \$3,67 \$3,83 27 CMS Energy Corporation \$1,74 \$1,85 \$1,96 \$2,08 \$2,21 \$2,24 \$2,55 \$5,57 \$5,51 \$5,75 \$5,61 \$5,73 \$5,65 \$5,91 \$		Company	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
23 Alliant Energy Corporation \$3.48 \$3.68 \$3.88 \$4.10 \$4.34 \$4.58 \$4.84 \$5.10 \$5.37 \$5.64 \$5.91 \$6.18 \$6.45 \$6.73 \$7.02 \$7.32 \$7.64 24 Ameren Corporation \$2.40 \$2.55 \$2.72 \$2.89 \$3.08 \$3.20 \$3.70 \$3.91 \$4.12 \$4.33 \$4.54 \$4.73 \$4.94 \$5.15 \$5.38 \$5.64 \$5.94 \$5.26 \$5.49 \$5.73 \$5.98 \$6.12 \$5.83 \$5.61 \$6.680 25 American Electric Power Company, Inc. \$3.34 \$3.05 \$2.13 \$2.24 \$2.23 \$2.47 \$2.59 \$2.71 \$2.24 \$2.35 \$2.47 \$2.50 \$3.10 \$3.32 \$3.34 \$3.49 \$3.66 \$3.80 \$3.80 \$3.80 \$3.80 \$3.80 \$3.80 \$3.80 \$3.80 \$3.80 \$3.81 \$3.60 \$3.61 \$6.60 \$6.33 \$6.60 \$6.83 \$6.60 \$6.83 \$6.60 \$6.83 \$6.60 \$6.83 \$6.60 \$6.83 \$6.60 \$6.63 \$6.61 <td>22</td> <td>ALLETE, Inc.</td> <td>\$2,90</td> <td>\$3.06</td> <td>\$3.23</td> <td>\$3.41</td> <td>\$3.59</td> <td>\$3.79</td> <td>\$4.00</td> <td>\$4.21</td> <td>\$4.43</td> <td>\$4.64</td> <td>\$4.86</td> <td>\$5,09</td> <td>\$5.31</td> <td>\$5.54</td> <td>\$5.78</td> <td>\$6.03</td> <td>\$6,29</td>	22	ALLETE, Inc.	\$2,90	\$3.06	\$3.23	\$3.41	\$3.59	\$3.79	\$4.00	\$4.21	\$4.43	\$4.64	\$4.86	\$5,09	\$5.31	\$5.54	\$5.78	\$6.03	\$6,29
24 Ameren Corporation \$2,40 \$2,55 \$2,72 \$2,89 \$3,08 \$3,28 \$3,70 \$3,91 \$4,12 \$4,33 \$4,54 \$4,73 \$4,94 \$5,15 \$5,38 \$5,61 25 American Electric Power Company, Inc. \$3,34 \$3,20 \$2,23 \$2,24 \$2,255 \$2,47 \$2,59 \$2,71 \$2,84 \$2,07 \$3,23 \$3,30 \$3,26 \$3,86 \$3,86 \$3,83 \$4,02 \$4,40 \$4,61 \$4,82 \$5,16 \$5,49 \$5,73 \$5,98 \$5,24 \$6,51 \$6,80 \$3,23 \$3,37 \$3,52 \$3,67 \$5,83 \$5,26 \$5,14 \$6,12 \$3,23 \$3,10 \$3,23 \$3,10 \$3,23 \$3,16 \$3,26 \$3,68 \$3,09 \$3,26 \$3,26 \$3,68 \$2,21 \$2,24 \$2,24 \$2,27 \$2,50 \$2,71 \$2,82 \$5,51 \$5,51 \$3,60 \$3,26 \$3,83 \$3,66 \$3,29 \$3,33 \$4,18 \$4,46 \$4,73 \$5,01 \$5,25 \$5,51 \$5,57 \$6,00 \$6,60 \$6,33 \$6,60 \$6,63 <	23	3 Alliant Energy Corporation	\$3.48	\$3.68	\$3.88	\$4.10	\$4.34	\$4.58	\$4.84	\$5.10	\$5.37	\$5.64	\$5.91	\$6,18	\$6.45	\$6.73	\$7.02	\$7.32	\$7.64
25 American Electric Power Company, Inc. \$3.34 \$3.50 \$3.66 \$3.83 \$4.02 \$4.40 \$4.61 \$4.82 \$5.04 \$5.26 \$5.73 \$5.98 \$6.24 \$6.51 \$6.80 26 Avista Corporation \$1.84 \$1.93 \$2.03 \$2.13 \$2.24 \$2.35 \$2.47 \$2.59 \$2.71 \$2.84 \$2.97 \$3.10 \$3.23 \$3.37 \$3.52 \$3.67 \$3.83 27 CMS Energy Corporation \$1.74 \$1.85 \$1.96 \$2.08 \$2.21 \$2.34 \$2.48 \$2.63 \$2.77 \$2.92 \$3.06 \$3.34 \$3.44 \$3.46 \$3.96 \$3.96 \$3.96 \$3.97 \$4.85 \$2.65 \$5.55 \$5.81 \$6.06 \$6.83 \$6.09 \$7.19 29 DEE Energy Company \$5.10 \$5.37 \$5.65 \$5.94 \$6.26 \$6.58 \$6.93 \$7.46 \$8.01 \$5.29 \$5.51 \$5.75 \$6.00 \$6.26 \$6.53 \$6.81 30 IDACORP, Inc. \$3.85 \$3.97 \$4.08 \$4.46 \$4.60 \$4	24	4 Ameren Corporation	\$2,40	\$2.55	\$2.72	\$2,89	\$3.08	\$3.28	\$3.49	\$3.70	\$3,91	\$4,12	\$4.33	\$4,54	\$4.73	\$4.94	\$5,15	\$5,38	\$5,61
26 Avista Corporation \$1.84 \$1.93 \$2.03 \$2.13 \$2.24 \$2.35 \$2.47 \$2.59 \$2.71 \$2.84 \$2.97 \$3.10 \$3.23 \$3.37 \$3.52 \$3.67 \$3.83 27 CMS Energy Corporation \$1.74 \$1.85 \$1.96 \$2.08 \$2.21 \$2.34 \$2.48 \$2.63 \$2.77 \$2.92 \$3.06 \$3.20 \$3.34 \$3.46 \$3.80 \$3.96 \$3.93 \$4.18 \$4.46 \$4.73 \$5.01 \$5.81 \$6.06 \$6.33 \$6.60 \$6.89 \$7.19 29 DTE Energy Company \$5.10 \$5.57 \$5.65 \$5.94 \$6.26 \$6.58 \$6.93 \$7.26 \$5.01 \$5.57 \$6.00 \$6.26 \$6.53 \$6.81 30 IDACORP, Inc. \$3.85 \$3.97 \$4.08 \$4.21 \$4.33 \$4.46 \$4.75 \$4.91 \$5.09 \$5.21 \$5.57 \$6.00 \$6.26 \$6.53 \$6.81 31 NorthWestern Corporation \$2.99 \$3.17 \$3.37 \$3.57 \$3.79 \$4.02 \$4.77	2	5 American Electric Power Company, Inc.	\$3.34	\$3,50	\$3,66	\$3,83	\$4.02	\$4.20	\$4.40	\$4.61	\$4.82	\$5.04	\$5,26	\$5.49	\$5,73	\$5.98	\$6.24	\$6.51	\$6,80
27 CMS Energy Corporation \$1,74 \$1.85 \$1.96 \$2.08 \$2.21 \$2.34 \$2.48 \$2.63 \$2.77 \$2.92 \$3.06 \$3.20 \$3.34 \$3.49 \$3.64 \$3.80 \$3.96 28 Dominion Resources, Inc. \$3.05 \$3.25 \$3.46 \$3.69 \$3.93 \$4.18 \$4.46 \$4.73 \$5.01 \$5.55 \$5.81 \$6.06 \$6.33 \$6.60 \$6.83 \$6.68 \$7.28 \$7.64 \$8.01 \$8.88 \$8.75 \$9.14 \$9.54 \$9.95 \$10.38 \$1.083 30 IDACORP, Inc. \$3.85 \$3.97 \$4.08 \$4.21 \$4.33 \$4.46 \$4.75 \$4.91 \$5.09 \$5.51 \$5.75 \$6.00 \$6.25 \$6.63 \$6.81 31 NorthWestern Corporation \$2.99 \$3.17 \$3.37 \$3.57 \$3.79 \$4.02 \$4.27 \$4.51 \$4.56 \$5.26 \$5.74 \$5.09 \$6.25 \$6.63 \$6.81 32 OGE Energy Corp. \$1.98 \$2.05 \$2.13 \$2.20 \$2.28 \$2.54 \$2.64 \$2.75 \$2.86 \$2.86	26	3 Avista Corporation	\$1.84	\$1.93	\$2.03	\$2,13	\$2,24	\$2,35	\$2.47	\$2,59	\$2,71	\$2.84	\$2.97	\$3,10	\$3.23	\$3.37	\$3,52	\$3.67	\$3,83
28 Dominion Resources, Inc. \$3,05 \$3,25 \$3,46 \$3,69 \$3,93 \$4,18 \$4,46 \$4,73 \$5,01 \$5,28 \$5,55 \$5,81 \$6,06 \$6,33 \$6,60 \$6,89 \$7,19 29 DTE Energy Company \$5,10 \$5,37 \$5,65 \$5,94 \$6,26 \$6,58 \$6,93 \$7,28 \$7,64 \$8,01 \$8,88 \$9,74 \$9,94 \$9,95 \$10,38 \$10,83 30 IDACORP, Inc. \$3,85 \$3,97 \$4,08 \$4,21 \$4,33 \$4,46 \$4,67 \$5,09 \$5,50 \$5,75 \$6,00 \$6,26 \$6,63 \$6,81 31 NorthWestern Corporation \$2,99 \$3,17 \$3,37 \$3,27 \$2,20 \$2,23 \$2,55 \$5,75 \$5,10 \$5,57 \$6,00 \$6,25 \$6,63 \$6,81 32 OEE Energy Corp. \$1,98 \$2,20 \$2,213 \$2,207 \$2,23 \$2,239 \$2,56 \$2,77 \$2,88 \$3,04 \$3,19 \$3,33 \$3,47 \$3,62 \$3,78 \$3,95 34 Pinnacle West Capital Corporation \$3,58 \$3,74 \$3,92	2	7 CMS Energy Corporation	\$1.74	\$1.85	\$1,96	\$2.08	\$2.21	\$2,34	\$2.48	\$2.63	\$2.77	\$2.92	\$3.06	\$3.20	\$3.34	\$3,49	\$3.64	\$3.80	\$3,96
29 D1E Energy Company \$5,10 \$5,37 \$5,65 \$5,94 \$6,26 \$6,83 \$7,28 \$7,64 \$8,01 \$8,38 \$8,76 \$9,14 \$9,54 \$9,95 \$10,38 \$10,38 30 IDACORP, Inc. \$3,85 \$3,97 \$4,08 \$4,21 \$4,33 \$4,46 \$4,60 \$4,75 \$4,91 \$5.09 \$5.50 \$5,74 \$5.99 \$6,26 \$6,633 \$6,81 31 NorthWestern Corporation \$2,99 \$3,17 \$3,37 \$3,77 \$4,02 \$4,27 \$4,51 \$4,76 \$5.01 \$5.26 \$5,74 \$5.99 \$6,25 \$6,63 \$6,81 32 OGE Energy Corp. \$1,98 \$2,05 \$2,13 \$2,20 \$2,28 \$2,37 \$2,56 \$2,72 \$2,89 \$3,01 \$3,33 \$3,47 \$3,69 \$3,53 \$3,69 33 Otter Tail Corporation \$1,55 \$1,67 \$1,79 \$1,93 \$2,07 \$2,23 \$2,56 \$2,76 \$2,98 \$3,01 \$3,33 \$3,47 \$3,62 \$3,78 \$3,95 34 Pinnacle West Capital Corporation \$3,58 \$3,71 \$3,92 <	20	B Dominion Resources, Inc.	\$3,05	\$3.25	\$3.46	\$3.69	\$3.93	\$4.18	\$4.46	\$4.73	\$5.01	\$5.28	\$5,55	\$5,81	\$6.06	\$6.33	\$6.60	\$6.89	\$7,19
30 IDACORP, Inc. \$3,85 \$3,97 \$4,08 \$4,21 \$4,33 \$4,46 \$4,61 \$5,09 \$5,50 \$5,74 \$5,00 \$6,26 \$6,53 \$6,81 31 NorthWestern Corporation \$2,99 \$3,17 \$3,37 \$3,57 \$3,79 \$4,02 \$4,27 \$4,51 \$4,76 \$5,01 \$5,26 \$5,50 \$5,74 \$5,99 \$6,25 \$6,63 \$6,81 32 OGE Energy Corp. \$1,98 \$2,05 \$2,13 \$2,20 \$2,28 \$2,27 \$2,54 \$2,54 \$2,64 \$2,75 \$2,66 \$2,98 \$3,11 \$3,25 \$3,39 \$3,63 \$3,69 33 Otter Tail Corporation \$1,55 \$1,67 \$1,79 \$1,93 \$2,07 \$2,23 \$2,56 \$2,72 \$2,88 \$3,04 \$3,19 \$3,33 \$3,47 \$3,62 \$3,78 \$3,95 34 Pinnacle West Capital Corporation \$3,58 \$1,71 \$1,86 \$2,02 \$2,29 \$2,58 \$2,76 \$2,94 \$3,11 \$3,63 \$3,72 \$3,88 \$4,05 \$4,05 \$4,68 \$4	29	B DIE Energy Company	\$5,10	\$5.37	\$5.65	\$5,94	\$6.26	\$6.58	\$6.93	\$7.28	\$7.64	\$8.01	\$8.38	\$8,76	\$9,14	\$9.54	\$9.95	\$10.38	\$10.83
31 NormWestern Corporation \$2.99 \$3.17 \$3.77 \$3.77 \$3.79 \$4.02 \$4.27 \$4.51 \$4.76 \$5.26 \$5.74 \$5.99 \$6.25 \$6.53 \$6.53 \$6.81 32 OGE Energy Corp. \$1.98 \$2.05 \$2.13 \$2.20 \$2.28 \$2.37 \$2.45 \$2.64 \$2.75 \$2.86 \$3.11 \$3.25 \$3.39 \$3.53 \$3.69 33 Otter Tail Corporation \$1.55 \$1.67 \$1.79 \$1.93 \$2.07 \$2.23 \$2.39 \$2.56 \$2.72 \$2.88 \$3.11 \$3.25 \$3.33 \$3.47 \$3.62 \$3.78 \$3.95 34 Pinnacle West Capital Corporation \$3.58 \$3.74 \$3.92 \$4.48 \$4.48 \$4.90 \$5.12 \$5.58 \$5.83 \$6.68 \$6.62 \$6.91 \$7.71 35 PNM Resources, inc. \$1.45 \$1.58 \$1.71 \$1.86 \$2.02 \$2.20 \$2.39 \$2.56 \$2.76 \$2.94 \$3.11 \$3.63 \$3.72 \$3.88 \$4.05 36 Portland General Electric Company \$2.18 \$2.29 \$2.40 \$	30	D IDACORP, Inc.	\$3,85	\$3,97	\$4,08	\$4.21	\$4.33	\$4.46	\$4.50	\$4.75	\$4.91	\$5.09	\$5.29	\$5.51	\$5.75	\$6,00	\$6,26	\$6,53	\$6.81
32 ODE Energy Corp. \$1.98 \$2.05 \$2.13 \$2.20 \$2.28 \$2.37 \$2.45 \$2.64 \$2.75 \$2.60 \$2.86 \$2.95 \$3.11 \$3.25 \$3.33 \$3.47 \$3.62 \$3.34 \$3.58 \$3.78 \$3.95 33 Otter Tail Corporation \$1.56 \$1.67 \$1.79 \$1.93 \$2.07 \$2.23 \$2.39 \$2.56 \$2.72 \$2.89 \$3.04 \$3.19 \$3.33 \$3.47 \$3.62 \$3.78 \$3.95 34 Pinnacle West Capital Corporation \$3.58 \$3.74 \$3.92 \$4.20 \$4.48 \$4.68 \$4.90 \$5.12 \$5.12 \$5.83 \$6.68 \$6.62 \$6.61 \$7.71 35 PNM Resources, inc. \$1.45 \$1.58 \$1.71 \$1.86 \$2.02 \$2.39 \$3.03 \$3.18 \$3.32 \$3.41 \$3.56 \$3.72 \$3.88 \$4.05 36 Portland General Electric Company \$2.18 \$2.29 \$2.40 \$2.51 \$2.63 \$2.76 \$2.90 \$3.03 \$3.18 \$3.32 \$3.47 \$3.63 \$3.78 \$3.95 \$4.12 \$4.30 <td< td=""><td>3</td><td>1 NorthVvestern Corporation</td><td>\$2,99</td><td>\$3,17</td><td>\$3,37</td><td>\$3.57</td><td>\$3,79</td><td>\$4.02</td><td>\$4,27</td><td>\$4,51</td><td>\$4.76</td><td>\$5.01</td><td>\$5.26</td><td>\$5.50</td><td>\$5.74</td><td>\$5,99</td><td>\$6.25</td><td>\$6.53</td><td>\$6.81</td></td<>	3	1 NorthVvestern Corporation	\$2,99	\$3,17	\$3,37	\$3.57	\$3,79	\$4.02	\$4,27	\$4,51	\$4.76	\$5.01	\$5.26	\$5.50	\$5.74	\$5,99	\$6.25	\$6.53	\$6.81
33 Otter fail Corporation \$1,55 \$1,67 \$1,79 \$1,93 \$2,17 \$2,39 \$2,56 \$2,12 \$2,69 \$3,19 \$3,33 \$3,47 \$5,52 \$5,75 \$3,53 \$3,47 \$5,52 \$5,75 \$5,19 \$3,33 \$3,47 \$5,52 \$5,75 \$5,53 \$5,56 \$5,58 \$5,68 \$6,63 \$6,65 \$6,62 \$6,91 \$7,21 35 PNM Resources, inc. \$1,45 \$1,58 \$1,71 \$1,86 \$2,02 \$2,20 \$2,39 \$2,58 \$2,76 \$2,94 \$3,11 \$3,27 \$3,41 \$3,56 \$3,72 \$3,88 \$4,05 36 Portland General Electric Company \$2,18 \$2,29 \$2,40 \$2,51 \$2,63 \$2,76 \$2,90 \$3,03 \$3,18 \$3,22 \$3,41 \$3,56 \$3,72 \$3,88 \$4,49 \$4,52 \$4,72 \$4,93 \$5,15 \$5,38 \$5,62 \$5,66 \$6,612 \$6,39 \$6,66 \$6,95 \$7,26 \$7,57 37 SCANA Corporation \$3,79 \$3,96 \$4,132 \$4,52 \$4,72 \$4,93 \$5,15 \$5,38 \$5,6	ري مرد	2 OGE Energy Corp.	\$1.98 ¢1.00	\$2.05	\$2.13	\$4.20	\$2.28	\$2.37	\$2.45	\$2,54 60.50	\$∠.64 ¢0.70	\$Z./5	\$2.85	\$2.98	\$3,17	\$3.25	\$3,39 eo.oo	\$3,53 #0.78	\$3,69 \$3,69
34 Primacle West Capital Corporation \$3,50 \$5,74 \$3,92 \$4,10 \$4,20 \$4,45 \$4,90 \$5,12 \$5,55 \$5,56 \$5,55	3.	Otter Tail Corporation Otter Tail Corporation			\$1.79 \$2.00	\$1.93 #4.40	\$ <u>7.0</u> 7	\$4.23 64.40	\$2.38 R4 CD	\$∠.50 €4.00	\$Z.12 \$5.10	ΦZ,09	\$3.04 #C.59	33.19 05.09	\$3,33 @C.09	\$3,47 #C.26	53,5% FC CO	\$3,70 #C.01	გა, ყ ა იუ ეჟ
36 Forthand General Electric Company \$2,18 \$2,29 \$2,40 \$2,51 \$2,63 \$2,76 \$2,90 \$3,03 \$3,18 \$3,22 \$3,47 \$3,63 \$3,78 \$3,95 \$4,12 \$4,30 \$4,49 37 SCANA Corporation \$3,79 \$3,96 \$4,14 \$4,32 \$4,52 \$4,72 \$4,93 \$5,15 \$5,38 \$5,62 \$5,66 \$6,66 \$6,95 \$7,26 \$7,57 38 Westar Energy, Inc. \$2,35 \$2,26 \$2,27 \$2,91 \$3,04 \$3,17 \$3,31 \$3,45 \$3,60 \$3,78 \$3,95 \$4,12 \$4,30 \$4,49 39 Xeel Energy, Inc. \$2,35 \$2,26 \$2,67 \$2,79 \$2,91 \$3,04 \$3,17 \$3,31 \$3,45 \$3,60 \$3,76 \$3,92 \$4,46 \$4,65 39 Xeel Energy Inc. \$2,03 \$2,13 \$2,23 \$2,279 \$2,91 \$3,04 \$3,17 \$3,31 \$3,45 \$3,60 \$3,76 \$3,92 \$4,46 \$4,65 39 Xeel Energy Inc. \$2,03 \$2,13 \$	3° 21	 Fullacie West Capital Corporation 5 DNM Desources inc. 	\$3.95 \$1.4E	φ3./4 ¢1.69	93,92 8174		94.20 \$2.02	94.40 \$2.20	34.00 \$2.30	374.90 \$2.5P	⇒つ.1Z \$12.76	\$0.35 ¢2.64	30.05 63.11	\$0,03 \$3,27	\$0.00 \$3.41	\$3.50 \$3.50	\$0.0∡ ¢1.71	42 55 90.91	\$7.21 \$7.05
37 SCANA Corporation \$3,79 \$3,96 \$4,14 \$4,32 \$4,52 \$4,72 \$4,93 \$5,15 \$5,38 \$5,62 \$5,60 \$6,12 \$6,39 \$6,66 \$6,95 \$7,26 \$7,57 38 Westar Energy, Inc. \$2,35 \$2,45 \$2,56 \$2,67 \$2,79 \$2,91 \$3,04 \$3,17 \$3,31 \$3,45 \$3,60 \$3,76 \$3,92 \$4,49 \$4,65 38 Westar Energy, Inc. \$2,35 \$2,45 \$2,56 \$2,67 \$2,79 \$2,91 \$3,04 \$3,17 \$3,31 \$3,45 \$3,60 \$3,76 \$3,92 \$4,46 \$4,65 39 Xcel Energy, Inc. \$2,03 \$2,13 \$2,23 \$2,23 \$2,07 \$3,20 \$3,34 \$3,49 \$3,66 \$3,96 \$4,14	3	6 Portland General Electric Company	φ1.40 \$2.49	Φ1,00 \$2.00	φι,/ \$2.40	91.00 \$9.64	92.02 52.63	92.20 \$2.76	92.09 \$2.00	\$3.03	- ምረ- 10 ፍር 10	φ <u>κ</u> .94 \$3,20	40.11 \$2.17	\$3.21 \$3.22	40.41 \$2.72	40.00 63.00	ዋጋ.72 ፍፈ 1ን	-,00 €⊿ ≎⊓	\$4.00 \$4.40
38 Westar Energy, Inc. \$2,35 \$2.45 \$2.67 \$2.79 \$2.91 \$3.04 \$3.17 \$3.31 \$3.45 \$3.60 \$3.76 \$3.92 \$4.09 \$4.27 \$4.46 \$4.65 39 Xeel Energy Inc. \$2.03 \$2.13 \$2.23 \$2.45 \$2.66 \$2.79 \$2.91 \$3.04 \$3.17 \$3.31 \$3.45 \$3.60 \$3.76 \$3.92 \$4.09 \$4.27 \$4.46 \$4.65 39 Xeel Energy Inc. \$2.03 \$2.13 \$2.23 \$2.44 \$2.66 \$2.67 \$2.44 \$4.65	بن م	7 SCANA Corporation	\$3.70	\$3.06	\$4.14	\$4.32	\$4.52	\$4.70	\$4.93	\$5.05	\$5 32	\$5.62	\$5.86	\$6.12	56.30	\$6.66	\$6.95	\$7.26	\$7.57
39 Xeel Energy Inc. \$2.03 \$2.13 \$2.23 \$2.33 \$2.44 \$2.56 \$2.68 \$2.60 \$2.93 \$3.07 \$3.20 \$3.34 \$3.49 \$3.64 \$3.80 \$3.96 \$4.14	3.	8 Westar Energy Inc.	\$2.35	\$2.45	\$2.56	\$2.67	\$2.79	\$2.91	\$3.04	\$3.17	\$3,31	\$3.45	\$3.60	\$3.76	\$3.92	\$4.09	\$4.27	\$4.46	\$4.65
	3	9 Xcel Energy Inc.	\$2.03	\$2.13	\$2.23	\$2.33	\$2.44	\$2.56	\$2.68	\$2.80	\$2.93	\$3.07	\$3.20	\$3,34	\$3,49	\$3.64	\$3.80	\$3,96	\$4,14

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Revised Hevert Multi-Stage Growth Discounted Cash Flow Model 180 Day Average Stock Price Average EPS Growth Rate Estimate in First Stage

	Projected Annual															
	Dividend Payout Ratio	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]
	Company	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
40	ALLETE, Inc.	66.00%	63.67%	61.33%	59.00%	60.00%	61.00%	62.00%	63.00%	64.00%	65.00%	66.00%	66.00%	66.00%	66.00%	66.00%
41.	Alliant Energy Corporation	61.00%	61.67%	62.33%	63.00%	62.71%	62.43%	62.14%	61.86%	61.57%	61,29%	61.00%	61.00%	61.00%	61.00%	61.00%
42	Ameren Corporation	62.00%	60.00%	58.00%	56.00%	56.86%	57.71%	58.57%	59.43%	60.29%	61.14%	62.00%	62.00%	62.00%	62.00%	62.00%
43	American Electric Power Company, Inc.	64.00%	64.33%	64.67%	65.00%	64.86%	64.71%	64.57%	64.43%	64.29%	64.14%	64.00%	64.00%	64.00%	64.00%	64.00%
44	Avista Corporation	69.00%	67.67%	66.33%	65,00%	65.57%	66.14%	66.71%	67.29%	67.86%	68.43%	69.00%	69.00%	69.00%	69.00%	69.00%
45	CMS Energy Corporation	60.00%	60.67%	61.33%	62,00%	61.71%	61.43%	61.14%	60.86%	60.57%	60.29%	60.00%	60.00%	60.00%	60.00%	60.00%
46	Dominion Resources, Inc.	74.00%	73.33%	72.67%	72.00%	72.29%	72.57%	72.86%	73.14%	73.43%	73.71%	74.00%	74.00%	74.00%	74.00%	74.00%
47	DTE Energy Company	61.00%	60.67%	60.33%	60.00%	60,14%	60.29%	60.43%	60.57%	60.71%	60.86%	61.00%	61.00%	61.00%	61.00%	61.00%
48	IDACORP, Inc.	53.00%	54.67%	56,33%	58.00%	57.29%	56.57%	55.86%	55.14%	54.43%	53,71%	53.00%	53.00%	53.00%	53.00%	53.00%
49	NorthWestern Corporation	61.00%	60,33%	59.67%	59.00%	59,29%	59.57%	59.86%	60.14%	60.43%	60,71%	61.00%	61.00%	61.00%	61.00%	61.00%
50	OGE Energy Corp.	63,00%	66.00%	69.00%	72,00%	70.71%	69.43%	68.14%	66.86%	65.57%	64.29%	63.00%	63.00%	63.00%	63.00%	63.00%
51	Otter Tail Corporation	71,00%	67.00%	63.00%	59,00%	60,71%	62.43%	64.14%	65.86%	67.57%	69.29%	71.00%	71.00%	71.00%	71.00%	71.00%
52	Pinnacle West Capital Corporation	64.00%	64.00%	64.00%	64.00%	64.00%	64.00%	64.00%	64,00%	64.00%	64.00%	64.00%	64.00%	64.00%	64.00%	64.00%
53	PNM Resources, Inc.	51.00%	52,33%	53.67%	55,00%	54.43%	53.86%	53.29%	52,71%	52.14%	51.57%	51.00%	51.00%	51.00%	51.00%	51,00%
54	Portland General Electric Company	52.00%	52.33%	52.67%	53.00%	52,86%	52.71%	52.57%	52.43%	52.29%	52.14%	52.00%	52.00%	52.00%	52.00%	52.00%
55	SCANA Corporation	56.00%	55.67%	55,33%	55.00%	55.14%	55.29%	55.43%	55.57%	55.71%	55.86%	56,00%	56.00%	56.00%	56.00%	56,00%
56	Westar Energy, Inc.	61.00%	59.00%	57.00%	55.00%	55.86%	56.71%	57.57%	58.43%	59.29%	60.14%	61.00%	61.00%	61.00%	61.00%	61.00%
57	Xcel Energy Inc.	63.00%	63.67%	64.33%	65.00%	64.71%	64.43%	<u>64.14%</u>	63.86%	63.57%	63.29%	63.00%	63.00%	63.00%	63.00%	63.00%

	Projected Annual																
	Cash Flows	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]
																	Terminal
	Company	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Value
58	ALLETE, Inc.	\$2,13	\$2.17	\$2.20	\$2,24	\$2.40	\$2.57	\$2.74	\$2.93	\$3.11	\$3,31	\$3.50	\$3.65	\$3,81	\$3.98	\$4.15	\$92.41
59	Alliant Energy Corporation	\$2.37	\$2.53	\$2.70	\$2,89	\$3.04	\$3,19	\$3.34	\$3.49	\$3.64	\$3.79	\$3.93	\$4.10	\$4.28	\$4.47	\$4.66	\$109.18
60	Ameren Corporation	\$1.69	\$1.74	\$1.79	\$1.84	\$1,98	\$2.14	\$2.29	\$2.45	\$2.61	\$2.77	\$2.93	\$3.06	\$3,20	\$3.33	\$3,48	\$77.74
61	American Electric Power Company, Inc.	\$2,34	\$2.47	\$2,60	\$2,73	\$2.86	\$2.98	\$3.11	\$3,25	\$3.38	\$3.52	\$3.67	\$3,83	\$4.00	\$4.17	\$4.35	\$101.70
62	Avista Corporation	\$1.40	\$1.44	\$1.48	\$1,53	\$1.62	\$1.71	\$1.81	\$1.91	\$2.01	\$2.12	\$2,23	\$2.33	\$2.43	\$2.54	\$2,65	\$60.62
63	CMS Energy Corporation	\$1.18	\$1.26	\$1.35	\$1.45	\$1.53	\$1.61	\$1.70	\$1.78	\$1.85	\$1.93	\$2.01	\$2.09	\$2,18	\$2.28	\$2,38	\$63.18
64	Dominion Resources, Inc.	\$2,56	\$2.70	\$2.85	\$3.01	\$3.22	\$3.43	\$3.65	\$3.86	\$4.07	\$4.28	\$4,49	\$4.68	\$4,88	\$5.10	\$5.32	\$129.45
65	DTE Energy Company	\$3.45	\$3.61	\$3.77	\$3.95	\$4.17	\$4.39	\$4.62	\$4,85	\$5.09	\$5.33	\$5.57	\$5.82	\$6,07	\$6.33	\$6.61	\$145,25
66	IDACORP, Inc.	\$2,16	\$2,30	\$2.44	\$2,59	\$2,63	\$2.68	\$2.74	\$2.81	\$2.88	\$2.96	\$3.05	\$3.18	\$3,32	\$3.46	\$3.61	\$111.92
67	NorthWestern Corporation	\$2.05	\$2.15	\$2.26	\$2.37	\$2.53	\$2.69	\$2,85	\$3,01	\$3.18	\$3,34	\$3.50	\$3.66	\$3.81	\$3.98	\$4,15	\$97.89
68	OGE Energy Corp.	\$1,34	\$1.45	\$1.58	\$1,70	\$1.73	\$1.77	\$1.80	\$1.84	\$1.88	\$1.92	\$1.96	\$2,04	\$2.13	\$2.23	\$2.32	\$49.61
69	Otter Tail Corporation	\$1.27	\$1.29	\$1,30	\$1.31	\$1.45	\$1.60	\$1.75	\$1.90	\$2.06	\$2.21	\$2,36	\$2.47	\$2.57	\$2.69	\$2.80	\$51.67
70	Pinnacle West Capital Corporation	\$2,51	\$2.62	\$2.74	\$2.87	\$3.00	\$3.13	\$3,28	\$3.42	\$3.57	\$3.73	\$3.89	\$4.06	\$4.24	\$4.42	\$4.62	\$112.38
71	PNM Resources, Inc.	\$0.87	\$0.97	\$1.09	\$1.21	\$1.30	\$1.39	\$1.47	\$1.55	\$1.62	\$1.69	\$1.74	\$1,82	\$1.90	\$1.98	\$2.0 6	\$50.73
72	Portland General Electric Company	\$1.25	\$1.31	\$1.39	\$1.46	\$1.53	\$1.60	\$1.67	\$1.74	\$1.82	\$1.89	\$1.97	\$2.05	\$2.14	\$2.24	\$2.33	\$65.08
73	SCANA Corporation	\$2.32	\$2.41	\$2.50	\$2.60	\$2.72	\$2.85	\$2.98	\$3.12	\$3.27	\$3.42	\$3.58	\$3.73	\$3.89	\$4.06	\$4.24	\$101.10
74	Westar Energy, Inc.	\$1.56	\$1.58	\$1.59	\$1.60	\$1.70	\$1,80	\$1.90	\$2.02	\$2.14	\$2.26	\$2.39	\$2.50	\$2.61	\$2.72	\$2.84	\$70.79
75	Xcel Energy Inc.	\$1.40	\$1.48	\$1.57	\$1,66	\$1.73	\$1.81	\$1.88	\$1.96	\$2.04	\$2.12	\$2.20	\$2.29	\$2.39	\$2.50	\$2,61	\$62.73

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Revised Hevert Multi-Stage Growth Discounted Cash Flow Model 180 Day Average Stock Price Average EPS Growth Rate Estimate in First Stage

Projected Annual Data																	
Investor Cash Flows	[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75 <u>]</u>	[76]	[77]	[78]
	Initial													÷			
Company	Outflow	1/15/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
76 ALLETE, Inc.	(\$49.47)	\$0,00	\$2.05	\$2.19	\$2.20	\$2.24	\$2.40	\$2.57	\$2.74	\$2.93	\$3.11	\$3.31	\$3.50	\$3.65	\$3.81	\$3.98	\$96.56
77 Alliant Energy Corporation	(\$59.67)	\$0.00	\$2.28	\$2.44	\$2,70	\$2,89	\$3.04	\$3.19	\$3.34	\$3.49	\$3.64	\$3,79	\$3.93	\$4,10	\$4.28	\$4.47	\$113.84
78 Ameren Corporation	(\$41.34)	\$0.00	\$1.62	\$1.74	\$1.79	\$1.84	\$1.98	\$2.14	\$2.29	\$2.45	\$2.61	\$2,77	\$2.93	\$3.06	\$3.20	\$3.33	\$81.21
79 American Electric Power Company, Inc.	(\$55.91)	\$0.00	\$2.25	\$2,40	\$2.60	\$2.73	\$2.86	\$2,98	\$3.11	\$3.25	\$3.38	\$3.52	\$3.67	\$3.83	\$4.00	\$4.17	\$106.05
80 Avista Corporation	(\$32.85)	\$0.00	\$1.35	\$1.43	\$1.48	\$1.53	\$1.62	\$1,71	\$1.81	\$1.91	\$2.01	\$2.12	\$2.23	\$2.33	\$2.43	\$2.54	\$63.26
81 CMS Energy Corporation	(\$34.36)	\$0.00	\$1.13	\$1.21	\$1.35	\$1.45	\$1.53	\$1.61	\$1.70	\$1.78	\$1.85	\$1.93	\$2.01	\$2.09	\$2.18	\$2.28	\$65.56
82 Dominion Resources, Inc.	(\$69,57)	\$0.00	\$2.46	\$2.65	\$2.85	\$3.01	\$3.22	\$3,43	\$3,65	\$3.86	\$4.07	\$4.28	\$4.49	\$4,68	\$4.88	\$5.10	\$134.77
83 DTE Energy Company	(\$79.11)	\$0.00	\$3.31	\$3.54	\$3.77	\$3.95	\$4,17	\$4.39	\$4.62	\$4,85	\$5.09	\$5.33	\$5.57	\$5.82	\$6.07	\$6.33	\$151.86
84 IDACORP, Inc.	(\$62.69)	\$0,00	\$2,08	\$2,20	\$2.44	\$2,59	\$2.63	\$2.68	\$2.74	\$2.81	\$2.88	\$2.96	\$3.05	\$3.18	\$3.32	\$3.46	\$115.53
85 NorthWestern Corporation	(\$52.75)	\$0,00	\$1,97	\$2.12	\$2.26	\$2.37	\$2,53	\$2.69	\$2.85	\$3,01	\$3.18	\$3.34	\$3.50	\$3.66	\$3,81	\$3.98	\$102.04
86 OGE Energy Corp.	(\$28.22)	\$0.00	\$1.29	\$1.36	\$1.58	\$1.70	\$1.73	\$1.77	\$1.80	\$1.84	\$1.88	\$1.92	\$1.96	\$2.04	\$2.13	\$2.23	\$51.93
87 Otter Tail Corporation	(\$26.76)	\$0.00	\$1.22	\$1,32	\$1.30	\$1.31	\$1.45	\$1,60	\$1.75	\$1.90	\$2.06	\$2.21	\$2,36	\$2.47	\$2,57	\$2.69	\$54.47
B8 Pinnacle West Capital Corporation	(\$61.66)	\$0.00	\$2.41	\$2.56	\$2.74	\$2.87	\$3.00	\$3.13	\$3.28	\$3.42	\$3.57	\$3,73	\$3.89	\$4.06	\$4.24	\$4.42	\$116.99
89 PNM Resources, Inc.	(\$27.23)	\$0.00	\$0.84	\$0.91	\$1.09	\$1.21	\$1.30	\$1.39	\$1.47	\$1.55	\$1.62	\$1.69	\$1.74	\$1.82	\$1.90	\$1.98	\$52.79
90 Portland General Electric Company	(\$35.66)	\$0.00	\$1.20	\$1.28	\$1.39	\$1.46	\$1.53	\$1.60	\$1.67	\$1.74	\$1.82	\$1,89	\$1.97	\$2.05	\$2.14	\$2.24	\$67.41
91 SCANA Corporation	(\$55,39)	\$0.00	\$2.23	\$2.37	\$2,50	\$2.60	\$2.72	\$2.85	\$2.98	\$3,12	\$3.27	\$3.42	\$3.58	\$3,73	\$3.89	\$4.06	\$105.34
92 Westar Energy, Inc.	(\$38.32)	\$0.00	\$1.50	\$1.60	\$1.59	\$1.60	\$1.70	\$1.80	\$1.90	\$2.02	\$2.14	\$2.26	\$2.39	\$2,50	\$2.61	\$2.72	\$73.62
93 Xcel Energy Inc.	(\$34.55)	\$0.00	\$1.35	\$1.44	\$1.57	\$1.66	\$1.73	\$1.81	\$1.88	\$1.96	\$2.04	\$2.12	\$2.20	\$2.29	\$2.39	\$2.50	\$65.33

Alternative Risk Premium Analysis Using A-Rated Utility Bond Yield Spreads

SUMMARY OUTPUT

Regression Statistics					
Multiple R	0.9246				
R Square	0.8548				
Adjusted R Square	0.8445				
Standard Error	0.0036				
Observations	31				

ANOVA

	•	df	SS	MS	F	Significance F
Regression		2	0.0022	0.0011	82.4448	1.84455E-12
Residual		28	0.0004	1.30772E-05		
Total		30	0.0025			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-0.0210	0.0060	-3.4976	0.0016	-0.0333	-0.0087
LN of 30-Yr Treasury	-0.0237	0.0019	-12.5282	5.35652E-13	-0.0276	-0.0198
A-Rated Spread	0.4640	0.1592	2.9157	0.0069	0.1380	0.7900

Intercept	-2.10%
LN of 30-Yr Treasury	8.64% =(-0.0237*LN(2.60%))
A-Rated Spread	0.63% =(0.4640*1.36%)
Risk Premium	7.18%
Current 30-Yr Treasury	2.60%
Cost of Equity	9.78%

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Alternative Risk Premium Analysis Using Baa-Rated Utility Bond Yield Spreads

SUMMARY OUTPUT

Regression Stat	istics					
Multiple R	0.9185					
R Square	0.8436					
Adjusted R Square	0.8324					
Standard Error	0.0038					
Observations	31					
ANOVA						
	df	SS	MS	F	Significance F	
Regression	2	0.0021	0.0011	75.5198	5.2351E-12	-
Residual	28	0.0004	1.41E-05			
Total	30	0.0025				_
					· · · · ·	
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-0.0160	0.0058	-2.7545	0.0102	-0.0279	-0.0041
LN of 30-Yr Treasury	-0.0221	0.0021	-10.7119	2.06E-11	-0.0263	-0.0179
Baa-Rated Spread	0.3358	0.1385	2.4249	0.0220	0.0521	0.6195
Intercent	1 60%					
Intercept	~1.00%	-(0 0004*LNI/0	600())			
Liv of 30-17 Treasury	8.06%	=(-0.0221~LIN(2.	60%))			
Baa-Rated Spread	0.70%	_=(0.3358*2.09%)			
Risk Premium	7.17%					
Current 30-Yr Treasury	2.60%					

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Accuracy of interest Rate Forecasts [Long-Term Treasury Bond Yields - Projected Vs. Actual]

	•	Publication Data			Actual Yield	Projected Yield
		Prior Quarter	Projected	Projected	In Projected	Higher (Lower)
Lîne	Date	Actual Yield	Yield	Quarter	Quarter	Than Actual Yield
		(1)	(2)	{3}	(4)	(0)
	0	5 0 V		10.02	E 64	0.2%
1	Dec-00	5.6%	5.6%	10, 02	0.0% 5.0%	-0.25
2	Mar-01	0./%) 5./W	0.071	20,02	5,679	-0.279
3	JUN-01	5.4% 5.7M	0.075 £012	302, 02	5.414	0.073
4	Sep-01	5.1%	5,975	40,02	5.1%	0.7%
ŝ	Dec-01	5,575	5.0%	20.03	4.74	1.2%
5	Mar-02	5.375	0.375	20,03	5.2%	1.0%
	Sec M	5.0%	5.0%	40,03	5.2%	0.7%
°	Dec-02	5.0%	57%	10.04	49%	0.8%
10	Dec-02	5 144	5.74	20.04	54%	0.3%
11	100.03	5.0%	5.4%	30.04	5 1%	0.3%
12	540-03	1 746	5.8%	40.04	4 9%	0.9%
13	Dav.03	5.2%	5.9%	10, 05	4.8%	1.1%
4.4	Marchi	5.2%	5.9%	20 05	4 6%	1.4%
15	40-04	4 9%	6.2%	30, 05	4.5%	1.7%
16	San-R4	5.4%	6.0%	40, 05	4.8%	1.2%
17	Dec-04	5.1%	5.8%	10.06	4.6%	1.2%
18	Mar-05	4.9%	5.6%	20,06	5.1%	0.5%
19	400-05	4.8%	5.5%	30, 06	5.0%	0.5%
20	Sec.05	4.6%	5.2%	40,06	4.7%	0.5%
21	Dec-05	4.5%	5.3%	10.07	4.8%	0.5%
22	Mac-06	4.8%	5 1%	20.07	5.0%	0.1%
23	Jun-06	4.6%	5.3%	30, 07	4.9%	0.4%
24	Sec.06	5 1%	5.2%	40.07	4.6%	0.6%
25	Dec-06	5.0%	5.0%	10.08	4.4%	0.6%
20	Mar-07	4.7%	5.1%	20,08	4.6%	0.5%
20	km_07	4.8%	5 1%	30,08	4.5%	0.7%
28	Sec.07	5.0%	5.2%	40 08	37%	1.5%
20	Dec-07	4.9%	4.8%	10,09	3.5%	1.4%
30	Mac.08	4.6%	4.8%	20, 09	4.0%	0.8%
31	.km.08	4.4%	4.9%	30,09	43%	0.6%
32	Sec.08	4.6%	5 1%	40,09	4 3%	0.8%
33	040-08	4.5%	4.6%	10 10	4.6%	0.0%
34	1126.00	3.7%	A 1%	20 10	4 4%	-0.3%
25	hm-09	3.5%	4.6%	30 10	3.9%	0.8%
35	Sec.09	4.0%	5.0%	40.10	4.2%	0.8%
37	Dec.09	4.3%	5 0%	10 11	46%	0.4%
30	Mar. 10	4.3%	5 2%	20 11	4 3%	0.9%
30	.5m_10	4.6%	5.2%	30.11	3.7%	1.5%
30	Cao 10	4.6%	174	40 11	3.0%	1.7%
41	Dec. 10	3.9%	4.6%	10.12	3.1%	1.5%
42	Mac.11	4.2%	5 1%	20, 12	2.9%	2.2%
43	.80.11	4.6%	5.2%	30, 12	2.8%	2.5%
44	Sec.11	4.3%	4 2%	40 12	29%	1.3%
45	Dec-11	3.7%	3.8%	10 13	3.1%	0.7%
40	Mar.12	3.0%	3.8%	20, 13	32%	0.7%
47	Jun 12	3 1%	37%	30, 13	3.7%	0.0%
48	Sec. 12	2 94	34%	40 13	38%	-0.4%
40	Dec. 12	2.8%	3 4%	10, 14	3.7%	-0.3%
50	Way-13	2.9%	36%	20, 14	3.4%	0.2%
51	Jun-13	3.1%	3.7%	30, 14	3.3%	0.4%
52	Sec-13	3.2%	4.2%	4Q, 14	3.0%	1.2%
53	Dec-13	3.7%	4.2%	10, 15	2.6%	1.7%
54	Mar-14	3.8%	4.4%	20 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	Jan-15	3.0%	4.0%	2Q 16		
59	Feb-15	3.0%	3.7%	2Q 16		
60	Mar 15	3.0%	3.7%	2Q 16		
61	Apr-15	2.6%	3.7%	3Q 16		
62	May-15	2.6%	3.7%	3Q 16		
63	Jun 15	2.6%	3.7%	3Q 16		
64	Ju-15	2.7%	4.0%	4Q 16		
65	Aug-15	2.9%	3.9%	4Q 16		
68	Sep-15	2.9%	3.8%	4Q 16		
67	Oct-15	2.8%	3.9%	10 17		
68	Nov-15	2.8%	3.8%	10 17		
69	Dec-15	2.8%	3.7%	1Q 17		
70	Jan-15	3.0%	3,8%	2Q 17		
71	Feb-16	3.0%	3.7%	2Q 17		
72	Mar-16	3.0%	3.5%	2Q 17		
73	An 16	2.7%	3.6%	3Q 17		
74	May-16	2.7%	3.5%	3Q 17		
75	Jun-18	2.7%	3.4%	3Q 17		

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

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