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## **BEFORE THE**

## FLORIDA PUBLIC SERVICE COMMISSION

IN RE: PETITION FOR RATE INCREASE BY FLORIDA POWER & LIGHT COMPANY

**DOCKET NO. 160021-EI** 

Direct Testimony and Exhibits of

Michael P. Gorman

On behalf of

**Federal Executive Agencies** 

July 7, 2016



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Exhibit MPG-1 through Exhibit MPG-21

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## **Direct Testimony of Michael P. Gorman**

1		I. INTRODUCTION AND SUMMARY
2	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
3	Α	Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,
4		Chesterfield, MO 63017.
5		
6	Q	WHAT IS YOUR OCCUPATION?
7	Α	I am a consultant in the field of public utility regulation and a Managing Principal of
8		Brubaker & Associates, Inc., energy, economic and regulatory consultants.
9		
10	Q	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.
11	Α	This information is included in Appendix A to this testimony.
12		
13	Q	ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?
14	Α	This testimony is presented on behalf of Federal Executive Agencies ("FEA"). FEA
15		consists of certain agencies of the United States Government which have offices,
16		facilities, and/or installations in the service area of Florida Power & Light Company
17		("FPL" or "Company") and purchase electric utility service from FPL.

### Q WHAT IS THE SUBJECT MATTER OF YOUR TESTIMONY?

My testimony will address the current market cost of equity, and resulting overall rate of return, for FPL. In my analyses, I consider the results of several market models, the current economic environment and outlook for the electric utility industry, as well as the financial integrity of FPL given my recommended return on equity. I will also respond to FPL witness Mr. Robert Hevert's recommended return on equity of 11.00%.

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

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# PLEASE SUMMARIZE YOUR RECOMMENDATIONS AND CONCLUSIONS ON RATE OF RETURN.

I recommend the Florida Public Service Commission ("Commission") award a return on common equity of 9.25%, which is at the midpoint of my recommended range of 8.90% to 9.60%. My recommended return on equity will fairly compensate FPL 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.

Based on my recommended return on equity and the Company's capital structure and embedded cost of debt, I recommend an overall rate of return of 5.56% as developed on my Exhibit MPG-1.

Finally, I will also comment on the unreasonableness of the return on equity recommendations and supporting studies offered by FPL witness Mr. Robert Hevert.

## 

Α

## **II. RATE OF RETURN**

### Q PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.

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 begin my estimate of a fair return on equity by reviewing regulatory authorized returns on equity, the market's 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 of the risk characteristics of regulated utility investments in general, which is then used to produce a refined estimate of the market's return requirement for assuming investment risk similar to FPL'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.

Based on this review of credit outlooks and stock price performance, I 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.

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# DO YOU HAVE ANY COMMENTS FOR FPL WITNESS MORAY DEWHURST'S PROPOSAL FOR A 50 BASIS POINTS RETURN ON EQUITY PERFORMANCE ADDER?

Yes. At pages 27-31 of his testimony, Mr. Dewhurst outlines his rationale for adding 50 basis points to FPL's authorized return on equity as a performance adder. The justification largely reflects his belief that FPL is a low-cost provider of high quality,

reliable service. He also outlines that FPL has been compliant with environmental regulations on generation emissions, and has been recognized for customer satisfaction.

Q

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# IS FPL'S PROPOSED 50 BASIS POINT RETURN ON EQUITY PERFORMANCE ADDER REASONABLE?

No. The Company's proposal for a 50 basis points return on equity adder for these factors simply is not justified. FPL has been provided the privilege of providing a monopolistic or franchise service territory to retail customers in Florida. This obligation requires FPL to provide high quality, reliable service at competitive rates. Providing FPL an opportunity to earn a market-based return on equity capital will provide fair compensation to its investors, will maintain its financial integrity, and allow it access to capital to fund necessary plant investments to modernize its infrastructure and maintain its service reliability and quality. It is expected that FPL will meet these obligations to its customers based on just and reasonable rates.

Mr. Dewhurst simply has not provided any justifications for receiving a significant reward of 50 basis points for simply providing the service expected for a monopolistic or franchise provider in Florida. Mr. Dewhurst's proposal for a 50 basis point return on equity adder should be rejected.

I would also note that a 50 basis point adder is significant. The increase in the 2017 revenue requirement through a 50 basis point return on equity adder is about \$120 million per year based on the Company's \$32.5 billion jurisdictional 2017 rate base, as listed on its Schedule A-1. The revenue requirement impact of a 50 basis point return on equity adder reflects both the increase in the operating income, and

the related income tax expense. The Company's proposal for a performance adder to the return on equity is excessive, and should be denied.<sup>1</sup>

 Α

## II.A. Electric Industry Authorized Returns on Equity, Credit Strength, and Access to Capital

Q PLEASE DESCRIBE RECENT EVIDENCE ON AUTHORIZED RETURNS ON EQUITY FOR ELECTRIC UTILITIES, ELECTRIC UTILITIES' CREDIT STANDING, AND ELECTRIC UTILITIES' ACCESS TO CAPITAL TO FUND INFRASTRUCTURE INVESTMENT.

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. Specifically, Regulatory Research Associates ("RRA") summarizes its review of recent authorized returns on equity for regulated utility companies in its April 15, 2016 publication "Major Rate Case Decisions – January-March 2016". RRA stated as follows:

The average ROE authorized <u>electric</u> utilities was 10.26% in the first quarter of 2016, compared to 9.85% in 2015. There were 8 electric ROE determinations in the first three months of 2016, versus 30 in all of 2015. We note that the data includes several surcharge/rider generation cases in Virginia that incorporate plant-specific ROE premiums. Virginia statutes authorize the State Corporation Commission to approve ROE premiums of up to 200 basis points for certain generation projects (see the Virginia Commission Profile). Excluding from the data these Virginia surcharge/rider generation cases that utilize an ROE premium, <u>the average authorized electric ROE was 9.68% for the first quarter of 2016 compared to 9.58% for full year 2015</u>. The average ROE authorized <u>gas</u> utilities was 9.48% in the first quarter of 2016 versus 9.6% in all of 2015. There were 6 gas

<sup>&</sup>lt;sup>1</sup>\$32.5 billion rate base, change in pretax rate of return of 0.37% increases the revenue requirement by \$151.1 million.

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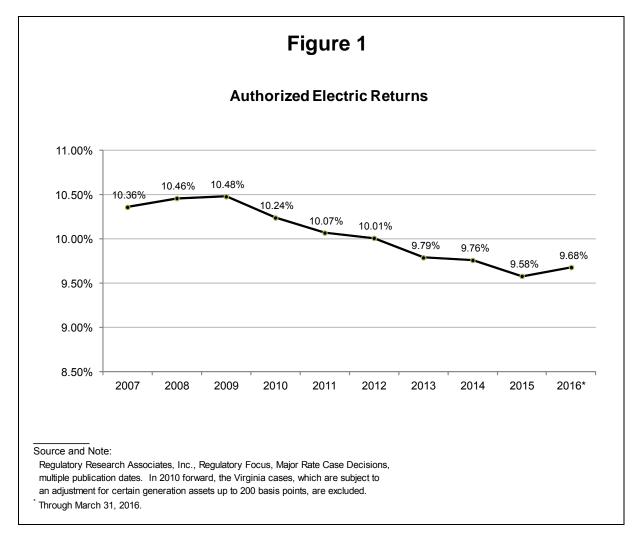
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cases that included an ROE determination in the first three months of 2016, compared to 16 in 2015.<sup>2</sup>



As illustrated on Figure 1 above, excluding these Virginia rider decisions, the authorized electric return on equity in 2013 and 2014 was approximately 9.8%, and dropped to 9.6% to 9.7% in 2015 and 2016.

This decline in authorized returns on equity for utilities follows the decline in capital market costs. Importantly, with the declines in capital market costs and authorized equity returns, utilities are maintaining strong investment grade credit

<sup>&</sup>lt;sup>2</sup>Regulatory Research Associates *Regulatory Focus*, "Major Rate Case Decisions – January-March 2016," April 15, 2016, emphasis added indicated by double underlining.

standing, and have been able to attract large amounts of capital at low costs to fund
very large capital programs.

# Q HOW ARE THE RECENTLY AUTHORIZED RETURNS PERCEIVED BY THE CREDIT RATING AGENCIES?

A Credit rating agencies recognize the declining trend in authorized returns and the expectation that regulators will continue lowering the returns for U.S. utilities while maintaining a stable credit profile. Specifically, Moody's states:

# Lower Authorized Equity Returns Will Not Hurt Near-Term Credit Profiles

The credit profiles of US regulated utilities will remain intact over the next few years despite our expectation that regulators will continue to trim the sector's profitability by lowering its authorized returns on equity (ROE). Persistently low interest rates and a comprehensive suite of cost recovery mechanisms ensure a low business risk profile for utilities, prompting regulators to scrutinize [sic] their profitability, which is defined as the ratio of net income to book equity. We view cash flow measures as a more important rating driver than authorized ROEs, and we note that regulators can lower authorized ROEs without hurting cash flow, for instance by targeting depreciation, or through special rate structures. Regulators can also adjust a utility's equity capitalization in its rate base. All else being equal, we think most utilities would prefer a thicker equity base and a lower authorized ROE over a small equity layer and a high authorized ROE.

» Utilities' actual financial performance remains stable. Earned ROEs, which typically lag authorized ROEs, have not fallen as much as authorized returns in recent years. Since 2007, vertically integrated utilities, transmission and distribution only utilities, and natural gas local distribution companies have maintained steady earned ROE's in the 9% - 10% range. Holding companies with primarily regulated businesses also earned ROEs of around 9% - 10%, while returns for holding companies with diversified operations, namely unregulated generation, have fallen from 11% (over the past seven year average) to around 9% today.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup>*Moody's Investors Service*, "US Regulated Utilities: Lower Authorized Equity Returns Will Not Hurt Near-Term Credit Profiles," March 10, 2015, emphasis added.

Similarly, in a more recent report, S&P asserts that steady authorized returns in the mid 9.0% range are in line with earned returns. Specifically, 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-to-date test years, flexible and dynamic tariff clauses for major expense items, and alternative ratemaking approaches that allow faster rate recognition for some new investments.

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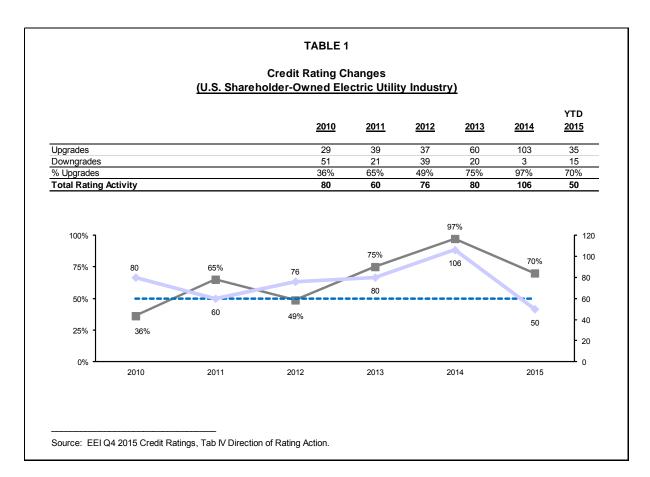
# Q PLEASE DESCRIBE THE TREND IN CREDIT RATINGS IN THE ELECTRIC UTILITY INDUSTRY OVER THE LAST FIVE YEARS.

Credit analysts are fully aware of regulatory decisions including authorized returns on equity. Hence, changing credit standing fully reflects regulatory decisions including the authorized returns on equity. With this as a backdrop, it is significant to recognize that electric utility credit standing has been improving over the last five to six years.

As shown below in Table 1, 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).

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



As noted above in Table 1, the upgrades in utility credit ratings started outpacing downgrades in 2011, and more recently, the number of upgrades substantially exceeds the amount of downgrades. For example, in 2014, there are 103 upgrades and only three downgrades. In 2015, the number of upgrades were more than twice the number of downgrades (at 35 upgrades and 15 downgrades).

Moody's comments on this improved credit standing of regulated utility companies in its publication, "Regulation Remains a Credit Supportive Ratings Driver Two Years After Sector-Wide Upgrades." Moody's stated as follows:

## **Summary**

In January and February 2014, we upgraded the ratings of 147 US regulated electric and gas utility debt issuers as part of a sector-wide rating action that reflected our more <u>favorable view of the relative credit supportiveness of US utility regulation</u>. Factors supporting this view include better cost-recovery provisions, reduced regulatory lag,

and generally fair and open relationships between utilities and their state regulators.  $^{\!5}$ 

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# WITH DECLINING AUTHORIZED RETURNS ON EQUITY AND STABLE CREDIT, HAVE UTILITIES BEEN ABLE TO SUPPORT LARGE CAPITAL PROGRAMS?

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."

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

<sup>5</sup>Moody's Investor Service: "U.S. Regulated Utilities: Regulation Remains a Credit Supportive Ratings Driver Two Years After Sector-Wide Upgrades," November 6, 2015, emphasis added.

<sup>7</sup>*Id.*, pages 8 and 11.

<sup>&</sup>lt;sup>6</sup>Edison Electric Institute, 2015 Financial Review, Annual Report of the U.S. Investor-Owned Electric Utility Industry, page 17.

## 1 Q WHY DO YOU BELIEVE THE VALUATION OF ELECTRIC UTILITY SECURITIES

### IS ROBUST?

This robust valuation is an indication that utilities can sell securities at high prices, which is a strong indication that they can access capital under reasonable terms and conditions, and at relatively low cost. As shown on my Exhibit MPG-2, the historical valuation of the electric utilities included in Mr. Hevert's proxy group based on a price-to-earnings ratio, price-to-cash flow ratio, and market-to-book ratio, indicate that utility security valuations today are very strong and quite robust relative to the last 15 years. Again, the strong valuations of utility stocks indicate that utilities have access to equity capital under reasonable terms, and the strong valuation is an indication that the cost of equity capital is very low.

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## II.B. Regulated Utility Industry Market Outlook

- Q PLEASE DESCRIBE THE CREDIT RATING OUTLOOK FOR REGULATED UTILITIES.
  - Regulated utilities' credit ratings have improved over the last few years and the outlook has been labeled "Stable" by credit rating agencies. Credit analysts have also observed that utilities have strong access to capital at attractive pricing (i.e., low capital costs), which has supported very large capital programs.

Standard & Poor's ("S&P") recently published a report titled "Corporate Industry Credit Research: Industry Top Trends 2016, Utilities." In that report, S&P noted the following:

**Ratings Outlook.** Stable 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.

1 2 3	<ul> <li>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.</li> </ul>
4 5 6 7 8 9	• 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. <sup>8</sup>
11	Similarly, Fitch states:
12 13 14 15 16 17 18 19 20	<b>Stable Financial Performance:</b> 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.
21 22 23 24 25 26 27 28 29	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.
30 31 32 33 34 35 36	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.
37	* * *
38 39 40 41	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

<sup>\*</sup>Standard & Poor's Ratings Services: "Corporate Industry Credit Research: Industry Top Trends 2016, Utilities," December 9, 2015, at 22, emphasis added.

1 and Rentl and FFO [Funds From Operations] coverage ratios were 2 5.6x and 5.9x, respectively, for the LTM ended second-quarter 2015, 3 while adjusted debt/EDITDAR and FFO-adjusted leverage were 3.5x 4 and 3.4x, respectively.9 5 Moody's recent comments on the U.S. Utility Sector state as follows: 6 Our outlook for the US regulated utilities industry is stable. This outlook reflects our expectations for fundamental business conditions in the 7 8 industry over the next 12 to 18 months. 9 » The credit-supportive regulatory environment is the main 10 reason for our stable outlook. We expect that the relationship 11 between regulators and utilities in 2016 will remain credit-supportive, 12 enabling utilities to recover costs in a timely manner and maintain stable cash flows. 13 14 » We estimate that the ratio of cash flow from operations (CFO) to 15 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 16 17 mechanisms and continued expense management will help utilities 18 offset a lack of growth in electricity demand and lower allowed returns 19 on equity, enabling financial metrics to remain stable. Tax benefits tied to the expected extension of bonus depreciation will also support CFO-20 to-debt ratios. 21 22 23 » Utilities are increasingly using holding company leverage to 24 **drive returns, a credit negative.** Although not a driver of our outlook, 25 utilities are using leverage at the holding company level to invest in other businesses, make acquisitions and earn higher returns on equity, 26 27 which could have negative implications across the whole family. 10 28 29 Q PLEASE DESCRIBE UTILITY STOCK PRICE PERFORMANCE OVER THE LAST 30 SEVERAL YEARS. 31 Α As shown in the graph below, SNL Financial has recorded utility stock price 32 performance compared to the market. The industry's stock performance data from 33 2004 through March 2016 shows that the SNL Electric Company Index has

<sup>&</sup>lt;sup>9</sup> Fitch Ratings: "U.S. Utilities, Power & Gas Data comparator," September 21, 2015, at 1 and 7, emphasis added.

<sup>&</sup>lt;sup>10</sup>*Moody's Investors Service*: "2016 Outlook – US Regulated Utilities: Credit-Supportive Regulatory Environment Drives Stable Outlook," November 6, 2015, at 1, emphasis added.

outperformed the market in downturns and trailed the market during recovery. This relatively stable price performance for utilities supports my conclusion that utility stock investments are regarded by market participants as a moderate- to low-risk investment.

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# HAVE ELECTRIC UTILITY INDUSTRY TRADE ORGANIZATIONS COMMENTED ON ELECTRIC UTILITY STOCK PRICE PERFORMANCE?

Yes. In its 4th Quarter 2015 Financial Update, The Edison Electric Institute ("EEI") 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 short-term 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

1 inflation and economic strength than by the Fed's short-term rate 2 policy. 3 4 **Regulated Fundamentals Remain Stable** 5 The rate stability offered by state regulation and the ability to recover 6 rising capital spending in rate base shield regulated utilities from the 7 volatility in the competitive power arena and turn the growth of 8 renewable generation (and the resulting need for new and upgraded 9 transmission lines) into a rate base growth opportunity for many 10 industry players. 11 12 In the shorter-term, analysts continue to see opportunity for 4-6% earnings growth for regulated utilities in general along with prospects 13 14 for slightly rising dividends (with a dividend yield now at about 4% for 15 the industry overall). That formula has served utility investors quite 16 well in recent years, delivering long-term returns equivalent to those of 17 the broad markets but with much lower volatility. Provided state 18 regulation remains fair and constructive in an effort to address the 19 interests of ratepayers and investors, it would appear that the industry can continue to deliver success for all stakeholders, even in an 20 21 environment of flat demand and considerable technological change.<sup>11</sup> 22 23 II.C. FPL Investment Risk 24 Q PLEASE DESCRIBE THE MARKET'S ASSESSMENT OF THE INVESTMENT RISK 25 OF FPL. 26 Α The market's assessment of FPL's investment risk is described by credit rating 27 analysts' reports. FPL's current corporate bond ratings from S&P and Moody's are A-28 and A1, respectively. FPL's outlook from both credit rating agencies is "Stable." 29 Specifically, S&P states: 30 Outlook: Stable 31 The outlook on Florida Power & Light Co. (FPL) is stable and is based 32 on the outlook of its parent, NextEra Energy Inc. (NEE). The stable 33 rating outlook on NextEra and its subsidiaries, Florida Power & Light

<sup>&</sup>lt;sup>11</sup>EEI Q4 2015 Financial Update: "Stock Performance" at 4 and 6, emphasis added.

Co. and NextEra Energy Capital Holdings Inc., reflects our expectation that the company will preserve its "strong" business risk profile while ensuring that its financial risk profile remains well within the "intermediate" category at all times, albeit toward the lower end of the category. The stable outlook is also predicated on the company effectively managing its growth and capital spending so that regulated operations continue to contribute about 60% of operating income. Finally, the stable outlook anticipates that NextEra will fund the proposed merger with Hawaiian Electric Industries in a credit-neutral manner, while receiving approval to close the merger without any restrictive regulatory provisions or requirements.

12 \* \* \*

### **Business Risk: Excellent**

We assess FPL's business risk profile as "excellent," accounting for the company's regulated utility operations that benefit from a constructive regulatory framework, which provides for timely investment and fuel cost recovery. FPL has historically managed its regulatory risk effectively, resulting in earned returns that are consistently close to or at the authorized levels. The service territory is large and lacks geographic and regulatory diversity. FPL's customer base is large, with no meaningful industrial exposure and above-average growth. The company has material exposure to natural gasfired generation, which, in combination with low natural gas prices and the company's efficient operations, contributes to overall competitive rates for its customers.

### Financial Risk: Intermediate

We assess FPL's financial risk profile as being in the "intermediate" category using the medial volatility financial ration benchmarks. Under our base-case scenario we expect that FPL's financial profile will benefit largely from recovery of invested capital and load/customer growth, with FFO to debt that averages about 33% over the next few years and debt to EBITDA that remains consistently below 2.5x. 12

## Similarly, Moody's states:

### **Summary Rating Rationale**

FPL is one of the strongest regulated electric utilities in the US. The political and regulatory environment for Florida utilities is <u>stable</u>, allaying some of the uncertainties that this year's rate case will entail. FPL has good cost recovery mechanisms that produce consistently above-average financial performance. Its large, mainly residential service territory is growing, and the economic recovery will result in

<sup>&</sup>lt;sup>12</sup> Standard & Poor's RatingsDirect: "Summary: Florida Power & Light Co.," June 12, 2015, at 3-4, emphasis added.

1 organic growth in sales and a need for new infrastructure. To meet 2 those needs. FPL continues to make substantial capital investments in 3 its rate base, which will increase earnings as they are completed. 4 5 **Rating Outlook** 6 The stable rating outlook reflects the our expectation that the current 7 rate case will result in a constructive outcome that will maintain its existing credit-supportive ratemaking features. The ratings assume its 8 9 timely cost recovery mechanisms and regular capital contributions from NextEra will maintain FPL's strong credit metrics, including CFO 10 Pre-WC-to-debt in the low to mid 30% range.<sup>13</sup> 11 12 Fitch also opines as follows: 13 Fitch Ratings has affirmed the Issuer Default Rating (IDR) for Florida 14 Power & Light Company (FPL) at 'A' with a Stable Rating Outlook. 15 FPL's ratings reflect the predictable nature of cash flows from 16 regulated electric operations, a favorable outcome to the 2012 base 17 rate case that provides for four years of regulatory certainty, recovering 18 electric sales in its service territory after a prolonged trough, management focus on O&M cost containment that is expected to drive 19 20 returns close to the upper end of the authorized return on equity (ROE) 21 range, and a strong balance sheet and liquidity profile. The ratings also 22 reflect high-capex investments over 2015-18 as the utility spends on 23 new generation and other infrastructure improvements.<sup>14</sup> 24 III. FPL'S PROPOSED CAPITAL STRUCTURE 25 26 WHAT IS FPL'S PROPOSED CAPITAL STRUCTURE? Q 27 Α FPL's proposed capital structure is shown below in Table 2. This capital structure

<sup>13</sup>*Moody's Investors Service*: "Credit Opinion: Florida Power & Light Company," March 31, 2016 at 1-2, provided by FPL in response to OPC's 1st POD No. 12, emphasis added.

ending the test year period December 31, 2017 is sponsored by FPL witnesses Mr.

Dewhurst and Mr. Hevert. Mr. Dewhurst proposes using an investor-supplied capital

structure consisting of 59.6% equity component as approved in FPL's adjusted capital

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<sup>&</sup>lt;sup>14</sup> Fitch Ratings: "Fitch Affirms Florida Power & Light Co. at 'A'; Outlook Stable," December 3, 2015 at 1, provided by FPL in response to OPC's 1st POD No. 9, emphasis added.

in a manner similar to the adjustments applied in prior regulatory proceedings.

(Dewhurst Direct at 24).

TABLE 2 <u>Reasonable Capital Structure</u> (2017 Test Year)				
<u>Description</u>	Regulatory <u>Weight</u> (1)	Investor <u>Weight</u> (2)		
Long-Term Debt Customer Deposits	28.76% 1.25%	37.96%		
Common Equity	45.13%	59.55%		
Short-Term Debt	1.88%	2.49%		
Deferred Income Tax	22.65%			
Investment Tax Credit Total	<u>0.33%</u> 100.00%	100.00%		
Source: Schedule D-1a.				

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# Q IS FPL'S PROPOSED CAPITAL STRUCTURE REASONABLE?

No. FPL's proposed capital structure has a very large component of common equity relative to total investor capital. As shown in Table 2 above, FPL's total common equity ratio of total investor capital is 59.55%. For industry averages, the capital structures used to set rates generally include common equity to total investor capital of closer to 50%. FPL's equity-rich capital structure substantially increases its cost of service with very little benefit to retail customers. Specifically, its bond ratings of A-

<sup>&</sup>lt;sup>15</sup>Regulatory Research Associates *Regulatory Focus*, "Major Rate Case Decisions – January-March 2016," April 15, 2016, common equity ratio for electric utilities 2002-2016.

and A1 are approximately at the high-end of the range of most bond ratings for electric utility companies.<sup>16</sup>

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

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

A reasonable mix of debt and equity is necessary in order to balance FPL's financial risk, support an investment grade credit rating, and permit FPL 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.

For a utility managing its capital structure, it is important to balance its obligations to minimize its cost of capital, while at the same time support its financial

<sup>&</sup>lt;sup>16</sup>Edison Electric Institute ("EEI") in a fourth quarter 2015 publication on electric utility credit ratings, listed the bond ratings for its universe of electric utility companies based on EEI's assessment of them being "Regulated," (above 80% of total assets) "Mostly Regulated" (50%-80% of total assets) or "Diversified" (below 50% of total assets). For "Regulated" and "Mostly Regulated" utilities, 85-90% of all electric utilities had bond ratings in the range of A- to BBB. While FPL's bond rating falls at the high end of this range, it nevertheless is not distinctively different than the electric utility industry.

integrity and access to capital. This balance requires a utility to manage its capital structure to maintain a reasonable balance of common equity and debt such that cost of capital is minimized and its credit rating is preserved.

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# ARE YOU PROPOSING ANY ADJUSTMENTS TO MODIFY FPL'S EXCESSIVE COMMON EQUITY RATIO?

No. However, FPL's capital structure is not reasonable and unnecessarily inflates the claimed revenue deficiency in this proceeding because its common equity component of total capital is unreasonably high.

The Commission should carefully weigh the balance of a fair return on equity between the Company and its retail customers. Because FPL's capital structure has an excessive weight of common equity, the Commission should award a return on equity that is lower to reflect this reduction in financial risk, and the need for a lower rate of return to produce more balance between customers and shareholders.

For these reasons, I will consider FPL's excessive common equity weighted capital structure in recommending a fair risk-adjusted rate of return on equity for FPL in this proceeding.

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# DID THE COMPANY PROPOSE TO USE ITS CAPITAL STRUCTURE FOR SETTING THE REVENUE REQUIREMENT IN 2019 FOR ITS OKEECHOBEE LSA FACILITY ("OKEECHOBEE")?

No. The Company proposes to set the overall rate of return for Okeechobee based on its investor capital weights only.<sup>17</sup> The Company is proposing to ignore all customer-supplied capital including customer deposits, and zero-cost capital

<sup>&</sup>lt;sup>17</sup>Okeechobee Clean Energy Center Limited Scope, Vol. 1, Schedule D-1a.

1		components related to deferred income taxes and investment tax credits. This has
2		the effect of increasing the rate of return that would be applied to the \$1.06 billion
3		investment projected at May 31, 2020. <sup>18</sup>
4		
5	Q	DO YOU BELIEVE THE COMPANY'S PROPOSAL TO SET THE REVENUE
6		REQUIREMENT OF THE OKEECHOBEE INVESTMENT ON ONLY INVESTOR
7		CAPITAL WOULD BE REASONABLE?
8	Α	No. The Company proposes to adjust rates to reflect this new investment in 2019.
9		Initial rates in this case will go into effect in 2017. Over this time period, the
10		Company's invested capital will change dramatically based on the rates set in 2017
11		and modified in 2018. As such, the incremental change in rates in 2019 for this
12		investment should be based on the same capital structure used to develop the
13		revenue requirement for all other plant investment. This is appropriate because the
14		Company is not reflecting changes in invested capital for other rate base items that
15		could offset the need for an increase for the Okeechobee investment as it comes in
16		service in 2019.
17		
18	Q	WHAT IS THE REVENUE REQUIREMENT IMPACT IF THE COMPANY'S
19		REGULATORY CAPITAL STRUCTURE IS USED TO DEVELOP THE 2019
20		REVENUE REQUIREMENT FOR THE OKEECHOBEE INVESTMENT?
21	Α	Using the Company's proposed capital structure for 2018 will reduce the revenue
22		requirement for the Okeechobee investment by approximately \$34.8 million.
23		
24		

<sup>&</sup>lt;sup>18</sup>*Id.* at A-1.

## 2 WHAT IS THE COMPANY'S EMBEDDED COST OF DEBT? Q 3 Α Mr. Dewhurst is proposing an embedded cost of debt of 4.62% as shown on 4 Schedule D-1a. However, on his Schedule D-4a, the cost of debt is 4.57%. 5 6 Q DID FPL INCLUDE PROJECTED NEW BOND ISSUANCES IN ITS EMBEDDED 7 **COST OF DEBT ESTIMATE?** 8 Α Yes. Company witness Dewhurst includes the following projected debt issuances for 9 the test year period: 10 4.75% \$300 million 30-year debt with issuance, March 2016; 11 • 6.16% \$500 million 30-year debt with issuance, March 2017; and 12 • 6.16% \$800 million 30-year debt with issuance, November, 2017. 13 IS FPL'S PROJECTED PRICING FOR THESE BOND ISSUES REASONABLE? 14 Q 15 Α The Company should update its filing to reflect actual debt issuance costs (interest 16 rate and expenses) after the new debt issuance occurs. Based on FPL's filing the 17 most recent debt issuances are: 18 • 3.85% \$600 million 10-year First Mortgage Bonds as of November 2015, and 19 4.05% \$500 million 30-year First Mortgage Bonds as of September 2014. 20 The Company's projected debt issuances of 6.16% are significantly above the current 21 market cost of debt. 22 23 24 25

**III.A.** Embedded Cost of Debt

## 1 Q ARE YOU PROPOSING TO ADJUST FPL'S EMBEDDED DEBT COST ESTIMATE? 2 Α Yes. I revised the Company's projected debt issuances of 6.16% to reflect the 3 current market cost of debt. My adjusted debt cost is developed on my Exhibit 4 MPG-3. The first panel of this exhibit shows the Company's embedded cost of debt as 5 6 developed on Schedule D-4a. I used the most recent 13-week average "A" rated 7 utility yield of 3.96% and the Company's proposed issuance expense adder of 8 0.875% as developed on Schedule F-8. This produced an updated new debt cost of 9 4.835%. Revising the coupon rate of the two projected debt issuances from 6.16% 10 down to 4.835% reduces the embedded debt cost from 4.62% to 4.51% as shown on 11 the second panel of Exhibit MPG-3. 12 13 DO YOU HAVE ANY ADDITIONAL COMMENTS RELATED TO FPL COSTS OF Q 14 CAPITAL? 15 Α Yes. FPL incorrectly calculated the cost of the investment tax credit ("ITC") included 16 in its regulatory capital structure. The Company did not include the short-term debt in 17 the cost of ITC. I recommend setting the ITC cost at the weighted average cost of all 18 investor capital, including short-term debt. 19 20 IV. RETURN ON EQUITY 21 PLEASE DESCRIBE WHAT IS MEANT BY A "UTILITY'S COST OF COMMON Q 22 EQUITY." 23 Α A utility's cost of common equity is the expected return that investors require on an

dividends and through stock price appreciation.

investment in the utility. Investors expect to earn their required return from receiving

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# 1 Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED 2 UTILITY'S COST OF COMMON EQUITY.

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

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

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# PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE FPL'S COST OF COMMON EQUITY.

I have used several models based on financial theory to estimate FPL'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 that have investment risk similar to FPL.

## IV.A. Risk Proxy Group

	2	Q	PLEASE DESCRIBE	HOW Y	YOU IDEN	ITIFIED A	PROXY	UTILITY	GROUP	THA
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3 COULD BE USED TO REASONABLY REFLECT THE INVESTMENT RISK OF FPL

AND USED TO ESTIMATE ITS CURRENT MARKET COST OF EQUITY.

I relied on the same proxy group developed by FPL witness Mr. Hevert, but updated it to review companies with selection criteria. Based on a review of updated information, 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. Two companies began involvement in mergers and acquisitions ("M&A") activity. Dominion Resources was removed because in February 2016 it announced its intent to purchase Questar Corp. Also, Westar Energy was excluded because on May 31, 2016, it announced the intent to be acquired by Great Plains Energy.

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# WHY IS IT IMPORTANT TO EXCLUDE COMPANIES FROM THE PROXY GROUP IF THEY DO NOT HAVE CONSENSUS ANALYSTS' GROWTH RATES PUBLISHED BY ZACKS, SNL FINANCIAL OR REUTERS?

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

# WHY IS IT APPROPRIATE TO EXCLUDE COMPANIES WHICH ARE INVOLVED IN M&A ACTIVITY FROM THE PROXY GROUP?

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.

Moreover, companies generally enter into M&A in order to produce greater shareholder value by combining companies. The enhanced shareholder value normally could not be realized had the two companies not combined.

When companies announce an M&A, the public assesses the proposed merger and develops outlooks on the value of the two companies after the combination based on expected synergies or other value adds created by the M&A.

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

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# 1 Q PLEASE DESCRIBE WHY YOU BELIEVE YOUR PROXY GROUP IS 2 REASONABLY COMPARABLE IN INVESTMENT RISK TO FPL.

The proxy group is shown in Exhibit MPG-4. The proxy group has an average corporate credit rating from S&P of BBB+, which is one notch lower than S&P's corporate credit rating for FPL of A-. The proxy group has an average corporate credit rating from Moody's of Baa1, which is three notches lower than FPL's corporate credit rating from Moody's of A1. Based on this information, I believe my proxy group will produce a conservative return on equity for FPL.

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.

The Company's proposed common equity ratio of 59.6% is significantly higher than the proxy group common equity ratio, which means that my proxy group has higher financial risk than FPL and will produce a conservative return on equity for FPL. Based on these risk factors, I conclude the proxy group reasonably approximates the investment risk of FPL, and it will produce a conservative return on equity for FPL.

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# IV.B. Discounted Cash Flow Model

### Q PLEASE DESCRIBE THE DCF MODEL.

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

1		$P_0 = D_1 + D_2 \dots D_{\infty} $ (Equation 1)
2		$\overline{(1+K)^1}$ $\overline{(1+K)^2}$ $\overline{(1+K)^\infty}$
3		P <sub>0</sub> = Current stock price
4		D = Dividends in periods 1 - ∞
5		K = Investor's required return
6		This model can be rearranged in order to estimate the discount rate or
7		investor-required return, "K." If it is reasonable to assume that earnings and
8		dividends will grow at a constant rate, then Equation 1 can be rearranged as follows:
9		$K = D_1/P_0 + G $ (Equation 2)
10		K = Investor's required return
11		D <sub>1</sub> = Dividend in first year
12		P <sub>0</sub> = Current stock price
13		G = Expected constant dividend growth rate
14		Equation 2 is referred to as the annual "constant growth" DCF model.
15		
16	Q	PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF MODEL.
17	Α	As shown in Equation 2 above, the DCF model requires a current stock price,
18		expected dividend, and expected growth rate in dividends.
19		
20	Q	WHAT STOCK PRICE HAVE YOU RELIED ON IN YOUR CONSTANT GROWTH
21		DCF MODEL?
22	Α	I relied on the average of the weekly high and low stock prices of the utilities in the
23		proxy group over a 13-week period ending on June 10, 2016. An average stock price
24		is less susceptible to market price variations than a spot price. 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.

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

I used the most recently paid quarterly dividend, as reported in *Value Line*. This dividend was annualized (multiplied by 4) and adjusted for next year's growth to produce the D<sub>1</sub> factor for use in Equation 2 above.

# WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR CONSTANT GROWTH DCF MODEL?

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.

<sup>&</sup>lt;sup>19</sup>The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

As predictors of future returns, security analysts' growth estimates have been shown to be more accurate than growth rates derived from historical data.<sup>20</sup> That is, assuming the market generally makes rational investment decisions, analysts' growth projections are more likely to influence investors' decisions which are captured in 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 simple average, or arithmetic mean, of analyst forecasts is a good proxy for market consensus expectations.

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

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

<sup>&</sup>lt;sup>20</sup> See, e.g., David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating Share Yield," *The Journal of Portfolio Management*, Spring 1989.

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

2 A As shown in Exhibit 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.

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# 5 Q DO YOU HAVE ANY COMMENTS ON THE RESULTS OF YOUR CONSTANT 6 GROWTH DCF ANALYSIS?

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

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# HOW DID YOU ESTIMATE A MAXIMUM LONG-TERM SUSTAINABLE GROWTH 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.<sup>21</sup>

<sup>21</sup>Blue Chip Financial Forecasts, June 1, 2016, at 14.

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.

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## IV.C. Sustainable Growth DCF

# Q PLEASE DESCRIBE HOW YOU ESTIMATED A SUSTAINABLE LONG-TERM GROWTH 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 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 Exhibit 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.

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

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

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

A DCF estimate based on these sustainable growth rates is developed in Exhibit

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.

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## IV.D. Multi-Stage Growth DCF Model

### Q HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?

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/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.

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

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.

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

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### PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.

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, which consists of the first five years; (2) a transition period, which consists 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, which reflects 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.

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## WHY IS THE GDP GROWTH PROJECTION A REASONABLE PROXY FOR THE MAXIMUM SUSTAINABLE LONG-TERM GROWTH RATE?

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

The U.S. Department of Energy, Energy Information Administration ("EIA") has observed that utility sales growth tracks the U.S. GDP growth, albeit at a lower level, as shown in Exhibit 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.

1	Q	IS THERE RESEARCH THAT SUPPORTS YOUR POSITION THAT, OVER THE
2		LONG TERM, A COMPANY'S EARNINGS AND DIVIDENDS CANNOT GROW AT
3		A RATE GREATER THAN THE GROWTH OF THE U.S. GDP?
4	Α	Yes. This concept is supported in published analyst literature and academic work.
5		Specifically, in a textbook titled "Fundamentals of Financial Management," published
6		by Eugene Brigham and Joel F. Houston, the authors state as follows:
7 8 9 10 11		The constant growth model is most appropriate for mature companies with a stable history of growth and stable future expectations. Expected growth rates vary somewhat among companies, but dividends for mature firms are often expected to grow in the future at about the same rate as nominal gross domestic product (real GDP plus inflation). <sup>22</sup>
13		The use of the economic growth rate is also supported by investment
14		practitioners as outlined as follows:
15		Estimating Growth Rates
16 17 18 19 20 21		One of the advantages of a three-stage discounted cash flow model is that it fits with life cycle theories in regards to company growth. In these theories, companies are assumed to have a life cycle with varying growth characteristics. Typically, the potential for extraordinary growth in the near term eases over time and eventually growth slows to a more stable level.
22		* * *
23 24 25 26 27 28 29 30		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 <i>Ibbotson Cost of Capital Yearbook</i> . To obtain the economic growth rate, a forecast is made of the growth rate's 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. <sup>23</sup>
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<sup>22</sup> "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.

<sup>&</sup>lt;sup>23</sup>Morningstar, Inc., Ibbotson SBBI 2013 Valuation Yearbook at 51 and 52.

1	Q	IS THERE ANY ACTUAL INVESTMENT HISTORY THAT SUPPORTS THE
2		NOTION THAT THE CAPITAL APPRECIATION FOR STOCK INVESTMENTS WILL
3		NOT EXCEED THE NOMINAL GROWTH OF THE U.S. GDP?
4	Α	Yes. This is evident by a comparison of the compound annual growth of the U.S
5		GDP compared to the geometric growth of the U.S. stock market. Morningstan
6		measures the historical geometric growth of the U.S. stock market over the period
7		1926-2015 to be approximately 5.8%. During this same time period, the U.S. nomina
8		compound annual growth of the U.S. GDP was approximately 6.2%. <sup>24</sup>
9		As such, the compound geometric growth of the U.S. nominal GDP has been
0		higher but comparable to the nominal growth of the U.S. stock market capita
1		appreciation. This historical relationship indicates the U.S. GDP growth outlook is a
12		conservative estimate of the long-term sustainable growth of U.S. stock investments.
13		
14	Q	HOW DID YOU DETERMINE A SUSTAINABLE LONG-TERM GROWTH RATE
15		THAT REFLECTS THE CURRENT CONSENSUS OUTLOOK OF THE MARKET?
16	Α	I relied on the consensus analysts' projections of long-term GDP growth. Blue Chip
17		Financial Forecasts publishes consensus economists' GDP growth projections twice
18		a year. These consensus analysts' GDP growth outlooks are the best available
19		measure of the market's assessment of long-term GDP growth. These analys
20		projections reflect all current outlooks for GDP and are likely the most influential or
21		investors' expectations of future growth outlooks. The consensus economists
22		published GDP growth rate outlook is 4.35% over the next 10 years. <sup>25</sup>
23		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* 

<sup>&</sup>lt;sup>24</sup>Duff & Phelps 2016 Valuation Handbook inflation rate of 3.0% at 2-4, and U.S. Bureau of Economic Analysis, January 29, 2016.

<sup>25</sup>Blue Chip Financial Forecasts, June 1, 2016, at 14.

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%, 26 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.

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

9 A Yes, and these sources corroborate my consensus analysts' projections, as shown below in Table 3.

	TABLE 3	sts_		
Source	<u>Term</u>	Real GDP	<u>Inflation</u>	Nominal GDP
EIA – Annual Earnings Outlook <sup>27</sup>	25 Yrs	2.4%	1.8%	4.2%
Congressional Budget Office <sup>28</sup>	10 Yrs	2.0%	2.0%	4.0%
Moody's Analytics <sup>29</sup>	30 Yrs	2.0%	2.0%	4.1%
Social Security Administration <sup>30</sup>	50 Yrs			4.5%
The Economist Intelligence Unit <sup>31</sup>	35 Yrs	1.9%	2.0%	3.9%
Blue Chip Financial Forecasts	5-10 Yrs	2.2%	2.1%	4.3%

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The EIA in its *Annual Energy Outlook* projects real GDP out until 2040. In its 2015 Annual Report, the EIA projects real GDP through 2040 to be in the range of 1.8% to 2.9%, with a midpoint or reference case of 2.4%, and a long-term GDP price

<sup>&</sup>lt;sup>26</sup> Id.

inflation projection of 1.8%. The EIA data supports a long-term nominal GDP growth outlook of 4.2%.<sup>27</sup>

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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%.<sup>28</sup> The CBO 10-year outlook for nominal GDP based on this projection is 4.0%.

Moody's Analytics also makes long-term economic projections. In its recent 30-year outlook to 2045, Moody's Analytics is projecting real GDP growth of 2.0% with GDP inflation of 2.0%.<sup>29</sup> Based on these projections, Moody's is projecting nominal GDP growth of 4.1% over the next 30 years.

The Social Security Administration makes long-term economic projections out to 2090. The Social Security Administration's nominal GDP projection, under its intermediate cost scenario of 50 years, is 4.5%.<sup>30</sup> This projection is in line with the consensus economists.

The Economist Intelligence Unit, a division of *The Economist* and a third-party data provider to SNL Financial, makes a long-term economic projection out to 2050.<sup>31</sup> The Economist Intelligence Unit is projecting real GDP growth of 1.9% with an inflation rate of 2.0% out to 2050. The real GDP growth projection is in line with the consensus economists. The long-term nominal GDP projection based on these outlooks is approximately 3.9%.

The real GDP and nominal GDP growth projections made by these independent sources support the use of the consensus economist 5-year and 10-year

<sup>&</sup>lt;sup>27</sup>DOE/EIA Annual Energy Outlook 2015 With Projections to 2040, January 2016, at 4 and

<sup>&</sup>lt;sup>28</sup>CBO: The Budget and Economic Outlook: 2016 to 2026, January 2016, at 140.

<sup>&</sup>lt;sup>29</sup>www.economy.com, Moody's Analytics Forecast, January 6, 2016.

<sup>&</sup>lt;sup>30</sup>www.ssa.gov, "2015 OASDI Trustees Report," Table VI.G4.

<sup>&</sup>lt;sup>31</sup>SNL Financial, Economist Intelligence Unit, downloaded on January 13, 2016.

1	projected	GDP	growth	outlooks	as	а	reasonable	estimate	of	market	participant	S
2	long-term	GDP (	growth o	utlooks.								

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# WHAT STOCK PRICE, DIVIDEND, AND GROWTH RATES DID YOU USE IN YOUR MULTI-STAGE GROWTH DCF ANALYSIS?

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 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, which starts in year 11, I used a 4.35% long-term sustainable growth rate, which is based on the consensus economists' long-term projected nominal GDP growth rate.

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

As shown in Exhibit 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.

#### PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.

A The results from my DCF analyses are summarized in Table 4 below:

TABLE 4
Summary of DCF Results

<b>—</b>	_	Group
<u>Description</u>	<u>Average</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 that my DCF studies support a return on equity of 8.9%, which is primarily based on my proxy group median for the constant growth DCF result.

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#### IV.E. Risk Premium Model

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

This model is based on the principle that 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 more risky than bond securities.

This risk premium model is based on two estimates of an equity risk premium. First, I estimated the difference between the required return on utility common equity investments and U.S. Treasury bonds. The difference between the required return on common equity and the Treasury bond yield is the risk premium. I estimated the risk premium on an annual basis for each year over the period 1986 through March 2016.

The common equity required returns were based on regulatory commissionauthorized returns for electric utility companies. Authorized returns are typically based on expert witnesses' estimates of the contemporary investor-required return.

The second equity risk premium estimate is based on the difference between regulatory commission-authorized returns on common equity and contemporary "A" rated utility bond yields by Moody's. I selected the period 1986 through March 2016 because public utility stocks consistently traded at a premium to book value during that period. This is illustrated in Exhibit MPG-12, which shows that the market to book ratio since 1986 for the electric utility industry was consistently above a multiple of 1.0x. Over this period, regulatory authorized returns were sufficient to 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 that utilities were able to access equity markets without a detrimental impact on current shareholders.

Based on this analysis, as shown in Exhibit 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.

I incorporated five-year and 10-year rolling average risk premiums over the study period to gauge the variability over time of risk premiums. These rolling average risk premiums mitigate the impact of anomalous market conditions and skewed risk premiums over an entire business cycle. As shown on my Exhibit

MPG-13, the five-year rolling average risk premium over Treasury bonds ranged from 4.25% to 6.71%, while the 10-year rolling average risk premium ranged from 4.38% to 6.38%.

As shown on my Exhibit 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.

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# DO YOU BELIEVE THAT THE TIME PERIOD USED TO DERIVE THESE EQUITY RISK PREMIUM ESTIMATES IS APPROPRIATE TO FORM ACCURATE CONCLUSIONS ABOUT CONTEMPORARY MARKET CONDITIONS?

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.

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

Alternatively, some studies, such as Morningstar referred to later in this testimony, have recommended that use of "actual achieved investment return data" in a risk premium study should be based on long historical time periods. The studies

find that achieved returns over short time periods may not reflect investors' expected returns due to unexpected and abnormal stock price performance. Short-term abnormal actual returns would be smoothed over time and the achieved actual investment returns over long time periods would approximate investors' expected returns. Therefore, it is reasonable to assume that averages of annual achieved returns over long time periods will generally converge on the investors' expected returns.

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

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## BASED ON HISTORICAL DATA, WHAT RISK PREMIUM HAVE YOU USED TO ESTIMATE FPL'S COST OF COMMON EQUITY IN THIS PROCEEDING?

The equity risk premium should reflect the relative market perception of risk in the utility industry today. I have gauged investor perceptions in utility risk today in Exhibit MPG-15. In Exhibit MPG-15, I show the yield spread between utility bonds and Treasury bonds over the last 36 years. As shown in this exhibit, the average utility bond yield spreads over Treasury bonds for "A" and "Baa" rated utility bonds for this historical period are 1.52% and 1.97%, respectively. The utility bond yield spreads over Treasury bonds for "A" and "Baa" rated utilities for 2016 were 1.46% and 2.58%, respectively. The current average "A" rated utility bond yield spread over Treasury bond yields is now lower than the 36-year average spread. The current "Baa" rated utility bond yield spread over Treasury bond yields is higher than the 36-year average spread.

A current 13-week average "A" rated utility bond yield of 3.96%, when compared to the current Treasury bond yield of 2.60% as shown in Exhibit 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 bonds of 1.52%. The current spread for the "Baa" rated utility bond yield of 2.09% is higher than the 36-year average spread of 1.97%. However, when compared to the projected Treasury bond yield of 3.40%, the current "Baa" utility spread is around 1.29%, which is lower than the 36-year average of 1.97%.

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

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### HOW DO YOU DETERMINE WHERE A REASONABLE RISK PREMIUM IS IN THE

#### **CURRENT MARKET?**

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 provides, and quite clearly, is that the valuations in the current market place an above average risk premium on securities that have greater risk.

This market evidence is summarized below in Table 5, which shows the utility bond yield spreads over Treasury bond yields on average for the period 1980 through 2016, and the spreads for the first quarter of 2016. I also show the corporate bond yield spreads for Aaa corporates and Baa corporates.

# TABLE 5 <u>Comparison of Yield Spreads Over Treasury Bonds</u>

	<u>Util</u>	ity	Corporate			
Description	A	Baa	Aaa	Baa		
Average Historical Spread	1.52%	1.97%	0.84%	1.95%		
Q1, 2016 Spread	1.46%	2.58%	1.21%	2.59%		

Source: Exhibit MPG-15.

The observable yield spreads shown in the table above illustrate that 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 above the yield spread over the last 36 years.

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 that 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.

## 1 Q WHAT IS YOUR RECOMMENDED RETURN FOR FPL BASED ON YOUR RISK 2 PREMIUM STUDY?

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 would be approximately 6.09%, 32 which is considerably higher than the 31-year average risk premium of 5.46% and reasonably reflective of the 3.4% projected Treasury bond yield. A Treasury bond risk premium of 6.1% and projected Treasury bond yield of 3.4% produce a risk premium return estimate of 9.50%.

Applying these weights to the utility risk premium indicates a risk premium of 4.9%.<sup>33</sup> This risk premium is above the 31-year historical average risk premium of 4.08%. Using the weighted utility risk premium and the current Baa observable utility bond yield of 4.69% produces an estimated return on equity of approximately 9.59%, rounded to 9.60%.

Based on this methodology, my Treasury bond risk premium return 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%, rounded to 9.60%.

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 $<sup>^{32}(4.25\% * 25\%) + (6.71\% * 75\%) = 6.09\%.</sup>$ 

 $<sup>^{33}(2.88\% * 25\%) + (5.53\% * 75\%) = 4.87\%.</sup>$ 

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

#### 2 Q PLEASE DESCRIBE THE CAPM.

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The CAPM method of analysis is based upon the theory that the market-required rate

of return for a security is equal to the risk-free rate, plus a risk premium associated

with the specific security. This relationship between risk and return can be expressed

mathematically as follows:

 $R_i = R_f + B_i \times (R_m - R_f)$  where:

R<sub>i</sub> = 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

The stock-specific risk term in the above equation is beta. Beta represents the investment risk that cannot be diversified away when the security is held in a 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).

The risks that cannot be eliminated when held in a diversified portfolio are non-diversifiable risks. Non-diversifiable risks are related to the market in general and are referred to as systematic risks. Risks that can be eliminated by diversification are regarded as non-systematic risks. In a broad sense, systematic risks are market risks, and non-systematic risks are business risks. The CAPM theory suggests that the market will not compensate investors for assuming risks that can be diversified away. Therefore, the only risk that investors will be compensated for are systematic

1 or non-diversifiable risks. The beta is a measure of the systematic or 2 non-diversifiable risks.

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#### PLEASE DESCRIBE THE INPUTS TO YOUR CAPM. Q

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

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

As previously noted, Blue Chip Financial Forecasts' projected 30-year Treasury bond yield is 3.40%.<sup>34</sup> The current 30-year Treasury bond yield is 2.60%, as shown in Exhibit MPG-16. I used Blue Chip Financial Forecasts' projected 30-year Treasury bond yield of 3.40% for my CAPM analysis.

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

Treasury securities are backed by the full faith and credit of the United States 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 common stock. As a result, investor-anticipated long-run inflation expectations are reflected in both common stock required returns and long-term bond yields. Therefore, the nominal risk-free rate (or expected inflation rate and real risk-free rate) included in a long-term bond yield is a reasonable estimate of the nominal risk-free rate included in common stock returns.

<sup>&</sup>lt;sup>34</sup>Blue Chip Financial Forecasts, June 1, 2016 at 2.

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

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#### WHAT BETA DID YOU USE IN YOUR ANALYSIS?

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

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

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

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

Duff & Phelps' 2016 Valuation Handbook estimates the historical arithmetic average real market return over the period 1926 to 2015 as 8.7%.<sup>35</sup> A current consensus analysts' inflation projection, as measured by the Consumer Price Index,

 $<sup>^{35}</sup>$  Duff & Phelps, 2016 Valuation Handbook: Guide to Cost of Capital at 2-4. Calculated as [(1+0.12)/(1+0.03)]-1.

is 2.3%.<sup>36</sup> Using these estimates, the expected market return is 11.20%.<sup>37</sup> The market risk premium then is the difference between the 11.20% expected market return, and my 3.40% risk-free rate estimate, or approximately 7.8%.

My historical estimate of the market risk premium was also calculated by using data provided by Duff & Phelps in its 2016 Valuation Handbook. Over the period 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%, 38 and the total return on long-term Treasury bonds was 6.00%.<sup>39</sup> The indicated market risk premium is 6.0% (12.0% - 6.0% = 6.0%).

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

The Duff & Phelps analysis indicates that 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 approximately the same as the high-end of the Duff & Phelps range.

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#### HOW DOES DUFF & PHELPS MEASURE A MARKET RISK PREMIUM?

Duff & Phelps makes several estimates of a forward-looking market risk premium based on actual achieved data from the historical period of 1926 through 2015, as well as normalized data. Using this data, Duff & Phelps estimates a market risk premium derived from the total return on large company stocks (S&P 500), less the income return on Treasury bonds. The total return includes capital appreciation,

<sup>&</sup>lt;sup>36</sup>Blue Chip Financial Forecasts, June 1, 2016 at 2.

<sup>&</sup>lt;sup>39</sup>*Id*.

dividend or coupon reinvestment returns, and annual yields received from coupons and/or dividend payments. The income return, in contrast, only reflects the income return received from dividend payments or coupon yields. Duff & Phelps claims that the income return is the only true risk-free rate associated with Treasury bonds and is the best approximation of a truly risk-free rate. 40 I disagree with this assessment from Duff & Phelps, because it does not reflect a true investment option available to the marketplace and therefore does not produce a legitimate estimate of the expected premium of investing in the stock market versus that of Treasury bonds. Nevertheless, I will use Duff & Phelps' conclusion to show the reasonableness of my market risk premium estimates.

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 time period.

Second, Duff & Phelps updated the Ibbotson & Chen supply-side model which found that the 6.9% market risk premium based on the S&P 500 was influenced by an abnormal expansion of price-to-earnings ("P/E") ratios relative to earnings and dividend growth during the period, primarily over the last 25 years. Duff & Phelps believes this abnormal P/E expansion is not sustainable. 41 Therefore, Duff & Phelps adjusted this market risk premium estimate to normalize the growth in the P/E ratio to be more in line with the growth in dividends and earnings. Based on this alternative methodology, Duff & Phelps published a long-horizon supply-side market risk premium of 6.03%.42

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<sup>&</sup>lt;sup>40</sup>*Id.* at 3-28. <sup>41</sup>*Id.* at 3-30. <sup>42</sup>*Id.* at 3-31.

Finally, Duff & Phelps develops its own recommended equity, or market, risk premium by employing an analysis that takes into consideration a wide range of economic information, multiple risk premium estimation methodologies, and the current state of the economy by observing measures such as the level of stock indices and corporate spreads as indicators of perceived risk. Based on this methodology, and utilizing a "normalized" risk-free rate of 4.0%, Duff & Phelps concludes that the current expected, or forward-looking, market risk premium is 5.5%, implying an expected return on the market of 9.5%.<sup>43</sup>

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#### Q WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

As shown in Exhibit 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 the high-end CAPM return estimate of 9.25% as the most conservative estimate of FPL's current market cost of equity.

#### IV.G. Return on Equity Summary

- Q BASED ON THE RESULTS OF YOUR RETURN ON COMMON EQUITY
  ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO
  YOU RECOMMEND FOR FPL?
- 22 A Based on my analyses, I estimate FPL's current market cost of equity to be 9.25%.

<sup>&</sup>lt;sup>43</sup> *Id.* at 3-40.

TABL	E 6				
Return on Common Equity Summary					
<u>Description</u>	<u>Results</u>				
DCF	8.90%				
Risk Premium	9.60%				
CAPM	9.25%				

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 6 above, the high-end of my estimated range is based on my risk premium study. The low-end is based on my DCF studies. The CAPM results support the midpoint of my recommended range.

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### IV.H. Financial Integrity

## Q WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT AN INVESTMENT GRADE BOND RATING FOR FPL?

Yes. I have reached this conclusion by comparing the key credit rating financial ratios for FPL, at my proposed return on equity, and the Company's capital structure, to S&P's benchmark financial ratios using S&P's new credit metric ranges.

# Q PLEASE DESCRIBE THE MOST RECENT S&P FINANCIAL RATIO CREDIT METRIC METHODOLOGY.

A S&P publishes a matrix of financial ratios that correspond 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.<sup>44</sup>

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." FPL has an "Excellent" business risk profile and an "Intermediate" financial risk profile.

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

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

S&P publishes ranges for three 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.<sup>45</sup>

<sup>&</sup>lt;sup>44</sup>S&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.

<sup>&</sup>lt;sup>45</sup> Standard & Poor's RatingsDirect. "Criteria: Corporate Methodology," November 19, 2013.

#### 1 Q HOW DID YOU APPLY S&P'S FINANCIAL RATIOS TO TEST THE 2 REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS? 3 I calculated each of S&P's financial ratios based on FPL's cost of service for its retail Α 4 jurisdictional operations. While S&P would normally look at total consolidated FPL financial ratios in its credit review process, my investigation in this proceeding is not 5 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 FPL's retail regulated utility operations. Hence, I am attempting to determine whether my proposed rate of return will in turn support cash 8 9 flow metrics, balance sheet strength, and earnings that will support an investment 10 grade bond rating and FPL's financial integrity. 11 12 Q DID YOU INCLUDE ANY OFF-BALANCE SHEET DEBT EQUIVALENTS? 13 Yes. I included approximately \$263 million of off-balance sheet debt related to Α 14 purchased power agreements and their associated depreciation and interest 15 expenses. 16 17 Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS AS IT 18 RELATES TO FPL. 19 Α The S&P financial metric calculations for FPL at a 9.25% return are developed on 20 Exhibit MPG-19, page 1. The credit metrics produced below, with FPL's financial 21 profile score from S&P of "Intermediate" and business risk score by S&P of 22 "Excellent", will be used to assess the strength of the credit metrics based on FPL's 23 retail operations in Florida. 24 FPL's adjusted total debt ratio is approximately 41%. As shown on page 2 of

Exhibit MPG-19, this adjusted debt ratio is the lowest debt ratio based on the S&P's

median debt ratio of approximately 51% for A-rated utilities. Hence, I concluded this capital structure reasonably supports FPL's current investment grade bond rating. This adjusted total debt ratio will support an investment grade bond rating.

Based on an equity return of 9.25%, FPL will be provided an opportunity to produce a debt to Earnings Before Interest, Taxes, Depreciation and Amortization ("EBITDA") ratio of 3.0x. This is at midpoint of S&P's "Intermediate" guideline range of 2.5x to 3.5x."<sup>46</sup> This ratio supports an investment grade credit rating.

FPL's retail operations FFO to total debt coverage at a 9.25% equity return is 27%, 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.

At my recommended return on equity of 9.25% and the Company's embedded debt cost and capital structure, FPL's financial credit metrics continue to support credit metrics at an investment grade utility level.

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#### V. RESPONSE TO FPL WITNESS MR. ROBERT B. HEVERT

# WHAT RETURN ON COMMON EQUITY IS FPL PROPOSING FOR THIS PROCEEDING?

The Company has requested a return on equity of 11.0% based on the recommended range of 10.5% to 11.5% sponsored by its witness, Mr. Robert Hevert.<sup>47</sup> This does not include the 50 basis point adder for performance. Mr. Hevert concludes that his recommended return on equity range is reasonable.<sup>48</sup> Mr. Hevert's recommended return is based on: (1) CAPM studies, (2) a Bond Yield Plus Risk Premium

<sup>47</sup>Direct Testimony of Robert Hevert at 4-5.

<sup>48</sup>*Id*. at 4.

<sup>&</sup>lt;sup>46</sup>Id

1	methodology,	(3)	а	constant	growth	DCF	analysis,	and	(4)	а	multi-stage	DCF
2	analysis,.											

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

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 CAPM is based on inflated market risk premiums and adjusted for flotation costs; (2) his Bond Yield Plus Risk Premium is based on inflated utility equity risk premiums; (3) his risk premium studies are based on stale Treasury yields; (4) his constant growth DCF results are based on excessive, unsustainable growth rates; and (5) his multi-stage DCF is based on an unrealistic GDP growth estimate, unsustainable payout ratio assumptions and also adjusted for flotation costs.

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

Mr. Hevert's return on equity estimates are summarized in Table 7 below, excluding his 12 basis points flotation cost adjustment. 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 FPL is reasonable.

TABLE 7							
Hevert's Return on Equity Estimat	Hevert's Return on Equity Estimates						
Description	<u>Mean<sup>1</sup></u>	Adjusted <sup>2</sup>					
CARM Results (Pleasethers Rets)	(1)	(2)					
CAPM Results (Bloomberg Beta)  Current 20 Vr Traggury (BL 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	9.45%	7.46%					
Current 30-Yr Treasury (BL – 2.96% Rev. to 2.72%)  Current 30-Yr Treasury (VL – 2.96% Rev. to 2.72%)	9.45% 8.96%	7.46% 7.46%					
Near-Term 2017 Proj. 30-Yr Treasury (BL – 4.00% Rev. to 3.40%)	10.50%	8.14%					
Near-Term 2017 Proj. 30-Yr Treasury (VL – 4.00% Rev. to 3.40%)	10.00%	8.14%					
Long-Term 2020 Proj. 30-Yr Treasury (NE – 4.00 % Rev. to 3.40 %)	11.30%	Reject					
Long-Term 2020 Proj. 30-Yr Treasury (VL – 4.80%)	10.80%	Reject					
Long-Term 2020 Froj. 30-11 Treasury (VL = 4.00 %)	10.00 /0	Reject					
CAPM Results (Value Line Beta)							
Current 30-Yr Treasury (BL – 2.96% Rev. to 2.72%)	11.24%	8.72%					
Current 30-Yr Treasury ( <i>VL</i> – 2.96% Rev. to 2.72%)	10.61%	8.72%					
Near-Term 2017 Proj. 30-Yr Treasury (BL – 4.00% Rev. to 3.40%)	12.29%	9.45%					
Near-Term 2017 Proj. 30-Yr Treasury (VL – 4.00% Rev. to 3.40%)	11.66%	9.45%					
Long-Term 2020 Proj. 30-Yr Treasury (BL – 4.80%)	13.09%	Reject					
Long-Term 2020 Proj. 30-Yr Treasury (VL – 4.80%)	12.46%	Reject					
Risk Premium							
Current 30-Yr Treasury (2.96% Rev. to 2.72%)	10.04%	8.81%					
Near-Term 2017 Proj. 30-Yr Treasury (4.00% Rev. to 3.40%)	10.24%	9.49%					
Long-Term 2020 Proj. 30-Yr Treasury (4.80%)	10.53%	Reject					
Constant Growth DCF:							
30-Day Average	9.19%	9.19%					
90-Day Average	9.23%	9.23%					
180-Day Average	9.30%	9.30%					
Average Constant Growth DCF	9.24%	9.24%					
Multi-Stage Growth DCF:	0.700/	0.040/					
30-Day Average	9.72%	8.64%					
90-Day Average	9.76%	8.67%					
180-Day Average	9.84%	8.76%					
Average Multi-Stage Growth DCF	9.77%	8.69%					
DCF Range	9.2% to 9.8%	8.7% to 9.2%					
ROE Range	10.5% to 11.5%	8.7% to 9.5%					
Flotation ROE Adder	0.12%						
Recommended Return on Equity	11.0%	9.25%					
Sources: <sup>1</sup> Hevert Direct Testimony at 23, 26, 31 and 36, excluding flotation cost <sup>2</sup> Exhibit MPG-20.	s of 12 basis points						

#### V.A. Flotation Costs

### 2 Q PLEASE DESCRIBE MR. HEVERT'S PROPOSED FLOTATION COST ADDITION

#### 3 TO HIS RETURN ON EQUITY ESTIMATES.

Mr. Hevert estimated that a 12 basis point adder represents a reasonable adjustment to account for flotation costs. He adds this flotation cost adder to the results of his DCF and CAPM studies. At page 50 of his testimony, Mr. Hevert goes over his development of a flotation cost return on equity adder.

He bases this return on equity on stock issuances of companies other than FPL.<sup>49</sup> As such, he uses industry data to approximate a flotation cost that has been incurred by other utility companies. Mr. Hevert did not develop a flotation cost adder based on FPL's specific cost data and he has not identified flotation cost incurred by or allocated to FPL.

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### IS MR. HEVERT'S FLOTATION COST RETURN ON EQUITY ADDER OF 12 BASIS POINTS REASONABLE?

No. Mr. Hevert's flotation cost estimate is flawed and it should not be included in determining a fair return on equity for FPL.

Flotation costs are a legitimate cost of doing business. However, flotation costs should only be included in the development of cost of service when proven reasonable. Mr. Hevert's flotation cost adder is not reasonable for several reasons. First, FPL has to demonstrate what its actual common stock flotation costs are, and FPL has not proven the costs are reasonable. It is not appropriate to approximate flotation costs for utility companies and build those approximated costs into a utility's cost of service. Costs should be known and measurable and should be verifiable and

<sup>&</sup>lt;sup>49</sup>Exhibit RBH-9.

most importantly should be shown to be reasonable before they are included in cost of service. This is not possible if a utility's flotation costs are approximated, as Mr. Hevert has done.

Second, FPL is not a publicly traded company. Rather, it is a wholly-owned subsidiary of NextEra Energy. Hence, FPL does not incur costs related to selling common stock to the market. FPL's common equity capital comes from two sources: (1) retained earnings, which incur no flotation costs, and (2) equity infusion from its parent company. Equity issuances from the parent company may include selling stock to the public. In this case, it might be appropriate for NextEra Energy to allocate part of its public stock flotation cost to FPL if the proceeds of the equity stock issuance are used to make equity contributions to FPL. However, NextEra Energy can fund equity infusions into FPL by internal sources of funds (dividend payments from utility subsidiaries such as FPL) or issuing debt securities. Neither of these two sources of funds to NextEra Energy would include flotation cost expenses related to making equity infusions into FPL. As such, even equity contributions from NextEra Energy to FPL may not include incurring the cost of selling stock to the public or flotation expenses.

Mr. Hevert's proposed 12 basis points return on equity adder for flotation costs should be rejected because it is not a known and measurable cost to FPL.

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# Q DO YOU AGREE WITH MR. HEVERT THAT FPL'S FOUR-YEAR RATE PROPOSAL IMPOSES MULTIPLE RISKS ON SHAREHOLDERS?

No. The risks Mr. Hevert refers to are already accounted for in credit rating agencies' assessment.<sup>50</sup> Second, Mr. Hevert has not provided enough evidence that interest

<sup>&</sup>lt;sup>50</sup>*Moody's Investors Service*: "Credit Opinion: Florida Power & Light Company," March 31, 2016 at 1-2, provided by FPL in response to OPC's 1st POD No. 12, emphasis added.

rates and the inputs of the various financial models he uses will increase. Those input estimates could also decline and lead to a lower return for FPL. Therefore, Mr. Hevert's assessment is one-sided and is unreasonable. The four-year plan provides certainty that the Company will be able to achieve its authorized earnings during its construction program.

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#### V.B. Hevert CAPM

#### 8 Q PLEASE DESCRIBE MR. HEVERT'S CAPM ESTIMATE.

Mr. Hevert developed CAPM return estimates based on market risk premiums derived from DCF returns on the market, and current observable and projected returns on U.S. Treasury bond yields for 2017 and 2020.<sup>51</sup>

He derives two market risk premiums using DCF methodologies. First, he uses Bloomberg growth rate projections to produce a DCF return on the market of 13.63%. He subtracts from this the risk-free rate to produce the implied risk premium. Second, he relies on *Value Line* data to produce a second DCF return on the market of 12.82% from which he subtracts the risk-free rate to produce an alternative risk premium estimate.<sup>52</sup>

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

My major concern with Mr. Hevert's CAPM analyses is his inflated market risk premium estimates. I also take issue with Mr. Hevert's outdated projected risk-free rates based on a December 2015 *Blue Chip Financial Forecasts* document. Finally,

<sup>&</sup>lt;sup>51</sup>Hevert Direct Testimony at 20.

<sup>&</sup>lt;sup>52</sup>Exhibit RBH-6, pages 1 and 7.

1		Mr. Hevert applies his unreasonable flotation cost adder to his CAPM, which should
2		be rejected, as discussed above.
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4	Q	PLEASE DESCRIBE MR. HEVERT'S MARKET RISK PREMIUMS.
5	Α	Mr. Hevert developed two market risk premium estimates. Both are DCF-derived
6		market risk premiums of 10.68% (Bloomberg) and 9.87% (Value Line). These market
7		risk premiums are based on projected market DCF returns of 13.63% and 12.82%,
8		less the current 30-year Treasury bond yields of 2.96%. <sup>53</sup>
9		
10	Q	ARE MR. HEVERT'S DCF-DERIVED MARKET RISK PREMIUM ESTIMATES
11		REASONABLE?
12	Α	No. Mr. Hevert's DCF-derived market risk premiums are based on inflated market
13		returns of 13.63% and 12.82%. The DCF market returns are produced using growth
14		rates of 11.24% and 10.58%, and market dividend yields of 2.41% and 2.45%. <sup>54</sup>
15		As discussed above, the DCF model requires a long-term sustainable growth
16		rate. Mr. Hevert's sustainable market growth rates of 11.22% and 10.37% are far too
17		high to be a rational outlook for sustainable long-term market growth. These growth
18		rates are more than two times the consensus analysts projected long-term growth of
19		the U.S. GDP of 4.35%.
20		As a result of his inflated long-term market growth rate, Mr. Hevert's market
21		DCF returns are inflated and not reliable.
22		Mr. Hevert's 10.68% (Bloomberg) and 9.87% (Value Line) market risk
23		premiums should be given no weight in estimating a fair return for FPL in this case.
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 $<sup>^{53}</sup>$  Direct Testimony of Robert Hevert, page 20, Exhibit RBH-6.  $^{54}$  Exhibit RBH-6 (13.63% = 2.41% + 11.22%) and (12.82% = 2.45% +10.37%).

### 1 Q DO HISTORICAL ACTUAL RETURNS ON THE MARKET SUPPORT

#### MR. HEVERT'S PROJECTED MARKET RETURNS?

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.

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#### Q PLEASE EXPLAIN.

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%.<sup>55</sup> This compares to Mr. Hevert's projected growth of the market of 11.22% to 10.37%.

Further, historically the geometric growth of the market of 5.8%<sup>56</sup> has reflected geometric growth of GDP over this same time period of approximately 6.2%.<sup>57</sup>

This review of historical data establishes two facts very clearly. First, historical actual achieved growth has been substantially less than that projected by Mr. Hevert. Second, historical growth on the market has tracked historical growth of the U.S. GDP. Projected growth of the U.S. GDP now is closer to the 4% to 5% area. All of this information strongly supports the conclusion that Mr. Hevert's projected growth on the market of 11.22% to 10.37% is substantially overstated. While I do not endorse the use of a historical growth rate to draw assessments of the market's forward-looking growth rate outlooks, this data can be used to show how the market return estimates produced by Mr. Hevert are unreasonable and inflated.

<sup>&</sup>lt;sup>55</sup>Duff & Phelps, 2016 Valuation Handbook: Guide to Cost of Capital at 2-4.

<sup>&</sup>lt;sup>56</sup>Real 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).

<sup>&</sup>lt;sup>57</sup>Hevert Direct Testimony at 35, line 3, and note 53. Real GDP of 3.25% and historical inflation of 2.9%.

I	Q	WHAT 1550E5 DO YOU HAVE WITH MR. HEVERT'S RISK-FREE RATES?
2	Α	Mr. Hevert's risk-free rates are based on Blue Chip current (2.96%), near-term 2017
3		projected (4.00%) and long-term 2020 projected (4.80%) 30-year Treasury yields,
4		which are now more than 6 months old. Based on the most recent Blue Chip
5		publication the current, near-term and long-term projected 30-year Treasury yields
6		are 2.72%, 3.4% and 4.4%, respectively. <sup>58</sup> However, using projections for 2020
7		(4.4%) is highly uncertain and it will produce unreliable return estimates.
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9	Q	CAN MR. HEVERT'S CAPM ANALYSIS BE REVISED TO REFLECT A MORE
10		REASONABLE MARKET RISK PREMIUM AND RECENT RISK-FREE RATES?
11	Α	Yes. I have revised Mr. Hevert's CAPM cost estimate by making the following
12		adjustments to his study:
13		1. Rejected his 12 basis point flotation cost adder.
14		2. Relied on the more recent projections of risk-free rates projected through 2017.
15		3. Relied on Mr. Hevert's beta estimates from Bloomberg and Value Line for his
16		proxy group of 0.608 and 0.776.
17		4. Relied on a market risk premium of 7.8% which reflects the highest market risk
18		premium from historical data, and corresponds with very low risk-free rates.
19		With all these adjustments, Mr. Hevert's adjusted CAPM return would be no
20		higher than 9.5%, as shown in Table 7 above.
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<sup>&</sup>lt;sup>58</sup> Blue Chip Financial Forecasts, June 1, 2016 at 4 and 14.

#### V.C. Bond Yield Plus Risk Premium

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

As shown on Exhibit RBH-3, Mr. Hevert constructs a risk premium return on equity estimate based on the premise that equity risk premiums are inversely related to interest rates. He estimates an average electric risk premium of 4.50% over the period January 1980 through January 15, 2016. Then he applies a regression formula to the current, near-term, and long-term projected 30-year Treasury bond yields of 2.96%, 4.00%, and 4.80% to produce electric risk premiums of 7.08%, 6.24%, and 5.73%, respectively. Thus, he calculates return on equity estimates of 10.04%, 10.24%, and 10.53%, respectively.

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### Q IS MR. HEVERT'S BOND YIELD PLUS RISK PREMIUM METHODOLOGY

#### REASONABLE?

No. Mr. Hevert's contention that there is a simplistic inverse relationship between equity risk premiums and interest rates is not supported by academic research. While academic studies have shown that, in the past, there has been an inverse relationship among these variables, researchers have found that the relationship changes over time and is influenced by changes in perception of the risk of bond investments relative to equity investments, and not simply changes to interest rates.<sup>59</sup>

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

<sup>&</sup>lt;sup>59</sup>"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.

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

In today's marketplace, interest rate volatility is not as extreme as it was during the 1980s. 60 Nevertheless, changes in the perceived risk of bond investments relative to equity investments still drive changes in equity premiums. However, a relative investment risk differential cannot be measured simply by observing nominal interest rates. Changes in nominal interest rates are heavily influenced by changes to inflation outlooks, which also change equity return expectations. As such, the relevant factor needed to explain changes in equity risk premiums is the relative changes to the risk of equity versus debt securities investments, and not simply changes in interest rates.

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

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# CAN MR. HEVERT'S BOND YIELD PLUS RISK PREMIUM ANALYSIS BE REVISED TO REFLECT CURRENT PROJECTIONS OF TREASURY YIELDS?

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%) and two-year projected (3.40%) Treasury yields will produce return on equity estimates no higher than 9.5%, as shown in Table 7 above.

<sup>&</sup>lt;sup>60</sup>"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.

### V.D. Hevert DCF Studies

### 2 V.D.1. Constant Growth

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

His constant growth DCF returns are developed in Exhibit 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 ending January 15, 2016: 30-day, 90-day, and 180-day, reflecting one-half year dividend growth adjustments.

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

Mr. Hevert's constant growth DCF studies generally support a mean return on equity of approximately 9.1%, similar to my constant growth DCF study.

Mr. Hevert arranges his DCF return estimates for low, median and high. His high-end estimate produces a DCF return estimate of 10.08%<sup>61</sup> (excluding 0.12 flotation adder). However, these high-end estimates appear to be what Mr. Hevert largely relies on in forming his recommended return on equity range for FPL.

These high-end estimates are not reasonable for several reasons. First, they do not reflect DCF return estimates for his proxy group reflecting a consistent source for growth. Rather, they rely on the highest growth rate estimates produced from one of three sources. As such, the growth rates are not derived from a single source rate forecast, do not reflect a consistent application of a DCF growth rate, and do not

<sup>&</sup>lt;sup>61</sup>Exhibit RBH-4, page 3 of 3.

reflect growth rates that are reasonable estimates of long-term sustainable growth as required by this model.

The latter point is the most relevant. Mr. Hevert's high-end DCF return estimate of 10.08% is based on a proxy group growth rate of 6.22%. This growth rate is nearly 200 basis points higher than the long-term growth outlook for the U.S. GDP of 4.35%, as discussed above. Mr. Hevert's mean constant growth DCF analysis, excluding the flotation cost adjustment, ranged from 9.19% to 9.30%. The midpoint of the DCF range is approximately 9.25%, which supports my recommendation in this proceeding. (See page 31 of Mr. Hevert's testimony, Table 4, excluding 12 basis point flotation cost adder).

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#### V.D.2. Multi-Stage Growth DCF

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

Yes, he did. His multi-stage DCF model is developed on Exhibit RBH-2. 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.

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

Mr. Hevert produced a nominal projected GDP growth rate of 5.35% using a real GDP growth factor of 3.25% and a forward-looking inflation rate of 2.04%.

Mr. Hevert's real GDP growth rate was based on the actual achieved real growth in the U.S. GDP over the period 1929-2014.

He then relied on two sources to project going-forward inflation. First, he considered the inflation rate as implied by the difference in spread between nominal Treasury bond yields and Treasury Inflation Protected Securities ("TIPS") over an 180-day average period. This produced a forward-looking inflation outlook of 1.87%. Second, he considered CPI's projection for inflation over the period 2022-2026 of 2.2% as published by the *Blue Chip Financial Forecasts*. The average of these two inflation projections is 2.04%. ((2.2% + 1.87%)÷ 2).

Mr. Hevert's nominal GDP forecast of 5.55% then is the product of this real GDP of 3.25% and inflation projection of 2.04%. (1.0325 x 1.0204 - 1).

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### IS MR. HEVERT'S LONG-TERM GROWTH RATE ESTIMATE OF 5.35%

#### **REASONABLE?**

No. The methodology used by Mr. Hevert to calculate this growth rate simply is not based on market participants' outlooks for future GDP growth. Therefore, Mr. Hevert's GDP growth rate projections do not reflect market participants' outlooks of future growth, and therefore are not useful or reliable in estimating a current market-required return for FPL in this proceeding. By relying on his own GDP growth forecast, rather than one that reflects market participants, he is not accurately estimating the current market cost of equity.

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

Mr. Hevert's growth rate of 5.35% is based on a 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.

In order to measure the current market cost of equity demanded by investors in today's marketplace, it is necessary to reasonably capture the outlooks by investors that have formed valuations of observable stock prices used in the various time periods underlying Mr. Hevert's and my DCF studies. Mr. Hevert's long-term growth rate simply ignores current consensus analysts' outlooks for future growth, and therefore is not a reasonable estimate of what market participants have relied on 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 8 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 8, Mr. Hevert's historical GDP growth is much higher than, and not representative of, consensus market expected forward-looking GDP growth.

TABLE 8							
GDP Projections							
Description	GDP Inflation	Real GDP	Nominal GDP				
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.					

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

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PLEASE EXPLAIN HOW MR. HEVERT'S MULTI-STAGE GROWTH DCF MODEL

OVERSTATED DIVIDEND CASH FLOWS BECAUSE OF HIS LONG-TERM

DIVIDEND PAYOUT RATIO ASSUMPTION.

Mr. Hevert modified analysts' three- to five-year dividend payout projections of 61.68% for his proxy group, and assumed that eventually they would converge to the historical industry average dividend payout ratio of 67.30%.<sup>62</sup>

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

No. There is simply no reason to expect the dividend payout ratio of the proxy group will increase toward the historical utility industry average. The going forward payout

<sup>&</sup>lt;sup>62</sup>Direct Testimony of Robert Hevert at 36.

ratio of the proxy group will be controlled by funding requirements and dividend 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 Mr. Hevert's transition period growth stage.

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 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.

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# CAN MR. HEVERT'S MODEL BE CORRECTED TO ELIMINATE HIS UNREASONABLE INDUSTRY PAYOUT RATIO ASSUMPTIONS?

Yes. Simply eliminating his assumption that the utility payout ratio will revert from the analysts' three- to five-year growth rate projections to the higher long-term historical growth rate will correct this problem. Maintaining the existing payout ratio is consistent with industry outlooks.

1 Q HOW WOULD MR. HEVERT'S MULTI-STAGE GROWTH DCF MODEL CHANGE IF
2 THE CORRECTIONS YOU DESCRIBED ABOVE ARE MADE TO HIS RETURN
3 ESTIMATE?

As shown below in Table 9, 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 8.64% for his proxy group.

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wth DCF Anal	<u>ysis</u>
Mean¹ (1)	Adjusted <sup>2</sup> (2)
9.72% 9.76% <u>9.84%</u> 9.77%	8.64% 8.67% <u>8.76%</u> 8.69%
	Mean <sup>1</sup> (1)  9.72% 9.76% 9.84%

#### Sources:

<sup>2</sup>Exhibit MPG-20.

9

10

### V.D.3. DCF Conclusions

- 11 Q WHAT IS A REASONABLE DCF RETURN FOR FPL BASED ON MR. HEVERT'S
- 12 CONSTANT GROWTH DCF ESTIMATES AND YOUR SOUND ADJUSTMENTS TO
- 13 **HIS MULTI-STAGE DCF RESULTS?**
- Mr. Hevert's constant growth DCF study supports a return on equity of approximately 9.25%. As shown above in Table 9, balanced and accurate adjustments to Mr. Hevert's multi-stage growth DCF study support a return on equity in the range of 8.64% to 8.76%, with a midpoint of approximately 8.7%. Based on this assessment, Mr. Hevert's DCF studies reflecting market participants' outlooks for growth, and

<sup>&</sup>lt;sup>1</sup>Hevert Direct Testimony at 36, excluding flotation costs of 0.12%.

reasonable estimates of the central tendency of the results of the DCF study, support a return on equity for FPL in the range of 8.7% to 9.25%.

Α

### V.E. Risk Factors

# Q DID MR. HEVERT CONSIDER ADDITIONAL BUSINESS RISKS TO JUSTIFY HIS

### **RECOMMENDED RETURN ON EQUITY OF 11.0%?**

Mr. Hevert believes that: (1) the Company's geographic risk; (2) the Company's need to access external capital; (3) the potential for new regulatory requirements associated with nuclear generation; (4) the need to account for flotation costs; and (5) the potential for an increase in the cost of equity over the Company's proposed four year rate period justify a return on equity above the mean of his analytical results.

Α

#### Q PLEASE COMMENT.

I disagree. Setting the return on equity within Mr. Hevert's range of 10.5% to 11.5% will place an unreasonable cost burden on FPL's ratepayers without any justified benefits.

Customers are already required to pay cost-based rates to fully compensate FPL for its cost of service within its geographic area (including storm hardening costs), support cash flow and earnings metrics that will maintain strong investment grade credit rating and support its access to external capital, reflect all operating and business risk requirements such that it can meet its obligations to operate and decommission nuclear generating stations, and to account for a legitimate and verifiable cost such as flotation expenses if the Company actually incurs such expenses. Further, the proposal for a multi-year rate plan benefits the Company to

the extent it creates rate certainty, and allows for adjustments in rates to track changes in cost of service. Increasing the authorized return on equity to support the Company's request for a multi-year rate plan provides it compensation for risks that are largely transferred to customers in such a regulatory mechanism. For all these reasons, Mr. Hevert's proposal for recognizing business risk increases to support an above market return for FPL is without merit and should be denied.

Q

Α

# DO YOU BELIEVE THAT FPL FACES OPERATING RISKS THAT ARE COMPARABLE TO THE PROXY GROUP FROM WHICH YOU AND MR. HEVERT HAVE MEASURED A RISK-ADJUSTED MARKET RETURN?

Yes. As shown on my Exhibit MPG-4, the average S&P credit rating for my proxy group of BBB+ is lower than FPL's credit rating of A-. The relative risks discussed on pages 37-52 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 FPL, in comparison to a proxy group, is fully absorbed into the market's perception of FPL's risk and the proxy group fully captures the investment risk of FPL. In fact, as discussed above, the return on equity produced by the proxy group is conservative considering the lower business and financial risks of FPL relative to the proxy group.

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

#### UTILITIES?

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

To determine the assessment for a corporate issuer's business risk profile, the criteria combine our assessments of industry risk, country risk, and competitive position. Cash flow/leverage analysis determines a company's financial risk profile assessment. The analysis then combines the corporate issuer's business risk profile assessment and its financial risk profile assessment to determine its anchor. In general, the analysis weighs the business risk profile more heavily for investment-grade anchors, while the financial risk profile carries more weight for speculative-grade anchors. <sup>63</sup>

Α

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

Yes. Mr. Hevert describes a few factors that, he suggests, gauge investor sentiment, including the relationship between the Federal Reserve's balance sheet and market volatility, measured by the CBOE Volatility Index, known as the VIX, his contention that interest rates will increase and credit spreads have widened.<sup>64</sup> He concludes that these metrics indicate that current levels of instability and risk aversion are at historically low levels and that the market is disjointed.

<sup>&</sup>lt;sup>63</sup>Standard & Poor's RatingsDirect: "Criteria/Corporates/General: Corporate Methodology," November 19, 2013.

<sup>&</sup>lt;sup>64</sup>Direct Testimony of Robert Hevert at 52-65.

# 1 Q DO YOU BELIEVE THAT MR. HEVERT'S USE OF THESE MARKET SENTIMENTS 2 SUPPORTS HIS FINDINGS THAT FPL'S MARKET COST OF EQUITY IS 3 CURRENTLY 11.0%?

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

Q

Α

Α

#### WHAT IS THE MARKET SENTIMENT FOR UTILITY INVESTMENTS?

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 Exhibit MPG-15, under column 11, which shows the spread between "A" rated utility bond yields and "Aaa" rated corporate bond yields. Currently, the spread is approximately 0.25%. This is a relatively low spread over the 36-year time horizon. Indeed, current spreads of utility versus high-grade corporate bond yields are at the lowest level they have been in most periods over the last 36 years. This is also reflective of the spreads between "Baa" utility bond yields relative to "Baa" corporate bond yields. Currently, utility bonds are trading at a premium to corporate bonds. This has been largely the case during the significant market turbulence that has occurred over the last five to eight years. However, over longer periods of time, utility bond yields on average trade at parity to a premium to corporate "Baa" rated bond yields. The current strong utility bond 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 investment industry.

Further, other measures of utility stock valuations also support a robust market for utility stocks. As shown on my Exhibit MPG-2, utility valuation measures – e.g., price-to-earnings ratio, market price to cash flow ratio and market-to-book ratio, – show that 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 that utilities' market cost of equity is very low in today's very low cost capital market environment.

Q

Α

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

Yes. Mr. Hevert develops his risk premium studies mainly relying on near-term and long-term projected interest rates, which he believes are expected to increase (Hevert Direct at 61-63). Mr. Hevert's proposal to rely mainly on forecasted Treasury bond yields is unreasonable because he is not considering the highly likely outcome that current observable interest rates will prevail during the period rates determined in this proceeding will be in effect. This is important, because while current observable interest rates are actual market data that provides a measure of the current cost of capital, the accuracy of forecasted interest rates is at very best, problematic.

### Q WHY DO YOU BELIEVE THAT THE ACCURACY OF FORECASTED INTEREST

#### RATES IS HIGHLY PROBLEMATIC?

Over the last several years, observable current interest rates have been a more accurate predictor of future interest rates than economists' consensus projections. Exhibit MPG-21 illustrates this point. On this exhibit, under Columns 1 and 2, I 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 and, 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, over the last several years, economists consistently have been projecting that interest rates will increase. 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.

Q

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### DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

23 A Yes, it does.

### **Qualifications of Michael P. Gorman** 2 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS. 3 Α Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140, 4 Chesterfield, MO 63017. 5 6 PLEASE STATE YOUR OCCUPATION. Q 7 Α I am a consultant in the field of public utility regulation and a Managing Principal with 8 the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory 9 consultants. 10 11 PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK Q 12 EXPERIENCE. 13 In 1983 I received a Bachelors of Science Degree in Electrical Engineering from 14 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 15 Springfield. I have also completed several graduate level economics courses. 16 17 In August of 1983, I accepted an analyst position with the Illinois Commerce 18 Commission ("ICC"). In this position, I performed a variety of analyses for both formal 19 and informal investigations before the ICC, including: marginal cost of energy, central 20 dispatch, avoided cost of energy, annual system production costs, and working 21 capital. In October of 1986, I was promoted to the position of Senior Analyst. In this 22 position, I assumed the additional responsibilities of technical leader on projects, and 23 my areas of responsibility were expanded to include utility financial modeling and 24 financial analyses.

1

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.

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

Q

Α

#### HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

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

1	Q	PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR
2		ORGANIZATIONS TO WHICH YOU BELONG.
3	Α	I earned the designation of Chartered Financial Analyst ("CFA") from the CFA
4		Institute. The CFA charter was awarded after successfully completing three
5		examinations which covered the subject areas of financial accounting, economics,
6		fixed income and equity valuation and professional and ethical conduct. I am a
7		member of the CFA Institute's Financial Analyst Society.
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# Rate of Return <u>December 31, 2017</u>

				Juris Adjusted			Weighted
<u>Line</u>	<b>Description</b>	Amount (000)	<u>Adjustments</u>	<u>Amount</u>	<u>Weight</u>	Cost	Cost
		(1)	(2)	(3)	(4)	(5)	(6)
1	Long-Term Debt	\$ 10,784,635	\$ 1,426,218	\$ 9,358,417	28.76%	4.51%	1.30%
2	Customer Deposits	\$ 444,135	\$ 36,806	\$ 407,328	1.25%	2.05%	0.03%
3	Common Equity	\$ 16,667,065	\$ 1,984,491	\$ 14,682,574	45.13%	9.25%	4.17%
4	Short-Term Debt	\$ 695,089	\$ 82,150	\$ 612,939	1.88%	1.85%	0.03%
5	Deferred Income Tax	\$ 8,739,409	\$ 1,370,826	\$ 7,368,582	22.65%	0.00%	0.00%
6	Investment Tax Credit	\$ 263,675	\$ 157,400	\$ 106,275	0.33%	7.27%	0.02%
7	Total	\$ 37,594,007	\$ 5,057,891	\$ 32,536,116	100.00%		5.56%

### **Investor-Supplied Capital Structure**

<u>Line</u>	<u>Description</u>	Adjusted mount (000) (1)	Weight (2)	<u>A</u>	djustments (3)	Adjusted Amount (4)	Weight (5)	<u>Cost</u> (6)	Weighted Cost (7)
8	Long-Term Debt	\$ 10,784,635	38.32%	\$	1,426,218	\$ 9,358,417	37.96%	4.51%	1.71%
9	Short-Term Debt	\$ 695,089	2.47%	\$	82,150	\$ 612,939	2.49%	1.85%	0.05%
10	Common Equity	\$ 16,667,065	<u>59.21%</u>	\$	1,984,491	\$ 14,682,574	<u>59.55%</u>	9.25%	<u>5.51%</u>
11	Total	\$ 28,146,789	100.00%	\$	3,492,859	\$ 24,653,930	100.00%		7.27%

Source:

Schedule D-1a.

### **Valuation Metrics**

		Price to Earnings (P/E) Ratio <sup>1</sup>															
		15-Year								J ,							
Line	Company	<u>Average</u>	2016 <sup>2</sup>	2015	2014	2013	2012	<u>2011</u>	2010	2009	2008	2007	2006	2005	2004	2003	2002
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
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	N/A	N/A
2	Alliant Energy	15.37	20.80	18.07	16.60	15.28	14.50	14.45	12.47	13.86	13.43	15.08	16.82	12.59	14.00	12.69	19.93
3	Ameren Corp.	15.21	19.80	17.55	16.71	16.52	13.35	11.93	9.66	9.26	14.21	17.45	19.39	16.72	16.28	13.51	15.78
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	12.91	13.70	12.42	10.66	12.68
5	Avista Corp.	17.72	20.50	17.60	17.28	14.64	19.30	14.08	12.74	11.42	14.97	30.88	15.39	19.45	24.43	13.84	19.27
6	Black Hills	16.46	23.50	16.14	19.03	18.24	17.13	31.13	18.10	9.93	0.00	15.02	15.77	17.27	17.13	15.95	12.52
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	5.59
8	CMS Energy Corp.	16.37	21.30	18.29	17.30	16.32	15.07	13.62	12.46	13.56	10.87	26.84	22.18	12.60	12.39	N/A	N/A
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	18.21	14.30	13.28
10	Dominion Resources	17.69	20.10	22.14	22.97	19.25	18.91	17.27	14.35	12.74	13.78	20.63	15.98	24.89	15.07	15.24	12.05
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
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	N/A	N/A
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	12.99	11.74	37.59	6.97	7.78
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	22.99
15	Empire District Electric	18.19	24.10	18.71	16.21	15.00	15.76	15.76	16.75	14.34	17.26	21.70	15.92	24.50	24.81	15.83	16.18
16	Entergy Corp.	13.64	15.40	12.53	12.89	13.21	11.22	9.06	11.57	11.98	16.56	19.30	14.28	16.28	15.09	13.77	11.53
17	Eversource Energy	17.50	19.50	18.11	17.92	16.94	19.86	15.35	13.42	11.96	13.66	18.75	27.07	19.76	20.77	13.35	16.07
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
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
20	Great Plains 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	13.96	12.59	12.23	11.09
21	Hawaiian 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
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
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
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	15.88	22.40	17.98	17.55	15.96
25	NextEra Energy, Inc.	15.39	19.80	16.89	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
26	NorthWestern Corp	17.01	21.20	18.36	16.24	16.86	15.72	12.62	12.90	11.54	13.87	21.74	25.95	17.09	N/A	N/A	N/A
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
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
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
30	Pinnacle West Capital	15.28	18.60	16.04	15.89	15.27	14.35	14.60	12.57	13.74	16.07	14.93	13.69	19.24	15.80	13.96	14.43
31	PNM Resources	15.35	20.40	0.00	18.68	16.13	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	12.37	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	12.51	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	14.67	13.68	14.43	14.80	13.67	12.93	11.63	12.67	14.96	15.42	14.44	13.57	13.05	12.17
36	Sempra Energy	13.73	20.40	19.73	21.87	19.68	14.89	11.77	12.60	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	16.97	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	14.58	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	17.57	14.80	14.16
40	Westar Energy	15.16	23.20	18.45	15.36	14.04	13.43	14.78	12.96	14.95	16.96	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	16.47	15.97	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	16.65	14.80	15.36	13.65	11.62	40.80
43	Average	15.89	19.73	17.27	17.38	16.42	15.70	15.36	14.39	13.57	14.78	17.88	16.37	16.17	16.42	13.38	13.50
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

<sup>&</sup>lt;sup>1</sup> The Value Line Investment Survey Investment Analyzer Software, downloaded on June 28, 2016.

<sup>&</sup>lt;sup>2</sup> The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

### **Valuation Metrics**

		Market Price to Cash Flow (MP/CF) Ratio 1															
		15-Year															
Line	Company	Average	2016 2/a	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
45	ALLETE	9.21	7.96	7.49	8.80	9.15	8.18	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 Corp.	6.71	7.12	6.87	6.95	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	5.71	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	Black Hills	7.32	7.72	8.06	8.81	8.03	6.04	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	5.39	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	3.64	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	7.81	10.09	7.68	7.51	6.53
55	DTE Energy	5.84	8.40	8.52	6.42	6.65	5.91	5.18	4.69	3.59	4.90	5.73	5.21	5.54	6.00	5.62	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	5.46	4.59	4.22	4.11	3.95	5.63	7.01	5.87	5.61	6.84	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	6.88	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	6.99	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	6.04	5.15	6.90	5.10
64	Great Plains Energy	6.24	6.58	6.66	6.45	5.73	6.09	5.74	4.49	5.06	7.71	7.13	7.68	6.70	6.52	5.92	5.14
65	Hawaiian 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	7.55	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	9.48	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	9.18	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	8.19	9.25	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	9.45	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.	6.13	6.19	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	6.91	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	5.08	4.86	4.13	4.63	4.81	5.34	5.74	N/A	N/A	N/A	N/A
77	PPL Corp.	7.36	9.22	8.73	7.32	6.59	5.87	5.98	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	6.66	6.48	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	Sempra 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	9.06	8.23	8.42	8.30	8.75	8.22	7.79	7.08	8.18	8.62	8.47	8.41	8.28	8.28	7.83
82	TECO Energy	7.11	10.25	8.76	7.56	7.16	6.55	6.62	6.37	5.38	8.12	6.75	6.42	7.21	6.41	6.39	6.68
83	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	Westar 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	6.54	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	5.64	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

<sup>&</sup>lt;sup>1</sup> The Value Line Investment Survey Investment Analyzer Software, downloaded on June 28, 2016.

<sup>&</sup>lt;sup>2</sup> The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

<sup>&</sup>lt;sup>a</sup> 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 Investment Survey, April 29, May 20, and June 17, 2016.

### **Valuation Metrics**

Second Part			Market Print to Pook Valve (MD/DV) Potic 1												
Section			12-Year						Market Pr	Ce to Book	value (IVII	P/BV) Katio	)		
Allerter	Line	Company	Average	2016 <sup>2/a</sup>	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
90 Alliant Energy 1.55 1.91 1.86 1.86 1.70 1.57 1.46 1.31 1.04 1.33 1.67 1.52 1.33 1 Anner Corp. 1.30 1.57 1.46 1.45 1.29 1.18 0.90 0.83 0.78 1.25 1.60 1.62 1.88 2.24 Annerican Electric Power 1.45 1.64 1.55 1.54 1.40 1.31 1.23 1.23 1.23 1.08 1.48 1.85 1.56 1.57 1.45 1.45 1.45 1.45 1.45 1.45 1.45 1.45			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
91 America Corp. 1,30 1,57 1,48 1,45 1,54 1,40 1,31 1,31 1,32 1,38 1,30 1,55 1,60 1,62 1,68 1,68 1,69 3, Awisa Corp. 1,22 1,49 1,38 1,33 1,25 1,21 1,19 1,07 0,34 1,11 1,29 1,30 1,17 1,18 1,19 1,07 0,34 1,11 1,19 1,07 0,34 1,11 1,19 1,07 0,34 1,11 1,19 1,07 0,34 1,11 1,19 1,07 0,34 1,11 1,19 1,07 0,34 1,11 1,19 1,07 0,35 1,22 1,57 1,47 1,58 1,69 6 CMS Energy Corp. 1,77 2,59 2,43 2,60 2,99 2,70 2,70 2,70 2,70 2,70 2,70 2,70 2,70	89	ALLETE	1.55	1.41	1.37	1.42	1.51	1.34	1.35	1.28	1.15	1.55	1.89	2.09	2.22
American Electric Power	90	Alliant Energy	1.55	1.91	1.86	1.86	1.70	1.57	1.46	1.31	1.04	1.33	1.67	1.52	1.33
93 Avista Corp.  148 Black Hills  141 173 1.59 1.79 1.62 1.21 1.19 1.07 0.94 1.11 1.29 1.30 1.13  95 CenterPoint Energy  237 2.41 2.43 2.27 2.30 1.99 1.87 1.96 1.77 2.49 3.13 2.75 3.89  96 CMS Energy Corp.  1.77 2.59 2.43 2.26 2.09 1.91 1.66 1.48 1.10 1.23 3.13 2.75 3.89  97 Consol. Edison  1.37 1.51 1.42 1.34 1.38 1.47 1.38 1.22 1.08 1.17 1.47 1.47 1.42 1.34  98 Dominion Resources  2.62 2.94 3.34 3.55 2.97 2.84 2.37 2.01 1.80 2.42 2.69 2.09 9.07 2.50  99 DTE Energy  1.04 1.28 1.29 1.28 1.51 1.35 1.62 1.51 1.35 1.20 1.16 0.89 1.10 1.35 1.29 1.39 1.00 0.44 2.269 2.07 2.50  99 DE Energy  1.04 1.28 1.29 1.28 1.19 1.12 1.11 1.00 0.91 1.06 1.15 0.00 N. M. 1.00 0.10 1.06 1.15 0.00 N. M. 1.00 0.10 0.91 1.00 0.91 1.70 1.00 1.35 1.29 1.20 1.20 1.20 0.20 0.20 0.20 0.20 0.20	91	Ameren Corp.	1.30	1.57	1.46	1.45	1.29	1.18	0.90	0.83	0.78	1.25	1.60	1.62	1.68
8 Black Hills   1.41   1.73   1.59   1.79   1.62   1.21   1.14   1.07   0.83   1.22   1.57   1.47   1.63     5 CenterPoint Energy Corp.   1.77   2.59   2.43   2.26   2.09   1.91   1.66   1.48   1.10   1.23   1.82   1.42   1.32     7 Consol. Edison   1.37   1.51   1.42   1.34   1.38   1.47   1.38   1.22   1.08   1.17   1.47   1.52     98 Dominion Resources   2.62   2.94   3.34   3.55   2.97   2.84   2.37   2.01   1.80   2.42   2.69   2.07   2.50     99 DTE Energy   1.35   1.68   1.65   1.62   1.51   1.35   1.20   1.16   0.89   1.10   1.35   1.28   1.39     100 Duke Energy   1.36   1.68   1.65   1.62   1.51   1.35   1.20   1.16   0.89   1.10   1.35   1.28   1.39     101 Edison Int1   1.58   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 El Paso Electric   1.34   1.62   1.32   1.39   1.27   1.23   1.25   1.24   1.07   1.04   1.56   2.05   1.80   1.93     103 Empire District Electric   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 Eversource Energy   1.37   1.61   1.53   1.47   1.38   1.28   1.59   1.50   1.62   1.48   1.57   1.53   1.24   1.07   1.30   1.47   1.45   1.49     106 Exelon Corp.   1.56   1.10   1.16   1.15   1.28   1.44   1.33   1.69   1.12   1.11   1.60   1.15   1.00   1.00     107 FirstEnergy 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     109 General Plains Energy   1.37   1.51   1.52   1.49   1.59   1.55   1.54   1.44   1.66   1.57   1.77   1.86     109 Hawaiian Elec   1.59   1.65   1.10   1.16   1.55   1.54   1.45   1	92	American Electric Power	1.45	1.64	1.55	1.54	1.40	1.31	1.23	1.23	1.08	1.48	1.85	1.56	1.57
95 CenterPoint Energy 96 CMS Energy Corp. 177 2.59 2.43 2.27 2.30 1.99 1.87 1.96 1.77 2.49 3.13 2.75 3.06 96 CMS Energy Corp. 177 2.59 2.43 2.26 2.09 1.91 1.66 1.48 1.10 1.23 1.82 1.42 1.32 97 Consol Edison 1.37 1.51 1.42 1.34 1.38 1.47 1.38 1.22 1.08 1.17 1.47 1.47 1.52 98 Dominion Resources 2.22 2.94 3.34 3.55 2.97 2.84 2.37 2.01 1.80 2.42 2.69 2.07 2.50 99 DTE Energy 1.35 1.68 1.65 1.62 1.51 1.35 1.20 1.16 0.89 1.10 1.35 1.29 1.38 1.00 Duke Energy 1.04 1.28 1.29 1.28 1.19 1.12 1.11 1.00 0.91 1.06 1.15 0.00 NA 101 Edison 1.15 1.53 1.78 1.76 1.68 1.57 1.53 1.24 1.07 1.04 1.56 2.05 1.80 1.39 102 El Paso Electric 1.50 1.62 1.48 1.52 1.49 1.59 1.64 1.17 0.98 1.33 1.99 1.71 1.76 103 Empire District Electric 1.34 1.62 1.32 1.39 1.27 1.23 1.25 1.24 1.07 1.00 1.41 1.56 2.05 1.89 1.01 104 Entergy Corp. 1.69 1.36 1.40 1.33 1.21 1.31 1.35 1.62 1.66 2.44 2.65 1.89 2.01 105 Eversource Energy 1.37 1.61 1.53 1.47 1.38 1.28 1.59 1.64 1.17 1.25 1.41 1.60 1.22 1.05 106 Exclon Corp. 2.45 1.08 1.14 1.28 1.17 1.46 1.95 2.07 2.57 4.39 4.79 3.89 3.60 107 First Energy 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 1.64 108 Great Plains Energy 1.20 1.21 1.12 1.11 1.02 0.96 0.93 0.87 0.80 1.11 1.66 1.77 1.86 109 Hawaiian Elec. 1.59 1.65 1.71 1.49 1.54 1.62 1.65 1.44 1.16 1.61 1.57 2.25 1.24 1.07 1.00 1.16 1.57 1.28 1.14 1.15 1.00 0.90 0.93 0.87 0.80 1.11 1.66 1.77 1.86 110 IDACORP, Inc. 1.28 1.64 1.57 1.78 1.79 1.75 1.75 1.49 1	93	Avista Corp.	1.22	1.49	1.36	1.33	1.25	1.21	1.19	1.07	0.94	1.11	1.29	1.30	1.13
66         CMS Energy Corp.         1.77         2.59         2.43         2.26         2.09         1.91         1.66         1.48         1.10         1.23         1.82         1.42         1.23           7         Consol Edison         1.37         1.51         1.42         1.34         1.38         1.22         1.08         1.17         1.48         1.29         1.28         1.19         1.12         1.18         0.00         1.18         1.29         1.28         1.19         1.12         1.11         1.00         0.91         1.06         1.135         1.29         1.28         1.19         1.12         1.11         1.00         0.91         1.06         1.135         1.20         1.14         1.17         1.47         1.47         1.47         1.47         1.47         1.47         1.47         1.47         1.47 </td <td>94</td> <td>Black Hills</td> <td>1.41</td> <td>1.73</td> <td>1.59</td> <td>1.79</td> <td>1.62</td> <td>1.21</td> <td>1.14</td> <td>1.07</td> <td>0.83</td> <td>1.22</td> <td>1.57</td> <td>1.47</td> <td>1.63</td>	94	Black Hills	1.41	1.73	1.59	1.79	1.62	1.21	1.14	1.07	0.83	1.22	1.57	1.47	1.63
97 Consol. Edison	95	CenterPoint Energy	2.37	2.41	2.43	2.27	2.30	1.99	1.87	1.96	1.77	2.49	3.13	2.75	3.06
88         Dominion Resources         2.62         2.94         3.34         3.55         2.97         2.84         2.37         2.01         1.80         2.42         2.99         2.07         2.50           99         DTE Energy         1.35         1.68         1.65         1.62         1.51         1.35         1.20         1.16         0.89         1.10         1.35         1.29         1.29           100         Duke Energy         1.04         1.28         1.29         1.28         1.19         1.12         1.11         1.00         0.91         1.06         1.15         0.00         NA           101         Edison Int1         1.58         1.76         1.68         1.57         1.68         1.57         1.68         1.53         1.24         1.07         1.04         1.56         2.05         1.80         1.21         1.11         1.00         0.91         1.06         1.16         0.15         1.16         1.53         1.14         1.53         1.24         1.07         1.04         1.45         1.48           105         Eversource Energy         1.37         1.61         1.53         1.47         1.38         1.28         1.50         1.31	96	CMS Energy Corp.	1.77	2.59	2.43	2.26	2.09	1.91	1.66	1.48	1.10	1.23	1.82	1.42	1.32
99 DTE Energy 1.55 1.68 1.65 1.62 1.51 1.35 1.20 1.16 0.89 1.10 1.35 1.29 1.39 1.39 1.00 Duke Energy 1.04 1.28 1.29 1.28 1.19 1.12 1.11 1.00 0.91 1.06 1.15 0.00 N/A 101 Edison Int1 1.58 1.78 1.76 1.68 1.57 1.53 1.24 1.07 1.04 1.56 2.05 1.80 1.93 1.76 1.75 1.75 1.75 1.75 1.75 1.75 1.75 1.75	97	Consol. Edison	1.37	1.51	1.42	1.34	1.38	1.47	1.38	1.22	1.08	1.17	1.47	1.47	1.52
100         Duke Energy         1.04         1.28         1.29         1.28         1.19         1.12         1.11         1.00         0.91         1.06         1.15         0.00         NA           101         Edison Int¹         1.58         1.78         1.76         1.68         1.57         1.59         1.64         1.17         1.04         1.56         2.05         1.80         1.33           102         El Paso 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         1.75           103         Empire District Electric         1.34         1.62         1.36         1.40         1.33         1.21         1.31         1.36         1.40         1.33         1.26         1.40         1.48         1.40         1.33         1.26         1.66         2.44         2.65         1.89         2.01         1.56         1.58         1.41         1.28         1.41         1.28         1.41         1.28         1.46         1.95         2.07         2.57         4.39         4.79         3.89         3.60         1.05         1.77         1.86         1.52	98	Dominion Resources	2.62	2.94	3.34	3.55	2.97	2.84	2.37	2.01	1.80	2.42	2.69	2.07	2.50
101   Edison Inti    1.58   1.78   1.76   1.68   1.57   1.53   1.24   1.07   1.04   1.56   2.05   1.80   1.39   1.30   1.30   1.71   1.76   1.30   1.69   1.36   1.49   1.59   1.64   1.17   0.98   1.33   1.69   1.71   1.76   1.30   1.47   1.45   1.49   1.49   1.59   1.24   1.07   1.30   1.47   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.49   1.45   1.45   1.49   1.45	99	DTE Energy	1.35	1.68	1.65	1.62	1.51	1.35	1.20	1.16	0.89	1.10	1.35	1.29	1.39
El Paso Electric	100	Duke Energy	1.04	1.28	1.29	1.28	1.19	1.12	1.11	1.00	0.91	1.06	1.15	0.00	N/A
Empire District Electric   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   1,04   Entergy Corp.   1,69   1,36   1,40   1,33   1,21   1,31   1,35   1,62   1,66   2,44   2,65   1,89   2,01   1,05   Eversource Energy   1,37   1,61   1,53   1,47   1,38   1,28   1,50   1,31   1,12   1,31   1,60   1,22   1,05   1,06   Exelon Corp.   2,45   1,08   1,14   1,28   1,17   1,46   1,95   2,07   2,57   4,39   4,79   3,89   3,60   1,06   1,06   1,06   1,06   1,06   1,06   1,07   1,06	101	Edison Int'l	1.58	1.78	1.76	1.68	1.57	1.53	1.24	1.07	1.04	1.56	2.05	1.80	1.93
104 Entergy Corp. 1.69 1.36 1.40 1.33 1.21 1.31 1.35 1.62 1.66 2.44 2.65 1.89 2.01 1.05 Eversource Energy 1.37 1.61 1.53 1.47 1.38 1.28 1.50 1.31 1.12 1.31 1.62 1.03 1.02 1.05 1.06 Exclosor. 2.45 1.08 1.14 1.28 1.17 1.46 1.95 2.07 2.57 4.39 4.79 3.89 3.60 1.07 FirstEnergy 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 1.68 1.08 Great Plains Energy 1.20 1.21 1.12 1.11 1.02 0.96 0.93 0.87 0.80 1.11 1.66 1.77 1.86 1.09 Hawaiian Elec. 1.59 1.65 1.71 1.49 1.54 1.62 1.54 1.44 1.16 1.61 1.57 2.01 1.78 1.09 Hawaiian Elec. 1.59 1.65 1.71 1.49 1.54 1.65 1.33 1.19 1.17 1.13 0.92 1.09 1.26 1.37 1.28 1.14 1.10 1.10 1.00 1.00 1.00 1.00 1.00	102	El Paso 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
105   Eversource Energy	103	Empire District Electric	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
Exelon Corp.	104	Entergy Corp.	1.69	1.36	1.40	1.33	1.21	1.31	1.35	1.62	1.66	2.44	2.65	1.89	2.01
FirstEnergy 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   1.84     108   Great Plains Energy   1.20   1.21   1.12   1.11   1.02   0.96   0.93   0.87   0.80   0.11   1.66   1.77   1.86     109   Hawaiian Elec.   1.59   1.65   1.71   1.49   1.54   1.62   1.54   1.44   1.16   1.61   1.61   1.57   2.01   1.78     110   IDACORP, 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   ITC 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     114   NorthWestern 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   1.80     116   Otter Tail 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     118   Pinnacle West Capital   1.29   1.62   1.52   1.44   1.47   1.39   1.25   1.14   0.95   1.00   1.26   1.25   1.25     119   PNM Resources   1.05   1.33   1.33   1.21   1.09   0.98   0.80   0.69   0.56   0.66   1.23   1.21   1.45     120   Portand General   1.11   1.44   1.42   1.37   1.28   1.41   1.09   0.94   0.92   1.05   1.32   1.36   1.05     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     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   1.58   1.57   1.58   1.57   1.58   1.57   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     127   Vectren Corp.   1.	105	Eversource Energy	1.37	1.61	1.53	1.47	1.38	1.28	1.50	1.31	1.12	1.31	1.60	1.22	1.05
108   Great Plains Energy   1.20   1.21   1.12   1.11   1.02   0.96   0.93   0.87   0.80   1.11   1.66   1.77   1.86   1.77   1.86   1.79   1.86   1.59   1.65   1.71   1.49   1.54   1.62   1.54   1.44   1.16   1.61   1.57   2.01   1.78   1.10   1.04   1.05	106	Exelon Corp.	2.45	1.08	1.14	1.28	1.17	1.46	1.95	2.07	2.57	4.39	4.79	3.89	3.60
Hawaiian Elec.	107	FirstEnergy 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
110       IDACORP, 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       ITC 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       McB 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       2.99         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         114       NorthWestern 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       1.80         116       Otter Tail Corp. <t< td=""><td>108</td><td>Great Plains Energy</td><td>1.20</td><td>1.21</td><td>1.12</td><td>1.11</td><td>1.02</td><td>0.96</td><td>0.93</td><td>0.87</td><td>0.80</td><td>1.11</td><td>1.66</td><td>1.77</td><td>1.86</td></t<>	108	Great Plains Energy	1.20	1.21	1.12	1.11	1.02	0.96	0.93	0.87	0.80	1.11	1.66	1.77	1.86
111       ITC 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         114       NorthWestern 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       1.88         116       Otter Tail 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       1.78       1.93       1.83       1.41       1.90<	109	Hawaiian Elec.	1.59	1.65	1.71	1.49	1.54	1.62	1.54	1.44	1.16	1.61	1.57	2.01	1.78
112 MGE Energy	110	IDACORP, 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
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           114         NorthWestern 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         1.80           116         Otter Tail 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           117         PG&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         Pilos Scapa         1.57         1.59         1.52         1.44         1.47         1.39         1.26         1.41         1.50	111	ITC 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
114       NorthWestern 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       1.80         116       Otter Tail 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       1.77         117       PG&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       1.26       1.26       1.25         119       PNIM Resources       1.05       1.39       1.33       1.21       1.09       0.98       0.80       0.69       0.56       0.66       1.23       1.21       1.45         120       Portland General	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
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       1.80         116       Otter Tail 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         117       PG&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       1.26       1.26       1.25         119       PNM Resources       1.05       1.39       1.33       1.21       1.09       0.98       0.80       0.69       0.56       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	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
116       Otter Tail 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         117       PG&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       1.26       1.26       1.25         119       PNM Resources       1.05       1.39       1.33       1.21       1.09       0.98       0.80       0.69       0.56       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 <td>114</td> <td>NorthWestern Corp</td> <td>1.43</td> <td>1.68</td> <td>1.60</td> <td>1.54</td> <td>1.56</td> <td>1.42</td> <td>1.35</td> <td>1.22</td> <td>1.07</td> <td>1.15</td> <td>1.48</td> <td>1.65</td> <td>1.42</td>	114	NorthWestern 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
117         PG&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         1.26         1.26         1.25           119         PNM Resources         1.05         1.39         1.33         1.21         1.09         0.98         0.80         0.69         0.56         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	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	1.80
118         Pinnacle West Capital         1.29         1.62         1.52         1.44         1.47         1.39         1.25         1.14         0.95         1.00         1.26         1.26         1.25           119         PNM Resources         1.05         1.39         1.33         1.21         1.09         0.98         0.80         0.69         0.56         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         3.9         3.05         2.43         2.62         1.64         1.55         1.58         1.47         1.61         2.10         3.9         3.05         2.43         2.43         2.43         1.44         1.46         1.59         1.67         1.78         2.58         2.99         2.46         2.45         2.45         1.23         1.20         1.45         1.62         1.64         1.72         1.22	116	Otter Tail 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
119       PNM Resources       1.05       1.39       1.33       1.21       1.09       0.98       0.80       0.69       0.56       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. <td< td=""><td>117</td><td>PG&amp;E Corp.</td><td>1.57</td><td>1.55</td><td>1.57</td><td>1.39</td><td>1.38</td><td>1.41</td><td>1.46</td><td>1.56</td><td>1.41</td><td>1.50</td><td>1.94</td><td>1.83</td><td>1.84</td></td<>	117	PG&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
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	118	Pinnacle West Capital	1.29	1.62	1.52	1.44	1.47	1.39	1.25	1.14	0.95	1.00	1.26	1.26	1.25
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	119	PNM Resources	1.05	1.39	1.33	1.21	1.09	0.98	0.80	0.69	0.56	0.66	1.23	1.21	1.45
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         1.36         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         2.35           127         Vectren Corp.         1.74         2.04         2.11         2.08         1.82         1.57         1.53         1.41         1.34<	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
123       SCANA Corp.       1.49       1.65       1.47       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       1.77       1.77       1.96       2.23         128       Westar 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 <td>121</td> <td>PPL Corp.</td> <td>2.13</td> <td>2.28</td> <td>2.24</td> <td>1.64</td> <td>1.55</td> <td>1.58</td> <td>1.47</td> <td>1.61</td> <td>2.10</td> <td>3.19</td> <td>3.05</td> <td>2.43</td> <td>2.50</td>	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
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     1.77     1.96     2.23       128     Westar 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     1.65     1.40     1.57     1.77     1.71     1.62       130     Xcel Energy Inc.     1.46     1.79     1.73     1.72     1.62     1.54     1.47     1.38     1.27     1.65     1.93     1.74     1.80 <td>122</td> <td>Public Serv. Enterprise</td> <td>1.93</td> <td>1.57</td> <td>1.58</td> <td>1.57</td> <td>1.44</td> <td>1.46</td> <td>1.59</td> <td>1.67</td> <td>1.78</td> <td>2.58</td> <td>2.99</td> <td>2.46</td> <td>2.45</td>	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
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     Westar 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     1.71     1.77     1.71     1.62       129     WEC Energy Group     1.83     1.98     1.82     2.34     2.21     2.05     1.81     1.65     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     1.72     1.62     1.54     1.47     1.38     1.27     1.65	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
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     Westar 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     1.65     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     1.72     1.62     1.54     1.47     1.38     1.27     1.65     1.93     1.74     1.80	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
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     Westar 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     1.65     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     1.72     1.62     1.54     1.47     1.38     1.27     1.65     1.93     1.74     1.80	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
128     Westar 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     1.65     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     1.72     1.62     1.54     1.47     1.38     1.27     1.65     1.93     1.74     1.80															2.23
129     WEC Energy Group     1.83     1.98     1.82     2.34     2.21     2.05     1.81     1.65     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     1.72     1.62     1.54     1.47     1.38     1.27     1.65     1.93     1.74     1.80															1.82
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 1.31 Average 1.64 1.79 1.73 1.72 1.62 1.54 1.47 1.38 1.27 1.65 1.93 1.74 1.80		3,												1.30	1.41
131 Average 1.64 1.79 1.73 1.72 1.62 1.54 1.47 1.38 1.27 1.65 1.93 1.74 1.80		0, .			1.82						1.40				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
132 Median 1.52 1.65 1.59 1.54 1.50 1.47 1.37 1.31 1.15 1.49 1.74 1.71 1.73	131	Average	1.64	1.79	1.73	1.72	1.62	1.54	1.47	1.38	1.27	1.65	1.93	1.74	1.80
	132	Median	1.52	1.65	1.59	1.54	1.50	1.47	1.37	1.31	1.15	1.49	1.74	1.71	1.73

Sources:

<sup>&</sup>lt;sup>1</sup> The Value Line Investment Survey Investment Analyzer Software, downloaded on June 28, 2016.

 $<sup>^2</sup>$  The Value Line Investment Survey,  $\,$  April 29, May 20, and June 17, 2016. Note:

<sup>&</sup>lt;sup>a</sup> 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 Investment Survey, April 29, May 20, and June 17, 2016.

# Embedded Cost of Debt (2017 Adjusted)

1	Total Outstanding Debt	10,938,767	,
2	Less: Unamortized Premium	(200,817)	')
3	Net Debt Outstanding	10,737,950	)
4	Total Annual Cost	490,998	}
5	Embedded Debt Cost*	4.57%	6

		<u>Rate</u>	Principal	Outstanding	Expense Expense	Cost	
		(1)	(2)	(3)	(4)	(5)	
6	New Debt Issuances:	6.16%		\$ 123,077			
8		6.16%	\$ 500,000 \$ 1,300,000	<del></del>	\$ 4,375 \$11,375	<del></del>	_

### MPG Revised (\$ 000)

9	Current A rated yield	3.96%
10	FPL Underwriting Commission**	0.875%
11	Projected New Debt Cost	4.835%

		Rate	Principal Outstanding				Col. (3) - (4) Cost			
		(1)		(2)		(3)		(4)		(5)
12 13 14	New Debt Issuances:	4.835% 4.835%	\$ \$ \$	800,000 500,000 1,300,000	\$ \$	123,077 384,615 507,692	\$	7,000 4,375 11,375	\$ \$ \$	5,612 18,385 23,997
15	Difference								\$	6,915
16	Net Debt Outstanding		\$	10,737,950						
17	Revised Debt Cost		\$	484,083						
18	Embedded debt Cost			4.51%						

Source:

Schedule D-4a

<sup>\*</sup> Schedule D-1a shows 4.62%.

<sup>\*\*</sup> Schedule F-8.

### **Proxy Group**

		Credit	Ratings <sup>1</sup>	Common Equity Ratios			
<u>Line</u>	Company	<u>S&amp;P</u> (1)	Moody's (2)	SNL <sup>1</sup> (3)	Value Line <sup>2</sup> (4)		
1	ALLETE, Inc.	BBB+	A3	53.3%	53.7%		
2	Alliant Energy Corporation	A-	А3	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	BBB+	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-	А3	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	Florida Power & Light Company	<b>A</b> - <sup>1</sup>	A1 <sup>1</sup>		<b>59.6</b> % <sup>3</sup>		

### Sources:

<sup>&</sup>lt;sup>1</sup> SNL Financial, Downloaded on June 10, 2016.

<sup>&</sup>lt;sup>2</sup> The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

<sup>&</sup>lt;sup>3</sup> Dewhurst direct at 23.

## **Consensus Analysts' Growth Rates**

		Zad	cks	SI	NL	Reu	Average of	
		Estimated	Number of	Estimated	Number of	Estimated	Number of	Growth
<u>Line</u>	<u>Company</u>	Growth %1	<b>Estimates</b>	Growth %2	<b>Estimates</b>	Growth %3	<b>Estimates</b>	<u>Rates</u>
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	ALLETE, Inc.	4.50%	N/A	4.50%	2	3.00%	1	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	CMS Energy Corporation	6.40%	N/A	6.30%	2	7.24%	3	6.65%
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%
10	OGE Energy Corp.	5.20%	N/A	5.30%	2	4.30%	2	4.93%
11	Pinnacle West Capital Corporation	4.00%	N/A	4.20%	3	3.73%	3	3.98%
12	PNM Resources, Inc.	7.60%	N/A	7.00%	2	8.76%	2	7.79%
13	Portland General Electric Company	6.40%	N/A	6.20%	4	6.57%	4	6.39%
14	SCANA Corporation	5.30%	N/A	5.60%	2	5.40%	2	5.43%
15	Xcel Energy Inc.	5.30%	N/A	5.00%	4	5.27%	3	5.19%
16	Average	5.44%	N/A	5.50%	3	5.42%	2	5.38%

Sources:

<sup>&</sup>lt;sup>1</sup> Zacks Elite, http://www.zackselite.com/, downloaded on June 10, 2016.

 $<sup>^{2}</sup>$  SNL Interactive, http://www.snl.com/, downloaded on June 10, 2016.

<sup>&</sup>lt;sup>3</sup> Reuters, http://www.reuters.com/, downloaded on June 10, 2016.

# Constant Growth DCF Model (Consensus Analysts' Growth Rates)

<u>Line</u>	<u>Company</u>	13-Week AVG <u>Stock Price<sup>1</sup></u> (1)	Analysts' <u>Growth<sup>2</sup></u> (2)	Annualized <u>Dividend<sup>3</sup></u> (3)	Adjusted <u>Yield</u> (4)	Constant Growth DCF (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:

<sup>&</sup>lt;sup>1</sup> SNL Financial, Downloaded on June 13, 2016.

<sup>&</sup>lt;sup>2</sup> Exhibit MPG-5.

 $<sup>^{\</sup>rm 3}$  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>	<u>Company</u>	<u>2015</u>	Projected	<u>2015</u>	Projected	<u>2015</u>	Projected	
		(1)	(2)	(3)	(4)	(5)	(6)	
		<b>#</b> 0.00	<b>DO 10</b>	00.00	<b>A</b> 0.75	<b>50 70</b> 0/	0.4.000/	
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%	
11	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.

### **Sustainable Growth Rate**

	3 to 5 Year Projections									Sustainable		
		Dividends	Earnings	Book Value	Book Value		Adjustment	Adjusted	Payout	Retention	Internal	Growth
<u>Line</u>	<u>Company</u>	Per Share (1)	Per Share (2)	Per Share (3)	Growth (4)	<u>ROE</u> (5)	Factor (6)	<u>ROE</u> (7)	<u>Ratio</u> (8)	<u>Rate</u> (9)	Growth Rate (10)	<u>Rate</u> (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. (1) / Col. (2).

Col. (9): 1 - Col. (8).

Col. (10): Col. (9) \* Col. (7).

Col. (11): Col. (10) + Page 2 Col. (9).

### **Sustainable Growth Rate**

		13-Week Average	2015 Book Value	Market to Book	Common Outstanding	n Shares g (in Millions)²				
<u>Line</u>	Company	Stock Price <sup>1</sup> (1)	Per Share <sup>2</sup> (2)	<u>Ratio</u> (3)	<u>2015</u> (4)	3-5 Years (5)	Growth (6)	S Factor <sup>3</sup> (7)	V Factor <sup>4</sup> (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:

<sup>&</sup>lt;sup>1</sup> SNL Financial, Downloaded on June 13, 2016.

<sup>&</sup>lt;sup>2</sup> The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

<sup>&</sup>lt;sup>3</sup> Expected Growth in the Number of Shares, Column (3) \* Column (6).

<sup>&</sup>lt;sup>4</sup> Expected Profit of Stock Investment, [ 1 - 1 / Column (3) ].

# Constant Growth DCF Model (Sustainable Growth Rate)

<u>Line</u>	<u>Company</u>	13-Week AVG <u>Stock Price<sup>1</sup></u> (1)	Sustainable <u>Growth<sup>2</sup></u> (2)	Annualized <u>Dividend<sup>3</sup></u> (3)	Adjusted <u>Yield</u> (4)	Constant Growth DCF (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 17	Average Median	\$53.04	4.26%	\$1.74	3.42%	7.67% 7.34%

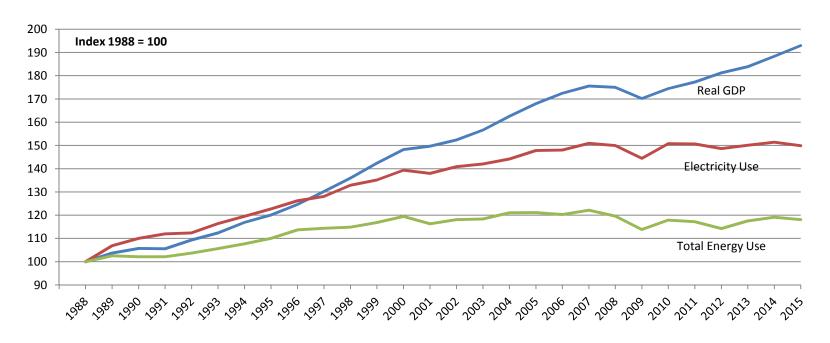
Sources:

<sup>&</sup>lt;sup>1</sup> SNL Financial, Downloaded on June 13, 2016.

<sup>&</sup>lt;sup>2</sup> Exhibit MPG-8, page 1.

<sup>&</sup>lt;sup>3</sup> 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

### **Multi-Stage Growth DCF Model**

		13-Week AVG	Annualized	First Stage		Sec	ond Stage Grov	wth		Third Stage	Multi-Stage
<u>Line</u>	Company	Stock Price <sup>1</sup> (1)	<u>Dividend<sup>2</sup></u> (2)	Growth <sup>3</sup> (3)	<u>Year 6</u> (4)	<u>Year 7</u> (5)	<u>Year 8</u> (6)	<u>Year 9</u> (7)	<u>Year 10</u> (8)	Growth <sup>4</sup> (9)	Growth DCF (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

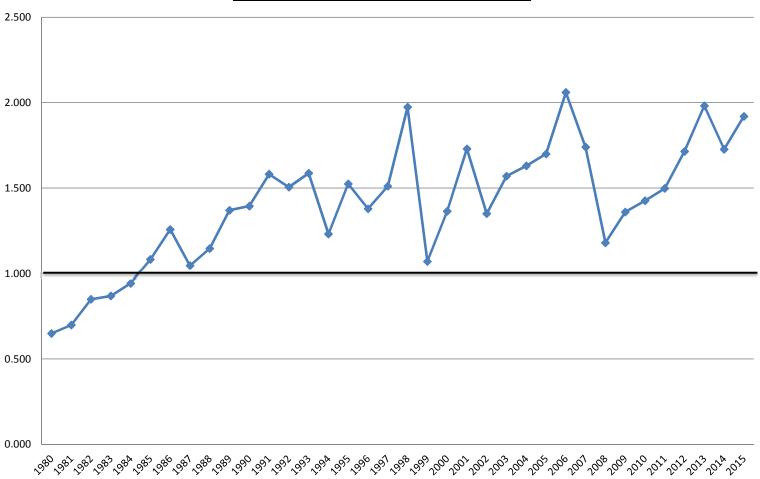
<sup>&</sup>lt;sup>1</sup> SNL Financial, Downloaded on June 13, 2016.

<sup>&</sup>lt;sup>2</sup> The Value Line Investment Survey, April 29, May 20, and June 17, 2016.

<sup>&</sup>lt;sup>3</sup> Exhibit MPG-6

<sup>&</sup>lt;sup>4</sup> Blue Chip Financial Forecasts, June 1, 2016 at 14.

## **Common Stock Market/Book Ratio**



Source:

1980 - 2000: Mergent Public Utility Manual.

2001 - 2015: AUS Utility Reports, various dates.

### **Equity Risk Premium - Treasury Bond**

<u>Line</u>	<u>Year</u>	Authorized Electric <u>Returns<sup>1</sup></u> (1)	30 yr. Treasury <u>Bond Yield<sup>2</sup></u> (2)	Indicated Risk <u>Premium</u> (3)	Rolling 5 - Year <u>Average</u> (4)	Rolling 10 - Year <u>Average</u> (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%	5.56%	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 <sup>3</sup>	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:

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.

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> The data includes the period Jan - Mar 2016.

### **Equity Risk Premium - Utility Bond**

		Authorized Electric	Average "A" Rated Utility	Indicated Risk	Rolling 5 - Year	Rolling 10 - Year
<u>Line</u>	<u>Year</u>	Returns <sup>1</sup> (1)	Bond Yield <sup>2</sup> (2)	Premium (3)	Average (4)	Average (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 <sup>3</sup>	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%

Sources:

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.

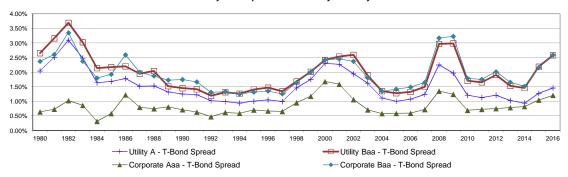
<sup>&</sup>lt;sup>2</sup> Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2009 were obtained from the Mergent Bond Record. The utility yields from 2010-2015 were obtained from http://credittrends.moodys.com/.

<sup>&</sup>lt;sup>3</sup> The data includes the period Jan - Mar 2016.

### **Bond Yield Spreads**

				Public Utility Bond		i		Co	orporate Bond		Utility to Corporate		
		T-Bond			A-T-Bond	Baa-T-Bond			Aaa-T-Bond	Baa-T-Bond	Baa	A-Aaa	
Line	Year	Yield <sup>1</sup>	<u>A<sup>2</sup></u>	Baa <sup>2</sup>	Spread Property 1985	Spread	<u>Aaa<sup>1</sup></u>	Baa <sup>1</sup>	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	2008	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 <sup>3</sup>	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:

 $<sup>^{\</sup>rm 1}$  St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/.

<sup>&</sup>lt;sup>2</sup> 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/.

<sup>&</sup>lt;sup>3</sup> The data includes the period Jan - Mar 2016.

# **Treasury and Utility Bond Yields**

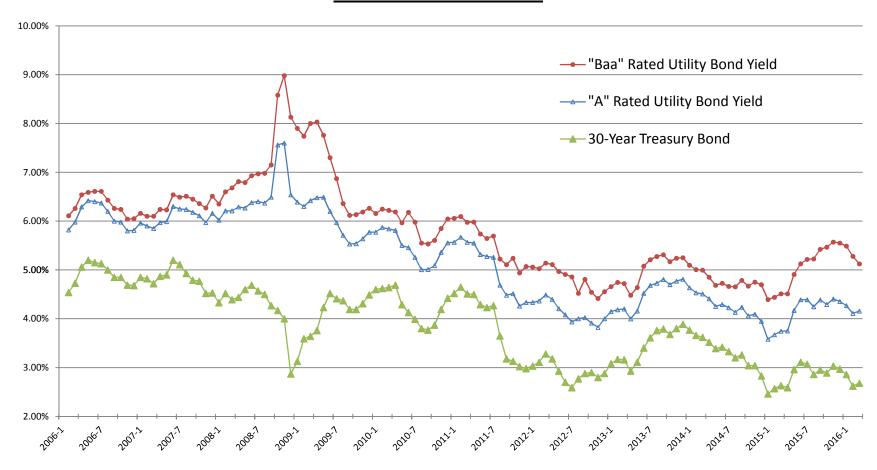
<u>Line</u>	<u>Date</u>	Treasury  Bond Yield <sup>1</sup> (1)	"A" Rated Utility <u>Bond Yield<sup>2</sup></u> (2)	"Baa" Rated Utility <u>Bond Yield<sup>2</sup></u> (3)
1	06/10/16	2.44%	3.75%	4.44%
2	06/03/16	2.52%	3.82%	4.51%
3	05/27/16	2.65%	3.94%	4.63%
4	05/19/16	2.64%	3.92%	4.60%
5	05/13/16	2.55%	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:

<sup>&</sup>lt;sup>1</sup> St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org.

<sup>&</sup>lt;sup>2</sup> http://credittrends.moodys.com/.

# **Trends in Bond Yields**



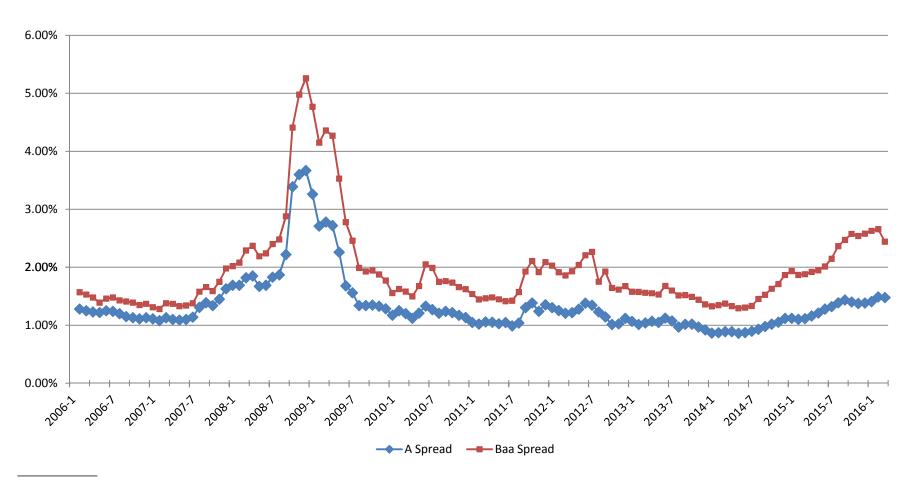
Sources:

Mergent Bond Record.

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

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

# **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/

# Value Line Beta

<u>Line</u>	<u>Company</u>	<u>Beta</u>
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:

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

# **CAPM Return**

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

#### Sources:

<sup>&</sup>lt;sup>1</sup> Blue Chip Financial Forecasts; June 1, 2016, at 2.

<sup>&</sup>lt;sup>2</sup> Duff & Phelps, 2016 Valuation Handbook Guide to Cost of Capital at 2-4, 3-31, and 3-40

<sup>&</sup>lt;sup>3</sup> Exhibit MPG-17.

#### **Standard & Poor's Credit Metrics**

			Retail				
		Co	ost of Service		mark (Medial \		
Line	<u>Description</u>		Amount	Intermediate	Significant	Aggressive	Reference
			(1)	(2)	(3)	(4)	(5)
1	Rate Base	\$	32,536,116				Schedule A-1.
2	Weighted Common Return		4.17%				Page 3, Line 3, Col. 3.
3	Pre-Tax Rate of Return		8.19%				Page 3, Line 7, Col. 4.
4	Income to Common	\$	1,358,138				Line 1 x Line 2.
5	EBIT	\$	2,663,378				Line 1 x Line 3.
6	Depreciation & Amortization	\$	1,665,925				Schedule C-1.
7	Imputed Amortization	\$	52,057				CreditStats, www.globalcreditportal.com, June 30, 2016.
8	Deferred Income Taxes & ITC	\$	598,846				Schedule C-22.
9	Funds from Operations (FFO)	\$	3,674,966				Sum of Line 4 and Lines 6 through 8.
10	Imputed & Capitalized Interest Expense	\$	40,363				CreditStats, www.globalcreditportal.com, June 30, 2016.
11	EBITDA	\$	4,421,723				Sum of Lines 5 through 7 and Line 10.
12	Total Adjusted Debt Ratio		41%				Page 4, Line 4, Col. 2.
13	Debt to EBITDA		3.0x	2.5x - 3.5x	3.5x - 4.5x	4.5x - 5.5x	(Line 1 x Line 12) / Line 11.
14	FFO to Total Debt		27%	23% - 35%	13% - 23%	9% - 13%	Line 9 / (Line 1 x Line 12).
			2. /0	2070 0070	.070 2070	0,0 10,0	Line 9 / (Line 1 x Line 12).

#### Sources:

#### Note:

Based on the June 2015 S&P report, FPL has an "Excellent" business profile and an "Intermediate" financial profile, and falls under the 'Medial Volatility' matrix.

<sup>&</sup>lt;sup>1</sup> Standard & Poor's: "Criteria: Corporate Methodology," November 19, 2013.

<sup>&</sup>lt;sup>2</sup> Standard & Poor's, Ratings Direct: "Summary: Florida Power & Light Co.," June 12, 2015.

# Standard & Poor's Credit Metrics (June 30, 2015)

<u>Line</u>		Credit Rating (1)	FFO / Debt (%) (2)	Debt / Capital (%) (3)
	Value Line Pub	licly Traded Elect	ric Utility Compani	<u>es</u>
	A Rated			
1	Average	A-	25.17	55.50
2	Median	A-	26.02	54.03
	BBB Rated			
3	Average	BBB	21.30	56.64
4	Median	BBB	21.72	56.75
_	All Utilities			
5	Average	BBB+	22.62	56.25
6	Median	BBB+	23.89	56.14
	Electric Operati	ing Subsidiary Co	<u>mpanies</u>	
	A Rated			
7	Average	A-	26.43	50.64
8	Median	A-	26.59	50.65
	BBB Rated			
9	Average	BBB	22.25	53.81
10	Median	BBB	21.10	54.17
10	Median	ВВВ	21.10	34.17
	All Utilities			
11	Average	BBB+	24.34	52.22
12	Median	BBB+	24.36	52.81
4.0		er & Light Compar		07.07
13	Average	A-	42.92	37.87

Source:

www.globalcreditportal.com/ratingsdirect/ Downloaded June 30, 2016.

# Standard & Poor's Credit Metrics (Pre-Tax Rate of Return)

<u>Line</u>	<u>Description</u>	<u>Weight</u> ¹ (1)	<u>Cost</u> (2)	Weighted <u>Cost</u> (3)	Pre-Tax Weighted <u>Cost</u> (4)
1	Long-Term Debt	28.76%	4.51%	1.30%	1.30%
2	Customer Deposits	1.25%	2.05%	0.03%	0.03%
3	Common Equity	45.13%	9.25%	4.17%	6.81%
4	Short-Term Debt	1.88%	1.85%	0.03%	0.03%
5	Deferred Income Tax	22.65%	0.00%	0.00%	0.00%
6	Investment Tax Credit	<u>0.33%</u>	7.27%	0.02%	0.02%
7	Total	100.00%		5.56%	8.19%
8	Tax Conversion Factor <sup>2</sup>				1.63024

Sources:

<sup>&</sup>lt;sup>1</sup>Exhibit MPG-1.

<sup>&</sup>lt;sup>2</sup>Schedule A-1.

# Standard & Poor's Credit Metrics (Financial Capital Structure)

<u>Line</u>	<u>Description</u>	<u>Am</u>	ount (\$ 000) <sup>1</sup> (1)	Weight (2)
1	Long-Term Debt	\$	9,358,417	37.6%
2	Short-Term Debt	\$	612,939	2.5%
3	Off-Balance Sheet Debt <sup>2</sup>	\$	263,273	<u>1.1%</u>
4	Total Long-Term Debt	\$	10,234,629	41.1%
5	Common Equity	\$	14,682,574	<u>58.9%</u>
6	Total	\$	24,917,203	100.0%

Sources:

<sup>&</sup>lt;sup>1</sup>Exhibit MPG-1.

<sup>&</sup>lt;sup>2</sup>CreditStats, www.globalcreditportal.com, June 30, 2016.

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

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]				
	Stock	El	PS Growth R		ates	Long-Term		Payout Rati	0	Iterative	Solution	Terminal	Terminal				
				Value		_											
Company	Price	Zacks	First Call	Line	Average	Growth	2016	2019	2026	Proof	IRR	P/E Ratio	PEG Ratio				
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				
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				
Ameren Corporation	\$43.18	6.30%	6.00%	7.00%	6.43%	4.35%	62.00%	56.00%	62.00%	\$0.00	8.82%	14.46	3.32				
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				
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				
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				
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				
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				
Great Plains Energy Inc.	\$26.91	5.80%	5.07%	5.00%	5.29%	4.35%	60.00%	62.00%	60.00%	\$0.00	8.62%	14.66	3.37				
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				
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				
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				
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				
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				
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				
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				
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				
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				
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				
										MEAN MAX							
										MIN							
										IVIII V	1.4070						
Projected Annual																	
Earnings per Share	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
	r1	[,]	[4]	[]	[0]	[]	[1	[]	,	[]	[1	[1	[-4]	[]	[1	[]	[0.0]
Company	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
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
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
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
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
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
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
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
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
Great Plains Energy Inc.	\$1.57	\$1.65	\$1.74	\$1.83	\$1.93	\$2.03	\$2.14	\$2.25	\$2.36	\$2.47	\$2.59	\$2.71	\$2.82	\$2.95	\$3.08	\$3.21	\$3.35
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
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
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
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
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
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
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
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
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
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
7.001 E.1019y 1110.	Ψ2.00	Ψ2.10	ΨΖ.ΖΟ	Ψ2.00	Ψ2.77	Ψ2.00	Ψ2.00	Ψ2.00	Ψ2.00	ψυ.υτ	ψυ.20	ψ0.0-	ψυτυ	ψυ.υ-γ	ψυ.υυ	ψ0.00	Ψ

#### 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]	
Company	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	_
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%	
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%	
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%	
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%	
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%	
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%	
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%	
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%	
Great Plains Energy Inc.	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%	
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%	
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%	
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%	
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%	
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%	
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%	
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%	
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%	
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%	
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]	[
Company	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Te
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	\$9
Alliant Energy Corporation	\$2.13	\$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	\$1°
		\$1.74	\$1.79		\$1.98	\$2.14	\$2.29	\$2.45	\$2.61	\$2.77	\$2.93	\$3.06		\$3.33	\$3.48	\$8
Ameren Corporation	\$1.69			\$1.84		*							\$3.20			
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	\$1
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	\$6
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	\$6
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	\$1:
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	\$1
Great Plains Energy Inc.	\$1.04	\$1.11	\$1.18	\$1.26	\$1.32	\$1.38	\$1.44	\$1.51	\$1.57	\$1.63	\$1.69	\$1.77	\$1.85	\$1.93	\$2.01	\$4
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	\$1:
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	\$1
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	\$4
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	\$5
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	\$1
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	\$5
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	\$6
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	\$1
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	\$
					\$1.70				\$2.14	\$2.20 \$2.12	\$2.39 \$2.20	\$2.50 \$2.29	\$2.39	\$2.72	\$2.64 \$2.61	\$6
Xcel Energy Inc.	\$1.40	\$1.48	\$1.57	\$1.66	\$1.73	\$1.81	\$1.88	\$1.96	\$2.04	\$Z.TZ	\$Z.ZU	\$2.29	\$2.39	<b>⊅∠.</b> 5U	\$2.01	Þ۴

#### 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																
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
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
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
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
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
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
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
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
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
Great Plains Energy Inc.	(\$26.91)	\$0.00	\$1.00	\$1.07	\$1.18	\$1.26	\$1.32	\$1.38	\$1.44	\$1.51	\$1.57	\$1.63	\$1.69	\$1.77	\$1.85	\$1.93	\$51.11
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
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
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
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
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
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
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
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
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
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)

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]				
-	Stock		S Growth R			Long-Term		Payout Rati		Iterative		Terminal	Terminal				
				Value				•									
Company	Price	Zacks	First Call	Line	Average	Growth	2016	2019	2026	Proof	IRR	P/E Ratio	PEG Ratio				
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				
Alliant Energy Corporation	\$59.72	5.40%	5.55%	6.00%	5.65%	4.35%	61.00%	63.00%	61.00%	\$0.00	8.80%	14.30	3.29				
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				
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				
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				
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				
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				
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				
Great Plains Energy Inc.	\$26.82	5.80%	5.07%	5.00%	5.29%	4.35%	60.00%	62.00%	60.00%	\$0.00	8.63%	14.61	3.36				
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				
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				
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				
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				
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				
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				
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				
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				
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				
Xcel Energy Inc.	\$35.44	5.00%	4.68%	4.50%	4.73%	4.35%	63.00%	65.00%	63.00%	\$0.00	8.57%	15.56	3.58				
										MEAN	8.67%						
										MAX	10.04%						
										MIN	7.53%						
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
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
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
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
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
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
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
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
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
Great Plains Energy Inc.	\$1.57	\$1.65	\$1.74	\$1.83	\$1.93	\$2.03	\$2.14	\$2.25	\$2.36	\$2.47	\$2.59	\$2.71	\$2.82	\$2.95	\$3.08	\$3.21	\$3.35
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
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
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
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
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
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
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
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
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
Xcel Energy Inc.	\$2.03	\$2.43	\$2.23	\$2.33	\$2.79	\$2.56	\$2.68	\$2.80	\$2.93	\$3.45	\$3.20	\$3.76	\$3.49	\$3.64	\$3.80	\$3.96	\$4.03
Acci Energy IIIc.	φ2.03	φ2.13	φ2.23	φ2.33	φ <b>∠.44</b>	φ2.00	φ2.00	φ2.0U	φ <b>∠</b> .33	φ3.07	φ3.20	φυ.υ4	φυ.45	ψ3.04	φ3.00	φυ.συ	φ4.14

#### 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]	
Company	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	_
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%	
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%	
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%	
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%	
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%	
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%	
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%	
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%	
Great Plains Energy Inc.	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%	
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%	
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%	
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%	
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%	
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%	
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%	
		52.33%	52.67%		52.86%	52.71%	52.57%	52.43%	52.14%	52.14%		52.00%	52.00%	52.00%	52.00%	
Portland General Electric Company SCANA Corporation	52.00% 56.00%	52.33% 55.67%	52.67%	53.00% 55.00%	52.86% 55.14%	52.71%	52.57%	52.43% 55.57%	52.29% 55.71%	52.14% 55.86%	52.00% 56.00%	52.00% 56.00%	52.00% 56.00%	52.00% 56.00%	56.00%	
Westar Energy, Inc.	61.00%	59.00% 63.67%	57.00% 64.33%	55.00% 65.00%	55.86%	56.71% 64.43%	57.57%	58.43% 63.86%	59.29% 63.57%	60.14% 63.29%	61.00%	61.00% 63.00%	61.00% 63.00%	61.00% 63.00%	61.00% 63.00%	
Xcel Energy Inc.	63.00%	03.07 /0	04.0070	05.0078	64.71%	04.4370	64.14%	03.0070	00.07 /0	03.2370	63.00%	03.0076	03.0076	03.0070	03.0078	-
Projected Annual																
Cash Flows																
	[46]	[47]	[40]	[40]	[60]	[64]	[62]	[63]	[64]	[66]	[66]	[67]	[69]	[60]	[en]	
Casii Fiuws	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	To
																Te
Company	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Te V
Company ALLETE, Inc.	2016 \$2.13	2017 \$2.17	2018 \$2.20	2019 \$2.24	2020 \$2.40	2021 \$2.57	2022 \$2.74	2023 \$2.93	2024 \$3.11	2025 \$3.31	2026 \$3.50	2027 \$3.65	2028 \$3.81	2029 \$3.98	2030 \$4.15	Te V \$9
Company ALLETE, Inc. Alliant Energy Corporation	2016 \$2.13 \$2.37	2017 \$2.17 \$2.53	2018 \$2.20 \$2.70	2019 \$2.24 \$2.89	2020 \$2.40 \$3.04	2021 \$2.57 \$3.19	2022 \$2.74 \$3.34	2023 \$2.93 \$3.49	2024 \$3.11 \$3.64	2025 \$3.31 \$3.79	2026 \$3.50 \$3.93	2027 \$3.65 \$4.10	2028 \$3.81 \$4.28	2029 \$3.98 \$4.47	2030 \$4.15 \$4.66	Te V \$9 \$1
Company ALLETE, Inc. Alliant Energy Corporation Ameren Corporation	2016 \$2.13 \$2.37 \$1.69	2017 \$2.17 \$2.53 \$1.74	2018 \$2.20 \$2.70 \$1.79	2019 \$2.24 \$2.89 \$1.84	2020 \$2.40 \$3.04 \$1.98	2021 \$2.57 \$3.19 \$2.14	2022 \$2.74 \$3.34 \$2.29	2023 \$2.93 \$3.49 \$2.45	2024 \$3.11 \$3.64 \$2.61	2025 \$3.31 \$3.79 \$2.77	2026 \$3.50 \$3.93 \$2.93	2027 \$3.65 \$4.10 \$3.06	2028 \$3.81 \$4.28 \$3.20	2029 \$3.98 \$4.47 \$3.33	2030 \$4.15 \$4.66 \$3.48	Te V \$9 \$1 \$8
Company ALLETE, Inc. Alliant Energy Corporation Ameren Corporation American Electric Power Company, Inc.	2016 \$2.13 \$2.37 \$1.69 \$2.34	2017 \$2.17 \$2.53 \$1.74 \$2.47	2018 \$2.20 \$2.70 \$1.79 \$2.60	2019 \$2.24 \$2.89 \$1.84 \$2.73	2020 \$2.40 \$3.04 \$1.98 \$2.86	2021 \$2.57 \$3.19 \$2.14 \$2.98	2022 \$2.74 \$3.34 \$2.29 \$3.11	2023 \$2.93 \$3.49 \$2.45 \$3.25	2024 \$3.11 \$3.64 \$2.61 \$3.38	2025 \$3.31 \$3.79 \$2.77 \$3.52	2026 \$3.50 \$3.93 \$2.93 \$3.67	2027 \$3.65 \$4.10 \$3.06 \$3.83	2028 \$3.81 \$4.28 \$3.20 \$4.00	2029 \$3.98 \$4.47 \$3.33 \$4.17	2030 \$4.15 \$4.66 \$3.48 \$4.35	\$9 \$1 \$8 \$1
Company ALLETE, Inc. Alliant Energy Corporation Ameren Corporation American Electric Power Company, Inc. Avista Corporation	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65	\$9 \$1 \$8 \$1 \$6
Company ALLETE, Inc. Alliant Energy Corporation Ameren Corporation American Electric Power Company, Inc. Avista Corporation CMS Energy Corporation	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38	\$9 \$1 \$8 \$1 \$6 \$6
Company ALLETE, Inc. Alliant Energy Corporation Ameren Corporation American Electric Power Company, Inc. Avista Corporation CMS Energy Corporation Dominion Resources, Inc.	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28 \$5.10	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32	Te \ \$9 \$1 \$8 \$1 \$6 \$1
Company ALLETE, Inc. Alliant Energy Corporation Ameren Corporation American Electric Power Company, Inc. Avista Corporation CMS Energy Corporation Dominion Resources, Inc. DTE Energy Company	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28 \$5.10 \$6.33	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61	Te \\ \$9 \$1 \$8 \$1 \$6 \$6 \$1
Company ALLETE, Inc. Alliant Energy Corporation Ameren Corporation American Electric Power Company, Inc. Avista Corporation CMS Energy Corporation Dominion Resources, Inc. DTE Energy Company Great Plains Energy Inc.	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61 \$1.11	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17 \$1.32	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.78 \$3.86 \$4.85 \$1.51	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28 \$5.10 \$6.33 \$1.93	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01	Te \ \$9 \$1 \$6 \$1 \$1 \$1 \$4
Company ALLETE, Inc. Alliant Energy Corporation American Electric Power Company, Inc. Avista Corporation CMS Energy Corporation Dominion Resources, Inc. DTE Energy Company Great Plains Energy Inc. IDACORP, Inc.	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61 \$1.11 \$2.30	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.59	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.33 \$4.68 \$5.82 \$1.77 \$3.18	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$5.10 \$6.33 \$1.93 \$3.46	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01 \$3.61	Te \ \$9 \$1 \$1 \$6 \$1 \$1 \$1 \$2
Company ALLETE, Inc. Alliant Energy Corporation American Electric Power Company, Inc. Avista Corporation CMS Energy Corporation Dominion Resources, Inc. DTE Energy Company Great Plains Energy Inc. IDACORP, Inc.	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61 \$1.11 \$2.30 \$2.15	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44 \$2.26	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.59 \$2.37	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63 \$2.53	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68 \$2.69	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81 \$3.01	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88 \$3.18	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96 \$3.34	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77 \$3.18 \$3.66	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32 \$3.81	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28 \$5.10 \$6.33 \$1.93 \$3.46 \$3.98	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01 \$3.61 \$4.15	Te \ \$1 \$8 \$1 \$6 \$1 \$1 \$1 \$1
Company ALLETE, Inc. Alliant Energy Corporation Ameren Corporation American Electric Power Company, Inc. Avista Corporation CMS Energy Corporation Dominion Resources, Inc. DTE Energy Company Great Plains Energy Inc. IDACORP, Inc. NorthWestern Corporation	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61 \$1.11 \$2.30	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.59	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.33 \$4.68 \$5.82 \$1.77 \$3.18	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$5.10 \$6.33 \$1.93 \$3.46	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01 \$3.61	Te \ \$1 \$8 \$1 \$6 \$1 \$1 \$1 \$1
Company ALLETE, Inc. Alliant Energy Corporation Ameren Corporation American Electric Power Company, Inc. Avista Corporation CMS Energy Corporation Dominion Resources, Inc. DTE Energy Company Great Plains Energy Inc. IDACORP, Inc. NorthWestern Corporation OGE Energy Corp.	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16 \$2.05	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61 \$1.11 \$2.30 \$2.15	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44 \$2.26	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.59 \$2.37	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63 \$2.53	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68 \$2.69	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74 \$2.85	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81 \$3.01	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88 \$3.18	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96 \$3.34	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05 \$3.50	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77 \$3.18 \$3.66	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32 \$3.81	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28 \$5.10 \$6.33 \$1.93 \$3.46 \$3.98	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01 \$3.61 \$4.15	Te \ \$9 \$1 \$6 \$1 \$1 \$1 \$1 \$2 \$1
Company ALLETE, Inc. Alliant Energy Corporation American Electric Power Company, Inc. Avista Corporation CMS Energy Corporation Dominion Resources, Inc. DTE Energy Company Great Plains Energy Inc. IDACORP, Inc. NorthWestern Corporation OGE Energy Corp. Otter Tail Corporation	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16 \$2.05 \$1.34	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61 \$1.11 \$2.30 \$2.15 \$1.45	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44 \$2.26 \$1.58	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.37 \$1.70	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63 \$2.53 \$1.73	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68 \$2.69 \$1.77	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74 \$2.85 \$1.80	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81 \$3.01 \$1.84	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88 \$3.18 \$1.88	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96 \$3.34 \$1.92	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05 \$3.50 \$1.96	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77 \$3.18 \$3.66 \$2.04	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32 \$3.81 \$2.13	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28 \$5.10 \$6.33 \$1.93 \$3.46 \$3.98 \$2.23	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01 \$3.61 \$4.15 \$2.32	Te \ \ \ \$9 \ \$1 \ \$6 \ \$6 \ \$6 \ \$6 \ \$6 \ \$6 \ \$6
Company ALLETE, Inc. Alliant Energy Corporation Ameren Corporation American Electric Power Company, Inc. Avista Corporation CMS Energy Corporation Dominion Resources, Inc. DTE Energy Company Great Plains Energy Inc. IDACORP, Inc. NorthWestern Corporation OGE Energy Corp. Otter Tail Corporation Pinnacle West Capital Corporation	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16 \$2.05 \$1.34 \$1.27	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61 \$1.11 \$2.30 \$2.15 \$1.45 \$1.29	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44 \$2.26 \$1.58 \$1.30	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.59 \$2.59 \$1.70 \$1.31	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63 \$2.63 \$1.73 \$1.45	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$1.38 \$2.68 \$2.68 \$1.77 \$1.60	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74 \$2.74 \$2.85 \$1.80 \$1.75	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81 \$3.01 \$1.84 \$1.90	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88 \$3.18 \$1.88 \$2.06	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96 \$3.34 \$1.92 \$2.21	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05 \$3.50 \$1.96 \$2.36	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77 \$3.18 \$3.66 \$2.04 \$2.47	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32 \$3.32 \$3.81 \$2.13 \$2.57	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$5.10 \$6.33 \$1.93 \$3.46 \$3.98 \$2.23 \$2.69	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01 \$3.61 \$4.15 \$2.32 \$2.80	Te \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Company ALLETE, Inc. Alliant Energy Corporation Ameren Corporation American Electric Power Company, Inc. Avista Corporation CMS Energy Corporation CMS Energy Corporation DEDITION COMPANY Great Plains Energy Inc. IDACORP, Inc. NorthWesterm Corporation OGE Energy Corp. Otter Tail Corporation PNM Resources, Inc. PNM Resources, Inc.	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16 \$2.05 \$1.34 \$1.27 \$2.51	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$1.11 \$2.30 \$2.15 \$1.45 \$1.29 \$2.62	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44 \$2.26 \$1.58 \$1.30 \$2.74	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.59 \$2.37 \$1.70 \$1.31 \$2.87	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63 \$2.53 \$1.73 \$1.45 \$3.00	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68 \$2.69 \$1.77 \$1.60 \$3.13	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74 \$2.85 \$1.85 \$1.75 \$3.28	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81 \$3.01 \$1.84 \$1.90 \$3.42	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88 \$3.18 \$1.88 \$2.06 \$3.57	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96 \$3.34 \$1.92 \$2.21 \$3.73	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05 \$3.50 \$1.96 \$2.36 \$3.89	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77 \$3.18 \$3.66 \$2.04 \$2.47 \$4.06	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.86 7 \$1.85 \$3.32 \$3.31 \$2.17 \$4.24	2029 \$3,98 \$4.47 \$3,33 \$4.17 \$2.54 \$2,28 \$5.10 \$1.93 \$3,46 \$3,98 \$2,23 \$2,69 \$4.42	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$5.361 \$2.01 \$3.61 \$4.15 \$2.20 \$4.62	Te N  \$1  \$1  \$1  \$1  \$1  \$1  \$1  \$1  \$1  \$
Company ALLETE, Inc. Alliant Energy Corporation Ameren Corporation American Electric Power Company, Inc. Avista Corporation CMS Energy Corporation Dominion Resources, Inc. DTE Energy Company Great Plains Energy Inc. IDACORP, Inc. NorthWestern Corporation OGE Energy Corp. Otter Tail Corporation Pinnacle West Capital Corporation PNM Resources, Inc. Portland General Electric Company	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16 \$2.05 \$1.34 \$1.27 \$2.51 \$0.87	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.24 \$1.26 \$2.70 \$3.61 \$1.11 \$2.30 \$2.15 \$1.45 \$1.29 \$2.62 \$2.62 \$2.62 \$2.62	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44 \$2.26 \$1.58 \$1.30 \$1.58 \$1.58 \$1.58 \$1.58 \$1.59	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.59 \$2.37 \$1.70 \$1.31 \$2.87 \$1.21	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.53 \$3.22 \$4.17 \$1.32 \$2.53 \$1.73 \$1.45 \$3.00 \$1.30	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68 \$2.69 \$1.77 \$1.60 \$3.13 \$3.13	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74 \$2.85 \$1.80 \$1.75 \$3.28 \$1.47 \$3.28 \$1.47	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81 \$3.01 \$1.84 \$1.90 \$3.42 \$1.55	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88 \$3.18 \$2.06 \$3.57 \$1.62 \$1.62 \$1.62	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96 \$3.34 \$1.92 \$2.21 \$3.73 \$1.69	2026 \$3.50 \$3.93 \$2.93 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05 \$3.05 \$3.89 \$1.74	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77 \$3.18 \$3.66 \$2.04 \$2.47 \$4.06 \$1.82	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32 \$3.31 \$2.13 \$2.57 \$4.24 \$1.90 \$2.14	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.24 \$5.10 \$6.33 \$1.93 \$3.46 \$3.98 \$2.23 \$2.69 \$4.42 \$1.98	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01 \$3.61 \$4.15 \$2.32 \$2.80 \$4.62 \$2.06	Te N
Company ALLETE, Inc. Alliant Energy Corporation Ameren Corporation American Electric Power Company, Inc. Avista Corporation CMS Energy Corporation	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16 \$2.16 \$2.21 \$	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61 \$2.15 \$1.11 \$2.30 \$2.15 \$1.45 \$1.29 \$2.62 \$0.97 \$1.31	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44 \$2.24 \$1.58 \$1.30 \$2.70 \$1.30 \$2.70 \$1.30 \$2.70 \$1.30	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$2.59 \$2.59 \$2.37 \$1.70 \$1.31 \$2.87 \$1.21 \$1.46	2020 \$2,40 \$3,04 \$1,98 \$2,86 \$1,62 \$1,53 \$3,22 \$4,17 \$1,32 \$2,63 \$2,53 \$1,73 \$1,45 \$3,00 \$1,53	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68 \$2.68 \$2.68 \$1.77 \$1.60 \$3.13 \$1.39 \$1.60	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74 \$2.85 \$1.80 \$1.75 \$3.28 \$1.47	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81 \$3.01 \$1.84 \$1.90 \$3.42 \$1.55 \$1.74	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88 \$3.18 \$1.88 \$2.06 \$3.57 \$1.62	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96 \$3.34 \$1.92 \$2.21 \$3.73 \$1.89	2026 \$3.50 \$3.93 \$2.93 \$2.93 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05 \$3.05 \$2.36 \$3.89 \$1.74 \$1.97	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$5.82 \$3.18 \$3.66 \$2.04 \$2.47 \$4.06 \$1.82 \$2.05	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32 \$3.81 \$2.13 \$2.13 \$2.13 \$2.13 \$2.13	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28 \$5.10 \$6.33 \$3.46 \$3.98 \$2.23 \$2.69 \$4.42 \$1.98 \$2.24	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$4.15 \$2.32 \$2.80 \$4.62 \$2.32 \$2.80 \$4.62 \$2.33	\$9 \$1 \$8 \$1

#### 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]
	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
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
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
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
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
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
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
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
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
Great Plains Energy Inc.	(\$26.82)	\$0.00	\$1.00	\$1.07	\$1.18	\$1.26	\$1.32	\$1.38	\$1.44	\$1.51	\$1.57	\$1.63	\$1.69	\$1.77	\$1.85	\$1.93	\$50.95
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
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
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
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
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
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
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
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
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
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

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

	Stock	E	PS Growth R		ates	Long-Term		Payout Rati	0	Iterative	Solution	Terminal	Terminal				
Company	Drice	Zacks	First Call	Value	Averen	Croudh	2016	2040	2026	Proof	IDD	P/E Ratio	PEG Ratio				
ALLETE, Inc.	Price \$49.47	5.00%	5.00%	6.50%	Average 5.50%	Growth 4.35%	<b>2016</b> 66.00%	<b>2019</b> 59.00%	<b>2026</b> 66.00%	(\$0.00)	9.04%	14.69	3.38				
Alliant Energy Corporation	\$59.67	5.40%	5.55%	6.00%	5.65%	4.35%	61.00%	63.00%	61.00%	\$0.00	8.81%	14.09	3.28				
Ameren Corporation	\$41.34	6.30%	6.00%	7.00%	6.43%	4.35%	62.00%	56.00%	62.00%	\$0.00	9.02%	13.85	3.18				
American Electric Power Company, Inc.	\$55.91	4.70%	4.43%	5.00%	4.71%	4.35%	64.00%	65.00%	64.00%	(\$0.00)	8.81%	14.96	3.44				
Avista Corporation	\$32.85	5.00%	5.00%	5.00%	5.00%	4.35%	69.00%	65.00%	69.00%	(\$0.00)	8.90%	15.81	3.63				
CMS Energy Corporation	\$34.36	6.10%	6.72%	5.50%	6.11%	4.35%	60.00%	62.00%	60.00%	\$0.00	8.28%	15.94	3.66				
Dominion Resources, Inc.	\$69.57	6.10%	5.49%	8.00%	6.53%	4.35%	74.00%	72.00%	74.00%	\$0.00	8.64%	18.01	4.14				
DTE 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				
Great Plains Energy Inc.	\$26.16	5.80%	5.07%	5.00%	5.29%	4.35%	60.00%	62.00%	60.00%	\$0.00	8.75%	14.25	3.27				
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				
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				
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				
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				
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				
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	2.88				
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				
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				
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				
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				
<u> </u>										MEAN	8.76%						
										MAX	10.01%						
										MIN	7.72%						
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
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
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
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
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
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
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
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
DTE Energy Company	\$5.10 \$1.57	\$5.37 \$1.65	\$5.65 \$1.74	\$5.94 \$1.83	\$6.26 \$1.93	\$6.58 \$2.03	\$6.93 \$2.14	\$7.28 \$2.25	\$7.64 \$2.36	\$8.01 \$2.47	\$8.38 \$2.59	\$8.76 \$2.71	\$9.14 \$2.82	\$9.54 \$2.95	\$9.95 \$3.08	\$10.38 \$3.21	\$10.83 \$3.35
Great Plains Energy Inc.			*														
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
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
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
Otter Tail Corporation	\$1.55	\$1.67	\$1.79 \$3.92	\$1.93	\$2.07 \$4.28	\$2.23	\$2.39	\$2.56	\$2.72 \$5.12	\$2.89 \$5.35	\$3.04 \$5.58	\$3.19	\$3.33 \$6.08	\$3.47	\$3.62 \$6.62	\$3.78 \$6.91	\$3.95 \$7.21
Pinnacle West Capital Corporation	\$3.58	\$3.74		\$4.10		\$4.48	\$4.68	\$4.90				\$5.83		\$6.35			
PNM Resources, Inc.	\$1.45	\$1.58 \$2.29	\$1.71 \$2.40	\$1.86	\$2.02	\$2.20	\$2.39 \$2.90	\$2.58	\$2.76	\$2.94	\$3.11 \$3.47	\$3.27	\$3.41	\$3.56	\$3.72 \$4.12	\$3.88	\$4.05 \$4.49
Portland General Electric Company	\$2.18			\$2.51	\$2.63	\$2.76		\$3.03	\$3.18	\$3.32		\$3.63	\$3.78	\$3.95		\$4.30	
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
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
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

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

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	_
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%	
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%	
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%	
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%	
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%	
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%	
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%	
OTE 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%	
Great Plains Energy Inc.	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%	
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%	
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%	
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%	
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%	
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%	
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%	
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%	
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%	
Vestar 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%	
Kcel 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																
	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[6
Cash Flows																Tern
Cash Flows Company	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Cash Flows Company ALLETE, Inc.	2016 \$2.13	2017 \$2.17	2018 \$2.20	2019 \$2.24	2020 \$2.40	2021 \$2.57	2022 \$2.74	2023 \$2.93	2024 \$3.11	2025 \$3.31	2026 \$3.50	2027 \$3.65	2028 \$3.81	2029 \$3.98	2030 \$4.15	Term Val
Cash Flows  Company  ALLETE, Inc.  Alliant Energy Corporation	2016 \$2.13 \$2.37	2017	2018	2019 \$2.24 \$2.89	2020	2021	2022	2023	2024	2025	2026	2027	2028 \$3.81 \$4.28	2029	2030	Tern Va \$92 \$109
Cash Flows  Company ALLETE, Inc. Alliant Energy Corporation Ameren Corporation	2016 \$2.13 \$2.37 \$1.69	2017 \$2.17 \$2.53 \$1.74	2018 \$2.20 \$2.70 \$1.79	2019 \$2.24 \$2.89 \$1.84	2020 \$2.40 \$3.04 \$1.98	2021 \$2.57 \$3.19 \$2.14	2022 \$2.74 \$3.34 \$2.29	2023 \$2.93 \$3.49 \$2.45	2024 \$3.11 \$3.64 \$2.61	2025 \$3.31 \$3.79 \$2.77	2026 \$3.50 \$3.93 \$2.93	2027 \$3.65 \$4.10 \$3.06	2028 \$3.81 \$4.28 \$3.20	2029 \$3.98 \$4.47 \$3.33	2030 \$4.15 \$4.66 \$3.48	Tern Va \$92 \$109 \$77
Cash Flows  Company  ALLETE, Inc.  Alliant Energy Corporation  Ameren Corporation  American Electric Power Company, Inc.	2016 \$2.13 \$2.37 \$1.69 \$2.34	2017 \$2.17 \$2.53 \$1.74 \$2.47	2018 \$2.20 \$2.70 \$1.79 \$2.60	2019 \$2.24 \$2.89 \$1.84 \$2.73	2020 \$2.40 \$3.04 \$1.98 \$2.86	2021 \$2.57 \$3.19 \$2.14 \$2.98	2022 \$2.74 \$3.34 \$2.29 \$3.11	2023 \$2.93 \$3.49 \$2.45 \$3.25	2024 \$3.11 \$3.64 \$2.61 \$3.38	2025 \$3.31 \$3.79 \$2.77 \$3.52	2026 \$3.50 \$3.93 \$2.93 \$3.67	2027 \$3.65 \$4.10 \$3.06 \$3.83	2028 \$3.81 \$4.28 \$3.20 \$4.00	2029 \$3.98 \$4.47 \$3.33 \$4.17	2030 \$4.15 \$4.66 \$3.48 \$4.35	Tern Val \$92 \$109 \$77 \$101
Cash Flows  Company  ALLETE, Inc.  Alliant Energy Corporation  American Electric Power Company, Inc.  Avista Corporation	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65	Term Val \$92 \$109 \$77 \$101 \$60
Projected Annual Cash Flows  Company ALLETE, Inc. Alliant Energy Corporation American Electric Power Company, Inc. Avista Corporation CMS Energy Corporation CMS Energy Corporation Companion Resources Inc.	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38	Tern Val \$92 \$109 \$77 \$101 \$60 \$63
Cash Flows  Company ALLETE, Inc. Alliant Energy Corporation American Corporation American Electric Power Company, Inc. Avista Corporation OMS Energy Corporation Cominion Resources, Inc.	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28 \$5.10	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32	Va \$92 \$109 \$77 \$101 \$60 \$63 \$129
Cash Flows  Company  ALLETE, Inc.  Alliant Energy Corporation American Electric Power Company, Inc.  Avista Corporation  JMS Energy Corporation  JMS Energy Corporation  JOMIN Energy Corporation  JOTE Energy Company	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28 \$5.10 \$6.33	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61	Term Va \$92 \$109 \$77 \$101 \$60 \$63 \$129 \$145
Company  ALLETE, Inc.  Alliant Energy Corporation American Electric Power Company, Inc.  Avista Corporation  OMS Energy Corporation  Ominion Resources, Inc.  DITE Energy Company  Great Plains Energy Inc.	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61 \$1.11	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17 \$1.32	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28 \$5.10 \$6.33 \$1.93	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01	Term Va \$92 \$109 \$77 \$101 \$60 \$63 \$129 \$145 \$47
Company  LLETE, Inc.  Illiant Energy Corporation American Electric Power Company, Inc.  In	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61 \$1.11 \$2.30	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.59	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77 \$3.18	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$5.10 \$6.33 \$1.93 \$3.46	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01 \$3.61	Term Va \$92 \$109 \$77 \$101 \$60 \$63 \$129 \$145 \$47 \$111
Company  LLETE, Inc.  Illiant Energy Corporation Ameren Corporation American Electric Power Company, Inc.  Livista Corporation AMS Energy Corporation Dominion Resources, Inc.  DIE Energy Company Freat Plains Energy Inc.  DACORP, Inc.  LorthWestern Corporation	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16 \$2.05	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61 \$1.11 \$2.30 \$2.15	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44 \$2.26	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.59 \$2.37	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63 \$2.53	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68 \$2.69	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74 \$2.85	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81 \$3.01	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88 \$3.18	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96 \$3.34	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05 \$3.50	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77 \$3.18 \$3.66	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32 \$3.81	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28 \$5.10 \$6.33 \$1.93 \$3.46 \$3.98	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01 \$3.61 \$4.15	Terrr Va \$92 \$109 \$77 \$100 \$60 \$63 \$129 \$110 \$47 \$110 \$97
Company  ALLETE, Inc.  Alliant Energy Corporation American Electric Power Company, Inc.  Avista Corporation  MS Energy Corporation  Dominion Resources, Inc.  DTE Energy Company  Great Plains Energy Inc.  DACORP, Inc.  NorthWestern Corporation  DGE Energy Corp.	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16 \$2.05 \$1.34	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61 \$1.11 \$2.30 \$2.15 \$1.45	2018 \$2.20 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44 \$2.26 \$1.58	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.59 \$2.37 \$1.70	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63 \$2.53 \$1.73	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68 \$2.69 \$1.77	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74 \$2.85 \$1.80	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81 \$3.01 \$1.84	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88 \$3.18 \$1.88	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96 \$3.34 \$1.92	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05 \$3.50 \$1.96	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77 \$3.18 \$3.66 \$2.04	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32 \$3.81 \$2.13	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28 \$5.10 \$6.33 \$1.93 \$3.46 \$3.98 \$2.23	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.61 \$2.32	Terrr Va \$92 \$109 \$77 \$100 \$600 \$63 \$129 \$145 \$47 \$110 \$97 \$49
Cash Flows  Company  ALLETE, Inc.  Alliant Energy Corporation American Electric Power Company, Inc.  Avista Corporation  OMS Energy Corporation  Dominion Resources, Inc.  DTE Energy Company  Great Plains Energy Inc.  DACORP, Inc.  AorthWestern Corporation  DGE Energy Corp.  Other Tail Corporation  Other Tail Corporation  Other Tail Corporation	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16 \$2.16 \$2.16 \$1.34 \$1.27	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61 \$1.11 \$2.30 \$2.15 \$1.45 \$1.29	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44 \$2.26 \$1.58 \$1.30	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.59 \$2.59 \$1.31	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63 \$2.63 \$1.73 \$1.45	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68 \$2.69 \$1.77 \$1.60	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74 \$2.74 \$1.80 \$1.75	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81 \$3.01 \$1.84 \$1.90	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88 \$3.18 \$1.88 \$2.06	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96 \$3.34 \$1.92 \$2.21	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05 \$3.50 \$1.96 \$2.36	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77 \$3.18 \$3.66 \$2.04 \$2.47	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32 \$3.32 \$2.13 \$2.57	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$5.10 \$6.33 \$1.93 \$3.46 \$3.46 \$2.23 \$2.69	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01 \$3.61 \$4.15 \$2.32 \$2.80	Terri Va \$92 \$100 \$77 \$10 \$60 \$63 \$120 \$14 \$47 \$11 \$97 \$49 \$51
Cash Flows  Company  LLLETE, Inc.  Illiant Energy Corporation American Electric Power Company, Inc.  LVISTA Corporation CMS Energy Corp. CMS	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16 \$2.05 \$1.34 \$1.27 \$2.51	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.44 \$1.26 \$2.70 \$3.61 \$1.11 \$2.30 \$2.15 \$1.45 \$1.45 \$1.29 \$2.62	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44 \$2.26 \$1.58 \$1.30 \$2.74	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.59 \$2.37 \$1.70 \$1.31 \$2.87	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63 \$2.53 \$1.73 \$1.45 \$3.00	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68 \$2.69 \$1.77 \$1.60 \$3.13	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74 \$2.85 \$1.80 \$1.75 \$3.28	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81 \$3.01 \$1.84 \$1.90 \$3.42	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88 \$3.18 \$1.88 \$2.06 \$3.57	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96 \$3.34 \$1.92 \$2.21 \$3.73	2026 \$3.50 \$3.93 \$2.93 \$3.67 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05 \$3.50 \$1.96 \$2.36 \$3.89	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77 \$3.18 \$3.66 \$2.04 \$2.47 \$4.06	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32 \$3.81 \$2.13 \$2.57 \$4.24	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28 \$5.10 \$5.10 \$3.46 \$3.98 \$2.28 \$2.69 \$4.42	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01 \$3.61 \$4.15 \$2.32 \$2.80 \$4.62	Terri Va \$92 \$100 \$77 \$10 \$60 \$63 \$120 \$14 \$47 \$11 \$97 \$49 \$51
Cash Flows  Company  ALLETE, Inc.  Alliant Energy Corporation American Electric Power Company, Inc.  Avista Corporation  JMS Energy Corporation  JMS Energy Corporation  JOS Energy Corporation  Dominion Resources, Inc.  JTE Energy Company  Great Plains Energy Inc.  DACORP, Inc.  NorthWestern Corporation  JGE Energy Corp.  Jter Tail Corporation  Jose Energy Corp.  NM Resources, Inc.	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16 \$2.05 \$1.34 \$1.27 \$2.51 \$0.87	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.24 \$1.26 \$2.70 \$3.61 \$1.11 \$2.30 \$2.15 \$1.45 \$1.29 \$2.62 \$0.97	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44 \$2.26 \$1.58 \$1.58 \$1.58 \$1.58 \$1.59	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.59 \$2.37 \$1.70 \$1.31 \$2.87 \$1.21	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63 \$2.53 \$1.73 \$1.45 \$3.00 \$1.30	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68 \$2.69 \$1.77 \$1.60 \$3.13 \$3.13	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74 \$2.85 \$1.80 \$1.75 \$3.28 \$1.47	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81 \$3.01 \$1.84 \$1.93 \$3.42 \$3.42	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88 \$3.18 \$1.88 \$2.06 \$3.57 \$1.62	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96 \$3.34 \$1.92 \$2.21 \$3.73 \$1.69	2026 \$3.50 \$3.93 \$2.93 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05 \$1.96 \$2.36 \$2.36 \$1.74	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77 \$3.18 \$3.66 \$2.04 \$2.47 \$4.06 \$1.82	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32 \$3.81 \$2.13 \$2.13 \$2.13 \$2.19 \$4.24	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$5.10 \$6.33 \$1.93 \$3.46 \$3.98 \$2.23 \$2.69 \$4.42 \$1.98	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01 \$3.61 \$4.15 \$2.32 \$2.80 \$4.62 \$2.06	Terri Va \$92 \$10 \$77 \$10 \$60 \$63 \$12 \$14 \$47 \$11 \$97 \$49 \$51
Cash Flows  Company  ALLETE, Inc.  Alliant Energy Corporation  American Electric Power Company, Inc.  Avista Corporation  OMS Energy Corporation  Ominion Resources, Inc.  OTE Energy Company  Great Plains Energy Inc.  DACORP, Inc.  NorthWestern Corporation  OGE Energy Corp.  Other Tail Corporation  Pinnacle West Capital Corporation  Pom M Resources, Inc.  Portland General Electric Company	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$2.16 \$2.05 \$1.34 \$1.27 \$2.51 \$0.87 \$1.25	2017 \$2.17 \$2.53 \$1.74 \$2.53 \$1.74 \$1.26 \$2.70 \$3.61 \$2.30 \$2.15 \$1.45 \$1.29 \$2.62 \$0.97 \$1.31	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44 \$2.26 \$1.58 \$1.30 \$2.74 \$1.30 \$2.74 \$1.30	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$2.59 \$2.59 \$2.17 \$1.70 \$1.31 \$2.87 \$1.21 \$1.46	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.62 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63 \$2.53 \$1.73 \$1.45 \$3.00 \$1.53	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68 \$2.68 \$2.68 \$1.77 \$1.60 \$3.13 \$1.39 \$1.60	2022 \$2,74 \$3,34 \$2,29 \$3,11 \$1,70 \$3,65 \$4,62 \$1,44 \$2,74 \$2,85 \$1,75 \$3,28 \$1,47 \$1,67	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81 \$3.01 \$1.84 \$1.90 \$3.42 \$1.55 \$1.74	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88 \$3.18 \$3.18 \$2.06 \$3.57 \$1.62 \$1.82	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96 \$3.34 \$1.92 \$2.21 \$3.73 \$1.89	2026 \$3.50 \$3.93 \$2.93 \$2.93 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05 \$3.05 \$2.36 \$3.89 \$1.74 \$1.97	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$5.17 \$3.18 \$3.66 \$2.04 \$2.47 \$4.06 \$1.82 \$2.05	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$3.32 \$3.32 \$3.31 \$2.13 \$2.57 \$4.24 \$1.20 \$2.14	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$2.28 \$5.10 \$6.33 \$3.46 \$3.98 \$2.23 \$2.69 \$4.42 \$1.98 \$2.24	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01 \$3.61 \$4.15 \$2.32 \$2.80 \$4.62 \$2.32	Terr Va \$92 \$109 \$77 \$100 \$600 \$63 \$129 \$110 \$97 \$49 \$511 \$112 \$500 \$65
Cash Flows  Company  ALLETE, Inc.  Alliant Energy Corporation American Electric Power Company, Inc.  Avista Corporation  JMS Energy Corporation  JMS Energy Corporation  JOS Energy Corporation  Dominion Resources, Inc.  JTE Energy Company  Great Plains Energy Inc.  DACORP, Inc.  NorthWestern Corporation  JGE Energy Corp.  Jter Tail Corporation  Jose Energy Corp.  NM Resources, Inc.	2016 \$2.13 \$2.37 \$1.69 \$2.34 \$1.40 \$1.18 \$2.56 \$3.45 \$1.04 \$2.16 \$2.05 \$1.34 \$1.27 \$2.51 \$0.87	2017 \$2.17 \$2.53 \$1.74 \$2.47 \$1.24 \$1.26 \$2.70 \$3.61 \$1.11 \$2.30 \$2.15 \$1.45 \$1.29 \$2.62 \$0.97	2018 \$2.20 \$2.70 \$1.79 \$2.60 \$1.48 \$1.35 \$2.85 \$3.77 \$1.18 \$2.44 \$2.26 \$1.58 \$1.58 \$1.58 \$1.58 \$1.59	2019 \$2.24 \$2.89 \$1.84 \$2.73 \$1.53 \$1.45 \$3.01 \$3.95 \$1.26 \$2.59 \$2.37 \$1.70 \$1.31 \$2.87 \$1.21	2020 \$2.40 \$3.04 \$1.98 \$2.86 \$1.53 \$3.22 \$4.17 \$1.32 \$2.63 \$1.73 \$1.73 \$1.45 \$3.00 \$1.30	2021 \$2.57 \$3.19 \$2.14 \$2.98 \$1.71 \$1.61 \$3.43 \$4.39 \$1.38 \$2.68 \$2.69 \$1.77 \$1.60 \$3.13 \$3.13	2022 \$2.74 \$3.34 \$2.29 \$3.11 \$1.81 \$1.70 \$3.65 \$4.62 \$1.44 \$2.74 \$2.85 \$1.80 \$1.75 \$3.28 \$1.47	2023 \$2.93 \$3.49 \$2.45 \$3.25 \$1.91 \$1.78 \$3.86 \$4.85 \$1.51 \$2.81 \$3.01 \$1.84 \$1.93 \$3.42 \$3.42	2024 \$3.11 \$3.64 \$2.61 \$3.38 \$2.01 \$1.85 \$4.07 \$5.09 \$1.57 \$2.88 \$3.18 \$1.88 \$2.06 \$3.57 \$1.62	2025 \$3.31 \$3.79 \$2.77 \$3.52 \$2.12 \$1.93 \$4.28 \$5.33 \$1.63 \$2.96 \$3.34 \$1.92 \$2.21 \$3.73 \$1.69	2026 \$3.50 \$3.93 \$2.93 \$2.23 \$2.01 \$4.49 \$5.57 \$1.69 \$3.05 \$1.96 \$2.36 \$2.36 \$1.74	2027 \$3.65 \$4.10 \$3.06 \$3.83 \$2.33 \$2.09 \$4.68 \$5.82 \$1.77 \$3.18 \$3.66 \$2.04 \$2.47 \$4.06 \$1.82	2028 \$3.81 \$4.28 \$3.20 \$4.00 \$2.43 \$2.18 \$4.88 \$6.07 \$1.85 \$3.32 \$3.81 \$2.13 \$2.13 \$2.13 \$2.19 \$4.24	2029 \$3.98 \$4.47 \$3.33 \$4.17 \$2.54 \$5.10 \$6.33 \$1.93 \$3.46 \$3.98 \$2.23 \$2.69 \$4.42 \$1.98	2030 \$4.15 \$4.66 \$3.48 \$4.35 \$2.65 \$2.38 \$5.32 \$6.61 \$2.01 \$3.61 \$4.15 \$2.32 \$2.80 \$4.62 \$2.06	Terr Va \$92 \$109 \$77 \$10 \$60 \$63 \$129 \$14 \$47 \$11 \$97

#### 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]	[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
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
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
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
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
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
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
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
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
Great Plains Energy Inc.	(\$26.16)	\$0.00	\$1.00	\$1.07	\$1.18	\$1.26	\$1.32	\$1.38	\$1.44	\$1.51	\$1.57	\$1.63	\$1.69	\$1.77	\$1.85	\$1.93	\$49.72
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
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
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
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
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
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
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
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
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
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

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

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

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