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**MISSOURI PUBLIC SERVICE COMMISSION**

**FILE NO. ER-2014-0258**

**REBUTTAL TESTIMONY**

**OF**

**ROBERT B. HEVERT**

**ON**

**BEHALF OF**

**UNION ELECTRIC COMPANY  
d/b/a Ameren Missouri**

**Framingham, Massachusetts  
January 2015**

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1 East, LP and Sam's East, Inc. (together with Mr. Murray, the "Opposing ROE  
2 Witnesses") as each witness' direct testimony relates to the Company's ROE. In  
3 addition, I provide updated calculations and analytical results regarding the Company's  
4 Cost of Equity.<sup>1</sup> My analyses and conclusions are supported by the data presented in  
5 Schedules RBH-R7 through RBH-R28, which have been prepared by me or under my  
6 direction.

7 **II. SUMMARY AND OVERVIEW OF TESTIMONY**

8 **Q. Please provide an overview of the key issues and recommendations**  
9 **addressed in your Rebuttal Testimony.**

10 A. In my Direct Testimony, I recommended a Return on Equity ("ROE") of  
11 10.40 percent, based on a range of 10.20 percent to 10.60 percent. As my Direct  
12 Testimony discussed, my ROE recommendation, and the analytical results on which it is  
13 based, considers a variety of factors including the specific risks faced by Ameren  
14 Missouri. Because the application of financial models and interpretation of their results  
15 is often the subject of differences among analysts in regulatory proceedings, I believe that  
16 it is important to review and consider a variety of data points - doing so enables us to put  
17 in context both quantitative analyses and the associated recommendations. As such, I  
18 have updated many of the analyses contained in my Direct Testimony, and provided  
19 several new analyses in response to issues raised by the Opposing ROE Witnesses.

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<sup>1</sup> See Schedules RBH-R7 through RBH-R12.



1           **Q. Please now summarize your response to the Opposing ROE**  
2 **Witnesses.**

3           A. As discussed throughout the balance of my Rebuttal Testimony, my  
4 updated analyses support an ROE range of 10.20 percent to 10.60 percent and my  
5 recommendation of 10.40 percent. The Opposing ROE Witnesses' recommendations,  
6 however, fall within the rather narrow range of 9.01 percent to 9.30 percent. The fact that  
7 their recommendations are so tightly clustered does not mean that the Opposing ROE  
8 Witnesses' methods are appropriate or that their conclusions are reasonable. In this case,  
9 there are two very recent and highly relevant benchmarks that provide a more  
10 comprehensive perspective: the range of recently authorized returns for other vertically  
11 integrated electric utility companies (*see* Chart I, below);<sup>2</sup> and the ROEs of 10.00 percent  
12 and 10.80 percent recently authorized by the Commission for natural gas utility  
13 companies.<sup>3</sup> Taken from that perspective, the Opposing ROE Witnesses'  
14 recommendations, individually and as a group, are far below the returns that investors  
15 reasonably would expect for a vertically integrated electric utility such as Ameren  
16 Missouri.

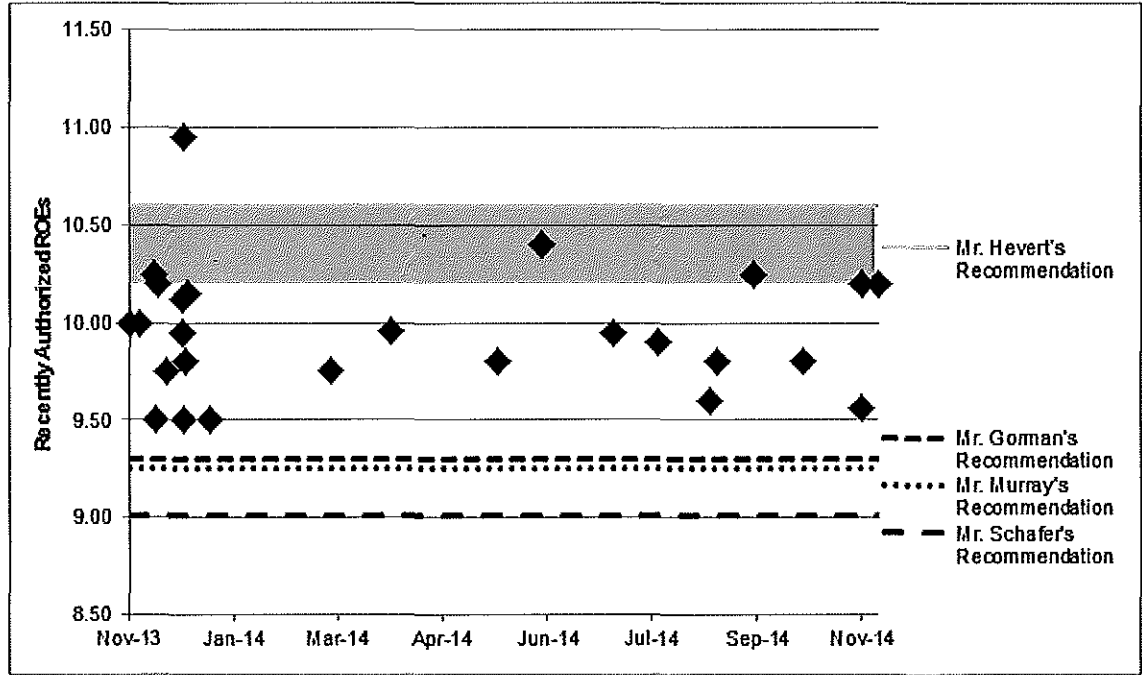
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<sup>2</sup> *See* Schedule RBH-R13.

<sup>3</sup> The Commission authorized an ROE of 10.00 percent for Liberty Utilities in December 2014, and an ROE of 10.80 percent for Summit Natural Gas in October 2014.

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**Chart 1: Authorized ROEs for Vertically Integrated  
Electric Utilities (Recent Twelve Months)<sup>4</sup>**



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Although my Rebuttal Testimony necessarily responds to the Opposing ROE Witnesses' models and methods, I also address a very practical question: Is there any reasonable basis to conclude that the return required by equity investors has fallen by 50 to 79 basis points since the Commission authorized the Company's prevailing ROE of 9.80 percent in December 2012? Since the Company's currently authorized ROE was adopted by the Commission, the average authorized return for vertically integrated electric utilities (nationally) has been 9.96 percent; over the past twelve months, the average authorized return has been 9.96 percent. That is, even though the Company's currently authorized return is 16 basis points below the average return authorized over the past twelve months, the Opposing ROE Witnesses would have the Commission reduce

<sup>4</sup> Source: Regulatory Research Associates, *see* Schedule RBH-R13.

1 Ameren Missouri's ROE even further below the returns available to other vertically  
2 integrated electric utilities. In fact, the Opposing ROE Witnesses would reduce the  
3 Company's return below the 9.78 percent ROE authorized (on average) for natural gas  
4 utilities during calendar year 2014.<sup>5</sup>

5 As the Commission has pointed out, because no one financial model is any more  
6 "correct" than any other method in all circumstances, it is important to consider the  
7 results of a variety of methods.<sup>6</sup> That observation is especially important when market  
8 conditions are such that financial models produce results that are widely divergent, and  
9 highly sensitive to inputs and assumptions. For example, the market prices used to  
10 calculate the dividend yield portion of the Constant Growth Discounted Cash Flow model  
11 were taken from a period during which utilities in general, and the proxy companies in  
12 particular, traded at unusually high, and likely unsustainable, levels.

13 In fact, during Opposing ROE Witnesses' study period, utility Price/Earnings  
14 ("P/E") ratios exceeded their long-term average, to the point that they were greater than  
15 the market P/E ratio (as measured by the Standard & Poor's ("S&P") 500).<sup>7</sup> As would be  
16 expected, utilities (including the proxy group companies), generally have traded below  
17 the market P/E ratio; there is no reason to believe that the currently elevated P/E ratios  
18 will remain in perpetuity. Yet, several of the Opposing ROE Witnesses give considerable  
19 weight to the Constant Growth Discounted Cash Flow model, which assumes that the  
20 current P/E ratio will not change, ever. The inconsistency between model assumptions

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<sup>5</sup> Source: Regulatory Research Associates. 9.78 percent represents the national average.

<sup>6</sup> Public Service Commission of the State of Missouri, Case No. ER-2011-0028, Report and Order Dated July 13, 2011, at 67.

<sup>7</sup> This issue is discussed in more detail in my responses to Messrs. Schafer and Gorman.

1 and market data should cause us to view those results with great caution rather than  
2 giving them undue weight in developing ROE recommendations.<sup>8</sup>

3         Although it is important to understand and vet the assumptions and inputs used to  
4 arrive at ROE estimates, the basic question of whether or not ROE recommendations are  
5 reasonable also may be considered from a more fundamental perspective: What has  
6 changed so significantly over the past two years that equity investors now require a  
7 dramatically lower rate of return? As discussed throughout my Rebuttal Testimony,  
8 neither market conditions in general, nor the Company's situation in particular supports  
9 the proposition that the required Return on Equity has fallen, as the Opposing ROE  
10 Witnesses recommend.

11         As to the Opposing ROE Witnesses' position that the current interest rate  
12 environment requires a significant decrease in the Company's Cost of Equity, they fail to  
13 consider that recent interest rates have been somewhat *above* the levels that prevailed in  
14 when the Commission authorized the Company's 9.80 percent ROE in December 2012.  
15 From July through December 2012 the average 30-year Treasury yield was 2.80 percent;<sup>9</sup>  
16 during the same period in 2014, the average 30-year Treasury yield was 3.12 percent, an  
17 increase of 32 basis points. Looking forward, consensus forecasts of the 30-year  
18 Treasury yield indicate a 100 basis point increase over the coming year.<sup>10</sup> That is,  
19 whether interest rates are viewed in an historical or prospective context, they simply do

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<sup>8</sup> I recognize that Mr. Schafer attempted to address the DCF model results through an out-of-model adjustment. As discussed later in my Rebuttal Testimony, however, that adjustment is incomplete and inadequate.

<sup>9</sup> Source: Federal Reserve Schedule H.15.

<sup>10</sup> Source: *Blue Chip Financial Forecast*, December 2014, at 2; Bloomberg.

1 not support a decrease in the Company's ROE, let alone a decrease of nearly 80 basis  
2 points.

3 In summary, my Rebuttal Testimony demonstrates that neither market conditions  
4 in general, nor the Company's situation in particular can justify an ROE that is 80 basis  
5 points, or more, below the prevailing level of returns authorized for vertically integrated  
6 electric utilities, as the Opposing ROE Witnesses suggest. My recommended range (*i.e.*,  
7 10.20 percent to 10.60 percent) is consistent with recently authorized returns for  
8 vertically electric utilities with risks similar to those faced by Ameren Missouri, and  
9 appropriately reflects current and expected market conditions. The Opposing ROE  
10 Witnesses' recommendations, on the other hand, fail to meet that basic test of  
11 reasonableness, are incompatible with prevailing returns available to equity investors in  
12 utilities with commensurate risk, and would cause investors to question the stability,  
13 predictability, and supportiveness of the regulatory environment in Missouri.

14 **Q. How is the remainder of your Rebuttal Testimony organized?**

15 A. The remainder of my Rebuttal Testimony is organized as follows:

- 16 • Section III – Provides my Response to the Staff Cost of Service Report as  
17 it Relates to the Return on Equity;
- 18 • Section IV – Provides my response to the Direct Testimony of  
19 Mr. Schafer;
- 20 • Section V – Provides my response to the Direct Testimony of  
21 Mr. Gorman;
- 22 • Section VI – Provides my response to the Direct Testimony of Mr. Chriss;
- 23 • Section VII – Provides my updated analyses; and

- 1           • Section VIII – Summarizes my conclusions and recommendations.

III. RESPONSE TO THE STAFF COST OF SERVICE REPORT AS IT  
RELATES TO THE RETURN ON EQUITY

2           **Q. Please summarize Staff's ROE recommendation.**

3           A. Staff, through its witness Mr. Murray, states that the Company's Cost of  
4 Equity is within a range of 9.00 percent to 9.50 percent, with a midpoint of 9.25 percent.  
5 In large measure, Staff's recommendation is based on Mr. Murray's view that the Cost of  
6 Equity has fallen by 25 to 75 basis points since the Company's last rate case.<sup>11</sup> That is,  
7 because the Commission found the Company's currently authorized ROE to be fair and  
8 reasonable, and since he believes that utility commissions commonly authorize ROEs  
9 higher than the Cost of Equity, Mr. Murray's recommended ROE is based on his  
10 assessment of the relative change in the Cost of Equity since Ameren Missouri's last rate  
11 case;<sup>12</sup> it is not consistent with the results of the various models that he uses to estimate  
12 the current Cost of Equity.

13           To estimate the change in the Cost of Equity since the Company's last rate case,  
14 Mr. Murray compares his 8.00 percent to 8.75 percent Multi-Stage DCF results from the  
15 Company's last rate case (after excluding two companies that are currently party to a  
16 merger or acquisition) to his updated 7.38 percent to 8.15 percent range of results for the  
17 same proxy companies.<sup>13</sup> Mr. Murray then estimates a 50 to 55 basis point decrease by  
18 performing a similar calculation using backdated results for his current proxy group

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<sup>11</sup> Staff Revenue Requirement Cost of Service Report, at 10-11.

<sup>12</sup> Staff Revenue Requirement Cost of Service Report, at 13.

<sup>13</sup> Staff Revenue Requirement Cost of Service Report, at 39-40.

1 (excluding Ameren and PNM Resources).<sup>14</sup> Based on those observations, Mr. Murray  
2 recommends a range of 9.00 percent to 9.50 percent, with an ROE point estimate of 9.25  
3 percent.<sup>15</sup>

4 **Q. Please summarize Staff's ROE analyses.**

5 A. Although his recommendation is disconnected from the results of his ROE  
6 analyses, Mr. Murray estimates the Company's Cost of Equity using the Multi-Stage  
7 DCF model, which he tests for reasonableness by reference to his CAPM, and "rule of  
8 thumb" risk premium results.<sup>16</sup> The DCF model and CAPM were applied to a "broad"  
9 proxy group of fourteen companies as well as a "refined" proxy group of twelve  
10 companies.<sup>17</sup> With regard to the DCF model, Mr. Murray indicates he relies on his Multi-  
11 Stage DCF results (7.60 percent to 8.72 percent), because he considers his Constant  
12 Growth DCF results (7.40 percent to 8.40 percent) to be less reliable due to the "non-  
13 sustainable" nature of certain growth rate projections.<sup>18</sup> Mr. Murray's CAPM results  
14 range from 6.53 percent to 7.76 percent,<sup>19</sup> and his "rule of thumb" approach suggests an  
15 ROE of 8.13 percent to 8.76 percent.<sup>20</sup> Mr. Murray also reviews recently authorized  
16 electric utility ROEs (which are significantly above the highest of his ROE estimates),  
17 although he does not reconcile his analyses or recommendation with that data.<sup>21</sup>

18 Mr. Murray considers a variety of growth rates for his Constant Growth DCF  
19 analyses, including historical and projected Earnings per Share, Dividends per Share, and

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<sup>14</sup> Staff Revenue Requirement Cost of Service Report, at 40.

<sup>15</sup> Staff Revenue Requirement Cost of Service Report, at 8.

<sup>16</sup> *Ibid.*, at 42, 44.

<sup>17</sup> *Ibid.*, at 26-29.

<sup>18</sup> *Ibid.*, at 33, 41-42.

<sup>19</sup> *Ibid.*, at 43.

<sup>20</sup> *Ibid.*, at 44.

<sup>21</sup> *Ibid.*, at 45-46.

1 Book Value per Share.<sup>22</sup> Mr. Murray observes that average analysts' projected EPS  
2 growth rate is 5.74 percent for his broad proxy group and 5.60 percent for his refined  
3 proxy group, a rate that Staff considers unsustainable.<sup>23</sup> Mr. Murray suggests that  
4 observed historical growth rates indicate the constant growth rate for the electric utility  
5 industry should not be much more than 3.00 percent, and notes that electric utility  
6 earnings growth rates were less than half of achieved Gross Domestic Product ("GDP")  
7 growth over Staff's study period (1968 through 1999).<sup>24</sup> On that basis, Mr. Murray  
8 selects 3.50 percent to 4.50 percent as a reasonable growth rate for the Constant Growth  
9 DCF model.<sup>25</sup> Because he concludes that the growth rates for certain companies in his  
10 proxy group are not sustainable, Mr. Murray relies on the Multi-Stage DCF model.

11 As to the Multi-Stage DCF model, Staff suggests that its analysis of historical  
12 growth rates indicates a 3.00 percent to 4.00 percent perpetual growth rate for electric  
13 utilities in general (2.00 percent to 3.00 percent for Missouri's utilities).<sup>26</sup> Staff further  
14 notes that a 2.00 percent stock growth rate "is about what investors would expect," and  
15 argues that electric utilities' financial growth will be limited because electricity demand  
16 growth will be lower than it has been historically.<sup>27</sup> Recognizing that some utility Cost of  
17 Equity witnesses have accepted the assumption that utilities' per share growth can grow  
18 at the same rate as nominal GDP, Staff also develops a set of Multi-Stage DCF analyses  
19 based on a long-term growth estimate of 4.40 percent.<sup>28</sup>

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<sup>22</sup> *Ibid.*, at 31-32.

<sup>23</sup> *Ibid.*, at 32-33.

<sup>24</sup> *Ibid.*, at 33, 35 and Schedule 13-4.

<sup>25</sup> *Ibid.*, at 33.

<sup>26</sup> *Ibid.*, at 37.

<sup>27</sup> *Ibid.*, at 37-38.

<sup>28</sup> *Ibid.*, at 40-41.



1           Mr. Murray tests the reasonableness of his DCF results by reference to his CAPM  
2 results, along with other data points. Mr. Murray's CAPM analysis produces mean  
3 results of 6.53 percent to 6.60 percent (based on the geometric average market risk  
4 premium) and 7.66 percent to 7.76 percent (based on the arithmetic average market risk  
5 premium).<sup>29</sup> Mr. Murray also applies a "rule of thumb" estimate based on data that are  
6 not specific to the electric utility industry, but establishes the Cost of Equity as 300 to  
7 400 basis points over the cost of long-term debt for A-rated and Baa-rated public utilities.  
8 Based on his "rule of thumb" approach, Mr. Murray derives Cost of Equity estimates  
9 ranging from 7.13 percent to 8.76 percent.<sup>30</sup>

10           **Q. Are Mr. Murray's analytical results and recommendation**  
11 **reasonable?**

12           A. No, they are not. ROE estimates as low as 6.53 percent have no practical  
13 meaning, and highlight the inherent risk of not questioning the applicability of models  
14 and assumptions in the current market environment. For example, Mr. Murray reviewed  
15 recently authorized returns for vertically integrated utilities, which averaged 9.94 percent  
16 through November 14, 2014 (9.96 percent in calendar year 2013).<sup>31</sup> All of Mr. Murray's  
17 ROE estimates, however, fall well below that benchmark: all 28 of Mr. Murray's CAPM  
18 estimates fall substantially below 9.94 percent, and 53 of his 56 Multi-Stage DCF results  
19 are below 9.94 percent.<sup>32</sup>

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<sup>29</sup> *Ibid.*, at 43, and Schedule 16.

<sup>30</sup> *Ibid.*, at 44.

<sup>31</sup> *Ibid.*, at 45.

<sup>32</sup> See, Appendix 2 to Staff Revenue Requirement Cost of Service Report, Schedules 12-1, 12-2, 12-3, and 12-4.

1           As another point of reference, over the twelve months ending November 14,  
2 2014, authorized ROEs for vertically integrated electric utilities have ranged from 9.50  
3 percent to 10.95 percent, with a mean authorized ROE of 9.96 percent.<sup>33</sup> Even  
4 Mr. Murray's 9.25 percent ROE recommendation, which is substantially higher than his  
5 estimate of the Company's Cost of Equity, is below the range of ROE recently authorized  
6 for vertically integrated electric utilities.

7           **Q.     What are the specific areas in which you disagree with Mr. Murray's**  
8 **analyses and recommendations?**

9           A.     There are several areas in which I disagree with Mr. Murray, including:  
10 (1) Mr. Murray's conclusion that Ameren Missouri's Cost of Equity has declined since  
11 the Company's last rate case; (2) the composition of Mr. Murray's proxy groups; (3) the  
12 range of growth rates Mr. Murray relies on his Constant Growth DCF analyses; (4) the  
13 application and structure of Mr. Murray's Multi-Stage DCF Model; (5) Mr. Murray's  
14 application of the CAPM and the relevance of those results in estimating the Cost of  
15 Equity; (6) Mr. Murray's "rule of thumb" analysis; and (7) Mr. Murray's failure to  
16 consider the effect of his recommendation on Ameren Missouri's financial integrity and  
17 ability to attract capital. I discuss each of those issues in turn, below.

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<sup>33</sup> Source: Regulatory Research Associates.

1 *A. Staff's Recommendation to Lower the Company's ROE by 25 to 75 Basis Points*

2 Q. Please briefly summarize the analyses Mr. Murray relies on to  
3 determine the Company's Cost of Equity has declined by 25 to 75 basis points.<sup>34</sup>

4 A. Mr. Murray updated the Multi-Stage DCF analyses he performed on his  
5 proxy group from Ameren Missouri's 2012 rate case (excluding CNL and WEC due to  
6 merger activity) to "gain insight" as to the direction and magnitude of the change in the  
7 Cost of Equity.<sup>35</sup> Based on that analysis, Mr. Murray concludes that the Cost of Equity  
8 has declined from a range of 8.00 percent to 8.75 percent, to a range of 7.38 percent to  
9 8.15 percent (that is, by approximately 60 basis points).<sup>36</sup>

10 Mr. Murray then "tests" his estimate of the decrease in the Cost of Equity by  
11 performing backdated Multi-Stage DCF analyses on the proxy groups used in the current  
12 proceeding (excluding Ameren Corporation, and PNM Resources due to earlier "financial  
13 difficulties").<sup>37</sup> Mr. Murray suggests that his backdated results indicate that the Cost of  
14 Equity has declined from a range of 8.16 percent to 8.84 percent to a range of 7.60  
15 percent to 8.36 percent (approximately 50 to 55 basis points).<sup>38</sup> Lastly, Mr. Murray notes  
16 that his "rule of thumb" approach, which adds 3.00 percent to 4.00 percent to the yield on  
17 "A" and "Baa" rated long-term utility bonds suggests that the Cost of Equity has declined  
18 by 75 basis points.<sup>39</sup>

19 Based on those analyses, Mr. Murray concludes the Cost of Equity has declined  
20 by as much as 75 basis points since the Company's prevailing ROE (9.80 percent) was

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<sup>34</sup> Staff Revenue Requirement Cost of Service Report, at 11.

<sup>35</sup> *Ibid.*, at 39.

<sup>36</sup> *Ibid.*, at 39-40.

<sup>37</sup> *Ibid.*, at 40.

<sup>38</sup> *Ibid.*

<sup>39</sup> *Ibid.*, at 44.

1 authorized and recommends the Commission allow an 9.25 percent ROE, which is the  
2 midpoint of his 9.00 percent to 9.50 percent recommended range.

3 **Q. Do you have any concerns with Mr. Murray's analysis and**  
4 **conclusion?**

5 A. Yes, I do. It is important to remember that all models used to estimate the  
6 Cost of Equity are subject to limiting assumptions or other methodological constraints.<sup>40</sup>  
7 Strict adherence to any single approach, or the results of any single approach, can result  
8 in misleading conclusions. A reasonable ROE estimate therefore considers capital  
9 market conditions and weighs the individual and collective results of alternate  
10 methodologies.<sup>41</sup> To that point, Brigham and Ehrhardt discuss the estimation of required  
11 return in Financial Management: Theory and Practice, and note:

12 Three methods typically are used: (1) the Capital Asset Pricing  
13 Model (CAPM), (2) the discounted cash flow (DCF) method, and  
14 (3) the bond-yield-plus-risk-premium approach. These methods  
15 are not mutually exclusive. When faced with the task of estimating  
16 a company's cost of equity, we generally use all three methods and  
17 then choose among them on the basis of our confidence in the  
18 input data available for the specific case at hand.<sup>42</sup>

19 While Mr. Murray focuses on the decline in the results of his Multi-Stage DCF  
20 analyses and infers from that data a decline in the Cost of Equity. A similar comparison  
21 using his CAPM analyses, however, would indicate that the Cost of Equity actually has  
22 increased by at least 60 basis points (*see* Schedule RBH-R14). In fact, all three

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<sup>40</sup> As noted by the Commission in Case No. ER-2011-0028 regarding DCF, Risk Premium and CAPM analyses: "No one method is any more 'correct' than any other method in all circumstances. Analysts balance their use of all three methods to reach a recommended return on equity." *See*, Report and Order in Case No. ER-2011-0028, July 13, 2011, at 67.

<sup>41</sup> It is for that reason that I applied multiple models in my Direct Testimony in order to estimate Ameren Missouri's ROE. *See* Direct Testimony of Robert B. Hevert, at 3.

<sup>42</sup> Eugene Brigham and Michael Ehrhardt, Financial Management: Theory and Practice, 12th Ed. (Mason, OH: South-Western Cengage Learning, 2008), at 346.

1 components of Mr. Murray's CAPM analyses (the risk-free rate, Beta coefficient and  
2 Market Risk Premium ("MRP")) have remained relatively constant or have increased.<sup>43</sup>

3 Moreover, applying the Bond Yield Plus Risk Premium model presented in  
4 Schedule RBH-6 using the three-month average 30-year Treasury yields reported by  
5 Mr. Murray in the prior case and the current proceeding (3.13 percent and 3.17 percent,  
6 respectively) would indicate the Cost of Equity is essentially unchanged, with results  
7 increasing from 10.12 percent to 10.13 percent. That comparison provides a more  
8 reasonable estimate of the change in the Company's Cost of Equity than Mr. Murray's  
9 "rule of thumb" because it accounts for the inverse relationship between the equity risk  
10 premium and interest rates, and does not misinterpret changes in credit spreads as  
11 changes in the Cost of Equity.<sup>44</sup>

12 **Q. Has there been a downward trend in authorized ROEs since the**  
13 **Commission's order in the Company's last rate case?**

14 **A.** No, it does not appear so. As shown in Chart 2 (below), there is no  
15 discernible trend in the level of authorized ROEs for vertically integrated electric utilities  
16 since December 2012.

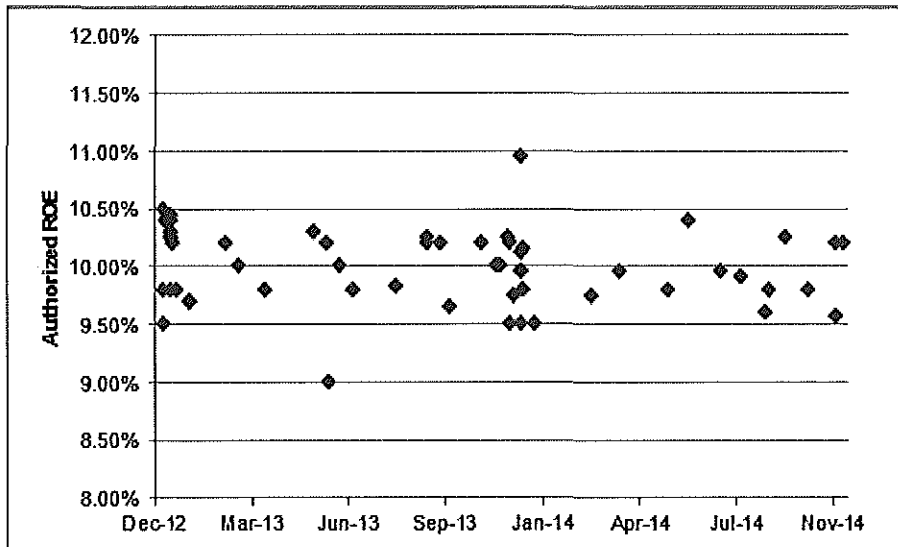
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<sup>43</sup> See Staff Revenue Requirement Cost of Service Report, at 43; and Case No. ER-2012-0166, Staff Revenue Requirement Cost of Service Report, at 47.

<sup>44</sup> That is, Mr. Murray's "rule of thumb" results have decreased because the spread between long-term utility debt and long-term Treasury yields has declined, not because the yield on long-term Treasuries (*i.e.*, the risk-free rate) is lower.

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**Chart 2: Authorized ROEs for Vertically Integrated Electric Utilities:  
December 12, 2012 – November, 14, 2014**



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4 If anything, Ameren Missouri's authorized ROE is on the low end of current  
5 market requirements for integrated electric utilities. Regardless of Mr. Murray's  
6 conclusions regarding the direction of his Multi-Stage DCF model results, the *Hope* and  
7 *Bluefield* standards, as Mr. Murray notes, require a return that will allow the Company to  
8 earn a return similar to returns earned by companies with similar risks. Taken from that  
9 perspective alone, Mr. Murray's recommendation to lower the Company's authorized  
10 ROE is unreasonable.

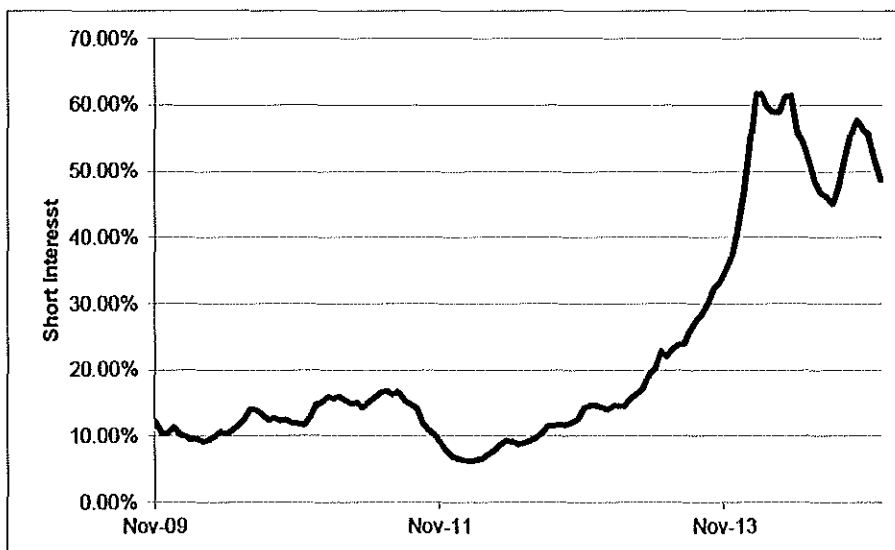
11 **Q. Are there reasons to question whether the Multi-Stage DCF model**  
12 **currently produces results that are a reliable indicator of investors required return**  
13 **on equity?**

14 **A. Yes, there are. As discussed above, the utility industry's P/E ratio**  
15 **currently is well above its historical average, both on an absolute basis and relative to the**  
16 **broader market. However, there are several indicators suggesting that the industry's**

1 currently elevated P/E ratio may not be sustainable. For example, Value Line expects a  
2 decline in stock price for 10 of the 14 companies in Mr. Murray's broad proxy group,  
3 with a median projected price decline of 3.78 percent over the coming three to five years,  
4 even as the median projected annual growth in earnings is 5.25 percent over the same  
5 period (*see* Schedule RBH-R15).<sup>45</sup> Similarly, Morningstar assigned the utility industry a  
6 price to fair value estimate of 1.09 as of mid-November 2014, which indicates they  
7 believe utility stock prices in general are nearly 10.00 percent above their intrinsic  
8 value.<sup>46</sup>

9 In addition, as shown in Chart 3 (below), short interest in the Utilities Select  
10 Sector Spider ETF (ticker: XLU) is currently elevated, indicating that at least some  
11 investors may not believe that the current valuation levels are sustainable.

12 **Chart 3: Short Interest in Utilities Select Spider ETF:**  
13 **November 14, 2009 – November, 14, 2014<sup>47</sup>**



<sup>45</sup> Source: Value Line Stock Screener

<sup>46</sup> Source: Josh Peters, CFA Equity Research and Valuation Conference Presentation: Finding Value and Sustainability in Dividend Stocks, November 2014.

<sup>47</sup> Source: Bloomberg. Represents two-month rolling average.

1 ***B. Proxy Group Composition***

2 **Q. Please summarize the differences between your proxy group and the**  
3 **one developed by Mr. Murray.**

4 **A. While there is significant overlap in the fourteen companies in my revised**  
5 **proxy group and the fourteen companies in Staff's broad proxy group, there are also**  
6 **significant differences. Table 1 (below) provides a summary of the various companies**  
7 **included by Staff and me in this case in our respective proxy groups.**



1

**Table 1: Hevert and Murray Proxy Groups**

Company	Ticker	Hevert Original Proxy Group	Hevert Revised Proxy Group	Murray "Broad" Proxy Group [8]
Alliant Energy Corp.	LNT	[1]	[1]	√
Ameren Corp.	AEE	[1], [2]	[1], [2]	√
American Electric Power Co., Inc.	AEP	√	√	√
Cleco Corp.	CNL	√	[3]	[4]
CMS Energy Corporation	CMS	[1]	[1]	√
DTE Energy Corporation	DTE	[1]	[1]	√
Duke Energy Corporation	DUK	√	√	[5]
Empire District Electric Company	EDE	√	√	[4]
Great Plains Energy Inc.	GXP	√	√	√
Hawaiian Electric Industries, Inc.	HE	√	√	[6]
IDACORP, Inc.	IDA	√	√	[4]
NextEra Energy, Inc.	NEE	√	√	[6]
Northeast Utilities	NU	√	√	[7]
OGE Energy Corp.	OGE	[3]	[3]	√
Otter Tail Corp.	OTTR	√	√	[5]
Pinnacle West Capital Corp.	PNW	√	√	√
PNM Resources, Inc.	PNM	√	√	√
Portland General Electric Co.	POR	√	√	√
Southern Company	SO	√	√	√
TECO Energy, Inc.	TE	[1], [3]	[1]	√
Westar Energy, Inc.	WR	√	√	√
Xcel Energy Inc.	XEL	[1]	[1]	√
√ Included in proxy group				
[1] Removed for having less than an average of 90.00% of regulated net income from electric operations over prior 3 years				
[2] Removed because company is the parent company of Ameren Missouri				
[3] Removed because company is party to a merger or other significant transaction				
[4] Less than two analysts providing long-term growth estimates within 90 days of analysis date				
[5] Mr. Murray reports less than 80.00% of income from regulated utility operations				
[6] Not reported as an electric utility by Edison Electric Institute				
[7] Less than 25.00% of electric plant is from generation				
[8] See Appendix 2 to Staff Revenue Requirement Cost of Service Report, Schedule 7				

2

1           **Q. Please explain why you exclude Cleco Corporation (“CNL”) from**  
2 **your updated analyses.**

3           A. On October 17, 2014 an investor group led by Macquarie Group Limited  
4 agreed to acquire the outstanding shares of CNL for approximately \$3.40 billion.<sup>48</sup> CNL  
5 is excluded from my updated analyses group because it no longer passes the screening  
6 criterion that eliminates companies that are party to a significant transaction.<sup>49</sup> I refer to  
7 the proxy group from my Direct Testimony as the “Original Proxy Group” and the  
8 updated proxy group excluding CNL as the “Revised Proxy Group.”

9           **Q. Please briefly summarize Mr. Murray’s proxy group selection**  
10 **process.**

11           A. Mr. Murray starts with the group of companies classified by SNL  
12 Financial as power companies and applies a series of screening criteria, as follows:  
13 (1) publicly-traded stock; (2) followed by EEI and classified by EEI as a regulated utility;  
14 (3) at least 50.00 percent of plant is from electric utility operations; (4) at least 25.00  
15 percent of electric plant is from generation; (5) at least 80.00 percent of income is from  
16 regulated utility operations over the past three years; (6) no reduced dividends since  
17 2011; (7) at least an investment grade credit rating; (8) at least two equity analysts  
18 providing long-term growth projections in the last 90 days; and (9) no significant merger  
19 or acquisition announced recently.<sup>50</sup> Mr. Murray’s “broad proxy group” consists of the  
20 fourteen companies that pass the above screening criteria.

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<sup>48</sup> Cleco Corporation, SEC Form 8-K, October 20, 2014, Exhibit 99.1, at 3.

<sup>49</sup> See, Direct Testimony of Robert B. Hevert, at 9-10.

<sup>50</sup> See, Staff Revenue Requirement Cost of Service Report, at 27-30.

1           Mr. Murray then develops a “refined proxy group” by eliminating two companies  
2 whose regulated utilities’ contribution to income had a standard deviation greater than  
3 10.00 percent over the past three years, unless the company has recently divested the  
4 segment that caused the swings in the company’s net income (such as Ameren  
5 Corporation).<sup>51</sup>

6           **Q.     What accounts for the differences in your respective proxy groups?**

7           A.     The differences between my Revised Proxy Group and Mr. Murray’s  
8 broad proxy group are primarily attributable to: (1) Mr. Murray’s use of seven companies  
9 (Alliant Energy (“LNT”), Ameren Corporation, CMS Energy Corporation (“CMS”), DTE  
10 Energy Corporation (“DTE”), OGE Energy Corporation (“OGE”), TECO Energy, Inc.  
11 (“TE”) and Xcel Energy (“XEL”)) that I had excluded on the basis of business segment  
12 operating results or the company’s involvement in a significant transaction; and (2) the  
13 exclusion of seven companies (Duke Energy Corporation (“DUK”), Empire District  
14 Electric (“EDE”), Hawaiian Electric Industries, Inc. (“HE”), IDACORP, Inc. (“IDA”),  
15 NextEra Energy, Inc. (“NEE”), Northeast Utilities (“NU”) and Otter Tail Corp.  
16 (“OTTR”)) from Mr. Murray’s proxy group that are included in my Revised Proxy  
17 Group.

18           **Q.     Why were the seven companies included in Mr. Murray’s proxy**  
19 **group excluded from your group?**

20           A.     Mr. Murray’s screening criteria would include six companies (*i.e.*, LNT,  
21 Ameren Corporation, CMS, DTE, TE and XEL) that I have excluded because they failed  
22 to derive 90.00 percent or more of total regulated operating income from regulated

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<sup>51</sup> *Ibid.*

1 electric utility service over the past three years.<sup>52</sup> Upon reviewing operating income data  
2 for the period from 2011 through 2013 for each of those six companies, I note that they  
3 derived between 72.68 percent to 88.74 percent of their total regulated operating income  
4 from regulated electric utility service during that three year period.<sup>53</sup>

5 **Q. Why did Mr. Murray exclude certain companies contained in your**  
6 **proxy group from his recommended proxy groups?**

7 A. As noted above, Mr. Murray excluded seven companies (*i.e.*, DUK, EDE,  
8 HE, IDA, NEE and NU) that are included in my Revised Proxy Group. Based on  
9 Mr. Murray's Schedule 7, which illustrates his screening process, DUK and OTTR were  
10 excluded because they derived less than 80.00 percent of income from regulated utility  
11 operations; EDE and IDA were excluded because SNL Financial reported fewer than two  
12 analysts providing long-term growth estimates within 90 days of Staff's analysis date; HE  
13 and NEE were excluded because they were not reported as regulated electric utilities by  
14 Edison Electric Institute; and NU was excluded because electric generation assets  
15 accounted for less than 25.00 percent of the company's electric plant.

16 **Q. Why are DUK and OTTR included in your proxy group?**

17 A. My screening criteria require that proxy group companies derive at least  
18 60.00 percent of total operating income from regulated operations. Over the past three  
19 years DUK and OTTR have derived an average of 91.46 percent and 75.71 percent of

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<sup>52</sup> I also exclude Ameren Corporation to avoid the circular logic that would otherwise occur. *See*, Direct Testimony of Robert B. Hevert, at 10.

<sup>53</sup> LNT = 88.74%, Ameren Corporation = 88.16%, CMS = 72.68%, DTE = 76.30%, TE = 85.25%, and XEL = 88.52% of total regulated operating income from regulated electric utility service from 2011-2013.

1 operating income from regulated operations, respectively.<sup>54</sup> I believe both companies  
2 derive a sufficient portion of their operating income from regulated operations to be  
3 included in the proxy group. Given that Mr. Murray's screening criterion requires 80.00  
4 percent of income to be derived from regulated operations, it is unclear why he has  
5 excluded DUK.

6 **Q. Why are EDE and IDA included in your proxy group?**

7 A. Mr. Murray excluded EDE and IDA because the single source of his  
8 growth rate estimates (SNL Financial) did not report at least two analyst long-term  
9 earnings per share ("EPS") growth estimates in the 90 days prior to Staff's analysis date.  
10 While my proxy group selection criteria also require that at least two analyst long-term  
11 EPS growth rate estimates are available, two (First Call and Zacks) of the three sources I  
12 rely on for analyst long-term EPS growth estimates reported more than one analyst long-  
13 term growth estimate.

14 **Q. Why is NU included in your proxy group?**

15 A. NU passed all of the screening criteria outlined in my Direct Testimony,  
16 and I consequently believe it is a reasonable proxy for the Cost of Equity of Ameren  
17 Missouri. Mr. Murray, however, excludes NU from his proxy group because less than  
18 25.00 percent of its electric utility assets are related to electric generation. Under the  
19 premise that electric generation is riskier than electric distribution operations, I note  
20 including NU would only serve to make my proxy group relatively conservative.

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<sup>54</sup> Source: SEC Form 10-K data as reported by SNL Financial.

1           **Q.     Do you have any concerns with Mr. Murray's decision to exclude HE**  
2 **and NEE from his proxy groups?**

3           A.     Yes, I do. As noted above, Mr. Murray excluded HE and NEE from his  
4 proxy group because they did not meet his criteria for being classified by EEI as a  
5 regulated utility. The companies are, however, classified by Value Line, a source which  
6 Mr. Murray relies upon extensively, as Electric Utilities. Moreover, HE and NEE meet  
7 my other screening criteria, including the proportion of operating income derived from  
8 regulated electric utility service. The EEI screen by which Mr. Murray excluded HE and  
9 NEE is based on the percentage of utility assets, as opposed to operating income, devoted  
10 to regulated electric utility service. Specifically, EEI classifies investor-owned electric  
11 utilities as follows: (1) Regulated: 80.00 percent or more of total assets are regulated;  
12 (2) Mostly Regulated: 50.00 percent to 80.00 percent of total assets are regulated; and  
13 (3) Diversified: less than 50.00 percent of total assets are regulated.<sup>55</sup> Mr. Murray's  
14 asset screen fails to recognize that to the extent investors consider the percentage of  
15 assets used for regulated services, the purpose is to determine the operating income that  
16 those regulated assets might be expected to produce, which, in turn, would contribute to  
17 cash flows and earnings. Consequently, I believe that it is more appropriate to rely on the  
18 percentage of operating income rather than the percentage of regulated assets to develop  
19 a risk comparable proxy group.

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<sup>55</sup> Edison Electric Institute, 2013 Financial Review, Annual Report of the U.S. Shareholder-Owned Electric Utility Industry, at v.

1           **Q.     Please explain why you excluded OGE from your proxy group.**

2           A.     I excluded OGE from my proxy group because the company recently was  
3 party to a significant transaction in which its midstream assets<sup>56</sup> were contributed to  
4 Enable Midstream Partners (a joint venture with affiliates of CenterPoint Energy and  
5 ArcLight Capital Partners).<sup>57</sup> Value Line notes Enable Midstream Partners, which had an  
6 initial public offering in April 2014, distributed \$76.50 million to OGE in the first six-  
7 months of 2014, which is nearly 20.00 percent of OGE's total projected 2014 earnings  
8 per share.<sup>58</sup> Corporate restructuring transactions of a significant size impact the financial  
9 performance of a company and can have a material effect on the results of cost of capital  
10 models, and accordingly, such companies are properly excluded from the proxy group.

11           **Q.     What effect does the composition of your respective proxy groups**  
12 **have on your ROE analyses?**

13           A.     Table 2 (below) provides updated DCF results for both my Revised Proxy  
14 Group and Mr. Murray's proxy groups (based on the Constant Growth and Multi-Stage  
15 DCF Models) as of November 14, 2014.

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<sup>56</sup> Midstream operations include assets related to gathering, processing, transporting and storing natural gas.

<sup>57</sup> See <http://www.enablemidstream.com/html/pages/p001-homepage.html>

<sup>58</sup> Value Line Company Report, OGE Energy Corporation, September 19, 2014.

1           **Table 2: DCF Results Comparison: Hevert and Murray Proxy Groups**

	<b>Hevert Revised Proxy Group</b>	<b>Murray Broad Proxy Group</b>	<b>Murray Refined Proxy Group</b>
<i>Constant Growth DCF</i>	<b>Mean</b>	<b>Mean</b>	<b>Mean</b>
30-Day Average	9.32%	9.44%	9.40%
90-Day Average	9.48%	9.57%	9.53%
180-Day Average	9.51%	9.60%	9.56%
<i>Multi-Stage DCF</i>	<b>Mean</b>	<b>Mean</b>	<b>Mean</b>
30-Day Average	9.81%	9.80%	9.84%
90-Day Average	9.98%	9.94%	9.98%
180-Day Average	10.01%	9.97%	10.01%

2           As Table 2 demonstrates, the composition of the proxy group affects, to some  
3 degree, the Constant Growth DCF results, although proxy group composition has less  
4 effect on the Multi-Stage DCF results. I continue to believe that my selection criteria  
5 produce a proxy group that is more representative of Ameren Missouri's investment risks  
6 than do Mr. Murray's criteria. Nonetheless, in order to reduce the number of contested  
7 issues, I have included Mr. Murray's proxy companies in a Combined Proxy Group.

8           ***C. Application of the Constant Growth DCF Model***

9           **Q.     Please explain the differences between you and Mr. Murray in the**  
10 **selection of growth rates in your respective Constant Growth DCF analyses.**

11           A.     My Constant Growth DCF analysis relies on analysts' earnings growth  
12 projections, as provided by Zacks, First Call, and Value Line.<sup>59</sup> Mr. Murray's analysis,  
13 on the other hand, reflects projected growth in Dividends per Share ("DPS"), Book Value

<sup>59</sup> See, Direct Testimony of Robert B. Hevert, at 18.



1 per Share (“BVPS”), and Earnings per Share (“EPS”), as well as historical growth rates,  
2 although he considers the historical data to be “quite volatile.”<sup>60</sup> Mr. Murray observes  
3 that the consensus analyst EPS growth estimates provided by SNL Financial average 5.74  
4 percent for his broader proxy group, and 5.60 percent for his refined proxy group.<sup>61</sup> He  
5 concludes, however, that those estimates are not reliable indicators of long-term,  
6 sustainable growth expectations relative to Staff’s “high-end” estimate of long-term GDP  
7 growth (approximately 4.50 percent).<sup>62</sup>

8 **Q. Why does Mr. Murray reject the use of analysts’ forecasts of five-year**  
9 **EPS growth in his Constant Growth DCF model?**

10 A. Mr. Murray suggests the use of equity analysts’ forecasts of five-year EPS  
11 growth would be “unreasonable” because they are higher than the approximately 4.50  
12 percent high-end of his long-term GDP growth estimate.<sup>63</sup> In particular, Mr. Murray  
13 notes that the companies in the S&P 500 recently have retained approximately 65.00  
14 percent to 70.00 percent of their earnings, while electric utilities recently have retained  
15 less than half of that proportion.<sup>64</sup> Mr. Murray further argues that observed historical  
16 electric utility growth rates suggest the utility industry could “barely” support a growth  
17 rate more than 3.00 percent.<sup>65</sup> Mr. Murray states that for those reasons, Staff relied on a  
18 growth rate range of 3.50 percent to 4.50 percent in its Constant Growth DCF analysis,

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<sup>60</sup> Staff Revenue Requirement Cost of Service Report, at 31-32.

<sup>61</sup> *Ibid.*, at 32.

<sup>62</sup> *Ibid.* As shown on Schedule 11, Mr. Murray relies on long-term growth rates of 3.50 percent to 4.50 percent to derive his Constant Growth DCF range of 7.40 percent to 8.40 percent.

<sup>63</sup> Staff Revenue Requirement Cost of Service Report, at 32.

<sup>64</sup> *Ibid.*

<sup>65</sup> *Ibid.*, at 33.

1 instead of the 5.60 percent average analyst EPS projection for his broad proxy group or  
2 5.74 percent for his refined proxy group.<sup>66</sup>

3 **Q. As a preliminary matter, does the Constant Growth DCF model**  
4 **produce reasonable results under current market conditions?**

5 A. No, Mr. Murray's Constant Growth DCF results are well below the  
6 prevailing level of authorized returns. Moreover, as discussed in my Direct Testimony,  
7 the Constant Growth DCF model requires certain assumptions, including: (1) a constant  
8 growth rate for earnings and dividends; (2) a stable dividend payout ratio; (3) a constant  
9 price-to-earnings multiple; and (4) a discount rate greater than the expected growth rate.<sup>67</sup>  
10 To the extent any of those assumptions is violated, considered judgment and/or specific  
11 adjustments should be applied to the results. Given the recently elevated level of electric  
12 utility company P/E ratios relative to their historical average level, it is not clear that  
13 those assumptions are likely to hold. As such, the Constant Growth DCF model results  
14 should be viewed with considerable caution.

15 **Q. Do you agree with Mr. Murray's assessment of growth rates for his**  
16 **Constant Growth DCF model?**

17 A. No, I do not. As to Mr. Murray's consideration of dividend and book  
18 value growth, it is important to realize that earnings growth enables both.<sup>68</sup> Corporate  
19 decisions to manage the dividend payout ratio for the purpose of minimizing future  
20 dividend reductions or to signal future earnings prospects can influence dividend growth

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<sup>66</sup> *Ibid.* It is interesting to note that in the Company's last rate case (Case No. ER-2012-0166), Staff had concluded that its review of historical growth in the electric industry could marginally support a more aggressive 5.00% to 5.50% growth rate range. See Case No. ER-2012-0166, Staff Revenue Requirement Cost of Service Report, at 29.

<sup>67</sup> See, Direct Testimony of Robert B. Hevert, at 14.

<sup>68</sup> *Ibid.*, at 24.

1 rates in near-term periods in a manner that is disproportionate to earnings growth.  
2 Similarly, book value can increase over time only through the addition of retained  
3 earnings, or with the issuance of new equity. Both of those factors are derivative of  
4 earnings. Retained earnings increase with the amount of earnings not distributed as  
5 dividends, and the price at which new equity is issued is a function of the earnings per  
6 share and the then-current P/E ratio.

7 Mr. Murray's reference to dividend and book value growth rates also is misplaced  
8 because the only scenario under which dividend growth rates and book value growth  
9 rates are relevant is when the fundamental assumptions underlying the Constant Growth  
10 DCF model essentially hold. Under those fundamental assumptions, the Constant  
11 Growth DCF model produces the same result whether the stock is held in perpetuity or  
12 sold after an assumed holding period, and the assumed growth rate equals the rate of  
13 capital appreciation (*i.e.*, the stock price growth rate). Given that investors tend to value  
14 common equity on the basis of P/E ratios, the required ROE is a function of the long-term  
15 growth in earnings, not dividends or book value.

16 **Q. Why are EPS growth rates the appropriate measure for the Constant**  
17 **Growth DCF model?**

18 A. First, as noted above, it is growth in earnings that enables both dividend  
19 and book value growth, a position that is firmly supported by academic research.<sup>69</sup>  
20 Moreover, valuation metrics also focus on earnings, as opposed to dividends. As noted  
21 over 40 years ago by Charles Phillips in The Economics of Regulation:

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<sup>69</sup> See, for example, Harris, Robert, *Using Analysts' Growth Forecasts to Estimate Shareholder Required Rate of Return*, Financial Management, Spring 1986.

1 For many years, it was thought that investors bought utility stocks  
2 on the basis of dividends. More recently, however, studies indicate  
3 that the market is valuing utility stocks with reference to total per  
4 share earnings, so that the price-earnings ratio has assumed  
5 increased emphasis in rate cases.<sup>70</sup>

6 Phillips's conclusion continues to hold true. Subsequent academic research has  
7 clearly and consistently indicated that measures of earnings and cash flow are strongly  
8 related to returns, and that analysts' forecasts of earnings growth are superior to other  
9 measures of growth in predicting stock prices.<sup>71</sup> For example, Vander Weide and  
10 Carleton state that "[o]ur results...are consistent with the hypothesis that investors use  
11 analysts' forecasts, rather than historically oriented growth calculations, in making stock  
12 buy-and-sell decisions."<sup>72</sup> Other research specifically notes the importance of analysts'  
13 growth estimates in determining the Cost of Equity, and in the valuation of equity  
14 securities. Moreover, Dr. Robert Harris noted that "a growing body of knowledge shows  
15 that analysts' earnings forecasts are indeed reflected in stock prices."<sup>73</sup> Citing Cragg and  
16 Malkiel, Dr. Harris notes that those authors "found that the evaluations of companies that  
17 analysts make are the sorts of ones on which market valuation is based."<sup>74</sup>

18 To that point, the research of Carleton and Vander Weide (discussed below)  
19 demonstrates that earnings growth projections have a statistically significant relationship  
20 to stock valuation levels, while dividend growth projections do not. Those findings

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<sup>70</sup> Charles F. Phillips, Jr., The Economics of Regulation, Revised Edition, 1969, Richard D. Irwin, Inc., at 285.

<sup>71</sup> See, for example, Christofi, Christofi, Lori and Moliver, *Evaluating Common Stocks Using Value Line's Projected Cash Flows and Implied Growth Rate*, Journal of Investing (Spring 1999); Harris and Marston, *Estimating Shareholder Risk Premia Using Analysts Growth Forecasts*, Financial Management, 21 (Summer 1992); and Vander Weide and Carleton, *Investor Growth Expectations: Analysts vs. History*, The Journal of Portfolio Management, Spring 1988, at 81.

<sup>72</sup> Vander Weide and Carleton, *Investor Growth Expectations: Analysts vs. History*, The Journal of Portfolio Management, Spring 1988.

<sup>73</sup> Robert S. Harris, *Using Analysts' Growth Forecasts to Estimate Shareholder Required Rate of Return*, Financial Management, Spring 1986.

<sup>74</sup> *Ibid.*

1 suggest that investors form their investment decisions based on expectations of growth in  
2 earnings, not dividends. Consequently, earnings growth not dividend growth is the  
3 appropriate estimate for the purpose of the Constant Growth DCF model.<sup>75</sup> While  
4 Carleton and Vander Weide's research was based on companies and industries in addition  
5 to utilities, my own quantitative analyses demonstrate that the same conclusions hold for  
6 electric utility companies.

7 **Q. Please describe the analyses you conducted to determine which**  
8 **measures of growth are statistically related to the proxy companies' stock valuation**  
9 **levels.**

10 A. My analyses are based on the approach developed by Professors Carleton  
11 and Vander Weide, who conducted a comparison of the predictive capability of historical  
12 growth estimates and analysts' consensus forecasts of five-year earnings growth for the  
13 stock prices of sixty-five utility companies.<sup>76</sup> While their study addressed the use of  
14 historical growth rates, the general methodology established by Carleton and Vander  
15 Weide also can be used to determine which growth rate projections have the greatest  
16 predictive capability with respect to stock valuation levels. As discussed below, my  
17 analyses were structured to assess the ability of various growth estimates to explain  
18 changes in stock valuation levels. Essentially, the analysis is structured to determine  
19 whether investors use earnings, dividend, or book value growth rates when valuing  
20 electric utility stocks.

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<sup>75</sup> As discussed later in my Rebuttal Testimony, that finding applies specifically to electric utility companies.

<sup>76</sup> Vander Weide and Carleton, *Investor Growth Expectations: Analysts vs. History*, The Journal of Portfolio Management, Spring 1988, at 81. Please note that while the original study was published in 1988, it was updated in 2004 under the direction of Dr. Vander Weide. The results of this updated study are consistent with Vander Weide and Carlton's original conclusions.

1 As shown in Table 3 (*see also*, Schedule RBH-R16), my analysis examines the  
2 relationship between the P/E ratios of the Value Line universe of electric utility  
3 companies, and the projected EPS, DPS, and BVPS growth rates reported by Value Line  
4 as of October 31, 2014, September 19, 2014, and August 22, 2014. I also eliminated any  
5 observations wherein Value Line did not report P/E, EPS, DPS, or BVPS projection data.  
6 I then performed a series of regression analyses in which the projected growth rates were  
7 included as explanatory variables, with the P/E ratio as the dependent variable. The  
8 intent of those analyses was to determine which, if any, of the growth rates are  
9 statistically related to the proxy company stock valuation levels.

10 **Table 3: Regression Results - Price to Earnings v. Growth Rates**

	Intercept	Coefficient	Standard Error	T-Stat	F-Stat
Scenario 1- Projected EPS	13.245	37.236	8.552	4.354	18.956
Scenario 2- Projected DPS	15.699	-12.713	8.698	-1.462	2.136
Scenario 3- Projected BVPS	16.523	-32.711	23.078	-1.417	2.009
Scenario 4- Projected EPS Projected DPS Projected BVPS	14.469	40.125 -16.462 -16.659	8.116 7.279 19.035	4.944 -2.262 -0.875	9.875

11 In the first set of analyses (*see* Table 3, Scenarios 1-3), I considered each  
12 independent variable separately (*i.e.*, performed three separate regressions with P/E as the  
13 dependent variable and projected EPS, DPS, and BVPS as the independent variable). To  
14 ensure that those separate analyses did not somehow bias my results, I then performed a  
15 single regression that included all three variables as potential explanatory variables  
16 (Scenario 4). To determine whether the variables and equations are statistically  
17 significant, I also reviewed the T- and F-Statistics. In general, a T-Statistic of 2.00 or

1 greater indicates that the variable is likely to be different than zero, or “statistically  
2 significant”. The F-Statistic is used to determine whether the model as a whole has  
3 statistically significant predictive capability.

4 **Q. What did those analyses reveal?**

5 A. In all four scenarios, the only theoretically meaningful and statistically  
6 significant variable was the projected EPS growth rate; neither projected DPS growth nor  
7 projected BVPS growth provided any meaningful explanatory value.

8 **Q. What conclusions do you draw from those analyses?**

9 A. Since my analyses demonstrate that only EPS growth has a meaningful  
10 and statistically significant level of explanatory value with respect to the proxy  
11 companies’ stock valuations, I conclude that investors consider expected EPS growth  
12 rates, and not expected DPS or BVPS growth rates, in establishing market prices for  
13 those companies. Therefore, I have continued to rely on projected EPS growth rates from  
14 Value Line, Zacks, and First Call in developing my DCF results.

15 **Q. Please comment on Mr. Murray’s use of certain historical data in  
16 evaluating the reasonableness of analysts’ projected EPS growth rates.**

17 A. As noted above, Mr. Murray suggests that the electric utility industry’s  
18 historical growth “barely supports” a constant growth rate estimate much more than 3.00  
19 percent. Mr. Murray’s analysis of historical electric utility industry growth rates is based  
20 on data relating to *Central* region electric utilities for the period 1968 through 1999.<sup>77</sup> He  
21 does not use information after 1999, owing to his concerns related to the quality of the

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<sup>77</sup> Staff Revenue Requirement Cost of Service Report, at 34-35.

1 data due to the consolidation of the electric utility industry, utility diversification, and the  
2 potential effects of the Enron bankruptcy and deregulation on investors' growth  
3 expectations.<sup>78</sup> Mr. Murray notes that he did not apply rigid selection criteria for  
4 assembling his study group, stating that instead, "Staff did eliminate companies that  
5 generally did not have at least 70% of revenues from electric utility operations in the late  
6 1990s,"<sup>79</sup> as well as companies that appeared to be affected by restructuring of electric  
7 utility markets, and companies that were affected by major mergers, acquisitions or  
8 restructurings.<sup>80</sup> That selection process produced a ten-company study group.<sup>81</sup>

9 Using that group, Mr. Murray calculates rolling average ten-year growth rates  
10 over the study period of 3.62 percent (EPS), 3.99 percent (DPS), and 3.18 percent  
11 (BVPS), respectively, with an overall average of 3.59 percent.<sup>82</sup> Mr. Murray suggests  
12 that those growth rates were realized over a much more robust economic environment  
13 than the U.S. is expected to achieve in the foreseeable future.<sup>83</sup> Conducting a similar set  
14 of analyses on electric utilities in Missouri for the period 1968 - 1999, Mr. Murray  
15 estimates average rolling ten-year growth rates of 3.11 percent (EPS), 3.59 percent  
16 (DPS), and 2.57 percent (BVPS), respectively, with an overall average of 3.09 percent.<sup>84</sup>  
17 Extending the analysis through 2013 for the Missouri electric utilities, Mr. Murray  
18 estimates average ten-year growth rates of 1.66 percent (EPS), 1.84 percent (DPS), and  
19 2.39 percent (BVPS), respectively, with an overall average of 1.96 percent.<sup>85</sup> Mr. Murray

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<sup>78</sup> *Ibid.*

<sup>79</sup> *Ibid.*, at 35.

<sup>80</sup> *Ibid.*

<sup>81</sup> *Ibid.*, Schedule 13-1.

<sup>82</sup> *Ibid.*, at 35 and Schedule 13-4.

<sup>83</sup> *Ibid.*, at 35.

<sup>84</sup> *Ibid.*, at 36.

<sup>85</sup> *Ibid.*



1 then reasons that his analysis supports a long-term growth rate in the 2.00 percent to 3.00  
2 percent range, and suggests it is “quite logical and rational in the current low-yield  
3 environment” that electric utility investors expect a return of approximately 6.00  
4 percent.<sup>86</sup>

5 **Q. Do you agree with Mr. Murray’s conclusion?**

6 A. No, I do not. As a preliminary matter, aside from Mr. Murray’s broad  
7 assertion that the 32 year period from 1968 through 1999 somehow is representative of  
8 investors’ current expectations, he has provided no basis for the use of that particular data  
9 set. Mr. Murray’s conclusion also ignores the effect that changes in other economic or  
10 financial variables, such as authorized ROE levels, may have had on the observed growth  
11 rates over his study period. For example, SNL Financial, which provides data on  
12 authorized utility ROEs as far back as 1980, reports the average authorized electric utility  
13 ROE declined from 14.23 percent in 1980 to 10.72 percent in 1999. All else being equal,  
14 a decrease in allowed return on equity would be expected to decrease the rate of earnings  
15 growth over that portion of Mr. Murray’s study period. However, if average authorized  
16 ROEs were to increase significantly in the future, it could accelerate earnings growth  
17 above the level expected given current ROE levels.

18 In any event, as noted earlier, academic research has shown that analysts’  
19 forecasted growth rates are superior to historical growth rates in terms of projecting  
20 future stock prices. Further, academic research and the regression analyses described  
21 above demonstrate the superiority of analysts’ EPS growth projections over DPS and  
22 BVPS growth projections in the utility stock valuation process.

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<sup>86</sup> *Ibid.*

1           Moreover, Mr. Murray’s position assumes that historical data ending in 1999 for a  
2   ten company group that has only three companies in common with the proxy group used  
3   in Staff’s DCF and CAPM analyses somehow is relevant to estimating Ameren  
4   Missouri’s Cost of Equity.<sup>87</sup> Given the acknowledged importance of developing a risk-  
5   comparable proxy group, it is unclear why Mr. Murray would assume that to be the case.  
6   Lastly, I note that regardless of whether historical data for a separate proxy group is a  
7   relevant measure of expected growth for Ameren Missouri, Mr. Murray has not  
8   demonstrated why a 2.00 percent to 3.00 percent growth rate estimate, which provides  
9   little if any real growth over his 2.00 percent inflation rate estimate,<sup>88</sup> is applicable in this  
10   case. Mr. Murray has provided no authoritative or academic support suggesting it would  
11   be reasonable to rely on a nominal long-term growth rate of 3.00 percent or lower.

12   ***D. Application of the Multi-Stage DCF Model***

13           **Q.    Does Staff apply a Multi-Stage DCF Model to estimate the ROE for**  
14   **Ameren Missouri?**

15           A.    Yes, Staff believes that its Multi-Stage DCF analysis “provides a more  
16   reliable cost of common equity” because in its view, some of the proxy group companies  
17   have “non-sustainable” growth rates.<sup>89</sup> In general, I agree with Mr. Murray that the  
18   Multi-Stage form of the DCF model enables the analyst to address many of the

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<sup>87</sup> I recognize that companies such as XEL are the successor companies to certain of the utilities contained in Schedule 13-1 through 13-4.

<sup>88</sup> Staff Revenue Requirement Cost of Service Report, at 41. It is also interesting to note Mr. Murray’s 2.00 percent to 3.00 percent growth rate estimate is well below the 3.21 percent geometric average inflation rate over the past century (3.32 percent arithmetic average); *See*: Bureau of Labor Statistics, Series ID CUUR0000SA0 (Consumer Price Index - All Urban Consumers) for the years 1913 to 2013.

<sup>89</sup> Mr. Murray’s concerns appear misplaced considering his Constant Growth DCF analysis did not rely on individual company growth rates, but rather the 3.50% to 4.50% growth rate range he selected.

1 shortcomings of the Constant Growth form of the DCF model. Of particular relevance,  
2 the Multi-Stage model: (1) sets long-term growth rates at a level that is sustainable based  
3 on long-term growth in the economy; (2) allows for the dividend payout ratio to change  
4 and revert toward the long-term historical industry average over time; and (3) addresses  
5 concerns with growth rate estimates that (in the context of the constant growth form of  
6 the model) may be too low or too high to be considered sustainable in perpetuity.

7 **Q. Please describe Mr. Murray's Multi-Stage DCF Model.**

8 A. Similar to my Multi-Stage model, Mr. Murray's analysis includes three  
9 stages, the first two of which include five-year horizons, while the third assumes cash  
10 flows in perpetuity.<sup>90</sup> In the first stage, Mr. Murray relies on analyst growth projections;  
11 the second stage assumes a linear transition from analysts' growth projections to the 3.00  
12 percent to 4.00 percent range that Mr. Murray has concluded is more  
13 "normal/sustainable."<sup>91</sup> Since Mr. Murray's final stage assumes his long-term growth  
14 rate in perpetuity, it essentially is equivalent to the "Gordon Growth" form of the  
15 Constant Growth DCF model. As discussed later in my Rebuttal Testimony, that  
16 structure is the functional equivalent of the "terminal value," or the expected price at  
17 which the stock may be sold at the end of the forecast horizon. Based on a long-term  
18 growth rate from 3.00 percent to 4.00 percent, Staff's Multi-Stage DCF analysis produces  
19 a range of results between 7.65 percent and 8.41 percent for the broad proxy group, and

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<sup>90</sup> Mr. Murray's work papers indicate the final stage of his Multi-Stage DCF model includes cash flows for a 200 year period.

<sup>91</sup> *Ibid.*, at 33. Please also note that, as discussed in my Direct Testimony at page 21, my Multi-Stage model assumes varying payout ratios over time, while Mr. Murray's model implicitly assumes a constant payout ratio.

1 7.60 percent to 8.37 percent for the refined proxy group.<sup>92</sup> Mr. Murray, however,  
2 acknowledges that even ROE witnesses for customer groups have used estimated  
3 nominal GDP growth as the terminal growth rate in the Multi-Stage DCF Model.<sup>93</sup> Under  
4 that scenario, Staff applies a long-term growth rate of 4.40 percent, which produces a  
5 Multi-Stage DCF result of 8.72 percent for the broad proxy group and 8.67 percent for  
6 his refined proxy group.<sup>94</sup>

7 **Q. How did Staff develop its terminal growth estimate?**

8 A. Mr. Murray states that although Staff is confident that “investors do not  
9 expect that utilities’ per share growth rates can grow at the same rate [as] nominal GDP  
10 in the long-run”, Staff recognizes that other ROE witnesses have been willing to accept  
11 that assumption for purposes of estimating the Cost of Equity.<sup>95</sup> As such, Mr. Murray  
12 reviews a number of real GDP growth estimates reported in the U.S. Energy Information  
13 Administration’s (“EIA”) 2014 Annual Energy Outlook, covering various forecast  
14 periods that end between eight and 26 years in the future.<sup>96</sup> Combining the 2.35 percent  
15 midpoint of the real GDP growth estimates reported by the EIA for the 2025 – 2040  
16 period with the Congressional Budget Office’s 2.00 percent expected GDP price deflator  
17 (which is also the Federal Reserve’s stated inflation target), Mr. Murray develops a long-  
18 term nominal GDP growth estimate of 4.40 percent.<sup>97</sup>

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<sup>92</sup> Staff Revenue Requirement Cost of Service Report, Schedule 12-1 to 12-3.

<sup>93</sup> *Ibid.*, at 40.

<sup>94</sup> *Ibid.*, Schedule 12-4.

<sup>95</sup> *Ibid.*, at 40.

<sup>96</sup> *Ibid.*, at 41.

<sup>97</sup> *Ibid.*

1           **Q.     Do you agree with Staff's estimate of long-term GDP growth?**

2           A.     No, I do not. The important distinction between Staff's estimate of long-  
3 term GDP growth and mine is the timing and horizon of our estimates. It is important to  
4 remember that the terminal growth rate is intended to reflect growth in perpetuity and, as  
5 Mr. Murray notes, that the "perpetual growth rate is intended to measure the long-run  
6 trend growth rate supported by the long-term fundamentals of the U.S.'s mature  
7 economy."<sup>98</sup> In that important respect, the term of even the longest GDP forecast  
8 considered by Mr. Murray does not reflect the perpetual nature of the terminal growth  
9 assumed in the DCF model. As explained in my Direct Testimony, I have relied on the  
10 long-term historical growth rate in real GDP adjusted to reflect long-term forecasts for  
11 inflation in order to establish the projected nominal GDP growth rate in the terminal year  
12 of my analysis.<sup>99</sup>

13           Moreover, the 4.40 percent nominal GDP growth rate that Mr. Murray assumes  
14 will persist in perpetuity is at odds with market measures cited elsewhere in Staff's  
15 Report. For example, it is unclear why Mr. Murray does not consider the use of long-  
16 term historical data for the purpose of developing his terminal growth rate, given that he  
17 relies on long-term historical data for the purposes of his CAPM analyses. According to  
18 Morningstar (which provides the data Duff & Phelps relies on to estimate the historical  
19 Market Risk Premia on which Mr. Murray relies), the arithmetic average historical capital  
20 appreciation rate is 7.70 percent, which is substantially higher than Mr. Murray's

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<sup>98</sup> *Ibid.*, at 25.

<sup>99</sup> *See*, Direct Testimony of Robert B. Hevert, at 28-29.

1 estimate of long-term GDP growth.<sup>100</sup> As such, the assumptions used in Mr. Murray's  
2 DCF analysis and his CAPM analysis are highly inconsistent.<sup>101</sup>

3 **Q. Have you performed any analysis to assess the reasonableness of**  
4 **Mr. Murray's long-term growth estimate?**

5 A. Yes, I have. As Mr. Murray correctly notes, "[c]ost of equity estimates  
6 using multi-stage DCF methodologies are **extremely sensitive** to the assumed perpetual  
7 growth rate."<sup>102</sup> Although Mr. Murray reviews GDP growth estimates that end from  
8 eight to 26 years from now, it is important to remember that the long-term growth rate  
9 used in the DCF model is a perpetual rate, extending indefinitely.<sup>103</sup> With respect to  
10 nominal GDP growth, I note that the long-term geometric average from 1929 to 2013 was  
11 6.23 percent, and the arithmetic average was 6.47 percent. Those observed growth rates  
12 are 183 basis points or more above the high end of the 3.00 percent to 4.40 percent  
13 growth rate range on which Mr. Murray relies as a measure of long-term expected  
14 growth.<sup>104</sup>

15 Since Mr. Murray considered ten year average growth rates when comparing GDP  
16 growth rates to electric utility EPS, DPS and BVPS growth rates,<sup>105</sup> I also reviewed ten  
17 year average GDP growth rates over the 1929 to 2013 period. I then arranged that data as  
18 a histogram to provide a perspective of how frequently various levels of growth have  
19 occurred. As Chart 4 demonstrates, average annual growth as low as 4.40 percent has

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<sup>100</sup> Morningstar, Ibbotson SBBI 2014 Classic Yearbook, Market Results for Stocks, Bonds, Bill and Inflation 1926-2013, at 91.

<sup>101</sup> Mr. Gorman is similarly inconsistent in his assumptions, and I explain this issue in more detail in my discussion of Mr. Gorman below.

<sup>102</sup> Staff Revenue Requirement Cost of Service Report, at 34. **[emphasis included]**

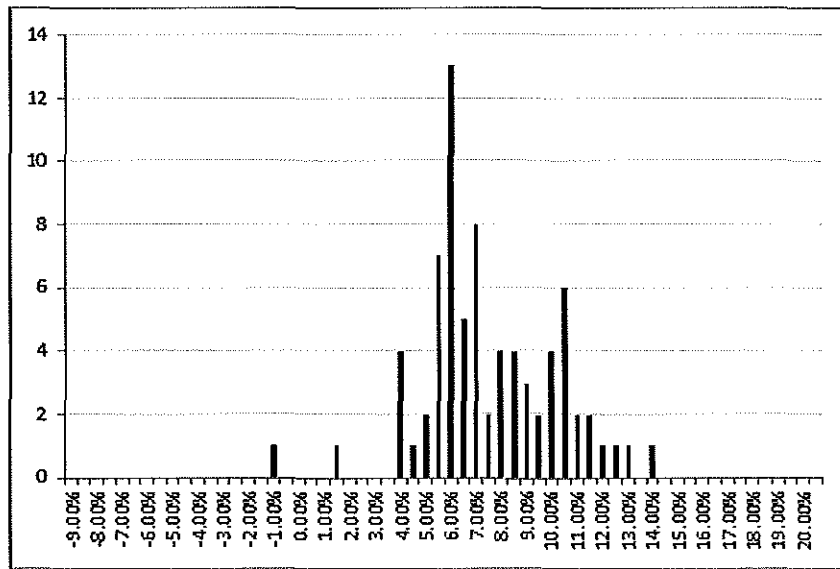
<sup>103</sup> See, Direct Testimony of Robert B. Hevert, at 19-20.

<sup>104</sup> Staff Revenue Requirement Cost of Service Report, Schedule 12.

<sup>105</sup> *Ibid.*, at 34-37.

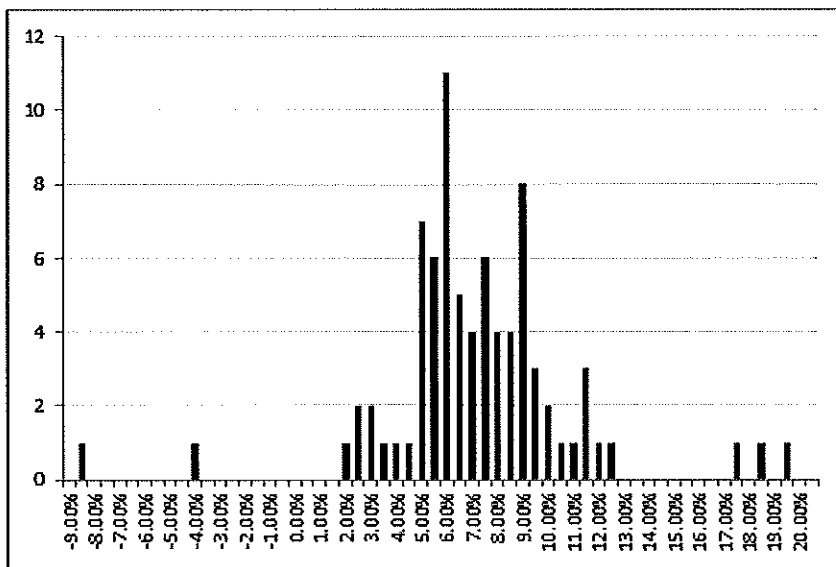
1 been observed very infrequently; when measured over ten year periods, average annual  
2 growth *exceeded* 4.40 percent in 68 of 75 periods. To provide an additional perspective, I  
3 calculated average GDP growth over five year periods. In that case, average annual GDP  
4 growth exceeded 4.40 percent in 70 of 80 periods (*see* Chart 5).

5 **Chart 4: Average Annual GDP Growth Measured over Ten-Year Periods<sup>106</sup>**



<sup>106</sup> Source: Bureau of Economic Analysis.

1       **Chart 5: Average Annual GDP Growth Measured over Five-Year Periods<sup>107</sup>**



2

3       **Q.     Are there other benchmarks that may help put that growth rate in**  
4 **context?**

5       A.     Yes, there are. Mr. Murray's long-term growth projections also can be  
6 assessed in the context of authorized ROEs. The average authorized ROE over the past  
7 twelve months (*i.e.*, November 14, 2013 through November 14, 2014) for vertically  
8 integrated electric utilities was 9.96 percent.<sup>108</sup> In the context of the Constant Growth  
9 DCF model, that return includes income from dividends (*i.e.*, the dividend yield) and  
10 expected growth (*i.e.*, capital appreciation). Assuming Mr. Murray's proxy group  
11 average projected dividend yield of 3.92 percent as the average industry dividend yield,  
12 the average reported authorized ROE of 9.96 percent provided in Schedule RBH-R13  
13 implies an expected long-term growth rate of 6.04 percent.<sup>109</sup> That estimate is consistent

<sup>107</sup> Source: Bureau of Economic Analysis.

<sup>108</sup> Source: Regulatory Research Associates. See Schedule RBH-R13.

<sup>109</sup> 9.96 percent – 3.92 percent = 6.04 percent.



1 with, although somewhat higher than, the long-term growth estimate of 5.63 percent used  
2 in my updated Multi-Stage DCF analyses.

3 **Q. Is there another approach to calculating the long-term growth rate**  
4 **that produces more reasonable results?**

5 A. Yes, there is. As noted in my Direct Testimony, it is possible to use  
6 observable market data regarding nominal and inflation-protected Treasury yields  
7 (referred to as “Treasury Inflation Protected Securities” or “TIPS”) to calculate the  
8 market’s forward view of inflation (that is, inflation expected over the long term  
9 beginning ten years from now).<sup>110</sup> In particular, the difference between nominal Treasury  
10 yields and TIPS yields is commonly considered to be a measure of expected inflation.  
11 That measure of expected inflation can then be combined with average historical real  
12 GDP growth. According to data provided by the Bureau of Economic Analysis, over the  
13 period 1929 to 2013 the average annual real GDP growth rate was 3.27 percent.  
14 Combining real GDP growth with an expected inflation rate of 2.29 percent produces an  
15 expected long-term growth rate of 5.63 percent. Interestingly, my estimate of GDP  
16 growth is 41 basis points *below* the 6.04 percent estimate implied by Mr. Murray’s  
17 Constant Growth DCF model, assuming the average authorized ROE during 2013 - 2014.

18 **Q. Is it reasonable to assume future real GDP growth will reflect**  
19 **historical real GDP growth?**

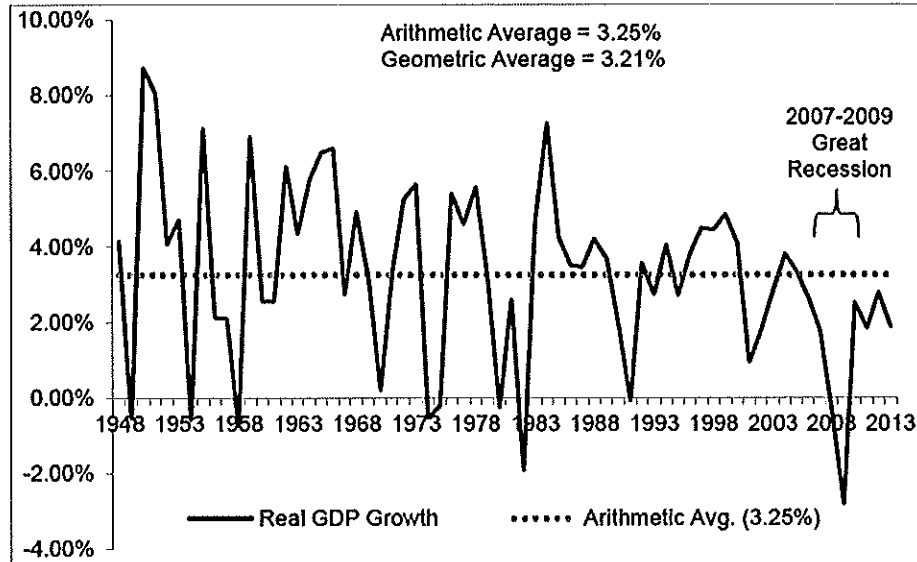
20 A. Yes, it is. As shown in Chart 6 (below), but for the recent “great  
21 recession” and the continued economic recovery, real GDP growth since the post-World

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<sup>110</sup> See, Direct Testimony of Robert B. Hevert, at 22-23.

1 War II era has been cyclical, but has reverted to a level close to the long-term historical  
2 average of 3.27 percent.

3 **Chart 6: Real GDP Growth Mean Reversion (1948 to 2013)<sup>111</sup>**



4  
5 Over that more recent period, annual real GDP growth rates have been above the  
6 long-term 3.27 percent geometric average slightly more than half of the time (35 of 66  
7 years).

8 As noted above, Mr. Murray surveyed a number of GDP forecasts with time  
9 horizons ranging from eight to 26 years. Based on that data, Mr. Murray relies on a long-  
10 term real GDP growth rate estimate of 2.35 percent.<sup>112</sup> It is interesting to note that annual  
11 real GDP growth has been at or above 2.35 percent approximately 70.00 percent of the  
12 time since 1948 (46 of 66 years). In fact, of the 20 years with 2.35 percent real growth or  
13 less, six have been during or following the recent “great recession.” Mr. Murray,

<sup>111</sup> Source: Bureau of Economic Analysis.

<sup>112</sup> Staff Revenue Requirement Cost of Service Report, at 41.

1    however, has provided no rationale to explain his assumed decline of more than 90 basis  
2    points in the structural growth potential of the economy over the long-term.

3           **Q.    Please summarize Mr. Murray's position with respect to the**  
4    **relationship between nominal GDP growth rates and EPS growth rates for electric**  
5    **utilities.**

6           A.    Mr. Murray is of the view that investors do not expect earnings per share  
7    growth for electric utilities to approximate nominal GDP growth in the long run.<sup>113</sup> To  
8    support his position, Mr. Murray compares nominal GDP growth rates to EPS growth  
9    rates for electric utilities from 1968 to 1999, and concludes that EPS growth rates have  
10   been less than 50.00 percent of nominal GDP growth over that period of time.<sup>114</sup>

11           **Q.    Do you agree with Mr. Murray's position with respect to the**  
12   **relationship between nominal GDP growth rates and EPS growth rates?**

13           A.    No, I do not. As a preliminary matter, I disagree with Mr. Murray's  
14   premise that it is appropriate to test the reasonableness of long-term expected growth  
15   rates for the proxy companies in 2014 based on an analysis that compares GDP growth  
16   rates and EPS growth rates for electric utilities from 1968 through 1999. Rather,  
17   measures of expected long-term growth that reflect the market's expectations of future  
18   price escalation are the relevant source of information. As such, I disagree with  
19   Mr. Murray's conclusion that it is not appropriate to rely on nominal GDP growth rates in  
20   the terminal stage of the Multi-Stage DCF Model.

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<sup>113</sup> *Ibid.*, at 40.

<sup>114</sup> *Ibid.*, at 35.

1           **Q. Have you performed any analyses to examine the relationship**  
2 **between earnings per share growth and GDP growth?**

3           A. Yes, I compared EPS growth for the S&P 500 Index to nominal GDP  
4 growth from 1968 through 2013. As shown on Schedule RBH-R17, the compound  
5 annual growth rate in Earnings per Share for the S&P 500 companies over that period  
6 was 6.55 percent, while the compound annual growth rate in nominal GDP was 6.61  
7 percent. That analysis demonstrates that there has been a strong correlation between  
8 earnings per share growth for companies in the S&P 500 and nominal GDP growth since  
9 1968. I also note that those growth rates are reasonably consistent with the long-term  
10 capital appreciation rate as reported by Morningstar for large-cap companies of 7.70  
11 percent (arithmetic average) and 5.80 percent (geometric average);<sup>115</sup> they also are  
12 consistent with the 6.23 percent nominal GDP growth rate for the period from 1929-  
13 2013, which is the period covered by my calculation of long-term real GDP growth.<sup>116</sup>

14           Further, industry practice has been to assume that nominal GDP growth is a  
15 reasonable surrogate for long-term earnings per share growth. In that regard, the  
16 Commission has accepted that practice in prior decisions where it relied on nominal GDP  
17 growth as the appropriate growth rate for the terminal stage of the Multi-Stage DCF  
18 Model.<sup>117</sup> Likewise, even a brief survey of finance texts speaks to the use of long-term  
19 GDP growth as a reasonable estimate for the terminal period. For example, Dr. Roger  
20 Morin writes: “It is useful to remember that eventually all company growth rates,

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<sup>115</sup> Morningstar, Ibbotson SBBI 2014 Classic Yearbook, Market Results for Stocks, Bonds, Bill and Inflation 1926-2013, at 91.

<sup>116</sup> Source: Bureau of Economic Analysis, National Economic Accounts, November 14, 2014.

<sup>117</sup> See, for example, Report and Order in ER-2008-0036, May 28, 2010, at 18-19; Report and Order in Case No. ER-2008-0318, January 27, 2009, at 21-22; and Report and Order in Case No. ER-2012-0174 and ER-2012-0175, January 9, 2013, at 18.

1 especially utility services growth rates, converge to a level consistent with the growth rate  
2 of the aggregate economy.”<sup>118</sup> Similarly, Eugene F. Brigham and Michael C. Ehrhardt in

3 Financial Management: Theory and Practice note:

4           Expected growth rates vary somewhat among companies, but  
5           dividend growth for most mature firms is generally expected to  
6           continue in the future at about the same rate as nominal gross  
7           domestic product (real GDP plus inflation). On that basis, one  
8           might expect the dividends of an average, or “normal,” company to  
9           grow at a rate of 5% to 8% a year.<sup>119</sup>

10           In addition, Morningstar notes that “...historically, the growth in corporate  
11 earnings has been in line with the growth of overall economic productivity,”<sup>120</sup> and  
12 Ibbotson and Chen state: “For the whole period [1926-2000], GDP per capita slightly  
13 outgrew earnings and dividends, but all four factors grew at approximately the same  
14 rate.”<sup>121</sup>

15           As discussed above, and as supported by academic research and industry practice,  
16 there is a relationship between GDP growth and earnings per share growth for the  
17 companies in the S&P 500. On that basis, I disagree with Mr. Murray’s conclusion that  
18 investors do not expect earnings per share growth for electric utilities to approximate  
19 nominal GDP growth in the long run.<sup>122</sup>

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<sup>118</sup> Roger A. Morin, New Regulatory Finance, Public Utilities Report, Inc., 2006, at 308.

<sup>119</sup> Eugene Brigham and Michael Ehrhardt, Financial Management: Theory and Practice, 12th Ed. (Mason, OH: South-Western Cengage Learning, 2008), at 291.

<sup>120</sup> Morningstar, Ibbotson SBBI 2012 Valuation Yearbook, Market Results for Stocks, Bonds, Bills, and Inflation 1926-2011, at 64.

<sup>121</sup> Roger G Ibbotson and Peng Chen, *Long-Run Stock Returns: Participating in the Real Economy*, Financial Analysts Journal, January/February 2003, at 93.

<sup>122</sup> See, Staff Revenue Requirement Cost of Service Report, at 40.

1           **Q. Do you agree with Mr. Murray's assertion that because their payout**  
2 **ratios are relatively higher than the average payout ratio for the S&P 500, utilities**  
3 **will likely grow at a slower rate than the overall economy?**<sup>123</sup>

4           A. No, I do not. Mr. Murray states:

5                         In fact, considering that companies in the S&P 500 (a proxy for the  
6                         U.S. capital markets) in recent years have retained approximately  
7                         65% to 70% of their earnings for reinvestment, while electric  
8                         utilities' retention ratio has been less than half that of the S&P 500,  
9                         it makes logical sense that utilities will grow at a rate less than that  
10                        of nominal GDP growth.<sup>124</sup>

11           However, in 2006, two articles appeared in Financial Analysts Journal, addressing  
12 the theory that high dividend payouts (*i.e.*, low retention ratios) are associated with low  
13 future earnings growth.<sup>125</sup> Both of those articles cite a 2003 study by Arnott and Asness,  
14 which found that, over the course of 130 years future earnings growth was associated  
15 with high, rather than low, payout ratios.<sup>126</sup> Consequently, a general observation  
16 regarding the relative size of the average payout ratio of electric utility companies  
17 compared to the S&P 500 index does not provide sufficient information to determine the  
18 extent to which the two growth rates may (or may not) diverge.

19           It also is interesting to note that based on the information contained in Schedule  
20 13-4 to Appendix 2 of the Staff Report, the long-term historical growth in electric utility  
21 EPS, DPS and BVPS from 1968-1999 was 3.59 percent. Assuming Mr. Murray's  
22 position implies a payout ratio of approximately 65.00 percent, that 3.59 percent growth

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<sup>123</sup> *Ibid.*, at 32.

<sup>124</sup> *Ibid.*

<sup>125</sup> See, Ping Zhou, William Ruland, *Dividend Payout and Future Earnings Growth*, Financial Analysts Journal, Vol. 62, No. 3, 2006. See also Owain ap Gwilym, James Seaton, Karina Suddason, Stephen Thomas, *International Evidence on the Payout Ratio, Earnings, Dividends and Returns*, Financial Analysts Journal, Vol. 62, No. 1, 2006.

<sup>126</sup> See, Robert Arnott, Clifford Asness, *Surprise: Higher Dividends = Higher Earnings Growth*, Financial Analysts Journal, Vol. 59, No. 1, 2003.

1 rate would imply an authorized ROE of 10.26 percent,<sup>127</sup> which is within my estimated  
2 ROE range for Ameren Missouri, and consistent with the range of authorized returns for  
3 integrated electric utilities in other jurisdictions over the past twelve months.

4 **Q. What are the implications of Mr. Murray's analysis suggesting that**  
5 **investors expect long-term EPS growth for electric utilities to be less than 50.00**  
6 **percent of nominal GDP growth?**

7 A. If Mr. Murray is correct that investors expect long-term EPS growth for  
8 electric utilities to be less than 50.00 percent of nominal GDP growth, then as shown in  
9 Schedule RBH-R18, the Multi-Stage DCF Model would produce results of 7.05 percent  
10 for Mr. Murray's proxy group companies, based on a terminal growth rate of 2.20  
11 percent, which is 50.00 percent of the nominal GDP growth estimate of 4.40 percent that  
12 Mr. Murray relies on in the Staff Report. That result is not reasonable in the context of  
13 other observable, market-based indicators of the Cost of Equity, including returns for  
14 vertically integrated electric utilities in other jurisdictions from November 14, 2013  
15 through November 14, 2014 (*i.e.*, 9.96 percent) and the current authorized ROE for  
16 Ameren Missouri's electric operations of 9.80 percent, which was approved by the  
17 Commission in December 2012.

18 **Q. Do you agree with Mr. Murray's suggestion that lower growth in**  
19 **electricity demand will limit electric utility growth?**

20 A. No, I do not. In suggesting that earnings growth is limited by electricity  
21 sales growth, Mr. Murray has implicitly assumed that there is a direct relationship

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<sup>127</sup> Assuming the simple form of the sustainable growth model, growth equals the return on equity multiplied by the retention ratio (and, the retention ratio equals one minus the payout ratio).  $3.59\% = (1 - 65\%) \times 10.26\%$ .

1 between electricity sales volumes on the one hand, and utility revenue, capital  
2 expenditures, and earnings on the other. As a practical matter, however, many variables  
3 enter into that relationship. Rate design, for example, will affect the relationship between  
4 sales volumes and revenues. In that regard, there has been a move away from volumetric  
5 rates, toward higher fixed charges for utility service.<sup>128</sup> The relationship between revenue  
6 and earnings likewise depends on operating margins, which in turn, are influenced by a  
7 variety of operating factors, such as productivity improvements. Moreover, additional  
8 rate base investment may be driven by the need to meet modern infrastructure  
9 requirements including, for example, integration of renewables, increased use of energy  
10 efficiency, application of smart grid technologies, and storm-hardening.<sup>129</sup> The modern  
11 economy is dependent on a reliable electric infrastructure today as much as ever, and it is  
12 reasonable for investors to expect growth from ongoing investments in the modernization  
13 of the electric infrastructure.

14         Based on data from the EIA and Value Line, it is clear that from 2005 through  
15 2013 (the range of data available from Value Line and EIA) the combined proxy group's  
16 average growth in revenues, earnings, cash flow and capital expenditures far exceeded  
17 the growth in electricity sales volume (*see* Chart 7, below). Consequently, I strongly  
18 disagree with Mr. Murray's suggestion that electricity sales growth somehow should be  
19 viewed as indicative of long-term growth.

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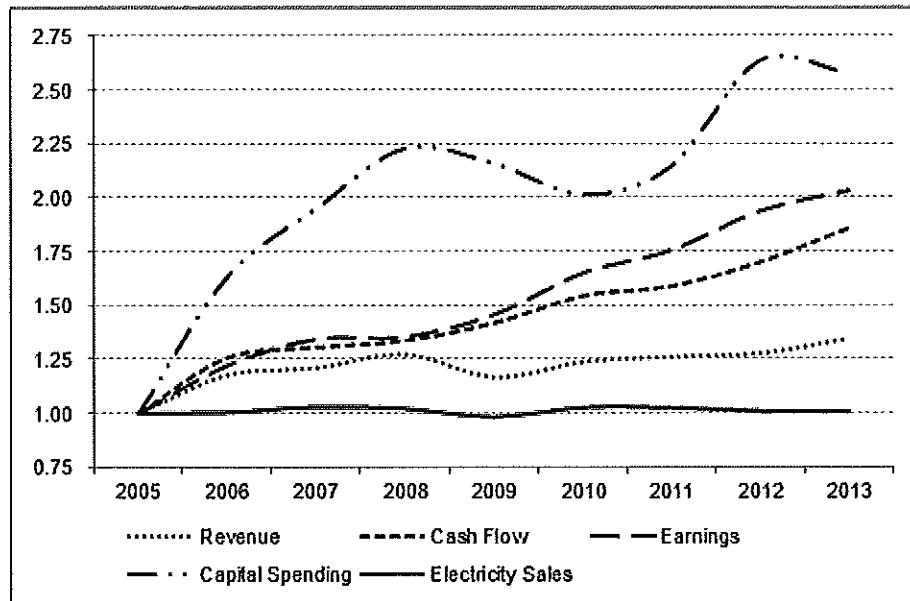
<sup>128</sup> See Decoupling Mechanisms/Straight-Fixed-Variable Rate Design, Regulatory Research Associates, December 26, 2013 at 2.

<sup>129</sup> See Capital Expenditure Update: Capital Spending at All-Time High in 2014, Regulatory Research Associates, November 10, 2014, at 1.



1  
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**Chart 7: Percent Annual Growth in Electricity End Use Sales Volume, Revenue, Earnings, Cash Flow and Capital Spending 2005 – 2013<sup>130</sup>**



3

4           Lastly, I note that the EIA's 2014 Annual Energy Outlook reports expected  
5 annual retail electric sales growth of approximately 1.38 percent a year over the next five  
6 years,<sup>131</sup> yet the average earnings growth estimate reported in Staff's Schedule 9-6 is 5.74  
7 percent for the broad proxy group and 5.60 percent for the refined proxy group. In that  
8 regard, analysts' expectations for earnings growth do not appear to be limited by the rate  
9 of electric sales growth.

10           **Q. Do you agree with Mr. Murray that it is logical to assume that most**  
11 **utilities should not grow much faster than the rate of inflation in the long-term?**<sup>132</sup>

12           **A. No, I do not. Mr. Murray's statement implies that investors do not expect**  
13 **any real growth from electric utility companies over the long-term. That view ignores the**

<sup>130</sup> Sources: Value Line and EIA.

<sup>131</sup> EIA, Annual Energy Outlook 2014 Reference Case, April 2014, Table A8. Annual data accessed at: <http://www.eia.gov/oiaf/aeo/tablebrowser>.

<sup>132</sup> *Ibid.*, at 38-39.

1 fact that electric utility earnings may grow over the long-term due to several factors,  
2 including (but not limited to): (1) capital investments that are eventually included in rate  
3 base; (2) new customer additions; and (3) increases in customer demand. Electric utilities  
4 would face significant difficulty competing for capital if investors believed that the long-  
5 term real growth rate for those companies was negligible. In essence, under  
6 Mr. Murray's scenario utility stocks would provide a dividend yield and some measure of  
7 protection against inflation, but no more than that. At the same time, investors would  
8 remain exposed to the risk of capital losses. Since other investments, such as Treasury  
9 Inflation Protected Securities provide inflation protection and carry a minimal risk of  
10 capital loss (if held to maturity), Mr. Murray's position assumes that investors would  
11 require the only difference in yields as compensation for the additional risk of capital  
12 loss. Given the capital market and sector-specific risks discussed throughout my direct  
13 and Rebuttal Testimony, that does not appear to be a reasonable assumption.

14         Since earnings growth supports dividend growth, if Mr. Murray is correct that  
15 long-term growth does not exceed the expected inflation rate, electric utilities would not  
16 be able to offer investors any prospects for inflation-adjusted dividend growth. Under  
17 that scenario, the industry would not be able to attract equity capital, and would not be  
18 able to generate the cash flow needed to maintain appropriate credit metrics or liquidity,  
19 yet would have to fund increasing amounts of its utility plant with long-term debt. That  
20 scenario, of course, would create a downward spiral in which leverage increases,  
21 creditworthiness decreases, and access to either debt or equity becomes increasingly  
22 constrained. In the long-term, then, utilities would not be able to fund the investments  
23 needed to provide safe and reliable utility service.

1           Nonetheless, if Mr. Murray is correct that most investors expect a long-term  
2 growth rate equivalent to the inflation rate, then as shown on Schedule RBH-R18, the  
3 Multi-Stage DCF Model would produce results of 7.07 percent for Mr. Murray's broad  
4 proxy group, based on an inflation rate of 2.00 percent, which is the GDP price deflator  
5 on which Mr. Murray relies. Once again, that result is not reasonable in the context of  
6 other observable, market-based indicators of the Cost of Equity, including returns in other  
7 jurisdictions, and would be highly detrimental to the Company's ability to access capital  
8 markets.

9           **Q. Please describe each step in your analysis to revise Mr. Murray's**  
10 **application of the Multi-Stage DCF Model for his proxy group.**

11           A. I began with Mr. Murray's Multi-Stage DCF Model, and made the  
12 following five adjustments:

- 13           • In Step 1, I adjusted the timing of cash flows in Mr. Murray's model to  
14 reflect the fact that, on average, dividend payments are received at mid-  
15 year, not year-end, which is consistent with the notion that dividends are  
16 increased by one-half of the expected growth rate in the Constant Growth  
17 DCF model to account for future increases in dividends.
- 18           • In Step 2, I adjusted the dividend payout ratio to converge toward 65.00  
19 percent, which Mr. Murray indicates is consistent with the recent electric  
20 utility industry average.<sup>133</sup>

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<sup>133</sup> Mr. Murray notes electric utilities have had retention ratios less than half of the S&P 500's 65.00% - 70.00% range, which implies retention ratios less than 32.50% to 35.00%; see, Staff Revenue Requirement Cost of Service Report, at 32. Because the payout ratio equals one minus the retention rate, Mr. Murray's statement implies electric utilities have payout ratios of 65.00% - 67.50% or greater.

1           • In Step 3, I adjusted the long-term growth rate used in the final stage to  
2           reflect my updated estimate of long-term nominal GDP growth of 5.63  
3           percent.

4           **Q. How do the changes you propose to Mr. Murray’s assumptions and**  
5 **inputs to the Multi-Stage DCF Model contribute to the difference between his**  
6 **results and yours?**

7           A. Table 4 (below, *see also*, Schedule RBH-R18) presents the effect that each  
8 assumption and input correction to Mr. Murray’s Multi-Stage DCF Model has on the  
9 results for his proxy group.

10                   **Table 4: Adjustments to Mr. Murray’s Multi-Stage DCF Model –**  
11                   **Broad Proxy Group**

<b>Step</b>	<b>Mean ROE</b>	<b>Median ROE</b>
As Filed ( <i>see</i> Schedule 12-4):	8.72%	8.59%
Step 1: Adjust timing of cash flows • Mid-year convention for dividend payments	8.90%	8.76%
Step 2: Adjust dividend payout ratio • Convergence to industry average of 65.00%	9.10%	8.99%
Step 3: Adjust long-term GDP growth rate estimate • Projected nominal GDP growth rate of 5.63%	10.05%	9.96%
Total increase in ROE result	1.33%	1.37%

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**Table 5: Adjustments to Mr. Murray's Multi-Stage DCF Model –  
Refined Proxy Group**

<b>Step</b>	<b>Mean ROE</b>	<b>Median ROE</b>
As Filed ( <i>see</i> Schedule 12-4):	8.67%	8.59%
Step 1: Adjust timing of cash flows <ul style="list-style-type: none"><li>• Mid-year convention for dividend payments</li></ul>	8.85%	8.76%
Step 2: Adjust dividend payout ratio <ul style="list-style-type: none"><li>• Convergence to industry average of 65.00%</li></ul>	9.13%	8.99%
Step 3: Adjust long-term GDP growth rate estimate <ul style="list-style-type: none"><li>• Projected nominal GDP growth rate of 5.63%</li></ul>	10.09%	9.96%
Total increase in ROE result	1.42%	1.37%

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**Q. How did your revisions to Staff's Multi-Stage DCF Model affect the results?**

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A. Based on the adjustments described above, the mean and median results for Staff's Multi-Stage DCF Model increase from 8.72 percent to 10.05 percent for the broad proxy group, and from 8.67 percent to 10.09 percent for the refined proxy group. That analysis demonstrates that reasonable adjustments to Mr. Murray's assumptions and inputs result in ROE estimates for his proxy group that are reasonably consistent with my updated mean results. It is important to note that changes to the long-term growth rate account for the majority of the difference in our respective Multi-Stage DCF results.

12

***E. Application of the CAPM and Relevance of Results***

13  
14  
15

**Q. Please summarize Mr. Murray's CAPM analyses.**

A. Mr. Murray's CAPM analyses rely on a risk-free rate of 3.17 percent based on the average 30-year Treasury yield for the three month period ending

1 October 31, 2014, calculated Beta coefficients, and historical Market Risk Premium of  
2 4.64 percent (using the geometric mean) and 6.20 percent (using the arithmetic mean).<sup>134</sup>

3 **Q. Do you agree with Mr. Murray's application of the CAPM?**

4 A. No, I do not. In particular, I disagree with Mr. Murray's sole reliance on a  
5 historical risk-free rate and his use of historical MRP estimates. More important than our  
6 methodological differences, however, are our respective conclusions regarding the  
7 reasonableness and reliability of an analysis that produce ROE estimates of 6.53 percent  
8 to 6.60 percent (using the geometric risk premium) and 7.66 percent to 7.76 percent  
9 (using the arithmetic risk premium). As noted earlier, there are no market data of which I  
10 am aware that rationalize such low results.

11 **Q. Turning to the risk-free rate component of the CAPM, do you agree**  
12 **with Mr. Murray's use of the average 30-year Treasury yield?**

13 A. While I agree with Mr. Murray that it is appropriate to use the current  
14 average 30-year Treasury yield, I also believe that since the purpose of this proceeding is  
15 to establish the Cost of Equity for Ameren Missouri's electric utility operations on a  
16 going-forward basis, it is important to develop a CAPM analysis that reflects investor  
17 expectations concerning the risk-free rate and, as discussed in more detail below, the  
18 MRP. For that reason, as discussed in my Direct Testimony, I relied on both the current  
19 30-day average 30-year Treasury yield and the projected near-term 30-year Treasury  
20 yield as reported by Blue Chip Financial Forecast.<sup>135</sup>

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<sup>134</sup> Staff Revenue Requirement Cost of Service Report, at 42-43.

<sup>135</sup> See, Direct Testimony of Robert B. Hevert, at 25.

1           **Q.     How did Mr. Murray calculate his MRP estimates?**

2           A.     Mr. Murray cites Duff & Phelps' 2014 Valuation Handbook and states he  
3     calculated his 6.20 percent arithmetic and 4.64 percent geometric historical MRP  
4     estimates by taking the difference between the long-term average earned return on stocks  
5     and bonds from 1926 – 2013.<sup>136</sup> I note, however, that Duff & Phelps reports arithmetic  
6     and geometric historical Market Risk Premium estimates of 6.96 percent and 4.89  
7     percent, respectively.<sup>137</sup>

8           **Q.     Is it appropriate to rely exclusively on historical data in estimating the**  
9     **MRP, as Mr. Murray has done?**

10          A.     No. The Market Risk Premium represents the additional return required  
11     by equity investors to assume the risks of owning the “market portfolio” of equity relative  
12     to long-term Treasury securities. As with other elements of Cost of Equity analyses, the  
13     MRP is meant to be a forward-looking parameter. Simply relying on the historical MRP  
14     may produce results that are not consistent with investor sentiment and current conditions  
15     in capital markets. For example, Morningstar observes:

16                     It is important to note that the expected equity risk premium, as it  
17                     is used in discount rates and cost of capital analysis, is a forward-  
18                     looking concept. That is, the equity risk premium that is used in the  
19                     discount rate should be reflective of what investors think the risk  
20                     premium will be going forward.<sup>138</sup>

21          The relevant analytical issue in the application of the CAPM is to ensure that all  
22     three components of the model (*i.e.*, the risk-free rate, Beta, and the MRP) are consistent  
23     with current market conditions and investor perceptions.

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<sup>136</sup> Staff Revenue Requirement Cost of Service Report, at 43.

<sup>137</sup> Duff & Phelps, 2014 Valuation Handbook, at 3-19.

<sup>138</sup> Morningstar, Ibbotson SBBI 2013 Valuation Yearbook, Market Results for Stocks, Bonds, Bills, and Inflation 1926-2012, at 53.

1           **Q.     What is the difference between the geometric and the arithmetic mean**  
2 **risk premium?**

3           A.     Although I do not endorse the use of a historical MRP, the arithmetic risk  
4 premium best reflects the uncertainty associated with returns from year to year. The  
5 arithmetic mean is the simple average of single period rates of return, while the geometric  
6 mean is the compound rate that equates a beginning value to its ending value. The  
7 important distinction between the two methods is that the arithmetic mean assumes that  
8 each periodic return is an independent observation and, therefore, incorporates  
9 uncertainty into the calculation of the long-term average. The geometric mean, by  
10 contrast, is a backward-looking calculation that essentially equates a beginning value to  
11 an ending value over a specific period of time. Geometric averages, therefore, provide a  
12 standardized basis of review of historical performance across investments or investment  
13 managers; they do not, however, reflect forward-looking uncertainty.

14           Since there is no uncertainty with respect to past returns, the use of geometric  
15 averages is appropriate when comparing investment performance on a retrospective basis.  
16 On a prospective basis, however, uncertainty exists and should be taken into  
17 consideration when developing return expectations and requirements. That is why  
18 investors and researchers commonly use the arithmetic mean when estimating the risk  
19 premium over historical periods for the purpose of estimating equity cost rates.  
20 Moreover, investment risk, or volatility, typically is measured on the basis of the standard  
21 deviation. The standard deviation, in turn, is a function of the arithmetic, as opposed to



1 the geometric mean. In that regard, the Beta coefficients applied in CAPM analyses are a  
2 function of the standard deviation of returns.<sup>139</sup> In any case, Morningstar notes that:

3 The arithmetic average equity risk premium can be demonstrated  
4 to be the most appropriate when discounting future cash flows. For  
5 use as the expected equity risk premium in either the CAPM or the  
6 building block approach, the arithmetic mean or the simple  
7 difference of the arithmetic means of the stock market returns and  
8 the riskless rates is the relevant number.<sup>140</sup>

9 Similarly, an article reviewing literature on the topic noted the following rationale  
10 for using the arithmetic mean:

11 Note that the arithmetic mean, not the geometric mean is the  
12 relevant value for this purpose. The quantity desired is the rate of  
13 return that investors expect over the next year for the random  
14 annual rate of return on the market. The arithmetic mean, or simple  
15 average, is the unbiased measure of the expected value of repeated  
16 observations of a random variable, not the geometric mean....  
17 [The] geometric mean underestimates the expected annual rate of  
18 return.<sup>141</sup>

19 **Q. Putting aside the issue of whether it is more appropriate to use the**  
20 **geometric or arithmetic mean, do you have any concerns with the way in which**  
21 **Mr. Murray derived his recommended MRP?**

22 **A. Yes, I do. Mr. Murray's MRP estimates are derived using the historical**  
23 **difference in the earned returns on stocks and bonds. According to Morningstar,**  
24 **however, the historical MRP is appropriately calculated by subtracting the *income only***  
25 **portion of the government bond return from the total return on large company stocks:**

26 Another point to keep in mind when calculating the equity risk  
27 premium is that the income return on the appropriate-horizon  
28 Treasury security, rather than the total return, is used in the

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<sup>139</sup> See Direct Testimony of Robert B. Hevert, at 26.

<sup>140</sup> Morningstar, Inc., 2013 Ibbotson Stocks, Bonds, Bills, and Inflation Valuation Yearbook, at 56.

<sup>141</sup> Ian Cooper, *Arithmetic versus geometric mean estimators: Setting discount rates for capital budgeting*, European Financial Management 2.2, (1996): 158.

1 calculation. The total return is comprised of three return  
2 components: the income return, the capital appreciation return,  
3 and the reinvestment return...The income return is thus used in the  
4 estimation of the equity risk premium because it represents the  
5 truly riskless portion of the return.<sup>142</sup>

6 By subtracting the total return on government bonds from the total return on  
7 stocks, Mr. Murray has understated the historical MRP by approximately 80 basis points  
8 (using the arithmetic mean).<sup>143</sup> Based on Mr. Murray's average Beta coefficient of 0.74  
9 (broader proxy group), the effect on his mean CAPM estimate would be approximately  
10 59 basis points. Even that correction, however, produces results that are far too low to be  
11 reasonable estimates of the Company's Cost of Equity.

12 **Q. What are your conclusions regarding Mr. Murray's CAPM analysis?**

13 A. As a practical matter, estimates as low as 6.53 percent have little, if any,  
14 practical meaning for the purpose of determining the Company's ROE. Mr. Murray's  
15 view that his 6.53 percent to 7.76 percent CAPM results have any analytical meaning,  
16 even if only for the purpose of rationalizing his DCF model estimates, is misplaced on its  
17 face, but more importantly points out the difficulty in applying financial models without  
18 giving due consideration to the reasonableness of the inputs, assumptions, and results.

19 **Q. What is your response to Mr. Murray's suggestion that investors**  
20 **consider utility stocks to be close alternatives to bonds?**<sup>144</sup>

21 A. While it may be Mr. Murray's opinion that investors consider utility ROEs  
22 as equivalent to the cost of debt, he provides no support for his assertion that electric

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<sup>142</sup> Morningstar, Ibbotson SBBI 2013 Valuation Yearbook, Market Results for Stocks, Bonds, Bills, and Inflation 1926-2012, at 55.

<sup>143</sup> Morningstar, Ibbotson SBBI 2014 Classic Yearbook, Market Results for Stocks, Bonds, Bills, and Inflation 1926-2013, at 91.

<sup>144</sup> See, Staff Revenue Requirement Cost of Service Report, at 17.

1 utilities in general (and the Company in particular) essentially have no residual (that is,  
2 equity) risk and somehow take on the risk characteristics of debt.

3 As a preliminary matter, it is important to note that under any condition, debt  
4 investors are the beneficiaries of a contractual obligation to make interest and principal  
5 payments, while equity investors bear the “residual risk” associated with ownership. In  
6 light of that priority and the incremental security provided by the debt agreements, yields  
7 on long-term debt are below returns required by equity investors. For that reason alone,  
8 it is difficult to imagine that the Cost of Equity would approach the cost of debt. More  
9 importantly, it is clear that investors consider equity to be far more risky than debt.

10 **Q. Is it possible to test the conclusion that the equity risk for utility**  
11 **companies approaches the risk associated with long-term bonds?**

12 **A.** Yes, it is. One approach is to consider the volatility of each investment  
13 relative to the broader market. An important component of the CAPM is the Beta  
14 coefficient, which measures the volatility of the underlying security relative to the  
15 volatility of the market as a whole.<sup>145</sup> It is possible to calculate the implied Beta  
16 coefficient associated with debt yields. To the extent that the implied debt Beta is well  
17 below the equity Beta coefficient, Mr. Murray’s view that utilities are close alternatives  
18 to long-term bonds is called into question. In that regard, since debt holders benefit from  
19 the contractual obligation of the debtor to pay both principal and interest, the volatility of  
20 debt securities relative to the broad equity market is extremely low; in fact, a common  
21 assumption is that debt Beta coefficients are near-zero. In the 1984 edition of their  
22 widely-used text, for example, Brealey and Myers note that:

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<sup>145</sup> See, Direct Testimony of Robert B. Hevert, at 25.

1 Debt betas are typically close to zero – close enough that for large  
2 blue-chip companies, many financial analysts just assume  $\beta_{\text{debt}} =$   
3 0.<sup>146</sup>

4 More recently, in their 2008 text, Ross, Westerfield and Jaffe state that “[t]he beta of debt  
5 is very low in practice.”<sup>147</sup>

6 The implied debt Beta coefficients of Baa-rated utilities can be calculated using  
7 the average yield on that debt. Mr. Murray notes the three-month average of the  
8 Moody’s Baa-rated Utility Bond Index was 4.76 percent as of October 31, 2014, and the  
9 average risk-free rate over that same time period was 3.17 percent.<sup>148</sup> For the sake of  
10 discussion, using the arithmetic average MRP presented in Mr. Murray’s Schedule 16,  
11 the Beta coefficient for Moody’s Baa-rated Utility Bond Index is 0.26 (4.76 percent =  
12 3.17 percent + (0.26 x 6.20 percent)). The Value Line equity Beta coefficients for  
13 Mr. Murray’s proxy groups presented in Schedule 16 range from 0.55 to 0.87 with an  
14 average of 0.74 for the broad proxy group and 0.73 for the refined proxy group, or nearly  
15 three times the implied debt Beta coefficient. Thus, Mr. Murray’s data and assumptions  
16 do not support the notion that investors consider utility stocks and bonds to be substitutes  
17 or surrogates.

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<sup>146</sup> Richard Brealey, Stewart Myers, Principles of Corporate Finance, 2<sup>nd</sup> Ed., 1984, McGraw-Hill, at 175.

<sup>147</sup> Stephen Ross, Randolph Westerfield, Jeffery Jaffe, Corporate Finance, 8<sup>th</sup> Ed., 2008, McGraw-Hill/Irwin, at 351.

<sup>148</sup> Staff Revenue Requirement Cost of Service Report, at 42, 44.

1 ***F. Risk Premium Analysis***

2 **Q. Did Mr. Murray present a Risk Premium Analysis other than his**  
3 **CAPM analysis?**

4 A. Yes. Mr. Murray presented an additional risk premium analysis, referred  
5 to as his “rule of thumb” approach, which adds a premium of 3.00 percent to 4.00 percent  
6 to the corporate bond yield as represented by the average interest rate on the Moody’s A  
7 and Baa-rated bond from August through September 2014. Based on that approach,  
8 Mr. Murray estimates an ROE range of 7.13 percent to 8.76 percent.<sup>149</sup> Mr. Murray  
9 reasons that the equity risk premium for utilities is toward the lower end of that range,  
10 since investors view utility stocks as similar to utility bonds.<sup>150</sup>

11 **Q. Are Mr. Murray’s conclusions valid?**

12 A. No. The principal issue is that Mr. Murray’s “rule of thumb” approach  
13 ignores the well-established finding that the equity risk premium is inversely related to  
14 interest rates. That relationship, which was demonstrated with respect to long-term  
15 Treasury yields in my Direct Testimony,<sup>151</sup> also applies to utility bond yields. As Chart 8  
16 (below), demonstrates (*See also*, Schedule RBH-R19), there is a significant, negative  
17 relationship between the Moody’s Baa Utility Bond Index yield and the equity risk  
18 premium (defined by reference to authorized ROEs).

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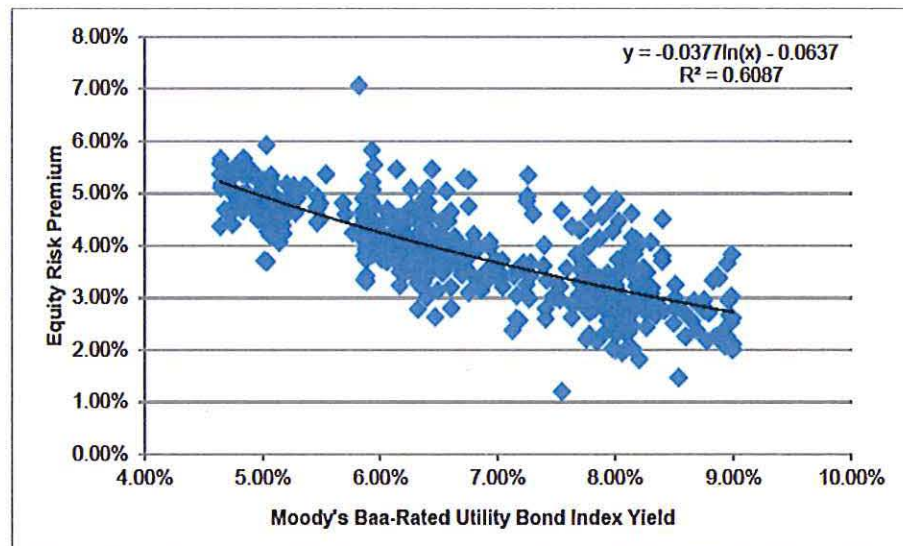
<sup>149</sup> *Ibid.*, at 44.

<sup>150</sup> *Ibid.*

<sup>151</sup> *See*, Direct Testimony of Robert B. Hevert, at 29-30.

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**Chart 8: Equity Risk Premium vs. Moody's Baa Yield**



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3 That finding also is consistent with published academic research.<sup>152</sup> In fact,  
4 applying the 4.76 percent Baa yield noted on page 44 of the Staff Report to the regression  
5 equation provided in Chart 8, which clearly demonstrates that the equity risk premium  
6 increases as interest rates decrease, produces a risk premium estimate of approximately  
7 5.12 percent, and an ROE of 9.88 percent, well above Mr. Murray's "rule of thumb" risk  
8 premium estimate.<sup>153</sup>

<sup>152</sup> Robert S. Harris and Felicia C. Marston, Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts, *Financial Management*, Summer 1992, at 63-70; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, The Risk Premium Approach to Measuring a Utility's Cost of Equity, *Financial Management*, Spring 1985, at 33-45; and Farris M. Maddox, Donna T. Pippert, and Rodney N. Sullivan, An Empirical Study of Ex Ante Risk Premiums for the Electric Utility Industry, *Financial Management*, Autumn 1995, at 89-95.

<sup>153</sup> In my response to Mr. Gorman, I provide more detail regarding the strongly supported inverse relationship between the equity risk premium and interest rates.

1 ***G. Financial Integrity***

2 **Q. Did Mr. Murray quantify the potential effect of his ROE**  
3 **recommendation on Ameren Missouri's financial integrity?**

4 A. No, he did not.

5 **Q. Have you considered how the adoption of Mr. Murray's ROE**  
6 **recommendation would affect the Company's financial profile?**

7 A. Yes, I have. There is little question that the financial community puts  
8 considerable weight on regulatory issues. For example, Moody's considers the  
9 regulatory structure to be so important that 50.00 percent of the factors that weigh in its  
10 ratings determination are related to the nature of regulation.<sup>154</sup> Among the factors  
11 considered by Moody's in assessing the regulatory framework, are the predictability and  
12 consistency of regulatory actions:

13 As the revenues set by the regulator are a primary component of a  
14 utility's cash flow, the utility's ability to obtain predictable and  
15 supportive treatment within its regulatory framework is one of the  
16 most significant factors in assessing a utility's credit quality. The  
17 regulatory framework generally provides more certainty around a  
18 utility's cash flow and typically allows the company to operate  
19 with significantly less cushion in its cash flow metrics than  
20 comparably rated companies in other industrial sectors.

21 \*\*\*

22 In situations where the regulatory framework is less supportive, or  
23 is more contentious, a utility's credit quality can deteriorate  
24 rapidly.<sup>155</sup>

25 Mr. Murray recommends an ROE that falls well below the prevailing level of  
26 authorized returns for natural gas utilities, electric distribution utilities, and vertically

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<sup>154</sup> Moody's Investors Service, *Rating Methodology; Regulated Gas and Electric Utilities*, December 23, 2013 at 6.

<sup>155</sup> Moody's Investors Service, *Regulatory Frameworks – Ratings and Credit Quality for Investor-Owned Utilities*, June 18, 2010, at 2.

1 integrated electric utilities.<sup>156</sup> If the Commission were to adopt his recommendation, it  
2 would represent a substantial departure from recently authorized ROEs, and insert a  
3 considerable degree of uncertainty regarding the Company's cash flows, and the  
4 regulatory environment in which it operates. In light of Moody's focus on "predictable  
5 and supportive treatment," it is my view that Mr. Murray's unreasonably low ROE would  
6 put immediate and substantial downward pressure on important credit metrics. Such  
7 pressure would diminish the Company's ability to attract capital at reasonable terms,  
8 which, as noted above, is a fundamental measure of financial integrity.

9 *H. Other Issues*

10 **Q. Do you agree with Mr. Murray that Staff's 9.25 percent ROE**  
11 **recommendation is higher than Ameren Missouri's actual Cost of Equity, and that**  
12 **it is common practice for utility commissions to set the authorized ROE above the**  
13 **actual Cost of Equity?**<sup>157</sup>

14 **A.** No, I do not. Mr. Murray acknowledges that the Commission has relied  
15 on returns in other jurisdictions as a benchmark to assess the reasonableness of allowed  
16 ROEs for Ameren Missouri. He asserts, however, that those returns are higher than the  
17 Cost of Equity.<sup>158</sup> Mr. Murray's position, however, fails to recognize that commissions in  
18 other jurisdictions consider the same *Hope* and *Bluefield* standards cited by

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<sup>156</sup> Source: Regulatory Research Associates. The average authorized ROE for natural gas utilities, electric distribution utilities, and vertically integrated utilities over the twelve months ended November 14, 2014 was 9.76%, 9.58%, and 9.96%, respectively. Excludes limited-issue riders and Illinois formula ROEs.

<sup>157</sup> See, Staff Revenue Requirement Cost of Service Report, at 13.

<sup>158</sup> *Ibid.*



1 Mr. Murray,<sup>159</sup> and (in my experience) base their decisions on the same type of market-  
2 based analyses that have been presented by the ROE witnesses in this proceeding. The  
3 *Hope* and *Bluefield* decisions require the authorized ROE must be comparable to those  
4 available from companies with similar business and financial risks. In that regard,  
5 authorizing a return that is equal to Ameren Missouri's Cost of Equity will allow the  
6 Company to compete for capital with utilities with commensurate risks. To that point,  
7 the Commission has determined that authorized ROEs in other jurisdictions are a relevant  
8 benchmark in developing a zone of reasonableness against which the Commission may  
9 test the authorized ROE.<sup>160</sup>

#### IV. RESPONSE TO THE DIRECT TESTIMONY OF MR. SCHAFER

10 Q. Please briefly summarize OPC Witness Schafer's ROE analyses and  
11 recommendations.

12 A. OPC Witness Schafer recommends an ROE of 9.01 percent, which  
13 represents the simple average of his Constant Growth DCF, Multi-Stage DCF, and  
14 CAPM analyses.<sup>161</sup> Mr. Schafer's DCF-based estimates include a 45 basis point  
15 adjustment, which he applies to recognize the likelihood of changing economic  
16 conditions during 2015.<sup>162</sup> Absent that adjustment, Mr. Schafer's average result would be  
17 approximately 8.70 percent. To support his recommendation, Mr. Schafer produces a  
18 series of *pro forma* coverage ratios analyses from which he concludes that his 9.01

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<sup>159</sup> *Ibid.*, at 11-12.

<sup>160</sup> See, for example, Report and Order, Case No. ER-2011-0028, at 67.

<sup>161</sup> Direct Testimony of Lance E. Schafer, at 3, 37.

<sup>162</sup> *Ibid.*, at 16, 20, 26.

1 percent ROE recommendation “should support continuation of Ameren Missouri’s  
2 current credit rating and financial risk profile.”<sup>163</sup>

3 **Q. Are there specific issues on which you agree with Mr. Schafer?**

4 A. Yes, there are. I generally agree with the screening criteria on which  
5 Mr. Schafer relies to develop his proxy group. As briefly discussed below, although we  
6 disagree as to one element of those criteria, I do not find his proxy group itself to be  
7 unreasonable. Regarding the methods used to estimate the Cost of Equity, I agree with  
8 Mr. Schafer that no single model provides the most reliable estimate under all market  
9 conditions, and that it is appropriate to use multiple methods.<sup>164</sup> As to the Constant  
10 Growth DCF model, I agree with Mr. Schafer’s focus on expected earnings growth rates,  
11 and with his conclusion that long-term nominal GDP growth is the proper measure of  
12 terminal growth for the Multi-Stage DCF model. Although those areas of agreement are  
13 few in number, they do reduce the scope of differences that I otherwise would address in  
14 this section of my Rebuttal Testimony.

15 **Q. Please now summarize the principal areas of disagreement between**  
16 **you and Mr. Schafer.**

17 A. Our principal areas of disagreement include: (1) the overall reasonableness  
18 of Mr. Schafer’s 9.01 percent ROE recommendation; (2) Mr. Schafer’s reliance on the  
19 Constant Growth DCF model results, including his 45 basis point adjustment; (3) the  
20 structure and application of the Multi-Stage DCF model; (4) the application of the

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<sup>163</sup> *Ibid.*, at 43.

<sup>164</sup> *Ibid.*, at 18. *See, also*, Direct Testimony of Robert B. Hevert, at 13.

1 CAPM; and (5) Mr. Schafer's conclusion that his recommendation supports the  
2 Company's credit and financial risk profile. I discuss each of those issues in turn, below.

3 **Q. Before turning to those issues, please briefly address Mr. Schafer's**  
4 **proxy group, and the screening criteria that he applies to develop that group.**

5 A. As noted above, there is a considerable degree of overlap between our two  
6 proxy groups; eight of Mr. Schafer's ten proxy companies are in my proxy group, as  
7 well.<sup>165</sup> In large measure, that consistency is the result of similar screening criteria. The  
8 difference between our proxy groups appears to be largely the result of Mr. Schafer's use  
9 of revenue, rather than operating income as a screening criterion, and the basis on which  
10 Mr. Schafer excluded companies that had been involved in mergers or other transactions.  
11 In particular, three companies in my proxy were excluded from Mr. Schafer's group on  
12 the basis of revenue (NextEra Energy: NEE; Otter Tail Power: OTTR); three were  
13 excluded based on transactions (Duke Energy: DUK; Cleco Corporation: CNL; Northeast  
14 Utilities: NU); one was eliminated due to its dividend history (Empire District Electric:  
15 EDE).

16 **Q. What is your concern with the use of revenue, rather than income, as**  
17 **a screening criterion?**

18 A. Measures of income are far more likely to be considered by the financial  
19 community in making credit assessments and investment decisions than are measures of  
20 revenue. From the perspective of credit markets, measures of financial strength and  
21 liquidity are focused on cash from operations, which is directly derivative of earnings, as

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<sup>165</sup> The two companies not included in my proxy group are Alliant Energy Corporation, and Xcel Energy, Inc.

1 opposed to revenue. As discussed in my response to Mr. Murray, Moody's assigns a  
2 40.00 percent weight to measures of financial strength and liquidity, of which 32.50  
3 percent specifically relates to the ability to cover debt obligations with cash from  
4 operations. Although I disagree with his conclusions, I note that Mr. Schafer himself  
5 calculates a series of coverage ratios that are derived from income.<sup>166</sup>

6 Just as rating agencies focus on measures of cash from operations, equity  
7 investors prefer measures of income in assessing equity valuation levels: common  
8 measures of relative equity valuation include the Price/Earnings ratio, and the ratio of  
9 Enterprise Value/EBITDA (Earnings Before Interest, Taxes, Depreciation, and  
10 Amortization). Revenue, however, may be several steps removed from the earnings and  
11 cash flows that are the basis of equity valuations. Energy trading and marketing  
12 units, for example, often represent high revenue but low margin operations. Those  
13 operations may generate a comparatively large proportion of the combined entity's  
14 revenue, but only a small percentage of its income. In such cases, focusing on revenue  
15 may mislead the analyst into assuming that a given operating unit is the primary driver of  
16 expected growth, when other business segments create the majority of earnings and cash  
17 flows. Here, we are considering whether the underlying utility is the principal source of  
18 long-term growth and as such, it could be misleading to focus on revenue rather than  
19 earnings for the purpose of identifying proxy companies.

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<sup>166</sup> Direct Testimony of Lance C. Schafer, at 39 – 43.

1           **Q.     Turning now to companies eliminated due to transactions, do you**  
2 **agree with Mr. Schafer’s decision to remove both Cleco Corporation, Duke Energy,**  
3 **and Northeast Utilities?**

4           A.     As discussed in my response to Mr. Murray, because the Cleco transaction  
5 fell well within Mr. Schafer’s analysis period, I agree that it should be excluded from his  
6 proxy group.<sup>167</sup> I disagree, however, that either Duke Energy or Northeast Utilities  
7 should be excluded. As Mr. Schafer’s workpapers correctly point out, Duke Energy  
8 completed its merger with Progress Energy in July 2012, over two years ago and well  
9 before the beginning of his analytical period in this case. Similarly, Mr. Schafer’s  
10 workpapers noted that Northeast Utilities completed its merger with NSTAR in 2012. As  
11 such, I do not agree that the market data relating to either of those two companies would  
12 be biased, or would produce misleading results.

13           **Q.     Lastly, what is your response to Mr. Schafer’s decision to exclude**  
14 **Empire District Electric from his proxy group?**

15           A.     Mr. Schafer excluded Empire District Electric Company (“EDE”) because  
16 the company had not paid consecutive quarterly dividends for four years. Looking more  
17 closely at EDE, we see that it suspended its dividend for two quarters in May 2011, after  
18 its service territory was severely damaged by the Joplin, Missouri tornados. The  
19 company resumed its dividend in February 2012, and has paid twelve consistent quarterly  
20 dividends since then. In fact, but for the two quarter suspension, EDE had paid consistent  
21 quarterly dividends since at least 1987. Looking forward, the company sees opportunities

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<sup>167</sup> As discussed elsewhere in my Rebuttal Testimony, I also have excluded CNL from my updated analyses.

1 for both earnings and dividend growth.<sup>168</sup> Given the circumstances surrounding the  
2 dividend suspension and having no reason to believe that EDE will suspend its future  
3 dividend payments, I disagree with Mr. Schafer's decision to exclude that company.

4 *A. Reasonableness of Mr. Schafer's 9.01 Percent ROE Recommendation*

5 **Q. Before turning to specific methodological issues, do you believe that**  
6 **Mr. Schafer's 9.01 percent ROE recommendation is a reasonable estimate of the**  
7 **Company's Cost of Equity?**

8 A. No, I do not. Putting aside the various methodological issues discussed  
9 below, Mr. Schafer's 9.01 percent ROE recommendation falls well below the returns  
10 authorized recently for the vertically integrated electric utilities against which Ameren  
11 Missouri must compete for capital - it even falls well below the returns authorized for  
12 natural gas distribution utilities. As a practical matter, vertically integrated electric  
13 utilities face operating, environmental and capital acquisition risks associated with the  
14 ownership and operating of generating facilities to which natural gas utilities are not  
15 exposed. That difference in risk profiles has been reflected in the returns authorized for  
16 the two groups: since the year 2000, vertically integrated electric utilities have been  
17 awarded ROEs 24 basis points higher than those awarded to natural gas utilities.<sup>169</sup> In  
18 any case, the average authorized ROE for natural gas utilities during calendar year 2014  
19 was 9.78 percent, approximately 80 basis points above Mr. Schafer's 9.01 percent ROE  
20 recommendation.

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<sup>168</sup> The Empire District Electric Company, First Quarter 2014 Analyst Presentation, May 9, 2014, at 9.

<sup>169</sup> Source: Regulatory Research Associates; differences calculated on an average annual basis.

1           Although Mr. Schafer addresses many analytical issues in his testimony, nowhere  
2 does he explain why the Company is so much less risky than other vertically integrated  
3 electric utilities, or how it is that Ameren Missouri faces fewer or lower risks than natural  
4 gas distribution companies. The distinction between Mr. Schafer's recommendation and  
5 recently authorized returns becomes even more acute when we recognize that his 9.01  
6 percent estimate would be 30 basis points lower still, absent the 45 basis point adjustment  
7 made to his DCF-based estimates. In my view, an ROE recommendation for Ameren  
8 Missouri that falls approximately 95 basis points below the returns currently authorized  
9 for vertically integrated electric utilities (and nearly 80 basis points below the returns  
10 authorized for natural gas utilities) should be viewed with considerable caution.

11 ***B. Application of the Constant Growth Discounted Cash Flow Model***

12           **Q. Please briefly summarize Mr. Schafer's Constant Growth DCF**  
13 **analyses and the conclusions that he draws from the model's results.**

14           A. Mr. Schafer calculates Constant Growth DCF estimates as the sum of  
15 (1) the expected dividend yield, and (2) the expected growth rate. The expected dividend  
16 yield reflects the average of weekly high and low prices over the thirteen weeks ended  
17 November 17, 2014, together with the current annualized dividend. Mr. Schafer then  
18 adjusts the resulting yield by one-half of the expected growth rate. That calculation (that  
19 is, the expected dividend yield) is largely consistent with the approach used in my Direct  
20 and Rebuttal Testimony. Regarding the expected growth rate, Mr. Schafer relies on

1 earnings growth projections from Value Line, Zacks, and I/B/E/S.<sup>170</sup> Here again,  
2 Mr. Schafer's approach is consistent with mine.

3 Based on those assumptions, Mr. Schafer calculates an average Constant Growth  
4 DCF result of 8.77 percent.<sup>171</sup> Mr. Schafer, however, adjusted that result based on his  
5 "further study" to ensure that certain model inputs "were not unduly influenced by short-  
6 term economic conditions."<sup>172</sup> Focusing on the dividend yield component of the model,  
7 Mr. Schafer pointed out that utility sector valuations "increased dramatically in 2014"<sup>173</sup>  
8 and that such changes have important implications for the Constant Growth DCF model.

9 **Q. How did Mr. Schafer take the increase in utility stock valuations into**  
10 **account in his analysis?**

11 A. In essence, Mr. Schafer observed that both historical and projected  
12 dividend yields for his proxy companies exceeded the current dividend yield by  
13 approximately 45 basis points.<sup>174</sup> Mr. Schafer also observed that Value Line expects  
14 interest rates to increase in the 2017 to 2019 time period, and that the Federal Reserve  
15 soon will increase interest rates. Mr. Schafer concludes that because current dividend  
16 yields are lower than both historical and projected yields, and investors expect interest  
17 rates to rise in the future, it would be reasonable to adjust the observed dividend yield by  
18 45 basis points to account for those factors. That adjustment increases Mr. Schafer's  
19 Constant Growth DCF estimate from 8.77 percent to 9.22 percent.

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<sup>170</sup> Direct Testimony of Lance C. Schafer, at 13 – 14.

<sup>171</sup> *Ibid.* at 14; Schedule LCS-5.

<sup>172</sup> *Ibid.*, at 14.

<sup>173</sup> *Ibid.*, at 15.

<sup>174</sup> *See*, Schedule LCS-4.



1           **Q.     What is your response to Mr. Schafer on those points?**

2           A.     First, I agree with Mr. Schafer that recent market conditions likely violate  
3     an important assumption underlying the Constant Growth DCF model (that the P/E ratio  
4     will remain constant in perpetuity), thereby calling into question the model's reliability.  
5     Although I appreciate that Mr. Schafer recognized that his Constant Growth DCF result  
6     were unduly low, I disagree with his approach to address that concern. Although it is true  
7     that interest rates are expected to rise, that increase is associated with expectations of  
8     higher macroeconomic growth.<sup>175</sup> That is, the same economic factor that calls for  
9     increases in dividend yields also calls for increases in expected growth rates. Because  
10    Mr. Schafer focused on only expected dividend yields and excluded the effect on  
11    expected growth, his adjustment is incomplete.

12           Second, and perhaps more fundamentally, the conditions that Mr. Schafer identify  
13    violate one of the principal assumptions of the Constant Growth DCF model, that the  
14    Price/Earnings ratio will remain constant in perpetuity. Historically, utility stocks,  
15    including Mr. Schafer's proxy companies, have traded at P/E ratios less than the market  
16    P/E ratio. Data provided by Bloomberg, for example, indicates that from 1990 through  
17    2014, the proxy companies' average P/E multiple was approximately 78.00 percent of the  
18    market P/E multiple.<sup>176</sup> As Mr. Schafer points out, however, utility stocks recently have  
19    traded well in excess of their historical valuation levels.<sup>177</sup> Mr. Schafer's Constant

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<sup>175</sup> See, *Minutes of the Federal Open Market Committee*, December 16–17, 2014, at 1, 10.

<sup>176</sup> Market measured by the S&P 500 Index.

<sup>177</sup> At several times during 2014 the proxy group average P/E ratio exceeded the market P/E ratio. Over the course of 2014, the proxy group average P/E ratio was approximately 97.00 percent of the market P/E. As noted above, the long-term average relative P/E ratio was approximately 78.00 percent. Source: Bloomberg.

1 Growth DCF results therefore assume that the unusually high utility P/E ratios observed  
2 during his study period will not change, ever.

3         There are many reasons why that likely will not be the case. Chief among those  
4 factors is that the increase in utility stock prices was highly correlated with the Federal  
5 Reserve's asset purchases under its Quantitative Easing policy, a policy that now has  
6 been completed. In fact, from January 2003 through August 2012, the period prior to the  
7 month in which the Federal Reserve began its third round of Quantitative Easing, the  
8 correlation between the Federal Reserve's balance sheet (the measure of the assets  
9 purchased under Quantitative Easing) and Mr. Schafer's proxy group average P/E ratio<sup>178</sup>  
10 was negative 7.30 percent; from September 2012 through October 2014 the correlation  
11 increased to positive 52.80 percent. It appears, therefore, that past Federal monetary  
12 policy was a significant factor in the recent increase in utility P/E ratios and, therefore, in  
13 the depressed dividend yields that Mr. Schafer sought to address.

14         In essence, Mr. Schafer's 45 basis point adjustment recognizes that his Constant  
15 Growth DCF results are unduly low, but does not address the fundamental discontinuities  
16 between the model's assumptions, and the market data on which it relies. Because  
17 Mr. Schafer's 45 basis point adjustment does not recognize that increased interest rates  
18 would be accompanied by increased economic growth, it does not adequately address the  
19 model's fundamental shortcomings. In my view, rather than develop an out-of-model  
20 adjustment (as Mr. Schafer has done) it is more appropriate to recognize that because the  
21 Constant Growth DCF model results are premised on a faulty assumption (*i.e.*, that utility

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<sup>178</sup> Measured as an index.

1 P/E ratios will remain elevated in perpetuity), its results are not reliable and should be  
2 given little weight in determining the Company's ROE.

3 *C. Application of the Multi-Stage Discounted Cash Flow Model*

4 **Q. Please briefly summarize Mr. Schafer's Multi-Stage Discounted Cash**  
5 **Flow Model.**

6 A. Mr. Schafer's Multi-Stage DCF model discounts expected dividends over  
7 three stages of growth: the first is based on analysts' earnings growth projections over  
8 five years; the third stage is the terminal period reflecting expected GDP growth in  
9 perpetuity; the second stage is a transition period between the first and third periods.<sup>179</sup>  
10 The model assumes that in each stage, dividends will grow at the same rate as earnings.  
11 Because the third stage is modeled as a terminal price based on the Gordon Model,  
12 Mr. Schafer's model is solved iteratively. Those assumptions combine to produce an  
13 ROE 8.62 percent, before the same 45 basis point adjustment that Mr. Schafer applied to  
14 his Constant Growth DCF results.

15 **Q. Do you agree with the structure of Mr. Schafer's model?**

16 A. Although I appreciate that Mr. Schafer supplemented his Constant Growth  
17 DCF model with the Multi-Stage approach, I disagree with the structure and assumptions  
18 underlying his model. In particular, Mr. Schafer's Multi-Stage model: (1) fails to  
19 recognize the likely change in dividend payout ratios during his forecast period;  
20 (2) assumes that all dividends are received at the end of each year (that is, it does not  
21 reflect the "mid-year convention"); (3) assumes a terminal growth rate that is premised

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<sup>179</sup> Direct Testimony of Lance C. Schafer, at 22.

1 on the incorrect assumption that more than 93.00 percent of the proxy companies'  
2 terminal value is determined by the first 20 years of cash flows;<sup>180</sup> and (4) relies an out-  
3 of-model, 45 basis point adjustment to arrive at an ROE estimate that exceeds 9.00  
4 percent (but by only seven basis points).

5 **Q. Turning to your first point, what are your concerns regarding the**  
6 **constant payout ratio assumption embedded in Mr. Schafer's model?**

7 A. My first concern is that Mr. Schafer's model appears to maintain one of  
8 the assumptions underlying the Constant Growth DCF model, *i.e.*, that earnings and  
9 dividends will grow at the same rate. Although it is true that under Mr. Schafer's  
10 construct the rate of growth changes across stages, his model assumes that earnings and  
11 dividends grow at the same rate within each stage; the model does not accommodate the  
12 expected increase in payout ratios over his forecast period. As noted in my Direct  
13 Testimony, a principal benefit of the Multi-Stage DCF method is that the structure  
14 enables us to address certain of the limiting assumptions underlying the Constant Growth  
15 form of the model, including the constant payout ratio assumption. Rather than assuming  
16 that dividends will grow at the same rate as earnings, it would be more appropriate to  
17 model dividends as the product of earnings and the payout ratio, and use projected  
18 earnings as the measure of cash flows.

19 Over the past several years electric utilities had increased capital investments in  
20 response to environmental mandates, system hardening, aging infrastructure, and other  
21 capital requirements. During that time, dividends did not increase as quickly as earnings,  
22 resulting in relatively low payout ratios. To that point, Mr. Schafer's work papers

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<sup>180</sup> *Ibid.*, at 25 – 26.

1 indicate that for the years 2004 through 2007 (that is, before the 2008 – 2009 market  
2 contraction) the mean and median payout ratios for his proxy group were approximately  
3 70.00 percent and 67.00 percent, respectively. As of the most recent trailing twelve  
4 months, the mean and median payout ratios had fallen to approximately 58.00 percent.<sup>181</sup>

5 **Q. What is the effect of Mr. Schafer's constant payout ratio assumption**  
6 **on his Multi-Stage DCF model results?**

7 A. Because Mr. Schafer's model assumes that dividends will grow at the  
8 same rate as earnings in the future, he has assumed that the payout ratio will remain at the  
9 current, atypically low level in perpetuity. Since dividends change based on both the rate  
10 of growth in earnings and the payout ratio, assuming a historically low payout ratio in  
11 perpetuity, without allowing for a reversion to long-term levels, produces lower expected  
12 dividends, and therefore a lower ROE estimate.

13 **Q. Please now explain why the mid-year convention, rather than the**  
14 **year-end convention, is the more appropriate approach in calculating cash flows**  
15 **under the Multi-Stage DCF Model.**

16 A. As discussed in my responses to Messrs. Murray and Gorman, utilities  
17 (including the proxy companies) pay dividends on a quarterly basis. Assuming that the  
18 entire dividend is paid at year-end unrealistically defers the timing of the quarterly cash  
19 flows (that is, the quarterly dividends), even though they are paid throughout the year.  
20 The mid-year convention, on the other hand, assumes that cash flows are received (on  
21 average) in the middle of the year, such that half the quarterly dividend payments are  
22 received prior to the assumed dividend payment date, and half are received after.

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<sup>181</sup> In each case, as reported by Morningstar in Mr. Schafer's work papers.

1           **Q.     What is the effect of revising Mr. Schafer’s model to reflect the mid-**  
2 **year convention?**

3           A.     The mid-year convention has the effect of increasing Mr. Schafer’s results  
4 by approximately 16 basis points. Even with that change, however, the model produces  
5 an unreasonably low estimate of the Company’s Cost of Equity.

6           **Q.     Turning to the terminal growth rate, please explain how Mr. Schafer**  
7 **developed his estimate.**

8           A.     Mr. Schafer’s 4.86 percent long-term growth rate represents his estimate  
9 of the arithmetic average rate of nominal GDP growth for the first twenty years of his  
10 terminal growth period (*i.e.*, 2025 through 2045). Mr. Schafer develops his estimate by  
11 combining projections of real GDP growth with estimates of inflation (based on the GDP  
12 Price Deflator) for the years 2025 through 2045.<sup>182</sup> Because those projections end in the  
13 year 2040, Mr. Schafer assumes (as I do) that over the long-run the real GDP growth rate  
14 will revert to its long-term historical average of approximately 3.30 percent. Regarding  
15 the rate of inflation, Mr. Schafer assumes that the 2.17 percent average rate projected by  
16 OECD and the Social Security Administration will be in place from 2025 through  
17 2060.<sup>183</sup> It is interesting to note that the 5.54 percent long-term growth rate that  
18 Mr. Schafer assumes for the years 2041 through 2045 is only nine basis points removed  
19 from the 5.63 percent terminal growth rate used in my Multi-Stage DCF analysis.

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<sup>182</sup> As Mr. Schafer explains, his sources of growth rate estimates include the Energy Information Administration, the Congressional Budget Office, and the Organisation for Economic Co-operation and Development (“OECD”). See, Direct Testimony of Lance C. Schafer, at 25 - 26.

<sup>183</sup> See Schedule LCS-6.

1           **Q. Do you have any observations regarding the method by which**  
2 **Mr. Schafer developed his terminal growth rate estimate?**

3           A. Yes, I do. Mr. Schafer chose to limit his horizon to the 20 years ending in  
4 2045 based on an article by Aaron Rotkowsi and Evan Clough, which suggests that the  
5 “majority” of the terminal value is generated within the “first few years” beyond the  
6 projection period. In particular, Mr. Schafer states that “93.9% percent of the value from  
7 the terminal value calculation (*i.e.*, the stage three calculation) is accounted for in the  
8 20 years that follow the period for which that calculation is done...”<sup>184</sup> It is important to  
9 note, however, that the assumptions contained in that article are quite different than those  
10 used in Mr. Schafer’s analysis. In particular, in arriving at their 93.90 percent estimate  
11 Rotkowsi and Clough assume a discount rate of 15.00 percent, and a terminal growth  
12 rate of zero percent.<sup>185</sup> In contrast, Mr. Schafer’s Constant Growth DCF model (which is  
13 the re-arranged version of the Gordon Model) assumes an average growth rate of 5.03  
14 percent, and an average discount rate of 8.77 percent (before the 45 basis point  
15 adjustment).

16           If we were to rely on Mr. Schafer’s assumptions, the length of time needed to  
17 realize approximately 93.90 percent of the value under the Gordon model is substantially  
18 longer than 20 years. In fact, as shown in Schedule RBH-R20, it takes (on average)  
19 78.30 years to realize 93.90 percent of his proxy companies’ value. Consequently,  
20 Rotkowsi and Clough’s theory of limiting the long-term growth rate averaging period to  
21 20 years is based on assumptions far different than those contained in Mr. Schafer’s

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<sup>184</sup> Direct Testimony of Lance C. Schafer, at 25 – 26.

<sup>185</sup> Aaron Rotkowsi and Evan Clough, *How to Estimate the Long-Term Growth Rate in the Discounted Cash Flow Model*, [www.willamette.com](http://www.willamette.com), *Insights*, Spring 2013, at 11; see Figure 2.

1 analyses and if applied to his analyses, has the effect of unduly reducing his Multi-Stage  
2 DCF model results.

3 **Q. What would be the effect of extending Mr. Schafer's averaging period**  
4 **from 20 to 60 years?**

5 A. Extending the averaging period has the practical effect of including more  
6 observations with annual GDP growth rates of 5.54 percent. If we were to extend the  
7 averaging period from 20 to 60 years, the average annual growth rate would increase  
8 from 4.86 percent to 5.30 percent. That one change would increase Mr. Schafer's  
9 average Multi-Stage DCF result from 8.62 percent to 8.97 percent; reflecting the mid-  
10 year convention further increases the result to 9.14 percent. Similarly, if we were to  
11 extend the averaging period to 2125 (that is, one-half of the period needed to realize the  
12 full value of the expected cash flows), the average growth rate would increase to  
13 5.40 percent, and the mid-year convention results would increase to 9.21 percent. That  
14 9.21 percent result, together with Mr. Schafer's 45 basis point adjustment produces an  
15 ROE estimate of 9.66 percent.

16 Lastly, as noted above Mr. Schafer's long-term growth rate is only nine basis  
17 points removed from the 5.63 percent rate used in my Multi-Stage DCF analysis. If we  
18 were to adopt 5.63 percent as the terminal growth rate in Mr. Schafer's model, the  
19 average result would be 9.40 percent (based on the mid-year convention), which would  
20 produce an adjusted ROE estimate of 9.85 percent (including the 45 basis point  
21 adjustment). As discussed earlier, however, Mr. Schafer's model does not reflect the  
22 likely increases in dividend payout ratios during the forecast period. If we were to reflect  
23 that change, the 9.66 percent ROE estimate likely would increase further.



1 ***D. Application of the Capital Asset Pricing Model***

2 **Q. Please briefly summarize Mr. Schafer's CAPM analysis and results.**

3 A. Mr. Schafer's CAPM analyses reflect (1) assumed risk-free rates of 3.20  
4 percent (current) 4.50 percent (forecast); (2) Beta coefficients provided by Value Line;  
5 and (3) measures of the arithmetic and geometric historical average Market Risk Premia  
6 based on certain data provided by Morningstar.<sup>186</sup> Based on those inputs, Mr. Schafer  
7 produces CAPM estimates of 7.44 percent (based on the current risk-free rate) and 8.74  
8 percent (based on the projected risk-free rate).

9 **Q. What are the principal areas in which you disagree with**  
10 **Mr. Schafer's analysis?**

11 A. First, I do not believe that CAPM results of 7.44 percent and 8.74 percent  
12 are meaningful estimates of the Company's Cost of Equity. As discussed elsewhere in  
13 my Rebuttal Testimony, as a practical matter the average authorized ROE for vertically  
14 integrated electric utilities has been well in excess of those estimates. That perspective is  
15 important since Mr. Schafer's 9.01 percent ROE recommendation gives one-third weight  
16 to his 8.74 percent CAPM estimate. That observation aside, I strongly disagree with  
17 Mr. Schafer's Market Risk Premia estimates (4.60 percent and 6.20 percent for the  
18 geometric and arithmetic average, respectively).

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<sup>186</sup> See, Schedules LCS-9 and LCS-10.

1           **Q.     Turning to his MRP estimates, do you agree with Mr. Schafer’s use of**  
2 **the total return on long-term government bonds in that calculation?**

3           A.     No, I do not. As Morningstar points out, the total return on a security is  
4 composed of three components: (1) the income return; (2) capital gains (or capital losses,  
5 if the value of the security falls); and (3) reinvestment return.<sup>187</sup> The income return is  
6 generally defined as the coupon, or interest rate on the security, which does not change  
7 over the life of the security. In contrast, the value of the security rises or falls as interest  
8 rates change, resulting in uncertain capital gains. As such, the income return is the only  
9 “riskless” component of the total return. Consequently, it is the income-only portion of  
10 the return, as opposed to the total return, that should be used in calculating the MRP.

11           **Q.     Why do you disagree with Mr. Schafer’s use of geometric average**  
12 **returns?**

13           A.     As noted in my response to Mr. Murray, the important distinction between  
14 the arithmetic and geometric averages is that the arithmetic mean assumes that each  
15 periodic return is an independent observation and, therefore, incorporates uncertainty into  
16 the calculation of the long-term average. The geometric mean, by contrast, is a  
17 backward-looking calculation that essentially equates a beginning value to an ending  
18 value over a specific period of time. Geometric averages, therefore, provide a  
19 standardized basis of review of historical performance across investments or investment  
20 managers; they do not, however, reflect forward-looking uncertainty. In any case,

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<sup>187</sup> See, Morningstar, Inc., Ibbotson SBB1 2104 Classic Yearbook, Market Results for Stocks, Bonds, Bills and Inflation 1926 – 2013, at 153.

1 Morningstar (the source of Mr. Schafer's data) makes clear that the arithmetic mean is  
2 the appropriate measure for the purpose of the CAPM.<sup>188</sup>

3 **Q. What are your conclusions regarding Mr. Schafer's CAPM analyses**  
4 **and results?**

5 A. The principal challenge with Mr. Schafer's CAPM analysis lies in his  
6 estimates of the expected Market Risk Premium. Aside from the issues noted above, the  
7 6.20 percent Market Risk Premium on which Mr. Schafer's 9.37 percent (arithmetic  
8 average) CAPM result relies assumes a 12.10 percent market return, and a 5.90 percent  
9 total return on long-term Government bonds. Even if we were to look at the income-only  
10 portion of the long-term Government bond return, it still would be 5.10 percent, or 60  
11 basis points above the 4.50 percent return assumed in Mr. Schafer's CAPM analyses.  
12 Because the equity risk premium moves inversely with changes in interest rates, it is  
13 apparent that Mr. Schafer's 6.20 percent MRP does not reasonably reflect the current  
14 market. On that basis, even the higher of Mr. Schafer's two CAPM estimates (i.e., 9.37  
15 percent) is unduly low.

16 Lastly, the lowest ROE authorized for any electric utility over the last thirty years  
17 was 8.75 percent, one basis point below Mr. Schafer's 8.74 percent average CAPM  
18 estimate.<sup>189</sup> Nonetheless, Mr. Schafer gives one-third weight to his CAPM estimate in  
19 arriving at his 9.01 percent ROE recommendation.

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<sup>188</sup> *Ibid.*

<sup>189</sup> As reported by Regulatory Research Associates. The 8.75 percent ROE was authorized for United Illuminating Company in February 2009 by the Connecticut Public Utility Regulatory Authority. Excludes formula rate based ROEs implemented in Illinois.

1 ***E. Effect of Mr. Schafer's ROE Recommendation on Ameren Missouri's***  
2 ***Credit Profile***

3 **Q. What does Mr. Schafer conclude regarding the effect of his 9.01**  
4 **percent ROE recommendation on the Company's credit profile?**

5 A. Mr. Schafer expects that his recommendation "should support Ameren  
6 Missouri's current rating."<sup>190</sup> Although he acknowledges that a comprehensive credit  
7 assessment is beyond the scope of his analyses, Mr. Schafer concludes that two *pro forma*  
8 coverage ratio calculations "will provide evidence that [his] recommendation supports the  
9 Company's current rating."<sup>191</sup> After performing those two calculations, Mr. Schafer  
10 concludes that his "recommended return on equity should support continuation of  
11 Ameren Missouri's current credit rating and financial risk profile."<sup>192</sup>

12 **Q. Do you agree with Mr. Schafer's conclusion in that regard?**

13 A. No, I do not. Mr. Schafer arrives at his conclusion based on two *pro*  
14 *forma* coverage calculations: (1) the ratio of Earnings Before Interest, Taxes,  
15 Depreciation, and Amortization ("EBITDA") to interest expense; and (2) the ratio of  
16 Debt to EBITDA. Mr. Schafer states that because those *pro forma* calculations fall  
17 within the bands established by Standard & Poor's for the Company's current credit  
18 rating, reducing the ROE by 79 basis points (to 9.01 percent) would have no effect on  
19 Ameren Missouri's credit profile. I disagree. As discussed below, a wide range of ROE  
20 estimates create *pro forma* coverage ratios within the same bands; that does not mean that  
21 rating agencies or investors would consider Mr. Schafer's 9.01 percent ROE to be credit

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<sup>190</sup> Direct Testimony of Lance C. Schafer, at 39.

<sup>191</sup> *Ibid.*, at 39. [clarification added]

<sup>192</sup> *Ibid.*, at 43.

1 supportive. Rather, rating agencies such as Moody's base their ratings determinations on  
2 a variety of factors, well beyond the two ratios that Mr. Schafer considered.

3 **Q. Turning to your first point, have you tested the range of ROE**  
4 **estimates that provide *pro forma* coverage ratios in the same financial risk profile**  
5 **range as Mr. Schafer's 9.01 percent recommendation?**

6 **A.** Yes, I have. As a preliminary matter, Standard & Poor's "core" credit  
7 ratios include Funds From Operations ("FFO") to Debt, rather than EBITDA to Interest,  
8 as Mr. Schafer suggests (S&P does include the ratio of Debt to EBITDA).<sup>193</sup> FFO differs  
9 from EBITDA in that FFO excludes Interest and Taxes, whereas EBITDA includes those  
10 two elements. In any event, my earlier observation holds: A wide range of ROE  
11 estimates produce coverage ratios associated with the Company's current rating.

12 To develop the range of results that would produce coverage ratios within the  
13 same range, I first replicated Mr. Schafer's analysis. I then added the ability to calculate  
14 FFO, and the ratio of FFO to Debt. From there, I simply solved for the minimum ROE  
15 that would produce coverage ratios within Mr. Schafer's range, and found that a return as  
16 low as 7.05 percent does so. At the same time, my 10.40 percent ROE also produces  
17 comparable ratios. Although both fall within the same range, my recommended return  
18 provides stronger levels of coverage and, therefore, would provide investors with more  
19 confidence in the Company's ability to fund its fixed obligations.

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<sup>193</sup> See Standard & Poor's Ratings Services, *Ratings Direct Corporate Methodology*, November 2013, at 35. EBITDA to Interest is considered a "supplementary" coverage ratio.

1           **Q.     Turning to your second point, are there issues beyond coverage ratios**  
2 **that rating agencies consider in arriving at ratings determinations?**

3           A.     Yes, there are. As noted in my response to Mr. Murray, 50.00 percent of  
4 the factors that Moody's considers relate to the regulatory environment. In fact, while  
5 Moody's affords the ratios of Cash Flow to Interest, and Cash Flow to Debt a combined  
6 weight of 22.50 percent, it gives the more subjective factors of the Consistency and  
7 Predictability of Regulation, and the Sufficiency of Rates and Returns a combined weight  
8 of 25.00 percent.<sup>194</sup> Standard & Poor's likewise considers the nature of the regulatory  
9 environment an important credit factor:

10                     We base our assessment of the regulatory framework's relative  
11                     credit supportiveness on our view of how regulatory stability,  
12                     efficiency of tariff setting procedures, financial stability, and  
13                     regulatory independence protect a utility's credit quality and its  
14                     ability to recover its costs and earn a timely return. Our view of  
15                     these four pillars is the foundation of a utility's regulatory  
16                     support.<sup>195</sup>

17           Regarding "regulatory stability", S&P notes that the key factors for consideration  
18 include:

- 19                     • Transparency of the key components of the rate setting and how these are  
20                     assessed;  
21                     • Predictability that lowers uncertainty for the utility and its stakeholders;  
22                     and  
23                     • Consistency in the regulatory framework over time.<sup>196</sup>

24           In my view, therefore, it is incorrect to conclude that an ROE of 9.01 percent,  
25 which is nearly 80 basis points below the Company's existing authorized return, and 95

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<sup>194</sup> Moody's Investors Service, *Rating Methodology: Regulated Electric and Gas Utilities*, December 23, 2013, at 6.

<sup>195</sup> Standard & Poor's Ratings Services, *Key Credit Factors for the Regulated Utilities Industry*, November 19, 2013 at 6.

<sup>196</sup> *Ibid.*

1 basis points below the national average return, would support Ameren Missouri's credit  
2 profile. Rather, it is more likely that the qualitative factors considered by S&P and  
3 Moody's would reflect the inconsistent and essentially unpredictable nature of such an  
4 outcome, and would put considerable downward pressure on the Company's credit rating  
5 and profile.

V. RESPONSE TO THE DIRECT TESTIMONY OF MR. GORMAN

6 Q. Please briefly summarize Mr. Gorman's recommendation regarding  
7 the Company's Cost of Equity.

8 A. Mr. Gorman recommends an ROE of 9.30 percent, within a recommended  
9 range of 9.00 percent to 9.60 percent.<sup>197</sup> Mr. Gorman establishes his ROE  
10 recommendation by reference to three versions of Discounted Cash Flow method (with  
11 results ranging from 8.57 percent to 8.95 percent, with a point estimate of 9.00 percent),  
12 his Risk Premium estimates (ranging from 9.24 percent to 9.91 percent, with a point  
13 estimate of 9.60 percent), and his Capital Asset Pricing Model analyses (ranging from  
14 8.82 percent to 9.66 percent, with a point estimate of 9.24 percent).<sup>198</sup>

15 There are several points of Mr. Gorman's testimony and analyses that are at odds  
16 with each other. On the one hand, for example, Mr. Gorman concludes that his Constant  
17 Growth DCF estimates are based on growth rates that are not "sustainable" and therefore  
18 overstate the Cost of Equity.<sup>199</sup> On the other hand, Mr. Gorman gives equal weight to his  
19 Risk Premium results, which are nearly 60 basis points above those estimates. Moreover  
20 (and as discussed in more detail below), Mr. Gorman's Risk Premium analysis (which

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<sup>197</sup> See Direct Testimony of Michael P. Gorman, at 38.

<sup>198</sup> *Ibid.*, at 26, 32, 37.

<sup>199</sup> Direct Testimony of Michael P. Gorman, at 18.

1 forms the upper end of his range) is highly subjective and ignores important information  
2 provided in his own data. Mr. Gorman's 9.30 percent ROE recommendation, therefore,  
3 is based on analytical results that are not supported by his own conclusions, are highly  
4 subjective, and are inconsistent with observable data.

5 **Q. What are the principal areas in which you disagree with**  
6 **Mr. Gorman?**

7 **A.** The principal analytical areas in which I disagree with Mr. Gorman  
8 include: (1) the use of a near-term estimate of Sustainable Growth in the Constant  
9 Growth DCF model; (2) the application of the Multi-Stage DCF model; (3) the Market  
10 Risk Premium component of the CAPM and, in particular, the expected market return  
11 from which the MRP is calculated; (4) the assumptions and methods underlying  
12 Mr. Gorman's Risk Premium analyses; and (5) Mr. Gorman's assessment of the  
13 Company's risk relative to the proxy group.

14 ***A. Application of the Constant Growth DCF Model***

15 **Q. As a preliminary matter, do Mr. Gorman's Constant Growth DCF**  
16 **model results weigh heavily in his 9.30 percent ROE recommendation?**

17 **A.** Yes, they do. As noted earlier, Mr. Gorman's 9.30 percent  
18 recommendation is the midpoint of his 9.00 percent to 9.60 percent recommended range;  
19 the bottom end of that range (9.00 percent) is based on Mr. Gorman's Constant Growth  
20 DCF estimates.<sup>200</sup> It appears, then, that Mr. Gorman gives significant weight to his  
21 Constant Growth DCF estimates, and that he does so despite his view that those estimates

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<sup>200</sup> See Direct Testimony of Michael P. Gorman, at 38, Table 3.



1 somewhat “overstate” the Cost of Equity for companies such as Ameren Missouri.<sup>201</sup> If  
2 Mr. Gorman had used the 4.60 percent growth rate that he considers to be sustainable in  
3 the long-run,<sup>202</sup> his Constant Growth DCF results would be approximately 8.50 percent.<sup>203</sup>  
4 What Mr. Gorman does not make clear, however, is why he would give weight to his  
5 Risk Premium estimates, which are approximately 80 basis points higher than the level  
6 that he suggests is “sustainable”.

7 **Q. Before turning to Mr. Gorman’s analyses in particular, do you have**  
8 **any concerns with the Constant Growth DCF model in general, and the weight that**  
9 **Mr. Gorman applies to those results in particular?**

10 **A.** Yes, I do. As discussed in Section II, the Constant Growth DCF model is  
11 based on several underlying assumptions, one of which is that the Price/Earnings ratio  
12 will remain constant, in perpetuity. However, that was not the case for Mr. Gorman’s  
13 proxy group. From January 2004 until August 2014 (that is prior to the period over  
14 which Mr. Gorman calculated his average prices), the average P/E ratio for Mr. Gorman’s  
15 proxy group was 16.13; over the thirteen weeks during which he calculated the average  
16 prices used in his Constant Growth DCF models, the average P/E ratio was 18.31.<sup>204</sup> As  
17 to the overall market (as measured by the S&P 500 Index), the corresponding long-term  
18 and thirteen-week averages were 16.50 and 17.67, respectively (*see* Chart 9 below).

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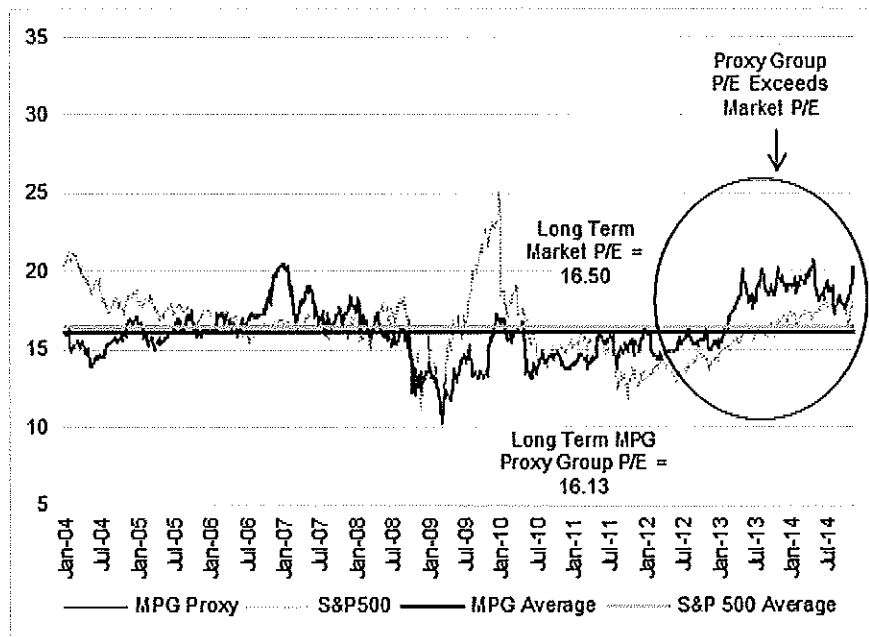
<sup>201</sup> *Ibid.*, at 18.

<sup>202</sup> *Ibid.*, at 19.

<sup>203</sup> Schedule RBH-R21.

<sup>204</sup> Calculated as an index. Source: SNL Financial.

1           **Chart 9: Mr. Gorman's Proxy Group vs. S&P 500 Price/Earnings Ratio**<sup>205</sup>



2

3            That data brings up several important points. First, during the period over which  
4 Mr. Gorman calculated his average prices the proxy group's P/E ratio well exceeded its  
5 long-term average (that is, the P/E ratio expanded). Although the market P/E ratio  
6 likewise expanded, it did not do so to the same degree. As a consequence, Mr. Gorman's  
7 group, which historically had traded at a slight discount to the market, began to trade at a  
8 premium to the market; that premium included Mr. Gorman's August to November 2014  
9 analysis period.

10            In essence, Mr. Gorman's Constant Growth DCF estimates (which, as noted  
11 earlier form the low end of his recommended range) assumes that proxy group's P/E ratio  
12 will remain at its recently elevated level in perpetuity. Equally important, the analysis  
13 assumes that the proxy group will trade at a premium to the market, also in perpetuity.

<sup>205</sup> Sources: SNL Financial and Bloomberg Professional. Proxy Group P/E ratio calculated as an index.

1 Although I appreciate that Mr. Gorman's analysis simply reflects current market data, it  
2 is important to assess that data and determine the weight it should be given in arriving at  
3 an ROE recommendation. In my view, the abnormally elevated P/E ratios do not support  
4 the weight that Mr. Gorman applies to those results.

5 **Q. Those issues aside, do you agree with Mr. Gorman's application of the**  
6 **Constant Growth DCF model?**

7 A. Mr. Gorman's application of the Constant Growth DCF (Analysts'  
8 Growth) model is generally consistent with mine.<sup>206</sup> For example, we both rely on  
9 average stock prices to avoid the effect of anomalous fluctuations in a given day and use  
10 projected EPS growth estimates as the growth component of the model. Although we use  
11 different approaches to calculate the expected dividend yield, I do not believe  
12 Mr. Gorman's approach is unreasonable.<sup>207</sup>

13 Although Mr. Gorman considers both mean and median results,<sup>208</sup> more than half  
14 of the results contained in Mr. Gorman's Constant Growth DCF (Analysts' Growth) are  
15 below reasonable estimates of the Company's Cost of Equity. Of the 44 rate cases  
16 involving vertically integrated electric utilities since 2013, none included an authorized  
17 ROE below 9.00 percent.<sup>209</sup> In contrast, eight of the twelve results contained in  
18 Mr. Gorman's Schedule MPG-4 are below 9.00 percent; three are below 8.00 percent.  
19 Conversely, only three of Mr. Gorman's twelve estimates are as high as 10.00 percent,  
20 which is the approximate median authorized ROE for vertically integrated electric

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<sup>206</sup> See Direct Testimony of Robert B. Hevert at 14-19.

<sup>207</sup> Mr. Gorman adjusts the dividend yield by the full growth rate, whereas I adjust the dividend yield by one-half of the growth rate.

<sup>208</sup> See, Schedules MPG-4, MPG-7.

<sup>209</sup> As reported by Regulatory Research Associates. See, Schedule RBH-R12.

1 utilities since January 2013.<sup>210</sup> On that basis alone, Mr. Gorman’s mean and median  
2 Constant Growth DCF results model should be given little, if any weight.

3 **Q. Do you agree with Mr. Gorman’s Sustainable Growth Constant**  
4 **Growth DCF approach?**

5 A. No, I do not. The Sustainable Growth model (also referred to as the  
6 “Retention Growth” model) is premised on the theory that a firm’s growth is a function  
7 of its expected earnings and the extent to which those earnings are retained and  
8 reinvested in the enterprise. In its simplest form, the model represents long-term growth  
9 as the product of the retention ratio (*i.e.*, the percentage of earnings not paid out as  
10 dividends, referred to below as (“b”) and the expected return on book equity (referred to  
11 below as “r”). Thus, the simple “b x r” form of the model projects growth as a function  
12 of internally generated funds. That form of the model is limiting, however, in that it does  
13 not provide for growth funded from external equity.

14 The “br + sv” form of the Sustainable Growth estimate is meant to reflect growth  
15 from both internally generated funds (*i.e.*, the “b x r” term) and from issuances of equity  
16 (*i.e.*, the “sv” term). The first term, which is the product of the retention ratio (*i.e.*, the  
17 portion of net income not paid in dividends) and the expected return on equity (*i.e.*, “r”) represents the portion of net income that is “plowed back” into the Company as a means  
18 of funding growth. The “sv” term is represented as:

20 
$$\left(\frac{m}{b} - 1\right) \times \text{Growth rate in Common Shares} \quad \text{Equation [1]}$$

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<sup>210</sup> *Ibid.*

1 where  $\frac{m}{b}$  is the Market-to-Book ratio.

2 In this form, the “sv” term reflects an element of growth as the product of (a) the  
3 growth in shares outstanding, and (b) that portion of the market-to-book ratio that  
4 exceeds unity. As discussed in more detail below, the Sustainable Growth method  
5 assumes that the payout ratio and earned return on common equity will remain constant  
6 in perpetuity, an assumption that may not hold true. Further, historical market data and  
7 independent research do not support the principal assumption of the Sustainable Growth  
8 model, i.e., that increased retention ratios are directly and positively related to future  
9 earnings growth, for electric utilities.

10 In any case, the salient issue in assessing growth rates in the context of the DCF  
11 model is whether investors tend to rely on a particular estimate of growth. Prior  
12 academic research indicates that, consistent with the approach used in my analyses (as  
13 discussed in my Direct Testimony<sup>211</sup> and my response to Mr. Murray), investors rely on  
14 analysts’ earnings growth projections in valuing equity securities. While Mr. Gorman  
15 may be of the view that analyst growth rates are not sustainable, the relevant issue is  
16 whether investors rely on those projections in making their investment decisions.

17 **Q. Are there other aspects of Mr. Gorman’s sustainable growth estimate**  
18 **that are inconsistent with his 8.71 percent ROE estimate?**

19 A. Yes, there are. Schedule MPG-6, Page 1 of 2 provides the expected  
20 Return on Equity, which represents the “r” term of his Sustainable Growth estimate. The  
21 average Return on Equity (as adjusted for growth in Book Value) used in his calculations

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<sup>211</sup> See Direct Testimony of Robert B. Hevert at 16-18.

1 is 10.05 percent, 25 basis points higher than the Company's currently authorized ROE of  
2 9.80 percent. I recognize that the Return on Equity used in Mr. Gorman's model is not  
3 necessarily the same as the ROE calculated from market-based data. Nonetheless, the  
4 ROE determined in regulatory proceedings is applied to the book value of Common  
5 Equity, which is the basis of the ROE reported in Mr. Gorman's Schedule MPG-6.  
6 Mr. Gorman, however, has not addressed the 134 basis point difference between his  
7 Sustainable Growth-based DCF estimate (8.71 percent) and the average expected ROE  
8 (10.05 percent).

9 Putting aside those analytical concerns, as a practical matter eight of the thirteen  
10 Sustainable Growth DCF estimates contained in Mr. Gorman's Schedule MPG-7 are  
11 below 9.00 percent, yet only two are as high as 10.00 percent. As discussed earlier, the  
12 Constant Growth DCF model must be viewed with great caution in the first instance;  
13 results (such as Mr. Gorman's) that are so disconnected from recently authorized returns  
14 simply reinforce that need for caution.

15 **Q. Are there other concerns with Mr. Gorman's "sustainable growth"**  
16 **estimate?**

17 **A.** Yes. It is important to note that the "Sustainable Growth" model itself  
18 requires an estimate of the earned return on common equity and is therefore somewhat  
19 circular. By adopting Value Line's earned ROE estimates, Mr. Gorman has effectively  
20 pre-supposed the Return on Common Equity projected by Value Line for the proxy group  
21 companies. In addition, the use of the "Sustainable Growth" model requires the  
22 assumption that the subject company not only maintains its retention ratio and ROE in

1 perpetuity, but also that the components of “r” (*i.e.*, the earned return on common equity)  
2 are reasonably stable over time.

3           In order to assess whether that assumption holds (that is, whether the components  
4 of “r” are stable), I used the “DuPont” formula, which decomposes the Return on  
5 Common Equity into three components: the Profit Margin (net income/revenues), Asset  
6 Turnover (revenues/net plant), and the Equity Multiplier (net plant/equity). As Schedule  
7 RBH-R22 demonstrates, based on Mr. Gorman’s proxy group, the product of those three  
8 measures is approximately equal (but for rounding) to Value Line’s reported Return on  
9 Common Equity, on both an historical and projected basis. That analysis also shows that  
10 while all three components are expected to change over time, the Profit Margin is  
11 expected to increase significantly, as the Asset Turnover ratio moderately improves after  
12 substantial compression since 2007.

13           The decreasing Equity Multiplier (which relates to a greater proportion of equity  
14 in the capital structure) is consistent with the general observation that since the 2008  
15 capital market dislocation most often associated with the Lehman Brothers bankruptcy in  
16 September 2008, capital-intensive companies such as utilities have been focused on  
17 financial integrity and the ability to access the capital markets during turbulent  
18 conditions. Given that the fundamental elements of the “r” component of the  
19 “Sustainable Growth” model are expected to change over time, I do not believe it is  
20 appropriate to use that model as an estimate of constant, perpetual growth.

1           **Q.     Are there other reasons why the sustainable growth calculation may**  
2 **not accurately reflect long-term growth rates?**

3           A.     Yes, there are. The underlying premise of that model is that future  
4 earnings will increase as the retention ratio increases. That is, if future growth is  
5 modeled as “ $b \times r$ ” (where “ $b$ ” is the retention ratio, and “ $r$ ” is the earned return on book  
6 equity), growth will increase as “ $b$ ” increases. There are several reasons, however, why  
7 that may not be the case. Management decisions to conserve cash for capital  
8 investments, to manage the dividend payout for the purpose of minimizing future  
9 dividend reductions or to signal future earnings prospects, can and do influence dividend  
10 payout (and therefore earnings retention) decisions in the near-term. Consequently, it is  
11 appropriate to determine whether the data relied upon by Mr. Gorman supports the  
12 assumption that higher earnings retention ratios necessarily are associated with higher  
13 future earnings growth rates.

14           **Q.     Did you perform any analyses to test that assumption?**

15           A.     Yes, I did. For each of the companies in Mr. Gorman’s proxy group, I  
16 calculated (in each year of the historical period) the dividend payout ratio, the retention  
17 ratio, and the subsequent five-year earnings growth rate. I then performed a regression  
18 analysis in which the dependent variable was the five-year earnings growth rate, and the  
19 explanatory variable was the earnings retention ratio. The purpose of that analysis was to  
20 determine whether the data source relied upon by Mr. Gorman for his “Sustainable  
21 Growth” rate estimates empirically supports the assumption (which, as noted, is central to  
22 his Sustainable Growth modeling) that higher retention ratios necessarily produce higher  
23 earnings growth rates. *See* Schedule RBH-R23.





1 rather than over the course of the year. Those assumptions have the effect of  
2 unreasonably decreasing the DCF result.

3 **Q. How does Mr. Gorman's assumption with regard to the timing of**  
4 **dividend payments affect his Multi-Stage DCF model results?**

5 A. Mr. Gorman notes that quarterly dividends in his Multi-Stage DCF model  
6 were "annualized (multiplied by 4)."<sup>214</sup> Considering that Mr. Gorman's proxy companies  
7 pay dividends on a quarterly basis, assuming (as Mr. Gorman has done) that the entire  
8 dividend is paid at the end of that year essentially defers the timing of the quarterly cash  
9 flows (that is, the quarterly dividends) until year-end, even though they are paid  
10 throughout the year. A more reasonable approach would be to assume that cash flows are  
11 received (on average) in the middle of the year, such that half the quarterly dividend  
12 payments occur prior to the assumed dividend payment date, and half occur after (*i.e.*, the  
13 "mid-year convention"). That approach is consistent with the common practice in the  
14 Constant Growth DCF model of accounting for periodic growth in dividends by applying  
15 one-half of the expected annual dividend growth rate to calculate the expected dividend  
16 yield.

17 **Q. How would the mid-year convention affect Mr. Gorman's Multi-Stage**  
18 **DCF results?**

19 A. Holding all other assumptions constant, simply changing Mr. Gorman's  
20 methodology to reflect the mid-year convention increases both the mean and median  
21 results by approximately 17 basis points.<sup>215</sup>

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<sup>214</sup> Direct Testimony of Michael P. Gorman, at 16.

<sup>215</sup> See Schedule RBH-R24.

1           **Q. Do you agree with the long-term growth rate in Mr. Gorman's Multi-**  
2 **Stage DCF model?**

3           A. No, I do not. The long-term growth rate represents the expected rate of  
4 growth, in perpetuity, as of the beginning of the third, or terminal, stage.<sup>216</sup> Mr. Gorman  
5 assumes a long-term growth rate of 4.60 percent, which is the approximate average of the  
6 five year (2016 – 2020) and ten year (2021-2025) nominal GDP growth estimates, as  
7 reported by *Blue Chip*.<sup>217</sup> Consequently, Mr. Gorman's long-term GDP growth rate  
8 projection, which he applies to years eleven through 200 of his model (that is, from year  
9 2025 through 2213), is based on data that includes only year eleven (that is, 2025). That  
10 is, despite the fact that the *Blue Chip* projection period ends in 2025, Mr. Gorman uses it  
11 as the measure of expected perpetual GDP growth beginning in 2025 and continuing in  
12 perpetuity.

13           **Q. Are there other benchmarks that put Mr. Gorman's 4.60 percent**  
14 **long-term growth rate in context?**

15           A. Yes, there are. While Mr. Gorman suggests that the reasonableness of his  
16 ROE estimates may be viewed in the context of his long-term growth projections, an  
17 alternative approach is to assess his long-term growth projections in the context of  
18 recently authorized ROEs. Given that Mr. Gorman's Risk Premium approach is premised

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<sup>216</sup> See Direct Testimony of Michael P. Gorman, at 21-22.

<sup>217</sup> *Ibid.*, at 24-25 and Schedule MPG-9. Mr. Gorman calculates his nominal GDP growth rates based on separate Blue Chip consensus forecasts for real GDP growth and growth in the GDP Chained Price Index for the periods 2016-2020 and 2021-2025. At pages 24-25 of his Direct Testimony, Mr. Gorman points to the EIA Annual Energy Outlook, which projects real GDP growth in the range of 1.90 percent to 2.80 percent for the years through 2040, and Congressional Budget Office projections of real GDP growth from 2.10 percent to 2.80 percent over the coming five to ten years.

1 on the use of authorized returns as a measure of “expectational” data,<sup>218</sup> it would follow  
2 that the long-term growth rate assumed in his Multi-Stage DCF model should produce  
3 results that are reasonably consistent with current expectations (that is, with recently  
4 authorized equity returns).

5         Knowing that his average Multi-Stage DCF estimate is 8.57 percent, and that  
6 recently authorized equity returns are quite a bit higher (*see* Schedule RBH-R13, and  
7 Mr. Gorman’s Schedules MPG-11 and 12), it is reasonable to question the terminal  
8 growth rate used in Mr. Gorman’s Multi-Stage DCF analysis. As shown in Schedule  
9 RBH-R25, keeping all of Mr. Gorman’s data and assumptions constant but for the  
10 terminal growth rate, and solving for the growth rate that produces an average ROE of  
11 9.96 percent<sup>219</sup> produces an implied growth rate of 6.35 percent.<sup>220</sup> That, of course, is  
12 substantially above Mr. Gorman’s 4.60 percent estimate, although it is generally  
13 consistent with (although somewhat higher than) the assumption included in my Multi-  
14 Stage analysis (5.63 percent) and the long-term geometric average nominal GDP growth  
15 rate (6.23 percent).<sup>221</sup>

16         **Q.**     **With those points in mind, did you make any additional adjustments**  
17 **to Mr. Gorman’s analysis?**

18         **A.**     Yes, Schedule RBH-R24 provides the incremental results of those  
19 adjustments. To ensure that I correctly applied the analysis, I first recreated  
20 Mr. Gorman’s Multi-Stage model and replicated his results. I then adjusted

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<sup>218</sup> *See* Direct Testimony of Michael P. Gorman, at 28.

<sup>219</sup> *See* Schedule RBH-R13. 9.96 percent represents the average authorized return for vertically integrated electric utilities from for the twelve-month period ending November 14, 2014, as reported by Regulatory Research Associates.

<sup>220</sup> *See* Schedule RBH-R25.

<sup>221</sup> Source: Bureau of Economic Analysis.

1 Mr. Gorman's Internal Rate of Return calculation to reflect the mid-year convention (as  
2 explained above), and revised the long-term growth rate used in the final stage of  
3 Mr. Gorman's model to the more reasonable estimate of perpetual long-term nominal  
4 GDP growth described above. The cumulative effect of those adjustments is to increase  
5 his median electric proxy group ROE estimate to 9.53 percent. Although those results  
6 remain below a reasonable estimate of the Company's Cost of Equity, they are as much  
7 as 23 basis points above Mr. Gorman's 9.30 percent ROE recommendation.

8 **Q. Are there other aspects of Mr. Gorman's model that serve to reduce**  
9 **his DCF estimates?**

10 **A.** Yes, there are. Mr. Gorman assumes that the current level of payout ratios  
11 for the proxy group will remain unchanged over the entire study period. Mr. Gorman's  
12 average projected payout ratio for his proxy group is 60.15 percent, below the long-term  
13 industry average of 67.23 percent, thus resulting in lower DCF estimates than if the long-  
14 term industry average payout ratio was assumed.<sup>222</sup> That assumption suggests that the  
15 current payout ratio, which may be affected by short-term factors such as elevated levels  
16 of capital expenditures, is appropriate for all future years. The constant payout  
17 assumption, however, does not apply to Mr. Gorman's proxy group. In fact, data  
18 provided by Value Line indicates that none of the companies in his proxy group will  
19 maintain their payout ratios at a constant level over the next three to five years. My  
20 model allows the analyst to reflect assumptions regarding the timing and extent of

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<sup>222</sup> See, Schedules MPG-5 and Schedule RBH-R8.

1 changes in the payout ratio to reflect, for example, increases or decreases in expected  
2 capital spending, or transition from current payout levels to long-term expected levels.<sup>223</sup>

3 ***C. Application of Capital Asset Pricing Model***

4 **Q. Please summarize Mr. Gorman's CAPM analysis.**

5 A. Mr. Gorman develops two CAPM estimates (9.66 percent and 8.82  
6 percent), based on Morningstar's historical Market Risk Premium estimates of 7.30  
7 percent and 6.20 percent, respectively; *Blue Chip's* projected 30-year Treasury yield of  
8 4.10 percent (as the risk-free rate), and a 0.76 average proxy group Beta coefficient as  
9 reported by Value Line.<sup>224</sup> For the Market Risk Premium component of the CAPM,  
10 Mr. Gorman uses (1) an estimate of 7.30 percent based on the long-term historical  
11 arithmetic average real market return from 1926 through 2013 as reported by  
12 Morningstar, which he then adjusts for current inflation forecasts; and (2) an estimate of  
13 6.20 percent based on the historical difference between the average return on the S&P  
14 500 and the average total return on long-term government bonds.<sup>225</sup>

15 **Q. Turning first to the expected total return on the market, do you agree**  
16 **with Mr. Gorman's 11.40 percent estimate?**

17 A. No, I do not. To put Mr. Gorman's estimate in perspective, it is important  
18 to understand how often various ranges of total returns actually have occurred from 1926  
19 to 2013. To perform that analysis, I gathered the annual return on Large Company  
20 Stocks reported by Morningstar, produced a histogram of those observations, and

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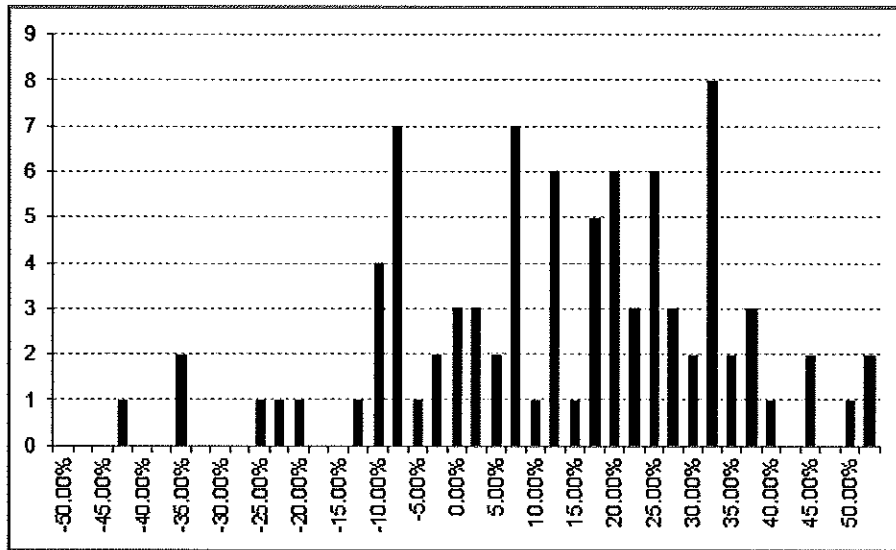
<sup>223</sup> Consequently, the adjusted 9.53 percent result noted above understates the Company's Cost of Equity.

<sup>224</sup> See Direct Testimony of Michael P. Gorman, at 32-37 and Schedule MPG-16.

<sup>225</sup> See Direct Testimony of Michael P. Gorman, at 36-37.

1 calculated the probability that a given market return estimate would be observed. The  
2 results of that analysis, which are presented in Chart 10, demonstrate that returns of 13.00  
3 percent (which is consistent with my analysis<sup>226</sup>) and higher actually occurred quite often.

4 **Chart 10: Frequency Distribution of Observed Market Returns, 1926 – 2013<sup>227</sup>**



5  
6 In fact, the 12.75 percent and 13.49 percent estimates, which I rely on in my  
7 CAPM analysis (as shown in Schedule RBH-R26), represent approximately the 50th  
8 percentile of the actual returns observed from 1926 to 2013. In other words, of the 88  
9 annual observations, 45 were 12.75 percent or higher. By that measure, my estimate is  
10 entirely consistent with historical experience, although Mr. Gorman's estimate is low  
11 relative to that standard.

<sup>226</sup> See Schedule RBH-R9.

<sup>227</sup> Schedule RBH-R26; See Morningstar, Inc., 2014 Ibbotson Stocks, Bonds, Bills and Inflation Classic Yearbook, at 196-197.

1           **Q.     Is Mr. Gorman's use of the historical rate of S&P 500 total return as a**  
2 **measure of sustainable future market growth consistent with his use of the**  
3 **sustainable growth rate in his DCF analysis?**

4           A.     No, it is not. The Sustainable Growth rate used in Mr. Gorman's DCF  
5 analysis is based on the assumption that there is a positive relationship between the  
6 earnings retention ratio and earnings growth. In that regard, Mr. Gorman states:

7                     The internal growth methodology is tied to the percentage of  
8 earnings retained in the company and not paid out as dividends.  
9                     The earnings retention ratio is 1 minus the dividend payout ratio.  
10                    As the payout ratio declines, the earnings retention ratio increases.  
11                    An increased earnings retention ratio will fuel stronger growth  
12 because the business funds more investments with retained  
13 earnings.<sup>228</sup>

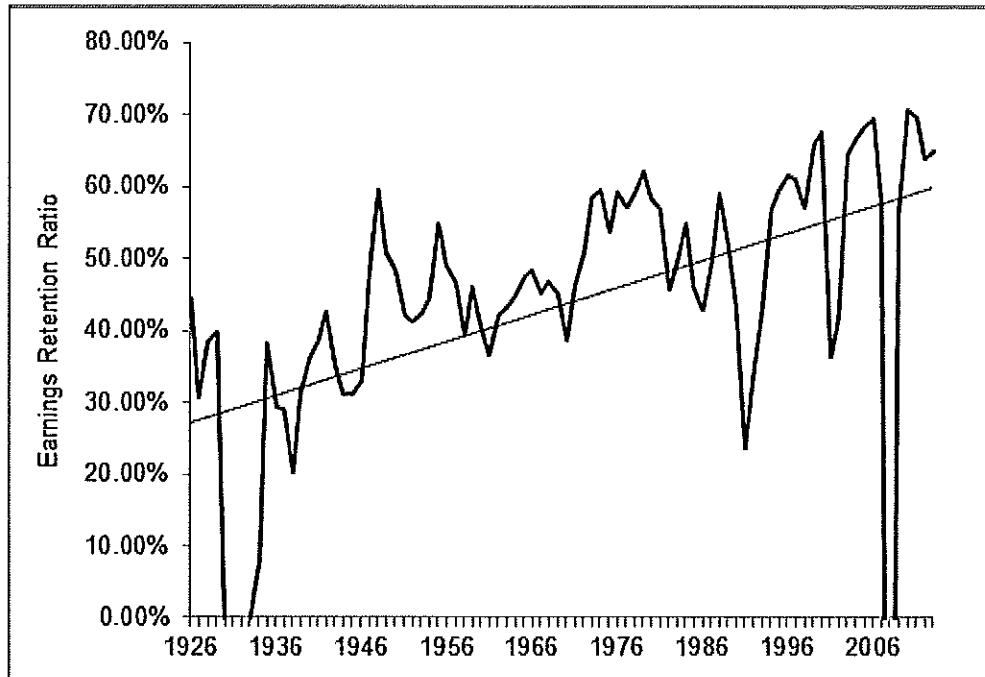
14           While (as discussed above) I do not agree with Mr. Gorman's use of the  
15 Sustainable Growth method, it is helpful to consider the current level of the S&P 500  
16 earnings retention ratio relative to its historical level. If the current market retention ratio  
17 is well above its long-term average, it calls into question whether the market will  
18 maintain that level in perpetuity. As shown in Chart 11 (below), data reported by  
19 Dr. Robert J. Shiller indicates the S&P 500 earnings retention has trended upward over  
20 time and is currently well above its historical average. Consequently, the Sustainable  
21 Growth estimate that Mr. Gorman relied upon suggests that future market growth could  
22 outpace historical growth.

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<sup>228</sup> Direct Testimony of Michael P. Gorman, at 19.



1                   **Chart 11: S&P 500 Annual Earnings Retention Ratio, 1926 - 2013**<sup>229</sup>



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3

4

**Q. Did you also consider where Mr. Gorman's Market Risk Premium estimate falls within the range of historical observations?**

5

6

7

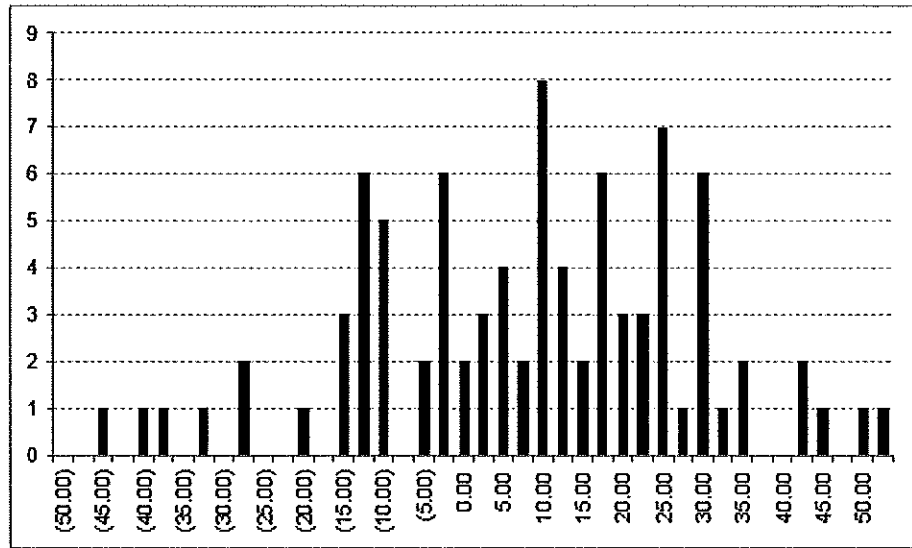
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**A.** Yes, I did. Similar to my review of observed market returns, I gathered the annual Market Risk Premia reported by Morningstar and produced a histogram of the observations. The results of that analysis, which are presented in Chart 12, demonstrate that MRPs of at least 10.45 percent (the upper range of my MRP estimates included in my updated analysis; *see* Schedule RBH-R27) have occurred nearly half of the time.

<sup>229</sup> Source: <http://www.econ.yale.edu/~shiller/data.htm>.

1           **Chart 12: Frequency Distribution of Market Risk Premium, 1926 - 2013**<sup>230</sup>

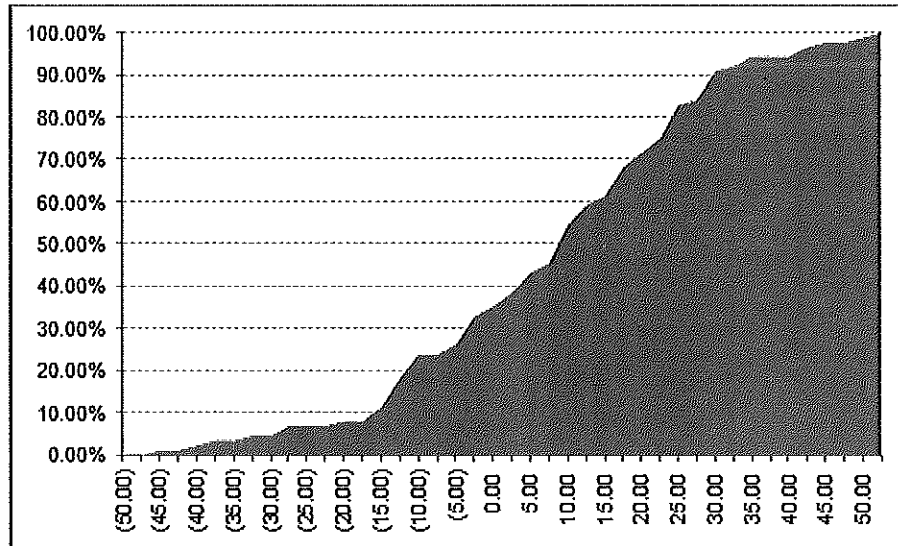


2

3           I then considered a different perspective, calculating the cumulative probability of  
4           the same ranges of MRP estimates. Those results, which are provided in Chart 13  
5           demonstrate that (based on historical observations) there is approximately a 54.70 percent  
6           likelihood that an MRP of at least 10.45 percent will occur.

<sup>230</sup> Schedule RBH-R27. See Morningstar, Inc., 2014 Ibbotson Stocks, Bonds, Bills and Inflation Classic Yearbook at 196-197, 208-209.

1           **Chart 13: Cumulative Probability of Market Risk Premia, 1926 - 2013**<sup>231</sup>



2

3           **D. Application of the Risk Premium Model**

4           **Q. Please briefly describe Mr. Gorman’s Risk Premium analyses.**

5           A. Mr. Gorman defines the “Risk Premium” as the difference between  
6 average annual authorized equity returns for electric utilities, and a measure of long-term  
7 interest rates each year from 1986 through September 2014.<sup>232</sup> Mr. Gorman’s first  
8 approach calculates the annual risk premium by reference to the 30-year Treasury yield,  
9 while the second considers the average A-rated utility bond yield.<sup>233</sup> In each case,  
10 Mr. Gorman discards the three lowest and three highest implied equity risk premia, and  
11 establishes the range of Risk Premium estimates based on the next highest (or lowest)  
12 estimate. In other words, the lower bound of his Risk Premium range is defined by the  
13 fourth-lowest risk premium, regardless of the year in which it occurred. In a similar

<sup>231</sup> *Ibid.*

<sup>232</sup> Direct Testimony of Michael P. Gorman, at 27.

<sup>233</sup> See Direct Testimony of Michael P. Gorman, Schedules MPG-11 and MPG-12.

1 manner, the upper bound of Mr. Gorman's Risk Premium range is defined by the fourth-  
2 highest estimate, also regardless of the year in which that observation occurred.  
3 Mr. Gorman then applies weights of 25.00 percent and 75.00 percent, respectively, to his  
4 lower and upper bound estimates.<sup>234</sup>

5 As to the period over which he gathers and analyzes his data, Mr. Gorman  
6 suggests that his 28-year horizon is a "generally accepted period to develop a risk  
7 premium study using 'expectational' data."<sup>235</sup> Mr. Gorman further notes that "it is  
8 reasonable to assume that averages of annual achieved returns over long time periods will  
9 generally converge on the investors' expected returns," and concludes that his "risk  
10 premium study is based on expectational data, not actual investment returns, and, thus,  
11 need not encompass a very long historical time period."<sup>236</sup> Based on those assumptions,  
12 Mr. Gorman calculates a range of estimates from 7.74 percent to 10.38 percent which, he  
13 suggests, produces a reasonable range of 9.24 percent to 9.91 percent with a (rounded)  
14 midpoint of 9.60 percent.<sup>237</sup>

15 **Q. Does Mr. Gorman rely on his Risk Premium model in making his**  
16 **ROE recommendation?**

17 **A.** Yes, he does. As noted above, the upper end of Mr. Gorman's range is set  
18 by reference to his Risk Premium model.<sup>238</sup>

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<sup>234</sup> *Ibid.*, at 32.

<sup>235</sup> *Ibid.*, at 28.

<sup>236</sup> *Ibid.*, at 29.

<sup>237</sup> *Ibid.*, at 30-32.

<sup>238</sup> *See* Direct Testimony of Michael P. Gorman, at 38.

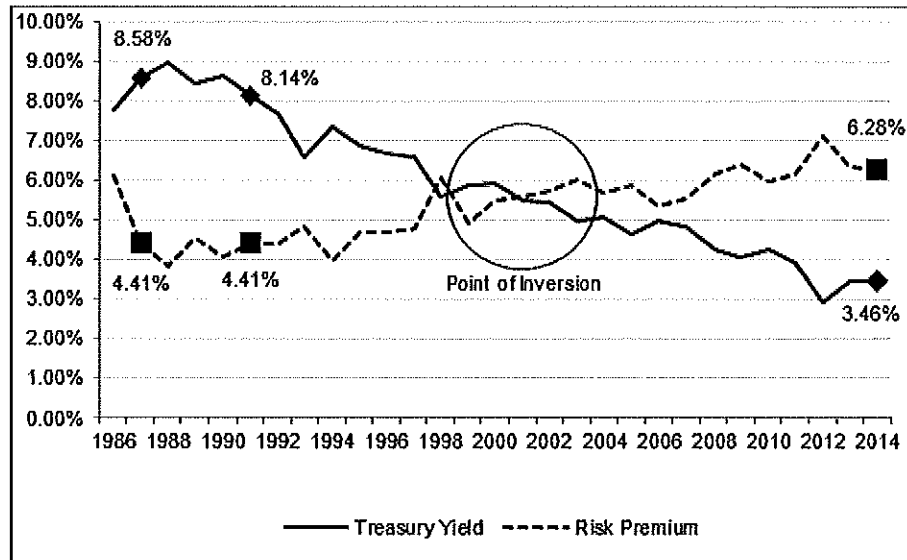
1           **Q.     What are your specific concerns with Mr. Gorman's Risk Premium**  
2 **analyses?**

3           A.     I have several concerns with Mr. Gorman's analysis: (1) his method of  
4 relying on the fourth lowest and highest risk premium is arbitrary and establishes a range  
5 of ROE estimates that are predicated on economic and financial conditions that are  
6 removed from the current market; (2) Mr. Gorman's method and recommendation ignore  
7 an important relationship revealed by his own data, *i.e.*, that the Risk Premium has a  
8 strong negative correlation to the level of interest rates (whether measured by Treasury or  
9 utility bond yields); and (3) the low end of Mr. Gorman's Risk Premium estimates is far  
10 lower than any ROE authorized since at least 1986 and as such, has no relevance in  
11 estimating the Company's Cost of Equity.

12           **Q.     Turning first to the method by which Mr. Gorman selected the**  
13 **bounds of his Risk Premium estimates, have you reviewed the range of data**  
14 **included in his analysis?**

15           A.     Yes, I have. Considering first the Treasury yield-based analysis, I plotted  
16 the yields and Risk Premia over the 1986 to 2013 period included in Mr. Gorman's  
17 analysis. That graph is presented in Chart 14 (below).

1           **Chart 14: Mr. Gorman's Treasury Yield-Based Risk Premium Data**<sup>239</sup>



2

3           There are several important points that may be taken from that data. First, the low

4           end of Mr. Gorman's Risk Premium range, 4.41 percent, was observed in 1987 and 1991.

5           In my view, discrete observations from economic environments 23 to 27 years ago have

6           little to do with current market conditions. A very visible measure of such differences is

7           the fact that in 1987, Treasury yields exceeded the Risk Premium. As Schedule

8           RBH-R28 demonstrates, however, since the turn of the Millennium, the opposite has

9           been true; the Risk Premium has consistently exceeded Treasury yields. By that measure

10          alone, it is clear that the low end of Mr. Gorman's range has little, if any, relevance to the

11          current market environment.

12           As to the high end of his range, Mr. Gorman's convention of discarding the three

13          highest Treasury yield-based Risk Premium estimates has the effect of ignoring

14          observations from 2009, 2012 and 2013; the Utility bond-based estimates exclude 2012,

15          2013 and 2014. Beginning in 2008, the Federal Reserve proceeded on a steady path of

<sup>239</sup> Source: Direct Testimony of Michael P. Gorman, Schedule MPG-11. See also Schedule RBH-R28.

1 initiatives designed to lower long-term Treasury yields.<sup>240</sup> By not including the most  
2 recent data in his analysis, Mr. Gorman's selections specifically exclude the market  
3 conditions that he finds important in other aspects of his analyses.<sup>241</sup> Moreover, the Risk  
4 Premium tends to move inversely with changes in interest rates: As interest rates have  
5 fallen, the Risk Premium has increased. Mr. Gorman's approach, therefore, removes  
6 very recent observations for which the Risk Premium would be relatively high.

7 Combining data from the highest and lowest (rather than the fourth highest and  
8 lowest) return produces an ROE estimate of 10.37 percent relative to the 9.91 percent  
9 result that Mr. Gorman reports.<sup>242</sup> In fact, moving from the fourth to the first highest and  
10 lowest return would increase the ROE estimate by 46 basis points while an equivalent  
11 move downward (*i.e.*, moving from the fourth to the seventh) would decrease the ROE by  
12 only 8 basis points.<sup>243</sup> Given the rather subjective nature of the analysis, and in light of  
13 the significant skew in results, it is my view that Mr. Gorman's Risk Premium analysis  
14 tends to understate the Company's Cost of Equity.

15 In fact, if we were to establish the range of estimates based on the highest and  
16 lowest risk premium over the past ten years, rather than the fourth highest and lowest  
17 over the past 29 years, the results change considerably. As shown in Schedule RBH-R28,  
18 combining the same expected Treasury yield (4.10 percent) and utility bond yield (4.71  
19 percent) with the highest and lowest risk premia observed over the most recent ten years

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<sup>240</sup> See Federal Reserve Press Release dated June 19, 2013. Although the Federal Reserve's Quantitative Easing Policy ended in October 2014, other policies intended to maintain low interest rates remain in effect (*e.g.*, maintaining the federal funds rate). See also, Federal Reserve Press Release dated October 29, 2014.

<sup>241</sup> See, for example, Direct Testimony of Michael P. Gorman, at 31-32 and 37-38.

<sup>242</sup>  $0.75 \times (4.10\% + 7.09\%) + 0.25 \times (4.10\% + 3.83\%) = 10.37\%$ .

<sup>243</sup> Schedule RBH-R28.

1 (2005 through 2014) produces a range of 10.10 percent to 10.76 percent.<sup>244</sup> The midpoint  
2 of that range is 10.43 percent, only three basis points removed from my 10.40 percent  
3 ROE recommendation.

4 **Q. Please now elaborate on your earlier observation that the Risk**  
5 **Premium has increased as Treasury yields have decreased.**

6 A. As Schedule RBH-R28 demonstrates, over Mr. Gorman's study period the  
7 Risk Premium has moved inversely to changes in Treasury yields and this relationship is  
8 supported by the data contained in Mr. Gorman's Schedules MPG-11 and 12; the  
9 correlation between the two is negative 87.64 percent (*see* Schedule RBH-R28). To put  
10 that degree of correlation in perspective, if the two were to move in exactly opposite  
11 directions, the correlation would be negative 100.00 percent, if they did not move  
12 together at all, the correlation would be zero. Because correlation coefficients by  
13 definition are between zero and one (either positive or negative), a correlation of negative  
14 87.64 percent indicates a strong tendency for the Equity Risk Premium to increase as  
15 interest rates decrease. Those findings are supported in academic studies. For example,  
16 Dr. Roger Morin notes that:

17 ...[p]ublished studies by Brigham, Shome, and Vinson (1985),  
18 Harris (1986), Harris and Marston (1992, 1993), Carleton,  
19 Chambers, and Lakonishok (1983), Morin (2005), and McShane  
20 (2005), and others demonstrate that, beginning in 1980, risk  
21 premiums varied inversely with the level of interest rates - rising  
22 when rates fell and declining when interest rates rose.<sup>245</sup>

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<sup>244</sup> Assumes the same 25.00 percent and 75.00 percent weighting factors (low and high, respectively) used in Mr. Gorman's analysis. Reflects Treasury and Utility Bond Risk Premium analyses.

<sup>245</sup> Roger A. Morin, New Regulatory Finance, Public Utilities Reports, Inc. (2006), at 128 [clarification added].



1           Turning back to Mr. Gorman's data, a simple linear regression analysis reveals  
2 that for every 100 basis point decrease in yields, the Risk Premium increases by  
3 approximately 43 basis points (*see* Schedule RBH-R28).<sup>246</sup> That result is consistent with  
4 those found by Maddox, Pippert and Sullivan, who determined that the Risk Premium  
5 would increase by 37 basis points for every 100 basis point change in the 30-year  
6 Treasury yield.<sup>247</sup> Citing Harris and Marston, the authors note a similar estimate of 36  
7 basis points.<sup>248</sup>

8           **Q.    Have you made any adjustments to Mr. Gorman's analysis to reflect**  
9 **the concerns discussed above?**

10          A.    Yes, I have. While I believe that the regression analysis described in my  
11 Direct Testimony is the appropriate method, I have adjusted Mr. Gorman's analysis to  
12 reflect the Risk Premium associated with the prevailing level of interest rates. Based on  
13 Mr. Gorman's Schedule MPG-11, the average 30-year Treasury yield in 2013 and 2014  
14 was 3.46 percent; the average Risk Premium during those years was 6.31 percent.  
15 Applying the projected 4.10 percent (30-year) Treasury yield to that risk premium  
16 produces an ROE estimate of 10.41 percent. Assuming the respective 2013 and 2014  
17 Risk Premium estimates (combined with the projected 4.10 percent Treasury yield)  
18 produces a range of 10.38 percent to 10.44 percent. Those estimates, which reflect more  
19 recent and relevant data, are well above Mr. Gorman's 9.30 percent ROE estimate but  
20 very consistent with my 10.40 percent ROE recommendation.

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<sup>246</sup> Adjusting for serial correlation does not materially affect the results; *see* Schedule RBH-R28.

<sup>247</sup> *See* Farris M. Maddox, Donna T. Pippert, and Rodney N. Sullivan, *An Empirical Study of Ex Ante Risk Premiums for the Electric Utility Industry*, Financial Management, Vol. 24, No. 3, Autumn 1995, at 93.

<sup>248</sup> *Ibid.*

1           **Q.    Have you completed a similar analysis using Mr. Gorman's Utility**  
2 **Bond Yield data?**

3           A.    Yes, and those results are consistent with my analysis of Mr. Gorman's  
4 Treasury yield-based Risk Premium.<sup>249</sup> Here again, it is clear that the Risk Premium has  
5 increased as the Utility Bond Yield has decreased. In fact, because the two have been  
6 moving steadily in opposite directions, the Risk Premium now is higher than the Bond  
7 Yield. Mr. Gorman, however, developed his Risk Premium (and, therefore, his ROE)  
8 estimates based on data points that occurred approximately 17 years prior to that point of  
9 inversion.

10           **Q.    Do you have any other observations regarding Mr. Gorman's Risk**  
11 **Premium analysis?**

12           A.    Yes, I do. Aside from the shortcomings discussed above, Mr. Gorman's  
13 Risk Premium recommendation gives considerable weight to ROE estimates that are well  
14 below the lowest return that has ever been authorized. Of the 1,433 electric utility rate  
15 authorizations since 1980 for which authorized ROEs were disclosed, the lowest was 8.72  
16 percent; that return was associated with an electric distribution utility.<sup>250</sup> Mr. Gorman,  
17 however, gives specific weight to an ROE estimate that is nearly 100 basis points lower,  
18 still (that is, the 7.74 percent ROE estimate to which Mr. Gorman gave 25.00 percent  
19 weight in his "A" rated utility bond version of the Risk Premium).

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<sup>249</sup> See Schedule RBH-R28.

<sup>250</sup> Source: Regulatory Research Associates; see, also, Schedule RBH-R12.

1 *E. Ameren Missouri's Risk Relative to the Proxy Group*

2 **Q. What is your response to Mr. Gorman's observation that Standard**  
3 **and Poor's gives Ameren Missouri an "excellent" business risk profile?**

4 **A.** Although it is the case S&P assigned Ameren Missouri an "excellent"  
5 business risk profile, that ranking is not uncommon. In fact, nearly 90.00 percent of the  
6 vertically integrated electric utilities rated by S&P had an "excellent" business risk  
7 profile. If we were to include transmission and distribution-only electric utilities, that  
8 proportion increases to approximately 93.00 percent.<sup>251</sup> Consequently, S&P's business  
9 risk assessment does not distinguish the Company from other electric utilities.

10 Moreover, equity and debt investors face different risks, require different returns  
11 and invest in different securities. Although credit ratings may be a broad measure of  
12 business risk, Mr. Gorman has presented no analyses to indicate how those ratings (or  
13 rankings) translate to increments or decrements of equity return requirements. If  
14 Mr. Gorman's point is that utilities in general are viewed as less risky than the overall  
15 market, I agree. In fact, the Beta coefficients included in my CAPM analysis are less  
16 than 1.00, indicating less systematic risk than the market, itself. That does not, however,  
17 mean that the return required for equity investments in vertically integrated electric  
18 utilities such as Ameren Missouri should be lower than the returns authorized for less  
19 risky natural gas utilities, as Mr. Gorman's 9.30 percent ROE recommendation  
20 suggests.<sup>252</sup>

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<sup>251</sup> Source: Standard & Poor's, *U.S. Regulated Electric, Gas and Water Utilities; Strongest to Weakest*, July 30, 2013.

<sup>252</sup> All of the natural gas utilities ranked by S&P had "excellent" business risk profiles.

1 ***F. Financial Integrity***

2 **Q. Please briefly summarize Mr. Gorman's assessment of his**  
3 **recommendation as it affects measures of the Company's financial integrity.**

4 A. Mr. Gorman evaluates the reasonableness of his ROE recommendation by  
5 evaluating the *pro forma* effect that his recommended ROE would have on two of the  
6 Company's key financial ratios with the goal of ascertaining whether those ratios would  
7 still fall within S&P's guideline ranges sufficient for an investment grade rating.<sup>253</sup> In  
8 that regard, Mr. Gorman develops the following *pro forma* ratios: (1) Debt to EBITDA;  
9 and (2) FFO to Total Debt. An obvious and important point is that Mr. Gorman's  
10 analysis assumes that the Company actually is able to earn the entirety of its authorized  
11 ROE on a going-forward basis.

12 In Schedule MPG-17, Mr. Gorman develops the *pro forma* financial ratios noted  
13 above based on the Company's retail cost of service, and his recommended ROE of 9.30  
14 percent. Mr. Gorman notes that his *pro forma* financial analysis suggests that his  
15 recommended ROE of 9.30 percent would be sufficient to maintain an investment grade  
16 credit rating.<sup>254</sup>

17 **Q. Do you agree with Mr. Gorman's analysis and conclusion?**

18 A. No, I do not. As discussed in my response to Mr. Schafer, a wide range of  
19 ROE estimates create *pro forma* coverage ratios within S&P's metric guidelines.  
20 However, credit rating agencies consider a number of other factors beyond coverage  
21 ratios. In my response to Mr. Murray, I note that 50.00 percent of the factors that

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<sup>253</sup> See Direct Testimony of Michael P. Gorman, at 40.

<sup>254</sup> *Ibid.*, at 41-42.

1 Moody's considers relate to the regulatory environment. An ROE recommendation of  
2 9.30, which is 68 basis points below the national average return for vertically integrated  
3 electric utilities, would likely reflect the inconsistent and essentially unpredictable nature  
4 of the Company's regulatory environment. As such, it is difficult to reconcile how a  
5 recommended ROE reduction of 50 basis points would support Ameren Missouri's credit  
6 profile. Rather, it is more likely that to put considerable downward pressure on the  
7 Company's credit rating and credit profile.

**VI. RESPONSE TO THE DIRECT TESTIMONY OF MR. CHRISS**

8 **Q. Please summarize Mr. Chriss' testimony regarding the Company's**  
9 **ROE.**

10 A. Mr. Chriss opposes my recommendation because, he states, it is higher  
11 than the ROEs authorized by other regulatory commissions since the beginning of 2012,  
12 and the Company's currently authorized ROE.<sup>255</sup> Despite his concerns, Mr. Chriss did  
13 not undertake an independent, market-based analysis of the Company's Cost of Equity.

14 **Q. Have you reviewed and updated the information contained in**  
15 **Mr. Chriss' Exhibit SWC-7?**

16 A. Yes, and it is important to note that my recommended range of 10.20  
17 percent to 10.60 percent and my recommended ROE of 10.40 percent is within the range  
18 of authorized ROEs for vertically integrated electric utilities (*see* Schedule RBH-R13).  
19 Further, it is important to note that the authorized ROE is a very visible measure of the

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<sup>255</sup> Direct Testimony of Steve W. Chriss at 9-10.

1 regulatory environment in which utilities operate. The regulatory environment, in turn, is  
2 important to utility analysts and investors.

3 **Q. Can you provide an example of how the financial community**  
4 **considers the regulatory environment in assessing utilities?**

5 A. Yes. As noted in my response to Messrs. Murray and Schafer, one-half of  
6 the factors that weigh in Moody's ratings relate to the nature of regulation.<sup>256</sup> While  
7 both S&P and Moody's consider regulatory risk in establishing credit ratings, Moody's  
8 has reflected the importance of regulation by establishing credit ratings based on four key  
9 factors: (1) regulatory framework; (2) the ability to recover costs and earn returns;  
10 (3) diversification; and (4) financial strength, liquidity, and key financial metrics. Of  
11 those criteria, the regulatory framework and the ability to recover costs and earn returns  
12 are each given a broad rating factor of 25.00 percent. Therefore, Moody's assigns  
13 regulatory risk a 50.00 percent weighting in the overall assessment of business and  
14 financial risk for regulated utilities.<sup>257</sup>

15 As also discussed earlier in my Rebuttal Testimony, the authorized ROE affects  
16 not only the cash flow-related metrics that measure financial strength but also provides an  
17 indication of the degree of regulatory support, and risk, associated with a given utility and  
18 jurisdiction. In that important respect, the Commission's decision in this proceeding will  
19 have a direct bearing on the company's credit profile, and its ability to access the capital  
20 needed to fund its investments.

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<sup>256</sup> Moody's Investors Service, *Rating Methodology, Regulated Gas and Electric Utilities*, December 23, 2013 at 6.

<sup>257</sup> Moody's Investors Service, *Rating Methodology, Regulated Electric and Gas Utilities*, December 23, 2013, at 6.

**VII. SUMMARY OF UPDATED ANALYSES**

1           **Q.    Have you updated the analyses presented in your Direct Testimony?**

2           A.    Yes. I have updated my DCF (Constant Growth and Multi-Stage models),  
3 CAPM and Bond Yield Plus Risk Premium analyses using data as of November 14, 2014.

4           **Q.    Please summarize your DCF model results.**

5           A.    I continue to use projected earnings growth rates from Zacks, First Call,  
6 and Value Line in developing my DCF model results, and have presented those results  
7 based on the low, average and high growth rates for each company. The results of the  
8 Quarterly Growth DCF model, Constant Growth DCF model and Multi-Stage DCF  
9 model are shown in Tables 7a and 7b (below; *see also*, Schedule RBH-R7 and RBH-R8).

10           **Table 7a: Summary of DCF Model Results – Combined Proxy Group<sup>258</sup>**

	Mean Low	Mean	Mean High
<i>Constant Growth DCF Results</i>			
30-Day Average	8.47%	9.44%	10.34%
90-Day Average	8.62%	9.58%	10.48%
180-Day Average	8.65%	9.62%	10.52%
<i>Multi-Stage DCF Results</i>			
30-Day Average	9.51%	9.77%	10.04%
90-Day Average	9.65%	9.92%	10.20%
180-Day Average	9.69%	9.96%	10.24%

<sup>258</sup> See Schedules RBH-R7 and RBH-R8.

1           **Table 7b: Summary of DCF Model Results – Hevert Revised Proxy Group**<sup>259</sup>

	Mean Low	Mean	Mean High
<i>Constant Growth DCF Results</i>			
30-Day Average	8.40%	9.32%	10.26%
90-Day Average	8.55%	9.48%	10.42%
180-Day Average	8.59%	9.51%	10.46%
<i>Multi-Stage DCF Results</i>			
30-Day Average	9.56%	9.81%	10.10%
90-Day Average	9.72%	9.98%	10.28%
180-Day Average	9.75%	10.01%	10.31%

2           **Q.     Please summarize your updated CAPM analysis.**

3           A.     I have used data updated through November 14, 2014 for the CAPM  
4 analyses. For the risk-free rate, I continue to refer to: (1) the 30-day average of the  
5 30-year Treasury yield; and (2) a consensus forecast of the average 30-Year Treasury  
6 yield for the coming six quarters. For the Beta coefficient, I rely on published estimates  
7 from both Value Line and Bloomberg.

8           For the MRP, I developed an *ex-ante* Market Risk Premia using the expected  
9 return on the S&P 500 Index less the current 30-year Treasury yield. To calculate the  
10 expected market return, I continue to rely on data from Value Line and Bloomberg.

11          **Q.     What are your updated CAPM results?**

12          A.     My updated CAPM results are shown in Tables 8a and 8b (below; *see*  
13 *also*, Schedule RBH-R11).

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<sup>259</sup> See Schedules RBH-R7 and RBH-R8.



1 **Table 8a: Summary of CAPM Results – Combined Proxy Group<sup>260</sup>**

	<b>Bloomberg Derived Market Risk Premium</b>	<b>Value Line Derived Market Risk Premium</b>
<i>Average Bloomberg Beta Coefficient</i>		
Current 30-Year Treasury (3.04%)	10.95%	10.39%
Near Term Projected 30-Year Treasury (3.68%)	11.59%	11.03%
<i>Average Value Line Beta Coefficient</i>		
Current 30-Year Treasury (3.04%)	10.98%	10.42%
Near Term Projected 30-Year Treasury (3.68%)	11.62%	11.06%

2  
3

**Table 8b: Summary of CAPM Results – Hevert Revised Proxy Group<sup>261</sup>**

	<b>Bloomberg Derived Market Risk Premium</b>	<b>Value Line Derived Market Risk Premium</b>
<i>Average Bloomberg Beta Coefficient</i>		
Current 30-Year Treasury (3.04%)	10.96%	10.40%
Near Term Projected 30-Year Treasury (3.68%)	11.60%	11.05%
<i>Average Value Line Beta Coefficient</i>		
Current 30-Year Treasury (3.04%)	10.88%	10.33%
Near Term Projected 30-Year Treasury (3.68%)	11.52%	10.97%

4 **Q. Please summarize your updated Risk Premium analysis.**

5 A. My updated Risk Premium analysis includes authorized ROEs as reported  
6 by Regulatory Research Associates through November 14, 2014. For the purpose of  
7 calculating the expected risk premium and ROE, I have used the current, near-term and  
8 long-term projected 30-year Treasury yield, as shown in Schedule RBH-R12.

<sup>260</sup> See Schedule RBH-R11.

<sup>261</sup> See Schedule RBH-R11.

1                                    **Table 9: Summary of Bond Yield Risk Premium Results<sup>262</sup>**

Treasury Yield	Return on Equity
Current 30-Year Treasury (3.04%)	10.10%
Near Term Projected 30-Year Treasury (3.68%)	10.20%
Long Term Projected 30-Year Treasury (5.45%)	10.86%

2                    **Q.    Have you considered whether your recommended returns meet the**  
3 **standard of a fair rate of return?**

4                    A.    Yes. As I noted in my Direct Testimony, my recommendation is based  
5 upon my understanding of the *Hope* and *Bluefield* cases, wherein those decisions  
6 established the standards for determining a fair and reasonable allowed Return on Equity  
7 including: consistency of the allowed return with other businesses having similar risk;  
8 adequacy of the return to provide access to capital and support credit quality; and that the  
9 end result must lead to just and reasonable rates.<sup>263</sup>

10                   My assessment also reflects the Company's need to attract capital at terms similar  
11 to those offered to companies of comparable risk. A recommendation that diminishes the  
12 Company's ability to compete for capital in the open market does not meet the  
13 "comparable company" standard.

**VIII. CONCLUSIONS AND RECOMMENDATION**

14                   **Q.    What is your conclusion regarding the Company's Cost of Equity?**

15                   A.    My updated analytical results are provided in Section VIII. Based on the  
16 analyses discussed throughout my Rebuttal Testimony, I conclude that the reasonable

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<sup>262</sup> See Schedule RBH-R12.

<sup>263</sup> See, Direct Testimony of Robert B. Hevert, at 6.

Rebuttal Testimony of  
Robert B. Hevert

1 range of ROE estimates is from 10.20 percent to 10.60 percent, and within that range,  
2 10.40 percent is a reasonable and appropriate estimate of the Company's Cost of Equity.  
3 The results of the updated DCF, CAPM, and Bond Yield Plus Risk Premium analyses  
4 support the reasonableness of my range of ROE estimates and my recommendation.

5 **Q. Does this conclude your Rebuttal Testimony?**

6 **A. Yes, it does.**

Constant Growth Discounted Cash Flow Model  
30 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
Alliant Energy Corporation	LNT	\$2.04	\$60.06	3.40%	3.49%	4.80%	4.90%	6.00%	5.23%	8.28%	8.72%	9.50%
Ameren Corporation	AEE	\$1.64	\$41.30	3.97%	4.11%	8.30%	8.90%	4.50%	7.23%	8.56%	11.35%	13.05%
American Electric Power Company, Inc.	AEP	\$2.12	\$56.09	3.78%	3.87%	4.90%	4.97%	4.50%	4.79%	8.36%	8.66%	8.84%
CMS Energy Corporation	CMS	\$1.08	\$31.78	3.40%	3.51%	6.10%	6.80%	6.50%	6.47%	9.60%	9.98%	10.31%
DTE Energy Company	DTE	\$2.76	\$80.22	3.44%	3.55%	6.20%	5.87%	6.50%	6.19%	9.41%	9.74%	10.05%
Duke Energy Corporation	DUK	\$3.18	\$79.74	3.99%	4.08%	4.70%	4.76%	5.00%	4.82%	8.78%	8.90%	9.09%
Empire District Electric Company	EDE	\$1.04	\$26.93	3.86%	3.93%	3.00%	3.00%	4.00%	3.33%	6.92%	7.26%	7.94%
Great Plains Energy Inc.	GXP	\$0.98	\$26.00	3.77%	3.87%	5.00%	5.00%	6.00%	5.33%	8.86%	9.20%	9.88%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$27.41	4.52%	4.61%	4.00%	4.00%	4.00%	4.00%	8.61%	8.61%	8.61%
IDACORP, Inc.	IDA	\$1.88	\$59.53	3.16%	3.21%	4.00%	4.00%	1.50%	3.17%	4.68%	6.37%	7.22%
NextEra Energy, Inc.	NEE	\$2.90	\$98.23	2.95%	3.05%	6.60%	6.47%	6.00%	6.36%	9.04%	9.40%	9.65%
Northeast Utilities	NU	\$1.57	\$48.36	3.25%	3.36%	6.70%	6.16%	8.00%	6.95%	9.51%	10.31%	11.38%
OGE Energy Corp.	OGE	\$1.00	\$36.61	2.73%	2.82%	6.50%	7.05%	5.50%	6.35%	8.31%	9.17%	9.88%
Otter Tail Corporation	OTTR	\$1.21	\$29.43	4.11%	4.33%	NA	6.00%	15.50%	10.75%	10.23%	15.08%	19.93%
Pinnacle West Capital Corporation	PNW	\$2.38	\$59.44	4.00%	4.08%	4.00%	3.95%	4.00%	3.98%	8.03%	8.07%	8.08%
PNM Resources, Inc.	PNM	\$0.74	\$27.73	2.67%	2.79%	8.50%	8.34%	11.00%	9.28%	11.12%	12.07%	13.82%
Portland General Electric Company	POR	\$1.12	\$35.16	3.19%	3.29%	7.80%	7.83%	5.00%	6.88%	8.26%	10.17%	11.14%
Southern Company	SO	\$2.10	\$46.55	4.51%	4.59%	3.60%	3.62%	3.50%	3.57%	8.09%	8.17%	8.21%
TECO Energy, Inc.	TE	\$0.88	\$19.00	4.63%	4.76%	6.50%	6.43%	3.50%	5.48%	8.21%	10.23%	11.28%
Westar Energy, Inc.	WR	\$1.40	\$36.85	3.80%	3.88%	3.80%	3.20%	6.00%	4.33%	7.06%	8.21%	9.91%
Xcel Energy Inc.	XEL	\$1.20	\$32.69	3.67%	3.76%	4.20%	4.51%	5.50%	4.74%	7.95%	8.49%	9.27%
PROXY GROUP MEAN				3.66%	3.76%	5.46%	5.51%	5.81%	5.68%	8.47%	9.44%	10.34%
PROXY GROUP MEDIAN				3.77%	3.87%	4.95%	5.00%	5.50%	5.33%	8.36%	9.17%	9.88%

Notes:

- [1] Source: Bloomberg Professional Service
- [2] Source: Bloomberg Professional Service, equals 30-trading day average as of November 14, 2014
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [8])
- [5] Source: Zacks
- [6] Source: Yahoo! Finance
- [7] Source: Value Line
- [8] Equals Average([5], [6], [7])
- [9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model  
90 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
Alliant Energy Corporation	LNT	\$2.04	\$58.31	3.50%	3.59%	4.80%	4.90%	6.00%	5.23%	8.38%	8.82%	9.60%
Ameren Corporation	AEE	\$1.64	\$39.75	4.13%	4.27%	8.30%	8.90%	4.50%	7.23%	8.72%	11.51%	13.21%
American Electric Power Company, Inc.	AEP	\$2.12	\$53.81	3.94%	4.03%	4.90%	4.97%	4.50%	4.79%	8.53%	8.82%	9.01%
CMS Energy Corporation	CMS	\$1.08	\$30.47	3.55%	3.66%	6.10%	6.80%	6.50%	6.47%	9.75%	10.13%	10.47%
DTE Energy Company	DTE	\$2.76	\$77.50	3.56%	3.67%	6.20%	5.87%	6.50%	6.19%	9.54%	9.86%	10.18%
Duke Energy Corporation	DUK	\$3.18	\$75.35	4.22%	4.32%	4.70%	4.76%	5.00%	4.82%	9.02%	9.14%	9.33%
Empire District Electric Company	EDE	\$1.04	\$25.68	4.05%	4.12%	3.00%	3.00%	4.00%	3.33%	7.11%	7.45%	8.13%
Great Plains Energy Inc.	GXP	\$0.98	\$25.46	3.85%	3.95%	5.00%	5.00%	6.00%	5.33%	8.94%	9.28%	9.96%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$25.74	4.82%	4.91%	4.00%	4.00%	4.00%	4.00%	8.91%	8.91%	8.91%
IDACORP, Inc.	IDA	\$1.88	\$56.39	3.33%	3.39%	4.00%	4.00%	1.50%	3.17%	4.86%	6.55%	7.40%
NextEra Energy, Inc.	NEE	\$2.90	\$96.84	2.99%	3.09%	6.60%	6.47%	6.00%	6.36%	9.08%	9.45%	9.69%
Northeast Utilities	NU	\$1.57	\$46.03	3.41%	3.53%	6.70%	6.16%	8.00%	6.95%	9.68%	10.48%	11.55%
OGE Energy Corp.	OGE	\$1.00	\$36.65	2.73%	2.82%	6.50%	7.05%	5.50%	6.35%	8.30%	9.17%	9.87%
Otter Tail Corporation	OTTR	\$1.21	\$28.51	4.24%	4.47%	NA	6.00%	15.50%	10.75%	10.37%	15.22%	20.07%
Pinnacle West Capital Corporation	PNW	\$2.38	\$56.85	4.19%	4.27%	4.00%	3.95%	4.00%	3.98%	8.22%	8.25%	8.27%
PNM Resources, Inc.	PNM	\$0.74	\$26.68	2.77%	2.90%	8.50%	8.34%	11.00%	9.28%	11.23%	12.18%	13.93%
Portland General Electric Company	POR	\$1.12	\$33.78	3.32%	3.43%	7.80%	7.83%	5.00%	6.88%	8.40%	10.31%	11.28%
Southern Company	SO	\$2.10	\$44.77	4.69%	4.77%	3.60%	3.62%	3.50%	3.57%	8.27%	8.35%	8.40%
TECO Energy, Inc.	TE	\$0.88	\$18.10	4.86%	4.99%	6.50%	6.43%	3.50%	5.48%	8.45%	10.47%	11.52%
Westar Energy, Inc.	WR	\$1.40	\$36.27	3.86%	3.94%	3.80%	3.20%	6.00%	4.33%	7.12%	8.28%	9.98%
Xcel Energy Inc.	XEL	\$1.20	\$31.70	3.79%	3.88%	4.20%	4.51%	5.50%	4.74%	8.07%	8.61%	9.39%
PROXY GROUP MEAN				3.80%	3.91%	5.46%	5.51%	5.81%	5.68%	8.62%	9.58%	10.48%
PROXY GROUP MEDIAN				3.85%	3.94%	4.95%	5.00%	5.50%	5.33%	8.53%	9.17%	9.87%

Notes:

- [1] Source: Bloomberg Professional Service
- [2] Source: Bloomberg Professional Service, equals 90-trading day average as of November 14, 2014
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [8])
- [5] Source: Zacks
- [6] Source: Yahoo! Finance
- [7] Source: Value Line
- [8] Equals Average([5], [6], [7])
- [9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model  
160 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
Alliant Energy Corporation	LNT	\$2.04	\$57.79	3.53%	3.62%	4.80%	4.90%	6.00%	5.23%	8.41%	8.86%	9.64%
Ameren Corporation	AEE	\$1.64	\$39.88	4.11%	4.26%	8.30%	8.90%	4.50%	7.23%	8.70%	11.49%	13.19%
American Electric Power Company, Inc.	AEP	\$2.12	\$52.99	4.00%	4.10%	4.90%	4.97%	4.50%	4.79%	8.59%	8.89%	9.07%
CMS Energy Corporation	CMS	\$1.08	\$29.99	3.60%	3.72%	6.10%	6.80%	6.50%	6.47%	9.81%	10.18%	10.52%
DTE Energy Company	DTE	\$2.76	\$76.33	3.62%	3.73%	6.20%	5.87%	6.50%	6.19%	9.59%	9.92%	10.23%
Duke Energy Corporation	DUK	\$3.18	\$73.44	4.33%	4.43%	4.70%	4.76%	5.00%	4.82%	9.13%	9.25%	9.44%
Empire District Electric Company	EDE	\$1.04	\$24.95	4.17%	4.24%	3.00%	3.00%	4.00%	3.33%	7.23%	7.57%	8.25%
Great Plains Energy Inc.	GXP	\$0.98	\$25.84	3.79%	3.89%	5.00%	5.00%	6.00%	5.33%	8.89%	9.23%	9.91%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$25.13	4.93%	5.03%	4.00%	4.00%	4.00%	4.00%	9.03%	9.03%	9.03%
IDACORP, Inc.	IDA	\$1.88	\$55.86	3.37%	3.42%	4.00%	4.00%	1.50%	3.17%	4.89%	6.59%	7.43%
NextEra Energy, Inc.	NEE	\$2.90	\$96.70	3.00%	3.09%	6.60%	6.47%	6.00%	6.36%	9.09%	9.45%	9.70%
Northeast Utilities	NU	\$1.57	\$45.79	3.43%	3.55%	6.70%	6.16%	8.00%	6.95%	9.69%	10.50%	11.57%
OGE Energy Corp.	OGE	\$1.00	\$38.62	2.73%	2.82%	6.50%	7.05%	5.50%	6.35%	8.31%	9.17%	9.88%
Otter Tail Corporation	OTTR	\$1.21	\$29.00	4.17%	4.40%	NA	6.00%	15.50%	10.75%	10.30%	15.15%	20.00%
Pinnacle West Capital Corporation	PNW	\$2.38	\$56.05	4.25%	4.33%	4.00%	3.95%	4.00%	3.98%	8.28%	8.31%	8.33%
PNM Resources, Inc.	PNM	\$0.74	\$27.21	2.72%	2.85%	8.50%	8.34%	11.00%	9.28%	11.17%	12.13%	13.87%
Portland General Electric Company	POR	\$1.12	\$33.29	3.36%	3.48%	7.80%	7.83%	5.00%	6.88%	8.45%	10.36%	11.33%
Southern Company	SO	\$2.10	\$44.36	4.73%	4.82%	3.60%	3.62%	3.50%	3.57%	8.32%	8.39%	8.44%
TECO Energy, Inc.	TE	\$0.88	\$17.77	4.95%	5.09%	6.50%	6.43%	3.50%	5.48%	8.54%	10.57%	11.61%
Westar Energy, Inc.	WR	\$1.40	\$35.95	3.89%	3.98%	3.80%	3.20%	6.00%	4.33%	7.16%	8.31%	10.01%
Xcel Energy Inc.	XEL	\$1.20	\$31.26	3.84%	3.93%	4.20%	4.51%	5.50%	4.74%	8.12%	8.67%	9.44%
PROXY GROUP MEAN				3.83%	3.94%	5.46%	5.51%	5.81%	5.68%	8.65%	9.62%	10.52%
PROXY GROUP MEDIAN				3.84%	3.93%	4.95%	5.00%	5.50%	5.33%	8.59%	9.23%	9.88%

Notes:

- [1] Source: Bloomberg Professional Service
- [2] Source: Bloomberg Professional Service, equals 180-trading day average as of November 14, 2014
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [8])
- [5] Source: Zacks
- [6] Source: Yahoo! Finance
- [7] Source: Value Line
- [8] Equals Average([5], [6], [7])
- [9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model  
30 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.12	\$56.09	3.78%	3.87%	4.90%	4.97%	4.50%	4.79%	8.36%	8.66%	8.84%
Duke Energy Corporation	DUK	\$3.18	\$79.74	3.99%	4.08%	4.70%	4.76%	5.00%	4.82%	8.76%	8.90%	9.09%
Empire District Electric Company	EDE	\$1.04	\$26.93	3.86%	3.93%	3.00%	3.00%	4.00%	3.33%	6.92%	7.26%	7.94%
Great Plains Energy Inc.	GXP	\$0.98	\$26.00	3.77%	3.87%	5.00%	5.00%	6.00%	5.33%	8.86%	9.20%	9.88%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$27.41	4.52%	4.61%	4.00%	4.00%	4.00%	4.00%	8.61%	8.61%	8.61%
IDACORP, Inc.	IDA	\$1.88	\$59.53	3.16%	3.21%	4.00%	4.00%	1.50%	3.17%	4.68%	6.37%	7.22%
NextEra Energy, Inc.	NEE	\$2.90	\$98.23	2.95%	3.05%	6.60%	6.47%	6.00%	6.36%	9.04%	9.40%	9.65%
Northeast Utilities	NU	\$1.57	\$48.36	3.25%	3.36%	6.70%	6.16%	8.00%	6.95%	9.51%	10.31%	11.38%
Otter Tail Corporation	OTTR	\$1.21	\$29.43	4.11%	4.33%	NA	6.00%	15.50%	10.75%	10.23%	15.08%	19.93%
Pinnacle West Capital Corporation	PNW	\$2.38	\$59.44	4.00%	4.08%	4.00%	3.95%	4.00%	3.98%	8.03%	8.07%	8.08%
PNM Resources, Inc.	PNM	\$0.74	\$27.73	2.67%	2.79%	8.50%	8.34%	11.00%	9.28%	11.12%	12.07%	13.82%
Portland General Electric Company	POR	\$1.12	\$35.16	3.19%	3.29%	7.80%	7.83%	5.00%	6.88%	8.26%	10.17%	11.14%
Southern Company	SO	\$2.10	\$46.55	4.51%	4.59%	3.60%	3.62%	3.50%	3.57%	8.09%	8.17%	8.21%
Westar Energy, Inc.	WR	\$1.40	\$36.85	3.80%	3.88%	3.80%	3.20%	6.00%	4.33%	7.06%	8.21%	9.91%
PROXY GROUP MEAN				3.68%	3.76%	5.12%	5.09%	6.00%	5.54%	8.40%	9.32%	10.26%
PROXY GROUP MEDIAN				3.79%	3.88%	4.70%	4.87%	5.00%	4.81%	8.49%	8.76%	9.37%

Notes:

- [1] Source: Bloomberg Professional Service  
[2] Source: Bloomberg Professional Service, equals 30-trading day average as of November 14, 2014  
[3] Equals [1] / [2]  
[4] Equals [3] x (1 + 0.5 x [8])  
[5] Source: Zacks  
[6] Source: Yahoo! Finance  
[7] Source: Value Line  
[8] Equals Average([5], [6], [7])  
[9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])  
[10] Equals [4] + [8]  
[11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model  
90 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.12	\$53.81	3.94%	4.03%	4.90%	4.97%	4.50%	4.79%	8.53%	8.82%	9.01%
Duke Energy Corporation	DUK	\$3.18	\$75.35	4.22%	4.32%	4.70%	4.76%	5.00%	4.82%	9.02%	9.14%	9.33%
Empire District Electric Company	EDE	\$1.04	\$25.68	4.05%	4.12%	3.00%	3.00%	4.00%	3.33%	7.11%	7.45%	8.13%
Great Plains Energy Inc.	GXP	\$0.98	\$25.46	3.85%	3.95%	5.00%	5.00%	6.00%	5.33%	8.94%	9.28%	9.96%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$25.74	4.82%	4.91%	4.00%	4.00%	4.00%	4.00%	8.91%	8.91%	8.91%
IDACORP, Inc.	IDA	\$1.88	\$56.39	3.33%	3.39%	4.00%	4.00%	1.50%	3.17%	4.86%	6.55%	7.40%
NextEra Energy, Inc.	NEE	\$2.90	\$96.64	2.99%	3.09%	6.60%	6.47%	6.00%	6.36%	9.08%	9.45%	9.69%
Northeast Utilities	NU	\$1.57	\$46.03	3.41%	3.53%	6.70%	6.16%	8.00%	6.95%	9.68%	10.48%	11.55%
Otter Tail Corporation	OTTR	\$1.21	\$28.51	4.24%	4.47%	NA	6.00%	15.50%	10.75%	10.37%	15.22%	20.07%
Pinnacle West Capital Corporation	PNW	\$2.38	\$56.85	4.19%	4.27%	4.00%	3.95%	4.00%	3.98%	8.22%	8.25%	8.27%
PNM Resources, Inc.	PNM	\$0.74	\$26.68	2.77%	2.90%	8.50%	8.34%	11.00%	9.28%	11.23%	12.18%	13.93%
Portland General Electric Company	POR	\$1.12	\$33.78	3.32%	3.43%	7.80%	7.83%	5.00%	6.88%	8.40%	10.31%	11.28%
Southern Company	SO	\$2.10	\$44.77	4.69%	4.77%	3.60%	3.62%	3.50%	3.57%	8.27%	8.35%	8.40%
Westar Energy, Inc.	WR	\$1.40	\$36.27	3.86%	3.94%	3.80%	3.20%	6.00%	4.33%	7.12%	8.28%	9.98%
PROXY GROUP MEAN				3.83%	3.94%	5.12%	5.09%	6.00%	5.54%	8.55%	9.48%	10.42%
PROXY GROUP MEDIAN				3.90%	3.99%	4.70%	4.87%	5.00%	4.81%	8.72%	9.03%	9.51%

Notes:

- [1] Source: Bloomberg Professional Service
- [2] Source: Bloomberg Professional Service, equals 90-trading day average as of November 14, 2014
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [8])
- [5] Source: Zacks
- [6] Source: Yahoo! Finance
- [7] Source: Value Line
- [8] Equals Average([5], [6], [7])
- [9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])



Constant Growth Discounted Cash Flow Model  
180 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.12	\$52.99	4.00%	4.10%	4.90%	4.97%	4.50%	4.79%	8.59%	8.89%	9.07%
Duke Energy Corporation	DUK	\$3.18	\$73.44	4.33%	4.43%	4.70%	4.76%	5.00%	4.82%	9.13%	9.25%	9.44%
Empire District Electric Company	EDE	\$1.04	\$24.95	4.17%	4.24%	3.00%	3.00%	4.00%	3.33%	7.23%	7.57%	8.25%
Great Plains Energy Inc.	GXP	\$0.98	\$25.84	3.79%	3.89%	5.00%	5.00%	6.00%	5.33%	8.89%	9.23%	9.91%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$25.13	4.93%	5.03%	4.00%	4.00%	4.00%	4.00%	9.03%	9.03%	9.03%
IDACORP, Inc.	IDA	\$1.88	\$55.86	3.37%	3.42%	4.00%	4.00%	1.50%	3.17%	4.89%	6.59%	7.43%
NextEra Energy, Inc.	NEE	\$2.90	\$96.70	3.00%	3.09%	6.60%	6.47%	6.00%	6.36%	9.09%	9.45%	9.70%
Northeast Utilities	NU	\$1.57	\$45.79	3.43%	3.55%	6.70%	6.16%	8.00%	6.95%	9.69%	10.50%	11.57%
Otter Tail Corporation	OTTR	\$1.21	\$29.00	4.17%	4.40%	NA	6.00%	15.50%	10.75%	10.30%	15.15%	20.00%
Pinnacle West Capital Corporation	PNW	\$2.38	\$56.05	4.25%	4.33%	4.00%	3.95%	4.00%	3.98%	8.28%	8.31%	8.33%
PNM Resources, Inc.	PNM	\$0.74	\$27.21	2.72%	2.85%	8.50%	8.34%	11.00%	9.28%	11.17%	12.13%	13.87%
Portland General Electric Company	POR	\$1.12	\$33.29	3.36%	3.48%	7.80%	7.83%	5.00%	6.88%	8.45%	10.36%	11.33%
Southern Company	SO	\$2.10	\$44.36	4.73%	4.82%	3.60%	3.62%	3.50%	3.57%	8.32%	8.39%	8.44%
Westar Energy, Inc.	WR	\$1.40	\$35.95	3.89%	3.98%	3.80%	3.20%	6.00%	4.33%	7.16%	8.31%	10.01%
PROXY GROUP MEAN				3.87%	3.97%	5.12%	5.09%	6.00%	5.54%	8.59%	9.51%	10.46%
PROXY GROUP MEDIAN				3.95%	4.04%	4.70%	4.87%	5.00%	4.81%	8.74%	9.13%	9.57%

Notes:

- [1] Source: Bloomberg Professional Service
- [2] Source: Bloomberg Professional Service, equals 180-trading day average as of November 14, 2014
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [8])
- [5] Source: Zacks
- [6] Source: Yahoo! Finance
- [7] Source: Value Line
- [8] Equals Average([5], [6], [7])
- [9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

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

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	
Stock	EPS Growth Rate	Estimates	Long-Term	Payout Ratio	Iterative Solution	Terminal P/E	Terminal PEG							
Company	Ticker	Price	Zacks	First Call	Line	Average	Growth	2014	2018	2024	Proof	IRR	Re50	Re50
Alliant Energy Corporation	LNT	\$69.06	4.80%	4.90%	6.00%	5.23%	5.63%	59.00%	60.00%	67.23%	(\$0.00)	9.68%	17.53	3.12
Ameren Corporation	AEE	\$41.30	8.30%	8.50%	4.50%	7.23%	5.63%	68.00%	59.00%	67.23%	(\$0.00)	9.55%	16.37	2.91
American Electric Power Company, Inc.	AEP	\$58.09	4.90%	4.97%	4.50%	4.79%	5.63%	61.00%	63.00%	67.23%	(\$0.00)	9.73%	17.31	3.03
CMS Energy Corporation	CMS	\$31.78	6.10%	6.80%	6.50%	6.47%	5.63%	60.00%	58.00%	67.23%	(\$0.00)	9.82%	16.95	3.01
DTE Energy Company	DTE	\$80.22	6.20%	5.87%	6.50%	6.19%	5.63%	57.00%	58.00%	67.23%	(\$0.00)	9.31%	19.29	3.43
Duke Energy Corporation	DUK	\$79.74	4.70%	4.76%	5.00%	4.82%	5.63%	71.00%	64.00%	67.23%	(\$0.00)	9.29%	19.41	3.45
Empire District Electric Company	EDE	\$26.93	3.00%	3.00%	4.00%	3.33%	5.63%	66.00%	63.00%	67.23%	\$0.00	9.23%	19.69	3.60
Great Plains Energy Inc.	GXP	\$26.00	5.00%	5.00%	6.00%	5.33%	5.63%	58.00%	62.00%	67.23%	\$0.00	10.26%	15.25	2.71
Hawaiian Electric Industries, Inc.	HE	\$27.41	4.00%	4.00%	4.00%	4.00%	5.63%	70.00%	65.00%	67.23%	\$0.00	9.77%	17.10	3.05
IDACORP, Inc.	IDA	\$59.53	4.00%	4.00%	1.50%	3.17%	5.63%	51.00%	58.00%	67.23%	(\$0.00)	8.49%	18.38	3.27
NextEra Energy, Inc.	NEE	\$58.23	6.60%	6.47%	6.00%	6.56%	5.63%	61.00%	57.00%	67.23%	(\$0.00)	9.54%	18.16	3.23
Northeast Utilities	NU	\$43.38	6.70%	6.16%	8.00%	8.95%	5.63%	60.00%	58.00%	67.23%	(\$0.00)	9.89%	16.65	2.98
OGE Energy Corp	OGE	\$39.61	6.50%	7.05%	5.50%	6.35%	5.63%	47.00%	54.00%	67.23%	(\$0.00)	9.75%	17.23	3.06
Older Tail Corporation	OTTR	\$20.43	NA	6.00%	15.50%	10.75%	5.63%	70.00%	59.00%	67.23%	(\$0.00)	10.64%	14.17	2.52
Pinnacle West Capital Corporation	PNW	\$59.44	4.00%	3.95%	4.00%	3.95%	5.63%	63.00%	65.00%	67.23%	\$0.00	9.83%	16.72	2.97
PNM Resources, Inc.	PNM	\$27.73	8.50%	8.34%	11.00%	9.26%	5.63%	50.00%	49.00%	67.23%	(\$0.00)	10.35%	14.94	2.65
Portland General Electric Company	POR	\$35.16	7.60%	7.83%	5.00%	6.88%	5.63%	50.00%	54.00%	67.23%	(\$0.00)	9.70%	17.43	3.10
Southern Company	SO	\$46.55	3.60%	3.62%	3.50%	3.57%	5.63%	74.00%	72.00%	67.23%	\$0.00	9.62%	17.78	3.16
TECO Energy, Inc.	TE	\$19.00	8.50%	6.43%	3.50%	5.48%	5.63%	93.00%	71.00%	67.23%	\$0.00	9.46%	18.44	3.28
Westar Energy, Inc.	WR	\$30.65	3.80%	3.20%	6.00%	4.33%	5.63%	59.00%	55.00%	67.23%	(\$0.00)	9.85%	16.81	2.99
Xcel Energy Inc.	XEL	\$32.69	4.20%	4.51%	5.50%	4.74%	5.63%	61.00%	60.00%	67.23%	(\$0.00)	9.81%	16.67	3.02

DCF Result

Mean	9.77%	17.27	3.07
Max	10.64%	19.69	3.50
Min	9.29%	14.17	2.52

Projected Annual Earnings per Share

Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Alliant Energy Corporation	LNT	\$3.29	\$3.46	\$3.64	\$3.83	\$4.03	\$4.25	\$4.47	\$4.71	\$4.96	\$5.23	\$5.52	\$5.83	\$6.16	\$6.51	\$6.87	\$7.26	\$7.67
Ameren Corporation	AEE	\$2.10	\$2.25	\$2.41	\$2.59	\$2.78	\$2.98	\$3.19	\$3.41	\$3.64	\$3.87	\$4.10	\$4.33	\$4.57	\$4.83	\$5.10	\$5.39	\$5.69
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.66	\$3.83	\$4.02	\$4.21	\$4.42	\$4.65	\$4.89	\$5.15	\$5.45	\$5.78	\$6.08	\$6.42	\$6.78	\$7.16
CMS Energy Corporation	CMS	\$1.66	\$1.77	\$1.88	\$2.00	\$2.13	\$2.27	\$2.42	\$2.57	\$2.73	\$2.89	\$3.06	\$3.23	\$3.41	\$3.60	\$3.81	\$4.02	\$4.25
DTE Energy Company	DTE	\$3.76	\$3.99	\$4.24	\$4.50	\$4.78	\$5.08	\$5.39	\$5.72	\$6.06	\$6.41	\$6.78	\$7.16	\$7.59	\$8.04	\$8.52	\$9.02	\$9.42
Duke Energy Corporation	DUK	\$3.69	\$4.17	\$4.37	\$4.58	\$4.80	\$5.04	\$5.28	\$5.54	\$5.83	\$6.14	\$6.47	\$6.84	\$7.22	\$7.63	\$8.06	\$8.51	\$8.99
Empire District Electric Company	EDE	\$1.43	\$1.53	\$1.58	\$1.63	\$1.69	\$1.74	\$1.80	\$1.87	\$1.95	\$2.04	\$2.15	\$2.27	\$2.40	\$2.53	\$2.68	\$2.82	\$2.98
Great Plains Energy Inc.	GXP	\$1.62	\$1.71	\$1.80	\$1.89	\$1.99	\$2.10	\$2.21	\$2.33	\$2.46	\$2.59	\$2.74	\$2.89	\$3.08	\$3.28	\$3.41	\$3.60	\$3.80
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.63	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25	\$3.44
IDACORP, Inc.	IDA	\$3.64	\$3.76	\$3.87	\$4.00	\$4.12	\$4.25	\$4.39	\$4.55	\$4.74	\$4.96	\$5.21	\$5.51	\$5.82	\$6.14	\$6.49	\$6.85	\$7.24
NextEra Energy, Inc.	NEE	\$4.83	\$5.14	\$5.48	\$5.81	\$6.18	\$6.57	\$6.99	\$7.43	\$7.88	\$8.34	\$8.82	\$9.32	\$9.84	\$10.40	\$10.98	\$11.60	\$12.25
Northeast Utilities	NU	\$2.49	\$2.66	\$2.85	\$3.05	\$3.28	\$3.53	\$3.73	\$3.98	\$4.23	\$4.49	\$4.78	\$5.02	\$5.31	\$5.61	\$5.92	\$6.25	\$6.61
OGE Energy Corp.	OGE	\$1.94	\$2.06	\$2.19	\$2.33	\$2.43	\$2.64	\$2.81	\$2.98	\$3.16	\$3.35	\$3.54	\$3.74	\$3.95	\$4.17	\$4.41	\$4.66	\$4.92
Older Tail Corporation	OTTR	\$1.37	\$1.52	\$1.68	\$1.85	\$2.08	\$2.28	\$2.53	\$2.77	\$3.02	\$3.25	\$3.46	\$3.66	\$3.86	\$4.08	\$4.31	\$4.55	\$4.81
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.63	\$4.83	\$5.05	\$5.30	\$5.58	\$5.90	\$6.23	\$6.58	\$6.95	\$7.34	\$7.75
PNM Resources, Inc.	PNM	\$1.41	\$1.54	\$1.68	\$1.84	\$2.01	\$2.20	\$2.40	\$2.61	\$2.81	\$3.01	\$3.20	\$3.38	\$3.57	\$3.77	\$3.98	\$4.21	\$4.45
Portland General Electric Company	POR	\$1.77	\$1.89	\$2.02	\$2.16	\$2.31	\$2.47	\$2.64	\$2.81	\$2.99	\$3.18	\$3.36	\$3.55	\$3.75	\$3.95	\$4.19	\$4.42	\$4.67
Southern Company	SO	\$2.70	\$2.80	\$2.90	\$3.00	\$3.11	\$3.22	\$3.33	\$3.47	\$3.62	\$3.79	\$3.99	\$4.21	\$4.45	\$4.70	\$4.97	\$5.25	\$5.54
TECO Energy, Inc.	TE	\$0.92	\$0.97	\$1.02	\$1.08	\$1.14	\$1.20	\$1.27	\$1.34	\$1.41	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$1.96	\$2.07	\$2.18
Westar Energy, Inc.	WR	\$2.27	\$2.37	\$2.47	\$2.58	\$2.69	\$2.81	\$2.93	\$3.06	\$3.21	\$3.38	\$3.56	\$3.76	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94
Xcel Energy Inc.	XEL	\$1.91	\$2.00	\$2.10	\$2.19	\$2.30	\$2.41	\$2.52	\$2.65	\$2.78	\$2.93	\$3.09	\$3.26	\$3.44	\$3.64	\$3.84	\$4.06	\$4.29

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Projected Annual Dividend Payout Ratio

Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Alliant Energy Corporation	LNT	59.00%	59.25%	59.50%	59.75%	60.00%	61.21%	62.41%	63.62%	64.82%	66.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Ameren Corporation	AEE	68.00%	65.75%	63.50%	61.25%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
CMS Energy Corporation	CMS	60.00%	59.80%	59.60%	59.40%	59.20%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
DTE Energy Company	DTE	57.00%	57.25%	57.50%	57.75%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.54%	65.08%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.67%	63.34%	64.02%	64.69%	65.36%	66.03%	66.70%	67.37%	68.04%	68.71%	69.38%
Hawaiian Electric Industries, Inc.	HE	76.00%	73.25%	70.50%	67.75%	65.00%	65.31%	65.74%	66.17%	66.60%	67.03%	67.46%	67.89%	68.32%	68.75%	69.18%	69.61%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.71%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
OGE Energy Corp.	OGE	47.00%	48.75%	50.50%	52.25%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Older Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	63.00%	63.60%	64.20%	64.80%	65.40%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	50.00%	49.75%	49.50%	49.25%	49.00%	52.04%	55.08%	58.12%	61.15%	64.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
TECO Energy, Inc.	TE	93.00%	87.50%	82.00%	76.50%	71.00%	70.37%	69.74%	69.12%	68.49%	67.86%	67.23%	67.2				

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

Projected Annual Cash Flows		(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
Altair Energy Corporation	LNT	\$2.04	\$2.16	\$2.28	\$2.41	\$2.55	\$2.73	\$2.94	\$3.15	\$3.39	\$3.64	\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$5.15	\$134.43	
Ameren Corporation	AEE	\$1.63	\$1.69	\$1.64	\$1.70	\$1.76	\$1.83	\$2.11	\$2.30	\$2.49	\$2.70	\$2.91	\$3.07	\$3.25	\$3.43	\$3.62	\$3.83	\$93.16	
American Electric Power Company, Inc.	AEP	\$2.03	\$2.15	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.03	\$3.22	\$3.43	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$4.82	\$124.00	
CMS Energy Corporation	CMS	\$1.05	\$1.12	\$1.18	\$1.25	\$1.32	\$1.44	\$1.57	\$1.71	\$1.85	\$2.01	\$2.17	\$2.29	\$2.42	\$2.56	\$2.70	\$2.85	\$72.01	
DTE Energy Company	DTE	\$2.28	\$2.43	\$2.59	\$2.76	\$2.94	\$3.21	\$3.49	\$3.79	\$4.12	\$4.48	\$4.82	\$5.09	\$5.37	\$5.68	\$6.00	\$6.33	\$181.70	
Duke Energy Corporation	DUK	\$2.95	\$3.03	\$3.09	\$3.16	\$3.22	\$3.41	\$3.61	\$3.82	\$4.06	\$4.32	\$4.60	\$4.85	\$5.13	\$5.42	\$5.72	\$6.04	\$174.45	
Empire District Electric Company	EDE	\$1.01	\$1.03	\$1.05	\$1.08	\$1.10	\$1.15	\$1.20	\$1.27	\$1.34	\$1.43	\$1.52	\$1.61	\$1.70	\$1.80	\$1.90	\$2.00	\$58.71	
Great Plains Energy Inc.	GXP	\$0.99	\$1.06	\$1.14	\$1.22	\$1.30	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82	\$1.95	\$2.05	\$2.17	\$2.29	\$2.42	\$2.56	\$58.02	
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.49	\$1.56	\$1.65	\$1.76	\$1.89	\$1.99	\$2.07	\$2.19	\$2.31	\$58.96	
IDACORP, Inc.	IDA	\$1.62	\$2.04	\$2.18	\$2.32	\$2.47	\$2.61	\$2.78	\$2.97	\$3.18	\$3.42	\$3.70	\$3.91	\$4.13	\$4.36	\$4.61	\$4.87	\$133.09	
NexEra Energy, Inc.	NEE	\$3.13	\$3.23	\$3.43	\$3.58	\$3.75	\$4.10	\$4.49	\$4.89	\$5.32	\$5.78	\$6.27	\$6.82	\$6.99	\$7.38	\$7.80	\$8.24	\$222.55	
Northeast Utilities	NU	\$1.80	\$1.89	\$1.80	\$1.91	\$2.02	\$2.22	\$2.43	\$2.65	\$2.88	\$3.13	\$3.38	\$3.57	\$3.77	\$3.93	\$4.21	\$4.44	\$109.93	
OGE Energy Corp.	OGE	\$0.97	\$1.07	\$1.16	\$1.30	\$1.43	\$1.58	\$1.74	\$1.92	\$2.10	\$2.30	\$2.52	\$2.66	\$2.81	\$2.95	\$3.13	\$3.31	\$54.77	
Older Tail Corporation	OTTR	\$1.05	\$1.13	\$1.20	\$1.27	\$1.35	\$1.53	\$1.71	\$1.90	\$2.09	\$2.28	\$2.48	\$2.60	\$2.74	\$2.90	\$3.05	\$3.23	\$68.16	
Pinnacle West Capital Corporation	PNW	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.02	\$3.17	\$3.34	\$3.62	\$3.73	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$5.21	\$129.60	
PNM Resources, Inc.	PNM	\$0.77	\$0.84	\$0.91	\$0.99	\$1.08	\$1.25	\$1.44	\$1.63	\$1.84	\$2.05	\$2.27	\$2.40	\$2.54	\$2.68	\$2.83	\$2.99	\$66.41	
Portland General Electric Company	POR	\$0.65	\$1.03	\$1.12	\$1.22	\$1.33	\$1.43	\$1.64	\$1.81	\$1.99	\$2.19	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.14	\$58.41	
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.32	\$2.37	\$2.44	\$2.52	\$2.61	\$2.71	\$2.83	\$2.99	\$3.16	\$3.34	\$3.53	\$3.73	\$90.27	
TECO Energy, Inc.	TE	\$0.90	\$0.90	\$0.89	\$0.87	\$0.85	\$0.89	\$0.93	\$0.97	\$1.02	\$1.07	\$1.12	\$1.18	\$1.25	\$1.32	\$1.39	\$1.47	\$40.27	
Westar Energy, Inc.	WR	\$1.37	\$1.41	\$1.46	\$1.50	\$1.54	\$1.67	\$1.81	\$1.96	\$2.13	\$2.32	\$2.53	\$2.67	\$2.82	\$2.98	\$3.14	\$3.32	\$83.04	
Xcel Energy Inc.	XEL	\$1.72	\$1.77	\$1.83	\$1.88	\$1.94	\$1.94	\$1.95	\$1.77	\$1.90	\$2.04	\$2.19	\$2.31	\$2.45	\$2.58	\$2.73	\$2.88	\$72.74	

Projected Annual Data Investor Cash Flows		(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)	(76)	(77)	(78)	(79)	(80)	(81)
Company	Ticker	Initial Outflow	11/14/14	12/31/14	6/30/15	6/30/16	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
Altair Energy Corporation	LNT	(\$60.06)	\$0.00	\$0.26	\$2.10	\$2.28	\$2.41	\$2.55	\$2.73	\$2.94	\$3.15	\$3.39	\$3.64	\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$159.59
Ameren Corporation	AEE	(\$41.50)	\$0.00	\$0.20	\$1.59	\$1.64	\$1.70	\$1.76	\$1.83	\$2.11	\$2.30	\$2.49	\$2.70	\$2.91	\$3.07	\$3.25	\$3.43	\$3.62	\$96.58
American Electric Power Company, Inc.	AEP	(\$59.09)	\$0.00	\$0.26	\$2.08	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.03	\$3.22	\$3.43	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$128.82
CMS Energy Corporation	CMS	(\$31.78)	\$0.00	\$0.14	\$1.09	\$1.18	\$1.25	\$1.32	\$1.44	\$1.57	\$1.71	\$1.85	\$2.01	\$2.17	\$2.29	\$2.42	\$2.56	\$2.70	\$74.87
DTE Energy Company	DTE	(\$50.22)	\$0.00	\$0.29	\$2.35	\$2.59	\$2.76	\$2.94	\$3.21	\$3.49	\$3.79	\$4.12	\$4.48	\$4.82	\$5.09	\$5.37	\$5.68	\$6.00	\$189.04
Duke Energy Corporation	DUK	(\$79.74)	\$0.00	\$0.38	\$3.03	\$3.09	\$3.16	\$3.22	\$3.41	\$3.61	\$3.82	\$4.06	\$4.32	\$4.60	\$4.85	\$5.13	\$5.42	\$5.72	\$160.49
Empire District Electric Company	EDE	(\$26.93)	\$0.00	\$0.13	\$1.03	\$1.05	\$1.08	\$1.10	\$1.15	\$1.20	\$1.27	\$1.34	\$1.43	\$1.52	\$1.61	\$1.70	\$1.80	\$1.90	\$60.71
Great Plains Energy Inc.	GXP	(\$26.00)	\$0.00	\$0.13	\$1.02	\$1.14	\$1.22	\$1.30	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82	\$1.95	\$2.05	\$2.17	\$2.29	\$2.42	\$60.58
Hawaiian Electric Industries, Inc.	HE	(\$27.41)	\$0.00	\$0.16	\$1.31	\$1.28	\$1.28	\$1.34	\$1.41	\$1.49	\$1.56	\$1.65	\$1.76	\$1.89	\$1.99	\$2.07	\$2.19	\$2.31	\$51.27
IDACORP, Inc.	IDA	(\$59.53)	\$0.00	\$0.25	\$1.95	\$2.18	\$2.32	\$2.47	\$2.61	\$2.78	\$2.97	\$3.18	\$3.42	\$3.70	\$3.91	\$4.13	\$4.36	\$4.61	\$137.95
NexEra Energy, Inc.	NEE	(\$58.23)	\$0.00	\$0.40	\$3.23	\$3.43	\$3.58	\$3.75	\$4.10	\$4.49	\$4.89	\$5.32	\$5.78	\$6.27	\$6.82	\$6.99	\$7.38	\$7.80	\$230.79
Northeast Utilities	NU	(\$48.35)	\$0.00	\$0.21	\$1.65	\$1.80	\$1.91	\$2.02	\$2.22	\$2.43	\$2.65	\$2.88	\$3.13	\$3.38	\$3.57	\$3.77	\$3.99	\$4.21	\$114.43
OGE Energy Corp.	OGE	(\$39.61)	\$0.00	\$0.12	\$1.00	\$1.18	\$1.30	\$1.43	\$1.58	\$1.74	\$1.92	\$2.10	\$2.30	\$2.52	\$2.66	\$2.81	\$2.95	\$3.13	\$53.08
Older Tail Corporation	OTTR	(\$29.43)	\$0.00	\$0.14	\$1.12	\$1.20	\$1.27	\$1.35	\$1.53	\$1.71	\$1.90	\$2.09	\$2.28	\$2.46	\$2.60	\$2.74	\$2.90	\$3.06	\$71.39
Pinnacle West Capital Corporation	PNW	(\$59.44)	\$0.00	\$0.31	\$2.45	\$2.63	\$2.76	\$2.89	\$3.02	\$3.17	\$3.34	\$3.52	\$3.73	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$134.81
PNM Resources, Inc.	PNM	(\$27.73)	\$0.00	\$0.10	\$0.81	\$0.91	\$0.99	\$1.08	\$1.25	\$1.44	\$1.63	\$1.84	\$2.05	\$2.27	\$2.40	\$2.54	\$2.68	\$2.83	\$69.40
Portland General Electric Company	POR	(\$35.15)	\$0.00	\$0.12	\$0.98	\$1.12	\$1.22	\$1.33	\$1.43	\$1.64	\$1.81	\$1.99	\$2.19	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$54.55
Southern Company	SO	(\$46.55)	\$0.00	\$0.27	\$2.11	\$2.19	\$2.25	\$2.32	\$2.37	\$2.44	\$2.52	\$2.61	\$2.71	\$2.83	\$2.99	\$3.16	\$3.34	\$3.53	\$102.24
TECO Energy, Inc.	TE	(\$19.00)	\$0.00	\$0.12	\$0.93	\$0.89	\$0.87	\$0.85	\$0.89	\$0.93	\$0.97	\$1.02	\$1.07	\$1.12	\$1.18	\$1.25	\$1.32	\$1.39	\$41.74
Westar Energy, Inc.	WR	(\$39.55)	\$0.00	\$0.18	\$1.40	\$1.46	\$1.50	\$1.54	\$1.67	\$1.81	\$1.96	\$2.13	\$2.32	\$2.53	\$2.67	\$2.82	\$2.98	\$3.14	\$86.38
Xcel Energy Inc.	XEL	(\$32.89)	\$0.00	\$0.16	\$1.25	\$1.33	\$1.38	\$1.44	\$1.54	\$1.65	\$1.77	\$1.90	\$2.04	\$2.19	\$2.31	\$2.45	\$2.58	\$2.73	\$75.62

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

Inputs		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Stock		EPS Growth Rate Estimates				Long-Term		Payout Ratio		Iterative Solution	Terminal	(13)		
Company	Ticker	Price	Zacks	First Call	Value	High	Growth	2014	2018	2024	Proof	IRR	P/E Ratio	PEG Ratio
Akiant Energy Corporation	LNT	\$60.06	4.60%	4.50%	6.00%	6.00%	6.63%	59.00%	60.00%	67.23%	(\$0.00)	9.60%	16.64	2.56
Ameren Corporation	AEE	\$41.30	8.30%	8.50%	4.50%	8.50%	6.63%	68.00%	59.00%	67.23%	(\$0.00)	10.47%	14.67	2.61
American Electric Power Company, Inc.	AEP	\$56.09	4.50%	4.97%	4.50%	4.97%	6.63%	61.00%	63.00%	67.23%	(\$0.00)	9.76%	17.09	3.04
CMS Energy Corporation	CMS	\$31.78	6.10%	6.80%	6.50%	6.60%	6.63%	60.00%	58.00%	67.23%	(\$0.00)	9.91%	16.58	2.95
DTE Energy Company	DTE	\$60.22	6.20%	5.87%	6.50%	6.50%	6.63%	57.00%	58.00%	67.23%	(\$0.00)	9.39%	18.88	3.36
Duke Energy Corporation	DUK	\$79.74	4.70%	4.70%	5.00%	5.00%	6.63%	71.00%	64.00%	67.23%	(\$0.00)	9.33%	19.17	3.41
Empire District Electric Company	EDE	\$26.93	3.00%	3.00%	4.00%	4.00%	6.63%	68.00%	63.00%	67.23%	\$0.00	9.41%	18.78	3.34
Great Plains Energy Inc.	GXP	\$26.00	5.00%	5.00%	6.00%	6.00%	6.63%	58.00%	62.00%	67.23%	\$0.00	10.60%	14.58	2.59
Hawaiian Electric Industries, Inc.	HE	\$27.41	4.00%	4.00%	4.00%	4.00%	6.63%	76.00%	65.00%	67.23%	\$0.00	9.77%	17.10	3.05
IDACORP, Inc.	IDA	\$59.63	4.00%	4.00%	1.50%	4.00%	6.63%	51.00%	59.00%	67.23%	(\$0.00)	9.72%	17.34	3.03
NextEra Energy, Inc.	NEE	\$59.23	6.00%	6.00%	8.47%	6.00%	6.63%	61.00%	57.00%	67.23%	(\$0.00)	9.60%	17.68	3.17
Northeast Utilities	NU	\$49.59	6.70%	6.16%	6.00%	6.00%	6.63%	60.00%	58.00%	67.23%	(\$0.00)	10.20%	15.53	2.76
OG&E Energy Corp.	OG&E	\$39.61	6.50%	7.05%	5.50%	5.50%	6.63%	47.00%	54.00%	67.23%	(\$0.00)	9.55%	16.45	2.92
Other Tail Corporation	OTTR	\$29.43	NA	6.00%	15.50%	15.50%	6.63%	70.00%	59.00%	67.23%	(\$0.00)	12.31%	10.63	1.69
Pinnacle West Capital Corporation	PNW	\$59.44	4.00%	3.95%	4.00%	4.00%	6.63%	63.00%	65.00%	67.23%	\$0.00	9.68%	16.70	2.97
PNM Resources, Inc.	PNM	\$27.73	8.50%	8.34%	11.00%	11.00%	6.63%	50.00%	49.00%	67.23%	(\$0.00)	10.92%	13.41	2.38
Portland General Electric Company	POR	\$35.16	7.80%	7.83%	5.00%	7.83%	6.63%	50.00%	54.00%	67.23%	(\$0.00)	9.97%	16.37	2.91
Southern Company	SO	\$49.55	3.60%	3.62%	3.50%	3.62%	6.63%	74.00%	72.00%	67.23%	\$0.00	9.64%	17.72	3.15
TECO Energy, Inc.	TE	\$19.00	6.50%	6.43%	3.50%	6.50%	6.63%	93.00%	71.00%	67.23%	\$0.00	9.76%	17.17	3.05
Westar Energy, Inc.	WR	\$39.65	3.80%	3.20%	6.00%	6.00%	6.63%	58.00%	55.00%	67.23%	(\$0.00)	10.36%	15.02	2.67
Xcel Energy Inc.	XEL	\$32.69	4.20%	4.51%	5.50%	5.50%	6.63%	61.00%	60.00%	67.23%	(\$0.00)	10.04%	18.11	2.86
DCF Result														
Mean			10.04%		16.37		2.91							
Max			12.31%		19.17		3.41							
Min			9.33%		10.63		1.69							

Projected Annual Earnings per Share		(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Akiant Energy Corporation	LNT	\$3.29	\$3.49	\$3.70	\$3.92	\$4.15	\$4.40	\$4.67	\$4.94	\$5.23	\$5.53	\$5.85	\$6.18	\$6.53	\$6.89	\$7.28	\$7.69	\$8.13
Ameren Corporation	AEE	\$2.10	\$2.29	\$2.49	\$2.71	\$2.95	\$3.22	\$3.50	\$3.79	\$4.08	\$4.36	\$4.64	\$4.90	\$5.17	\$5.46	\$5.77	\$6.10	\$6.44
American Electric Power Company, Inc.	AEP	\$3.18	\$3.34	\$3.50	\$3.68	\$3.86	\$4.05	\$4.27	\$4.71	\$4.95	\$5.23	\$5.52	\$5.84	\$6.18	\$6.51	\$6.88	\$7.26	\$7.68
CMS Energy Corporation	CMS	\$1.66	\$1.77	\$1.89	\$2.02	\$2.16	\$2.31	\$2.46	\$2.63	\$2.79	\$2.95	\$3.14	\$3.31	\$3.50	\$3.69	\$3.90	\$4.12	\$4.35
DTE Energy Company	DTE	\$3.76	\$4.00	\$4.26	\$4.54	\$4.84	\$5.15	\$5.49	\$5.83	\$6.19	\$6.56	\$6.94	\$7.33	\$7.75	\$8.18	\$8.64	\$9.13	\$9.64
Duke Energy Corporation	DUK	\$3.98	\$4.18	\$4.39	\$4.61	\$4.84	\$5.08	\$5.33	\$5.61	\$5.90	\$6.22	\$6.56	\$6.93	\$7.32	\$7.73	\$8.17	\$8.63	\$9.11
Empire District Electric Company	EDE	\$1.48	\$1.64	\$1.80	\$1.96	\$2.13	\$2.30	\$2.47	\$2.65	\$2.84	\$3.04	\$3.25	\$3.47	\$3.70	\$3.94	\$4.19	\$4.45	\$4.72
Great Plains Energy Inc.	GXP	\$1.82	\$1.72	\$1.62	\$1.53	\$2.05	\$2.17	\$2.30	\$2.43	\$2.58	\$2.73	\$2.88	\$3.04	\$3.21	\$3.40	\$3.59	\$3.79	\$4.00
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25	\$3.44
IDACORP, Inc.	IDA	\$3.64	\$3.79	\$3.94	\$4.09	\$4.26	\$4.43	\$4.61	\$4.80	\$5.03	\$5.28	\$5.56	\$5.87	\$6.20	\$6.54	\$6.92	\$7.31	\$7.72
NextEra Energy, Inc.	NEE	\$4.83	\$5.15	\$5.49	\$5.85	\$6.24	\$6.65	\$7.09	\$7.54	\$8.01	\$8.49	\$8.99	\$9.49	\$10.03	\$10.59	\$11.19	\$11.82	\$12.48
Northeast Utilities	NU	\$2.49	\$2.69	\$2.90	\$3.14	\$3.39	\$3.66	\$3.95	\$4.25	\$4.56	\$4.85	\$5.14	\$5.43	\$5.74	\$6.06	\$6.40	\$6.76	\$7.14
OG&E Energy Corp.	OG&E	\$1.94	\$2.08	\$2.22	\$2.38	\$2.55	\$2.73	\$2.92	\$3.12	\$3.32	\$3.52	\$3.73	\$3.94	\$4.17	\$4.40	\$4.65	\$4.91	\$5.18
Other Tail Corporation	OTTR	\$1.37	\$1.58	\$1.83	\$2.11	\$2.44	\$2.82	\$3.25	\$3.69	\$4.12	\$4.51	\$4.86	\$5.13	\$5.42	\$5.72	\$6.05	\$6.39	\$6.74
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.63	\$4.83	\$5.06	\$5.31	\$5.59	\$5.90	\$6.24	\$6.59	\$6.96	\$7.35	\$7.76
PNM Resources, Inc.	PNM	\$1.41	\$1.57	\$1.74	\$1.93	\$2.14	\$2.38	\$2.64	\$2.90	\$3.16	\$3.40	\$3.63	\$3.83	\$4.05	\$4.28	\$4.52	\$4.77	\$5.04
Portland General Electric Company	POR	\$1.77	\$1.91	\$2.06	\$2.22	\$2.39	\$2.58	\$2.78	\$2.99	\$3.20	\$3.40	\$3.61	\$3.81	\$4.03	\$4.25	\$4.49	\$4.75	\$5.01
Southern Company	SO	\$2.70	\$2.60	\$2.60	\$3.00	\$3.11	\$3.23	\$3.34	\$3.48	\$3.63	\$3.81	\$4.00	\$4.23	\$4.47	\$4.72	\$4.98	\$5.27	\$5.56
TECO Energy, Inc.	TE	\$0.92	\$0.98	\$1.04	\$1.11	\$1.18	\$1.26	\$1.34	\$1.43	\$1.52	\$1.61	\$1.70	\$1.79	\$1.90	\$2.00	\$2.11	\$2.23	\$2.36
Westar Energy, Inc.	WR	\$2.27	\$2.41	\$2.65	\$2.70	\$2.87	\$3.04	\$3.22	\$3.41	\$3.61	\$3.82	\$4.04	\$4.26	\$4.46	\$4.76	\$5.02	\$5.31	\$5.61
Xcel Energy Inc.	XEL	\$1.91	\$2.02	\$2.13	\$2.24	\$2.37	\$2.50	\$2.63	\$2.78	\$2.93	\$3.10	\$3.27	\$3.45	\$3.65	\$3.85	\$4.07	\$4.30	\$4.54

Projected Annual Dividend Payout Ratio		(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Akiant Energy Corporation	LNT	59.00%	59.25%	59.50%	59.75%	60.00%	61.21%	62.41%	63.62%	64.82%	66.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Ameren Corporation	AEE	68.00%	65.75%	63.50%	61.25%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
CMS Energy Corporation	CMS	60.00%	59.80%	59.60%	59.40%	59.20%	59.64%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
DTE Energy Company	DTE	57.00%	57.25%	57.50%	57.75%	58.00%	59.64%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.54%	65.06%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	78.00%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.64%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.71%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
OG&E Energy Corp.	OG&E	47.00%	48.75%	50.50%	52.25%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Other Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	63.00%	63.50%	64.00%	64.50%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	50.00%	49.75%	49.50%	49.25%	49.00%	50.04%	55.08%	58.12%	61.15%	64.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
TECO Energy, Inc.	TE	93.00%	87.50%	82.00%	76.50%	71.00%	70.37%	69.74%	69.12%	68.49%	67.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	57.04%	59.05%	61.12%	63.15%	65.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Xcel Energy Inc.	XEL	61.00%	60.75%	60.50%	60.25%	60.00%	61.21%	62.41%	63.62%	64.82%	66.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%

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

Projected Annual Cash Flows		(47)	(45)	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
Alliant Energy Corporation	LNT	\$2.06	\$2.19	\$2.33	\$2.48	\$2.64	\$2.86	\$3.09	\$3.33	\$3.59	\$3.86	\$4.15	\$4.59	\$4.64	\$4.60	\$5.17	\$5.46	\$5.46	\$135.19
Ameren Corporation	AEE	\$1.95	\$1.64	\$1.72	\$1.81	\$1.90	\$2.11	\$2.34	\$2.57	\$2.61	\$3.06	\$3.29	\$3.43	\$3.67	\$3.68	\$4.10	\$4.33	\$4.45	\$94.45
American Electric Power Company, Inc.	AEP	\$2.04	\$2.15	\$2.28	\$2.41	\$2.55	\$2.71	\$2.83	\$3.06	\$3.26	\$3.49	\$3.71	\$3.92	\$4.14	\$4.38	\$4.62	\$4.83	\$4.83	\$124.15
CMS Energy Corporation	CVS	\$1.06	\$1.13	\$1.19	\$1.26	\$1.34	\$1.47	\$1.60	\$1.75	\$1.90	\$2.08	\$2.23	\$2.35	\$2.43	\$2.62	\$2.77	\$2.93	\$2.93	\$72.20
DTE Energy Company	DTE	\$2.28	\$2.44	\$2.61	\$2.79	\$2.99	\$3.27	\$3.56	\$3.63	\$4.21	\$4.56	\$4.93	\$5.21	\$5.50	\$5.81	\$6.14	\$6.48	\$6.48	\$182.10
Duke Energy Corporation	DUK	\$2.97	\$3.04	\$3.11	\$3.18	\$3.25	\$3.44	\$3.65	\$3.87	\$4.11	\$4.33	\$4.66	\$4.92	\$5.20	\$5.49	\$5.80	\$6.13	\$6.13	\$174.64
Empire District Electric Company	EDE	\$1.02	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.70	\$1.79	\$1.89	\$2.00	\$2.11	\$2.11	\$58.94
Great Plains Energy Inc.	GXP	\$1.00	\$1.07	\$1.16	\$1.25	\$1.34	\$1.44	\$1.55	\$1.66	\$1.78	\$1.91	\$2.05	\$2.18	\$2.28	\$2.41	\$2.55	\$2.69	\$2.69	\$53.34
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.49	\$1.56	\$1.65	\$1.70	\$1.69	\$1.69	\$2.07	\$2.19	\$2.31	\$2.31	\$58.99
IDACORP, Inc.	IDA	\$1.93	\$2.08	\$2.23	\$2.40	\$2.57	\$2.74	\$2.93	\$3.15	\$3.39	\$3.65	\$3.95	\$4.17	\$4.40	\$4.65	\$4.91	\$5.19	\$5.19	\$133.63
Northern Energy, Inc.	NEE	\$3.14	\$3.29	\$3.45	\$3.62	\$3.79	\$4.18	\$4.56	\$4.99	\$5.42	\$5.89	\$6.38	\$6.74	\$7.12	\$7.52	\$7.94	\$8.39	\$8.39	\$222.55
Northeast Utilities	NU	\$1.61	\$1.73	\$1.85	\$1.93	\$2.12	\$2.35	\$2.59	\$2.85	\$3.11	\$3.38	\$3.65	\$3.86	\$4.08	\$4.30	\$4.55	\$4.80	\$4.80	\$110.93
OGE Energy Corp.	OGE	\$0.83	\$1.08	\$1.20	\$1.33	\$1.47	\$1.64	\$1.82	\$2.01	\$2.21	\$2.43	\$2.65	\$2.80	\$2.96	\$3.12	\$3.30	\$3.49	\$3.49	\$65.27
Otter Tail Corporation	OTTR	\$1.11	\$1.23	\$1.36	\$1.51	\$1.66	\$1.96	\$2.28	\$2.60	\$2.91	\$3.20	\$3.45	\$3.64	\$3.85	\$4.05	\$4.29	\$4.53	\$4.53	\$71.68
Pinnacle West Capital Corporation	PNW	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.03	\$3.18	\$3.34	\$3.53	\$3.74	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$5.22	\$5.22	\$129.61
PNM Resources, Inc.	PNM	\$0.78	\$0.86	\$0.95	\$1.05	\$1.16	\$1.37	\$1.60	\$1.83	\$2.08	\$2.33	\$2.58	\$2.72	\$2.83	\$3.04	\$3.21	\$3.39	\$3.39	\$67.61
Portland General Electric Company	POR	\$0.95	\$1.05	\$1.15	\$1.27	\$1.39	\$1.59	\$1.75	\$1.94	\$2.14	\$2.35	\$2.56	\$2.71	\$2.66	\$3.02	\$3.19	\$3.37	\$3.37	\$82.06
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.26	\$2.32	\$2.38	\$2.45	\$2.53	\$2.62	\$2.72	\$2.84	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$3.74	\$90.50
TECO Energy, Inc.	TE	\$0.91	\$0.91	\$0.91	\$0.91	\$0.89	\$0.84	\$1.00	\$1.05	\$1.10	\$1.15	\$1.21	\$1.27	\$1.35	\$1.42	\$1.50	\$1.59	\$1.59	\$40.50
Westar Energy, Inc.	WR	\$1.40	\$1.46	\$1.53	\$1.60	\$1.67	\$1.84	\$2.02	\$2.21	\$2.41	\$2.63	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57	\$3.77	\$3.77	\$84.20
Xcel Energy Inc.	XEL	\$1.23	\$1.29	\$1.36	\$1.43	\$1.50	\$1.61	\$1.73	\$1.87	\$2.01	\$2.16	\$2.32	\$2.45	\$2.59	\$2.74	\$2.89	\$3.05	\$3.05	\$73.16

Projected Annual Data Investor Cash Flows		(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)	(76)	(77)	(78)	(79)	(80)	(81)
Company	Ticker	Initial Outflow	11/14/14	12/31/14	6/30/15	6/30/16	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
Alliant Energy Corporation	LNT	(\$60.06)	\$0.00	\$0.26	\$2.12	\$2.33	\$2.49	\$2.64	\$2.69	\$3.09	\$3.33	\$3.59	\$3.85	\$4.15	\$4.59	\$4.64	\$4.60	\$5.17	\$140.56
Ameren Corporation	AEE	(\$41.50)	\$0.00	\$0.20	\$1.62	\$1.72	\$1.81	\$1.90	\$2.11	\$2.34	\$2.57	\$2.61	\$3.06	\$3.29	\$3.43	\$3.67	\$3.68	\$4.10	\$98.78
American Electric Power Company, Inc.	AEP	(\$56.03)	\$0.00	\$0.26	\$2.09	\$2.28	\$2.41	\$2.55	\$2.71	\$2.83	\$3.06	\$3.26	\$3.43	\$3.71	\$3.92	\$4.14	\$4.38	\$4.62	\$129.04
CMS Energy Corporation	CVS	(\$31.78)	\$0.00	\$0.14	\$1.10	\$1.19	\$1.26	\$1.34	\$1.47	\$1.60	\$1.75	\$1.90	\$2.08	\$2.23	\$2.35	\$2.43	\$2.62	\$2.77	\$75.13
DTE Energy Company	DTE	(\$80.22)	\$0.00	\$0.29	\$2.36	\$2.61	\$2.79	\$2.99	\$3.27	\$3.56	\$3.63	\$4.21	\$4.56	\$4.93	\$5.21	\$5.50	\$5.81	\$6.14	\$163.53
Duke Energy Corporation	DUK	(\$79.74)	\$0.00	\$0.38	\$3.04	\$3.11	\$3.18	\$3.25	\$3.44	\$3.65	\$3.87	\$4.11	\$4.33	\$4.66	\$4.92	\$5.20	\$5.49	\$5.80	\$160.76
Empire District Electric Company	EDE	(\$26.93)	\$0.00	\$0.13	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.70	\$1.79	\$1.89	\$2.00	\$61.05
Great Plains Energy Inc.	GXP	(\$26.00)	\$0.00	\$0.13	\$1.03	\$1.16	\$1.25	\$1.34	\$1.44	\$1.55	\$1.66	\$1.78	\$1.91	\$2.05	\$2.18	\$2.28	\$2.41	\$2.55	\$61.03
Hawaiian Electric Industries, Inc.	HE	(\$27.41)	\$0.00	\$0.16	\$1.31	\$1.28	\$1.28	\$1.34	\$1.41	\$1.49	\$1.56	\$1.65	\$1.70	\$1.69	\$1.96	\$2.07	\$2.19	\$2.31	\$51.27
IDACORP, Inc.	IDA	(\$59.53)	\$0.00	\$0.26	\$1.97	\$2.23	\$2.40	\$2.57	\$2.74	\$2.93	\$3.15	\$3.39	\$3.65	\$3.95	\$4.17	\$4.40	\$4.65	\$4.91	\$133.07
Northern Energy, Inc.	NEE	(\$93.23)	\$0.00	\$0.40	\$3.24	\$3.45	\$3.62	\$3.79	\$4.18	\$4.56	\$4.99	\$5.42	\$5.89	\$6.38	\$6.74	\$7.12	\$7.52	\$7.94	\$231.34
Northeast Utilities	NU	(\$48.36)	\$0.00	\$0.21	\$1.63	\$1.65	\$1.93	\$2.12	\$2.35	\$2.59	\$2.85	\$3.11	\$3.38	\$3.65	\$3.86	\$4.08	\$4.30	\$4.55	\$115.73
OGE Energy Corp.	OGE	(\$36.61)	\$0.00	\$0.13	\$1.01	\$1.20	\$1.33	\$1.47	\$1.64	\$1.82	\$2.01	\$2.21	\$2.43	\$2.65	\$2.80	\$2.96	\$3.12	\$3.30	\$68.75
Otter Tail Corporation	OTTR	(\$29.43)	\$0.00	\$0.14	\$1.19	\$1.36	\$1.51	\$1.66	\$1.96	\$2.28	\$2.60	\$2.91	\$3.20	\$3.45	\$3.64	\$3.85	\$4.05	\$4.29	\$76.22
Pinnacle West Capital Corporation	PNW	(\$59.44)	\$0.00	\$0.31	\$2.45	\$2.63	\$2.76	\$2.89	\$3.03	\$3.18	\$3.34	\$3.53	\$3.74	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$134.83
PNM Resources, Inc.	PNM	(\$27.73)	\$0.00	\$0.10	\$0.83	\$0.95	\$1.05	\$1.16	\$1.37	\$1.60	\$1.83	\$2.08	\$2.33	\$2.58	\$2.72	\$2.83	\$3.04	\$3.21	\$71.00
Portland General Electric Company	POR	(\$35.16)	\$0.00	\$0.12	\$0.99	\$1.15	\$1.27	\$1.39	\$1.56	\$1.75	\$1.94	\$2.14	\$2.35	\$2.56	\$2.71	\$2.66	\$3.02	\$3.19	\$65.43
Southern Company	SO	(\$45.55)	\$0.00	\$0.27	\$2.11	\$2.19	\$2.26	\$2.32	\$2.38	\$2.45	\$2.53	\$2.62	\$2.72	\$2.84	\$3.00	\$3.17	\$3.35	\$3.54	\$102.27
TECO Energy, Inc.	TE	(\$19.00)	\$0.00	\$0.12	\$0.94	\$0.91	\$0.91	\$0.89	\$0.84	\$1.00	\$1.05	\$1.10	\$1.15	\$1.21	\$1.27	\$1.35	\$1.42	\$1.50	\$42.03
Westar Energy, Inc.	WR	(\$36.65)	\$0.00	\$0.18	\$1.44	\$1.53	\$1.60	\$1.67	\$1.84	\$2.02	\$2.21	\$2.41	\$2.63	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57	\$87.97
Xcel Energy Inc.	XEL	(\$32.69)	\$0.00	\$0.16	\$1.26	\$1.36	\$1.43	\$1.50	\$1.61	\$1.73	\$1.87	\$2.01	\$2.16	\$2.32	\$2.45	\$2.59	\$2.74	\$2.89	\$78.21

Multi-Stage Growth Discounted Cash Flow Model  
30 Day Average Stock Price  
Low EPS Growth Rate Estimates in First Stage

Inputs	Stock	EPS Growth Rate Estimates										Long-Term Payout Ratio	[10]	[11]	[12]	[13]
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]					
Company	Ticker	Price	Zacks	First Call	Value Line	Low Growth	2014	2018	2024	Proof	IRR	P/E Ratio	PEG Ratio			
Alliant Energy Corporation	LNT	\$60.06	4.80%	4.50%	6.00%	4.80%	5.63%	59.00%	60.00%	67.23%	(\$0.00)	9.56%	18.07	3.21		
Ameren Corporation	AEE	\$41.30	8.30%	8.60%	4.50%	4.50%	5.63%	68.00%	59.00%	67.23%	(\$0.00)	9.22%	19.75	3.51		
American Electric Power Company, Inc.	AEP	\$58.09	4.90%	4.97%	4.50%	4.60%	5.63%	61.00%	63.00%	67.23%	(\$0.00)	9.65%	17.68	3.14		
CMS Energy Corporation	CMS	\$31.78	6.10%	6.80%	6.50%	6.10%	5.63%	60.00%	58.00%	67.23%	(\$0.00)	9.71%	17.33	3.09		
DTE Energy Company	DTE	\$60.22	6.20%	5.87%	6.50%	5.87%	5.63%	57.00%	58.00%	67.23%	(\$0.00)	9.23%	19.72	3.60		
Duke Energy Corporation	DUK	\$79.74	4.70%	4.76%	5.00%	4.70%	5.63%	71.00%	64.00%	67.23%	(\$0.00)	9.26%	19.57	3.48		
Empire District Electric Company	EDE	\$26.93	3.00%	3.00%	4.00%	3.00%	5.63%	66.00%	63.00%	67.23%	\$0.00	9.15%	20.16	3.59		
Great Plains Energy Inc.	GXP	\$26.00	5.00%	5.00%	6.00%	5.00%	5.63%	58.00%	62.00%	67.23%	\$0.00	10.15%	15.60	2.77		
Hawaiian Electric Industries, Inc.	HE	\$27.41	4.00%	4.00%	4.00%	4.00%	5.63%	78.00%	65.00%	67.23%	\$0.00	9.77%	17.18	3.05		
IDACORP, Inc.	IDA	\$59.59	4.00%	4.00%	1.00%	1.00%	5.63%	51.00%	59.00%	67.23%	(\$0.00)	9.65%	20.71	3.69		
NextEra Energy, Inc.	NEE	\$59.23	6.60%	8.47%	8.00%	8.00%	5.63%	61.00%	57.00%	67.23%	(\$0.00)	9.44%	18.61	3.31		
Northeast Utilities	NU	\$48.38	6.70%	8.16%	8.00%	8.16%	5.63%	60.00%	59.00%	67.23%	(\$0.00)	9.67%	17.55	3.12		
OGE Energy Corp.	OGE	\$36.61	6.50%	7.05%	5.50%	5.50%	5.63%	47.00%	54.00%	67.23%	(\$0.00)	9.52%	18.25	3.24		
Other Tail Corporation	OTTR	\$29.43	NA	6.00%	15.50%	6.00%	5.63%	70.00%	59.00%	67.23%	(\$0.00)	9.29%	19.41	3.45		
Pinnacle West Capital Corporation	PNW	\$59.44	4.00%	3.95%	4.00%	3.95%	5.63%	63.00%	65.00%	67.23%	\$0.00	9.87%	16.78	2.93		
PNM Resources, Inc.	PNM	\$27.73	8.50%	8.34%	11.00%	8.34%	5.63%	50.00%	49.00%	67.23%	(\$0.00)	10.10%	15.66	2.82		
Portland General Electric Company	POR	\$35.16	7.80%	7.83%	5.00%	5.00%	5.63%	50.00%	54.00%	67.23%	(\$0.00)	9.21%	19.81	3.52		
Southern Company	SO	\$46.55	3.60%	3.62%	3.50%	3.50%	5.63%	74.00%	72.00%	67.23%	\$0.00	9.60%	17.87	3.18		
TECO Energy, Inc.	TE	\$19.00	6.50%	8.43%	3.50%	3.50%	5.63%	93.00%	71.00%	67.23%	\$0.00	8.97%	21.25	3.78		
Westar Energy, Inc.	WR	\$36.85	3.80%	3.20%	6.00%	3.20%	5.63%	58.00%	55.00%	67.23%	(\$0.00)	9.63%	18.19	3.23		
Xcel Energy Inc.	XEL	\$32.69	4.20%	4.51%	5.50%	4.20%	5.63%	61.00%	60.00%	67.23%	(\$0.00)	9.66%	17.62	3.13		

DCF Result

Mean	9.51%	18.43	3.27
Max	10.15%	21.25	3.78
Min	8.97%	15.60	2.77

Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Alliant Energy Corporation	LNT	\$3.29	\$3.45	\$3.61	\$3.79	\$3.97	\$4.16	\$4.36	\$4.58	\$4.81	\$5.06	\$5.34	\$5.64	\$5.96	\$6.29	\$6.65	\$7.02	\$7.42
Ameren Corporation	AEE	\$2.10	\$2.19	\$2.29	\$2.40	\$2.50	\$2.62	\$2.73	\$2.86	\$3.01	\$3.16	\$3.33	\$3.52	\$3.72	\$3.93	\$4.15	\$4.38	\$4.63
American Electric Power Company, Inc.	AEP	\$3.18	\$3.32	\$3.47	\$3.63	\$3.79	\$3.95	\$4.14	\$4.34	\$4.55	\$4.79	\$5.05	\$5.33	\$5.63	\$5.95	\$6.28	\$6.63	\$7.01
CMS Energy Corporation	CMS	\$1.66	\$1.78	\$1.87	\$1.98	\$2.10	\$2.23	\$2.37	\$2.51	\$2.66	\$2.81	\$2.97	\$3.14	\$3.32	\$3.51	\$3.70	\$3.91	\$4.13
DTE Energy Company	DTE	\$3.78	\$3.93	\$4.21	\$4.48	\$4.72	\$5.00	\$5.29	\$5.60	\$5.93	\$6.27	\$6.62	\$6.99	\$7.39	\$7.80	\$8.24	\$8.71	\$9.20
Duke Energy Corporation	DUK	\$3.98	\$4.17	\$4.36	\$4.57	\$4.78	\$5.01	\$5.24	\$5.50	\$5.78	\$6.08	\$6.41	\$6.77	\$7.15	\$7.56	\$7.98	\$8.43	\$8.91
Empire District Electric Company	EDE	\$1.49	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.83	\$1.90	\$1.99	\$2.09	\$2.21	\$2.33	\$2.47	\$2.60	\$2.75	\$2.91
Great Plains Energy Inc.	GXP	\$1.62	\$1.70	\$1.79	\$1.88	\$1.97	\$2.07	\$2.17	\$2.28	\$2.40	\$2.53	\$2.67	\$2.82	\$2.98	\$3.15	\$3.32	\$3.51	\$3.71
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.78	\$2.92	\$3.08	\$3.25	\$3.44
IDACORP, Inc.	IDA	\$3.64	\$3.69	\$3.75	\$3.81	\$3.86	\$3.92	\$3.98	\$4.07	\$4.20	\$4.37	\$4.58	\$4.84	\$5.11	\$5.39	\$5.70	\$6.02	\$6.38
NextEra Energy, Inc.	NEE	\$4.83	\$5.12	\$5.43	\$5.75	\$6.10	\$6.48	\$6.85	\$7.26	\$7.68	\$8.13	\$8.59	\$9.07	\$9.58	\$10.12	\$10.69	\$11.29	\$11.93
Northeast Utilities	NU	\$2.49	\$2.64	\$2.81	\$2.98	\$3.16	\$3.36	\$3.56	\$3.78	\$4.00	\$4.24	\$4.43	\$4.73	\$5.00	\$5.28	\$5.58	\$5.89	\$6.22
OGE Energy Corp.	OGE	\$1.94	\$2.05	\$2.16	\$2.28	\$2.40	\$2.64	\$2.87	\$3.12	\$3.38	\$3.65	\$3.92	\$4.21	\$4.51	\$4.84	\$5.18	\$5.54	\$5.91
Other Tail Corporation	OTTR	\$1.37	\$1.45	\$1.54	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.18	\$2.30	\$2.44	\$2.57	\$2.72	\$2.87	\$3.03	\$3.20	\$3.38
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.95	\$4.11	\$4.27	\$4.44	\$4.62	\$4.82	\$5.04	\$5.29	\$5.57	\$5.88	\$6.21	\$6.56	\$6.93	\$7.32	\$7.73
PNM Resources, Inc.	PNM	\$1.41	\$1.53	\$1.65	\$1.79	\$1.94	\$2.10	\$2.28	\$2.48	\$2.64	\$2.81	\$2.99	\$3.15	\$3.33	\$3.52	\$3.72	\$3.93	\$4.15
Portland General Electric Company	POR	\$1.77	\$1.85	\$1.95	\$2.05	\$2.15	\$2.26	\$2.37	\$2.49	\$2.62	\$2.77	\$2.92	\$3.08	\$3.26	\$3.44	\$3.63	\$3.84	\$4.05
Southern Company	SO	\$2.70	\$2.79	\$2.89	\$2.99	\$3.10	\$3.21	\$3.32	\$3.45	\$3.60	\$3.77	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$5.22	\$5.51
TECO Energy, Inc.	TE	\$0.92	\$0.95	\$0.99	\$1.02	\$1.06	\$1.09	\$1.13	\$1.18	\$1.23	\$1.29	\$1.35	\$1.43	\$1.51	\$1.59	\$1.68	\$1.78	\$1.88
Westar Energy, Inc.	WR	\$2.27	\$2.34	\$2.42	\$2.49	\$2.57	\$2.66	\$2.74	\$2.84	\$2.95	\$3.10	\$3.26	\$3.44	\$3.64	\$3.84	\$4.06	\$4.29	\$4.53
Xcel Energy Inc.	XEL	\$1.91	\$1.99	\$2.07	\$2.16	\$2.25	\$2.35	\$2.44	\$2.55	\$2.63	\$2.81	\$2.89	\$3.13	\$3.30	\$3.49	\$3.69	\$3.89	\$4.11

Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
Alliant Energy Corporation	LNT	59.00%	59.25%	59.50%	59.75%	60.00%	61.21%	62.41%	63.62%	64.82%	66.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Ameren Corporation	AEE	68.00%	65.75%	63.50%	61.25%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
American Electric Power Company, Inc.	AEP	61.00%	61.80%	62.60%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
CMS Energy Corporation	CMS	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
DTE Energy Company	DTE	57.00%	57.25%	57.50%	57.75%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.54%	65.08%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	78.00%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.71%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
OGE Energy Corp.	OGE	47.00%	49.75%	50.50%	52.25%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Other Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	63.00%	63.50%	64.00%	64.50%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	50.00%	49.75%	49.50%	49.25%	49.00%	50.04%	50.08%	50.12%	51.15%	51.19%	52.23%	52.23%	52.23%	52.23%	52.23%	52.23%	52.23%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
TECO Energy, Inc.	TE	93.00%	87.50%	82.00%	76.50%	71.00%	70.37%	69.74%	69.12%	68.49%	67.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	57.04%	59.08%	61.12%	63.15%	65.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Xcel Energy Inc.	XEL	61.00%	60.50%	60.00%	60.25%	60.00%	61.21%	62.41%	63.62%	64.82%	66.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%

Multi-Stage Growth Discounted Cash Flow Model  
 30 Day Average Stock Price  
 Low EPS Growth Rate Estimates in First Stage

Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
Altant Energy Corporation	LNT	\$2.03	\$2.14	\$2.25	\$2.37	\$2.60	\$2.67	\$2.68	\$3.06	\$3.28	\$3.53	\$3.79	\$4.01	\$4.23	\$4.47	\$4.72	\$4.99	\$134.02	
Ameren Corporation	AEE	\$1.49	\$1.51	\$1.52	\$1.53	\$1.54	\$1.65	\$1.77	\$1.90	\$2.04	\$2.19	\$2.37	\$2.60	\$2.64	\$2.79	\$2.95	\$3.11	\$91.38	
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.36	\$3.58	\$3.78	\$4.00	\$4.22	\$4.45	\$4.71	\$123.76	
CMS Energy Corporation	CMS	\$1.06	\$1.11	\$1.17	\$1.23	\$1.29	\$1.41	\$1.53	\$1.66	\$1.80	\$1.95	\$2.11	\$2.23	\$2.36	\$2.49	\$2.63	\$2.78	\$71.81	
DTE Energy Company	DTE	\$2.27	\$2.41	\$2.57	\$2.73	\$2.90	\$3.15	\$3.42	\$3.71	\$4.02	\$4.35	\$4.70	\$4.97	\$5.25	\$5.54	\$5.85	\$6.18	\$181.31	
Duke Energy Corporation	DUK	\$2.96	\$3.02	\$3.08	\$3.14	\$3.20	\$3.38	\$3.58	\$3.79	\$4.02	\$4.28	\$4.55	\$4.81	\$5.08	\$5.37	\$5.67	\$5.99	\$174.33	
Empire District Electric Company	EDE	\$1.01	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.24	\$1.31	\$1.39	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$1.95	\$58.60	
Great Plains Energy Inc.	GXP	\$0.99	\$1.05	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.55	\$1.66	\$1.77	\$1.90	\$2.00	\$2.12	\$2.23	\$2.36	\$2.49	\$57.87	
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.29	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.75	\$1.85	\$1.96	\$2.07	\$2.19	\$2.31	\$58.96	
IDACORP, Inc.	IDA	\$1.88	\$1.99	\$2.07	\$2.17	\$2.27	\$2.37	\$2.49	\$2.63	\$2.80	\$3.01	\$3.25	\$3.43	\$3.63	\$3.83	\$4.05	\$4.27	\$131.65	
NextEra Energy, Inc.	NEE	\$3.12	\$3.28	\$3.39	\$3.54	\$3.68	\$4.02	\$4.33	\$4.77	\$5.19	\$5.63	\$6.10	\$6.44	\$6.81	\$7.19	\$7.59	\$8.02	\$221.53	
Northeast Utilities	NU	\$1.59	\$1.67	\$1.76	\$1.85	\$1.95	\$2.12	\$2.31	\$2.51	\$2.72	\$2.94	\$3.18	\$3.35	\$3.65	\$3.75	\$3.96	\$4.18	\$109.32	
OGE Energy Corp.	OGE	\$0.98	\$1.05	\$1.15	\$1.26	\$1.37	\$1.50	\$1.65	\$1.81	\$1.98	\$2.16	\$2.36	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$84.20	
Oter Tail Corporation	OTTR	\$1.02	\$1.04	\$1.05	\$1.07	\$1.08	\$1.17	\$1.27	\$1.38	\$1.49	\$1.60	\$1.73	\$1.83	\$1.93	\$2.04	\$2.15	\$2.27	\$65.66	
Pinnacle West Capital Corporation	PNW	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.02	\$3.17	\$3.33	\$3.52	\$3.72	\$3.95	\$4.18	\$4.41	\$4.66	\$4.92	\$5.20	\$129.67	
PNM Resources, Inc.	PNM	\$0.76	\$0.82	\$0.89	\$0.96	\$1.03	\$1.19	\$1.35	\$1.63	\$1.72	\$1.92	\$2.12	\$2.24	\$2.37	\$2.50	\$2.64	\$2.79	\$65.81	
Portland General Electric Company	POR	\$0.93	\$1.00	\$1.07	\$1.14	\$1.22	\$1.33	\$1.46	\$1.69	\$1.74	\$1.90	\$2.07	\$2.19	\$2.31	\$2.44	\$2.58	\$2.72	\$90.26	
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.31	\$2.36	\$2.43	\$2.51	\$2.60	\$2.70	\$2.82	\$2.94	\$3.14	\$3.32	\$3.51	\$3.70	\$98.47	
TECO Energy, Inc.	TE	\$0.63	\$0.66	\$0.84	\$0.81	\$0.78	\$0.60	\$0.82	\$0.85	\$0.88	\$0.92	\$0.96	\$1.01	\$1.07	\$1.13	\$1.20	\$1.26	\$39.60	
Westar Energy, Inc.	WR	\$1.36	\$1.33	\$1.41	\$1.44	\$1.46	\$1.56	\$1.69	\$1.81	\$1.96	\$2.12	\$2.31	\$2.44	\$2.68	\$2.73	\$2.88	\$3.04	\$82.34	
Xcel Energy Inc.	XEL	\$1.21	\$1.26	\$1.31	\$1.36	\$1.41	\$1.50	\$1.59	\$1.70	\$1.82	\$1.96	\$2.10	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$72.47	

Projected Annual Data Investor Cash Flows		[64]	[65]	[66]	[67]	[68]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]	
Company	Ticker	Outflow	11/14/14	12/31/14	6/30/15	6/30/16	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
Altant Energy Corporation	LNT	(\$60.06)	\$0.00	\$0.26	\$2.08	\$2.25	\$2.37	\$2.50	\$2.67	\$2.68	\$3.06	\$3.28	\$3.53	\$3.79	\$4.01	\$4.23	\$4.47	\$4.72	\$139.01
Ameren Corporation	AEE	(\$41.80)	\$0.00	\$0.19	\$1.53	\$1.52	\$1.53	\$1.54	\$1.65	\$1.77	\$1.90	\$2.04	\$2.19	\$2.37	\$2.60	\$2.64	\$2.79	\$2.95	\$94.50
American Electric Power Company, Inc.	AEP	(\$56.09)	\$0.00	\$0.26	\$2.07	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.36	\$3.58	\$3.78	\$4.00	\$4.22	\$4.45	\$123.76
CMS Energy Corporation	CMS	(\$31.78)	\$0.00	\$0.14	\$1.09	\$1.17	\$1.23	\$1.29	\$1.41	\$1.53	\$1.66	\$1.80	\$1.95	\$2.11	\$2.23	\$2.36	\$2.49	\$2.63	\$74.59
DTE Energy Company	DTE	(\$80.22)	\$0.00	\$0.29	\$2.34	\$2.57	\$2.73	\$2.90	\$3.15	\$3.42	\$3.71	\$4.02	\$4.35	\$4.70	\$4.97	\$5.25	\$5.54	\$5.85	\$187.49
Duke Energy Corporation	DUK	(\$79.74)	\$0.00	\$0.33	\$3.03	\$3.08	\$3.14	\$3.20	\$3.38	\$3.58	\$3.79	\$4.02	\$4.28	\$4.55	\$4.81	\$5.08	\$5.37	\$5.67	\$180.32
Empire District Electric Company	EDE	(\$26.93)	\$0.00	\$0.13	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.24	\$1.31	\$1.39	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$60.55
Great Plains Energy Inc.	GXP	(\$26.00)	\$0.00	\$0.13	\$1.01	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.55	\$1.66	\$1.77	\$1.90	\$2.00	\$2.12	\$2.23	\$2.36	\$60.37
Hawaiian Electric Industries, Inc.	HE	(\$27.41)	\$0.00	\$0.16	\$1.31	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.75	\$1.85	\$1.96	\$2.07	\$2.19	\$61.27
IDACORP, Inc.	IDA	(\$59.53)	\$0.00	\$0.24	\$1.80	\$2.07	\$2.17	\$2.27	\$2.37	\$2.49	\$2.63	\$2.80	\$3.01	\$3.25	\$3.43	\$3.63	\$3.83	\$4.05	\$135.63
NextEra Energy, Inc.	NEE	(\$58.23)	\$0.00	\$0.40	\$3.22	\$3.39	\$3.54	\$3.68	\$4.02	\$4.33	\$4.77	\$5.19	\$5.63	\$6.10	\$6.44	\$6.81	\$7.19	\$7.59	\$230.00
Northeast Utilities	NU	(\$48.58)	\$0.00	\$0.20	\$1.63	\$1.76	\$1.85	\$1.95	\$2.12	\$2.31	\$2.51	\$2.72	\$2.94	\$3.18	\$3.35	\$3.65	\$3.75	\$3.96	\$113.59
OGE Energy Corp.	OGE	(\$36.61)	\$0.00	\$0.12	\$0.99	\$1.15	\$1.26	\$1.37	\$1.60	\$1.66	\$1.81	\$1.98	\$2.16	\$2.36	\$2.49	\$2.63	\$2.78	\$2.94	\$87.30
Oter Tail Corporation	OTTR	(\$29.43)	\$0.00	\$0.13	\$1.05	\$1.05	\$1.07	\$1.08	\$1.17	\$1.27	\$1.38	\$1.49	\$1.60	\$1.73	\$1.83	\$1.93	\$2.04	\$2.15	\$67.94
Pinnacle West Capital Corporation	PNW	(\$59.44)	\$0.00	\$0.31	\$2.44	\$2.63	\$2.76	\$2.89	\$3.02	\$3.17	\$3.33	\$3.52	\$3.72	\$3.95	\$4.18	\$4.41	\$4.66	\$4.92	\$134.77
PNM Resources, Inc.	PNM	(\$27.73)	\$0.00	\$0.10	\$0.80	\$0.89	\$0.96	\$1.03	\$1.19	\$1.35	\$1.63	\$1.72	\$1.92	\$2.12	\$2.24	\$2.37	\$2.50	\$2.64	\$68.60
Portland General Electric Company	POR	(\$35.16)	\$0.00	\$0.12	\$0.95	\$1.07	\$1.14	\$1.22	\$1.33	\$1.46	\$1.59	\$1.74	\$1.90	\$2.07	\$2.19	\$2.31	\$2.44	\$2.58	\$82.63
Southern Company	SO	(\$46.55)	\$0.00	\$0.27	\$2.10	\$2.19	\$2.25	\$2.31	\$2.36	\$2.43	\$2.51	\$2.60	\$2.70	\$2.82	\$2.94	\$3.14	\$3.32	\$3.51	\$102.18
TECO Energy, Inc.	TE	(\$19.00)	\$0.00	\$0.11	\$0.90	\$0.84	\$0.81	\$0.78	\$0.60	\$0.82	\$0.85	\$0.88	\$0.92	\$0.96	\$1.01	\$1.07	\$1.13	\$1.20	\$41.16
Westar Energy, Inc.	WR	(\$36.65)	\$0.00	\$0.17	\$1.38	\$1.41	\$1.44	\$1.46	\$1.56	\$1.68	\$1.81	\$1.96	\$2.12	\$2.31	\$2.44	\$2.68	\$2.73	\$2.88	\$55.33
Xcel Energy Inc.	XEL	(\$32.69)	\$0.00	\$0.16	\$1.24	\$1.31	\$1.36	\$1.41	\$1.50	\$1.59	\$1.70	\$1.82	\$1.96	\$2.10	\$2.22	\$2.35	\$2.48	\$2.62	\$75.23

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

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
Stock		EPS Growth Rate	Estimate	Value	Long-Term	Payout Ratio	Iterative Solution	Terminal	Terminal				
Company	Ticker	Price	Zacks	First Call	Line	Average	Growth	2014	2018	2024	Profit	IRR	P/E Ratio/EG Ratio
Akbar Energy Corporation	LHIT	\$58.31	4.60%	4.50%	6.00%	5.23%	5.63%	59.00%	60.00%	67.23%	(\$0.00)	9.89%	17.02 3.02
Amaren Corporation	AEE	\$39.75	8.30%	8.50%	4.50%	7.23%	5.63%	58.00%	59.00%	67.23%	(\$0.00)	10.13%	15.78 2.60
American Electric Power Company, Inc.	AEP	\$53.81	4.90%	4.97%	4.50%	4.76%	5.63%	61.00%	63.00%	67.23%	(\$0.00)	9.91%	16.60 2.95
CMS Energy Corporation	CMS	\$30.47	6.10%	6.60%	6.50%	6.47%	5.63%	60.00%	58.00%	67.23%	(\$0.00)	9.99%	16.27 2.69
DTE Energy Company	DTE	\$77.50	6.20%	5.87%	6.50%	6.19%	5.63%	57.00%	58.00%	67.23%	(\$0.00)	9.44%	18.64 3.31
Duke Energy Corporation	DUK	\$75.35	4.70%	4.76%	5.00%	4.62%	5.63%	71.00%	64.00%	67.23%	(\$0.00)	8.59%	18.32 3.28
Empire District Electric Company	EDE	\$26.68	3.00%	3.00%	4.00%	3.33%	5.63%	68.00%	63.00%	67.23%	\$0.00	9.41%	18.75 3.33
Great Plains Energy Inc.	GXP	\$25.46	5.00%	5.00%	6.00%	5.33%	5.63%	58.00%	62.00%	67.23%	\$0.00	10.83%	14.94 2.65
Hawaiian Electric Industries, Inc.	HE	\$26.74	4.00%	4.00%	4.00%	4.09%	5.63%	70.00%	65.00%	67.23%	\$0.00	10.05%	16.08 2.68
IDACORP, Inc.	IDA	\$58.39	4.00%	4.00%	1.50%	3.17%	5.63%	51.00%	58.00%	67.23%	(\$0.00)	9.71%	17.41 3.09
NexEra Energy, Inc.	NEE	\$96.84	6.60%	6.47%	6.00%	6.36%	5.63%	61.00%	57.00%	67.23%	(\$0.00)	9.59%	17.91 3.18
Northeast Utilities	NEU	\$49.03	6.70%	6.16%	6.00%	6.95%	5.63%	60.00%	58.00%	67.23%	(\$0.00)	10.11%	15.68 2.82
OGE Energy Corp.	OGE	\$38.85	8.50%	7.00%	5.50%	8.35%	5.63%	47.00%	54.00%	67.23%	(\$0.00)	9.74%	17.25 3.07
Oster Tail Corporation	OTTR	\$28.51	NA	8.00%	15.60%	10.75%	5.63%	70.00%	59.00%	67.23%	(\$0.00)	10.80%	13.74 2.44
Pinnacle West Capital Corporation	PW	\$56.85	4.00%	3.95%	4.00%	3.98%	5.63%	63.00%	65.00%	67.23%	\$0.00	10.07%	15.97 2.84
PNM Resources, Inc.	PNM	\$26.68	8.50%	8.34%	11.00%	9.28%	5.63%	50.00%	49.00%	67.23%	(\$0.00)	10.56%	14.40 2.58
Portland General Electric Company	POR	\$33.78	7.80%	7.83%	5.00%	6.83%	5.63%	50.00%	54.00%	67.23%	(\$0.00)	9.86%	16.77 2.98
Southern Company	SO	\$44.77	3.60%	3.62%	3.50%	3.67%	5.63%	74.00%	72.00%	67.23%	\$0.00	9.79%	17.06 3.03
TECO Energy, Inc.	TE	\$18.10	6.50%	6.43%	3.50%	5.45%	5.63%	93.00%	71.00%	67.23%	\$0.00	9.68%	17.53 3.11
Westar Energy, Inc.	WR	\$36.27	3.80%	3.20%	6.00%	4.33%	5.63%	58.00%	55.00%	67.23%	(\$0.00)	9.92%	16.55 2.94
Xcel Energy Inc.	XEL	\$31.70	4.20%	4.51%	5.50%	4.74%	5.63%	61.00%	60.00%	67.23%	(\$0.00)	9.94%	16.45 2.92

DCF Result

Mean	9.92%	16.63	2.66
Max	10.60%	18.75	3.33
Min	9.41%	13.74	2.44

Projected Annual Earnings per Share	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Akbar Energy Corporation	LHIT	\$3.29	\$3.48	\$3.64	\$3.83	\$4.03	\$4.26	\$4.47	\$4.71	\$4.96	\$5.23	\$5.52	\$5.83	\$6.16	\$6.51	\$6.87	\$7.26	\$7.67
Amaren Corporation	AEE	\$2.10	\$2.25	\$2.41	\$2.59	\$2.78	\$2.98	\$3.19	\$3.41	\$3.64	\$3.87	\$4.10	\$4.33	\$4.57	\$4.83	\$5.10	\$5.39	\$5.69
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.65	\$3.83	\$4.02	\$4.21	\$4.42	\$4.65	\$4.89	\$5.16	\$5.45	\$5.76	\$6.08	\$6.42	\$6.78	\$7.16
CMS Energy Corporation	CMS	\$1.66	\$1.77	\$1.88	\$2.00	\$2.13	\$2.27	\$2.42	\$2.57	\$2.73	\$2.89	\$3.06	\$3.23	\$3.41	\$3.60	\$3.81	\$4.02	\$4.25
DTE Energy Company	DTE	\$3.76	\$3.99	\$4.24	\$4.50	\$4.78	\$5.08	\$5.39	\$5.72	\$6.06	\$6.41	\$6.78	\$7.16	\$7.57	\$7.99	\$8.44	\$8.92	\$9.42
Duke Energy Corporation	DUK	\$3.98	\$4.17	\$4.37	\$4.58	\$4.80	\$5.04	\$5.28	\$5.54	\$5.83	\$6.14	\$6.47	\$6.84	\$7.22	\$7.63	\$8.06	\$8.51	\$8.99
Empire District Electric Company	EDE	\$1.43	\$1.53	\$1.63	\$1.73	\$1.83	\$1.94	\$2.04	\$2.15	\$2.26	\$2.37	\$2.48	\$2.59	\$2.70	\$2.82	\$2.94	\$3.06	\$3.18
Great Plains Energy Inc.	GXP	\$1.62	\$1.71	\$1.80	\$1.89	\$1.99	\$2.10	\$2.21	\$2.33	\$2.45	\$2.58	\$2.74	\$2.89	\$3.05	\$3.23	\$3.41	\$3.60	\$3.80
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25	\$3.44
IDACORP, Inc.	IDA	\$3.64	\$3.78	\$3.97	\$4.00	\$4.12	\$4.25	\$4.39	\$4.55	\$4.74	\$4.96	\$5.21	\$5.51	\$5.82	\$6.14	\$6.49	\$6.85	\$7.24
NexEra Energy, Inc.	NEE	\$4.83	\$5.14	\$5.48	\$5.81	\$6.18	\$6.57	\$6.99	\$7.43	\$7.89	\$8.34	\$8.82	\$9.32	\$9.84	\$10.40	\$10.98	\$11.60	\$12.25
Northeast Utilities	NEU	\$2.49	\$2.68	\$2.85	\$3.05	\$3.26	\$3.48	\$3.73	\$3.98	\$4.23	\$4.49	\$4.75	\$5.02	\$5.31	\$5.61	\$5.92	\$6.25	\$6.61
OGE Energy Corp.	OGE	\$1.94	\$2.06	\$2.19	\$2.33	\$2.48	\$2.64	\$2.81	\$2.98	\$3.16	\$3.35	\$3.54	\$3.74	\$3.95	\$4.17	\$4.41	\$4.66	\$4.92
Oster Tail Corporation	OTTR	\$1.37	\$1.62	\$1.68	\$1.66	\$2.06	\$2.28	\$2.53	\$2.77	\$3.02	\$3.26	\$3.46	\$3.66	\$3.86	\$4.08	\$4.31	\$4.55	\$4.81
Pinnacle West Capital Corporation	PW	\$3.66	\$3.81	\$3.95	\$4.12	\$4.28	\$4.45	\$4.63	\$4.83	\$5.05	\$5.30	\$5.58	\$5.90	\$6.23	\$6.58	\$6.95	\$7.34	\$7.75
PNM Resources, Inc.	PNM	\$1.41	\$1.54	\$1.68	\$1.84	\$2.01	\$2.20	\$2.40	\$2.61	\$2.81	\$3.01	\$3.20	\$3.38	\$3.57	\$3.77	\$3.98	\$4.21	\$4.45
Portland General Electric Company	POR	\$1.77	\$1.89	\$2.02	\$2.16	\$2.31	\$2.47	\$2.64	\$2.81	\$2.99	\$3.18	\$3.36	\$3.55	\$3.75	\$3.96	\$4.19	\$4.42	\$4.67
Southern Company	SO	\$2.70	\$2.80	\$2.90	\$3.00	\$3.11	\$3.22	\$3.33	\$3.47	\$3.62	\$3.79	\$3.99	\$4.21	\$4.45	\$4.70	\$4.97	\$5.25	\$5.54
TECO Energy, Inc.	TE	\$0.92	\$0.97	\$1.02	\$1.08	\$1.14	\$1.20	\$1.27	\$1.34	\$1.41	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$1.96	\$2.07	\$2.18
Westar Energy, Inc.	WR	\$2.27	\$2.37	\$2.47	\$2.58	\$2.69	\$2.81	\$2.93	\$3.06	\$3.21	\$3.35	\$3.50	\$3.76	\$4.05	\$4.35	\$4.63	\$4.94	\$5.29
Xcel Energy Inc.	XEL	\$1.81	\$2.00	\$2.10	\$2.19	\$2.30	\$2.41	\$2.52	\$2.65	\$2.78	\$2.93	\$3.09	\$3.28	\$3.44	\$3.64	\$3.84	\$4.06	\$4.29

Projected Annual Dividend Payout Ratio	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]		
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
Akbar Energy Corporation	LHIT	59.00%	59.25%	59.50%	59.75%	60.00%	61.21%	62.41%	63.62%	64.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Amaren Corporation	AEE	68.00%	65.75%	63.50%	61.25%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
American Electric Power Company, Inc.	AEP	61.00%	61.60%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
CMS Energy Corporation	CMS	60.00%	59.69%	59.09%	58.50%	58.00%	59.54%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
DTE Energy Company	DTE	57.00%	57.25%	57.50%	57.75%	58.00%	59.54%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.64%	65.66%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	68.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	78.00%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.54%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NexEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.71%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NEU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
OGE Energy Corp.	OGE	47.00%	48.75%	50.50%	52.25%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Oster Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PW	63.00%	63.50%	64.00%	64.50%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	50.00%	49.75%	49.50%	49.25%	49.00%	52.04%	55.06%	58.12%	61.15%	64.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
TECO Energy, Inc.	TE	93.00%	87.50%	82.00%	76.50%	71.00%	70.37%	69.74%	69.12%	68.49%	67.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	57.04%	59.06%	61.12%	63.15%	65.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Xcel Energy Inc.	XEL	61.00%	60.75%	60.50%	60.25%	60.00%	61.21%	62.41%	63.62%	64.82%	66.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%



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

Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
Altair Energy Corporation	LHT	\$2.04	\$2.16	\$2.28	\$2.41	\$2.55	\$2.73	\$2.94	\$3.15	\$3.39	\$3.64	\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$5.15	\$150.50	
Ameren Corporation	AEE	\$1.53	\$1.59	\$1.64	\$1.70	\$1.76	\$1.83	\$2.11	\$2.30	\$2.49	\$2.70	\$2.91	\$3.07	\$3.25	\$3.43	\$3.62	\$3.83	\$59.70	
American Electric Power Company, Inc.	AEP	\$2.03	\$2.15	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.03	\$3.22	\$3.43	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$4.82	\$118.92	
CMS Energy Corporation	CMS	\$1.06	\$1.12	\$1.18	\$1.25	\$1.32	\$1.44	\$1.57	\$1.71	\$1.85	\$2.01	\$2.17	\$2.29	\$2.42	\$2.56	\$2.70	\$2.86	\$69.03	
DTE Energy Company	DTE	\$2.28	\$2.43	\$2.69	\$2.76	\$2.94	\$3.21	\$3.49	\$3.79	\$4.12	\$4.46	\$4.82	\$5.09	\$5.37	\$5.63	\$6.00	\$6.33	\$176.61	
Duke Energy Corporation	DUK	\$2.96	\$3.03	\$3.09	\$3.16	\$3.22	\$3.41	\$3.61	\$3.82	\$4.06	\$4.32	\$4.60	\$4.85	\$5.13	\$5.42	\$5.72	\$6.04	\$164.67	
Empire District Electric Company	EDE	\$1.01	\$1.03	\$1.05	\$1.08	\$1.10	\$1.15	\$1.20	\$1.27	\$1.34	\$1.43	\$1.52	\$1.61	\$1.70	\$1.80	\$1.90	\$2.00	\$55.92	
Great Plains Energy Inc.	GXP	\$0.99	\$1.09	\$1.14	\$1.22	\$1.30	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82	\$1.95	\$2.05	\$2.17	\$2.29	\$2.42	\$2.56	\$56.82	
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.76	\$1.86	\$1.95	\$2.07	\$2.19	\$2.31	\$55.23	
IDACORP, Inc.	IDA	\$1.92	\$2.04	\$2.18	\$2.32	\$2.47	\$2.61	\$2.78	\$2.97	\$3.18	\$3.42	\$3.70	\$3.91	\$4.13	\$4.36	\$4.61	\$4.87	\$126.07	
NextEra Energy, Inc.	NEE	\$3.13	\$3.28	\$3.43	\$3.58	\$3.75	\$4.10	\$4.49	\$4.69	\$5.02	\$5.38	\$5.78	\$6.27	\$6.62	\$6.99	\$7.38	\$7.80	\$219.43	
Northeast Utilities	NU	\$1.60	\$1.69	\$1.69	\$1.91	\$2.02	\$2.22	\$2.43	\$2.65	\$2.88	\$3.13	\$3.33	\$3.57	\$3.77	\$3.98	\$4.21	\$4.44	\$104.77	
OGE Energy Corp.	OGE	\$0.97	\$1.07	\$1.18	\$1.30	\$1.43	\$1.55	\$1.74	\$1.92	\$2.10	\$2.30	\$2.52	\$2.66	\$2.81	\$2.96	\$3.13	\$3.31	\$84.87	
Older Tail Corporation	OTTR	\$1.06	\$1.13	\$1.20	\$1.27	\$1.35	\$1.53	\$1.71	\$1.90	\$2.09	\$2.28	\$2.46	\$2.60	\$2.74	\$2.90	\$3.06	\$3.23	\$66.03	
Pinnacle West Capital Corporation	PNW	\$2.40	\$2.51	\$2.63	\$2.78	\$2.89	\$3.02	\$3.17	\$3.34	\$3.62	\$3.73	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$5.21	\$123.82	
PNM Resources, Inc.	PNM	\$0.77	\$0.84	\$0.91	\$0.99	\$1.03	\$1.25	\$1.44	\$1.63	\$1.84	\$2.05	\$2.27	\$2.40	\$2.54	\$2.68	\$2.83	\$2.99	\$64.04	
Portland General Electric Company	POR	\$0.95	\$1.03	\$1.12	\$1.22	\$1.33	\$1.43	\$1.64	\$1.81	\$1.99	\$2.19	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.14	\$78.30	
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.32	\$2.37	\$2.44	\$2.52	\$2.61	\$2.71	\$2.83	\$2.99	\$3.16	\$3.34	\$3.53	\$3.73	\$94.55	
TECO Energy, Inc.	TE	\$0.90	\$0.90	\$0.89	\$0.87	\$0.65	\$0.89	\$0.93	\$0.97	\$1.02	\$1.07	\$1.12	\$1.18	\$1.25	\$1.32	\$1.39	\$1.47	\$38.28	
Westar Energy, Inc.	WR	\$1.37	\$1.41	\$1.46	\$1.50	\$1.54	\$1.67	\$1.81	\$1.96	\$2.13	\$2.32	\$2.53	\$2.67	\$2.82	\$2.98	\$3.14	\$3.32	\$81.73	
Xcel Energy Inc.	XEL	\$1.22	\$1.27	\$1.33	\$1.33	\$1.44	\$1.54	\$1.65	\$1.77	\$1.90	\$2.04	\$2.19	\$2.31	\$2.45	\$2.58	\$2.73	\$2.88	\$70.52	

Projected Annual Data Investor Cash Flows		[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]
Company	Ticker	Initial Outflow	11/14/14	12/31/14	6/30/15	6/30/16	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
Altair Energy Corporation	LHT	(\$58.31)	\$0.00	\$0.26	\$2.10	\$2.28	\$2.41	\$2.55	\$2.73	\$2.94	\$3.15	\$3.39	\$3.64	\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$135.69
Ameren Corporation	AEE	(\$39.75)	\$0.00	\$0.20	\$1.59	\$1.64	\$1.70	\$1.76	\$1.83	\$2.11	\$2.30	\$2.49	\$2.70	\$2.91	\$3.07	\$3.25	\$3.43	\$3.62	\$93.52
American Electric Power Company, Inc.	AEP	(\$53.81)	\$0.00	\$0.26	\$2.08	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.03	\$3.22	\$3.43	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$123.73
CMS Energy Corporation	CMS	(\$30.47)	\$0.00	\$0.14	\$1.09	\$1.18	\$1.25	\$1.32	\$1.44	\$1.57	\$1.71	\$1.85	\$2.01	\$2.17	\$2.29	\$2.42	\$2.56	\$2.70	\$71.93
DTE Energy Company	DTE	(\$77.50)	\$0.00	\$0.29	\$2.35	\$2.59	\$2.76	\$2.94	\$3.21	\$3.49	\$3.79	\$4.12	\$4.46	\$4.82	\$5.09	\$5.37	\$5.63	\$6.00	\$181.95
Duke Energy Corporation	DUK	(\$75.35)	\$0.00	\$0.38	\$3.03	\$3.09	\$3.16	\$3.22	\$3.41	\$3.61	\$3.82	\$4.06	\$4.32	\$4.60	\$4.85	\$5.13	\$5.42	\$5.72	\$170.71
Empire District Electric Company	EDE	(\$25.68)	\$0.00	\$0.13	\$1.03	\$1.05	\$1.08	\$1.10	\$1.15	\$1.20	\$1.27	\$1.34	\$1.43	\$1.52	\$1.61	\$1.70	\$1.80	\$1.90	\$57.93
Great Plains Energy Inc.	GXP	(\$25.45)	\$0.00	\$0.13	\$1.02	\$1.14	\$1.22	\$1.30	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82	\$1.95	\$2.05	\$2.17	\$2.29	\$2.42	\$59.33
Hawaiian Electric Industries, Inc.	HE	(\$25.74)	\$0.00	\$0.16	\$1.31	\$1.28	\$1.28	\$1.23	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.76	\$1.86	\$1.95	\$2.07	\$2.19	\$57.54
IDACORP, Inc.	IDA	(\$56.39)	\$0.00	\$0.25	\$1.95	\$2.18	\$2.32	\$2.47	\$2.61	\$2.78	\$2.97	\$3.18	\$3.42	\$3.70	\$3.91	\$4.13	\$4.36	\$4.61	\$130.84
NextEra Energy, Inc.	NEE	(\$96.84)	\$0.00	\$0.40	\$3.23	\$3.43	\$3.58	\$3.75	\$4.10	\$4.49	\$4.69	\$5.02	\$5.38	\$5.78	\$6.27	\$6.62	\$6.99	\$7.38	\$227.67
Northeast Utilities	NU	(\$45.03)	\$0.00	\$0.21	\$1.65	\$1.69	\$1.91	\$2.02	\$2.22	\$2.43	\$2.65	\$2.88	\$3.13	\$3.33	\$3.57	\$3.77	\$3.98	\$4.21	\$109.21
OGE Energy Corp.	OGE	(\$36.65)	\$0.00	\$0.12	\$1.00	\$1.18	\$1.30	\$1.43	\$1.55	\$1.74	\$1.92	\$2.10	\$2.30	\$2.52	\$2.66	\$2.81	\$2.96	\$3.13	\$85.17
Older Tail Corporation	OTTR	(\$28.51)	\$0.00	\$0.14	\$1.12	\$1.20	\$1.27	\$1.35	\$1.53	\$1.71	\$1.90	\$2.09	\$2.28	\$2.46	\$2.60	\$2.74	\$2.90	\$3.06	\$69.31
Pinnacle West Capital Corporation	PNW	(\$56.65)	\$0.00	\$0.31	\$2.45	\$2.63	\$2.78	\$2.89	\$3.02	\$3.17	\$3.34	\$3.62	\$3.73	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$129.03
PNM Resources, Inc.	PNM	(\$26.68)	\$0.00	\$0.10	\$0.81	\$0.91	\$0.99	\$1.08	\$1.25	\$1.44	\$1.63	\$1.84	\$2.05	\$2.27	\$2.40	\$2.54	\$2.68	\$2.83	\$67.03
Portland General Electric Company	POR	(\$33.78)	\$0.00	\$0.12	\$0.98	\$1.12	\$1.22	\$1.33	\$1.43	\$1.64	\$1.81	\$1.99	\$2.19	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$81.44
Southern Company	SO	(\$44.77)	\$0.00	\$0.27	\$2.11	\$2.19	\$2.25	\$2.32	\$2.37	\$2.44	\$2.52	\$2.61	\$2.71	\$2.83	\$2.99	\$3.16	\$3.34	\$3.53	\$98.28
TECO Energy, Inc.	TE	(\$18.10)	\$0.00	\$0.12	\$0.93	\$0.89	\$0.87	\$0.65	\$0.89	\$0.93	\$0.97	\$1.02	\$1.07	\$1.12	\$1.18	\$1.25	\$1.32	\$1.39	\$39.75
Westar Energy, Inc.	WR	(\$36.27)	\$0.00	\$0.18	\$1.40	\$1.46	\$1.50	\$1.54	\$1.67	\$1.81	\$1.96	\$2.13	\$2.32	\$2.53	\$2.67	\$2.82	\$2.98	\$3.14	\$85.05
Xcel Energy Inc.	XEL	(\$31.70)	\$0.00	\$0.16	\$1.25	\$1.33	\$1.33	\$1.44	\$1.54	\$1.65	\$1.77	\$1.90	\$2.04	\$2.19	\$2.31	\$2.45	\$2.58	\$2.73	\$73.41

Multi-Stage Growth Discounted Cash Flow Model  
 50 Day Average Stock Price  
 High EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
Stock		EPS Growth Rate Estimates					Long-Term	Payout Ratio			Iterative Solution	Terminal		
Company	Ticker	Price	Zacks	First Call	Line	High Growth	Growth	2014	2018	2024	Proof	IRR	P/E Ratio	EG Ratio
Altant Energy Corporation	LNT	\$58.31	4.60%	4.90%	6.00%	6.00%	5.63%	59.00%	60.00%	67.23%	(\$0.00)	10.02%	18.15	2.87
Ameren Corporation	AEE	\$19.75	8.30%	8.50%	4.60%	8.90%	5.63%	68.00%	59.00%	67.23%	(\$0.00)	10.65%	14.13	2.51
American Electric Power Company, Inc.	AEP	\$53.81	4.50%	4.97%	4.50%	4.97%	5.63%	61.00%	63.00%	67.23%	(\$0.00)	9.96%	16.39	2.91
CMS Energy Corporation	CMS	\$30.47	6.10%	6.60%	6.60%	6.60%	5.63%	60.00%	58.00%	67.23%	(\$0.00)	10.06%	15.91	2.83
DTE Energy Company	DTE	\$77.50	6.20%	5.87%	6.50%	6.50%	5.63%	57.00%	58.00%	67.23%	(\$0.00)	9.52%	18.25	3.24
Duke Energy Corporation	DUK	\$75.35	4.70%	4.76%	5.00%	5.00%	5.63%	71.00%	64.00%	67.23%	(\$0.00)	9.55%	18.09	3.21
Empire District Electric Company	EDE	\$25.68	3.00%	3.00%	4.00%	4.00%	5.63%	66.00%	63.00%	67.23%	\$0.00	9.60%	17.89	3.18
Great Plains Energy Inc.	GXP	\$25.45	5.00%	5.00%	6.00%	6.00%	5.63%	58.00%	62.00%	67.23%	\$0.00	10.69%	14.28	2.54
Hawaiian Electric Industries, Inc.	HE	\$25.74	4.00%	4.00%	4.00%	4.00%	5.63%	76.00%	65.00%	67.23%	\$0.00	10.05%	16.08	2.68
IDACORP, Inc.	IDA	\$58.39	4.00%	4.00%	4.00%	4.00%	5.63%	51.00%	58.00%	67.23%	(\$0.00)	9.55%	16.43	2.92
NexEra Energy, Inc.	NEE	\$90.84	6.60%	6.47%	6.00%	6.00%	5.63%	61.00%	57.00%	67.23%	(\$0.00)	9.66%	17.61	3.13
Northeast Utilities	NU	\$49.03	6.70%	6.19%	6.00%	6.00%	5.63%	60.00%	58.00%	67.23%	(\$0.00)	10.43%	14.80	2.63
OSG Energy Corp.	OSG	\$38.65	6.50%	7.05%	5.50%	7.05%	6.63%	47.00%	54.00%	67.23%	(\$0.00)	9.84%	16.46	2.93
Orsted Tail Corporation	OTTR	\$24.51	NA	6.00%	15.50%	15.50%	5.63%	70.00%	59.00%	67.23%	(\$0.00)	12.61%	10.32	1.83
Pinnacle West Capital Corporation	PNW	\$58.85	4.00%	3.95%	4.00%	4.00%	5.63%	63.00%	65.00%	67.23%	\$0.00	10.06%	15.95	2.83
PNM Resources, Inc.	PNM	\$26.68	8.50%	8.34%	11.00%	11.00%	5.63%	50.00%	49.00%	67.23%	(\$0.00)	11.11%	12.94	2.30
Portland General Electric Company	POR	\$33.78	7.80%	7.83%	5.00%	7.83%	5.63%	50.00%	54.00%	67.23%	(\$0.00)	10.14%	15.75	2.60
Southern Company	SO	\$44.77	3.60%	3.62%	3.50%	3.62%	5.63%	74.00%	72.00%	67.23%	\$0.00	9.80%	17.01	3.02
TECO Energy, Inc.	TE	\$18.10	6.50%	6.43%	3.50%	6.50%	5.63%	93.00%	71.00%	67.23%	\$0.00	9.98%	16.32	2.90
Westar Energy, Inc.	WR	\$38.27	3.80%	3.20%	6.00%	6.00%	5.63%	58.00%	55.00%	67.23%	(\$0.00)	10.43%	14.78	2.63
Xcel Energy Inc.	XEL	\$31.70	4.20%	4.51%	5.50%	5.50%	5.63%	61.00%	60.00%	67.23%	(\$0.00)	10.17%	15.62	2.78

DCF Result

Mean	10.20%	15.77	2.60
Max	12.61%	18.25	3.24
Mn	9.52%	10.32	1.83

Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Altant Energy Corporation	LNT	\$3.23	\$3.49	\$3.70	\$3.92	\$4.15	\$4.40	\$4.67	\$4.94	\$5.23	\$5.53	\$5.85	\$6.18	\$6.53	\$6.89	\$7.28	\$7.69	\$8.13
Ameren Corporation	AEE	\$2.10	\$2.29	\$2.49	\$2.71	\$2.95	\$3.22	\$3.50	\$3.79	\$4.08	\$4.36	\$4.64	\$4.90	\$5.17	\$5.45	\$5.77	\$6.10	\$6.44
American Electric Power Company, Inc.	AEP	\$3.18	\$3.34	\$3.50	\$3.68	\$3.86	\$4.05	\$4.25	\$4.47	\$4.71	\$4.96	\$5.23	\$5.52	\$5.84	\$6.16	\$6.51	\$6.88	\$7.26
CMS Energy Corporation	CMS	\$1.66	\$1.77	\$1.89	\$2.02	\$2.16	\$2.31	\$2.43	\$2.63	\$2.79	\$2.96	\$3.14	\$3.31	\$3.50	\$3.69	\$3.90	\$4.12	\$4.35
DTE Energy Company	DTE	\$3.76	\$4.00	\$4.26	\$4.54	\$4.84	\$5.15	\$5.49	\$5.83	\$6.19	\$6.56	\$6.94	\$7.33	\$7.75	\$8.18	\$8.64	\$9.13	\$9.64
Duke Energy Corporation	DUK	\$3.59	\$4.18	\$4.39	\$4.61	\$4.84	\$5.08	\$5.33	\$5.61	\$5.90	\$6.22	\$6.56	\$6.93	\$7.32	\$7.73	\$8.17	\$8.63	\$9.11
Empire District Electric Company	EDE	\$1.49	\$1.54	\$1.60	\$1.66	\$1.73	\$1.80	\$1.87	\$1.95	\$2.04	\$2.15	\$2.26	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.14
Great Plains Energy Inc.	GXP	\$1.62	\$1.72	\$1.82	\$1.93	\$2.05	\$2.17	\$2.30	\$2.43	\$2.58	\$2.73	\$2.83	\$3.04	\$3.21	\$3.40	\$3.59	\$3.79	\$4.00
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25	\$3.44
IDACORP, Inc.	IDA	\$3.64	\$3.78	\$3.94	\$4.09	\$4.25	\$4.43	\$4.61	\$4.80	\$5.03	\$5.28	\$5.56	\$5.87	\$6.20	\$6.55	\$6.92	\$7.31	\$7.72
NexEra Energy, Inc.	NEE	\$4.93	\$5.15	\$5.49	\$5.85	\$6.21	\$6.65	\$7.09	\$7.54	\$8.01	\$8.49	\$8.99	\$9.49	\$10.03	\$10.59	\$11.19	\$11.82	\$12.43
Northeast Utilities	NU	\$2.43	\$2.69	\$2.90	\$3.14	\$3.39	\$3.66	\$3.95	\$4.25	\$4.55	\$4.85	\$5.14	\$5.43	\$5.74	\$6.06	\$6.40	\$6.76	\$7.14
OSG Energy Corp.	OSG	\$1.94	\$2.08	\$2.22	\$2.38	\$2.55	\$2.73	\$2.92	\$3.12	\$3.32	\$3.52	\$3.73	\$3.94	\$4.17	\$4.40	\$4.65	\$4.91	\$5.18
Orsted Tail Corporation	OTTR	\$1.37	\$1.58	\$1.83	\$2.11	\$2.44	\$2.82	\$3.25	\$3.69	\$4.12	\$4.51	\$4.86	\$5.13	\$5.42	\$5.72	\$6.05	\$6.39	\$6.74
Pinnacle West Capital Corporation	PNW	\$3.65	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.63	\$4.83	\$5.06	\$5.31	\$5.59	\$5.90	\$6.24	\$6.69	\$7.15	\$7.62	\$8.10
PNM Resources, Inc.	PNM	\$1.41	\$1.57	\$1.74	\$1.93	\$2.14	\$2.38	\$2.64	\$2.90	\$3.16	\$3.40	\$3.63	\$3.83	\$4.05	\$4.28	\$4.52	\$4.77	\$5.04
Portland General Electric Company	POR	\$1.77	\$1.91	\$2.06	\$2.22	\$2.39	\$2.58	\$2.78	\$2.99	\$3.20	\$3.40	\$3.61	\$3.81	\$4.03	\$4.25	\$4.49	\$4.75	\$5.01
Southern Company	SO	\$2.70	\$2.60	\$2.50	\$3.00	\$3.11	\$3.23	\$3.34	\$3.48	\$3.63	\$3.81	\$4.00	\$4.23	\$4.47	\$4.72	\$4.98	\$5.27	\$5.56
TECO Energy, Inc.	TE	\$0.92	\$0.93	\$1.04	\$1.11	\$1.18	\$1.26	\$1.34	\$1.43	\$1.52	\$1.61	\$1.70	\$1.79	\$1.90	\$2.00	\$2.11	\$2.23	\$2.35
Westar Energy, Inc.	WR	\$2.27	\$2.41	\$2.55	\$2.70	\$2.87	\$3.04	\$3.22	\$3.41	\$3.61	\$3.82	\$4.04	\$4.26	\$4.50	\$4.76	\$5.02	\$5.31	\$5.61
Xcel Energy Inc.	XEL	\$1.91	\$2.02	\$2.13	\$2.24	\$2.37	\$2.50	\$2.63	\$2.78	\$2.93	\$3.10	\$3.27	\$3.45	\$3.65	\$3.85	\$4.07	\$4.30	\$4.54

Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
Altant Energy Corporation	LNT	59.00%	59.25%	59.50%	59.75%	60.00%	61.21%	62.41%	63.62%	64.82%	66.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Ameren Corporation	AEE	68.00%	65.75%	63.50%	61.25%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
CMS Energy Corporation	CMS	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.03%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
DTE Energy Company	DTE	67.00%	67.25%	67.50%	67.75%	68.00%	69.54%	71.03%	72.62%	74.15%	75.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.54%	65.03%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.81%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	76.00%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.54%	61.03%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NexEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.71%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.03%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
OSG Energy Corp.	OSG	47.00%	48.75%	50.50%	52.25%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Orsted Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	63.00%	63.50%	64.00%	64.50%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	50.00%	49.75%	49.50%	49.25%	49.00%	52.04%	55.04%	58.12%	61.15%	64.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
TECO Energy, Inc.	TE	93.00%	87.50%	82.00%	76.50%	71.00%	70.37%	69.74%	69.12%	68.49%	67.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	57.04%	59.03%	61.12%	63.15%	65.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Xcel Energy Inc.	XEL	61.00%	60.75%	60.50%	60.25%	60.00%	61.21%	62.41%	63.62%	64.82%	66.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%

Multi-Stage Growth Discounted Cash Flow Model  
 60 Day Average Stock Price  
 High EPS Growth Rate Estimate in First Stage

Projected Annual Cash Flows		(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Alliant Energy Corporation	LNT	\$2.06	\$2.19	\$2.33	\$2.43	\$2.64	\$2.66	\$3.09	\$3.33	\$3.69	\$3.66	\$4.15	\$4.39	\$4.64	\$4.60	\$5.17	\$5.48	\$5.88	\$131.28
Ameren Corporation	AEE	\$1.56	\$1.64	\$1.72	\$1.81	\$1.90	\$2.11	\$2.34	\$2.57	\$2.81	\$3.05	\$3.29	\$3.43	\$3.67	\$3.68	\$4.10	\$4.33	\$4.63	\$90.64
American Electric Power Company, Inc.	AEP	\$2.04	\$2.15	\$2.28	\$2.41	\$2.55	\$2.71	\$2.88	\$3.06	\$3.26	\$3.49	\$3.71	\$3.92	\$4.14	\$4.33	\$4.62	\$4.63	\$4.63	\$119.07
CMS Energy Corporation	CMS	\$1.06	\$1.13	\$1.19	\$1.26	\$1.34	\$1.47	\$1.60	\$1.75	\$1.90	\$2.06	\$2.23	\$2.35	\$2.43	\$2.62	\$2.77	\$2.93	\$2.93	\$69.26
DTE Energy Company	DTE	\$2.28	\$2.44	\$2.61	\$2.79	\$2.99	\$3.27	\$3.56	\$3.83	\$4.21	\$4.56	\$4.93	\$5.21	\$5.50	\$5.81	\$6.14	\$6.48	\$6.88	\$176.00
Duke Energy Corporation	DUK	\$2.97	\$3.04	\$3.11	\$3.18	\$3.25	\$3.44	\$3.65	\$3.87	\$4.11	\$4.38	\$4.66	\$4.92	\$5.20	\$5.49	\$5.80	\$6.13	\$6.44	\$164.85
Empire District Electric Company	EDE	\$1.02	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.70	\$1.79	\$1.89	\$2.00	\$2.11	\$2.11	\$56.16
Great Plains Energy Inc.	GXP	\$1.09	\$1.07	\$1.16	\$1.25	\$1.34	\$1.44	\$1.55	\$1.66	\$1.78	\$1.91	\$2.05	\$2.16	\$2.28	\$2.41	\$2.55	\$2.69	\$2.77	\$57.13
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.76	\$1.88	\$1.98	\$2.07	\$2.19	\$2.31	\$2.31	\$55.23
IDACORP, Inc.	IDA	\$1.93	\$2.08	\$2.23	\$2.40	\$2.57	\$2.74	\$2.93	\$3.15	\$3.39	\$3.65	\$3.95	\$4.17	\$4.40	\$4.65	\$4.91	\$5.19	\$5.49	\$129.69
NextEra Energy, Inc.	NEE	\$3.14	\$3.29	\$3.45	\$3.62	\$3.79	\$4.16	\$4.56	\$4.99	\$5.42	\$5.89	\$6.38	\$6.74	\$7.12	\$7.52	\$7.94	\$8.39	\$8.89	\$219.83
Northeast Utilities	NEU	\$1.61	\$1.73	\$1.85	\$1.98	\$2.12	\$2.25	\$2.49	\$2.65	\$3.11	\$3.33	\$3.65	\$3.68	\$4.08	\$4.30	\$4.55	\$4.80	\$5.05	\$105.71
OGE Energy Corp.	OGE	\$0.93	\$1.08	\$1.20	\$1.33	\$1.47	\$1.64	\$1.82	\$2.01	\$2.21	\$2.43	\$2.65	\$2.80	\$2.96	\$3.12	\$3.30	\$3.49	\$3.67	\$55.37
Oter Tail Corporation	OTTR	\$1.11	\$1.23	\$1.36	\$1.51	\$1.66	\$1.98	\$2.28	\$2.60	\$2.81	\$3.20	\$3.45	\$3.64	\$3.85	\$4.05	\$4.29	\$4.53	\$4.83	\$69.68
Pinnacle West Capital Corporation	PNW	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.03	\$3.18	\$3.34	\$3.63	\$3.74	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$5.22	\$5.22	\$123.83
PNM Resources, Inc.	PNM	\$0.78	\$0.86	\$0.95	\$1.05	\$1.16	\$1.37	\$1.60	\$1.83	\$2.08	\$2.33	\$2.58	\$2.72	\$2.88	\$3.04	\$3.21	\$3.39	\$3.59	\$55.23
Portland General Electric Company	POR	\$0.95	\$1.05	\$1.15	\$1.27	\$1.39	\$1.56	\$1.75	\$1.94	\$2.14	\$2.35	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37	\$3.75	\$78.95
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.26	\$2.32	\$2.38	\$2.45	\$2.53	\$2.62	\$2.72	\$2.84	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$3.94	\$94.58
TECO Energy, Inc.	TE	\$0.91	\$0.91	\$0.91	\$0.91	\$0.89	\$0.94	\$1.00	\$1.06	\$1.10	\$1.15	\$1.21	\$1.27	\$1.35	\$1.42	\$1.50	\$1.59	\$38.61	
Westar Energy, Inc.	WR	\$1.40	\$1.48	\$1.53	\$1.60	\$1.67	\$1.84	\$2.02	\$2.21	\$2.41	\$2.63	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57	\$3.77	\$3.97	\$82.69
Xcel Energy Inc.	XEL	\$1.28	\$1.29	\$1.36	\$1.43	\$1.50	\$1.61	\$1.73	\$1.87	\$2.01	\$2.16	\$2.32	\$2.45	\$2.59	\$2.74	\$2.89	\$3.05	\$3.05	\$70.94

Projected Annual Data Investor Cash Flows		(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)	(76)	(77)	(78)	(79)	(80)	(81)
Company	Ticker	Initial Outflow	11/14/14	12/31/14	6/30/15	6/30/16	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
Alliant Energy Corporation	LNT	(\$59.31)	\$0.00	\$0.26	\$2.12	\$2.33	\$2.48	\$2.64	\$2.66	\$3.09	\$3.33	\$3.69	\$3.66	\$4.15	\$4.39	\$4.64	\$4.60	\$5.17	\$5.48
Ameren Corporation	AEE	(\$39.75)	\$0.00	\$0.20	\$1.62	\$1.72	\$1.81	\$1.90	\$2.11	\$2.34	\$2.57	\$2.81	\$3.05	\$3.29	\$3.43	\$3.67	\$3.68	\$4.10	\$4.33
American Electric Power Company, Inc.	AEP	(\$53.81)	\$0.00	\$0.26	\$2.09	\$2.28	\$2.41	\$2.55	\$2.71	\$2.88	\$3.06	\$3.26	\$3.49	\$3.71	\$3.92	\$4.14	\$4.33	\$4.62	\$4.63
CMS Energy Corporation	CMS	(\$30.47)	\$0.00	\$0.14	\$1.10	\$1.19	\$1.26	\$1.34	\$1.47	\$1.60	\$1.75	\$1.90	\$2.06	\$2.23	\$2.35	\$2.43	\$2.62	\$2.77	\$2.93
DTE Energy Company	DTE	(\$77.50)	\$0.00	\$0.29	\$2.36	\$2.61	\$2.79	\$2.99	\$3.27	\$3.56	\$3.83	\$4.21	\$4.56	\$4.93	\$5.21	\$5.50	\$5.81	\$6.14	\$6.48
Duke Energy Corporation	DUK	(\$75.35)	\$0.00	\$0.38	\$3.04	\$3.11	\$3.18	\$3.25	\$3.44	\$3.65	\$3.87	\$4.11	\$4.38	\$4.66	\$4.92	\$5.20	\$5.49	\$5.80	\$176.03
Empire District Electric Company	EDE	(\$25.68)	\$0.00	\$0.13	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.70	\$1.79	\$1.89	\$2.00	\$56.27
Great Plains Energy Inc.	GXP	(\$25.42)	\$0.00	\$0.13	\$1.03	\$1.16	\$1.25	\$1.34	\$1.44	\$1.55	\$1.66	\$1.78	\$1.91	\$2.05	\$2.16	\$2.28	\$2.41	\$2.55	\$57.82
Hawaiian Electric Industries, Inc.	HE	(\$25.74)	\$0.00	\$0.16	\$1.31	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.76	\$1.88	\$1.98	\$2.07	\$2.19	\$57.54
IDACORP, Inc.	IDA	(\$56.39)	\$0.00	\$0.25	\$1.97	\$2.23	\$2.40	\$2.57	\$2.74	\$2.93	\$3.15	\$3.39	\$3.65	\$3.95	\$4.17	\$4.40	\$4.65	\$4.91	\$132.05
NextEra Energy, Inc.	NEE	(\$60.84)	\$0.00	\$0.40	\$3.24	\$3.45	\$3.62	\$3.79	\$4.16	\$4.56	\$4.99	\$5.42	\$5.89	\$6.38	\$6.74	\$7.12	\$7.52	\$7.94	\$228.22
Northeast Utilities	NEU	(\$48.03)	\$0.00	\$0.21	\$1.68	\$1.85	\$1.98	\$2.12	\$2.25	\$2.49	\$2.65	\$3.11	\$3.33	\$3.65	\$3.68	\$4.08	\$4.30	\$4.55	\$110.51
OGE Energy Corp.	OGE	(\$38.65)	\$0.00	\$0.13	\$1.01	\$1.20	\$1.33	\$1.47	\$1.64	\$1.82	\$2.01	\$2.21	\$2.43	\$2.65	\$2.80	\$2.96	\$3.12	\$3.30	\$58.85
Oter Tail Corporation	OTTR	(\$28.51)	\$0.00	\$0.14	\$1.19	\$1.36	\$1.51	\$1.66	\$1.98	\$2.28	\$2.60	\$2.91	\$3.20	\$3.45	\$3.64	\$3.85	\$4.05	\$4.29	\$74.12
Pinnacle West Capital Corporation	PNW	(\$56.65)	\$0.00	\$0.31	\$2.45	\$2.63	\$2.76	\$2.89	\$3.03	\$3.18	\$3.34	\$3.53	\$3.74	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$123.05
PNM Resources, Inc.	PNM	(\$26.68)	\$0.00	\$0.10	\$0.83	\$0.95	\$1.05	\$1.16	\$1.37	\$1.60	\$1.83	\$2.08	\$2.33	\$2.58	\$2.72	\$2.88	\$3.04	\$3.21	\$68.62
Portland General Electric Company	POR	(\$33.78)	\$0.00	\$0.12	\$0.99	\$1.15	\$1.27	\$1.39	\$1.56	\$1.75	\$1.94	\$2.14	\$2.35	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$82.32
Southern Company	SO	(\$44.77)	\$0.00	\$0.27	\$2.11	\$2.19	\$2.26	\$2.32	\$2.38	\$2.45	\$2.53	\$2.62	\$2.72	\$2.84	\$3.00	\$3.17	\$3.35	\$3.54	\$93.31
TECO Energy, Inc.	TE	(\$18.10)	\$0.00	\$0.12	\$0.94	\$0.91	\$0.91	\$0.89	\$0.94	\$1.00	\$1.06	\$1.10	\$1.15	\$1.21	\$1.27	\$1.35	\$1.42	\$1.50	\$40.09
Westar Energy, Inc.	WR	(\$38.27)	\$0.00	\$0.18	\$1.44	\$1.53	\$1.60	\$1.67	\$1.84	\$2.02	\$2.21	\$2.41	\$2.63	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57	\$95.66
Xcel Energy Inc.	XEL	(\$31.70)	\$0.00	\$0.16	\$1.26	\$1.35	\$1.43	\$1.50	\$1.61	\$1.73	\$1.87	\$2.01	\$2.16	\$2.32	\$2.45	\$2.59	\$2.74	\$2.89	\$73.99

Multi-Stage Growth Discounted Cash Flow Model  
 50 Day Average Stock Price  
 Low EPS Growth Rate Estimate in First Stage

Inputs	Ticker	Price	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
			Stock	EPS Growth Rate	Estimate	Low	Long-Term	Payoff Ratio	Iterative Solution	Terminal	Terminal				
Company			Zacks	First Call	Line	Growth	2014	2018	2024	Proof	IRR	P/E Ratio	%PEG Ratio		
Aflac Energy Corporation	LUIT	\$58.31	4.80%	4.90%	6.00%	4.80%	5.63%	59.00%	60.00%	67.23%	(50.00)	9.68%	17.54	3.12	
Ameren Corporation	AEE	\$39.75	8.30%	8.90%	4.50%	4.50%	5.63%	68.00%	59.00%	67.23%	(50.00)	9.36%	19.00	3.38	
American Electric Power Company, Inc.	AEP	\$53.81	4.90%	4.97%	4.50%	4.50%	5.63%	61.00%	63.00%	67.23%	(50.00)	9.82%	16.93	3.01	
CMS Energy Corporation	CMS	\$30.47	6.10%	6.80%	6.50%	6.10%	5.63%	60.00%	58.00%	67.23%	(50.00)	9.69%	16.67	2.96	
DTE Energy Company	DTE	\$77.50	6.20%	5.87%	6.50%	5.87%	5.63%	57.00%	58.00%	67.23%	(50.00)	9.95%	19.05	3.39	
Duke Energy Corporation	DUK	\$75.35	4.70%	4.76%	5.00%	4.70%	5.63%	71.00%	64.00%	67.23%	(50.00)	9.47%	18.43	3.28	
Empire District Electric Company	EDE	\$26.68	3.00%	3.00%	4.00%	3.00%	5.63%	60.00%	63.00%	67.23%	(50.00)	9.32%	19.21	3.41	
Great Plains Energy Inc.	GXP	\$25.46	5.00%	5.00%	6.00%	5.00%	5.63%	58.00%	62.00%	67.23%	(50.00)	10.26%	15.28	2.72	
Hawaiian Electric Industries, Inc.	HE	\$26.74	4.00%	4.00%	4.00%	4.00%	5.63%	78.00%	65.00%	67.23%	(50.00)	10.06%	16.08	2.66	
IDACORP, Inc.	IDA	\$58.39	4.00%	4.00%	1.50%	1.50%	5.63%	51.00%	58.00%	67.23%	(50.00)	9.25%	19.61	3.48	
NexEra Energy, Inc.	NEE	\$96.84	6.60%	6.47%	6.00%	6.00%	5.63%	61.00%	57.00%	67.23%	(50.00)	9.50%	18.35	3.26	
Northeast Utilities	NEU	\$49.03	6.70%	6.16%	6.00%	6.16%	5.63%	60.00%	59.00%	67.23%	(50.00)	9.87%	16.73	2.97	
OGE Energy Corp.	OGE	\$39.65	6.50%	7.05%	5.50%	5.50%	5.63%	47.00%	54.00%	67.23%	(50.00)	9.51%	18.27	3.25	
Otter Tail Corporation	OTTR	\$28.51	NA	6.00%	15.50%	6.00%	5.63%	70.00%	59.00%	67.23%	(50.00)	9.41%	18.79	3.34	
Pinnacle West Capital Corporation	PNW	\$56.85	4.00%	3.95%	4.00%	3.95%	5.63%	63.00%	65.00%	67.23%	(50.00)	10.06%	16.01	2.84	
PNM Resources, Inc.	PNM	\$26.68	8.60%	8.34%	11.00%	8.34%	5.63%	50.00%	49.00%	67.23%	(50.00)	10.27%	15.29	2.72	
Portland General Electric Company	POR	\$33.78	7.60%	7.83%	5.00%	5.00%	5.63%	50.00%	54.00%	67.23%	(50.00)	9.36%	19.04	3.38	
Southern Company	SO	\$44.77	3.60%	3.62%	3.50%	3.60%	5.63%	74.00%	72.00%	67.23%	(50.00)	9.77%	17.15	3.05	
TECO Energy, Inc.	TE	\$18.10	6.60%	6.43%	3.50%	3.50%	5.63%	93.00%	71.00%	67.23%	(50.00)	9.15%	20.19	3.59	
Westar Energy, Inc.	WR	\$36.27	3.80%	3.20%	6.00%	3.20%	5.63%	58.00%	55.00%	67.23%	(50.00)	9.69%	17.50	3.18	
Xcel Energy Inc.	XEL	\$31.70	4.20%	4.51%	5.50%	4.20%	5.63%	61.00%	60.00%	67.23%	(50.00)	9.79%	17.03	3.03	

DCF Result

Mean	9.65%	17.74	3.15
Max	10.26%	20.19	3.59
Min	9.16%	15.28	2.72

Projected Annual Earnings per Share

Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Aflac Energy Corporation	LUIT	\$3.29	\$3.45	\$3.61	\$3.79	\$3.97	\$4.16	\$4.36	\$4.58	\$4.81	\$5.06	\$5.34	\$5.64	\$5.96	\$6.29	\$6.65	\$7.02	\$7.42
Ameren Corporation	AEE	\$2.10	\$2.19	\$2.29	\$2.40	\$2.50	\$2.62	\$2.73	\$2.86	\$3.01	\$3.16	\$3.33	\$3.52	\$3.72	\$3.93	\$4.15	\$4.38	\$4.63
American Electric Power Company, Inc.	AEP	\$3.18	\$3.32	\$3.47	\$3.63	\$3.79	\$3.96	\$4.14	\$4.34	\$4.56	\$4.79	\$5.05	\$5.33	\$5.63	\$5.95	\$6.28	\$6.63	\$7.01
CMS Energy Corporation	CMS	\$1.66	\$1.76	\$1.87	\$1.98	\$2.10	\$2.23	\$2.37	\$2.51	\$2.66	\$2.81	\$2.97	\$3.14	\$3.32	\$3.51	\$3.70	\$3.91	\$4.13
DTE Energy Company	DTE	\$3.76	\$3.98	\$4.21	\$4.46	\$4.72	\$5.00	\$5.29	\$5.60	\$5.93	\$6.27	\$6.62	\$6.99	\$7.39	\$7.80	\$8.24	\$8.71	\$9.20
Duke Energy Corporation	DUK	\$3.99	\$4.17	\$4.35	\$4.57	\$4.78	\$5.01	\$5.24	\$5.50	\$5.78	\$6.08	\$6.41	\$6.77	\$7.15	\$7.56	\$8.00	\$8.43	\$8.91
Empire District Electric Company	EDE	\$1.49	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.83	\$1.90	\$1.97	\$2.09	\$2.21	\$2.33	\$2.47	\$2.60	\$2.75	\$2.91
Great Plains Energy Inc.	GXP	\$1.62	\$1.70	\$1.79	\$1.88	\$1.97	\$2.07	\$2.17	\$2.28	\$2.40	\$2.53	\$2.67	\$2.82	\$2.98	\$3.15	\$3.32	\$3.51	\$3.71
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25	\$3.44
IDACORP, Inc.	IDA	\$3.61	\$3.69	\$3.75	\$3.81	\$3.88	\$3.92	\$3.98	\$4.07	\$4.20	\$4.37	\$4.58	\$4.84	\$5.11	\$5.39	\$5.70	\$6.02	\$6.36
NexEra Energy, Inc.	NEE	\$4.83	\$5.12	\$5.43	\$5.75	\$6.10	\$6.48	\$6.85	\$7.25	\$7.68	\$8.13	\$8.59	\$9.07	\$9.58	\$10.12	\$10.69	\$11.29	\$11.93
Northeast Utilities	NEU	\$2.49	\$2.64	\$2.81	\$2.98	\$3.16	\$3.36	\$3.56	\$3.78	\$4.00	\$4.24	\$4.48	\$4.73	\$5.00	\$5.28	\$5.58	\$5.89	\$6.22
OGE Energy Corp.	OGE	\$1.94	\$2.05	\$2.16	\$2.28	\$2.40	\$2.54	\$2.67	\$2.82	\$2.98	\$3.15	\$3.32	\$3.51	\$3.71	\$3.91	\$4.14	\$4.37	\$4.61
Otter Tail Corporation	OTTR	\$1.37	\$1.45	\$1.54	\$1.63	\$1.73	\$1.83	\$1.92	\$2.02	\$2.18	\$2.30	\$2.44	\$2.57	\$2.72	\$2.87	\$3.03	\$3.20	\$3.38
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.95	\$4.11	\$4.27	\$4.44	\$4.62	\$4.82	\$5.04	\$5.29	\$5.57	\$5.86	\$6.21	\$6.56	\$6.93	\$7.32	\$7.73
PNM Resources, Inc.	PNM	\$1.41	\$1.53	\$1.65	\$1.79	\$1.94	\$2.10	\$2.28	\$2.46	\$2.64	\$2.81	\$2.99	\$3.15	\$3.33	\$3.52	\$3.72	\$3.93	\$4.15
Portland General Electric Company	POR	\$1.77	\$1.86	\$1.95	\$2.05	\$2.15	\$2.26	\$2.37	\$2.49	\$2.62	\$2.77	\$2.92	\$3.08	\$3.26	\$3.44	\$3.63	\$3.84	\$4.05
Southern Company	SO	\$2.70	\$2.79	\$2.89	\$2.99	\$3.10	\$3.21	\$3.32	\$3.45	\$3.60	\$3.77	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$5.22	\$5.51
TECO Energy, Inc.	TE	\$0.92	\$0.95	\$0.99	\$1.02	\$1.06	\$1.09	\$1.13	\$1.18	\$1.23	\$1.29	\$1.35	\$1.43	\$1.51	\$1.59	\$1.68	\$1.78	\$1.83
Westar Energy, Inc.	WR	\$2.27	\$2.34	\$2.42	\$2.49	\$2.57	\$2.66	\$2.74	\$2.84	\$2.95	\$3.10	\$3.26	\$3.44	\$3.64	\$3.84	\$4.06	\$4.29	\$4.53
Xcel Energy Inc.	XEL	\$1.91	\$1.99	\$2.07	\$2.16	\$2.25	\$2.35	\$2.44	\$2.55	\$2.68	\$2.81	\$2.96	\$3.13	\$3.30	\$3.49	\$3.69	\$3.89	\$4.11

Projected Annual Dividend Payout Ratio

Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Aflac Energy Corporation	LUIT	59.00%	59.25%	59.50%	59.75%	60.00%	61.21%	62.41%	63.62%	64.82%	66.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Ameren Corporation	AEE	68.00%	65.75%	63.50%	61.25%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
CMS Energy Corporation	CMS	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
DTE Energy Company	DTE	57.00%	57.25%	57.50%	57.75%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.64%	65.66%	66.67%	67.68%	68.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	76.00%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NexEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.71%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NEU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
OGE Energy Corp.	OGE	47.00%	48.75%	50.50%	52.25%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	63.00%	63.50%	64.00%	64.50%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	50.00%	49.75%	49.50%	49.25%	49.00%	52.04%	55.06%	58.12%	61.15%	64.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
TECO Energy, Inc.	TE	93.00%	87.50%	82.00%	76.50%	71.00%											

Multi-Stage Growth Discounted Cash Flow Model  
 50 Day Average Stock Price  
 Low EPS Growth Rate Estimate in First Stage

Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
Aiark Energy Corporation	LHT	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.67	\$2.86	\$3.05	\$3.26	\$3.53	\$3.79	\$4.01	\$4.23	\$4.47	\$4.72	\$4.99	\$130.09	
Ametek Corporation	AEE	\$1.49	\$1.51	\$1.52	\$1.53	\$1.54	\$1.55	\$1.77	\$1.90	\$2.04	\$2.19	\$2.37	\$2.50	\$2.64	\$2.79	\$2.95	\$3.11	\$97.93	
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.25	\$2.37	\$2.60	\$2.64	\$2.79	\$2.96	\$3.15	\$3.38	\$3.58	\$3.78	\$4.00	\$4.22	\$4.45	\$4.71	\$118.67	
CMS Energy Corporation	CMS	\$1.05	\$1.11	\$1.17	\$1.23	\$1.29	\$1.41	\$1.53	\$1.66	\$1.80	\$1.95	\$2.11	\$2.23	\$2.38	\$2.49	\$2.63	\$2.78	\$58.68	
DTE Energy Company	DTE	\$2.27	\$2.41	\$2.57	\$2.73	\$2.90	\$3.15	\$3.42	\$3.71	\$4.02	\$4.35	\$4.70	\$4.97	\$5.25	\$5.54	\$5.85	\$6.18	\$175.22	
Duke Energy Corporation	DUK	\$2.96	\$3.02	\$3.08	\$3.14	\$3.20	\$3.38	\$3.58	\$3.79	\$4.02	\$4.28	\$4.55	\$4.81	\$5.08	\$5.37	\$5.67	\$5.99	\$164.55	
Empire District Electric Company	EDIE	\$1.01	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.24	\$1.31	\$1.39	\$1.49	\$1.67	\$1.66	\$1.75	\$1.85	\$1.95	\$55.81	
Great Plains Energy Inc.	GXP	\$0.99	\$1.05	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.55	\$1.66	\$1.77	\$1.90	\$2.00	\$2.12	\$2.23	\$2.38	\$2.49	\$56.67	
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.43	\$1.56	\$1.65	\$1.76	\$1.86	\$1.96	\$2.07	\$2.19	\$2.31	\$55.23	
IDACORP, Inc.	IDA	\$1.88	\$1.98	\$2.07	\$2.17	\$2.27	\$2.37	\$2.49	\$2.63	\$2.80	\$3.01	\$3.25	\$3.43	\$3.63	\$3.83	\$4.05	\$4.27	\$124.66	
NexEra Energy, Inc.	NEE	\$3.12	\$3.26	\$3.39	\$3.54	\$3.68	\$4.02	\$4.33	\$4.77	\$5.19	\$5.63	\$6.10	\$6.44	\$6.81	\$7.19	\$7.59	\$8.02	\$218.66	
Northeast Utilities	NU	\$1.59	\$1.67	\$1.76	\$1.85	\$1.95	\$2.12	\$2.31	\$2.51	\$2.72	\$2.94	\$3.18	\$3.36	\$3.55	\$3.75	\$3.99	\$4.18	\$104.11	
OGE Energy Corp.	OGE	\$0.96	\$1.05	\$1.15	\$1.26	\$1.37	\$1.50	\$1.65	\$1.81	\$1.99	\$2.16	\$2.36	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$84.30	
Oster Tail Corporation	OTTR	\$1.02	\$1.04	\$1.05	\$1.07	\$1.08	\$1.17	\$1.27	\$1.33	\$1.49	\$1.60	\$1.73	\$1.83	\$1.93	\$2.04	\$2.15	\$2.27	\$53.60	
Pinnacle West Capital Corporation	PWV	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.02	\$3.17	\$3.33	\$3.62	\$3.72	\$3.95	\$4.18	\$4.41	\$4.66	\$4.92	\$5.20	\$123.79	
PNM Resources, Inc.	PNM	\$0.76	\$0.82	\$0.89	\$0.98	\$1.03	\$1.19	\$1.35	\$1.53	\$1.72	\$1.92	\$2.12	\$2.24	\$2.37	\$2.50	\$2.64	\$2.79	\$69.45	
Portland General Electric Company	POR	\$0.93	\$1.00	\$1.07	\$1.14	\$1.22	\$1.33	\$1.43	\$1.59	\$1.74	\$1.90	\$2.07	\$2.19	\$2.31	\$2.44	\$2.58	\$2.72	\$77.15	
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.31	\$2.56	\$2.43	\$2.51	\$2.60	\$2.70	\$2.82	\$2.98	\$3.14	\$3.32	\$3.51	\$3.70	\$94.51	
TECO Energy, Inc.	TE	\$0.69	\$0.66	\$0.84	\$0.81	\$0.78	\$0.60	\$0.82	\$0.65	\$0.68	\$0.92	\$0.96	\$1.01	\$1.07	\$1.13	\$1.20	\$1.26	\$37.60	
Westar Energy, Inc.	WR	\$1.36	\$1.38	\$1.41	\$1.44	\$1.48	\$1.66	\$1.68	\$1.81	\$1.96	\$2.12	\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$3.04	\$81.03	
Xcel Energy Inc.	XEL	\$1.21	\$1.26	\$1.31	\$1.36	\$1.41	\$1.50	\$1.59	\$1.70	\$1.82	\$1.96	\$2.10	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$70.25	

Projected Annual Data Investor Cash Flows		[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]
Company	Ticker	Outflow	11/14/14	12/31/14	6/30/15	6/30/16	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
Aiark Energy Corporation	LHT	(\$58.31)	\$0.00	\$0.26	\$2.08	\$2.25	\$2.37	\$2.50	\$2.67	\$2.86	\$3.06	\$3.28	\$3.53	\$3.79	\$4.01	\$4.23	\$4.47	\$4.72	\$135.03
Ametek Corporation	AEE	(\$39.75)	\$0.00	\$0.19	\$1.53	\$1.52	\$1.53	\$1.54	\$1.65	\$1.77	\$1.90	\$2.04	\$2.19	\$2.37	\$2.50	\$2.64	\$2.79	\$2.95	\$91.04
American Electric Power Company, Inc.	AEP	(\$53.61)	\$0.00	\$0.26	\$2.07	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.38	\$3.58	\$3.78	\$4.00	\$4.22	\$4.45	\$123.39
CMS Energy Corporation	CMS	(\$30.47)	\$0.00	\$0.14	\$1.09	\$1.17	\$1.23	\$1.29	\$1.41	\$1.53	\$1.66	\$1.80	\$1.95	\$2.11	\$2.23	\$2.38	\$2.49	\$2.63	\$71.65
DTE Energy Company	DTE	(\$77.50)	\$0.00	\$0.29	\$2.34	\$2.57	\$2.73	\$2.90	\$3.15	\$3.42	\$3.71	\$4.02	\$4.35	\$4.70	\$4.97	\$5.25	\$5.54	\$5.85	\$181.40
Duke Energy Corporation	DUK	(\$75.35)	\$0.00	\$0.38	\$3.03	\$3.08	\$3.14	\$3.20	\$3.38	\$3.58	\$3.79	\$4.02	\$4.28	\$4.55	\$4.81	\$5.08	\$5.37	\$5.67	\$170.53
Empire District Electric Company	EDIE	(\$25.68)	\$0.00	\$0.13	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.24	\$1.31	\$1.39	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$57.76
Great Plains Energy Inc.	GXP	(\$25.46)	\$0.00	\$0.13	\$1.01	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.55	\$1.66	\$1.77	\$1.90	\$2.00	\$2.12	\$2.23	\$2.38	\$59.16
Hawaiian Electric Industries, Inc.	HE	(\$25.74)	\$0.00	\$0.16	\$1.31	\$1.28	\$1.28	\$1.34	\$1.41	\$1.43	\$1.56	\$1.65	\$1.76	\$1.86	\$1.96	\$2.07	\$2.19	\$2.31	\$57.54
IDACORP, Inc.	IDA	(\$56.39)	\$0.00	\$0.24	\$1.90	\$2.07	\$2.17	\$2.27	\$2.37	\$2.49	\$2.63	\$2.80	\$3.01	\$3.25	\$3.43	\$3.63	\$3.83	\$4.05	\$128.93
NexEra Energy, Inc.	NEE	(\$96.84)	\$0.00	\$0.40	\$3.22	\$3.39	\$3.54	\$3.68	\$4.02	\$4.38	\$4.77	\$5.19	\$5.63	\$6.10	\$6.44	\$6.81	\$7.19	\$7.59	\$226.63
Northeast Utilities	NU	(\$46.03)	\$0.00	\$0.20	\$1.63	\$1.76	\$1.85	\$1.95	\$2.12	\$2.31	\$2.51	\$2.72	\$2.94	\$3.18	\$3.36	\$3.55	\$3.75	\$3.96	\$108.29
OGE Energy Corp.	OGE	(\$36.65)	\$0.00	\$0.12	\$0.99	\$1.15	\$1.26	\$1.37	\$1.50	\$1.65	\$1.81	\$1.99	\$2.16	\$2.36	\$2.49	\$2.63	\$2.78	\$2.94	\$87.40
Oster Tail Corporation	OTTR	(\$28.51)	\$0.00	\$0.13	\$1.05	\$1.05	\$1.07	\$1.08	\$1.17	\$1.27	\$1.33	\$1.49	\$1.60	\$1.73	\$1.83	\$1.93	\$2.04	\$2.15	\$65.87
Pinnacle West Capital Corporation	PWV	(\$56.65)	\$0.00	\$0.31	\$2.63	\$2.78	\$2.89	\$3.02	\$3.17	\$3.33	\$3.52	\$3.72	\$3.95	\$4.18	\$4.41	\$4.66	\$4.92	\$5.20	\$123.69
PNM Resources, Inc.	PNM	(\$26.68)	\$0.00	\$0.10	\$0.80	\$0.89	\$0.98	\$1.03	\$1.19	\$1.35	\$1.53	\$1.72	\$1.92	\$2.12	\$2.24	\$2.37	\$2.50	\$2.64	\$66.23
Portland General Electric Company	POR	(\$33.78)	\$0.00	\$0.12	\$0.95	\$1.07	\$1.14	\$1.22	\$1.33	\$1.46	\$1.59	\$1.74	\$1.90	\$2.07	\$2.19	\$2.31	\$2.44	\$2.58	\$78.83
Southern Company	SO	(\$44.77)	\$0.00	\$0.27	\$2.10	\$2.19	\$2.25	\$2.31	\$2.36	\$2.43	\$2.51	\$2.60	\$2.70	\$2.82	\$2.98	\$3.14	\$3.32	\$3.51	\$98.22
TECO Energy, Inc.	TE	(\$18.10)	\$0.00	\$0.11	\$0.90	\$0.84	\$0.81	\$0.78	\$0.60	\$0.82	\$0.65	\$0.68	\$0.92	\$0.96	\$1.01	\$1.07	\$1.13	\$1.20	\$39.16
Westar Energy, Inc.	WR	(\$39.27)	\$0.00	\$0.17	\$1.38	\$1.41	\$1.44	\$1.46	\$1.56	\$1.68	\$1.81	\$1.96	\$2.12	\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$84.03
Xcel Energy Inc.	XEL	(\$31.70)	\$0.00	\$0.16	\$1.24	\$1.31	\$1.36	\$1.41	\$1.50	\$1.59	\$1.70	\$1.82	\$1.96	\$2.10	\$2.22	\$2.35	\$2.48	\$2.62	\$73.01

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

Input	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	
Stock		EPS Growth Rate Estimates			Long-Term			Payout Ratio		Iterative Solution		Terminal		
Company	Ticker	Price	Zacks	First Call	Line	Average	Growth	2014	2018	2024	Proof	IRR	P/E Ratio/PEG Ratio	
Altair Energy Corporation	LNT	\$57.79	4.80%	4.50%	6.00%	5.23%	5.63%	59.00%	60.60%	67.23%	(\$0.00)	9.84%	16.87	3.03
Amren Corporation	AEE	\$59.88	8.30%	8.00%	4.50%	7.23%	6.63%	68.00%	59.00%	67.23%	(\$0.00)	10.12%	15.82	2.81
American Electric Power Company, Inc.	AEP	\$52.99	4.50%	4.97%	4.50%	4.75%	5.63%	61.00%	63.00%	67.23%	(\$0.00)	9.97%	16.34	2.93
CMS Energy Corporation	CMS	\$29.89	6.10%	6.60%	6.50%	6.47%	5.63%	60.00%	58.00%	67.23%	(\$0.00)	10.06%	16.02	2.65
DTE Energy Company	DTE	\$76.33	6.20%	5.87%	6.50%	6.19%	5.63%	57.00%	58.00%	67.23%	(\$0.00)	9.49%	18.36	3.28
Duke Energy Corporation	DUK	\$73.44	4.70%	4.76%	5.00%	4.82%	5.63%	71.00%	64.00%	67.23%	(\$0.00)	9.61%	17.65	3.17
Empire District Electric Company	EDE	\$24.65	3.00%	3.00%	4.00%	3.33%	5.63%	66.00%	63.00%	67.23%	\$0.00	9.63%	18.21	3.24
Great Plains Energy Inc.	GXP	\$25.84	5.00%	5.00%	6.00%	5.33%	5.63%	58.00%	62.00%	67.23%	\$0.00	10.31%	15.16	2.69
Hawaiian Electric Industries, Inc.	HE	\$25.13	4.00%	4.00%	4.00%	4.00%	5.63%	76.00%	65.00%	67.23%	\$0.00	10.16%	15.63	2.79
IDACORP, Inc.	IDA	\$55.68	4.00%	4.00%	1.50%	3.17%	5.63%	51.00%	59.00%	67.23%	(\$0.00)	9.74%	17.25	3.07
NextEra Energy, Inc.	NEE	\$96.70	6.60%	6.47%	6.00%	6.35%	5.63%	61.00%	57.00%	67.23%	(\$0.00)	9.60%	17.63	3.18
Northeast Utilities	NU	\$45.79	6.70%	6.16%	8.00%	6.95%	6.63%	60.00%	68.00%	67.23%	(\$0.00)	10.13%	16.78	2.80
OGE Energy Corp.	OGE	\$36.62	6.50%	7.05%	5.50%	6.35%	5.63%	47.00%	54.00%	67.23%	(\$0.00)	9.75%	17.24	3.06
Other Tail Corporation	OTTR	\$23.00	12A	6.00%	15.50%	7.23%	5.63%	70.00%	59.00%	67.23%	(\$0.00)	10.71%	15.97	2.48
Pinnacle West Capital Corporation	PINW	\$59.65	4.00%	3.53%	4.00%	3.63%	5.63%	63.00%	65.00%	67.23%	\$0.00	10.14%	15.74	2.60
PNM Resources, Inc.	PNM	\$27.21	8.50%	8.34%	11.00%	9.28%	6.63%	50.00%	49.00%	67.23%	(\$0.00)	10.47%	14.67	2.61
Portland General Electric Company	POR	\$33.29	7.80%	7.83%	6.00%	6.63%	5.63%	50.00%	54.00%	67.23%	(\$0.00)	9.92%	16.53	2.94
Southern Company	SO	\$44.38	3.60%	3.62%	3.50%	3.57%	5.63%	74.00%	72.00%	67.23%	\$0.00	9.83%	16.50	3.00
TECO Energy, Inc.	TE	\$17.77	6.50%	6.43%	3.50%	5.48%	5.63%	93.00%	71.00%	67.23%	\$0.00	9.76%	17.18	3.05
Westar Energy, Inc.	WR	\$35.95	3.80%	3.20%	6.00%	4.33%	5.63%	58.00%	55.00%	67.23%	(\$0.00)	9.86%	16.40	2.91
Xcel Energy Inc.	XEL	\$31.26	4.20%	4.51%	5.50%	4.74%	5.63%	61.00%	60.00%	67.23%	(\$0.00)	10.00%	18.23	2.63

DCF Result

Mean	9.66%	16.43	2.93
Max	10.71%	18.36	3.26
Mn	9.49%	13.97	2.48

Projected Annual Earnings per Share	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Altair Energy Corporation	LNT	\$3.29	\$3.46	\$3.64	\$3.83	\$4.03	\$4.25	\$4.47	\$4.71	\$4.96	\$5.23	\$5.62	\$5.83	\$6.16	\$6.51	\$6.87	\$7.26
Amren Corporation	AEE	\$2.10	\$2.25	\$2.41	\$2.59	\$2.78	\$2.98	\$3.19	\$3.41	\$3.64	\$3.87	\$4.10	\$4.33	\$4.57	\$4.83	\$5.10	\$5.39
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.65	\$3.83	\$4.02	\$4.21	\$4.42	\$4.65	\$4.89	\$5.16	\$5.45	\$5.76	\$6.08	\$6.42	\$6.78
CMS Energy Corporation	CMS	\$1.66	\$1.77	\$1.88	\$2.00	\$2.13	\$2.27	\$2.42	\$2.57	\$2.73	\$2.89	\$3.06	\$3.23	\$3.41	\$3.60	\$3.81	\$4.02
DTE Energy Company	DTE	\$3.76	\$3.99	\$4.24	\$4.50	\$4.78	\$5.08	\$5.39	\$5.72	\$6.06	\$6.41	\$6.78	\$7.16	\$7.57	\$7.99	\$8.44	\$8.92
Duke Energy Corporation	DUK	\$3.58	\$4.17	\$4.37	\$4.58	\$4.80	\$5.04	\$5.28	\$5.54	\$5.83	\$6.14	\$6.47	\$6.84	\$7.22	\$7.63	\$8.06	\$8.51
Empire District Electric Company	EDE	\$1.43	\$1.53	\$1.59	\$1.63	\$1.69	\$1.74	\$1.80	\$1.87	\$1.95	\$2.04	\$2.15	\$2.27	\$2.40	\$2.53	\$2.67	\$2.82
Great Plains Energy Inc.	GXP	\$1.62	\$1.71	\$1.80	\$1.89	\$1.99	\$2.10	\$2.21	\$2.33	\$2.46	\$2.59	\$2.74	\$2.89	\$3.06	\$3.23	\$3.41	\$3.60
Hawaiian Electric Industries, Inc.	HE	\$1.82	\$1.88	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25
IDACORP, Inc.	IDA	\$3.64	\$3.76	\$3.87	\$4.00	\$4.12	\$4.25	\$4.39	\$4.55	\$4.74	\$4.96	\$5.21	\$5.51	\$5.82	\$6.14	\$6.49	\$6.85
NextEra Energy, Inc.	NEE	\$4.93	\$5.14	\$5.46	\$5.81	\$6.18	\$6.57	\$6.99	\$7.43	\$7.89	\$8.34	\$8.82	\$9.32	\$9.84	\$10.40	\$10.93	\$11.60
Northeast Utilities	NU	\$2.49	\$2.66	\$2.85	\$3.06	\$3.28	\$3.49	\$3.73	\$3.99	\$4.29	\$4.62	\$4.98	\$5.36	\$5.76	\$6.19	\$6.65	\$7.14
OGE Energy Corp.	OGE	\$1.94	\$2.09	\$2.19	\$2.33	\$2.48	\$2.64	\$2.81	\$2.98	\$3.16	\$3.35	\$3.54	\$3.74	\$3.95	\$4.17	\$4.41	\$4.66
Other Tail Corporation	OTTR	\$1.37	\$1.52	\$1.68	\$1.85	\$2.05	\$2.28	\$2.53	\$2.77	\$3.02	\$3.25	\$3.46	\$3.66	\$3.86	\$4.08	\$4.31	\$4.68
Pinnacle West Capital Corporation	PINW	\$3.65	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.63	\$4.83	\$5.05	\$5.30	\$5.58	\$5.90	\$6.23	\$6.58	\$6.95	\$7.34
PNM Resources, Inc.	PNM	\$1.41	\$1.54	\$1.68	\$1.84	\$2.01	\$2.20	\$2.40	\$2.61	\$2.81	\$3.01	\$3.20	\$3.38	\$3.57	\$3.77	\$3.98	\$4.21
Portland General Electric Company	POR	\$1.77	\$1.89	\$2.02	\$2.16	\$2.31	\$2.47	\$2.64	\$2.81	\$2.99	\$3.16	\$3.36	\$3.55	\$3.75	\$3.96	\$4.19	\$4.42
Southern Company	SO	\$2.70	\$2.80	\$2.90	\$3.00	\$3.11	\$3.22	\$3.33	\$3.47	\$3.62	\$3.79	\$3.99	\$4.21	\$4.45	\$4.70	\$4.97	\$5.25
TECO Energy, Inc.	TE	\$0.92	\$0.97	\$1.02	\$1.08	\$1.14	\$1.20	\$1.27	\$1.34	\$1.41	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$1.96	\$2.07
Westar Energy, Inc.	WR	\$2.27	\$2.37	\$2.47	\$2.58	\$2.69	\$2.81	\$2.93	\$3.06	\$3.21	\$3.38	\$3.56	\$3.76	\$3.97	\$4.19	\$4.43	\$4.68
Xcel Energy Inc.	XEL	\$1.91	\$2.00	\$2.10	\$2.19	\$2.30	\$2.41	\$2.52	\$2.65	\$2.78	\$2.93	\$3.09	\$3.26	\$3.44	\$3.64	\$3.84	\$4.09

Projected Annual Dividend Payout Ratio	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Altair Energy Corporation	LNT	59.00%	59.25%	59.50%	59.75%	60.00%	61.21%	62.41%	63.62%	64.82%	66.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Amren Corporation	AEE	68.00%	65.75%	63.50%	61.25%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
CMS Energy Corporation	CMS	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
DTE Energy Company	DTE	57.00%	57.25%	57.50%	57.75%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.54%	65.68%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	76.00%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.00%	52.78%	54.56%	56.35%	58.00%	59.84%	61.68%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.71%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
OGE Energy Corp.	OGE	47.00%	48.75%	50.50%	52.25%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Other Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PINW	63.00%	63.50%	64.00%	64.50%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	50.00%	49.75%	49.50%	49.25%	49.00%	50.21%	51.41%	52.62%	53.82%	55.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
TECO Energy, Inc.	TE	93.00%	87.50%	82.00%	76.50%	71.00%	70.37%	69.74%	69.12%	68.49%	67.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	57.04%	59.08%	61.12%	63.15%	65.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Xcel Energy Inc.	XEL	61.00%	60.75%	60.50%	60.25%	60.00%	61.21%	62.41%	63.62%	64.82%	66.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%

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

Projected Annual Cash Flows	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)	Terminal Value
Company	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
Altair Energy Corporation	LIT	\$2.04	\$2.16	\$2.28	\$2.41	\$2.65	\$2.73	\$2.94	\$3.15	\$3.33	\$3.64	\$3.92	\$4.14	\$4.37	\$4.62	\$4.83	\$5.15	\$129.35
Ameson Corporation	AEE	\$1.53	\$1.59	\$1.64	\$1.70	\$1.76	\$1.83	\$2.11	\$2.30	\$2.43	\$2.70	\$2.91	\$3.07	\$3.25	\$3.43	\$3.62	\$3.83	\$59.99
American Electric Power Company, Inc.	AEP	\$2.03	\$2.15	\$2.27	\$2.40	\$2.53	\$2.63	\$2.65	\$3.03	\$3.22	\$3.43	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$4.82	\$117.03
CMS Energy Corporation	CMS	\$1.06	\$1.12	\$1.16	\$1.25	\$1.32	\$1.44	\$1.57	\$1.71	\$1.85	\$2.01	\$2.17	\$2.29	\$2.42	\$2.56	\$2.70	\$2.85	\$68.01
DTE Energy Company	DTE	\$2.28	\$2.43	\$2.59	\$2.76	\$2.94	\$3.21	\$3.49	\$3.79	\$4.12	\$4.46	\$4.82	\$5.09	\$5.37	\$5.68	\$6.00	\$6.33	\$173.01
Duke Energy Corporation	DUK	\$2.95	\$3.03	\$3.09	\$3.16	\$3.22	\$3.41	\$3.61	\$3.82	\$4.06	\$4.32	\$4.60	\$4.85	\$5.13	\$5.42	\$5.72	\$6.04	\$160.40
Empire District Electric Company	EDE	\$1.01	\$1.03	\$1.05	\$1.08	\$1.10	\$1.15	\$1.20	\$1.27	\$1.34	\$1.43	\$1.52	\$1.61	\$1.70	\$1.80	\$1.90	\$2.00	\$54.29
Great Plains Energy Inc.	GXP	\$0.89	\$1.06	\$1.14	\$1.22	\$1.30	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82	\$1.95	\$2.05	\$2.17	\$2.29	\$2.42	\$2.56	\$57.66
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.76	\$1.86	\$1.96	\$2.07	\$2.19	\$2.31	\$53.83
IDACORP, Inc.	IDA	\$1.92	\$2.04	\$2.18	\$2.32	\$2.47	\$2.61	\$2.78	\$2.97	\$3.18	\$3.42	\$3.70	\$3.91	\$4.13	\$4.36	\$4.61	\$4.87	\$124.87
NexEra Energy, Inc.	NEE	\$3.13	\$3.28	\$3.43	\$3.58	\$3.75	\$4.10	\$4.49	\$4.89	\$5.32	\$5.78	\$6.27	\$6.62	\$6.99	\$7.38	\$7.80	\$8.24	\$218.12
Northeast Utilities	NEU	\$1.60	\$1.69	\$1.80	\$1.91	\$2.02	\$2.22	\$2.43	\$2.65	\$2.88	\$3.13	\$3.33	\$3.57	\$3.77	\$3.98	\$4.21	\$4.44	\$104.22
OGX Energy Corp.	OGX	\$0.67	\$1.07	\$1.16	\$1.33	\$1.43	\$1.59	\$1.74	\$1.92	\$2.10	\$2.30	\$2.52	\$2.65	\$2.81	\$2.99	\$3.13	\$3.31	\$84.83
Oster Tail Corporation	OTTR	\$1.06	\$1.13	\$1.20	\$1.27	\$1.35	\$1.53	\$1.71	\$1.90	\$2.09	\$2.28	\$2.46	\$2.60	\$2.74	\$2.90	\$3.06	\$3.23	\$67.20
Pinnacle West Capital Corporation	PXW	\$2.40	\$2.51	\$2.63	\$2.78	\$2.89	\$3.02	\$3.17	\$3.34	\$3.52	\$3.73	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$5.21	\$122.04
PNM Resources, Inc.	PNM	\$0.77	\$0.84	\$0.91	\$0.99	\$1.08	\$1.25	\$1.44	\$1.63	\$1.84	\$2.05	\$2.27	\$2.40	\$2.54	\$2.68	\$2.83	\$2.99	\$65.23
Portland General Electric Company	POR	\$0.65	\$1.03	\$1.12	\$1.22	\$1.33	\$1.48	\$1.64	\$1.81	\$1.99	\$2.19	\$2.59	\$2.52	\$2.65	\$2.81	\$2.97	\$3.14	\$77.19
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.32	\$2.37	\$2.44	\$2.52	\$2.61	\$2.71	\$2.83	\$2.99	\$3.16	\$3.34	\$3.53	\$3.73	\$93.63
TECO Energy, Inc.	TE	\$0.90	\$0.90	\$0.89	\$0.87	\$0.85	\$0.89	\$0.93	\$0.97	\$1.02	\$1.07	\$1.12	\$1.18	\$1.25	\$1.32	\$1.39	\$1.47	\$37.53
Westar Energy, Inc.	WR	\$1.37	\$1.41	\$1.46	\$1.50	\$1.54	\$1.67	\$1.81	\$1.96	\$2.13	\$2.32	\$2.53	\$2.67	\$2.82	\$2.98	\$3.14	\$3.32	\$81.02
Xcel Energy Inc.	XEL	\$1.22	\$1.27	\$1.33	\$1.38	\$1.44	\$1.54	\$1.65	\$1.77	\$1.90	\$2.04	\$2.19	\$2.31	\$2.45	\$2.58	\$2.73	\$2.88	\$69.56

Projected Annual Data Investor Cash Flows	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)	(76)	(77)	(78)	(79)	(80)	(81)	
Company	Initial Outflow	11/14/14	12/31/14	6/30/15	6/30/16	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	
Altair Energy Corporation	LIT (\$57.73)	\$0.00	\$0.26	\$2.10	\$2.28	\$2.41	\$2.55	\$2.73	\$2.94	\$3.15	\$3.39	\$3.64	\$3.92	\$4.14	\$4.37	\$4.62	\$4.83	\$134.51	
Ameson Corporation	AEE (\$39.63)	\$0.00	\$0.20	\$1.69	\$1.64	\$1.70	\$1.76	\$1.93	\$2.11	\$2.30	\$2.49	\$2.70	\$2.91	\$3.07	\$3.25	\$3.43	\$3.62	\$93.82	
American Electric Power Company, Inc.	AEP (\$52.99)	\$0.00	\$0.26	\$2.08	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.03	\$3.22	\$3.43	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$121.90	
CMS Energy Corporation	CMS (\$29.99)	\$0.00	\$0.14	\$1.09	\$1.18	\$1.25	\$1.32	\$1.44	\$1.57	\$1.71	\$1.85	\$2.01	\$2.17	\$2.29	\$2.42	\$2.56	\$2.70	\$70.87	
DTE Energy Company	DTE (\$76.33)	\$0.00	\$0.29	\$2.35	\$2.69	\$2.76	\$2.94	\$3.21	\$3.49	\$3.79	\$4.12	\$4.46	\$4.82	\$5.09	\$5.37	\$5.68	\$6.00	\$179.34	
Duke Energy Corporation	DUK (\$73.44)	\$0.00	\$0.33	\$3.03	\$3.09	\$3.16	\$3.22	\$3.41	\$3.61	\$3.82	\$4.06	\$4.32	\$4.60	\$4.85	\$5.13	\$5.42	\$5.72	\$166.44	
Empire District Electric Company	EDE (\$24.95)	\$0.00	\$0.13	\$1.03	\$1.05	\$1.08	\$1.10	\$1.15	\$1.20	\$1.27	\$1.34	\$1.43	\$1.52	\$1.61	\$1.70	\$1.80	\$1.90	\$56.30	
Great Plains Energy Inc.	GXP (\$25.84)	\$0.00	\$0.13	\$1.02	\$1.14	\$1.22	\$1.30	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82	\$1.95	\$2.05	\$2.17	\$2.29	\$2.42	\$60.21	
Hawaiian Electric Industries, Inc.	HE (\$25.13)	\$0.00	\$0.16	\$1.31	\$1.23	\$1.28	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.76	\$1.86	\$1.96	\$2.07	\$2.19	\$2.31	\$56.19	
IDACORP, Inc.	IDA (\$55.66)	\$0.00	\$0.25	\$1.95	\$2.18	\$2.32	\$2.47	\$2.61	\$2.78	\$2.97	\$3.18	\$3.42	\$3.70	\$3.91	\$4.13	\$4.35	\$4.61	\$129.74	
NexEra Energy, Inc.	NEE (\$98.70)	\$0.00	\$0.40	\$3.23	\$3.43	\$3.58	\$3.75	\$4.10	\$4.49	\$4.89	\$5.32	\$5.78	\$6.27	\$6.62	\$6.99	\$7.38	\$7.80	\$227.35	
Northeast Utilities	NEU (\$45.79)	\$0.00	\$0.21	\$1.65	\$1.60	\$1.66	\$1.71	\$1.90	\$2.02	\$2.22	\$2.43	\$2.65	\$2.83	\$3.13	\$3.59	\$3.77	\$3.98	\$4.21	\$163.67
OGX Energy Corp.	OGX (\$30.62)	\$0.00	\$0.12	\$1.00	\$1.18	\$1.30	\$1.43	\$1.58	\$1.74	\$1.92	\$2.10	\$2.30	\$2.52	\$2.65	\$2.81	\$2.99	\$3.13	\$88.11	
Oster Tail Corporation	OTTR (\$29.00)	\$0.00	\$0.14	\$1.12	\$1.20	\$1.27	\$1.35	\$1.53	\$1.71	\$1.90	\$2.09	\$2.28	\$2.46	\$2.60	\$2.74	\$2.90	\$3.06	\$70.43	
Pinnacle West Capital Corporation	PXW (\$56.05)	\$0.00	\$0.31	\$2.45	\$2.63	\$2.76	\$2.89	\$3.02	\$3.17	\$3.34	\$3.52	\$3.73	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$127.26	
PNM Resources, Inc.	PNM (\$27.21)	\$0.00	\$0.10	\$0.81	\$0.91	\$0.99	\$1.08	\$1.25	\$1.44	\$1.63	\$1.84	\$2.05	\$2.27	\$2.40	\$2.54	\$2.68	\$2.83	\$68.21	
Portland General Electric Company	POR (\$33.29)	\$0.00	\$0.12	\$0.99	\$1.12	\$1.22	\$1.33	\$1.48	\$1.64	\$1.81	\$1.99	\$2.19	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$60.33	
Southern Company	SO (\$44.35)	\$0.00	\$0.27	\$2.11	\$2.19	\$2.25	\$2.32	\$2.37	\$2.44	\$2.52	\$2.61	\$2.71	\$2.83	\$2.99	\$3.16	\$3.34	\$3.53	\$97.36	
TECO Energy, Inc.	TE (\$17.77)	\$0.00	\$0.12	\$0.93	\$0.89	\$0.87	\$0.85	\$0.89	\$0.93	\$0.97	\$1.02	\$1.07	\$1.12	\$1.18	\$1.25	\$1.32	\$1.39	\$38.99	
Westar Energy, Inc.	WR (\$35.95)	\$0.00	\$0.18	\$1.40	\$1.46	\$1.50	\$1.54	\$1.67	\$1.81	\$1.96	\$2.13	\$2.32	\$2.53	\$2.67	\$2.82	\$2.98	\$3.14	\$84.34	
Xcel Energy Inc.	XEL (\$31.26)	\$0.00	\$0.16	\$1.25	\$1.33	\$1.38	\$1.44	\$1.54	\$1.65	\$1.77	\$1.90	\$2.04	\$2.19	\$2.31	\$2.45	\$2.58	\$2.73	\$72.44	

Multi-Stage Growth Discounted Cash Flow Model  
 160 Day Average Stock Price  
 High EPS Growth Rate Estimate In First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
Company	Ticker	Price	EPS Growth Rate Estimates		Value	High	Long-Term	Payout Ratio		Iterative Solution	Terminal	Terminal		
			2013	2014	2015	2016	2017	2018	2019	2020	Proof	RR	P/E Ratio	PEG Ratio
Aliant Energy Corporation	LNT	\$57.79	4.60%	4.90%	6.00%	6.00%	5.63%	59.00%	60.00%	67.23%	\$0.00	10.05%	18.01	2.85
Amgen Corporation	AEE	\$39.84	8.30%	8.90%	4.60%	8.90%	5.63%	63.00%	59.00%	67.23%	\$0.00	10.64%	14.18	2.52
American Electric Power Company, Inc.	AEP	\$52.93	4.90%	4.97%	4.50%	4.97%	5.63%	61.00%	63.00%	67.23%	\$0.00	10.03%	16.14	2.87
CMS Energy Corporation	CMS	\$29.59	6.10%	6.82%	6.50%	6.82%	5.63%	60.00%	58.00%	67.23%	\$0.00	10.16%	15.60	2.78
DTE Energy Company	DTE	\$78.33	6.20%	5.87%	6.50%	6.50%	5.63%	57.00%	58.00%	67.23%	\$0.00	9.55%	17.58	3.20
Duke Energy Corporation	DUK	\$73.44	4.70%	4.76%	5.00%	5.00%	5.63%	71.00%	64.00%	67.23%	\$0.00	9.66%	17.62	3.13
Empire District Electric Company	EDE	\$24.95	3.00%	3.00%	4.00%	4.00%	5.63%	66.00%	63.00%	67.23%	\$0.00	9.72%	17.37	3.09
Great Plains Energy Inc.	GXP	\$25.84	5.00%	5.00%	6.00%	6.00%	5.63%	58.00%	62.00%	67.23%	\$0.00	10.53%	14.49	2.57
Hawaiian Electric Industries, Inc.	HE	\$25.13	4.00%	4.00%	4.00%	4.00%	5.63%	78.00%	65.00%	67.23%	\$0.00	10.16%	15.68	2.79
IDACORP, Inc.	IDA	\$55.65	4.00%	4.00%	1.50%	4.00%	5.63%	51.00%	58.00%	67.23%	\$0.00	9.99%	16.23	2.69
NextEra Energy, Inc.	NEE	\$96.70	6.60%	6.47%	6.00%	6.00%	5.63%	61.00%	57.00%	67.23%	\$0.00	9.66%	17.59	3.13
Northeast Utilities	NU	\$45.79	6.70%	8.16%	8.00%	8.00%	5.63%	60.00%	58.00%	67.23%	\$0.00	10.45%	14.72	2.62
OGE Energy Corp.	OGE	\$36.62	6.90%	7.05%	5.90%	7.05%	5.63%	47.00%	54.00%	67.23%	\$0.00	9.84%	16.45	2.92
Other Tail Corporation	OTTR	\$29.00	11A	6.00%	15.50%	15.50%	5.63%	70.00%	59.00%	67.23%	\$0.00	12.40%	10.43	1.56
Pinnacle West Capital Corporation	PINW	\$56.05	4.00%	3.56%	4.00%	4.00%	5.63%	63.00%	65.00%	67.23%	\$0.00	10.14%	15.72	2.79
PNM Resources, Inc.	PNM	\$27.21	8.50%	8.34%	11.00%	11.00%	5.63%	50.00%	49.00%	67.23%	\$0.00	11.02%	13.18	2.34
Portland General Electric Company	POR	\$33.29	7.80%	7.83%	5.00%	7.83%	5.63%	50.00%	54.00%	67.23%	\$0.00	10.20%	15.53	2.76
Southern Company	SO	\$44.35	3.60%	3.62%	3.50%	3.62%	5.63%	74.00%	72.00%	67.23%	\$0.00	9.84%	16.84	2.59
TECO Energy, Inc.	TE	\$17.77	6.50%	6.43%	3.50%	6.50%	5.63%	93.00%	71.00%	67.23%	\$0.00	10.07%	16.00	2.84
Westar Energy, Inc.	WR	\$35.95	3.80%	3.20%	6.00%	6.00%	5.63%	58.00%	55.00%	67.23%	\$0.00	10.47%	14.66	2.60
Xcel Energy Inc.	XEL	\$31.26	4.20%	4.51%	5.50%	5.50%	5.63%	61.00%	60.00%	67.23%	\$0.00	10.24%	15.40	2.74

DCF Result

Mean	10.24%	15.62	2.78
Max	12.40%	17.98	3.20
Min	9.55%	10.43	1.56

Projected Annual Earnings per Share

Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Aliant Energy Corporation	LNT	\$3.29	\$3.49	\$3.70	\$3.92	\$4.15	\$4.40	\$4.67	\$4.94	\$5.23	\$5.53	\$5.85	\$6.18	\$6.53	\$6.89	\$7.28	\$7.69	\$8.13
Amgen Corporation	AEE	\$2.10	\$2.29	\$2.49	\$2.71	\$2.95	\$3.22	\$3.50	\$3.79	\$4.08	\$4.36	\$4.64	\$4.90	\$5.17	\$5.46	\$5.77	\$6.10	\$6.44
American Electric Power Company, Inc.	AEP	\$3.18	\$3.34	\$3.50	\$3.68	\$3.86	\$4.05	\$4.25	\$4.47	\$4.71	\$4.96	\$5.23	\$5.52	\$5.84	\$6.16	\$6.51	\$6.88	\$7.26
CMS Energy Corporation	CMS	\$1.66	\$1.77	\$1.89	\$2.02	\$2.16	\$2.31	\$2.46	\$2.63	\$2.79	\$2.96	\$3.14	\$3.31	\$3.50	\$3.69	\$3.90	\$4.12	\$4.35
DTE Energy Company	DTE	\$3.76	\$4.00	\$4.26	\$4.54	\$4.81	\$5.15	\$5.49	\$5.83	\$6.19	\$6.56	\$6.94	\$7.33	\$7.75	\$8.18	\$8.64	\$9.13	\$9.64
Duke Energy Corporation	DUK	\$3.68	\$4.18	\$4.39	\$4.61	\$4.84	\$5.08	\$5.33	\$5.61	\$5.90	\$6.22	\$6.56	\$6.93	\$7.32	\$7.73	\$8.17	\$8.63	\$9.11
Empire District Electric Company	EDE	\$1.43	\$1.54	\$1.60	\$1.66	\$1.73	\$1.80	\$1.87	\$1.95	\$2.04	\$2.15	\$2.26	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.14
Great Plains Energy Inc.	GXP	\$1.62	\$1.72	\$1.82	\$1.93	\$2.05	\$2.17	\$2.30	\$2.43	\$2.58	\$2.73	\$2.88	\$3.04	\$3.21	\$3.40	\$3.59	\$3.79	\$4.00
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.63	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25	\$3.44
IDACORP, Inc.	IDA	\$3.64	\$3.79	\$3.94	\$4.09	\$4.26	\$4.43	\$4.61	\$4.80	\$5.03	\$5.28	\$5.56	\$5.87	\$6.20	\$6.55	\$6.92	\$7.31	\$7.72
NextEra Energy, Inc.	NEE	\$4.83	\$5.15	\$5.49	\$5.85	\$6.24	\$6.65	\$7.09	\$7.54	\$8.01	\$8.49	\$8.99	\$9.49	\$10.03	\$10.59	\$11.19	\$11.82	\$12.48
Northeast Utilities	NU	\$2.49	\$2.69	\$2.90	\$3.14	\$3.39	\$3.66	\$3.95	\$4.25	\$4.55	\$4.85	\$5.14	\$5.43	\$5.74	\$6.05	\$6.40	\$6.78	\$7.14
OGE Energy Corp.	OGE	\$1.94	\$2.08	\$2.22	\$2.38	\$2.55	\$2.73	\$2.92	\$3.12	\$3.32	\$3.52	\$3.73	\$3.94	\$4.17	\$4.40	\$4.65	\$4.91	\$5.18
Other Tail Corporation	OTTR	\$1.37	\$1.58	\$1.83	\$2.11	\$2.44	\$2.82	\$3.25	\$3.69	\$4.12	\$4.51	\$4.88	\$5.13	\$5.42	\$5.72	\$6.05	\$6.39	\$6.74
Pinnacle West Capital Corporation	PINW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.63	\$4.83	\$5.05	\$5.31	\$5.59	\$5.90	\$6.24	\$6.59	\$6.95	\$7.35	\$7.76
PNM Resources, Inc.	PNM	\$1.41	\$1.57	\$1.74	\$1.93	\$2.14	\$2.38	\$2.64	\$2.90	\$3.16	\$3.40	\$3.63	\$3.83	\$4.05	\$4.28	\$4.52	\$4.77	\$5.04
Portland General Electric Company	POR	\$1.77	\$1.91	\$2.06	\$2.22	\$2.39	\$2.58	\$2.78	\$2.99	\$3.20	\$3.40	\$3.61	\$3.81	\$4.03	\$4.25	\$4.49	\$4.75	\$5.01
Southern Company	SO	\$2.70	\$2.80	\$2.90	\$3.00	\$3.11	\$3.23	\$3.34	\$3.49	\$3.63	\$3.81	\$4.00	\$4.23	\$4.47	\$4.72	\$4.98	\$5.27	\$5.56
TECO Energy, Inc.	TE	\$0.92	\$0.98	\$1.04	\$1.11	\$1.18	\$1.26	\$1.34	\$1.43	\$1.52	\$1.61	\$1.70	\$1.79	\$1.90	\$2.00	\$2.11	\$2.23	\$2.36
Westar Energy, Inc.	WR	\$2.27	\$2.41	\$2.55	\$2.70	\$2.87	\$3.04	\$3.22	\$3.41	\$3.61	\$3.82	\$4.04	\$4.26	\$4.50	\$4.76	\$5.02	\$5.31	\$5.61
Xcel Energy Inc.	XEL	\$1.61	\$2.02	\$2.13	\$2.24	\$2.37	\$2.50	\$2.63	\$2.78	\$2.93	\$3.10	\$3.27	\$3.45	\$3.65	\$3.85	\$4.07	\$4.30	\$4.54

Projected Annual Dividend Payout Ratio

Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Aliant Energy Corporation	LNT	69.00%	69.25%	69.50%	69.75%	70.00%	70.21%	70.41%	70.62%	70.82%	71.02%	71.23%	71.43%	71.63%	71.83%	72.03%	72.23%
Amgen Corporation	AEE	68.00%	65.75%	63.50%	61.25%	59.00%	60.31%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
CMS Energy Corporation	CMS	60.00%	59.60%	59.00%	58.50%	58.00%	59.54%	61.03%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
DTE Energy Company	DTE	57.00%	57.25%	57.50%	57.75%	58.00%	59.54%	61.03%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.54%	65.08%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	78.00%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.54%	61.03%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.11%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
OGE Energy Corp.	OGE	47.00%	48.75%	50.50%	52.25%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Other Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.31%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PINW	63.00%	63.50%	64.00%	64.50%	65.00%	65.31%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	50.00%	49.75%	49.50%	49.25%	49.00%	50.24%	51.06%	51.82%	52.58%	53.34%	54.10%	54.86%	55.62%	56.38%	57.14%	57.90%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	54.21%	54.41%	54.62%	54.82%	55.03%	55.23%	55.43%	55.63%	55.83%	56.03%	56.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
TECO Energy, Inc.	TE	93.00%	87.50%	82.00%	76.50%	71.00%	70.37%	69.74%	69.12%	68.49%	67.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	57.04%	59.05%	61.12%	63.15%	65.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Xcel Energy Inc.	XEL	61.00%	60.75%	60.50%	60.25%	60.00%	61.21%	62.41%	63.62%	64.82%	66.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%



Multi-Stage Growth Discounted Cash Flow Model  
 160 Day Average Stock Price  
 High EPS Growth Rate Estimate in First Stage

Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Aliant Energy Corporation	LIT	\$2.06	\$2.19	\$2.33	\$2.45	\$2.64	\$2.85	\$3.09	\$3.33	\$3.69	\$3.66	\$4.15	\$4.39	\$4.64	\$4.90	\$5.17	\$5.45	\$5.73	\$130.11
Ameren Corporation	AEE	\$1.66	\$1.64	\$1.72	\$1.81	\$1.90	\$2.11	\$2.34	\$2.67	\$2.81	\$3.05	\$3.29	\$3.43	\$3.67	\$3.83	\$4.10	\$4.33	\$4.58	\$91.28
American Electric Power Company, Inc.	AEP	\$2.04	\$2.15	\$2.28	\$2.41	\$2.55	\$2.71	\$2.88	\$3.06	\$3.26	\$3.49	\$3.71	\$3.92	\$4.14	\$4.38	\$4.62	\$4.88	\$5.13	\$117.23
CMS Energy Corporation	CMS	\$1.06	\$1.13	\$1.19	\$1.26	\$1.34	\$1.47	\$1.60	\$1.75	\$1.90	\$2.06	\$2.23	\$2.35	\$2.43	\$2.62	\$2.77	\$2.93	\$3.09	\$69.20
DTE Energy Company	DTE	\$2.28	\$2.44	\$2.61	\$2.79	\$2.99	\$3.27	\$3.56	\$3.88	\$4.21	\$4.56	\$4.93	\$5.21	\$5.50	\$5.81	\$6.14	\$6.48	\$6.83	\$173.40
Duke Energy Corporation	DUK	\$2.97	\$3.04	\$3.11	\$3.18	\$3.25	\$3.44	\$3.65	\$3.87	\$4.11	\$4.38	\$4.66	\$4.92	\$5.20	\$5.49	\$5.80	\$6.13	\$6.50	\$160.59
Empire District Electric Company	EDE	\$1.02	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.70	\$1.79	\$1.89	\$2.00	\$2.11	\$2.22	\$54.62
Great Plains Energy Inc.	GXP	\$1.00	\$1.07	\$1.16	\$1.25	\$1.34	\$1.44	\$1.55	\$1.66	\$1.78	\$1.91	\$2.05	\$2.16	\$2.28	\$2.41	\$2.55	\$2.69	\$2.83	\$57.97
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.76	\$1.86	\$1.96	\$2.07	\$2.19	\$2.31	\$2.43	\$53.68
IDACORP, Inc.	IDA	\$1.93	\$2.08	\$2.23	\$2.40	\$2.57	\$2.74	\$2.93	\$3.15	\$3.39	\$3.65	\$3.95	\$4.17	\$4.40	\$4.65	\$4.91	\$5.19	\$5.48	\$125.66
NextEra Energy, Inc.	NEE	\$3.14	\$3.29	\$3.45	\$3.62	\$3.79	\$4.16	\$4.59	\$4.99	\$5.42	\$5.89	\$6.38	\$6.74	\$7.12	\$7.52	\$7.94	\$8.39	\$8.84	\$219.51
Northeast Utilities	NU	\$1.61	\$1.73	\$1.85	\$1.98	\$2.12	\$2.35	\$2.59	\$2.85	\$3.11	\$3.38	\$3.65	\$3.95	\$4.08	\$4.30	\$4.55	\$4.80	\$5.05	\$105.16
OGE Energy Corp.	OGE	\$0.98	\$1.08	\$1.20	\$1.33	\$1.47	\$1.64	\$1.82	\$2.01	\$2.21	\$2.43	\$2.65	\$2.80	\$2.95	\$3.12	\$3.30	\$3.49	\$3.69	\$55.30
Older Tail Corporation	OTTR	\$1.11	\$1.23	\$1.36	\$1.51	\$1.66	\$1.85	\$2.08	\$2.34	\$2.61	\$2.91	\$3.20	\$3.45	\$3.64	\$3.85	\$4.08	\$4.29	\$4.53	\$70.71
Pinnacle West Capital Corporation	PNW	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.03	\$3.18	\$3.34	\$3.53	\$3.74	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$5.22	\$5.50	\$122.05
PNM Resources, Inc.	PNM	\$0.78	\$0.86	\$0.95	\$1.05	\$1.16	\$1.37	\$1.60	\$1.83	\$2.08	\$2.33	\$2.58	\$2.72	\$2.88	\$3.04	\$3.21	\$3.39	\$3.56	\$66.42
Portland General Electric Company	POR	\$0.55	\$1.05	\$1.15	\$1.27	\$1.39	\$1.56	\$1.75	\$1.94	\$2.14	\$2.35	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37	\$3.54	\$77.84
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.26	\$2.32	\$2.38	\$2.45	\$2.53	\$2.62	\$2.72	\$2.84	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$3.94	\$93.66
TECO Energy, Inc.	TE	\$0.91	\$0.91	\$0.91	\$0.91	\$0.89	\$0.94	\$1.00	\$1.05	\$1.10	\$1.15	\$1.21	\$1.27	\$1.35	\$1.42	\$1.50	\$1.59	\$1.67	\$82.17
Westar Energy, Inc.	WR	\$1.40	\$1.45	\$1.53	\$1.60	\$1.67	\$1.84	\$2.02	\$2.21	\$2.41	\$2.63	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57	\$3.77	\$3.97	\$87.17
Xcel Energy Inc.	XEL	\$1.23	\$1.29	\$1.36	\$1.43	\$1.50	\$1.61	\$1.73	\$1.87	\$2.01	\$2.16	\$2.32	\$2.45	\$2.59	\$2.74	\$2.89	\$3.05	\$3.21	\$69.97

Projected Annual Data Investor Cash Flows		[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]	
Company	Ticker	Initial Outflow	11/14/14	12/31/14	6/30/15	6/30/16	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	
Aliant Energy Corporation	LIT	(\$57.76)	\$0.00	\$0.26	\$2.12	\$2.33	\$2.48	\$2.64	\$2.86	\$3.09	\$3.33	\$3.69	\$3.66	\$4.15	\$4.39	\$4.64	\$4.90	\$5.17	\$5.45	\$135.57
Ameren Corporation	AEE	(\$39.63)	\$0.00	\$0.20	\$1.62	\$1.72	\$1.81	\$1.90	\$2.11	\$2.34	\$2.67	\$2.81	\$3.05	\$3.29	\$3.43	\$3.67	\$3.83	\$4.10	\$4.33	\$95.61
American Electric Power Company, Inc.	AEP	(\$52.69)	\$0.00	\$0.26	\$2.09	\$2.28	\$2.41	\$2.55	\$2.71	\$2.88	\$3.06	\$3.26	\$3.43	\$3.71	\$3.92	\$4.14	\$4.38	\$4.62	\$4.88	\$122.11
CMS Energy Corporation	CMS	(\$29.69)	\$0.00	\$0.14	\$1.10	\$1.19	\$1.26	\$1.34	\$1.47	\$1.60	\$1.75	\$1.90	\$2.06	\$2.23	\$2.35	\$2.43	\$2.62	\$2.77	\$2.93	\$71.12
DTE Energy Company	DTE	(\$76.33)	\$0.00	\$0.29	\$2.36	\$2.61	\$2.79	\$2.99	\$3.27	\$3.56	\$3.88	\$4.21	\$4.56	\$4.93	\$5.21	\$5.50	\$5.81	\$6.14	\$6.48	\$179.63
Duke Energy Corporation	DUK	(\$73.44)	\$0.00	\$0.38	\$3.04	\$3.11	\$3.18	\$3.25	\$3.44	\$3.65	\$3.87	\$4.11	\$4.38	\$4.66	\$4.92	\$5.20	\$5.49	\$5.80	\$6.13	\$166.71
Empire District Electric Company	EDE	(\$24.66)	\$0.00	\$0.13	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.70	\$1.79	\$1.89	\$2.00	\$2.11	\$56.64
Great Plains Energy Inc.	GXP	(\$25.84)	\$0.00	\$0.13	\$1.03	\$1.10	\$1.16	\$1.25	\$1.34	\$1.44	\$1.55	\$1.66	\$1.78	\$1.91	\$2.05	\$2.16	\$2.28	\$2.41	\$2.55	\$56.66
Hawaiian Electric Industries, Inc.	HE	(\$26.13)	\$0.00	\$0.16	\$1.31	\$1.28	\$1.28	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.76	\$1.86	\$1.96	\$2.07	\$2.19	\$2.31	\$2.43	\$59.19
IDACORP, Inc.	IDA	(\$55.66)	\$0.00	\$0.25	\$1.97	\$2.23	\$2.40	\$2.57	\$2.74	\$2.93	\$3.15	\$3.39	\$3.65	\$3.95	\$4.17	\$4.40	\$4.65	\$4.91	\$5.19	\$130.65
NextEra Energy, Inc.	NEE	(\$95.70)	\$0.00	\$0.40	\$3.24	\$3.45	\$3.62	\$3.79	\$4.16	\$4.59	\$4.99	\$5.42	\$5.89	\$6.38	\$6.74	\$7.12	\$7.52	\$7.94	\$8.39	\$221.91
Northeast Utilities	NU	(\$45.79)	\$0.00	\$0.21	\$1.68	\$1.85	\$1.98	\$2.12	\$2.35	\$2.59	\$2.85	\$3.11	\$3.38	\$3.65	\$3.95	\$4.08	\$4.30	\$4.55	\$4.80	\$109.95
OGE Energy Corp.	OGE	(\$38.62)	\$0.00	\$0.13	\$1.01	\$1.20	\$1.33	\$1.47	\$1.64	\$1.82	\$2.01	\$2.21	\$2.43	\$2.65	\$2.80	\$2.95	\$3.12	\$3.30	\$3.49	\$58.79
Older Tail Corporation	OTTR	(\$28.00)	\$0.00	\$0.14	\$1.19	\$1.36	\$1.51	\$1.66	\$1.85	\$2.08	\$2.34	\$2.61	\$2.91	\$3.20	\$3.45	\$3.64	\$3.85	\$4.08	\$4.29	\$75.25
Pinnacle West Capital Corporation	PNW	(\$56.05)	\$0.00	\$0.31	\$2.45	\$2.63	\$2.76	\$2.89	\$3.03	\$3.18	\$3.34	\$3.53	\$3.74	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$5.22	\$127.23
PNM Resources, Inc.	PNM	(\$27.21)	\$0.00	\$0.10	\$0.83	\$0.95	\$1.05	\$1.16	\$1.37	\$1.60	\$1.83	\$2.08	\$2.33	\$2.58	\$2.72	\$2.88	\$3.04	\$3.21	\$3.39	\$69.81
Portland General Electric Company	POR	(\$33.29)	\$0.00	\$0.12	\$0.99	\$1.15	\$1.27	\$1.39	\$1.56	\$1.75	\$1.94	\$2.14	\$2.35	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37	\$81.21
Southern Company	SO	(\$44.85)	\$0.00	\$0.27	\$2.11	\$2.19	\$2.26	\$2.32	\$2.38	\$2.45	\$2.53	\$2.62	\$2.72	\$2.84	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$97.40
TECO Energy, Inc.	TE	(\$17.77)	\$0.00	\$0.12	\$0.94	\$0.91	\$0.91	\$0.89	\$0.94	\$1.00	\$1.05	\$1.10	\$1.15	\$1.21	\$1.27	\$1.35	\$1.42	\$1.50	\$1.59	\$39.34
Westar Energy, Inc.	WR	(\$35.65)	\$0.00	\$0.18	\$1.44	\$1.53	\$1.60	\$1.67	\$1.84	\$2.02	\$2.21	\$2.41	\$2.63	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57	\$3.77	\$85.84
Xcel Energy Inc.	XEL	(\$31.26)	\$0.00	\$0.16	\$1.26	\$1.36	\$1.43	\$1.50	\$1.61	\$1.73	\$1.87	\$2.01	\$2.16	\$2.32	\$2.45	\$2.59	\$2.74	\$2.89	\$3.05	\$73.02



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

Projected Annual Cash Flows		(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
Alliant Energy Corporation	LNT	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.67	\$2.86	\$3.06	\$3.28	\$3.53	\$3.79	\$4.01	\$4.23	\$4.47	\$4.72	\$4.99	\$128.84	
Amren Corporation	AEE	\$1.43	\$1.51	\$1.52	\$1.53	\$1.54	\$1.55	\$1.77	\$1.60	\$2.04	\$2.19	\$2.37	\$2.50	\$2.64	\$2.79	\$2.95	\$3.11	\$58.23	
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.36	\$3.58	\$3.78	\$4.00	\$4.22	\$4.46	\$4.71	\$116.84	
CMS Energy Corporation	CMS	\$1.08	\$1.11	\$1.17	\$1.23	\$1.29	\$1.41	\$1.53	\$1.66	\$1.80	\$1.95	\$2.11	\$2.23	\$2.36	\$2.49	\$2.63	\$2.78	\$67.61	
DTE Energy Company	DTE	\$2.27	\$2.41	\$2.57	\$2.73	\$2.90	\$3.15	\$3.42	\$3.71	\$4.02	\$4.35	\$4.70	\$4.97	\$5.25	\$5.54	\$5.85	\$6.18	\$172.61	
Duke Energy Corporation	DUK	\$2.96	\$3.02	\$3.08	\$3.14	\$3.20	\$3.38	\$3.58	\$3.79	\$4.02	\$4.28	\$4.55	\$4.81	\$5.08	\$5.37	\$5.67	\$5.99	\$160.28	
Empire District Electric Company	EDE	\$1.01	\$1.02	\$1.04	\$1.06	\$1.09	\$1.13	\$1.18	\$1.24	\$1.31	\$1.39	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$1.95	\$54.18	
Great Plains Energy Inc.	GXP	\$0.99	\$1.05	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.55	\$1.66	\$1.77	\$1.90	\$2.00	\$2.12	\$2.23	\$2.36	\$2.49	\$57.51	
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.29	\$1.28	\$1.28	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.76	\$1.88	\$1.96	\$2.07	\$2.19	\$2.31	\$53.88	
IDACORP, Inc.	IDA	\$1.88	\$1.93	\$2.07	\$2.17	\$2.27	\$2.37	\$2.49	\$2.63	\$2.80	\$3.01	\$3.25	\$3.43	\$3.63	\$3.83	\$4.05	\$4.27	\$123.46	
Northern Energy, Inc.	NEE	\$3.12	\$3.28	\$3.39	\$3.54	\$3.68	\$4.02	\$4.38	\$4.77	\$5.19	\$5.63	\$6.10	\$6.44	\$6.81	\$7.19	\$7.59	\$8.02	\$218.64	
Northeast Utilities	NU	\$1.59	\$1.67	\$1.78	\$1.85	\$1.95	\$2.12	\$2.31	\$2.51	\$2.72	\$2.94	\$3.18	\$3.36	\$3.55	\$3.75	\$3.96	\$4.18	\$103.56	
OGE Energy Corp.	OGE	\$0.95	\$1.05	\$1.15	\$1.26	\$1.37	\$1.50	\$1.65	\$1.81	\$1.98	\$2.16	\$2.36	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$84.23	
Other Tail Corporation	OTTR	\$1.02	\$1.04	\$1.05	\$1.07	\$1.08	\$1.17	\$1.27	\$1.38	\$1.43	\$1.60	\$1.73	\$1.83	\$1.93	\$2.04	\$2.15	\$2.27	\$54.71	
Pinnacle West Capital Corporation	PNW	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.02	\$3.17	\$3.33	\$3.52	\$3.72	\$3.95	\$4.18	\$4.41	\$4.66	\$4.92	\$5.20	\$122.01	
PNM Resources, Inc.	PNM	\$0.76	\$0.82	\$0.89	\$0.96	\$1.03	\$1.19	\$1.35	\$1.53	\$1.72	\$1.92	\$2.12	\$2.24	\$2.37	\$2.50	\$2.64	\$2.79	\$64.63	
Portland General Electric Company	POR	\$0.93	\$1.00	\$1.07	\$1.14	\$1.22	\$1.33	\$1.48	\$1.59	\$1.74	\$1.90	\$2.07	\$2.19	\$2.31	\$2.44	\$2.58	\$2.72	\$78.05	
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.26	\$2.31	\$2.36	\$2.43	\$2.51	\$2.60	\$2.70	\$2.82	\$2.93	\$3.14	\$3.32	\$3.51	\$3.70	\$93.60	
TECO Energy, Inc.	TE	\$0.83	\$0.86	\$0.84	\$0.81	\$0.78	\$0.80	\$0.82	\$0.85	\$0.83	\$0.92	\$0.95	\$1.01	\$1.07	\$1.13	\$1.20	\$1.26	\$37.15	
Westar Energy, Inc.	WR	\$1.36	\$1.33	\$1.41	\$1.44	\$1.49	\$1.56	\$1.68	\$1.81	\$1.96	\$2.12	\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$3.04	\$80.32	
Xcel Energy Inc.	XEL	\$1.21	\$1.26	\$1.31	\$1.36	\$1.41	\$1.50	\$1.59	\$1.70	\$1.82	\$1.96	\$2.10	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$69.28	

Projected Annual Data Investor Cash Flows		(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)	(76)	(77)	(78)	(79)	(80)	(81)
Company	Ticker	Initial Outflow	1/1/14	12/31/14	6/30/15	6/30/16	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
Alliant Energy Corporation	LNT	(\$57.78)	\$0.00	\$0.26	\$2.08	\$2.25	\$2.37	\$2.50	\$2.67	\$2.86	\$3.06	\$3.28	\$3.53	\$3.79	\$4.01	\$4.23	\$4.47	\$4.72	\$133.93
Amren Corporation	AEE	(\$39.68)	\$0.00	\$0.19	\$1.63	\$1.52	\$1.53	\$1.54	\$1.65	\$1.77	\$1.90	\$2.04	\$2.19	\$2.37	\$2.50	\$2.64	\$2.79	\$2.95	\$91.34
American Electric Power Company, Inc.	AEP	(\$52.99)	\$0.00	\$0.26	\$2.07	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.36	\$3.58	\$3.78	\$4.00	\$4.22	\$4.46	\$121.55
CMS Energy Corporation	CMS	(\$29.99)	\$0.00	\$0.14	\$1.09	\$1.17	\$1.23	\$1.29	\$1.41	\$1.53	\$1.66	\$1.80	\$1.95	\$2.11	\$2.23	\$2.36	\$2.49	\$2.63	\$70.59
DTE Energy Company	DTE	(\$76.33)	\$0.00	\$0.29	\$2.34	\$2.57	\$2.73	\$2.90	\$3.15	\$3.42	\$3.71	\$4.02	\$4.35	\$4.70	\$4.97	\$5.25	\$5.54	\$5.85	\$158.60
Duke Energy Corporation	DUK	(\$73.44)	\$0.00	\$0.33	\$3.03	\$3.03	\$3.14	\$3.20	\$3.38	\$3.58	\$3.79	\$4.02	\$4.28	\$4.55	\$4.81	\$5.08	\$5.37	\$5.67	\$159.27
Empire District Electric Company	EDE	(\$24.95)	\$0.00	\$0.13	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.24	\$1.31	\$1.39	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$56.14
Great Plains Energy Inc.	GXP	(\$25.84)	\$0.00	\$0.13	\$1.01	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.55	\$1.66	\$1.77	\$1.90	\$2.00	\$2.12	\$2.23	\$2.36	\$60.00
Hawaiian Electric Industries, Inc.	HE	(\$25.13)	\$0.00	\$0.16	\$1.31	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.43	\$1.56	\$1.65	\$1.76	\$1.88	\$1.96	\$2.07	\$2.19	\$58.19
IDACORP, Inc.	IDA	(\$55.86)	\$0.00	\$0.24	\$1.99	\$2.07	\$2.17	\$2.27	\$2.37	\$2.49	\$2.63	\$2.80	\$3.01	\$3.25	\$3.43	\$3.63	\$3.83	\$4.05	\$127.73
Northern Energy, Inc.	NEE	(\$69.70)	\$0.00	\$0.40	\$3.22	\$3.39	\$3.54	\$3.68	\$4.02	\$4.38	\$4.77	\$5.19	\$5.63	\$6.10	\$6.44	\$6.81	\$7.19	\$7.59	\$229.56
Northeast Utilities	NU	(\$45.19)	\$0.00	\$0.20	\$1.65	\$1.78	\$1.85	\$1.95	\$2.12	\$2.31	\$2.51	\$2.72	\$2.94	\$3.18	\$3.36	\$3.55	\$3.75	\$3.96	\$107.75
OGE Energy Corp.	OGE	(\$36.82)	\$0.00	\$0.12	\$0.99	\$1.15	\$1.26	\$1.37	\$1.50	\$1.65	\$1.81	\$1.98	\$2.16	\$2.36	\$2.49	\$2.63	\$2.78	\$2.94	\$87.33
Other Tail Corporation	OTTR	(\$29.00)	\$0.00	\$0.13	\$1.06	\$1.05	\$1.07	\$1.08	\$1.17	\$1.27	\$1.33	\$1.49	\$1.60	\$1.73	\$1.83	\$1.93	\$2.04	\$2.15	\$59.59
Pinnacle West Capital Corporation	PNW	(\$56.06)	\$0.00	\$0.31	\$2.44	\$2.63	\$2.76	\$2.89	\$3.02	\$3.17	\$3.33	\$3.52	\$3.72	\$3.95	\$4.18	\$4.41	\$4.66	\$4.92	\$127.21
PNM Resources, Inc.	PNM	(\$27.21)	\$0.00	\$0.10	\$0.80	\$0.89	\$0.96	\$1.03	\$1.19	\$1.35	\$1.53	\$1.72	\$1.92	\$2.12	\$2.24	\$2.37	\$2.50	\$2.64	\$67.42
Portland General Electric Company	POR	(\$33.29)	\$0.00	\$0.12	\$0.95	\$1.07	\$1.14	\$1.22	\$1.33	\$1.46	\$1.59	\$1.74	\$1.90	\$2.07	\$2.19	\$2.31	\$2.44	\$2.58	\$78.78
Southern Company	SO	(\$44.35)	\$0.00	\$0.27	\$2.10	\$2.19	\$2.25	\$2.31	\$2.36	\$2.43	\$2.51	\$2.60	\$2.70	\$2.82	\$2.93	\$3.14	\$3.32	\$3.51	\$97.30
TECO Energy, Inc.	TE	(\$17.77)	\$0.00	\$0.11	\$0.90	\$0.84	\$0.81	\$0.78	\$0.80	\$0.82	\$0.85	\$0.83	\$0.92	\$0.95	\$1.01	\$1.07	\$1.13	\$1.20	\$38.41
Westar Energy, Inc.	WR	(\$35.95)	\$0.00	\$0.17	\$1.33	\$1.41	\$1.44	\$1.46	\$1.56	\$1.68	\$1.81	\$1.96	\$2.12	\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$83.38
Xcel Energy Inc.	XEL	(\$31.26)	\$0.00	\$0.16	\$1.24	\$1.31	\$1.36	\$1.41	\$1.50	\$1.59	\$1.70	\$1.82	\$1.96	\$2.10	\$2.22	\$2.35	\$2.48	\$2.62	\$72.05

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

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	
Stock		EPS Growth Rate Estimates				Long-Term	Payout Ratio			Iterative Solution	Terminal			
Company	Ticker	Price	Zacks	First Call	Line	Average	Growth	2014	2018	2024	Proof	IRR	P/E Ratio	PEG Ratio
American Electric Power Company, Inc.	AEP	\$56.09	4.90%	4.97%	4.50%	4.79%	5.63%	61.00%	63.00%	67.23%	(\$0.00)	9.73%	17.31	3.03
Duke Energy Corporation	DUK	\$79.74	4.70%	4.76%	5.00%	4.62%	5.63%	71.00%	64.00%	67.23%	(\$0.00)	9.29%	19.41	3.45
Empire District Electric Company	EDE	\$26.93	3.00%	3.00%	4.00%	3.33%	5.63%	66.00%	63.00%	67.23%	\$0.00	9.23%	19.69	3.50
Great Plains Energy Inc.	GXP	\$26.00	5.00%	5.00%	6.00%	5.33%	5.63%	59.00%	62.00%	67.23%	\$0.00	10.25%	15.25	2.71
Hawaiian Electric Industries, Inc.	HE	\$27.41	4.00%	4.00%	4.00%	4.00%	5.63%	78.00%	65.00%	67.23%	\$0.00	9.77%	17.16	3.05
IDACORP, Inc.	IDA	\$59.53	4.00%	4.00%	1.50%	3.17%	5.63%	51.00%	58.00%	67.23%	(\$0.00)	9.49%	19.33	3.27
NextEra Energy, Inc.	NEE	\$53.23	6.60%	6.47%	6.00%	6.35%	5.63%	61.00%	57.00%	67.23%	(\$0.00)	9.54%	18.16	3.23
Northeast Utilities	NU	\$43.36	6.70%	6.16%	8.00%	6.65%	5.63%	69.00%	58.00%	67.23%	(\$0.00)	9.89%	16.65	2.98
Oter Tail Corporation	OTTR	\$29.43	NA	6.00%	15.60%	10.75%	5.63%	70.00%	59.00%	67.23%	(\$0.00)	10.64%	14.17	2.52
Pinnacle West Capital Corporation	PNW	\$59.44	4.00%	3.95%	4.00%	3.95%	5.63%	63.00%	65.00%	67.23%	\$0.00	9.88%	18.72	2.97
PNM Resources, Inc.	PNM	\$27.73	8.60%	8.34%	11.00%	9.28%	5.63%	50.00%	49.00%	67.23%	(\$0.00)	10.38%	14.94	2.65
Portland General Electric Company	POR	\$35.18	7.00%	7.63%	5.00%	6.63%	5.63%	50.00%	54.00%	67.23%	(\$0.00)	9.79%	17.43	3.10
Southern Company	SO	\$46.56	6.60%	3.62%	3.62%	3.62%	5.63%	74.00%	72.00%	67.23%	\$0.00	9.62%	17.78	3.18
Westar Energy, Inc.	WR	\$36.65	3.63%	3.20%	6.00%	4.33%	5.63%	53.00%	55.00%	67.23%	(\$0.00)	9.85%	16.81	2.99

DCF Result

Mean	9.81%	17.13	3.04
Max	10.64%	19.69	3.50
Mn	9.23%	14.17	2.52

Projected Annual Earnings per Share

Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.66	\$3.83	\$4.02	\$4.21	\$4.42	\$4.65	\$4.89	\$5.18	\$5.45	\$5.76	\$6.08	\$6.42	\$6.78	\$7.16	\$7.56
Duke Energy Corporation	DUK	\$3.68	\$4.17	\$4.37	\$4.58	\$4.80	\$5.04	\$5.28	\$5.54	\$5.83	\$6.14	\$6.47	\$6.84	\$7.22	\$7.63	\$8.05	\$8.51	\$8.99	\$9.49
Empire District Electric Company	EDE	\$1.43	\$1.53	\$1.58	\$1.63	\$1.69	\$1.74	\$1.80	\$1.87	\$1.95	\$2.04	\$2.15	\$2.27	\$2.40	\$2.53	\$2.67	\$2.82	\$2.98	\$3.15
Great Plains Energy Inc.	GXP	\$1.82	\$1.71	\$1.63	\$1.69	\$1.79	\$2.10	\$2.21	\$2.33	\$2.45	\$2.59	\$2.74	\$2.90	\$3.07	\$3.23	\$3.41	\$3.59	\$3.80	\$4.01
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.09	\$3.25	\$3.44	\$3.64
IDACORP, Inc.	IDA	\$3.64	\$3.76	\$3.87	\$4.00	\$4.12	\$4.25	\$4.38	\$4.55	\$4.74	\$4.96	\$5.21	\$5.51	\$5.82	\$6.14	\$6.49	\$6.85	\$7.24	\$7.64
NextEra Energy, Inc.	NEE	\$4.63	\$5.14	\$5.45	\$5.81	\$6.18	\$6.57	\$6.99	\$7.43	\$7.83	\$8.34	\$8.82	\$9.32	\$9.84	\$10.40	\$10.99	\$11.60	\$12.25	\$12.92
Northeast Utilities	NU	\$2.49	\$2.66	\$2.85	\$3.05	\$3.28	\$3.48	\$3.73	\$3.99	\$4.23	\$4.43	\$4.76	\$5.02	\$5.31	\$5.61	\$5.92	\$6.25	\$6.61	\$6.98
Oter Tail Corporation	OTTR	\$1.37	\$1.52	\$1.63	\$1.66	\$2.06	\$2.28	\$2.63	\$2.77	\$3.02	\$3.25	\$3.48	\$3.66	\$3.86	\$4.08	\$4.31	\$4.55	\$4.81	\$5.07
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.63	\$4.83	\$5.05	\$5.30	\$5.58	\$5.90	\$6.23	\$6.58	\$6.95	\$7.34	\$7.75	\$8.17
PNM Resources, Inc.	PNM	\$1.41	\$1.54	\$1.68	\$1.84	\$2.01	\$2.20	\$2.40	\$2.61	\$2.81	\$3.01	\$3.20	\$3.38	\$3.57	\$3.77	\$3.98	\$4.21	\$4.45	\$4.70
Portland General Electric Company	POR	\$1.77	\$1.89	\$2.02	\$2.16	\$2.31	\$2.47	\$2.64	\$2.81	\$2.99	\$3.18	\$3.36	\$3.55	\$3.75	\$3.96	\$4.18	\$4.42	\$4.67	\$4.92
Southern Company	SO	\$2.70	\$2.80	\$2.90	\$3.00	\$3.11	\$3.22	\$3.33	\$3.47	\$3.62	\$3.78	\$3.99	\$4.21	\$4.45	\$4.70	\$4.97	\$5.25	\$5.54	\$5.84
Westar Energy, Inc.	WR	\$2.27	\$2.37	\$2.47	\$2.58	\$2.69	\$2.81	\$2.93	\$3.06	\$3.21	\$3.38	\$3.56	\$3.76	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$5.20

Projected Annual Dividend Payout Ratio

Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.54%	65.08%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	76.00%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.71%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Oter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	63.00%	63.50%	64.00%	64.50%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	50.00%	49.56%	49.12%	48.68%	48.25%	52.04%	55.65%	59.26%	62.87%	66.49%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	56.21%	58.41%	60.62%	62.83%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.83%	68.05%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	57.04%	59.08%	61.12%	63.15%	65.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows

Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.15	\$2.27	\$2.40	\$2.53	\$2.63	\$2.65	\$3.03	\$3.22	\$3.43	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$4.82	\$5.08	\$124.00
Duke Energy Corporation	DUK	\$2.95	\$3.03	\$3.09	\$3.16	\$3.22	\$3.41	\$3.61	\$3.82	\$4.06	\$4.32	\$4.60	\$4.85	\$5.13	\$5.42	\$5.72	\$6.04	\$6.37	\$174.45
Empire District Electric Company	EDE	\$1.01	\$1.03	\$1.05	\$1.08	\$1.10	\$1.15	\$1.20	\$1.27	\$1.34	\$1.43	\$1.52	\$1.61	\$1.70	\$1.80	\$1.90	\$2.00	\$2.00	\$58.71
Great Plains Energy Inc.	GXP	\$0.99	\$1.06	\$1.14	\$1.22	\$1.30	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82	\$1.95	\$2.05	\$2.17	\$2.29	\$2.42	\$2.56	\$2.70	\$58.02
Hawaiian Electric Industries, Inc.	HE	\$1.23	\$1.28	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.43	\$1.50	\$1.65	\$1.76	\$1.88	\$1.96	\$2.07	\$2.19	\$2.31	\$2.43	\$133.03
IDACORP, Inc.	IDA	\$1.92	\$2.04	\$2.18	\$2.32	\$2.47	\$2.61	\$2.78	\$2.97	\$3.18	\$3.42	\$3.70	\$3.91	\$4.13	\$4.36	\$4.61	\$4.87	\$5.13	\$83.03
NextEra Energy, Inc.	NEE	\$3.13	\$3.28	\$3.43	\$3.58	\$3.75	\$4.10	\$4.49	\$4.89	\$5.32	\$5.78	\$6.27	\$6.62	\$6.99	\$7.38	\$7.80	\$8.24	\$8.70	\$222.55
Northeast Utilities	NU	\$1.60	\$1.69	\$1.80	\$1.91	\$2.02	\$2.22	\$2.43	\$2.65	\$2.88	\$3.13	\$3.38	\$3.67	\$3.97	\$4.28	\$4.61	\$4.94	\$5.28	\$109.63
Oter Tail Corporation	OTTR	\$1.06	\$1.13	\$1.20	\$1.27	\$1.35	\$1.51	\$1.71	\$1.90	\$2.09	\$2.28	\$2.46	\$2.60	\$2.74	\$2.90	\$3.06	\$3.23	\$3.38	\$63.16
Pinnacle West Capital Corporation	PNW	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.02	\$3.17	\$3.34	\$3.52	\$3.73	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$5.21	\$5.50	\$129.60
PNM Resources, Inc.	PNM	\$0.77	\$0.84	\$0.91	\$0.99	\$1.08	\$1.25	\$1.44	\$1.63	\$1.84	\$2.05	\$2.27	\$2.40	\$2.54	\$2.68	\$2.83	\$2.99	\$3.14	\$68.41
Portland General Electric Company	POR	\$0.95	\$1.03	\$1.12	\$1.22	\$1.33	\$1.43	\$1.64	\$1.61	\$1.69	\$2.19	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.14	\$3.31	\$81.41
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.32	\$2.37	\$2.44	\$2.52	\$2.61	\$2.71	\$2.83	\$2.92	\$3.06	\$3.24	\$3.43	\$3.63	\$3.83	\$98.51
Westar Energy, Inc.	WR	\$1.37	\$1.41	\$1.45	\$1.50	\$1.54	\$1.67	\$1.81	\$1.96	\$2.13	\$2.32	\$2.53	\$2.67	\$2.82	\$2.98	\$3.14	\$3.32	\$3.50	\$83.04

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

Inputs	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Stock	EPS Growth Rate Estimates			Long-Term	Payoff Ratio			Iterative Solution	Terminal	Terminal		
Company	Ticker	Price	Zacks	First Call	Value	High	Growth	2014	2018	2024	Proof	IRR	P/E Ratio/PEG Ratio
American Electric Power Company, Inc.	AEP	\$56.09	4.9%	4.9%	4.5%	4.9%	5.63%	61.0%	63.0%	67.23%	(\$0.00)	9.76%	17.09 3.04
Duke Energy Corporation	DUK	\$79.74	4.76%	4.76%	5.00%	5.00%	5.63%	71.0%	64.0%	67.23%	(\$0.00)	9.33%	19.17 3.41
Empire District Electric Company	EDE	\$28.93	3.0%	3.0%	4.0%	4.0%	5.63%	66.0%	63.0%	67.23%	\$0.00	9.41%	18.78 3.34
Great Plains Energy Inc.	GXP	\$26.00	6.00%	6.00%	6.00%	6.00%	5.63%	58.0%	62.0%	67.23%	\$0.00	10.50%	14.53 2.59
Hawaiian Electric Industries, Inc.	HE	\$27.41	4.00%	4.00%	4.00%	4.00%	5.63%	76.0%	65.0%	67.23%	\$0.00	9.77%	17.16 3.05
IDACORP, Inc.	IDA	\$59.53	4.00%	4.00%	4.00%	4.00%	5.63%	51.0%	58.0%	67.23%	(\$0.00)	9.72%	17.34 3.03
NextEra Energy, Inc.	NEE	\$93.23	6.60%	6.47%	6.00%	6.60%	5.63%	61.0%	57.0%	67.23%	(\$0.00)	9.60%	17.66 3.17
Northeast Utilities	NU	\$48.36	6.70%	6.16%	8.00%	8.00%	5.63%	60.0%	58.0%	67.23%	(\$0.00)	10.20%	15.53 2.76
Oter Tail Corporation	OTTR	\$29.43	NA	6.0%	15.50%	15.50%	5.63%	70.0%	59.0%	67.23%	(\$0.00)	12.31%	10.63 1.89
Pinnacle West Capital Corporation	PWV	\$59.44	4.0%	3.95%	4.0%	4.0%	5.63%	63.0%	65.0%	67.23%	\$0.00	9.65%	16.70 2.97
PNM Resources, Inc.	PNM	\$27.73	8.50%	9.34%	11.00%	11.00%	5.63%	50.0%	49.0%	67.23%	(\$0.00)	10.92%	13.41 2.39
Portland General Electric Company	POR	\$35.18	7.80%	7.80%	15.0%	7.80%	5.63%	50.0%	54.0%	67.23%	(\$0.00)	9.97%	16.37 2.91
Southern Company	SO	\$46.55	3.60%	3.62%	3.50%	3.62%	5.63%	74.0%	72.0%	67.23%	\$0.00	9.64%	17.72 3.15
Westar Energy, Inc.	WR	\$38.85	3.8%	3.20%	6.0%	6.0%	5.63%	58.0%	55.0%	67.23%	(\$0.00)	10.36%	15.02 2.67

DCF Result

Mean	10.16%	16.24	2.69
Max	12.31%	19.17	3.41
Mn	9.33%	10.63	1.69

Projected Annual Earnings per Share

Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
American Electric Power Company, Inc.	AEP	\$3.18	\$3.31	\$3.50	\$3.68	\$3.86	\$4.05	\$4.25	\$4.47	\$4.71	\$4.95	\$5.23	\$5.52	\$5.84	\$6.16	\$6.51	\$6.83	\$7.28	
Duke Energy Corporation	DUK	\$3.69	\$4.18	\$4.39	\$4.61	\$4.84	\$5.08	\$5.33	\$5.61	\$5.90	\$6.22	\$6.56	\$6.93	\$7.32	\$7.73	\$8.17	\$8.63	\$9.11	
Empire District Electric Company	EDE	\$1.49	\$1.54	\$1.60	\$1.66	\$1.73	\$1.80	\$1.87	\$1.95	\$2.04	\$2.15	\$2.29	\$2.45	\$2.62	\$2.81	\$2.97	\$3.14	\$3.34	
Great Plains Energy Inc.	GXP	\$1.62	\$1.72	\$1.82	\$1.93	\$2.07	\$2.17	\$2.30	\$2.43	\$2.57	\$2.73	\$2.91	\$3.04	\$3.21	\$3.40	\$3.59	\$3.79	\$4.00	
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25	\$3.44	
IDACORP, Inc.	IDA	\$3.64	\$3.79	\$3.94	\$4.09	\$4.26	\$4.43	\$4.61	\$4.80	\$5.03	\$5.28	\$5.56	\$5.87	\$6.20	\$6.55	\$6.92	\$7.31	\$7.72	
NextEra Energy, Inc.	NEE	\$4.83	\$5.15	\$5.49	\$5.85	\$6.24	\$6.65	\$7.09	\$7.54	\$8.01	\$8.49	\$8.99	\$9.49	\$10.03	\$10.59	\$11.19	\$11.82	\$12.48	
Northeast Utilities	NU	\$2.49	\$2.69	\$2.90	\$3.14	\$3.39	\$3.66	\$3.95	\$4.25	\$4.55	\$4.85	\$5.14	\$5.43	\$5.74	\$6.06	\$6.40	\$6.76	\$7.14	
Oter Tail Corporation	OTTR	\$1.37	\$1.58	\$1.83	\$2.11	\$2.44	\$2.82	\$3.25	\$3.69	\$4.12	\$4.61	\$4.86	\$5.13	\$5.42	\$5.72	\$6.05	\$6.39	\$6.74	
Pinnacle West Capital Corporation	PWV	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.63	\$4.83	\$5.06	\$5.31	\$5.59	\$5.90	\$6.24	\$6.59	\$6.96	\$7.35	\$7.78	
PNM Resources, Inc.	PNM	\$1.41	\$1.57	\$1.74	\$1.93	\$2.14	\$2.38	\$2.64	\$2.90	\$3.16	\$3.40	\$3.63	\$3.83	\$4.05	\$4.28	\$4.52	\$4.77	\$5.04	
Portland General Electric Company	POR	\$1.77	\$1.91	\$2.06	\$2.22	\$2.39	\$2.58	\$2.78	\$2.99	\$3.20	\$3.40	\$3.61	\$3.81	\$4.03	\$4.25	\$4.49	\$4.75	\$5.01	
Southern Company	SO	\$2.70	\$2.80	\$2.90	\$3.00	\$3.11	\$3.23	\$3.34	\$3.43	\$3.63	\$3.81	\$4.00	\$4.23	\$4.47	\$4.72	\$4.98	\$5.27	\$5.66	
Westar Energy, Inc.	WR	\$2.27	\$2.41	\$2.55	\$2.70	\$2.87	\$3.04	\$3.22	\$3.41	\$3.61	\$3.82	\$4.04	\$4.28	\$4.50	\$4.76	\$5.02	\$5.31	\$5.61	

Projected Annual Dividend Payout Ratio

Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.0%	61.50%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.0%	69.25%	67.50%	65.75%	64.00%	64.54%	65.08%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	65.0%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.0%	59.0%	60.0%	61.0%	62.0%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	76.0%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.0%	52.75%	54.50%	56.25%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.0%	60.0%	59.00%	58.00%	57.00%	57.71%	58.41%	59.12%	59.82%	60.53%	61.23%	61.93%	62.63%	63.33%	64.03%	64.73%
Northeast Utilities	NU	60.0%	59.50%	59.00%	58.50%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Oter Tail Corporation	OTTR	70.0%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PWV	63.0%	63.50%	64.00%	64.50%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	60.0%	49.75%	49.50%	49.25%	49.00%	52.04%	55.08%	58.12%	61.15%	64.19%	67.23%	67.23%	67.23%	67.23%	67.23%	
Portland General Electric Company	POR	50.0%	51.0%	52.0%	53.0%	54.0%	58.21%	58.41%	58.62%	58.82%	59.03%	67.23%	67.23%	67.23%	67.23%	67.23%	
Southern Company	SO	74.0%	73.90%	73.80%	73.70%	73.60%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.0%	57.25%	56.50%	55.75%	55.00%	57.04%	59.08%	61.12%	63.15%	65.19%	67.23%	67.23%	67.23%	67.23%	67.23%	

Projected Annual Cash Flows

Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value	
American Electric Power Company, Inc.	AEP	\$2.04	\$2.15	\$2.28	\$2.41	\$2.55	\$2.71	\$2.83	\$3.06	\$3.26	\$3.43	\$3.71	\$3.92	\$4.14	\$4.38	\$4.62	\$4.83	\$124.15	
Duke Energy Corporation	DUK	\$2.97	\$3.04	\$3.11	\$3.18	\$3.25	\$3.44	\$3.65	\$3.87	\$4.11	\$4.38	\$4.66	\$4.92	\$5.20	\$5.49	\$5.80	\$6.13	\$174.64	
Empire District Electric Company	EDE	\$1.02	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.70	\$1.79	\$1.89	\$2.00	\$2.11	\$58.84	
Great Plains Energy Inc.	GXP	\$1.00	\$1.07	\$1.16	\$1.25	\$1.34	\$1.44	\$1.55	\$1.66	\$1.78	\$1.91	\$2.05	\$2.18	\$2.33	\$2.41	\$2.55	\$2.69	\$58.34	
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.28	\$1.23	\$1.14	\$1.04	\$1.14	\$1.43	\$1.56	\$1.65	\$1.76	\$1.85	\$1.95	\$2.07	\$2.19	\$2.31	\$59.99	
IDACORP, Inc.	IDA	\$1.93	\$2.08	\$2.23	\$2.40	\$2.57	\$2.74	\$2.93	\$3.15	\$3.39	\$3.65	\$3.95	\$4.17	\$4.40	\$4.65	\$4.91	\$5.19	\$133.83	
NextEra Energy, Inc.	NEE	\$3.14	\$3.29	\$3.45	\$3.62	\$3.79	\$4.16	\$4.56	\$4.98	\$5.42	\$5.89	\$6.38	\$6.74	\$7.12	\$7.52	\$7.94	\$8.39	\$222.95	
Northeast Utilities	NU	\$1.61	\$1.73	\$1.85	\$1.93	\$2.12	\$2.35	\$2.69	\$2.85	\$3.11	\$3.38	\$3.65	\$3.66	\$4.08	\$4.40	\$4.65	\$4.80	\$110.93	
Oter Tail Corporation	OTTR	\$1.11	\$1.23	\$1.36	\$1.51	\$1.66	\$1.85	\$2.08	\$2.31	\$2.59	\$2.91	\$3.20	\$3.45	\$3.64	\$3.65	\$4.00	\$4.29	\$4.53	\$171.68
Pinnacle West Capital Corporation	PWV	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.03	\$3.18	\$3.34	\$3.53	\$3.74	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$5.22	\$129.61	
PNM Resources, Inc.	PNM	\$0.78	\$0.66	\$0.55	\$0.45	\$0.37	\$1.16	\$1.37	\$1.60	\$1.83	\$2.08	\$2.33	\$2.58	\$2.72	\$2.88	\$3.04	\$3.21	\$3.39	\$67.61
Portland General Electric Company	POR	\$0.95	\$1.05	\$1.15	\$1.27	\$1.39	\$1.55	\$1.75	\$1.94	\$2.14	\$2.35	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37	\$82.06	
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.26	\$2.32	\$2.33	\$2.45	\$2.63	\$2.82	\$2.72	\$2.84	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$68.53	
Westar Energy, Inc.	WR	\$1.40	\$1.45	\$1.53	\$1.60	\$1.67	\$1.84	\$2.02	\$2.21	\$2.41	\$2.63	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57	\$3.77	\$84.20	

Projected Annual Data Investor Cash Flows

Company	Ticker	Diff/Flow	11/14/14	12/31/14	6/30/15	6/30/16	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
American Electric Power Company, Inc.	AEP	(\$56.09)	\$0.00	\$0.26	\$2.09	\$2.28	\$2.41	\$2.55	\$2.71	\$2.83	\$3.06	\$3.26	\$3.43	\$3.71	\$3.92	\$4.14	\$4.38	\$4.62	\$129.04
Duke Energy Corporation	DUK	(\$79.74)	\$0.00	\$0.38	\$3.04	\$3.11	\$3.18</												

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

Inputs		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
		Stock	EPS Growth Rate Estimates			Value	Long-Term	Payoff Ratio			Iterative Solution	Terminal	Terminal	
Company	Ticker	Price	Zacks	First Call	Line	Low Growth	Growth	2014	2018	2024	Proof	IRR	P/E Ratio	SE Ratio
American Electric Power Company, Inc.	AEP	\$56.09	4.00%	4.07%	4.00%	4.50%	5.63%	61.00%	63.00%	67.23%	(\$0.00)	9.65%	17.66	3.14
Duke Energy Corporation	DUK	\$79.74	4.70%	4.76%	5.00%	4.70%	5.63%	71.00%	64.00%	67.23%	(\$0.00)	9.26%	19.57	3.48
Empire District Electric Company	EDE	\$26.93	3.00%	3.00%	4.00%	3.00%	5.63%	68.00%	63.00%	67.23%	\$0.00	9.15%	20.18	3.59
Great Plains Energy Inc.	GXP	\$26.00	5.00%	5.00%	6.00%	5.00%	5.63%	58.00%	62.00%	67.23%	\$0.00	10.16%	15.60	2.77
Hawaiian Electric Industries, Inc.	HE	\$27.41	4.00%	4.00%	4.00%	4.00%	5.63%	76.00%	65.00%	67.23%	\$0.00	9.77%	17.16	3.05
IDACORP, Inc.	IDA	\$59.53	4.00%	4.00%	1.50%	1.50%	5.63%	51.00%	58.00%	67.23%	(\$0.00)	9.06%	20.71	3.68
NextEra Energy, Inc.	NEE	\$99.23	6.00%	6.47%	8.00%	6.00%	5.63%	61.00%	57.00%	67.23%	(\$0.00)	9.44%	18.61	3.31
Northeast Utilities	NU	\$43.36	6.70%	8.16%	8.00%	8.16%	5.63%	60.00%	58.00%	67.23%	(\$0.00)	9.67%	17.56	3.12
Otter Tail Corporation	OTTR	\$29.43	NA	8.00%	15.50%	6.00%	5.63%	70.00%	59.00%	67.23%	(\$0.00)	9.29%	18.41	3.45
Pinnacle West Capital Corporation	PNW	\$59.44	4.00%	3.95%	4.00%	3.95%	5.63%	63.00%	65.00%	67.23%	\$0.00	9.87%	16.78	2.68
PNM Resources, Inc.	PNM	\$27.73	8.50%	8.34%	11.00%	8.34%	5.63%	50.00%	49.00%	67.23%	(\$0.00)	10.10%	15.85	2.82
Portland General Electric Company	POR	\$35.18	7.80%	7.83%	5.00%	5.00%	5.63%	50.00%	54.00%	67.23%	(\$0.00)	9.21%	18.81	3.52
Southern Company	SO	\$48.55	3.60%	3.62%	3.50%	3.50%	5.63%	74.00%	72.00%	67.23%	\$0.00	9.60%	17.87	3.18
Westar Energy, Inc.	WR	\$38.85	3.60%	3.20%	6.00%	3.20%	5.63%	58.00%	65.00%	67.23%	(\$0.00)	9.53%	18.19	3.23

DCF Result

Mean	9.56%	18.21	3.24
Max	10.16%	20.71	3.68
Min	9.06%	15.60	2.77

Projected Annual Earnings per Share

Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.32	\$3.47	\$3.63	\$3.79	\$3.96	\$4.14	\$4.34	\$4.55	\$4.79	\$5.06	\$5.33	\$5.63	\$5.95	\$6.28	\$6.63	\$7.01
Duke Energy Corporation	DUK	\$3.59	\$4.17	\$4.88	\$4.87	\$4.78	\$5.01	\$5.24	\$5.50	\$5.78	\$6.08	\$6.41	\$6.77	\$7.15	\$7.56	\$7.98	\$8.43	\$8.91
Empire District Electric Company	EDE	\$1.48	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.83	\$1.90	\$1.99	\$2.09	\$2.21	\$2.33	\$2.47	\$2.60	\$2.75	\$2.91
Great Plains Energy Inc.	GXP	\$1.82	\$1.79	\$1.79	\$1.81	\$1.87	\$2.07	\$2.17	\$2.28	\$2.40	\$2.53	\$2.67	\$2.82	\$2.98	\$3.15	\$3.32	\$3.51	\$3.71
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25	\$3.44
IDACORP, Inc.	IDA	\$3.64	\$3.69	\$3.75	\$3.81	\$3.86	\$3.92	\$3.93	\$4.07	\$4.20	\$4.37	\$4.58	\$4.84	\$5.11	\$5.39	\$5.70	\$6.02	\$6.36
NextEra Energy, Inc.	NEE	\$4.83	\$5.12	\$5.43	\$5.75	\$6.10	\$6.46	\$6.85	\$7.26	\$7.68	\$8.13	\$8.59	\$9.07	\$9.58	\$10.12	\$10.69	\$11.29	\$11.93
Northeast Utilities	NU	\$2.49	\$2.64	\$2.81	\$2.98	\$3.16	\$3.36	\$3.56	\$3.78	\$4.00	\$4.24	\$4.48	\$4.73	\$5.00	\$5.28	\$5.59	\$5.92	\$6.27
Otter Tail Corporation	OTTR	\$1.37	\$1.45	\$1.54	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.18	\$2.30	\$2.44	\$2.57	\$2.72	\$2.87	\$3.03	\$3.20	\$3.38
Pinnacle West Capital Corporation	PNW	\$3.65	\$3.80	\$3.95	\$4.11	\$4.27	\$4.44	\$4.62	\$4.82	\$5.04	\$5.29	\$5.57	\$5.83	\$6.21	\$6.56	\$6.93	\$7.32	\$7.73
PNM Resources, Inc.	PNM	\$1.41	\$1.53	\$1.65	\$1.79	\$1.94	\$2.10	\$2.28	\$2.46	\$2.64	\$2.81	\$2.99	\$3.15	\$3.33	\$3.52	\$3.72	\$3.93	\$4.15
Portland General Electric Company	POR	\$1.77	\$1.86	\$1.95	\$2.05	\$2.15	\$2.26	\$2.37	\$2.49	\$2.62	\$2.77	\$2.92	\$3.08	\$3.26	\$3.44	\$3.63	\$3.84	\$4.05
Southern Company	SO	\$2.70	\$2.79	\$2.89	\$2.99	\$3.10	\$3.21	\$3.32	\$3.45	\$3.60	\$3.77	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$5.22	\$5.51
Westar Energy, Inc.	WR	\$2.27	\$2.34	\$2.42	\$2.49	\$2.57	\$2.66	\$2.74	\$2.84	\$2.96	\$3.10	\$3.26	\$3.44	\$3.64	\$3.84	\$4.05	\$4.29	\$4.53

Projected Annual Dividend Payout Ratio

Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.54%	65.06%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	60.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	76.00%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.54%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.71%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	63.00%	63.50%	64.00%	64.50%	65.00%	65.31%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	50.00%	49.50%	49.00%	48.50%	48.00%	52.04%	55.03%	58.12%	61.15%	64.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	57.04%	59.06%	61.12%	63.15%	65.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows

Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.36	\$3.58	\$3.78	\$4.00	\$4.22	\$4.45	\$4.71	\$123.76
Duke Energy Corporation	DUK	\$2.95	\$3.02	\$3.08	\$3.14	\$3.20	\$3.33	\$3.48	\$3.79	\$4.02	\$4.28	\$4.55	\$4.81	\$5.08	\$5.37	\$5.67	\$5.99	\$174.33
Empire District Electric Company	EDE	\$1.01	\$1.02	\$1.04	\$1.05	\$1.08	\$1.13	\$1.18	\$1.24	\$1.31	\$1.39	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$1.95	\$58.60
Great Plains Energy Inc.	GXP	\$0.99	\$1.05	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.55	\$1.66	\$1.77	\$1.90	\$2.00	\$2.12	\$2.23	\$2.36	\$2.49	\$57.87
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.76	\$1.88	\$1.98	\$2.07	\$2.19	\$2.31	\$58.66
IDACORP, Inc.	IDA	\$1.68	\$1.68	\$2.07	\$2.17	\$2.27	\$2.37	\$2.49	\$2.63	\$2.80	\$3.01	\$3.25	\$3.43	\$3.63	\$3.83	\$4.05	\$4.27	\$131.65
NextEra Energy, Inc.	NEE	\$3.12	\$3.26	\$3.39	\$3.54	\$3.68	\$4.02	\$4.38	\$4.77	\$5.19	\$5.63	\$6.10	\$6.44	\$6.81	\$7.19	\$7.59	\$8.02	\$221.63
Northeast Utilities	NU	\$1.59	\$1.67	\$1.76	\$1.85	\$1.95	\$2.12	\$2.31	\$2.51	\$2.72	\$2.94	\$3.18	\$3.36	\$3.55	\$3.75	\$3.96	\$4.18	\$109.32
Otter Tail Corporation	OTTR	\$1.02	\$1.04	\$1.06	\$1.07	\$1.08	\$1.17	\$1.27	\$1.33	\$1.49	\$1.60	\$1.73	\$1.83	\$1.93	\$2.04	\$2.15	\$2.27	\$55.66
Pinnacle West Capital Corporation	PNW	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.02	\$3.17	\$3.33	\$3.52	\$3.72	\$3.95	\$4.18	\$4.41	\$4.66	\$4.92	\$5.20	\$129.57
PNM Resources, Inc.	PNM	\$0.76	\$0.82	\$0.88	\$0.96	\$1.03	\$1.19	\$1.35	\$1.53	\$1.72	\$1.92	\$2.12	\$2.24	\$2.37	\$2.50	\$2.64	\$2.79	\$55.81
Portland General Electric Company	POR	\$0.93	\$1.00	\$1.07	\$1.14	\$1.22	\$1.33	\$1.46	\$1.59	\$1.74	\$1.90	\$2.07	\$2.19	\$2.31	\$2.44	\$2.58	\$2.72	\$90.26
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.31	\$2.36	\$2.43	\$2.51	\$2.60	\$2.70	\$2.82	\$2.93	\$3.14	\$3.32	\$3.51	\$3.70	\$93.47
Westar Energy, Inc.	WR	\$1.36	\$1.33	\$1.41	\$1.44	\$1.46	\$1.56	\$1.68	\$1.81	\$1.95	\$2.12	\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$3.04	\$82.34

Projected Annual Data Investor Cash Flows

Company	Ticker	Initial	11/14/14	12/31/14	6/30/15	6/30/16	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
American Electric Power Company, Inc.	AEP	(\$58.06)	\$0.00	\$0.26	\$2.07	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.36	\$3.58</					

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

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	
Company	Ticker	Price	Zacks	First Call	Lite	Average	2014	2018	2024	Proof	IRR	P/E Ratio	Terminal	
American Electric Power Company, Inc.	AEP	\$53.81	4.90%	4.97%	4.50%	4.76%	6.00%	61.00%	63.00%	67.23%	(50.00)	9.91%	16.60	2.95
Duke Energy Corporation	DUK	\$75.35	4.70%	4.76%	5.00%	4.62%	6.63%	71.00%	64.00%	67.23%	(50.00)	9.50%	18.32	3.28
Empire District Electric Company	EDE	\$25.68	3.00%	3.00%	4.00%	3.33%	6.63%	68.00%	63.00%	67.23%	50.00	9.41%	18.75	3.33
Great Plains Energy Inc.	GXP	\$25.48	5.00%	5.00%	6.00%	5.33%	6.63%	58.00%	62.00%	67.23%	50.00	10.38%	14.94	2.65
Hawaiian Electric Industries, Inc.	HE	\$25.74	4.00%	4.00%	4.00%	4.00%	6.63%	76.00%	65.00%	67.23%	50.00	10.05%	16.03	2.66
IDACORP, Inc.	IDA	\$56.39	4.00%	4.00%	1.50%	3.17%	6.63%	51.00%	58.00%	67.23%	(50.00)	9.71%	17.41	3.09
NextEra Energy, Inc.	NEE	\$96.84	6.60%	6.47%	6.00%	6.36%	6.63%	61.00%	57.00%	67.23%	(50.00)	9.59%	17.91	3.18
Northeast Utilities	NU	\$46.03	6.70%	6.16%	8.00%	6.95%	6.63%	60.00%	58.00%	67.23%	(50.00)	10.11%	15.86	2.82
Oter Tail Corporation	OTTR	\$28.51	NA	6.00%	15.50%	10.75%	6.63%	70.00%	59.00%	67.23%	(50.00)	10.80%	13.74	2.44
Pinnacle West Capital Corporation	PNW	\$56.85	4.00%	3.93%	4.00%	3.63%	6.63%	63.00%	65.00%	67.23%	50.00	10.07%	15.97	2.84
PNM Resources, Inc.	PNM	\$26.69	6.50%	6.34%	11.00%	9.26%	6.63%	50.00%	49.00%	67.23%	(50.00)	10.56%	14.40	2.66
Portland General Electric Company	POR	\$33.78	7.80%	7.83%	5.00%	6.63%	6.63%	50.00%	54.00%	67.23%	(50.00)	9.85%	16.77	2.88
Southern Company	SO	\$44.77	3.60%	3.62%	3.50%	3.57%	6.63%	74.00%	72.00%	67.23%	50.00	9.79%	17.06	3.03
Westar Energy, Inc.	WR	\$36.27	3.80%	3.20%	6.00%	4.33%	6.63%	68.00%	65.00%	67.23%	(50.00)	9.92%	16.55	2.94

DCF Result			
Mean	9.98%	16.45	2.92
Max	10.60%	18.75	3.33
Min	9.41%	13.74	2.44

Projected Annual Earnings per Share	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.66	\$3.83	\$4.02	\$4.21	\$4.42	\$4.65	\$4.89	\$5.16	\$5.45	\$5.76	\$6.08	\$6.42	\$6.78
Duke Energy Corporation	DUK	\$3.68	\$4.17	\$4.37	\$4.58	\$4.80	\$5.04	\$5.28	\$5.54	\$5.83	\$6.14	\$6.47	\$6.84	\$7.22	\$7.63	\$8.06	\$8.51
Empire District Electric Company	EDE	\$1.43	\$1.53	\$1.58	\$1.63	\$1.69	\$1.74	\$1.80	\$1.87	\$1.95	\$2.04	\$2.15	\$2.27	\$2.40	\$2.53	\$2.67	\$2.82
Great Plains Energy Inc.	GXP	\$1.62	\$1.71	\$1.80	\$1.89	\$1.99	\$2.10	\$2.21	\$2.33	\$2.45	\$2.57	\$2.74	\$2.89	\$3.23	\$3.41	\$3.60	\$3.80
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25
IDACORP, Inc.	IDA	\$3.64	\$3.76	\$3.87	\$4.00	\$4.12	\$4.26	\$4.41	\$4.55	\$4.74	\$4.96	\$5.21	\$5.51	\$5.82	\$6.14	\$6.49	\$6.85
NextEra Energy, Inc.	NEE	\$4.83	\$5.14	\$5.46	\$5.81	\$6.18	\$6.57	\$6.99	\$7.43	\$7.88	\$8.34	\$8.82	\$9.32	\$9.84	\$10.40	\$10.98	\$11.60
Northeast Utilities	NU	\$2.49	\$2.66	\$2.65	\$3.05	\$3.26	\$3.48	\$3.73	\$3.99	\$4.23	\$4.49	\$4.76	\$5.02	\$5.31	\$5.61	\$5.92	\$6.25
Oter Tail Corporation	OTTR	\$1.37	\$1.52	\$1.68	\$1.86	\$2.06	\$2.28	\$2.53	\$2.77	\$3.02	\$3.26	\$3.48	\$3.68	\$3.86	\$4.03	\$4.21	\$4.45
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.63	\$4.83	\$5.05	\$5.30	\$5.58	\$5.90	\$6.23	\$6.58	\$6.94	\$7.34
PNM Resources, Inc.	PNM	\$1.41	\$1.54	\$1.68	\$1.84	\$2.01	\$2.20	\$2.40	\$2.61	\$2.81	\$3.01	\$3.20	\$3.38	\$3.57	\$3.77	\$3.98	\$4.21
Portland General Electric Company	POR	\$1.77	\$1.89	\$2.02	\$2.16	\$2.31	\$2.47	\$2.64	\$2.81	\$2.99	\$3.18	\$3.36	\$3.55	\$3.75	\$3.95	\$4.19	\$4.42
Southern Company	SO	\$2.70	\$2.80	\$2.90	\$3.00	\$3.11	\$3.22	\$3.33	\$3.47	\$3.62	\$3.79	\$3.99	\$4.21	\$4.45	\$4.70	\$4.97	\$5.25
Westar Energy, Inc.	WR	\$2.27	\$2.37	\$2.47	\$2.58	\$2.69	\$2.81	\$2.93	\$3.06	\$3.21	\$3.38	\$3.56	\$3.76	\$3.97	\$4.19	\$4.43	\$4.68

Projected Annual Dividend Payout Ratio	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.26%	67.50%	65.75%	64.00%	64.54%	65.08%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	76.00%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.64%	61.00%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	57.71%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%
Oter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	63.00%	63.50%	64.00%	64.50%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	50.00%	49.75%	49.50%	49.25%	49.00%	50.04%	50.08%	50.12%	50.16%	50.19%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	55.21%	56.41%	57.62%	58.82%	60.03%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	57.04%	59.08%	61.12%	63.15%	65.19%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]
American Electric Power Company, Inc.	AEP	\$2.03	\$2.15	\$2.27	\$2.40	\$2.52	\$2.68	\$2.85	\$3.03	\$3.22	\$3.43	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$4.82
Duke Energy Corporation	DUK	\$2.96	\$3.03	\$3.09	\$3.16	\$3.23	\$3.41	\$3.61	\$3.82	\$4.06	\$4.32	\$4.60	\$4.85	\$5.13	\$5.42	\$5.72	\$6.04
Empire District Electric Company	EDE	\$1.01	\$1.03	\$1.05	\$1.08	\$1.10	\$1.15	\$1.20	\$1.27	\$1.34	\$1.43	\$1.52	\$1.61	\$1.70	\$1.80	\$1.90	\$2.00
Great Plains Energy Inc.	GXP	\$0.99	\$1.06	\$1.14	\$1.22	\$1.30	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82	\$1.95	\$2.05	\$2.17	\$2.29	\$2.42	\$2.56
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.43	\$1.56	\$1.65	\$1.78	\$1.88	\$1.98	\$2.07	\$2.19	\$2.31
IDACORP, Inc.	IDA	\$1.62	\$2.04	\$2.18	\$2.32	\$2.47	\$2.61	\$2.78	\$2.97	\$3.18	\$3.42	\$3.70	\$3.91	\$4.13	\$4.36	\$4.61	\$4.87
NextEra Energy, Inc.	NEE	\$3.13	\$3.28	\$3.43	\$3.58	\$3.75	\$4.10	\$4.49	\$4.89	\$5.32	\$5.78	\$6.27	\$6.82	\$7.33	\$7.80	\$8.24	\$219.43
Northeast Utilities	NU	\$1.60	\$1.69	\$1.60	\$1.91	\$2.02	\$2.22	\$2.43	\$2.65	\$2.88	\$3.13	\$3.38	\$3.57	\$3.77	\$3.98	\$4.21	\$4.44
Oter Tail Corporation	OTTR	\$1.06	\$1.13	\$1.20	\$1.27	\$1.35	\$1.53	\$1.71	\$1.90	\$2.09	\$2.28	\$2.48	\$2.66	\$2.74	\$2.90	\$3.06	\$3.23
Pinnacle West Capital Corporation	PNW	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.02	\$3.17	\$3.34	\$3.52	\$3.73	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$5.21
PNM Resources, Inc.	PNM	\$0.77	\$0.84	\$0.91	\$0.99	\$1.08	\$1.25	\$1.44	\$1.63	\$1.84	\$2.05	\$2.27	\$2.40	\$2.54	\$2.68	\$2.83	\$2.99
Portland General Electric Company	POR	\$0.95	\$1.03	\$1.12	\$1.22	\$1.33	\$1.43	\$1.64	\$1.81	\$1.99	\$2.19	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.14
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.32	\$2.37	\$2.44	\$2.52	\$2.61	\$2.71	\$2.83	\$2.92	\$3.16	\$3.34	\$3.53	\$3.73
Westar Energy, Inc.	WR	\$1.37	\$1.41	\$1.46	\$1.50	\$1.54	\$1.67	\$1.81	\$1.96	\$2.13	\$2.32	\$2.53	\$2.67	\$2.82	\$2.98	\$3.14	\$3.32

Projected Annual Data Investor Cash Flows	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]
American Electric Power Company, Inc.	AEP	(\$53.81)	\$0.00	\$0.26	\$2.08	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.03	\$3.22	\$3.43	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56
Duke Energy Corporation	DUK	(\$75.35)	\$0.00	\$0.38	\$3.03	\$3.09	\$3.16	\$3.22	\$3.41	\$3.61	\$3.82	\$4.06	\$4.32	\$4.60	\$4.85	\$5.13	\$5.42	\$5.72
Empire District Electric Company	EDE	(\$25.68)	\$0.00	\$0.13	\$1.03	\$1.05	\$1.03	\$1.10	\$1.15	\$1.20	\$1.27	\$1.34	\$1.43	\$1.52	\$1.61	\$1.70	\$1.80	\$1.90
Great Plains Energy Inc.	GXP	(\$25.48)	\$0.00	\$0.13	\$1.02	\$1.14	\$1.22	\$1.30	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82	\$1.95	\$2.05	\$2.17	\$2.29	\$2.42
Hawaiian Electric Industries, Inc.	HE	(\$25.74)	\$0.00	\$0.16	\$1.31	\$1.28	\$1.28	\$1.34	\$1.41	\$1.43	\$							

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

Inputs	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Stock	Price	Zacks	First Call	Value	High	Long-Term	Payout Ratio	2014	2018	2024	Proof	RR	PE Ratio	EG Ratio
American Electric Power Company, Inc	AEP \$53.81	4.90%	4.87%	4.50%	4.97%	5.63%	61.00%	63.00%	67.23%	(\$0.00)	9.95%	16.33	2.91	
Duke Energy Corporation	DUK \$75.35	4.70%	4.76%	5.00%	5.00%	5.63%	71.00%	64.00%	67.23%	(\$0.00)	9.65%	18.09	3.21	
Empire District Electric Company	EDE \$25.63	3.00%	3.00%	4.00%	4.00%	5.63%	66.00%	63.00%	67.23%	\$0.00	9.60%	17.83	3.18	
Great Plains Energy Inc	GXP \$25.48	5.00%	5.00%	6.00%	6.00%	5.63%	58.00%	62.00%	67.23%	\$0.00	10.60%	14.28	2.54	
Hawaiian Electric Industries, Inc.	HE \$25.74	4.00%	4.00%	4.00%	4.00%	5.63%	78.00%	65.00%	67.23%	\$0.00	10.05%	16.08	2.66	
IDACORP, Inc.	IDA \$56.39	4.00%	4.00%	1.50%	4.00%	5.63%	51.00%	58.00%	67.23%	(\$0.00)	9.95%	16.43	2.92	
NextEra Energy, Inc.	NEE \$96.84	6.60%	6.47%	6.00%	6.60%	5.63%	61.00%	57.00%	67.23%	(\$0.00)	9.66%	17.61	3.13	
Northeast Utilities	NU \$46.03	6.70%	6.16%	8.00%	8.00%	5.63%	60.00%	58.00%	67.23%	(\$0.00)	10.43%	14.60	2.63	
Otter Tail Corporation	OTTR \$28.51	NA	6.00%	15.50%	15.50%	5.63%	70.00%	59.00%	67.23%	(\$0.00)	12.51%	10.32	1.83	
Pinnacle West Capital Corporation	PWV \$59.85	4.00%	3.95%	4.00%	4.00%	5.63%	63.00%	65.00%	67.23%	\$0.00	10.05%	15.95	2.83	
PNM Resources, Inc.	PNM \$26.63	6.50%	6.34%	11.00%	11.00%	5.63%	60.00%	49.00%	67.23%	(\$0.00)	11.11%	12.94	2.30	
Portland General Electric Company	POR \$33.78	7.60%	7.83%	5.00%	7.83%	5.63%	50.00%	54.00%	67.23%	(\$0.00)	10.14%	15.75	2.60	
Southern Company	SO \$44.77	3.60%	3.62%	3.50%	3.50%	5.63%	74.00%	72.00%	67.23%	\$0.00	9.60%	17.01	3.02	
Westar Energy, Inc.	WR \$39.27	3.80%	3.20%	6.00%	6.00%	5.63%	68.00%	55.00%	67.23%	(\$0.00)	10.43%	14.78	2.63	

DCF Result

Mean	10.28%	15.59	2.77
Max	12.51%	18.09	3.21
Mn	9.65%	10.32	1.83

Projected Annual Earnings per Share

Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
American Electric Power Company, Inc.	AEP	\$3.18	\$3.34	\$3.50	\$3.68	\$3.69	\$4.05	\$4.25	\$4.47	\$4.71	\$4.96	\$5.23	\$5.52	\$5.84	\$6.16	\$6.51	\$6.88	\$7.28	\$7.68
Duke Energy Corporation	DUK	\$3.69	\$4.18	\$4.39	\$4.61	\$4.84	\$5.08	\$5.33	\$5.61	\$5.90	\$6.22	\$6.56	\$6.93	\$7.32	\$7.73	\$8.17	\$8.63	\$9.11	\$9.63
Empire District Electric Company	EDE	\$1.49	\$1.54	\$1.60	\$1.68	\$1.73	\$1.80	\$1.87	\$1.95	\$2.04	\$2.15	\$2.28	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.14	\$3.34
Great Plains Energy Inc	GXP	\$1.62	\$1.72	\$1.82	\$1.92	\$2.05	\$2.17	\$2.30	\$2.43	\$2.58	\$2.73	\$2.89	\$3.06	\$3.24	\$3.43	\$3.63	\$3.85	\$4.09	\$4.35
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25	\$3.44	\$3.64
IDACORP, Inc.	IDA	\$3.64	\$3.79	\$3.94	\$4.09	\$4.28	\$4.43	\$4.61	\$4.80	\$5.03	\$5.28	\$5.56	\$5.87	\$6.20	\$6.55	\$6.92	\$7.31	\$7.72	\$8.16
NextEra Energy, Inc.	NEE	\$4.83	\$5.15	\$5.43	\$5.85	\$6.24	\$6.65	\$7.09	\$7.54	\$8.01	\$8.49	\$8.99	\$9.49	\$10.03	\$10.59	\$11.19	\$11.82	\$12.48	\$13.18
Northeast Utilities	NU	\$2.49	\$2.69	\$2.90	\$3.14	\$3.39	\$3.66	\$3.95	\$4.25	\$4.55	\$4.85	\$5.14	\$5.43	\$5.74	\$6.09	\$6.49	\$6.90	\$7.34	\$7.81
Otter Tail Corporation	OTTR	\$1.37	\$1.58	\$1.83	\$2.11	\$2.44	\$2.82	\$3.25	\$3.69	\$4.12	\$4.51	\$4.88	\$5.13	\$5.42	\$5.72	\$6.06	\$6.39	\$6.74	\$7.10
Pinnacle West Capital Corporation	PWV	\$3.66	\$3.61	\$3.66	\$4.12	\$4.28	\$4.45	\$4.63	\$4.83	\$5.05	\$5.31	\$5.59	\$5.90	\$6.24	\$6.59	\$6.96	\$7.35	\$7.76	\$8.19
PNM Resources, Inc.	PNM	\$1.41	\$1.57	\$1.74	\$1.93	\$2.14	\$2.38	\$2.64	\$2.90	\$3.16	\$3.40	\$3.63	\$3.83	\$4.03	\$4.28	\$4.52	\$4.77	\$5.04	\$5.31
Portland General Electric Company	POR	\$1.77	\$1.91	\$2.06	\$2.22	\$2.39	\$2.68	\$2.94	\$3.20	\$3.40	\$3.61	\$3.81	\$4.03	\$4.25	\$4.49	\$4.75	\$5.01	\$5.28	\$5.56
Southern Company	SO	\$2.70	\$2.60	\$2.60	\$3.00	\$3.11	\$3.23	\$3.34	\$3.49	\$3.63	\$3.81	\$4.00	\$4.23	\$4.47	\$4.72	\$4.98	\$5.27	\$5.56	\$5.86
Westar Energy, Inc.	WR	\$2.27	\$2.41	\$2.55	\$2.70	\$2.87	\$3.04	\$3.22	\$3.41	\$3.61	\$3.82	\$4.04	\$4.28	\$4.50	\$4.76	\$5.02	\$5.31	\$5.61	\$5.91

Projected Annual Dividend Payout Ratio

Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.60%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.93%	68.63%	69.33%	70.03%	70.73%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.54%	65.08%	65.62%	66.15%	66.69%	67.23%	67.76%	68.30%	68.83%	69.37%	69.90%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.93%	68.63%	69.33%	70.03%	70.73%
Great Plains Energy Inc	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	68.10%	68.97%	69.84%	70.71%	71.58%
Hawaiian Electric Industries, Inc.	HE	76.00%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.60%	67.97%	68.34%	68.71%	69.08%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.64%	61.08%	62.62%	64.15%	65.69%	67.23%	68.76%	70.24%	71.72%	73.20%	74.68%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.71%	60.41%	62.12%	63.82%	65.53%	67.23%	68.93%	70.63%	72.33%	74.03%	75.73%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	68.76%	70.24%	71.72%	73.20%	74.68%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	68.60%	70.03%	71.46%	72.89%	74.32%
Pinnacle West Capital Corporation	PWV	63.00%	63.50%	64.00%	64.50%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.60%	67.97%	68.34%	68.71%	69.08%
PNM Resources, Inc.	PNM	50.00%	49.75%	49.50%	49.25%	49.00%	50.04%	50.08%	50.12%	50.15%	50.19%	50.23%	50.27%	50.31%	50.35%	50.39%	50.43%
Portland General Electric Company	POR	60.00%	61.00%	62.00%	63.00%	64.00%	66.21%	68.41%	70.61%	72.81%	75.01%	77.21%	79.41%	81.61%	83.81%	86.01%	88.21%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.61%	68.81%	68.01%	67.21%	66.41%	65.61%	64.81%	64.01%	63.21%
Westar Energy, Inc.	WR	59.00%	57.25%	55.50%	53.75%	52.00%	57.04%	59.08%	61.12%	63.15%	65.19%	67.23%	69.27%	71.31%	73.35%	75.39%	

Projected Annual Cash Flows

Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value
American Electric Power Company, Inc.	AEP	\$2.04	\$2.15	\$2.28	\$2.41	\$2.55	\$2.71	\$2.83	\$3.05	\$3.26	\$3.43	\$3.71	\$3.92	\$4.14	\$4.38	\$4.62	\$4.83	\$119.07
Duke Energy Corporation	DUK	\$2.97	\$3.04	\$3.11	\$3.18	\$3.25	\$3.34	\$3.65	\$3.87	\$4.11	\$4.33	\$4.66	\$4.92	\$5.20	\$5.49	\$5.80	\$6.13	\$184.85
Empire District Electric Company	EDE	\$1.02	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.70	\$1.79	\$1.89	\$2.00	\$2.11	\$56.16
Great Plains Energy Inc	GXP	\$1.00	\$1.07	\$1.16	\$1.25	\$1.34	\$1.44	\$1.55	\$1.66	\$1.78	\$1.91	\$2.05	\$2.18	\$2.32	\$2.46	\$2.61	\$2.75	\$57.13
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.76	\$1.88	\$1.99	\$2.11	\$2.23	\$2.35	\$55.23
IDACORP, Inc.	IDA	\$1.93	\$2.08	\$2.23	\$2.40	\$2.57	\$2.74	\$2.93	\$3.15	\$3.39	\$3.65	\$3.95	\$4.17	\$4.40	\$4.65	\$4.91	\$5.19	\$123.86
NextEra Energy, Inc.	NEE	\$3.14	\$3.29	\$3.45	\$3.62	\$3.79	\$4.16	\$4.56	\$4.93	\$5.42	\$5.89	\$6.38	\$6.74	\$7.12	\$7.52	\$7.94	\$8.32	\$219.83
Northeast Utilities	NU	\$1.61	\$1.73	\$1.85	\$1.98	\$2.12	\$2.35	\$2.59	\$2.85	\$3.11	\$3.33	\$3.65	\$3.98	\$4.08	\$4.30	\$4.55	\$4.80	\$105.71
Otter Tail Corporation	OTTR	\$1.11	\$1.23	\$1.36	\$1.51	\$1.66	\$1.96	\$2.28	\$2.60	\$2.91	\$3.20	\$3.45	\$3.64	\$3.85	\$4.06	\$4.29	\$4.53	\$99.58
Pinnacle West Capital Corporation	PWV	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.03	\$3.18	\$3.34	\$3.53	\$3.74	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$5.22	\$123.83
PNM Resources, Inc.	PNM	\$0.78	\$0.86	\$0.95	\$1.05	\$1.16	\$1.37	\$1.60	\$1.83	\$2.08	\$2.33	\$2.58	\$2.72	\$2.88	\$3.04	\$3.21	\$3.39	\$65.23
Portland General Electric Company	POR	\$0.95	\$1.05	\$1.15	\$1.27	\$1.39	\$1.56	\$1.75	\$1.94	\$2.14	\$2.35	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37	\$78.65
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.26	\$2.32	\$2.38	\$2.45	\$2.53	\$2.62	\$2.72	\$2.84	\$2.91	\$3.17	\$3.35	\$3.54	\$3.74	\$94.58
Westar Energy, Inc.	WR	\$1.40	\$1.48	\$1.53	\$1.60	\$1.67	\$1.64	\$2.02	\$2.21	\$2.41	\$2.63	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57	\$3.77	\$82.89

Projected Annual Data Investor Cash Flows

Company	Ticker	Q1/14	11/14/14	12/31/14	6/30/15	6/30/16	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
American Electric Power Company, Inc.	AEP	(\$53.81)	\$0.00	\$0.26	\$2.09	\$2.28	\$2.41	\$2.55	\$2.71	\$2.83	\$3.05	\$3.26	\$3.43	\$3.7					



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

Includes		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
Stock		EPS Growth Rate Estimates				Long-Term	Payout Ratio			Relative	Solution	Terminal	Terminal	
Company	Ticker	Price	Zacks	First Call	Value	Low	Growth	2014	2018	2024	Proof	RR	P/E Ratio	PEG Ratio
American Electric Power Company, Inc	AEP	\$53.81	4.50%	4.97%	4.50%	4.50%	5.63%	61.00%	63.00%	67.23%	(\$0.00)	9.82%	16.63	3.01
Duke Energy Corporation	DUK	\$75.35	4.70%	4.76%	5.00%	4.70%	5.63%	71.00%	64.00%	67.23%	(\$0.00)	9.47%	18.43	3.28
Empire District Electric Company	EDE	\$25.63	3.00%	3.00%	4.00%	3.00%	5.63%	66.00%	63.00%	67.23%	\$0.00	9.32%	19.21	3.41
Great Plains Energy Inc.	GXP	\$25.40	5.00%	5.00%	6.00%	5.00%	5.63%	58.00%	62.00%	67.23%	\$0.00	10.26%	15.23	2.72
Hawaiian Electric Industries, Inc.	HE	\$25.74	4.00%	4.00%	4.00%	4.00%	5.63%	76.00%	65.00%	67.23%	\$0.00	10.05%	16.68	2.66
IDACORP, Inc.	IDA	\$56.39	4.00%	4.00%	1.50%	1.50%	5.63%	51.00%	58.00%	67.23%	(\$0.00)	9.25%	19.61	3.43
NextEra Energy, Inc.	NEE	\$96.84	6.60%	6.47%	6.00%	6.00%	5.63%	61.00%	57.00%	67.23%	(\$0.00)	9.50%	18.35	3.26
Northeast Utilities	NU	\$49.03	6.70%	6.16%	8.00%	6.16%	5.63%	60.00%	58.00%	67.23%	(\$0.00)	9.87%	16.73	2.97
Oter Tail Corporation	OTTR	\$28.51	NA	6.00%	15.80%	6.00%	5.63%	70.00%	59.00%	67.23%	(\$0.00)	9.41%	18.79	3.34
Pinnacle West Capital Corporation	PNW	\$56.85	4.00%	3.95%	4.00%	3.95%	5.63%	63.00%	65.00%	67.23%	\$0.00	10.06%	16.01	2.84
PNM Resources, Inc.	PNM	\$26.63	8.50%	8.34%	11.00%	8.34%	5.63%	50.00%	49.00%	67.23%	(\$0.00)	10.27%	15.29	2.72
Portland General Electric Company	POR	\$33.78	7.80%	7.83%	5.00%	5.00%	5.63%	50.00%	54.00%	67.23%	(\$0.00)	9.36%	19.04	3.38
Southern Company	SO	\$44.77	3.60%	3.62%	3.50%	3.50%	5.63%	74.00%	72.00%	67.23%	\$0.00	9.77%	17.15	2.65
Wester Energy, Inc.	WR	\$39.27	3.80%	3.20%	6.00%	3.20%	5.63%	58.00%	55.00%	67.23%	(\$0.00)	9.59%	17.60	3.18

DCF Result

Mean	9.72%	17.49	3.11
Max	10.26%	19.61	3.43
Min	9.25%	15.23	2.72

Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.32	\$3.47	\$3.63	\$3.79	\$3.96	\$4.14	\$4.34	\$4.55	\$4.79	\$5.05	\$5.33	\$5.63	\$5.95	\$6.28	\$6.63	\$7.01
Duke Energy Corporation	DUK	\$3.59	\$4.17	\$4.30	\$4.57	\$4.78	\$5.01	\$5.24	\$5.50	\$5.78	\$6.08	\$6.41	\$6.77	\$7.15	\$7.56	\$7.98	\$8.43	\$8.91
Empire District Electric Company	EDE	\$1.43	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.83	\$1.90	\$1.99	\$2.09	\$2.21	\$2.33	\$2.47	\$2.60	\$2.75	\$2.91
Great Plains Energy Inc.	GXP	\$1.62	\$1.70	\$1.79	\$1.88	\$1.97	\$2.07	\$2.17	\$2.28	\$2.40	\$2.53	\$2.67	\$2.82	\$2.98	\$3.15	\$3.32	\$3.51	\$3.71
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25	\$3.44
IDACORP, Inc.	IDA	\$3.64	\$3.69	\$3.75	\$3.81	\$3.88	\$3.92	\$3.98	\$4.07	\$4.20	\$4.37	\$4.68	\$4.84	\$5.11	\$5.39	\$5.70	\$6.02	\$6.36
NextEra Energy, Inc.	NEE	\$4.83	\$5.12	\$5.43	\$5.75	\$6.10	\$6.46	\$6.85	\$7.26	\$7.68	\$8.13	\$8.59	\$9.07	\$9.58	\$10.12	\$10.69	\$11.29	\$11.93
Northeast Utilities	NU	\$2.49	\$2.64	\$2.81	\$2.98	\$3.16	\$3.36	\$3.56	\$3.78	\$4.00	\$4.24	\$4.49	\$4.73	\$5.00	\$5.28	\$5.58	\$5.89	\$6.22
Oter Tail Corporation	OTTR	\$1.37	\$1.45	\$1.54	\$1.63	\$1.73	\$1.83	\$1.84	\$2.06	\$2.18	\$2.30	\$2.44	\$2.57	\$2.72	\$2.87	\$3.03	\$3.20	\$3.38
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.60	\$3.55	\$4.11	\$4.27	\$4.44	\$4.62	\$4.82	\$5.04	\$5.29	\$5.57	\$5.88	\$6.21	\$6.56	\$6.93	\$7.32	\$7.73
PNM Resources, Inc.	PNM	\$1.41	\$1.53	\$1.65	\$1.79	\$1.94	\$2.10	\$2.28	\$2.48	\$2.64	\$2.81	\$2.99	\$3.15	\$3.33	\$3.52	\$3.72	\$3.93	\$4.15
Portland General Electric Company	POR	\$1.77	\$1.66	\$1.95	\$2.05	\$2.15	\$2.26	\$2.37	\$2.49	\$2.62	\$2.77	\$2.92	\$3.08	\$3.26	\$3.44	\$3.63	\$3.84	\$4.06
Southern Company	SO	\$2.70	\$2.79	\$2.89	\$2.99	\$3.10	\$3.21	\$3.32	\$3.45	\$3.60	\$3.77	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$5.22	\$5.51
Wester Energy, Inc.	WR	\$2.27	\$2.34	\$2.42	\$2.49	\$2.57	\$2.66	\$2.74	\$2.84	\$2.96	\$3.10	\$3.26	\$3.44	\$3.64	\$3.84	\$4.06	\$4.29	\$4.53

Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.54%	65.08%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	76.00%	73.25%	70.50%	67.75%	65.00%	63.37%	65.74%	68.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.54%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.71%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Oter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	63.00%	63.50%	64.00%	64.50%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	50.00%	49.75%	49.50%	49.25%	49.00%	50.04%	50.05%	50.12%	51.15%	54.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Wester Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	57.04%	59.05%	61.12%	63.15%	65.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.25	\$2.37	\$2.60	\$2.64	\$2.79	\$2.96	\$3.15	\$3.36	\$3.58	\$3.78	\$4.00	\$4.22	\$4.46	\$4.71	\$118.67
Duke Energy Corporation	DUK	\$2.96	\$3.02	\$3.08	\$3.14	\$3.20	\$3.38	\$3.58	\$3.79	\$4.02	\$4.28	\$4.55	\$4.81	\$5.08	\$5.37	\$5.67	\$5.99	\$164.55
Empire District Electric Company	EDE	\$1.01	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.24	\$1.31	\$1.39	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$1.95	\$55.81
Great Plains Energy Inc.	GXP	\$0.99	\$1.05	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.55	\$1.66	\$1.77	\$1.90	\$2.02	\$2.12	\$2.23	\$2.36	\$2.49	\$56.67
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.49	\$1.56	\$1.65	\$1.76	\$1.88	\$1.96	\$2.07	\$2.19	\$2.31	\$55.23
IDACORP, Inc.	IDA	\$1.68	\$1.68	\$2.07	\$2.17	\$2.27	\$2.37	\$2.49	\$2.63	\$2.60	\$3.01	\$3.25	\$3.43	\$3.63	\$3.83	\$4.05	\$4.27	\$124.65
NextEra Energy, Inc.	NEE	\$3.12	\$3.26	\$3.39	\$3.54	\$3.68	\$4.02	\$4.38	\$4.77	\$5.19	\$5.63	\$6.10	\$6.64	\$6.81	\$7.19	\$7.59	\$8.02	\$218.65
Northeast Utilities	NU	\$1.59	\$1.67	\$1.76	\$1.85	\$1.95	\$2.12	\$2.31	\$2.51	\$2.72	\$2.94	\$3.18	\$3.36	\$3.55	\$3.75	\$3.96	\$4.18	\$104.11
Oter Tail Corporation	OTTR	\$1.02	\$1.04	\$1.05	\$1.07	\$1.08	\$1.17	\$1.27	\$1.38	\$1.49	\$1.60	\$1.73	\$1.83	\$1.93	\$2.04	\$2.15	\$2.27	\$63.60
Pinnacle West Capital Corporation	PNW	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.02	\$3.17	\$3.33	\$3.52	\$3.72	\$3.95	\$4.18	\$4.41	\$4.66	\$4.92	\$5.20	\$123.79
PNM Resources, Inc.	PNM	\$0.76	\$0.82	\$0.89	\$0.96	\$1.03	\$1.19	\$1.35	\$1.53	\$1.72	\$1.92	\$2.12	\$2.24	\$2.37	\$2.50	\$2.64	\$2.79	\$63.45
Portland General Electric Company	POR	\$0.99	\$1.00	\$1.07	\$1.14	\$1.22	\$1.33	\$1.46	\$1.59	\$1.74	\$1.90	\$2.07	\$2.19	\$2.31	\$2.44	\$2.58	\$2.72	\$77.15
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.31	\$2.36	\$2.43	\$2.51	\$2.60	\$2.70	\$2.82	\$2.93	\$3.14	\$3.32	\$3.51	\$3.70	\$94.51
Wester Energy, Inc.	WR	\$1.36	\$1.38	\$1.41	\$1.44	\$1.46	\$1.66	\$1.68	\$1.81	\$1.96	\$2.12	\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$3.04	\$81.0

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

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	
Stock	EPS Growth Rate Estimates					Long-Term	Payout Ratio			Relative Solution		Terminal	Terminal	
Company	Ticker	Price	Zecks	First Call	Line	Average	Growth	2014	2018	2024	Proof	IRR	P/E Ratio	PEG Ratio
American Electric Power Company, Inc.	AEP	\$52.99	4.90%	4.97%	4.50%	4.75%	6.63%	61.00%	63.00%	67.23%	(\$0.00)	9.97%	18.34	2.50
Duke Energy Corporation	DUK	\$73.44	4.70%	4.76%	5.00%	4.82%	5.63%	71.00%	84.00%	67.23%	(\$0.00)	9.61%	17.55	3.17
Empire District Electric Company	EDE	\$24.95	3.00%	3.00%	4.00%	3.33%	5.63%	66.00%	63.00%	67.23%	\$0.00	9.53%	18.21	3.24
Great Plains Energy Inc.	GXP	\$26.84	5.00%	5.00%	6.00%	5.33%	5.63%	58.00%	62.00%	67.23%	\$0.00	10.31%	15.16	2.63
Hawaiian Electric Industries, Inc.	HE	\$26.13	4.00%	4.00%	4.00%	4.00%	5.63%	76.00%	65.00%	67.23%	\$0.00	10.16%	15.68	2.79
IDACORP, Inc.	IDA	\$55.66	4.00%	4.00%	1.50%	3.17%	5.63%	51.00%	58.00%	67.23%	(\$0.00)	9.74%	17.25	3.07
NextEra Energy, Inc.	NEE	\$96.70	6.60%	6.47%	6.00%	6.36%	5.63%	61.00%	57.00%	67.23%	(\$0.00)	9.60%	17.68	3.18
Northeast Utilities	NU	\$45.79	6.70%	6.18%	8.00%	6.95%	5.63%	60.00%	58.00%	67.23%	(\$0.00)	10.13%	15.78	2.60
Other Tail Corporation	OTTR	\$29.00	NA	8.00%	15.50%	10.75%	5.63%	70.00%	59.00%	67.23%	(\$0.00)	10.71%	13.97	2.43
Pinnacle West Capital Corporation	PINW	\$56.05	4.00%	3.95%	4.00%	3.96%	5.63%	63.00%	65.00%	67.23%	\$0.00	10.14%	15.74	2.80
PNM Resources, Inc.	PNM	\$27.21	8.00%	8.24%	11.00%	9.26%	5.63%	50.00%	49.00%	67.23%	(\$0.00)	10.47%	14.67	2.61
Portland General Electric Company	POR	\$33.29	7.00%	7.83%	5.00%	6.68%	5.63%	50.00%	54.00%	67.23%	(\$0.00)	9.62%	10.53	2.94
Southern Company	SO	\$44.36	3.60%	3.62%	3.50%	3.57%	6.65%	74.00%	72.00%	67.23%	\$0.00	9.83%	16.90	3.00
Westar Energy, Inc.	WR	\$35.95	3.80%	3.20%	6.00%	4.33%	6.63%	58.00%	55.00%	67.23%	(\$0.00)	9.95%	16.40	2.91

DCF Result

Mean	10.01%	16.31	2.50
Max	10.71%	18.21	3.24
Mn	9.53%	13.97	2.43

Projected Annual Earnings per Share	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.66	\$3.83	\$4.02	\$4.21	\$4.42	\$4.65	\$4.89	\$5.16	\$5.45	\$5.76	\$6.08	\$6.42	\$6.78	\$7.16
Duke Energy Corporation	DUK	\$5.69	\$4.17	\$4.37	\$4.58	\$4.80	\$5.04	\$5.28	\$5.54	\$5.83	\$6.14	\$6.47	\$6.84	\$7.22	\$7.63	\$8.06	\$8.51	\$8.99
Empire District Electric Company	EDE	\$1.43	\$1.53	\$1.68	\$1.83	\$1.99	\$2.14	\$2.30	\$2.46	\$2.63	\$2.80	\$2.97	\$3.14	\$3.32	\$3.51	\$3.70	\$3.90	\$4.10
Great Plains Energy Inc.	GXP	\$1.62	\$1.71	\$1.80	\$1.89	\$1.99	\$2.10	\$2.21	\$2.33	\$2.45	\$2.59	\$2.74	\$2.89	\$3.05	\$3.21	\$3.38	\$3.55	\$3.73
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25	\$3.44
IDACORP, Inc.	IDA	\$3.64	\$3.78	\$3.87	\$4.00	\$4.12	\$4.25	\$4.38	\$4.55	\$4.74	\$4.96	\$5.21	\$5.51	\$5.82	\$6.14	\$6.49	\$6.85	\$7.21
NextEra Energy, Inc.	NEE	\$4.83	\$5.14	\$5.46	\$5.81	\$6.18	\$6.57	\$6.99	\$7.43	\$7.88	\$8.34	\$8.82	\$9.32	\$9.84	\$10.40	\$10.93	\$11.60	\$12.25
Northeast Utilities	NU	\$2.49	\$2.66	\$2.85	\$3.05	\$3.26	\$3.48	\$3.73	\$3.98	\$4.23	\$4.49	\$4.76	\$5.02	\$5.31	\$5.61	\$5.92	\$6.26	\$6.61
Other Tail Corporation	OTTR	\$1.37	\$1.52	\$1.68	\$1.86	\$2.06	\$2.28	\$2.53	\$2.77	\$3.02	\$3.25	\$3.46	\$3.66	\$3.86	\$4.08	\$4.31	\$4.55	\$4.81
Pinnacle West Capital Corporation	PINW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.63	\$4.83	\$5.05	\$5.30	\$5.58	\$5.90	\$6.23	\$6.58	\$6.95	\$7.34	\$7.76
PNM Resources, Inc.	PNM	\$1.41	\$1.54	\$1.68	\$1.84	\$2.01	\$2.20	\$2.40	\$2.61	\$2.81	\$3.01	\$3.20	\$3.38	\$3.57	\$3.77	\$3.98	\$4.21	\$4.45
Portland General Electric Company	POR	\$1.77	\$1.89	\$2.02	\$2.16	\$2.31	\$2.47	\$2.64	\$2.81	\$2.99	\$3.18	\$3.36	\$3.55	\$3.75	\$3.96	\$4.19	\$4.42	\$4.67
Southern Company	SO	\$2.70	\$2.60	\$2.60	\$3.00	\$3.11	\$3.22	\$3.33	\$3.47	\$3.62	\$3.79	\$3.99	\$4.21	\$4.45	\$4.70	\$4.97	\$5.26	\$5.64
Westar Energy, Inc.	WR	\$2.27	\$2.37	\$2.47	\$2.58	\$2.69	\$2.81	\$2.93	\$3.06	\$3.21	\$3.38	\$3.56	\$3.76	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94

Projected Annual Dividend Payout Ratio	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.54%	65.08%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	78.00%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.64%	61.03%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.71%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Other Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PINW	63.00%	63.50%	64.00%	64.50%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	50.00%	49.75%	49.50%	49.25%	49.00%	50.04%	50.04%	50.04%	50.04%	50.04%	50.04%	50.04%	50.04%	50.04%	50.04%	50.04%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	57.04%	59.06%	61.12%	63.15%	65.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$2.03	\$2.15	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.03	\$3.22	\$3.43	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$4.82
Duke Energy Corporation	DUK	\$2.96	\$3.03	\$3.09	\$3.16	\$3.23	\$3.31	\$3.41	\$3.51	\$3.62	\$3.72	\$3.82	\$3.92	\$4.02	\$4.12	\$4.22	\$4.32
Empire District Electric Company	EDE	\$1.01	\$1.03	\$1.05	\$1.08	\$1.10	\$1.15	\$1.20	\$1.27	\$1.34	\$1.43	\$1.52	\$1.61	\$1.70	\$1.80	\$1.90	\$2.00
Great Plains Energy Inc.	GXP	\$0.99	\$1.06	\$1.14	\$1.22	\$1.30	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82	\$1.95	\$2.05	\$2.17	\$2.29	\$2.42	\$2.55
Hawaiian Electric Industries, Inc.	HE	\$1.23	\$1.28	\$1.33	\$1.38	\$1.43	\$1.48	\$1.53	\$1.58	\$1.63	\$1.68	\$1.73	\$1.78	\$1.83	\$1.88	\$1.93	\$1.98
IDACORP, Inc.	IDA	\$1.92	\$2.04	\$2.18	\$2.32	\$2.47	\$2.61	\$2.78	\$2.97	\$3.18	\$3.42	\$3.70	\$3.91	\$4.13	\$4.36	\$4.61	\$4.87
NextEra Energy, Inc.	NEE	\$3.13	\$3.28	\$3.43	\$3.58	\$3.75	\$4.10	\$4.49	\$4.89	\$5.32	\$5.78	\$6.27	\$6.82	\$7.38	\$7.97	\$8.58	\$9.24
Northeast Utilities	NU	\$1.60	\$1.69	\$1.80	\$1.91	\$2.02	\$2.22	\$2.43	\$2.65	\$2.88	\$3.13	\$3.38	\$3.67	\$3.97	\$4.29	\$4.64	\$5.02
Other Tail Corporation	OTTR	\$1.06	\$1.13	\$1.20	\$1.27	\$1.35	\$1.53	\$1.71	\$1.90	\$2.09	\$2.28	\$2.46	\$2.60	\$2.74	\$2.90	\$3.09	\$3.28
Pinnacle West Capital Corporation	PINW	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.02	\$3.17	\$3.34	\$3.52	\$3.73	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$5.21
PNM Resources, Inc.	PNM	\$0.77	\$0.84	\$0.91	\$0.99	\$1.08	\$1.26	\$1.44	\$1.63	\$1.84	\$2.05	\$2.27	\$2.40	\$2.54	\$2.68	\$2.83	\$2.99
Portland General Electric Company	POR	\$0.95	\$1.03	\$1.12	\$1.22	\$1.33	\$1.43	\$1.64	\$1.81	\$1.99	\$2.19	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.14
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.32	\$2.37	\$2.44	\$2.52	\$2.61	\$2.71	\$2.83	\$2.99	\$3.16	\$3.34	\$3.53	\$3.73
Westar Energy, Inc.	WR	\$1.37	\$1.41	\$1.46	\$1.50	\$1.54	\$1.67	\$1.81	\$1.96	\$2.13	\$2.32	\$2.53	\$2.67	\$2.82	\$2.98	\$3.14	\$3.32

Projected Annual Data Investor Cash Flows	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]
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Multi-Stage Growth Discounted Cash Flow Model  
 180 Day Average Stock Price  
 High EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	
Stock		EPS Growth Rate Estimates			Long-Term	Payoff Ratio			Iterative Solution					
Company	Ticker	Price	Zacks	First Call	Line	High	Growth	2014	2018	2024	Proof	IRR	P/E Ratio	EG Ratio
American Electric Power Company, Inc.	AEP	\$52.99	4.00%	4.97%	4.50%	4.97%	5.63%	61.00%	63.00%	67.23%	(\$0.00)	10.03%	16.14	2.87
Duke Energy Corporation	DUK	\$73.44	4.70%	4.76%	5.00%	5.00%	5.63%	71.00%	64.00%	67.23%	(\$0.00)	8.66%	17.62	3.13
Empire District Electric Company	EDE	\$24.95	3.00%	3.00%	4.00%	4.00%	5.63%	66.00%	63.00%	67.23%	\$0.00	9.72%	17.37	3.09
Great Plains Energy Inc.	GXP	\$25.84	5.00%	5.00%	6.00%	6.00%	5.63%	58.00%	62.00%	67.23%	\$0.00	10.63%	14.49	2.57
Hawaiian Electric Industries, Inc.	HE	\$25.13	4.00%	4.00%	4.00%	4.00%	5.63%	76.00%	65.00%	67.23%	\$0.00	10.16%	15.68	2.79
IDACORP, Inc.	IDA	\$55.68	4.00%	4.00%	1.50%	4.00%	5.63%	51.00%	58.00%	67.23%	(\$0.00)	9.99%	16.28	2.69
NextEra Energy, Inc.	NEE	\$96.70	6.00%	6.47%	6.00%	6.00%	5.63%	61.00%	57.00%	67.23%	(\$0.00)	9.66%	17.59	3.13
Northeast Utilities	NU	\$45.78	6.70%	6.18%	8.00%	8.00%	5.63%	60.00%	58.00%	67.23%	(\$0.00)	10.45%	14.72	2.62
Otter Tail Corporation	OTTR	\$29.00	NA	6.00%	15.50%	15.50%	5.63%	70.00%	59.00%	67.23%	(\$0.00)	12.40%	10.43	1.68
Pinnacle West Capital Corporation	PNW	\$59.05	4.00%	3.95%	4.00%	4.00%	5.63%	63.00%	65.00%	67.23%	\$0.00	10.14%	15.72	2.78
PNM Resources, Inc.	PNM	\$27.21	8.50%	8.34%	11.00%	11.00%	5.63%	50.00%	49.00%	67.23%	(\$0.00)	11.02%	13.16	2.84
Portland General Electric Company	POR	\$33.29	7.60%	7.83%	5.00%	7.83%	5.63%	50.00%	54.00%	67.23%	(\$0.00)	10.20%	15.53	2.76
Southern Company	SO	\$44.36	3.60%	3.62%	3.60%	3.62%	5.63%	74.00%	72.00%	67.23%	\$0.00	9.84%	18.84	2.59
Westar Energy, Inc.	WR	\$35.95	3.60%	3.20%	6.00%	6.00%	5.63%	59.00%	55.00%	67.23%	(\$0.00)	10.47%	14.68	2.60

DCF Result

Mean	10.31%	15.45	2.75
Max	12.40%	17.62	3.13
Mn	9.66%	10.43	1.68

Projected Annual Earnings per Share

Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.34	\$3.50	\$3.68	\$3.86	\$4.05	\$4.25	\$4.47	\$4.71	\$4.96	\$5.23	\$5.52	\$5.84	\$6.16	\$6.51	\$6.83	\$7.28
Duke Energy Corporation	DUK	\$3.63	\$4.18	\$4.29	\$4.61	\$4.84	\$5.08	\$5.33	\$5.61	\$5.90	\$6.22	\$6.56	\$6.93	\$7.32	\$7.73	\$8.17	\$8.63	\$9.11
Empire District Electric Company	EDE	\$1.43	\$1.54	\$1.60	\$1.68	\$1.73	\$1.80	\$1.87	\$1.95	\$2.04	\$2.15	\$2.28	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.14
Great Plains Energy Inc.	GXP	\$1.62	\$1.72	\$1.82	\$1.93	\$2.05	\$2.17	\$2.30	\$2.43	\$2.59	\$2.73	\$2.89	\$3.01	\$3.40	\$3.59	\$3.79	\$4.00	\$4.23
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.63	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25	\$3.44
IDACORP, Inc.	IDA	\$3.64	\$3.79	\$3.94	\$4.09	\$4.28	\$4.43	\$4.61	\$4.80	\$5.03	\$5.28	\$5.56	\$5.87	\$6.20	\$6.55	\$6.92	\$7.31	\$7.72
NextEra Energy, Inc.	NEE	\$4.83	\$5.15	\$5.49	\$5.85	\$6.21	\$6.65	\$7.09	\$7.54	\$8.01	\$8.49	\$8.99	\$9.49	\$10.03	\$10.69	\$11.49	\$11.82	\$12.49
Northeast Utilities	NU	\$2.49	\$2.69	\$2.90	\$3.14	\$3.39	\$3.65	\$3.95	\$4.25	\$4.55	\$4.85	\$5.14	\$5.43	\$5.74	\$6.05	\$6.40	\$6.78	\$7.14
Otter Tail Corporation	OTTR	\$1.37	\$1.68	\$1.83	\$2.11	\$2.44	\$2.82	\$3.25	\$3.69	\$4.12	\$4.51	\$4.66	\$5.13	\$5.42	\$5.72	\$6.05	\$6.39	\$6.74
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.63	\$4.83	\$5.06	\$5.31	\$5.69	\$6.24	\$6.59	\$6.96	\$7.35	\$7.76	\$8.17
PNM Resources, Inc.	PNM	\$1.41	\$1.57	\$1.74	\$1.93	\$2.14	\$2.38	\$2.64	\$2.90	\$3.18	\$3.40	\$3.63	\$3.83	\$4.05	\$4.28	\$4.52	\$4.77	\$5.04
Portland General Electric Company	POR	\$1.77	\$1.91	\$2.06	\$2.22	\$2.39	\$2.58	\$2.78	\$2.99	\$3.20	\$3.40	\$3.61	\$3.81	\$4.03	\$4.25	\$4.49	\$4.75	\$5.01
Southern Company	SO	\$2.70	\$2.80	\$2.90	\$3.00	\$3.11	\$3.23	\$3.34	\$3.49	\$3.63	\$3.81	\$4.00	\$4.23	\$4.47	\$4.72	\$4.98	\$5.27	\$5.56
Westar Energy, Inc.	WR	\$2.27	\$2.41	\$2.55	\$2.70	\$2.87	\$3.04	\$3.22	\$3.41	\$3.61	\$3.82	\$4.04	\$4.28	\$4.50	\$4.75	\$5.02	\$5.31	\$5.61

Projected Annual Dividend Payout Ratio

Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.54%	65.08%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	78.00%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.64%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.71%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.06%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	63.00%	63.50%	64.00%	64.50%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	50.00%	49.75%	49.50%	49.25%	49.00%	50.04%	50.05%	50.12%	50.15%	50.18%	50.23%	50.23%	50.23%	50.23%	50.23%	50.23%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	58.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	57.04%	59.06%	61.12%	63.15%	65.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows

Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value	
American Electric Power Company, Inc.	AEP	\$2.04	\$2.15	\$2.28	\$2.41	\$2.55	\$2.71	\$2.83	\$3.06	\$3.26	\$3.43	\$3.71	\$3.92	\$4.14	\$4.33	\$4.62	\$4.83	\$117.23	
Duke Energy Corporation	DUK	\$2.97	\$3.04	\$3.11	\$3.18	\$3.25	\$3.32	\$3.44	\$3.65	\$3.87	\$4.11	\$4.33	\$4.66	\$4.92	\$5.20	\$5.49	\$5.80	\$160.69	
Empire District Electric Company	EDE	\$1.02	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.70	\$1.79	\$1.89	\$2.00	\$2.11	\$54.62	
Great Plains Energy Inc.	GXP	\$1.00	\$1.07	\$1.16	\$1.25	\$1.34	\$1.44	\$1.55	\$1.66	\$1.78	\$1.91	\$2.05	\$2.16	\$2.28	\$2.41	\$2.55	\$2.69	\$57.97	
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.76	\$1.85	\$1.95	\$2.07	\$2.19	\$2.31	\$59.63	
IDACORP, Inc.	IDA	\$1.63	\$2.08	\$2.23	\$2.40	\$2.57	\$2.74	\$2.93	\$3.15	\$3.39	\$3.65	\$3.95	\$4.17	\$4.40	\$4.65	\$4.91	\$5.19	\$125.66	
NextEra Energy, Inc.	NEE	\$3.14	\$3.29	\$3.45	\$3.62	\$3.79	\$4.16	\$4.66	\$4.93	\$5.42	\$5.69	\$6.33	\$6.74	\$7.12	\$7.52	\$7.94	\$8.33	\$219.51	
Northeast Utilities	NU	\$1.61	\$1.73	\$1.85	\$1.98	\$2.12	\$2.35	\$2.59	\$2.85	\$3.11	\$3.38	\$3.65	\$3.86	\$4.08	\$4.30	\$4.55	\$4.80	\$105.16	
Otter Tail Corporation	OTTR	\$1.11	\$1.23	\$1.36	\$1.51	\$1.65	\$1.86	\$2.08	\$2.29	\$2.51	\$2.73	\$3.00	\$3.45	\$3.64	\$3.85	\$4.06	\$4.29	\$4.53	\$70.71
Pinnacle West Capital Corporation	PNW	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.00	\$3.18	\$3.34	\$3.63	\$3.74	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$5.22	\$122.06	
PNM Resources, Inc.	PNM	\$0.78	\$0.88	\$0.95	\$1.05	\$1.16	\$1.37	\$1.60	\$1.83	\$2.08	\$2.33	\$2.58	\$2.72	\$2.88	\$3.04	\$3.21	\$3.39	\$66.42	
Portland General Electric Company	POR	\$0.95	\$1.05	\$1.15	\$1.27	\$1.39	\$1.56	\$1.75	\$1.94	\$2.14	\$2.35	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37	\$77.84	
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.26	\$2.32	\$2.38	\$2.45	\$2.53	\$2.62	\$2.72	\$2.84	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$93.66	
Westar Energy, Inc.	WR	\$1.40	\$1.48	\$1.53	\$1.60	\$1.67	\$1.84	\$2.02	\$2.21	\$2.41	\$2.63	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57	\$3.77	\$82.17	

Projected Annual Data Investor Cash Flows

Company	Ticker	Q1/2014	1/14/14	12/31/14	6/30/15	6/30/16	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
American Electric Power Company, Inc.	AEP	(\$52.99)	\$0.00	\$0.26	\$2.09	\$2.23	\$2.41	\$2.55	\$2.71	\$2.83	\$3.06	\$3.26	\$3.43						

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

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	
Stock	EPS Growth Rate Estimates				Long-Term			Payout Ratio		Rebate Solution		Terminal		
Company	Ticker	Price	Zacks	First Call	Line	Low Growth	2014	2018	2024	Proof	IRR	P/E Ratio	EG Ratio	
American Electric Power Company, Inc.	AEP	\$52.99	4.90%	4.97%	4.50%	4.60%	6.63%	61.00%	63.00%	67.23%	(\$0.00)	9.63%	16.67	2.96
Duke Energy Corporation	DUK	\$73.44	4.70%	4.76%	5.00%	4.70%	5.63%	71.00%	64.00%	67.23%	(\$0.00)	9.57%	18.00	3.20
Empire District Electric Company	EDE	\$24.55	3.00%	3.00%	4.00%	3.00%	5.63%	66.00%	63.00%	67.23%	\$0.00	9.44%	18.65	3.31
Great Plains Energy Inc.	GXP	\$25.84	5.00%	5.00%	6.00%	5.00%	6.63%	58.00%	62.00%	67.23%	\$0.00	10.21%	15.50	2.76
Hawaiian Electric Industries, Inc.	HE	\$26.13	4.00%	4.00%	4.00%	4.00%	5.63%	78.00%	65.00%	67.23%	\$0.00	10.16%	15.68	2.79
IDACORP, Inc.	IDA	\$55.66	4.00%	4.00%	1.50%	1.50%	5.63%	51.00%	58.00%	67.23%	(\$0.00)	9.28%	19.42	3.45
NextEra Energy, Inc.	NEE	\$98.70	6.66%	6.47%	6.00%	6.00%	5.63%	61.00%	57.00%	67.23%	(\$0.00)	9.50%	18.32	3.26
Northeast Utilities	NU	\$45.79	6.70%	6.16%	8.00%	6.16%	5.63%	60.00%	58.00%	67.23%	(\$0.00)	9.60%	18.64	2.98
Other Tail Corporation	OTTR	\$29.00	NA	6.00%	15.00%	6.00%	5.63%	70.00%	59.00%	67.23%	(\$0.00)	9.34%	19.12	3.40
Pinnacle West Capital Corporation	PNW	\$56.05	4.00%	3.95%	4.00%	3.95%	5.63%	63.00%	65.00%	67.23%	\$0.00	10.13%	15.78	2.80
PNM Resources, Inc.	PNM	\$27.21	8.59%	8.34%	11.00%	8.34%	5.63%	50.00%	49.00%	67.23%	(\$0.00)	10.19%	15.59	2.77
Portland General Electric Company	POR	\$33.29	7.65%	7.83%	5.00%	5.00%	5.63%	50.00%	54.00%	67.23%	(\$0.00)	9.41%	18.77	3.33
Southern Company	SO	\$44.56	3.66%	3.62%	3.50%	3.50%	5.63%	74.00%	72.00%	67.23%	\$0.00	9.81%	16.69	3.02
Westar Energy, Inc.	WR	\$35.95	3.69%	3.20%	6.00%	3.20%	5.63%	53.00%	55.00%	67.23%	(\$0.00)	9.63%	17.74	3.15

DCF Result

Mean	9.75%	17.35	3.08
Max	10.21%	19.42	3.45
Min	9.28%	15.50	2.76

Projected Annual Earnings per Share	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.32	\$3.47	\$3.63	\$3.79	\$3.96	\$4.14	\$4.34	\$4.55	\$4.79	\$5.05	\$5.33	\$5.63	\$5.95	\$6.28	\$6.63	\$7.01
Duke Energy Corporation	DUK	\$3.68	\$4.17	\$4.39	\$4.57	\$4.78	\$5.01	\$5.24	\$5.50	\$5.78	\$6.08	\$6.41	\$6.77	\$7.15	\$7.56	\$7.98	\$8.43	\$8.91
Empire District Electric Company	EDE	\$1.43	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.83	\$1.90	\$1.99	\$2.09	\$2.21	\$2.33	\$2.47	\$2.60	\$2.75	\$2.91
Great Plains Energy Inc.	GXP	\$1.62	\$1.70	\$1.79	\$1.89	\$1.97	\$2.07	\$2.17	\$2.28	\$2.40	\$2.53	\$2.67	\$2.82	\$2.97	\$3.13	\$3.29	\$3.46	\$3.64
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.05	\$2.14	\$2.24	\$2.35	\$2.47	\$2.61	\$2.76	\$2.92	\$3.08	\$3.25	\$3.44
IDACORP, Inc.	IDA	\$3.64	\$3.69	\$3.75	\$3.81	\$3.88	\$3.92	\$3.98	\$4.07	\$4.20	\$4.37	\$4.58	\$4.84	\$5.11	\$5.39	\$5.68	\$6.00	\$6.36
NextEra Energy, Inc.	NEE	\$4.83	\$5.12	\$5.43	\$5.75	\$6.10	\$6.48	\$6.85	\$7.25	\$7.68	\$8.13	\$8.59	\$9.07	\$9.58	\$10.12	\$10.69	\$11.29	\$11.93
Northeast Utilities	NU	\$2.49	\$2.64	\$2.81	\$2.99	\$3.16	\$3.36	\$3.56	\$3.78	\$4.00	\$4.24	\$4.48	\$4.73	\$5.00	\$5.28	\$5.58	\$5.89	\$6.22
Other Tail Corporation	OTTR	\$1.37	\$1.45	\$1.54	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.18	\$2.30	\$2.44	\$2.57	\$2.72	\$2.87	\$3.03	\$3.20	\$3.38
Pinnacle West Capital Corporation	PNW	\$3.60	\$3.60	\$3.65	\$4.11	\$4.27	\$4.44	\$4.62	\$4.82	\$5.04	\$5.29	\$5.57	\$5.83	\$6.21	\$6.56	\$6.93	\$7.32	\$7.73
PNM Resources, Inc.	PNM	\$1.41	\$1.53	\$1.65	\$1.79	\$1.94	\$2.10	\$2.28	\$2.46	\$2.64	\$2.81	\$2.99	\$3.15	\$3.33	\$3.52	\$3.72	\$3.93	\$4.15
Portland General Electric Company	POR	\$1.77	\$1.86	\$1.95	\$2.05	\$2.15	\$2.26	\$2.37	\$2.49	\$2.62	\$2.77	\$2.92	\$3.08	\$3.26	\$3.44	\$3.63	\$3.84	\$4.05
Southern Company	SO	\$2.70	\$2.79	\$2.89	\$2.99	\$3.10	\$3.21	\$3.32	\$3.45	\$3.60	\$3.77	\$3.97	\$4.19	\$4.43	\$4.68	\$4.94	\$5.22	\$5.51
Westar Energy, Inc.	WR	\$2.27	\$2.34	\$2.42	\$2.49	\$2.57	\$2.66	\$2.74	\$2.84	\$2.95	\$3.10	\$3.26	\$3.44	\$3.64	\$3.84	\$4.05	\$4.29	\$4.53

Projected Annual Dividend Payout Ratio	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.93%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.54%	65.08%	65.62%	66.15%	66.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.71%	64.41%	65.12%	65.82%	66.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.87%	63.74%	64.62%	65.49%	66.36%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	76.00%	73.25%	70.50%	67.75%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	51.00%	52.75%	54.50%	56.25%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.71%	60.41%	62.12%	63.82%	65.53%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.54%	61.08%	62.62%	64.15%	65.69%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Other Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.37%	61.74%	63.12%	64.49%	65.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	63.00%	63.50%	64.00%	64.50%	65.00%	65.37%	65.74%	66.12%	66.49%	66.86%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
PNM Resources, Inc.	PNM	60.00%	49.75%	49.50%	49.25%	49.00%	52.04%	55.08%	58.12%	61.15%	64.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	50.00%	51.00%	52.00%	53.00%	54.00%	56.21%	58.41%	60.62%	62.82%	65.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.21%	70.41%	69.62%	68.82%	68.03%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	57.04%	59.08%	61.12%	63.15%	65.19%	67.23%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.36	\$3.58	\$3.78	\$4.00	\$4.22	\$4.46	\$4.71	\$110.84
Duke Energy Corporation	DUK	\$2.96	\$3.02	\$3.08	\$3.14	\$3.20	\$3.38	\$3.58	\$3.79	\$4.02	\$4.28	\$4.55	\$4.81	\$5.08	\$5.37	\$5.67	\$5.99	\$160.28
Empire District Electric Company	EDE	\$1.01	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.24	\$1.31	\$1.39	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$1.95	\$54.18
Great Plains Energy Inc.	GXP	\$0.99	\$1.05	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.55	\$1.66	\$1.77	\$1.90	\$2.00	\$2.12	\$2.23	\$2.36	\$2.49	\$57.51
Hawaiian Electric Industries, Inc.	HE	\$1.28	\$1.28	\$1.28	\$1.28	\$1.28	\$1.34	\$1.41	\$1.48	\$1.56	\$1.65	\$1.76	\$1.88	\$1.99	\$2.07	\$2.19	\$2.31	\$53.88
IDACORP, Inc.	IDA	\$1.68	\$1.68	\$2.07	\$2.17	\$2.27	\$2.37	\$2.49	\$2.63	\$2.80	\$3.01	\$3.25	\$3.43	\$3.63	\$3.83	\$4.05	\$4.27	\$123.48
NextEra Energy, Inc.	NEE	\$3.12	\$3.26	\$3.39	\$3.54	\$3.68	\$4.02	\$4.33	\$4.77	\$5.19	\$5.63	\$6.10	\$6.64	\$7.19	\$7.79	\$8.40	\$9.02	\$218.54
Northeast Utilities	NU	\$1.59	\$1.67	\$1.76	\$1.85	\$1.95	\$2.12	\$2.31	\$2.51	\$2.72	\$2.94	\$3.18	\$3.36	\$3.55	\$3.75	\$3.95	\$4.18	\$103.56
Other Tail Corporation	OTTR	\$1.02	\$1.04	\$1.05	\$1.07	\$1.08	\$1.17	\$1.27	\$1.38	\$1.49	\$1.60	\$1.73	\$1.83	\$1.93	\$2.04	\$2.15	\$2.27	\$64.71
Pinnacle West Capital Corporation	PNW	\$2.40	\$2.51	\$2.63	\$2.76	\$2.89	\$3.02	\$3.17	\$3.33	\$3.52	\$3.72	\$3.95	\$4.18	\$4.41	\$4.66	\$4.92	\$5.20	\$122.01
PNM Resources, Inc.	PNM	\$0.76	\$0.82	\$0.89	\$0.96	\$1.03	\$1.19	\$1.35	\$1.53	\$1.72	\$1.92	\$2.12	\$2.34	\$2.57	\$2.80	\$3.04	\$3.29	\$54.63
Portland General Electric Company	POR	\$0.93	\$1.00	\$1.07	\$1.14	\$1.22	\$1.33	\$1.46	\$1.59	\$1.74	\$1.90	\$2.07	\$2.19	\$2.31	\$2.44	\$2.58	\$2.72	\$78.05
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.31	\$2.36	\$2.43	\$2.51	\$2.60	\$2.70	\$2.82	\$2.94	\$3.14	\$3.32	\$3.51	\$3.70	\$93.60
Westar Energy, Inc.	WR	\$1.36	\$1.38	\$1.41	\$1.44	\$1.49	\$1.56	\$1.68	\$1.81	\$1.96	\$2.12	\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$3.04	\$50.32

Multi-Stage DCF Notes

- [1] Source: Bloomberg, based on 30-, 60-, and 160-day historical average as of November 14, 2014
- [2] Source: Zacks
- [3] Source: Yahoo! Finance
- [4] Source: Value Line
- [5] Equals indicated value (average, minimum, maximum) of Columns [2], [3], [4]
- [6] Source: Federal Reserve, Bureau of Economic Analysis
- [7] Source: Value Line
- [8] Source: Value Line
- [9] Source: Bloomberg Professional
- [10] Equals Column [1] + Column [64]
- [11] Equals result of Excel Solver function, goal. Column [10] equals \$0.00
- [12] Equals Column [63] / Column [30]
- [13] Equals Column [12] / ((Column [9] x 100)
- [14] Source: Value Line
- [15] Equals Column [14] x (1 + Column [5])
- [16] Equals Column [15] x (1 + Column [5])
- [17] Equals Column [16] x (1 + Column [5])
- [18] Equals Column [17] x (1 + Column [5])
- [19] Equals Column [18] x (1 + Column [5])
- [20] Equals (1 + (Column [5] + (((Column [5] - Column [5]) / (2024 - 2020 + 1)) x (2019 - 2019)))) x Column [19]
- [21] Equals (1 + (Column [5] + (((Column [5] - Column [5]) / (2024 - 2020 + 1)) x (2020 - 2019)))) x Column [20]
- [22] Equals (1 + (Column [5] + (((Column [5] - Column [5]) / (2024 - 2020 + 1)) x (2021 - 2019)))) x Column [21]
- [23] Equals (1 + (Column [5] + (((Column [5] - Column [5]) / (2024 - 2020 + 1)) x (2022 - 2019)))) x Column [22]
- [24] Equals (1 + (Column [5] + (((Column [5] - Column [5]) / (2024 - 2020 + 1)) x (2023 - 2019)))) x Column [23]
- [25] Equals Column [24] x (1 + Column [6])
- [26] Equals Column [25] x (1 + Column [6])
- [27] Equals Column [26] x (1 + Column [6])
- [28] Equals Column [27] x (1 + Column [6])
- [29] Equals Column [28] x (1 + Column [6])
- [30] Equals Column [29] x (1 + Column [6])
- [31] Equals Column [7]
- [32] Equals Column [31] + ((Column [35] - Column [31]) / 4)
- [33] Equals Column [32] + ((Column [35] - Column [31]) / 4)
- [34] Equals Column [33] + ((Column [35] - Column [31]) / 4)
- [35] Equals Column [8]
- [36] Equals Column [35] + ((Column [41] - Column [35]) / 6)
- [37] Equals Column [36] + ((Column [41] - Column [35]) / 6)
- [38] Equals Column [37] + ((Column [41] - Column [35]) / 6)
- [39] Equals Column [38] + ((Column [41] - Column [35]) / 6)
- [40] Equals Column [39] + ((Column [41] - Column [35]) / 6)
- [41] Equals Column [9]
- [42] Equals Column [9]
- [43] Equals Column [9]
- [44] Equals Column [9]
- [45] Equals Column [9]
- [46] Equals Column [9]
- [47] Equals Column [15] x Column [31]
- [48] Equals Column [16] x Column [32]
- [49] Equals Column [17] x Column [33]
- [50] Equals Column [18] x Column [34]
- [51] Equals Column [19] x Column [35]
- [52] Equals Column [20] x Column [36]
- [53] Equals Column [21] x Column [37]
- [54] Equals Column [22] x Column [38]
- [55] Equals Column [23] x Column [39]
- [56] Equals Column [24] x Column [40]
- [57] Equals Column [25] x Column [41]
- [58] Equals Column [26] x Column [42]
- [59] Equals Column [27] x Column [43]
- [60] Equals Column [28] x Column [44]
- [61] Equals Column [29] x Column [45]
- [62] Equals Column [30] x Column [46]
- [63] Equals (Column [62] x (1 + Column [6])) / (Column [11] - Column [6])
- [64] Equals negative net present value, discount rate equals Column [11], cash flows equal Column [65] through Column [81]
- [65] Equals \$0.00
- [66] Equals Column [47] x (12/31/2014 - 1/1/14/2014) / 365
- [67] Equals Column [47] + (0.5 x Column [47])
- [68] Equals Column [48]
- [69] Equals Column [50]
- [70] Equals Column [51]
- [71] Equals Column [52]
- [72] Equals Column [53]
- [73] Equals Column [54]
- [74] Equals Column [55]
- [75] Equals Column [56]
- [76] Equals Column [57]
- [77] Equals Column [58]
- [78] Equals Column [59]
- [79] Equals Column [60]
- [80] Equals Column [61]
- [81] Equals Column [62] + [63]

Ex-Ante Market Risk Premium  
Market DCF Method Based - Bloomberg

[1]	[2]	[3]
S&P 500 Est. Required Market Return	Year Treasury (30- day average)	Implied Market Risk Premium
13.49%	3.04%	10.45%

Company	Ticker	[4] Market Capitalization	[5] Weight in Index	[6] Estimated Dividend Yield	[7] Long-Term Growth Est.	[8] DCF Result	[9] Weighted DCF Result
AGILENT TECHNOLOGIES INC	A	13,859.12	0.07%	1.27%	7.77%	9.09%	0.0066%
ALCOA INC	AA	19,963.36	0.10%	0.71%	10.67%	11.41%	0.0120%
APPLE INC	AAPL	669,178.24	3.52%	1.72%	15.97%	17.82%	0.6266%
ABBVIE INC	ABBV	101,773.77	0.53%	2.60%	8.83%	11.55%	0.0618%
AMERISOURCEBERGEN CORP	ABC	19,925.09	0.10%	1.12%	10.66%	11.84%	0.0124%
ABBOTT LABORATORIES	ABT	65,931.04	0.35%	2.01%	10.99%	13.11%	0.0454%
ACE LTD	ACE	36,686.85	0.19%	2.29%	7.13%	9.50%	0.0183%
ACCENTURE PLC-CL A	ACN	56,348.47	0.30%	2.42%	10.45%	12.99%	0.0385%
ACTAVIS PLC	ACT	64,629.85	0.34%	0.00%	18.13%	18.13%	0.0616%
ADOBE SYSTEMS INC	ADBE	35,609.96	0.19%	0.00%	12.50%	12.50%	0.0234%
ANALOG DEVICES INC	ADI	15,910.16	0.08%	2.85%	11.80%	14.82%	0.0124%
ARCHER-DANIELS-MIDLAND CO	ADM	33,042.40	0.17%	1.75%	10.03%	11.87%	0.0206%
AUTOMATIC DATA PROCESSING	ADP	40,791.65	0.21%	2.20%	10.29%	12.60%	0.0270%
ALLIANCE DATA SYSTEMS CORP	ADS	16,950.76	0.09%	0.00%	16.38%	16.38%	0.0146%
AUTODESK INC	ADSK	13,561.47	0.07%	0.00%	11.64%	11.64%	0.0083%
ADT CORP/THE	ADT	6,270.77	0.03%	2.30%	5.70%	8.06%	0.0027%
AMEREN CORPORATION	AEE	10,246.47	0.05%	3.84%	7.27%	11.24%	0.0061%
AMERICAN ELECTRIC POWER	AEP	27,417.04	0.14%	3.63%	5.39%	9.12%	0.0131%
AES CORP	AES	9,611.86	0.05%	1.49%	7.37%	8.91%	0.0045%
AETNA INC	AET	29,486.53	0.15%	1.07%	11.79%	12.93%	0.0200%
AFLAC INC	AFL	26,719.79	0.14%	2.54%	8.35%	10.99%	0.0154%
ALLERGAN INC	AGN	59,130.49	0.31%	0.10%	21.00%	21.11%	0.0656%
AMERICAN INTERNATIONAL GROUP	AIG	75,441.28	0.40%	0.93%	8.38%	9.35%	0.0371%
APARTMENT INVT & MGMT CO -A	AIV	5,289.71	0.03%	2.88%	7.28%	10.26%	0.0029%
ASSURANT INC	AIZ	4,748.54	0.02%	1.57%	6.98%	8.60%	0.0021%
AKAMAI TECHNOLOGIES INC	AKAM	11,174.46	0.06%	0.00%	15.83%	15.83%	0.0093%
ALLSTATE CORP	ALL	27,917.48	0.15%	1.67%	8.78%	10.52%	0.0154%
ALLEGION PLC	ALLE	5,002.78	0.03%	0.63%	17.40%	18.08%	0.0048%
ALTERA CORP	ALTR	10,735.65	0.06%	1.84%	12.03%	13.98%	0.0079%
ALEXION PHARMACEUTICALS INC	ALXN	37,440.53	0.20%	0.00%	37.07%	37.07%	0.0729%
APPLIED MATERIALS INC	AMAT	27,738.49	0.15%	1.77%	12.33%	14.21%	0.0207%
AMETEK INC	AME	12,702.43	0.07%	0.60%	12.73%	13.37%	0.0089%
AFFILIATED MANAGERS GROUP	AMG	10,940.03	0.06%	0.00%	14.51%	14.51%	0.0083%
AMGEN INC	AMGN	119,881.59	0.63%	1.55%	8.83%	10.45%	0.0658%
AMERIPRISE FINANCIAL INC	AMP	23,865.53	0.13%	1.73%	18.10%	19.99%	0.0251%
AMERICAN TOWER CORP	AMT	39,452.02	0.21%	1.40%	20.26%	21.80%	0.0452%
AMAZON.COM INC	AMZN	151,949.46	0.80%	0.00%	36.58%	36.58%	0.2921%
AUTONATION INC	AN	6,488.80	0.03%	0.00%	12.60%	12.60%	0.0043%
AON PLC	AON	25,599.57	0.13%	1.02%	12.66%	13.74%	0.0185%
APACHE CORP	APA	27,630.03	0.15%	1.31%	4.84%	6.19%	0.0090%
ANADARKO PETROLEUM CORP	APC	45,636.25	0.24%	1.10%	10.75%	11.91%	0.0286%
AIR PRODUCTS & CHEMICALS INC	APD	28,663.40	0.15%	2.34%	8.67%	11.11%	0.0167%
AMPHENOL CORP-CL A	APH	15,730.13	0.08%	0.89%	11.45%	12.39%	0.0102%
AIRGAS INC	ARG	8,527.24	0.04%	1.89%	11.80%	13.80%	0.0062%
ALLEGHENY TECHNOLOGIES INC	ATI	3,569.80	0.02%	2.19%	16.90%	19.28%	0.0036%
AVALONBAY COMMUNITIES INC	AVB	20,684.34	0.11%	2.96%	6.55%	9.61%	0.0104%
AVAGO TECHNOLOGIES LTD	AVGO	22,490.33	0.12%	1.23%	20.63%	21.98%	0.0260%
AVON PRODUCTS INC	AVP	4,370.46	0.02%	2.43%	6.52%	9.03%	0.0021%
AVERY DENNISON CORP	AVY	4,330.03	0.02%	2.66%	11.70%	14.51%	0.0033%
AMERICAN EXPRESS CO	AXP	93,772.73	0.49%	1.11%	9.42%	10.58%	0.0522%
AUTOZONE INC	AZO	18,170.28	0.10%	0.00%	13.39%	13.39%	0.0128%
BOEING CO/THE	BA	91,846.83	0.48%	2.27%	11.15%	13.54%	0.0854%
BANK OF AMERICA CORP	BAC	180,146.80	0.95%	0.70%	10.83%	11.56%	0.1095%
BAXTER INTERNATIONAL INC	BAX	38,881.51	0.20%	2.79%	8.96%	11.88%	0.0243%
BED BATH & BEYOND INC	BBBY	13,247.35	0.07%	0.00%	7.91%	7.91%	0.0055%
BB&T CORP	BBT	26,967.97	0.14%	2.54%	11.95%	14.63%	0.0207%
BEST BUY CO INC	BBY	12,400.88	0.07%	2.01%	13.25%	15.39%	0.0100%
CR BARD INC	BCR	12,290.88	0.06%	0.53%	11.00%	11.55%	0.0075%

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Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
BECTON DICKINSON AND CO	BDX	24,812.06	0.13%	1.78%	9.29%	11.15%	0.0145%
FRANKLIN RESOURCES INC	BEN	35,083.08	0.18%	0.95%	12.44%	13.45%	0.0248%
BROWN-FORMAN CORP-CLASS B	BF/B	19,825.49	0.10%	1.34%	9.60%	11.01%	0.0115%
BAKER HUGHES INC	BHI	25,986.22	0.14%	1.04%	30.75%	31.94%	0.0436%
BIOGEN IDEC INC	BIIB	72,051.01	0.38%	0.00%	21.05%	21.05%	0.0797%
BANK OF NEW YORK MELLON CORP	BK	44,645.65	0.23%	1.67%	9.83%	11.57%	0.0272%
BLACKROCK INC	BLK	58,162.16	0.31%	2.23%	12.37%	14.74%	0.0451%
BALL CORP	BLL	8,786.28	0.05%	0.82%	10.03%	10.89%	0.0050%
BEMIS COMPANY	BMS	3,839.42	0.02%	2.70%	8.85%	11.67%	0.0024%
BRISTOL-MYERS SQUIBB CO	BMJ	96,209.04	0.51%	2.48%	13.25%	15.90%	0.0804%
BROADCOM CORP-CL A	BRCM	24,920.24	0.13%	1.14%	10.51%	11.71%	0.0153%
BERKSHIRE HATHAWAY INC-CL B	BRK/B	358,034.91	1.88%	0.00%	6.70%	6.70%	0.1261%
BOSTON SCIENTIFIC CORP	BSX	17,788.23	0.09%	0.00%	7.40%	7.40%	0.0069%
BORGWARNER INC	BWA	12,551.02	0.07%	0.84%	11.77%	12.66%	0.0084%
BOSTON PROPERTIES INC	BXP	19,324.25	0.10%	2.92%	5.44%	8.44%	0.0086%
CITIGROUP INC	C	162,107.92	0.85%	0.07%	11.05%	11.13%	0.0948%
CA INC	CA	13,298.24	0.07%	3.36%	4.77%	8.20%	0.0057%
CONAGRA FOODS INC	CAG	14,741.52	0.08%	2.88%	9.37%	12.38%	0.0096%
CARDINAL HEALTH INC	CAH	26,609.31	0.14%	1.67%	12.16%	13.93%	0.0195%
CAMERON INTERNATIONAL CORP	CAM	11,485.44	0.06%	0.00%	17.47%	17.47%	0.0105%
CATERPILLAR INC	CAT	61,314.80	0.32%	2.54%	11.74%	14.42%	0.0465%
CHUBB CORP	CB	23,864.35	0.13%	1.96%	9.00%	11.05%	0.0139%
CBRE GROUP INC - A	CBG	10,781.56	0.06%	0.00%	12.17%	12.17%	0.0069%
CBS CORP-CLASS B NON VOTING	CBS	27,691.63	0.15%	1.01%	14.47%	15.56%	0.0226%
COCA-COLA ENTERPRISES	CCE	10,227.78	0.05%	2.33%	9.04%	11.48%	0.0062%
CROWN CASTLE INTL CORP	CCI	26,818.80	0.14%	2.16%	13.33%	15.64%	0.0220%
CARNIVAL CORP	CCL	32,111.64	0.17%	2.41%	17.03%	19.64%	0.0331%
CELGENE CORP	CELG	83,161.08	0.44%	0.00%	25.66%	25.66%	0.1121%
CERNER CORP	CERN	21,943.01	0.12%	0.00%	17.02%	17.02%	0.0196%
CF INDUSTRIES HOLDINGS INC	CF	13,236.03	0.07%	1.85%	12.18%	14.14%	0.0098%
CAREFUSION CORP	CFN	11,743.65	0.06%	0.00%	11.91%	11.91%	0.0073%
CHESAPEAKE ENERGY CORP	CHK	15,410.61	0.08%	1.49%	6.83%	8.37%	0.0068%
C.H. ROBINSON WORLDWIDE INC	CHRW	10,689.06	0.06%	1.94%	11.57%	13.62%	0.0076%
CIGNA CORP	CI	26,647.02	0.14%	0.04%	10.66%	10.70%	0.0150%
CINCINNATI FINANCIAL CORP	CINF	8,336.38	N/A	3.45%	#VALUE!	N/A	N/A
COLGATE-PALMOLIVE CO	CL	61,564.96	0.32%	2.12%	9.07%	11.29%	0.0365%
CLOROX COMPANY	CLX	12,949.24	0.07%	2.96%	6.67%	9.73%	0.0066%
COMERICA INC	CMA	8,713.00	0.05%	1.63%	10.69%	12.40%	0.0057%
COMCAST CORP-CLASS A	CMCSA	139,074.71	0.73%	1.67%	13.09%	14.87%	0.1086%
CME GROUP INC	CME	28,557.42	0.15%	4.39%	12.15%	16.80%	0.0252%
CHIPOTLE MEXICAN GRILL INC	CMG	20,771.97	0.11%	0.00%	22.84%	22.84%	0.0249%
CUMMINS INC	CMI	26,488.49	0.14%	1.97%	14.63%	16.75%	0.0233%
CMS ENERGY CORP	CMS	8,878.19	0.05%	3.36%	5.83%	9.29%	0.0043%
CENTERPOINT ENERGY INC	CNP	10,321.55	0.05%	3.96%	5.45%	9.51%	0.0052%
CONSOL ENERGY INC	CNX	9,119.71	0.05%	0.63%	9.70%	10.36%	0.0050%
CAPITAL ONE FINANCIAL CORP	COF	45,447.81	0.24%	1.47%	6.00%	7.51%	0.0179%
CABOT OIL & GAS CORP	COG	13,885.73	0.07%	0.22%	42.78%	43.04%	0.0314%
COACH INC	COH	9,700.78	0.05%	3.84%	8.31%	12.31%	0.0063%
ROCKWELL COLLINS INC	COL	11,351.02	0.06%	1.52%	9.96%	11.55%	0.0069%
CONOCOPHILLIPS	COP	87,764.09	0.46%	3.97%	6.33%	10.42%	0.0480%
COSTCO WHOLESALE CORP	COST	60,494.34	0.32%	1.03%	11.13%	12.22%	0.0388%
COVIDIEN PLC	COV	42,496.54	0.22%	1.49%	8.90%	10.45%	0.0233%
CAMPBELL SOUP CO	CPB	13,750.32	0.07%	3.10%	4.56%	7.73%	0.0056%
SALESFORCE.COM INC	CRM	39,535.53	0.21%	0.00%	22.26%	22.26%	0.0462%
COMPUTER SCIENCES CORP	CSC	8,672.49	0.05%	1.48%	9.45%	11.00%	0.0050%
CISCO SYSTEMS INC	CSCO	134,480.02	0.71%	2.78%	8.93%	11.83%	0.0836%
CSX CORP	CSX	36,714.29	0.19%	1.72%	11.88%	13.70%	0.0264%
CINTAS CORP	CTAS	8,377.46	0.04%	1.46%	10.68%	12.21%	0.0054%
CENTURYLINK INC	CTL	23,261.95	0.12%	5.30%	1.27%	6.60%	0.0081%
COGNIZANT TECH SOLUTIONS-A	CTSH	32,418.78	0.17%	0.00%	17.46%	17.46%	0.0297%
CITRIX SYSTEMS INC	CTXS	10,643.38	0.06%	0.00%	15.33%	15.33%	0.0086%
CABLEVISION SYSTEMS-NY GRP-A	CVC	5,071.73	0.03%	3.24%	-3.57%	-0.39%	-0.0001%
CVS HEALTH CORP	CVS	102,177.16	0.54%	1.21%	14.13%	15.42%	0.0828%
CHEVRON CORP	CVX	219,459.37	1.15%	3.62%	6.09%	9.83%	0.1133%
DOMINION RESOURCES INC/VA	D	41,749.61	0.22%	3.35%	6.00%	9.45%	0.0207%
DELTA AIR LINES INC	DAL	36,591.08	0.19%	0.67%	11.72%	12.42%	0.0239%
DU PONT (E.I.) DE NEMOURS	DD	64,159.17	0.34%	2.64%	7.68%	10.42%	0.0351%
DEERE & CO	DE	31,379.71	0.16%	2.40%	6.38%	8.86%	0.0146%
DISCOVER FINANCIAL SERVICES	DFS	29,462.58	0.15%	1.43%	9.73%	11.22%	0.0174%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
DOLLAR GENERAL CORP	DG	19,614.62	0.10%	0.00%	13.34%	13.34%	0.0137%
QUEST DIAGNOSTICS INC	DGX	9,008.82	0.05%	2.08%	8.87%	11.04%	0.0052%
DR HORTON INC	DHI	8,887.66	0.05%	0.97%	11.43%	12.45%	0.0058%
DANAHER CORP	DHR	57,757.74	0.30%	0.41%	11.25%	11.69%	0.0355%
WALT DISNEY CO/THE	DIS	155,776.42	0.82%	1.04%	10.41%	11.50%	0.0941%
DISCOVERY COMMUNICATIONS-A	DISCA	22,579.41	0.12%	0.00%	20.53%	20.53%	0.0244%
DISCOVERY COMMUNICATIONS-C	DISCK	22,577.16	0.12%	0.00%	20.53%	20.53%	0.0244%
DELPHI AUTOMOTIVE PLC	DLPH	20,915.05	0.11%	1.42%	14.01%	15.52%	0.0171%
DOLLAR TREE INC	DLTR	12,746.73	0.07%	0.00%	16.00%	16.00%	0.0107%
DUN & BRADSTREET CORP	DNB	4,488.73	0.02%	1.38%	10.70%	12.15%	0.0029%
DENBURY RESOURCES INC	DNR	3,945.18	0.02%	2.23%	6.10%	8.40%	0.0017%
DIAMOND OFFSHORE DRILLING	DO	4,908.52	0.03%	9.80%	-6.53%	2.94%	0.0008%
DOVER CORP	DOV	13,256.27	0.07%	1.93%	11.88%	13.92%	0.0097%
DOW CHEMICAL CO/THE	DOW	60,542.66	0.32%	2.79%	6.68%	9.56%	0.0304%
DR PEPPER SNAPPLE GROUP INC	DPS	13,622.27	0.07%	2.33%	8.43%	10.86%	0.0078%
DARDEN RESTAURANTS INC	DRI	7,412.34	0.04%	4.04%	12.90%	17.20%	0.0067%
DTE ENERGY COMPANY	DTE	14,132.75	0.07%	3.39%	5.50%	8.98%	0.0067%
DIRECTV	DTV	43,845.26	0.23%	0.00%	7.40%	7.40%	0.0170%
DUKE ENERGY CORP	DUK	55,918.40	0.29%	4.00%	4.78%	8.88%	0.0261%
DAVITA HEALTHCARE PARTNERS I	DVA	16,261.48	0.09%	0.00%	8.66%	8.66%	0.0074%
DEVON ENERGY CORP	DVN	26,219.22	0.14%	1.47%	10.18%	11.73%	0.0162%
ELECTRONIC ARTS INC	EA	12,882.09	0.07%	0.00%	7.35%	7.35%	0.0050%
EBAY INC	EBAY	67,460.54	0.35%	0.00%	12.67%	12.67%	0.0449%
ECOLAB INC	ECL	33,703.08	0.18%	0.98%	13.64%	14.69%	0.0260%
CONSOLIDATED EDISON INC	ED	18,176.62	0.10%	4.05%	3.92%	8.04%	0.0077%
EQUIFAX INC	EFX	9,421.43	0.05%	1.28%	11.90%	13.26%	0.0066%
EDISON INTERNATIONAL	EIX	20,112.33	0.11%	2.32%	5.06%	7.44%	0.0079%
ESTEE LAUDER COMPANIES-CL A	EL	27,058.89	0.14%	1.28%	11.19%	12.54%	0.0178%
EMC CORP/MA	EMC	61,108.30	0.32%	1.46%	11.07%	12.61%	0.0405%
EASTMAN CHEMICAL CO	EMN	12,482.24	0.07%	1.66%	7.53%	9.25%	0.0061%
EMERSON ELECTRIC CO	EMR	44,349.02	0.23%	2.95%	8.73%	11.81%	0.0275%
EOG RESOURCES INC	EOG	53,666.56	0.28%	0.57%	10.92%	11.52%	0.0325%
EQUITY RESIDENTIAL	EQR	25,075.53	0.13%	2.90%	6.80%	9.80%	0.0129%
EQT CORP	EQT	14,085.51	0.07%	0.14%	30.00%	30.16%	0.0223%
EXPRESS SCRIPTS HOLDING CO	ESRX	57,131.22	0.30%	0.00%	13.50%	13.50%	0.0405%
ESSEX PROPERTY TRUST INC	ESS	12,723.20	0.07%	2.55%	6.16%	8.79%	0.0059%
ENSCO PLC-CL A	ESV	9,070.48	0.05%	7.76%	2.27%	10.11%	0.0048%
E*TRADE FINANCIAL CORP	ETFC	6,704.20	0.04%	0.00%	40.00%	40.00%	0.0141%
EATON CORP PLC	ETN	31,712.77	0.17%	2.94%	9.12%	12.19%	0.0203%
ENTERGY CORP	ETR	14,705.60	0.08%	4.07%	3.10%	7.23%	0.0056%
EDWARDS LIFESCIENCES CORP	EW	13,324.71	0.07%	0.00%	12.54%	12.54%	0.0088%
EXELON CORP	EXC	30,459.43	0.16%	3.50%	5.00%	8.59%	0.0137%
EXPEDITORS INTL WASH INC	EXPD	8,474.04	0.04%	1.46%	7.53%	9.05%	0.0040%
EXPEDIA INC	EXPE	11,112.18	0.06%	0.74%	18.28%	19.08%	0.0111%
FORD MOTOR CO	F	58,249.88	0.31%	3.31%	9.31%	12.77%	0.0391%
FASTENAL CO	FAST	13,268.69	0.07%	2.23%	16.38%	18.79%	0.0131%
FACEBOOK INC-A	FB	209,210.19	1.10%	0.00%	36.90%	36.90%	0.4057%
FREEMPORT-MCMORAN INC	FCX	29,351.75	0.15%	4.43%	9.34%	13.98%	0.0216%
FAMILY DOLLAR STORES	FDO	8,953.66	0.05%	1.62%	4.13%	5.78%	0.0027%
FEDEX CORP	FDX	48,573.92	0.26%	0.46%	14.01%	14.51%	0.0370%
FIRSTENERGY CORP	FE	15,093.83	0.08%	4.01%	3.59%	7.68%	0.0061%
F5 NETWORKS INC	FFIV	9,525.74	0.05%	0.00%	16.95%	16.95%	0.0085%
FIDELITY NATIONAL INFORMATIO	FIS	16,786.72	0.09%	1.61%	12.00%	13.71%	0.0121%
FISERV INC	FISV	17,087.38	0.09%	0.00%	11.75%	11.75%	0.0106%
FIFTH THIRD BANCORP	FITB	16,595.50	0.09%	2.53%	10.46%	13.13%	0.0144%
FLIR SYSTEMS INC	FLIR	4,529.69	0.02%	1.28%	14.33%	15.71%	0.0037%
FLUOR CORP	FLR	10,116.84	0.05%	1.23%	10.10%	11.40%	0.0061%
FLOWERVE CORP	FLS	9,014.07	0.05%	0.96%	12.38%	13.40%	0.0063%
FMC CORP	FMC	7,538.92	0.04%	1.14%	9.00%	10.19%	0.0040%
FOSSIL GROUP INC	FOSL	5,530.39	0.03%	0.00%	14.18%	14.18%	0.0041%
TWENTY-FIRST CENTURY FOX-A	FOXA	74,577.95	0.39%	0.75%	15.05%	15.86%	0.0622%
FIRST SOLAR INC	FSLR	4,862.25	0.03%	0.00%	-4.27%	-4.27%	-0.0011%
FMC TECHNOLOGIES INC	FTI	12,695.52	0.07%	0.00%	18.15%	18.15%	0.0121%
FRONTIER COMMUNICATIONS CORI	FTR	6,819.16	0.04%	5.88%	9.10%	15.25%	0.0055%
AGL RESOURCES INC	GAS	6,153.23	0.03%	3.82%	5.53%	9.46%	0.0031%
GANNETT CO	GCI	7,012.05	0.04%	2.75%	9.07%	11.94%	0.0044%
GENERAL DYNAMICS CORP	GD	47,259.49	0.25%	1.73%	7.94%	9.74%	0.0242%
GENERAL ELECTRIC CO	GE	265,615.98	1.40%	3.35%	8.92%	12.42%	0.1734%
GENERAL GROWTH PROPERTIES	GGP	22,562.42	0.12%	2.38%	6.22%	8.68%	0.0103%



		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
GILEAD SCIENCES INC	GILD	154,200.58	0.81%	0.00%	24.58%	24.58%	0.1992%
GENERAL MILLS INC	GIS	30,676.42	0.16%	3.23%	7.02%	10.37%	0.0167%
CORNING INC	GLW	26,175.34	0.14%	1.97%	8.35%	10.41%	0.0143%
GENERAL MOTORS CO	GM	51,076.87	0.27%	3.83%	10.55%	14.59%	0.0392%
KEURIG GREEN MOUNTAIN INC	GMCR	25,100.77	0.13%	0.65%	15.83%	16.53%	0.0218%
GAMESTOP CORP-CLASS A	GME	4,997.92	0.03%	2.98%	15.33%	18.53%	0.0049%
GENWORTH FINANCIAL INC-CL A	GNW	4,666.12	0.02%	0.00%	5.00%	5.00%	0.0012%
GOOGLE INC-CL C	GOOG	372,142.60	1.96%	0.00%	18.02%	18.02%	0.3525%
GENUINE PARTS CO	GPC	15,249.16	0.08%	2.30%	7.18%	9.57%	0.0077%
GAP INC/THE	GPS	17,185.89	0.09%	2.15%	12.50%	14.78%	0.0133%
GARMIN LTD	GRMN	11,635.69	0.06%	3.34%	8.22%	11.70%	0.0072%
GOLDMAN SACHS GROUP INC	GS	85,577.20	0.45%	1.20%	10.17%	11.43%	0.0514%
GOODYEAR TIRE & RUBBER CO	GT	7,034.29	0.04%	0.84%	7.00%	7.86%	0.0029%
VW GRAINGER INC	GWW	16,765.60	0.09%	1.69%	13.02%	14.82%	0.0131%
HALLIBURTON CO	HAL	46,610.32	0.24%	1.14%	17.25%	18.49%	0.0453%
HARMAN INTERNATIONAL	HAR	7,305.83	0.04%	1.19%	16.95%	18.24%	0.0070%
HASBRO INC	HAS	6,781.82	0.04%	3.17%	11.20%	14.54%	0.0052%
HUNTINGTON BANCSHARES INC	HBAN	8,221.91	0.04%	2.13%	5.70%	7.89%	0.0034%
HUDSON CITY BANCORP INC	HCBK	5,187.18	N/A	1.63%	#VALUE!	N/A	N/A
HEALTH CARE REIT INC	HCN	23,302.54	0.12%	4.36%	5.68%	10.16%	0.0124%
HCP INC	HCP	20,010.11	0.11%	5.00%	4.00%	9.11%	0.0096%
HOME DEPOT INC	HD	132,061.82	0.69%	1.90%	15.71%	17.76%	0.1233%
HESS CORP	HES	24,787.48	0.13%	1.21%	9.96%	11.23%	0.0146%
HARTFORD FINANCIAL SVCS GRP	HIG	17,211.79	0.09%	1.68%	9.00%	10.76%	0.0097%
HARLEY-DAVIDSON INC	HOG	14,651.66	0.08%	1.61%	11.73%	13.43%	0.0103%
HONEYWELL INTERNATIONAL INC	HON	75,713.41	0.40%	1.91%	10.05%	12.05%	0.0480%
STARWOOD HOTELS & RESORTS	HOT	14,023.52	0.07%	1.77%	9.63%	11.49%	0.0085%
HELMERICH & PAYNE	HP	8,536.94	0.04%	3.55%	13.00%	16.79%	0.0075%
HEWLETT-PACKARD CO	HPQ	68,921.55	0.36%	1.65%	6.63%	8.33%	0.0302%
H&R BLOCK INC	HRB	8,943.12	0.05%	2.46%	11.00%	13.60%	0.0064%
HORMEL FOODS CORP	HRL	14,358.38	0.08%	1.46%	8.10%	9.62%	0.0073%
HARRIS CORP	HRS	7,384.18	N/A	2.64%	#VALUE!	N/A	N/A
HOSPIRA INC	HSP	9,849.25	0.05%	0.00%	13.96%	13.96%	0.0072%
HOST HOTELS & RESORTS INC	HST	17,160.84	0.09%	3.10%	6.00%	9.19%	0.0083%
HERSHEY CO/THE	HSY	21,201.26	0.11%	2.09%	10.05%	12.24%	0.0136%
HUMANA INC	HUM	20,806.02	0.11%	0.82%	9.62%	10.47%	0.0114%
INTL BUSINESS MACHINES CORP	IBM	162,393.39	0.85%	2.60%	8.80%	11.52%	0.0983%
INTERCONTINENTAL EXCHANGE INC	ICE	25,088.63	0.13%	1.17%	15.78%	17.04%	0.0225%
INTL FLAVORS & FRAGRANCES	IFF	7,934.41	0.04%	1.77%	10.63%	12.49%	0.0052%
INTEL CORP	INTC	164,003.20	0.86%	2.65%	8.34%	11.10%	0.0957%
INTUIT INC	INTU	25,864.23	0.14%	0.99%	14.42%	15.48%	0.0210%
INTERNATIONAL PAPER CO	IP	23,031.88	0.12%	2.71%	6.80%	9.60%	0.0116%
INTERPUBLIC GROUP OF COS INC	IPG	8,134.55	0.04%	1.95%	9.97%	12.02%	0.0051%
INGERSOLL-RAND PLC	IR	16,615.88	0.09%	1.60%	13.21%	14.92%	0.0130%
IRON MOUNTAIN INC	IRM	7,304.59	0.04%	12.08%	11.00%	23.75%	0.0091%
INTUITIVE SURGICAL INC	ISRG	18,563.17	0.10%	0.00%	8.90%	8.90%	0.0087%
ILLINOIS TOOL WORKS	ITW	36,622.66	0.19%	1.90%	11.78%	13.79%	0.0265%
INVESCO LTD	IVZ	17,293.42	0.09%	2.48%	13.26%	15.90%	0.0144%
JOHNSON CONTROLS INC	JCI	32,897.46	0.17%	1.98%	12.86%	14.97%	0.0259%
JACOBS ENGINEERING GROUP INC	JEC	6,346.82	0.03%	0.00%	10.49%	10.49%	0.0035%
JOHNSON & JOHNSON	JNJ	302,751.78	1.59%	2.56%	6.95%	9.60%	0.1527%
JUNIPER NETWORKS INC	JNPR	9,075.29	0.05%	0.64%	10.02%	10.70%	0.0051%
JOY GLOBAL INC	JOY	5,226.86	0.03%	1.40%	9.65%	11.12%	0.0031%
JPMORGAN CHASE & CO	JPM	225,375.40	1.18%	2.62%	5.95%	8.65%	0.1024%
NORDSTROM INC	JWN	14,255.15	0.07%	1.77%	10.10%	11.96%	0.0090%
KELLOGG CO	K	22,640.51	0.12%	2.95%	6.49%	9.54%	0.0113%
KEYCORP	KEY	11,535.11	0.06%	1.91%	6.78%	8.75%	0.0053%
KIMCO REALTY CORP	KIM	10,057.28	0.05%	3.72%	3.49%	7.27%	0.0038%
KLA-TENCOR CORP	KLAC	13,207.50	0.07%	2.46%	5.53%	8.06%	0.0056%
KIMBERLY-CLARK CORP	KMB	41,934.73	0.22%	2.97%	7.49%	10.57%	0.0233%
KINDER MORGAN INC	KMI	40,440.27	0.21%	4.38%	9.00%	13.58%	0.0289%
CARMAX INC	KMX	11,984.58	0.06%	0.00%	13.76%	13.76%	0.0087%
COCA-COLA CO/THE	KO	186,943.22	0.98%	2.85%	5.76%	8.69%	0.0854%
MICHAEL KORS HOLDINGS LTD	KORS	14,819.41	0.08%	0.00%	22.03%	22.03%	0.0172%
KROGER CO	KR	28,326.12	0.15%	1.20%	11.07%	12.34%	0.0184%
KRAFT FOODS GROUP INC	KRFT	33,780.82	0.18%	3.73%	7.39%	11.26%	0.0200%
KOHL'S CORP	KSS	11,682.48	0.06%	2.73%	5.50%	8.31%	0.0051%
KANSAS CITY SOUTHERN	KSU	13,877.82	0.07%	0.87%	19.42%	20.37%	0.0149%
LOEWS CORP	L	15,989.05	N/A	0.59%	#VALUE!	N/A	N/A

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
L BRANDS INC	LB	22,663.05	0.12%	2.54%	11.93%	14.62%	0.0174%
LEGETT & PLATT INC	LEG	5,606.85	N/A	2.97%	#VALUE!	N/A	N/A
LENNAR CORP-A	LEN	9,078.83	0.05%	0.35%	16.50%	16.88%	0.0081%
LABORATORY CRP OF AMER HLDGS	LH	8,354.52	0.04%	0.00%	10.07%	10.07%	0.0044%
L-3 COMMUNICATIONS HOLDINGS	LLL	10,148.30	0.05%	2.02%	5.39%	7.46%	0.0040%
LINEAR TECHNOLOGY CORP	LLTC	10,345.12	0.05%	2.53%	9.51%	12.17%	0.0066%
ELI LILLY & CO	LLY	74,967.23	0.39%	2.91%	9.13%	12.18%	0.0480%
LEGG MASON INC	LM	6,279.45	0.03%	1.18%	17.32%	18.60%	0.0061%
LOCKHEED MARTIN CORP	LMT	58,926.36	0.31%	2.93%	8.38%	11.43%	0.0354%
LINCOLN NATIONAL CORP	LNC	14,607.98	0.08%	1.17%	11.52%	12.75%	0.0098%
LORILLARD INC	LO	22,162.86	0.12%	3.98%	9.26%	13.42%	0.0156%
LOWE'S COS INC	LOW	57,785.44	0.30%	1.39%	15.95%	17.45%	0.0530%
LAM RESEARCH CORP	LRCX	12,677.10	0.07%	0.94%	5.24%	6.20%	0.0041%
LEUCADIA NATIONAL CORP	LUK	8,993.35	N/A	0.00%	#VALUE!	N/A	N/A
SOUTHWEST AIRLINES CO	LUV	26,409.94	0.14%	0.60%	21.35%	22.01%	0.0305%
LEVEL 3 COMMUNICATIONS INC	LVL3	16,462.10	0.09%	0.00%	30.94%	30.94%	0.0268%
LYONDELLBASELL INDU-CL A	LYB	44,229.01	0.23%	3.03%	6.50%	9.63%	0.0224%
MACY'S INC	M	21,893.87	0.12%	1.91%	9.68%	11.69%	0.0134%
MASTERCARD INC-CLASS A	MA	97,148.95	0.51%	0.53%	17.07%	17.64%	0.0900%
MAGERICH CO/THE	MAC	9,575.71	0.05%	3.66%	4.19%	7.93%	0.0040%
MARRIOTT INTERNATIONAL -CL A	MAR	22,102.14	0.12%	0.99%	10.63%	11.66%	0.0135%
MASCO CORP	MAS	8,268.80	0.04%	1.48%	10.93%	12.48%	0.0054%
MATTEL INC	MAT	10,483.30	0.06%	4.91%	7.50%	12.60%	0.0069%
MCDONALD'S CORP	MCD	93,592.99	0.49%	3.42%	7.49%	11.04%	0.0543%
MICROCHIP TECHNOLOGY INC	MCHP	8,705.83	0.05%	3.21%	10.70%	14.08%	0.0064%
MCKESSON CORP	MCK	47,579.82	0.25%	0.46%	15.10%	15.60%	0.0390%
MOODY'S CORP	MCO	20,958.04	0.11%	1.11%	13.50%	14.69%	0.0162%
MONDELEZ INTERNATIONAL INC-A	MDLZ	64,105.87	0.34%	1.51%	10.35%	11.94%	0.0402%
MEDTRONIC INC	MDT	67,743.26	0.36%	1.77%	7.78%	9.61%	0.0342%
METLIFE INC	MET	61,925.65	0.33%	2.45%	7.79%	10.33%	0.0336%
MCGRAW HILL FINANCIAL INC	MHFI	24,709.22	0.13%	1.32%	12.50%	13.90%	0.0181%
MOHAWK INDUSTRIES INC	MHK	10,453.42	0.05%	0.00%	9.35%	9.35%	0.0051%
MEAD JOHNSON NUTRITION CO	MJN	20,354.53	0.11%	1.49%	9.50%	11.06%	0.0118%
MCCORMICK & CO-NON VGT SHRS	MKC	9,368.35	0.05%	2.03%	7.73%	9.84%	0.0048%
MARTIN MARIETTA MATERIALS	MLM	8,504.95	0.04%	1.27%	19.34%	20.73%	0.0093%
MARSH & MCLENNAN COS	MMC	30,187.59	0.16%	1.90%	12.70%	14.72%	0.0233%
3M CO	MMM	101,742.81	0.53%	2.16%	9.33%	11.58%	0.0619%
MALLINCKRODT PLC	MNK	9,993.67	0.05%	0.00%	23.36%	23.36%	0.0123%
MONSTER BEVERAGE CORP	MNST	18,078.07	0.09%	0.00%	21.80%	21.80%	0.0207%
ALTRIA GROUP INC	MO	96,343.03	0.51%	4.15%	6.01%	10.28%	0.0521%
MONSANTO CO	MON	57,551.48	0.30%	1.62%	11.65%	13.36%	0.0404%
MOSAIC CO/THE	MOS	16,737.13	0.09%	2.22%	10.60%	12.94%	0.0114%
MARATHON PETROLEUM CORP	MPC	25,901.02	0.14%	1.99%	12.60%	14.72%	0.0200%
MERCK & CO. INC.	MRK	168,315.56	0.88%	2.99%	6.15%	9.23%	0.0816%
MARATHON OIL CORP	MRO	21,826.17	0.11%	2.46%	9.28%	11.85%	0.0136%
MORGAN STANLEY	MS	69,781.42	0.37%	1.02%	30.16%	31.33%	0.1149%
MICROSOFT CORP	MSFT	407,815.14	2.14%	2.37%	9.22%	11.69%	0.2506%
MOTOROLA SOLUTIONS INC	MSI	15,702.32	0.08%	1.94%	4.43%	6.41%	0.0053%
M & T BANK CORP	MTB	16,507.38	0.09%	2.24%	5.45%	7.75%	0.0067%
MICRON TECHNOLOGY INC	MU	34,994.64	0.18%	0.10%	12.54%	12.65%	0.0233%
MURPHY OIL CORP	MUR	9,204.88	0.05%	2.59%	11.50%	14.24%	0.0089%
MEADWESTVACO CORP	MWV	7,350.54	0.04%	3.13%	8.15%	11.41%	0.0044%
MYLAN INC	MYL	20,180.83	0.11%	0.00%	13.15%	13.15%	0.0139%
NAVIANT CORP	NAVI	8,368.47	N/A	2.94%	#VALUE!	N/A	N/A
NOBLE ENERGY INC	NBL	20,292.92	0.11%	1.16%	12.20%	13.43%	0.0143%
NABORS INDUSTRIES LTD	NBR	4,798.90	0.03%	1.13%	37.42%	38.77%	0.0098%
NASDAQ OMX GROUP/THE	NDAQ	7,335.36	0.04%	1.38%	9.91%	11.36%	0.0044%
NOBLE CORP PLC	NE	5,257.07	0.03%	7.22%	-2.60%	4.53%	0.0013%
NEXTERA ENERGY INC	NEE	44,446.99	0.23%	2.83%	6.17%	9.09%	0.0212%
NEWMONT MINING CORP	NEM	9,556.92	0.05%	1.05%	-1.25%	-0.21%	-0.0001%
NETFLIX INC	NFLX	23,270.77	0.12%	0.00%	29.05%	29.05%	0.0355%
NEWFIELD EXPLORATION CO	NFX	4,628.75	0.02%	0.00%	11.00%	11.00%	0.0027%
NISOURCE INC	NI	12,867.92	0.07%	2.51%	4.08%	6.64%	0.0045%
NIKE INC -CL B	NKE	82,239.60	0.43%	1.08%	13.33%	14.49%	0.0626%
NIELSEN NV	NLSN	15,856.49	0.08%	2.26%	16.17%	18.61%	0.0155%
NORTHROP GRUMMAN CORP	NOC	27,477.96	0.14%	1.99%	6.22%	8.27%	0.0119%
NATIONAL OILWELL VARCO INC	NOV	30,686.99	0.16%	2.25%	9.36%	11.71%	0.0189%
NRG ENERGY INC	NRG	10,572.66	0.06%	1.72%	40.32%	42.39%	0.0235%
NORFOLK SOUTHERN CORP	NSC	35,858.12	0.19%	1.90%	12.93%	14.96%	0.0282%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
NETAPP INC	NTAP	13,491.76	0.07%	1.56%	12.80%	14.46%	0.0102%
NORTHERN TRUST CORP	NTRS	15,955.46	0.08%	1.92%	9.27%	11.28%	0.0095%
NORTHEAST UTILITIES	NU	15,450.31	0.08%	3.21%	6.73%	10.04%	0.0082%
NUCOR CORP	NUE	17,190.91	0.09%	2.75%	7.33%	10.18%	0.0092%
NVIDIA CORP	NVDA	10,705.53	0.06%	1.72%	10.59%	12.40%	0.0070%
NEWELL RUBBERMAID INC	NWL	9,434.28	0.05%	1.91%	9.90%	11.90%	0.0059%
NEWS CORP - CLASS A	NWSA	8,775.32	0.05%	0.00%	8.30%	8.30%	0.0038%
OWENS-ILLINOIS INC	OI	4,193.66	0.02%	0.00%	4.22%	4.22%	0.0009%
ONEOK INC	OKE	11,642.44	0.06%	4.04%	9.00%	13.22%	0.0081%
OMNICOM GROUP	OMC	18,377.70	0.10%	2.50%	7.80%	10.40%	0.0100%
ORACLE CORP	ORCL	180,841.52	0.95%	1.19%	9.67%	10.91%	0.1037%
O'REILLY AUTOMOTIVE INC	ORLY	18,228.61	0.10%	0.00%	19.19%	19.19%	0.0184%
OCCIDENTAL PETROLEUM CORP	OXY	67,059.02	0.35%	3.30%	8.00%	11.43%	0.0403%
PAYCHEX INC	PAYX	17,121.84	0.09%	3.15%	9.90%	13.21%	0.0119%
PEOPLE'S UNITED FINANCIAL	PBCT	4,548.71	0.02%	4.47%	13.44%	18.20%	0.0044%
PITNEY BOWES INC	PBI	4,992.59	N/A	3.02%	#VALUE!	N/A	N/A
PACCAR INC	PCAR	23,583.34	0.12%	1.76%	9.83%	11.68%	0.0145%
P G & E CORP	PCG	23,597.62	0.12%	3.68%	7.50%	11.31%	0.0140%
PLUM CREEK TIMBER CO	PCL	7,118.36	0.04%	4.35%	7.05%	11.55%	0.0043%
PRICELINE GROUP INC/THE	PCLN	61,483.25	0.32%	0.00%	22.80%	22.80%	0.0737%
PRECISION CASTPARTS CORP	PCP	32,233.77	0.17%	0.05%	10.10%	10.16%	0.0172%
PATTERSON COS INC	PDCO	4,713.59	0.02%	1.85%	10.88%	12.83%	0.0032%
PUBLIC SERVICE ENTERPRISE GP	PEG	19,960.12	0.10%	3.75%	5.04%	8.88%	0.0093%
PEPSICO INC	PEP	146,263.31	0.77%	2.58%	7.83%	10.51%	0.0808%
PEPSMART INC	PETM	7,227.39	0.04%	0.92%	11.25%	12.23%	0.0046%
PFIZER INC	PFE	191,035.93	1.00%	3.43%	2.30%	5.77%	0.0579%
PRINCIPAL FINANCIAL GROUP	PFG	15,521.77	0.08%	2.41%	13.50%	16.07%	0.0131%
PROCTER & GAMBLE CO/THE	PG	237,962.09	1.25%	2.96%	8.49%	11.57%	0.1447%
PROGRESSIVE CORP	PGR	15,896.80	0.08%	3.47%	8.25%	11.86%	0.0099%
PARKER HANNIFIN CORP	PH	19,062.25	0.10%	1.78%	9.19%	11.05%	0.0111%
PULTEGROUP INC	PHM	7,752.75	0.04%	1.03%	6.92%	7.98%	0.0033%
PERKINELMER INC	PKI	4,934.20	0.03%	0.64%	11.81%	12.48%	0.0032%
PROLOGIS INC	PLD	20,379.55	0.11%	3.24%	7.00%	10.35%	0.0111%
PALL CORP	PLL	9,979.42	0.05%	1.23%	11.53%	12.84%	0.0067%
PHILIP MORRIS INTERNATIONAL	PM	133,805.95	0.70%	4.49%	7.25%	11.91%	0.0837%
PNC FINANCIAL SERVICES GROUP	PNC	45,985.47	0.24%	2.15%	5.21%	7.42%	0.0179%
PENTAIR PLC	PNR	12,791.67	0.07%	1.61%	14.35%	16.07%	0.0108%
PINNACLE WEST CAPITAL	PNW	6,713.15	0.04%	3.81%	4.64%	8.54%	0.0030%
PEPCO HOLDINGS INC	POM	6,869.51	0.04%	3.96%	6.96%	11.06%	0.0040%
PPG INDUSTRIES INC	PPG	27,961.64	0.15%	1.28%	8.13%	9.46%	0.0139%
PPL CORP	PPL	23,583.45	0.12%	4.20%	4.52%	8.82%	0.0109%
PERRIGO CO PLC	PRGO	20,692.18	0.11%	0.28%	12.64%	12.93%	0.0141%
PRUDENTIAL FINANCIAL INC	PRU	38,435.36	0.20%	2.50%	10.67%	13.30%	0.0269%
PUBLIC STORAGE	PSA	32,042.34	0.17%	3.03%	4.37%	7.47%	0.0126%
PHILLIPS 66	PSX	39,709.05	0.21%	2.60%	7.73%	10.43%	0.0218%
PVH CORP	PVH	9,805.62	0.05%	0.13%	11.04%	11.18%	0.0058%
QUANTA SERVICES INC	PWR	7,059.64	0.04%	0.00%	11.45%	11.45%	0.0042%
PRAXAIR INC	PX	36,657.58	0.19%	2.06%	9.45%	11.61%	0.0224%
PIONEER NATURAL RESOURCES CO	PXD	25,361.78	0.13%	0.05%	18.00%	18.05%	0.0241%
QUALCOMM INC	QCOM	117,612.39	0.62%	2.41%	13.37%	15.94%	0.0985%
QEP RESOURCES INC	QEP	4,410.05	0.02%	0.33%	15.00%	15.35%	0.0036%
RYDER SYSTEM INC	R	4,839.33	0.03%	1.46%	13.20%	14.75%	0.0038%
REYNOLDS AMERICAN INC	RAI	34,214.66	0.18%	4.14%	6.76%	11.04%	0.0198%
REGENERON PHARMACEUTICALS	REGN	40,220.82	0.21%	0.00%	18.55%	18.55%	0.0392%
REGIONS FINANCIAL CORP	RF	13,978.10	0.07%	1.77%	4.45%	6.26%	0.0046%
ROBERT HALF INTL INC	RHI	7,802.63	0.04%	1.25%	16.49%	17.84%	0.0073%
RED HAT INC	RHT	11,714.48	0.06%	0.00%	16.72%	16.72%	0.0103%
TRANSOCEAN LTD	RIG	9,440.04	0.05%	10.97%	-9.00%	1.47%	0.0007%
RALPH LAUREN CORP	RL	15,284.35	0.08%	1.07%	12.58%	13.71%	0.0110%
ROCKWELL AUTOMATION INC	ROK	15,176.99	0.08%	2.27%	10.72%	13.11%	0.0105%
ROPER INDUSTRIES INC	ROP	16,050.99	0.08%	0.44%	12.13%	12.60%	0.0106%
ROSS STORES INC	ROST	17,059.32	0.09%	0.98%	11.27%	12.30%	0.0110%
RANGE RESOURCES CORP	RRC	12,109.35	0.06%	0.22%	35.19%	35.45%	0.0226%
REPUBLIC SERVICES INC	RSQ	14,132.67	0.07%	2.68%	4.35%	7.09%	0.0053%
RAYTHEON COMPANY	RTN	32,209.04	0.17%	2.31%	8.00%	10.41%	0.0176%
STARBUCKS CORP	SBUX	58,578.58	0.31%	1.63%	18.06%	19.83%	0.0610%
SCANA CORP	SCG	7,914.39	0.04%	3.78%	6.25%	10.15%	0.0042%
SCHWAB (CHARLES) CORP	SCHW	37,664.90	0.20%	0.84%	20.98%	21.90%	0.0434%
SPECTRA ENERGY CORP	SE	25,571.82	0.13%	3.59%	8.30%	12.04%	0.0162%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
SEALED AIR CORP	SEE	8,015.54	0.04%	1.37%	12.27%	13.72%	0.0058%
SHERWIN-WILLIAMS CO/THE	SHW	22,988.57	0.12%	0.92%	10.00%	10.96%	0.0132%
SIGMA-ALDRICH	SIAL	16,140.83	0.08%	0.67%	8.50%	9.20%	0.0078%
JM SMUCKER CO/THE	SJM	10,208.21	0.05%	2.52%	6.15%	8.74%	0.0047%
SCHLUMBERGER LTD	SLB	122,464.18	0.64%	1.63%	14.36%	16.10%	0.1036%
SNAP-ON INC	SNA	7,860.22	0.04%	1.33%	4.40%	5.76%	0.0024%
SANDISK CORP	SNDK	21,197.73	0.11%	1.08%	20.35%	21.54%	0.0240%
SCRIPPS NETWORKS INTER-CL A	SNI	10,303.97	0.05%	1.06%	11.80%	12.92%	0.0070%
SOUTHERN CO/THE	SO	41,949.27	0.22%	4.47%	4.25%	8.81%	0.0194%
SIMON PROPERTY GROUP INC	SPG	55,895.97	0.29%	2.90%	5.42%	8.40%	0.0247%
STAPLES INC	SPLS	8,658.06	0.05%	3.63%	0.38%	4.02%	0.0018%
STERICYCLE INC	SRCL	10,816.82	0.06%	0.00%	14.92%	14.92%	0.0085%
SEMPRA ENERGY	SRE	26,768.85	0.14%	2.42%	7.12%	9.62%	0.0135%
SUNTRUST BANKS INC	STI	20,607.96	0.11%	1.77%	8.39%	10.24%	0.0111%
ST JUDE MEDICAL INC	STJ	18,592.91	0.10%	1.62%	11.61%	13.33%	0.0130%
STATE STREET CORP	STT	31,758.87	0.17%	1.53%	9.80%	11.40%	0.0190%
SEAGATE TECHNOLOGY	STX	20,583.33	0.11%	3.21%	8.88%	12.23%	0.0132%
CONSTELLATION BRANDS INC-A	STZ	17,932.19	0.09%	0.00%	16.35%	16.35%	0.0154%
STANLEY BLACK & DECKER INC	SWK	14,977.51	0.08%	2.14%	10.33%	12.58%	0.0099%
SOUTHWESTERN ENERGY CO	SWN	11,924.69	0.06%	0.00%	12.61%	12.61%	0.0079%
SAFEWAY INC	SWY	8,035.23	0.04%	2.44%	9.33%	11.89%	0.0050%
STRYKER CORP	SYK	33,311.12	0.18%	1.37%	10.43%	11.88%	0.0208%
SYMANTEC CORP	SYMC	17,488.34	0.09%	2.37%	7.65%	10.11%	0.0093%
SYSCO CORP	SYI	22,668.80	0.12%	3.13%	9.84%	13.12%	0.0156%
AT&T INC	T	186,005.82	0.98%	5.16%	5.45%	10.75%	0.1050%
MOLSON COORS BREWING CO -B	TAP	14,098.32	0.07%	1.94%	5.27%	7.26%	0.0054%
TERADATA CORP	TDC	6,774.84	0.04%	0.00%	10.01%	10.01%	0.0036%
TECO ENERGY INC	TE	4,513.13	0.02%	4.60%	5.77%	10.50%	0.0025%
INTEGRYS ENERGY GROUP INC	TEG	5,722.16	0.03%	3.80%	5.00%	8.90%	0.0027%
TE CONNECTIVITY LTD	TEL	24,990.23	0.13%	1.86%	11.20%	13.17%	0.0173%
TARGET CORP	TGT	43,111.73	0.23%	2.71%	10.64%	13.49%	0.0306%
TENET HEALTHCARE CORP	THC	4,570.03	0.02%	0.00%	14.42%	14.42%	0.0035%
TIFFANY & CO	TIF	13,226.86	0.07%	1.48%	12.60%	14.17%	0.0098%
TJX COMPANIES INC	TJX	43,204.91	0.23%	1.10%	11.52%	12.68%	0.0288%
TORCHMARK CORP	TMK	6,847.68	0.04%	0.94%	8.05%	9.03%	0.0032%
THERMO FISHER SCIENTIFIC INC	TMO	47,471.02	0.25%	0.51%	12.09%	12.63%	0.0315%
TRIPADVISOR INC	TRIP	9,984.69	0.05%	0.00%	25.60%	25.60%	0.0134%
T ROWE PRICE GROUP INC	TROW	21,282.81	0.11%	2.15%	12.36%	14.64%	0.0164%
TRAVELERS COS INC/THE	TRV	33,925.04	0.18%	2.11%	6.44%	8.62%	0.0154%
TRACTOR SUPPLY COMPANY	TSCO	10,161.43	0.05%	0.81%	16.48%	17.36%	0.0093%
TYSON FOODS INC-CL A	TSN	14,296.54	0.08%	0.74%	14.95%	15.74%	0.0118%
TESORO CORP	TSO	9,079.56	0.05%	1.54%	18.67%	20.35%	0.0097%
TOTAL SYSTEM SERVICES INC	TSS	6,093.73	0.03%	1.22%	11.80%	13.09%	0.0042%
TIME WARNER CABLE	TWC	39,311.30	0.21%	2.12%	9.16%	11.37%	0.0235%
TIME WARNER INC	TWX	66,810.59	0.35%	1.59%	11.26%	12.94%	0.0454%
TEXAS INSTRUMENTS INC	TXN	54,489.23	0.29%	2.41%	10.58%	13.12%	0.0376%
TEXTRON INC	TXT	11,525.04	0.06%	0.19%	17.08%	17.29%	0.0105%
TYCO INTERNATIONAL LTD	TYC	17,722.02	0.09%	1.81%	12.70%	14.62%	0.0136%
UNDER ARMOUR INC-CLASS A	UA	14,775.01	0.08%	0.00%	23.39%	23.39%	0.0182%
UNIVERSAL HEALTH SERVICES-B	UHS	9,713.31	0.05%	0.29%	9.41%	9.72%	0.0050%
UNITEDHEALTH GROUP INC	UNH	91,295.33	0.48%	1.48%	10.42%	11.98%	0.0575%
UNUM GROUP	UNM	8,618.12	0.05%	1.81%	9.00%	10.89%	0.0049%
UNION PACIFIC CORP	UNP	107,296.50	0.56%	1.52%	13.72%	15.34%	0.0865%
UNITED PARCEL SERVICE-CL B	UPS	96,750.59	0.51%	2.51%	10.71%	13.35%	0.0679%
URBAN OUTFITTERS INC	URBN	4,143.60	0.02%	0.00%	15.64%	15.64%	0.0034%
UNITED RENTALS INC	URI	11,484.93	0.06%	0.00%	22.82%	22.82%	0.0138%
US BANCORP	USB	78,196.19	0.41%	2.23%	9.38%	11.71%	0.0481%
UNITED TECHNOLOGIES CORP	UTX	97,939.45	0.51%	2.21%	10.77%	13.10%	0.0674%
VISA INC-CLASS A SHARES	V	155,224.13	0.82%	0.79%	17.83%	18.69%	0.1524%
VARIAN MEDICAL SYSTEMS INC	VAR	9,049.73	0.05%	0.00%	9.90%	9.90%	0.0047%
VF CORP	VFC	30,658.61	0.16%	1.57%	13.20%	14.87%	0.0240%
VIACOM INC-CLASS B	VIAB	29,911.20	0.16%	1.85%	12.09%	14.05%	0.0221%
VALERO ENERGY CORP	VLO	25,775.57	0.14%	2.12%	7.65%	9.86%	0.0133%
VULCAN MATERIALS CO	VMC	8,726.65	0.05%	0.32%	6.67%	6.99%	0.0032%
VORNADO REALTY TRUST	VNO	20,192.80	0.11%	2.71%	8.93%	11.77%	0.0125%
VERISIGN INC	VRSN	7,342.90	0.04%	0.00%	11.00%	11.00%	0.0042%
VERTEX PHARMACEUTICALS INC	VRTX	26,796.53	0.14%	0.00%	22.00%	22.00%	0.0310%
VENTAS INC	VTR	20,196.13	0.11%	4.26%	4.08%	8.42%	0.0089%
VERIZON COMMUNICATIONS INC	VZ	213,441.04	1.12%	4.14%	6.45%	10.72%	0.1203%

		[4]	[5]	[6]	[7]	[8]	[9]	
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result	
WALGREEN CO	WAG	63,552.37	0.33%	2.00%	14.14%	16.29%	0.0544%	
WATERS CORP	WAT	9,366.94	0.05%	0.00%	9.83%	9.83%	0.0048%	
WESTERN DIGITAL CORP	WDC	22,867.71	0.12%	1.61%	5.00%	6.65%	0.0080%	
WISCONSIN ENERGY CORP	WEC	10,781.98	0.06%	3.27%	5.08%	8.43%	0.0048%	
WELLS FARGO & CO	WFC	276,552.26	1.45%	2.53%	12.36%	15.05%	0.2187%	
WHOLE FOODS MARKET INC	WFM	17,003.81	0.09%	1.12%	13.01%	14.20%	0.0127%	
WHIRLPOOL CORP	WHR	13,491.93	0.07%	1.63%	23.47%	25.29%	0.0179%	
WINDSTREAM HOLDINGS INC	WIN	5,885.98	0.03%	10.24%	-2.50%	7.61%	0.0024%	
WELLPOINT INC	WLP	33,829.05	0.18%	1.39%	9.47%	10.92%	0.0194%	
WASTE MANAGEMENT INC	WM	22,483.92	0.12%	3.05%	7.83%	11.00%	0.0130%	
WILLIAMS COS INC	WMB	40,370.46	0.21%	3.63%	12.00%	15.85%	0.0336%	
WAL-MART STORES INC	WMT	267,146.35	1.40%	2.31%	7.21%	9.61%	0.1349%	
WESTERN UNION CO	WU	9,464.78	0.05%	2.76%	8.29%	11.17%	0.0056%	
WEYERHAEUSER CO	WY	17,775.92	0.09%	3.00%	3.00%	6.05%	0.0056%	
WYNDHAM WORLDWIDE CORP	WYN	9,819.12	0.05%	1.76%	10.00%	11.85%	0.0061%	
WYNN RESORTS LTD	WYNN	18,637.21	0.10%	2.76%	13.60%	16.55%	0.0162%	
CIMAREX ENERGY CO	XEC	10,251.70	0.05%	0.53%	13.42%	13.99%	0.0075%	
XCEL ENERGY INC	XEL	16,707.86	0.09%	3.61%	5.25%	8.96%	0.0079%	
XL GROUP PLC	XL	8,910.59	0.05%	1.81%	1.12%	2.94%	0.0014%	
XILINX INC	XLNX	11,524.96	0.06%	2.60%	8.66%	11.37%	0.0069%	
EXXON MOBIL CORP	XOM	402,195.53	2.11%	2.85%	13.28%	16.29%	0.3443%	
DENTSPLY INTERNATIONAL INC	XRAY	7,383.61	0.04%	0.51%	10.38%	10.92%	0.0042%	
XEROX CORP	XRX	15,348.22	0.08%	1.91%	8.65%	10.64%	0.0086%	
XYLEM INC	XYL	6,834.84	0.04%	1.36%	11.37%	12.80%	0.0046%	
YAHOO! INC	YHOO	48,988.60	0.26%	0.00%	7.40%	7.40%	0.0190%	
YUM! BRANDS INC	YUM	32,702.59	0.17%	2.02%	12.26%	14.40%	0.0247%	
ZIONS BANCORPORATION	ZION	5,917.50	0.03%	0.55%	9.00%	9.57%	0.0030%	
ZIMMER HOLDINGS INC	ZMH	18,652.63	0.10%	0.76%	9.92%	10.72%	0.0105%	
ZOETIS INC	ZTS	21,602.09	0.11%	0.67%	11.42%	12.13%	0.0138%	
Total Market Capil							19,030,553.61	13.49%

Notes:

- [1] Equals sum of Col. [9]  
[2] Source: Bloomberg Professional  
[3] Equals [1] - [2]  
[4] Source: Bloomberg Professional  
[5] Equals weight in S&P 500 based on market capitalization  
[6] Source: Bloomberg Professional  
[7] Source: Bloomberg Professional  
[8] Equals  $([6] \times (1 + (0.5 \times [7]))) + [7]$   
[9] Equals Col. [5] x Col. [8]

Ex-Ante Market Risk Premium  
Market DCF Method Based - Value Line

[1]	[2]	[3]
S&P 500 Est. Required Market Return	Year Treasury (30- day average)	Implied Market Risk Premium
12.75%	3.04%	9.72%

Company	Ticker	[4] Market Capitalization	[5] Weight in Index	[6] Estimated Dividend Yield	[7] Long-Term Growth Est.	[8] DCF Result	[9] Weighted DCF Result
AGILENT TECHNOLOGIES INC	A	13,824.11	0.09%	1.27%	7.50%	8.82%	0.0079%
ALCOA INC	AA	19,733.50	0.13%	0.71%	17.00%	17.77%	0.0228%
APPLE INC	AAPL	661,671.25	4.30%	1.69%	12.50%	14.30%	0.6148%
ABBVIE INC	ABBV	101,391.35	N/A	3.07%	NA	N/A	N/A
AMERISOURCEBERGEN CORP	ABC	19,987.95	0.13%	1.31%	13.50%	14.90%	0.0194%
ABBOTT LABORATORIES	ABT	67,143.22	0.44%	1.99%	-4.00%	-2.05%	-0.0089%
ACE LTD	ACE	N/A	N/A	0.00%	NA	N/A	N/A
ACCENTURE PLC-CL A	ACN	N/A	N/A	0.00%	NA	N/A	N/A
ACTAVIS PLC	ACT	64,046.69	N/A	0.00%	NA	N/A	N/A
ADOBE SYSTEMS INC	ADBE	35,769.56	N/A	0.00%	NA	N/A	N/A
ANALOG DEVICES INC	ADI	15,776.63	0.10%	2.95%	11.00%	14.11%	0.0145%
ARCHER-DANIELS-MIDLAND CO	ADM	32,710.87	0.21%	1.89%	6.50%	8.45%	0.0180%
AUTOMATIC DATA PROCESSING	ADP	41,172.49	0.27%	2.30%	9.50%	11.91%	0.0319%
ALLIANCE DATA SYSTEMS CORP	ADS	16,886.67	N/A	0.00%	NA	N/A	N/A
AUTODESK INC	ADSK	13,477.37	N/A	0.00%	NA	N/A	N/A
ADT CORP/THE	ADT	6,111.94	N/A	2.18%	NA	N/A	N/A
AMEREN CORPORATION	AEE	10,285.30	0.07%	3.84%	2.50%	6.39%	0.0043%
AMERICAN ELECTRIC POWER	AEP	27,549.10	0.18%	3.73%	4.50%	8.31%	0.0149%
AES CORP	AES	9,761.60	0.06%	1.49%	10.50%	12.07%	0.0077%
AETNA INC	AET	29,739.75	0.19%	1.07%	10.50%	11.62%	0.0225%
AFLAC INC	AFL	26,647.72	0.17%	2.64%	7.50%	10.23%	0.0177%
ALLERGAN INC	AGN	58,450.76	0.38%	0.10%	13.50%	13.61%	0.0517%
AMERICAN INTERNATIONAL GROUP	AIG	76,295.20	0.50%	0.92%	9.50%	10.46%	0.0519%
APARTMENT INVT & MGMT CO -A	AIV	5,368.65	N/A	2.88%	NA	N/A	N/A
ASSURANT INC	AIZ	4,766.10	0.03%	1.59%	7.50%	9.14%	0.0028%
AKAMAI TECHNOLOGIES INC	AKAM	10,759.74	N/A	0.00%	NA	N/A	N/A
ALLSTATE CORP	ALL	28,068.46	0.18%	1.67%	16.00%	17.80%	0.0325%
ALLEGION PLC	ALLE	N/A	N/A	0.00%	NA	N/A	N/A
ALTERA CORP	ALTR	10,625.92	0.07%	2.06%	3.00%	5.09%	0.0035%
ALEXION PHARMACEUTICALS INC	ALXN	38,386.38	N/A	0.00%	NA	N/A	N/A
APPLIED MATERIALS INC	AMAT	27,560.07	0.18%	1.78%	17.00%	18.93%	0.0339%
AMETEK INC	AME	12,375.35	0.08%	0.69%	10.50%	11.23%	0.0090%
AFFILIATED MANAGERS GROUP	AMG	11,059.58	N/A	0.00%	NA	N/A	N/A
AMGEN INC	AMGN	122,353.77	0.80%	1.51%	8.50%	10.07%	0.0801%
AMERIPRISE FINANCIAL INC	AMP	23,994.70	0.16%	1.78%	13.50%	15.40%	0.0240%
AMERICAN TOWER CORP	AMT	39,626.48	0.26%	1.44%	16.50%	18.06%	0.0465%
AMAZON.COM INC	AMZN	146,532.14	N/A	0.00%	NA	N/A	N/A
AUTONATION INC	AN	6,547.64	N/A	0.00%	NA	N/A	N/A
AON PLC	AON	25,636.67	0.17%	1.11%	15.50%	16.69%	0.0278%
APACHE CORP	APA	27,133.06	0.18%	1.36%	8.00%	9.41%	0.0166%
ANADARKO PETROLEUM CORP	APC	45,307.02	0.29%	1.18%	74.50%	76.12%	0.2242%
AIR PRODUCTS & CHEMICALS INC	APD	28,870.06	0.19%	2.29%	9.00%	11.39%	0.0214%
AMPHENOL CORP-CL A	APH	15,692.97	0.10%	0.98%	8.00%	9.01%	0.0092%
AIRGAS INC	ARG	8,584.01	0.06%	1.92%	13.50%	15.55%	0.0087%
ALLEGHENY TECHNOLOGIES INC	ATI	3,443.71	0.02%	2.22%	17.50%	19.92%	0.0045%
AVALONBAY COMMUNITIES INC	AVB	20,903.47	0.14%	2.96%	129.00%	133.86%	0.1819%
AVAGO TECHNOLOGIES LTD	AVGO	N/A	N/A	0.00%	NA	N/A	N/A
AVON PRODUCTS INC	AVP	4,459.57	0.03%	2.27%	36.50%	39.18%	0.0114%
AVERY DENNISON CORP	AVY	4,381.05	0.03%	2.91%	10.00%	13.06%	0.0037%
AMERICAN EXPRESS CO	AXP	94,228.03	0.61%	1.14%	10.00%	11.19%	0.0685%
AUTOZONE INC	AZO	18,382.56	N/A	0.00%	NA	N/A	N/A
BOEING CO/THE	BA	91,632.89	0.60%	2.32%	11.00%	13.45%	0.0801%
BANK OF AMERICA CORP	BAC	181,093.27	1.18%	1.16%	31.00%	32.34%	0.3806%
BAXTER INTERNATIONAL INC	BAX	39,065.77	0.25%	2.92%	8.00%	11.03%	0.0280%
BED BATH & BEYOND INC	BBBY	13,183.46	N/A	0.00%	NA	N/A	N/A
BB&T CORP	BBT	27,068.80	0.18%	2.55%	11.50%	14.19%	0.0250%
BEST BUY CO INC	BBY	12,407.87	0.08%	2.16%	2.50%	4.69%	0.0038%
CR BARD INC	BCR	12,402.53	0.08%	0.53%	8.00%	8.55%	0.0069%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
BECTON DICKINSON AND CO	BDX	24,806.31	0.16%	1.69%	8.00%	9.75%	0.0157%
FRANKLIN RESOURCES INC	BEN	35,350.73	0.23%	0.84%	9.00%	9.88%	0.0227%
BROWN-FORMAN CORP-CLASS B	BF/B	N/A	N/A	0.00%	NA	N/A	N/A
BAKER HUGHES INC	BHI	25,415.19	0.17%	1.33%	13.00%	14.42%	0.0238%
BIOGEN IDEC INC	BIIB	75,092.57	N/A	0.00%	NA	N/A	N/A
BANK OF NEW YORK MELLON CORP	BK	44,566.86	0.29%	1.71%	10.00%	11.80%	0.0342%
BLACKROCK INC	BLK	57,590.30	0.37%	2.21%	9.00%	11.31%	0.0423%
BALL CORP	BLL	8,921.84	0.06%	0.79%	12.00%	12.84%	0.0074%
BEMIS COMPANY	BMS	3,899.35	0.03%	2.77%	8.00%	10.88%	0.0028%
BRISTOL-MYERS SQUIBB CO	BMJ	95,877.25	0.62%	2.46%	8.50%	11.06%	0.0689%
BROADCOM CORP-CL A	BRCM	24,739.68	0.16%	1.17%	2.50%	3.68%	0.0059%
BERKSHIRE HATHAWAY INC-CL B	BRK/B	N/A	N/A	0.00%	NA	N/A	N/A
BOSTON SCIENTIFIC CORP	BSX	17,788.23	N/A	0.00%	NA	N/A	N/A
BORGWARNER INC	BWA	12,573.78	0.08%	0.94%	14.00%	15.01%	0.0123%
BOSTON PROPERTIES INC	BXP	19,572.30	N/A	2.05%	NA	N/A	N/A
CITIGROUP INC	C	161,895.84	1.05%	0.08%	14.00%	14.08%	0.1482%
CA INC	CA	13,262.65	0.09%	3.38%	5.00%	8.46%	0.0073%
CONAGRA FOODS INC	CAG	14,754.28	0.10%	2.89%	8.00%	11.00%	0.0105%
CARDINAL HEALTH INC	CAH	26,695.39	0.17%	1.71%	12.00%	13.81%	0.0240%
CAMERON INTERNATIONAL CORP	CAM	11,396.58	N/A	0.00%	NA	N/A	N/A
CATERPILLAR INC	CAT	61,211.89	0.40%	2.72%	5.50%	8.29%	0.0330%
CHUBB CORP	CB	23,928.05	0.16%	1.97%	8.50%	10.55%	0.0164%
CBRE GROUP INC - A	CBG	10,881.42	N/A	0.00%	NA	N/A	N/A
CBS CORP-CLASS B NON VOTING	CBS	24,919.59	0.16%	1.16%	13.00%	14.24%	0.0231%
COCA-COLA ENTERPRISES	CCE	10,329.29	0.07%	2.33%	10.50%	12.96%	0.0087%
CROWN CASTLE INTL CORP	CCI	26,778.75	0.17%	4.07%	27.00%	31.62%	0.0550%
CARNIVAL CORP	CCL	N/A	N/A	0.00%	NA	N/A	N/A
CELGENE CORP	CELG	85,804.77	N/A	0.00%	NA	N/A	N/A
CERNER CORP	CERN	22,035.19	N/A	0.00%	NA	N/A	N/A
CF INDUSTRIES HOLDINGS INC	CF	13,285.21	0.09%	2.25%	4.50%	6.80%	0.0059%
CAREFUSION CORP	CFN	11,737.52	N/A	0.00%	NA	N/A	N/A
CHESAPEAKE ENERGY CORP	CHK	15,104.67	0.10%	1.50%	7.00%	8.55%	0.0084%
C.H. ROBINSON WORLDWIDE INC	CHRW	10,694.16	0.07%	1.92%	7.00%	8.99%	0.0062%
CIGNA CORP	CI	26,866.78	0.17%	0.04%	9.00%	9.04%	0.0158%
CINCINNATI FINANCIAL CORP	CINF	8,398.48	0.05%	3.43%	12.50%	16.15%	0.0088%
COLGATE-PALMOLIVE CO	CL	62,239.37	0.40%	2.10%	10.50%	12.71%	0.0514%
CLOROX COMPANY	CLX	13,187.36	0.09%	2.92%	8.50%	11.54%	0.0099%
COMERICA INC	CMA	8,727.40	0.06%	1.63%	11.00%	12.72%	0.0072%
COMCAST CORP-CLASS A	CMCSA	116,765.04	0.76%	1.68%	12.00%	13.78%	0.1046%
CME GROUP INC	CME	28,678.39	0.19%	2.20%	8.50%	10.79%	0.0201%
CHIPOTLE MEXICAN GRILL INC	CMG	20,801.97	N/A	0.00%	NA	N/A	N/A
CUMMINS INC	CMI	26,402.65	0.17%	2.13%	8.50%	10.72%	0.0184%
CMS ENERGY CORP	CMS	8,922.37	0.06%	3.33%	6.50%	9.93%	0.0058%
CENTERPOINT ENERGY INC	CNP	10,396.77	0.07%	3.87%	2.50%	6.42%	0.0043%
CONSOL ENERGY INC	CNX	8,928.68	0.06%	0.63%	4.00%	4.65%	0.0027%
CAPITAL ONE FINANCIAL CORP	COF	45,367.23	0.29%	1.47%	4.00%	5.50%	0.0162%
CABOT OIL & GAS CORP	COG	13,505.75	0.09%	0.24%	33.00%	33.28%	0.0292%
COACH INC	COH	9,562.97	0.06%	3.84%	0.50%	4.35%	0.0027%
ROCKWELL COLLINS INC	COL	11,457.75	0.07%	1.41%	7.00%	8.46%	0.0063%
CONOCOPHILLIPS	COP	86,594.73	0.56%	4.10%	3.50%	7.67%	0.0432%
COSTCO WHOLESALE CORP	COST	60,721.97	0.39%	1.04%	10.50%	11.59%	0.0457%
COVIDIEN PLC	COV	N/A	N/A	0.00%	NA	N/A	N/A
CAMPBELL SOUP CO	CPB	13,781.75	0.09%	2.85%	3.00%	5.89%	0.0053%
SALESFORCE.COM INC	CRM	39,096.04	N/A	0.00%	NA	N/A	N/A
COMPUTER SCIENCES CORP	CSC	8,664.08	0.06%	1.50%	7.00%	8.55%	0.0048%
CISCO SYSTEMS INC	CSCO	131,484.76	0.85%	3.03%	5.50%	8.61%	0.0736%
CSX CORP	CSX	36,461.39	0.24%	1.74%	9.00%	10.82%	0.0256%
CINTAS CORP	CTAS	8,324.23	0.05%	1.19%	11.00%	12.26%	0.0066%
CENTURYLINK INC	CTL	23,353.25	0.15%	5.33%	6.50%	12.01%	0.0182%
COGNIZANT TECH SOLUTIONS-A	CTSH	32,510.13	N/A	0.00%	NA	N/A	N/A
CITRIX SYSTEMS INC	CTXS	10,599.94	N/A	0.00%	NA	N/A	N/A
CABLEVISION SYSTEMS-NY GRP-A	CVC	5,001.96	0.03%	3.31%	19.00%	22.62%	0.0074%
CVS HEALTH CORP	CVS	103,323.50	0.67%	1.23%	11.00%	12.30%	0.0826%
CHEVRON CORP	CVX	220,139.87	1.43%	3.64%	4.50%	8.22%	0.1176%
DOMINION RESOURCES INC/VA	D	42,193.41	0.27%	3.30%	5.00%	8.38%	0.0230%
DELTA AIR LINES INC	DAL	36,892.36	0.24%	0.83%	11.50%	12.38%	0.0297%
DU PONT (E.I.) DE NEMOURS	DD	63,914.56	0.42%	2.67%	8.50%	11.28%	0.0469%
DEERE & CO	DE	31,347.41	0.20%	2.72%	6.00%	8.80%	0.0179%
DISCOVER FINANCIAL SERVICES	DFS	29,585.04	0.19%	1.45%	8.50%	10.02%	0.0193%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
DOLLAR GENERAL CORP	DG	19,672.26	N/A	0.00%	NA	N/A	N/A
QUEST DIAGNOSTICS INC	DGX	9,216.93	0.06%	2.10%	6.50%	8.67%	0.0052%
DR HORTON INC	DHI	8,853.02	0.06%	1.04%	25.00%	26.17%	0.0151%
DANAHER CORP	DHR	57,901.82	0.38%	0.49%	12.00%	12.52%	0.0471%
WALT DISNEY CO/THE	DIS	155,330.16	1.01%	0.96%	13.50%	14.52%	0.1466%
DISCOVERY COMMUNICATIONS-A	DISCA	4,879.41	N/A	0.00%	NA	N/A	N/A
DISCOVERY COMMUNICATIONS-C	DISCK	N/A	N/A	0.00%	NA	N/A	N/A
DELPHI AUTOMOTIVE PLC	DLPH	20,935.75	0.14%	1.42%	12.00%	13.50%	0.0184%
DOLLAR TREE INC	DLTR	12,746.76	N/A	0.00%	NA	N/A	N/A
DUN & BRADSTREET CORP	DNB	4,490.90	0.03%	1.41%	6.00%	7.45%	0.0022%
DENBURY RESOURCES INC	DNR	3,874.67	0.03%	2.14%	11.50%	13.76%	0.0035%
DIAMOND OFFSHORE DRILLING	DO	4,838.58	0.03%	1.40%	6.50%	7.94%	0.0025%
DOVER CORP	DOV	13,270.30	0.09%	1.97%	7.00%	9.04%	0.0078%
DOW CHEMICAL CO/THE	DOW	58,880.91	0.38%	3.37%	14.50%	18.11%	0.0693%
DR PEPPER SNAPPLE GROUP INC	DPS	13,746.66	0.09%	2.32%	7.50%	9.91%	0.0089%
DARDEN RESTAURANTS INC	DRI	7,468.03	0.05%	3.90%	8.00%	12.06%	0.0059%
DTE ENERGY COMPANY	DTE	14,120.34	0.09%	3.41%	5.00%	8.50%	0.0078%
DIRECTV	DTV	43,945.74	N/A	0.00%	NA	N/A	N/A
DUKE ENERGY CORP	DUK	55,868.92	0.36%	3.98%	4.00%	8.06%	0.0293%
DAVITA HEALTHCARE PARTNERS I	DVA	16,555.90	N/A	0.00%	NA	N/A	N/A
DEVON ENERGY CORP	DVN	25,887.85	0.17%	1.50%	6.50%	8.05%	0.0135%
ELECTRONIC ARTS INC	EA	12,886.74	N/A	0.00%	NA	N/A	N/A
EBAY INC	EBAY	67,547.49	N/A	0.00%	NA	N/A	N/A
ECOLAB INC	ECL	33,898.10	0.22%	0.97%	11.50%	12.53%	0.0276%
CONSOLIDATED EDISON INC	ED	18,159.06	0.12%	4.05%	1.50%	5.58%	0.0066%
EQUIFAX INC	EFX	9,445.58	0.06%	1.27%	10.00%	11.33%	0.0070%
EDISON INTERNATIONAL	EIX	20,096.02	0.13%	2.28%	2.50%	4.80%	0.0063%
ESTEE LAUDER COMPANIES-CL A	EL	27,541.00	0.18%	1.32%	14.00%	15.41%	0.0276%
EMC CORP/MA	EMC	59,867.02	0.39%	1.56%	9.00%	10.63%	0.0414%
EASTMAN CHEMICAL CO	EMN	12,412.40	0.08%	1.67%	13.00%	14.77%	0.0119%
EMERSON ELECTRIC CO	EMR	44,331.56	0.29%	2.94%	7.00%	10.04%	0.0289%
EOG RESOURCES INC	EOG	52,526.66	0.34%	0.69%	21.50%	22.26%	0.0760%
EQUITY RESIDENTIAL	EQR	25,358.16	N/A	2.89%	NA	N/A	N/A
EQT CORP	EQT	13,874.92	0.09%	0.13%	15.50%	15.64%	0.0141%
EXPRESS SCRIPTS HOLDING CO	ESRX	57,171.59	N/A	0.00%	NA	N/A	N/A
ESSEX PROPERTY TRUST INC	ESS	12,821.65	N/A	2.59%	NA	N/A	N/A
ENSCO PLC-CL A	ESV	9,079.84	0.06%	7.64%	17.00%	25.29%	0.0149%
E*TRADE FINANCIAL CORP	ETFC	6,694.08	N/A	0.00%	NA	N/A	N/A
EATON CORP PLC	ETN	31,560.90	0.21%	2.90%	9.00%	12.03%	0.0247%
ENTERGY CORP	ETR	14,741.69	0.10%	4.07%	-2.50%	1.52%	0.0015%
EDWARDS LIFESCIENCES CORP	EW	13,323.61	N/A	0.00%	NA	N/A	N/A
EXELON CORP	EXC	30,390.68	0.20%	3.45%	-5.00%	-1.64%	-0.0032%
EXPEDITORS INTL WASH INC	EXPD	8,474.06	0.06%	1.46%	6.50%	8.01%	0.0044%
EXPEDIA INC	EXPE	10,945.14	0.07%	0.83%	7.50%	8.36%	0.0059%
FORD MOTOR CO	F	57,460.90	0.37%	3.43%	8.00%	11.57%	0.0432%
FASTENAL CO	FAST	13,141.23	0.09%	2.24%	12.00%	14.37%	0.0123%
FACEBOOK INC-A	FB	206,997.71	N/A	0.00%	NA	N/A	N/A
FREEMPORT-MCMORAN INC	FCX	28,991.39	0.19%	4.38%	6.00%	10.51%	0.0198%
FAMILY DOLLAR STORES	FDO	8,942.93	0.06%	1.58%	4.50%	6.11%	0.0036%
FEDEX CORP	FDX	48,596.52	0.32%	0.47%	15.00%	15.50%	0.0490%
FIRSTENERGY CORP	FE	15,190.63	0.10%	3.96%	2.00%	6.00%	0.0059%
F5 NETWORKS INC	FFIV	9,345.70	N/A	0.00%	NA	N/A	N/A
FIDELITY NATIONAL INFORMATIO	FIS	16,826.43	0.11%	1.63%	10.00%	11.71%	0.0128%
FISERV INC	FISV	17,167.89	N/A	0.00%	NA	N/A	N/A
FIFTH THIRD BANCORP	FITB	16,735.58	0.11%	2.55%	10.00%	12.68%	0.0138%
FLIR SYSTEMS INC	FLIR	4,570.54	0.03%	1.21%	11.00%	12.28%	0.0036%
FLUOR CORP	FLR	10,168.42	0.07%	1.27%	7.00%	8.32%	0.0055%
FLOWSERVE CORP	FLS	8,963.61	0.06%	0.95%	12.00%	13.01%	0.0076%
FMC CORP	FMC	7,514.93	0.05%	1.06%	12.00%	13.12%	0.0064%
FOSSIL GROUP INC	FOSL	5,809.67	N/A	0.00%	NA	N/A	N/A
TWENTY-FIRST CENTURY FOX-A	FOXA	47,502.49	0.31%	0.72%	13.50%	14.27%	0.0441%
FIRST SOLAR INC	FSLR	4,766.04	N/A	0.00%	NA	N/A	N/A
FMC TECHNOLOGIES INC	FTI	12,623.01	N/A	0.00%	NA	N/A	N/A
FRONTIER COMMUNICATIONS CORI	FTR	6,744.01	0.04%	5.90%	13.50%	19.80%	0.0087%
AGL RESOURCES INC	GAS	6,175.95	0.04%	3.76%	9.00%	12.93%	0.0052%
GANNETT CO	GCI	6,973.66	0.05%	2.59%	6.50%	9.18%	0.0042%
GENERAL DYNAMICS CORP	GD	47,292.67	0.31%	1.76%	3.00%	4.78%	0.0147%
GENERAL ELECTRIC CO	GE	265,314.71	1.72%	3.32%	10.50%	13.99%	0.2413%
GENERAL GROWTH PROPERTIES	GGP	22,712.71	N/A	2.52%	NA	N/A	N/A



		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
GILEAD SCIENCES INC	GILD	157,202.79	N/A	0.00%	NA	N/A	N/A
GENERAL MILLS INC	GIS	30,791.15	0.20%	3.22%	7.00%	10.33%	0.0207%
CORNING INC	GLW	26,085.61	0.17%	1.93%	6.50%	8.49%	0.0144%
GENERAL MOTORS CO	GM	50,851.93	0.33%	3.82%	9.50%	13.50%	0.0446%
KEURIG GREEN MOUNTAIN INC	GMCR	24,998.37	0.16%	0.66%	18.00%	18.71%	0.0304%
GAMESTOP CORP-CLASS A	GME	5,009.17	0.03%	3.04%	11.50%	14.72%	0.0048%
GENWORTH FINANCIAL INC-CL A	GNW	4,618.94	N/A	0.00%	NA	N/A	N/A
GOOGLE INC-CL C	GOOG	185,068.70	N/A	0.00%	NA	N/A	N/A
GENUINE PARTS CO	GPC	15,368.24	0.10%	2.29%	9.00%	11.39%	0.0114%
GAP INC/THE	GPS	17,064.14	0.11%	2.25%	13.50%	15.90%	0.0176%
GARMIN LTD	GRMN	10,695.33	0.07%	3.43%	1.50%	4.95%	0.0034%
GOLDMAN SACHS GROUP INC	GS	82,858.27	0.54%	1.26%	13.00%	14.34%	0.0772%
GOODYEAR TIRE & RUBBER CO	GT	6,980.76	0.05%	0.96%	11.50%	12.51%	0.0057%
WW GRAINGER INC	GWW	16,661.88	0.11%	1.75%	12.50%	14.36%	0.0156%
HALLIBURTON CO	HAL	45,584.87	0.30%	1.35%	11.50%	12.93%	0.0383%
HARMAN INTERNATIONAL	HAR	7,301.75	0.05%	1.22%	25.00%	26.38%	0.0125%
HASBRO INC	HAS	6,910.00	0.04%	2.99%	7.00%	10.10%	0.0045%
HUNTINGTON BANCSHARES INC	HBAN	8,221.91	0.05%	2.36%	6.00%	8.43%	0.0045%
HUDSON CITY BANCORP INC	HCBK	5,218.91	N/A	1.62%	NA	N/A	N/A
HEALTH CARE REIT INC	HCN	23,346.77	0.15%	4.50%	94.50%	101.12%	0.1534%
HCP INC	HCP	20,170.83	N/A	5.04%	NA	N/A	N/A
HOME DEPOT INC	HD	133,246.28	0.87%	1.91%	14.50%	16.55%	0.1433%
HESS CORP	HES	24,246.39	0.16%	1.21%	-1.00%	0.21%	0.0003%
HARTFORD FINANCIAL SVCS GRP	HIG	17,211.78	0.11%	1.80%	11.00%	12.90%	0.0144%
HARLEY-DAVIDSON INC	HOG	14,495.23	0.09%	1.64%	16.00%	17.77%	0.0167%
HONEYWELL INTERNATIONAL INC	HON	75,979.54	0.49%	2.13%	9.50%	11.74%	0.0580%
STARWOOD HOTELS & RESORTS	HOT	14,046.71	0.09%	1.80%	14.00%	15.92%	0.0145%
HELMERICH & PAYNE	HP	8,635.43	0.06%	3.21%	9.50%	12.87%	0.0072%
HEWLETT-PACKARD CO	HPQ	67,857.76	N/A	1.75%	NA	N/A	N/A
H&R BLOCK INC	HRB	8,871.59	0.06%	2.43%	9.00%	11.54%	0.0067%
HORMEL FOODS CORP	HRL	14,534.92	0.09%	1.46%	11.50%	13.05%	0.0123%
HARRIS CORP	HRS	7,374.78	0.05%	2.65%	3.00%	5.69%	0.0027%
HOSPIRA INC	HSP	9,828.94	N/A	0.00%	NA	N/A	N/A
HOST HOTELS & RESORTS INC	HST	17,213.86	N/A	3.53%	NA	N/A	N/A
HERSHEY CO/THE	HSY	15,486.56	0.10%	2.22%	12.00%	14.35%	0.0144%
HUMANA INC	HUM	21,223.10	0.14%	0.82%	7.50%	8.35%	0.0115%
INTL BUSINESS MACHINES CORP	IBM	161,106.75	1.05%	2.72%	7.50%	10.32%	0.1080%
INTERCONTINENTAL EXCHANGE INC	ICE	25,157.33	0.16%	1.18%	18.50%	19.78%	0.0323%
INTL FLAVORS & FRAGRANCES	IFF	8,103.68	0.05%	1.88%	7.00%	8.94%	0.0047%
INTEL CORP	INTC	162,842.80	1.06%	2.70%	6.00%	8.78%	0.0929%
INTUIT INC	INTU	25,824.24	0.17%	1.12%	11.00%	12.18%	0.0204%
INTERNATIONAL PAPER CO	IP	23,180.16	0.15%	2.96%	12.00%	15.14%	0.0228%
INTERPUBLIC GROUP OF COS INC	IPG	8,117.82	0.05%	1.96%	13.50%	15.59%	0.0082%
INGERSOLL-RAND PLC	IR	16,599.96	0.11%	1.59%	12.50%	14.19%	0.0153%
IRON MOUNTAIN INC	IRM	7,432.42	0.05%	4.66%	5.50%	10.29%	0.0050%
INTUITIVE SURGICAL INC	ISRG	18,709.66	N/A	0.00%	NA	N/A	N/A
ILLINOIS TOOL WORKS	ITW	36,223.94	0.24%	2.08%	10.50%	12.69%	0.0299%
INVESCO LTD	IVZ	17,530.39	0.11%	2.45%	17.00%	19.65%	0.0224%
JABIL CIRCUIT INC	JBL	3,968.44	0.03%	1.50%	4.00%	5.53%	0.0014%
JOHNSON CONTROLS INC	JCI	32,910.77	0.21%	1.78%	12.00%	13.88%	0.0297%
JACOBS ENGINEERING GROUP INC	JEC	6,317.55	N/A	0.00%	NA	N/A	N/A
JOHNSON & JOHNSON	JNJ	305,298.93	1.98%	2.58%	6.50%	9.16%	0.1817%
JUNIPER NETWORKS INC	JNPR	8,846.04	0.06%	1.92%	16.50%	18.58%	0.0107%
JOY GLOBAL INC	JOY	5,165.04	0.03%	1.49%	2.00%	3.50%	0.0012%
JPMORGAN CHASE & CO	JPM	225,151.12	1.46%	2.64%	8.00%	10.75%	0.1573%
NORDSTROM INC	JWN	14,108.76	0.09%	1.81%	10.00%	11.90%	0.0109%
KELLOGG CO	K	22,651.17	0.15%	3.08%	7.50%	10.69%	0.0157%
KEYCORP	KEY	11,652.07	0.08%	1.93%	8.50%	10.51%	0.0080%
KIMCO REALTY CORP	KIM	10,178.65	N/A	3.90%	NA	N/A	N/A
KLA-TENCOR CORP	KLAC	13,066.05	0.08%	2.51%	6.00%	8.58%	0.0073%
KIMBERLY-CLARK CORP	KMB	42,485.94	0.28%	2.96%	8.50%	11.59%	0.0320%
KINDER MORGAN INC	KMI	39,463.47	0.26%	4.57%	15.00%	19.91%	0.0511%
CARMAX INC	KMX	12,029.81	N/A	0.00%	NA	N/A	N/A
COCA-COLA CO/THE	KO	187,425.04	1.22%	2.86%	8.00%	10.97%	0.1336%
MICHAEL KORS HOLDINGS LTD	KORS	N/A	N/A	0.00%	NA	N/A	N/A
KROGER CO	KR	28,674.80	0.19%	1.27%	10.50%	11.83%	0.0221%
KRAFT FOODS GROUP INC	KRFT	33,933.93	N/A	3.83%	NA	N/A	N/A
KOHL'S CORP	KSS	11,475.73	0.07%	2.69%	7.00%	9.79%	0.0073%
KANSAS CITY SOUTHERN	KSU	13,753.06	0.09%	0.91%	14.00%	14.97%	0.0134%

Company	Ticker	[4] Market Capitalization	[5] Weight in Index	[6] Estimated Dividend Yield	[7] Long-Term Growth Est.	[8] DCF Result	[9] Weighted DCF Result
LOEWS CORP	L	16,073.23	0.10%	0.58%	13.00%	13.62%	0.0142%
L BRANDS INC	LB	22,525.64	0.15%	1.75%	9.50%	11.33%	0.0166%
LEGETT & PLATT INC	LEG	5,621.98	0.04%	2.99%	12.50%	15.68%	0.0057%
LENNAR CORP-A	LEN	7,942.19	0.05%	0.35%	27.00%	27.40%	0.0141%
LABORATORY CRP OF AMER HLDG	LH	8,412.82	N/A	0.00%	NA	N/A	N/A
L-3 COMMUNICATIONS HOLDINGS	LLL	10,192.97	0.07%	2.05%	4.00%	6.09%	0.0040%
LINEAR TECHNOLOGY CORP	LLTC	10,266.42	0.07%	2.51%	10.50%	13.14%	0.0088%
ELI LILLY & CO	LLY	75,356.94	0.49%	2.91%	-2.50%	0.37%	0.0018%
LEGG MASON INC	LM	6,287.46	0.04%	1.19%	14.50%	15.77%	0.0064%
LOCKHEED MARTIN CORP	LMT	59,384.42	0.39%	3.21%	7.50%	10.83%	0.0418%
LINCOLN NATIONAL CORP	LNC	14,639.17	0.10%	1.43%	8.00%	9.48%	0.0090%
LORILLARD INC	LO	22,357.24	0.15%	3.96%	12.00%	16.20%	0.0235%
LOWE'S COS INC	LOW	57,854.52	0.38%	1.58%	15.00%	16.70%	0.0628%
LAM RESEARCH CORP	LRCX	12,534.00	0.08%	0.91%	24.00%	25.02%	0.0204%
LEUCADIA NATIONAL CORP	LUK	8,974.93	0.06%	1.02%	4.50%	5.54%	0.0032%
SOUTHWEST AIRLINES CO	LUV	26,783.24	0.17%	0.61%	17.00%	17.66%	0.0307%
LYONDELLBASELL INDU-CL A	LYB	N/A	N/A	0.00%	NA	N/A	N/A
MACY'S INC	M	21,742.03	0.14%	2.03%	13.50%	15.67%	0.0221%
MASTERCARD INC-CLASS A	MA	97,070.39	0.63%	0.52%	15.00%	15.56%	0.0982%
MACERICH CO/THE	MAC	9,617.94	N/A	3.79%	NA	N/A	N/A
MARRIOTT INTERNATIONAL -CL A	MAR	22,127.66	0.14%	1.04%	14.00%	15.11%	0.0217%
MASCO CORP	MAS	8,258.11	0.05%	1.55%	33.50%	35.31%	0.0190%
MATTEL INC	MAT	10,559.54	0.07%	4.86%	9.50%	14.59%	0.0100%
MCDONALD'S CORP	MCD	92,921.52	0.60%	3.57%	7.00%	10.69%	0.0646%
MICROCHIP TECHNOLOGY INC	MCHP	8,619.43	0.06%	3.29%	9.00%	12.43%	0.0070%
MCKESSON CORP	MCK	47,494.07	0.31%	0.47%	14.00%	14.51%	0.0448%
MOODY'S CORP	MCO	21,047.74	0.14%	1.12%	12.50%	13.69%	0.0187%
MONDELEZ INTERNATIONAL INC-A	MDLZ	64,223.46	0.42%	1.58%	4.50%	6.12%	0.0255%
MEDTRONIC INC	MDT	68,195.41	0.44%	1.78%	6.50%	8.34%	0.0370%
METLIFE INC	MET	61,971.09	0.40%	2.54%	7.50%	10.14%	0.0408%
MCGRAW HILL FINANCIAL INC	MHFI	24,625.05	N/A	1.33%	NA	N/A	N/A
MOHAWK INDUSTRIES INC	MHK	10,390.01	N/A	0.00%	NA	N/A	N/A
MEAD JOHNSON NUTRITION CO	MJN	20,132.29	0.13%	1.51%	12.00%	13.60%	0.0178%
MCCORMICK & CO-NON VTG SHRS	MKC	8,579.48	0.06%	2.02%	8.50%	10.61%	0.0059%
MARTIN MARIETTA MATERIALS	MLM	8,383.86	0.05%	1.27%	20.50%	21.90%	0.0119%
MARSH & MCLENNAN COS	MMC	30,268.71	0.20%	2.00%	13.00%	15.13%	0.0298%
3M CO	MMM	101,473.69	0.66%	2.17%	7.50%	9.75%	0.0643%
MALLINCKRODT PLC	MNK	9,886.83	N/A	0.00%	NA	N/A	N/A
MONSTER BEVERAGE CORP	MNST	18,131.73	N/A	0.00%	NA	N/A	N/A
ALTRIA GROUP INC	MO	97,736.44	0.64%	4.22%	11.00%	15.45%	0.0981%
MONSANTO CO	MON	57,832.20	0.38%	1.65%	12.50%	14.25%	0.0536%
MOSAIC CO/THE	MOS	16,857.79	0.11%	2.21%	6.00%	8.28%	0.0091%
MARATHON PETROLEUM CORP	MPC	26,212.06	0.17%	2.11%	10.00%	12.21%	0.0208%
MERCK & CO. INC.	MRK	169,740.98	1.10%	2.97%	2.00%	5.00%	0.0551%
MARATHON OIL CORP	MRO	21,562.96	0.14%	2.57%	4.00%	6.62%	0.0093%
MORGAN STANLEY	MS	70,153.32	0.46%	1.11%	30.00%	31.28%	0.1426%
MICROSOFT CORP	MSFT	408,927.94	2.66%	2.54%	8.50%	11.15%	0.2963%
MOTOROLA SOLUTIONS INC	MSI	15,509.72	0.10%	2.14%	8.00%	10.22%	0.0103%
M & T BANK CORP	MTB	16,561.56	0.11%	2.23%	7.00%	9.31%	0.0100%
MICRON TECHNOLOGY INC	MU	35,359.61	N/A	0.00%	NA	N/A	N/A
MURPHY OIL CORP	MUR	9,110.82	0.06%	2.67%	9.00%	11.79%	0.0070%
MEADWESTVACO CORP	MWV	7,425.58	0.05%	2.25%	11.00%	13.37%	0.0065%
MYLAN INC	MYL	20,484.02	N/A	0.00%	NA	N/A	N/A
NAVIENT CORP	NAVI	8,524.35	N/A	2.98%	NA	N/A	N/A
NOBLE ENERGY INC	NBL	19,536.66	0.13%	1.30%	17.00%	18.41%	0.0234%
NABORS INDUSTRIES LTD	NBR	N/A	N/A	0.00%	NA	N/A	N/A
NASDAQ OMX GROUP/THE	NDAQ	7,342.05	0.05%	1.36%	8.50%	9.92%	0.0047%
NOBLE CORP PLC	NE	5,321.63	0.03%	6.96%	19.50%	27.14%	0.0094%
NEXTERA ENERGY INC	NEE	44,639.01	0.29%	2.81%	4.50%	7.38%	0.0214%
NEWMONT MINING CORP	NEM	9,098.04	0.06%	0.54%	-17.50%	-17.01%	-0.0101%
NETFLIX INC	NFLX	22,857.93	N/A	0.00%	NA	N/A	N/A
NEWFIELD EXPLORATION CO	NFX	4,514.83	N/A	0.00%	NA	N/A	N/A
NISOURCE INC	NI	13,019.47	0.08%	2.50%	10.50%	13.13%	0.0111%
NIKE INC -CL B	NKE	82,808.15	0.54%	1.00%	19.00%	20.10%	0.0822%
NIELSEN NV	NLSN	18,157.54	0.11%	2.32%	13.00%	15.47%	0.0162%
NORTHROP GRUMMAN CORP	NOC	27,714.26	0.18%	2.06%	5.00%	7.11%	0.0128%
NATIONAL OILWELL VARCO INC	NOV	30,794.65	0.20%	2.52%	11.50%	14.17%	0.0284%
NRG ENERGY INC	NRG	10,667.34	0.07%	1.73%	7.00%	8.79%	0.0061%
NORFOLK SOUTHERN CORP	NSC	35,725.08	0.23%	1.95%	8.50%	10.54%	0.0245%

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NETAPP INC	NTAP	13,116.63	0.09%	1.56%	9.50%	11.13%	0.0095%
NORTHERN TRUST CORP	NTRS	15,901.30	0.10%	1.95%	9.50%	11.54%	0.0119%
NORTHEAST UTILITIES	NU	15,608.69	0.10%	3.17%	8.00%	11.30%	0.0115%
NUCOR CORP	NUE	17,021.84	0.11%	2.78%	22.00%	25.08%	0.0278%
NVIDIA CORP	NVDA	10,594.44	0.07%	1.73%	6.50%	8.29%	0.0057%
NEWELL RUBBERMAID INC	NWL	9,455.97	0.06%	1.97%	12.50%	14.59%	0.0090%
NEWS CORP - CLASS A	NWSA	5,702.89	N/A	0.00%	NA	N/A	N/A
OWENS-ILLINOIS INC	OI	4,213.45	N/A	0.00%	NA	N/A	N/A
ONEOK INC	OKE	11,586.22	0.08%	4.18%	10.00%	14.39%	0.0108%
OMNICOM GROUP	OMC	18,275.98	0.12%	2.73%	11.50%	14.38%	0.0171%
ORACLE CORP	ORCL	180,442.70	1.17%	1.20%	9.50%	10.75%	0.1261%
O'REILLY AUTOMOTIVE INC	ORLY	18,425.46	N/A	0.00%	NA	N/A	N/A
OCCIDENTAL PETROLEUM CORP	OXY	66,911.68	0.43%	3.25%	3.50%	6.81%	0.0296%
PAYCHEX INC	PAYX	17,208.93	0.11%	3.20%	9.00%	12.35%	0.0138%
PEOPLE'S UNITED FINANCIAL	PBCT	4,556.42	0.03%	4.44%	14.00%	18.75%	0.0056%
PITNEY BOWES INC	PBI	4,990.58	0.03%	3.04%	2.00%	5.07%	0.0016%
PACCAR INC	PCAR	23,530.21	0.15%	1.32%	12.50%	13.90%	0.0213%
P G & E CORP	PCG	23,645.13	0.15%	3.63%	2.50%	6.18%	0.0095%
PLUM CREEK TIMBER CO	PCL	7,172.88	0.05%	4.31%	12.50%	17.08%	0.0080%
PRICELINE GROUP INC/THE	PCLN	61,152.33	N/A	0.00%	NA	N/A	N/A
PRECISION CASTPARTS CORP	PCP	32,319.36	0.21%	0.05%	13.00%	13.06%	0.0274%
PATTERSON COS INC	PDCO	4,764.68	0.03%	1.77%	11.50%	13.37%	0.0041%
PUBLIC SERVICE ENTERPRISE GP	PEG	19,874.11	0.13%	3.73%	-0.50%	3.22%	0.0042%
PEPSICO INC	PEP	147,475.56	0.96%	2.70%	8.50%	11.31%	0.1084%
PETSMART INC	PETM	7,236.34	0.05%	1.07%	14.00%	15.15%	0.0071%
PFIZER INC	PFE	191,665.99	1.25%	3.42%	10.50%	14.10%	0.1756%
PRINCIPAL FINANCIAL GROUP	PFG	15,637.77	0.10%	2.55%	9.50%	12.17%	0.0124%
PROCTER & GAMBLE CO/THE	PG	239,407.74	1.56%	2.88%	9.00%	12.01%	0.1868%
PROGRESSIVE CORP	PGR	16,014.65	0.10%	1.83%	14.00%	15.95%	0.0166%
PARKER HANNIFIN CORP	PH	18,873.46	0.12%	1.96%	8.00%	10.04%	0.0123%
PULTEGROUP INC	PHM	7,715.68	0.05%	1.55%	31.50%	33.29%	0.0167%
PERKINELMER INC	PKI	4,918.41	0.03%	0.64%	8.50%	9.17%	0.0029%
PROLOGIS INC	PLD	20,549.55	N/A	3.22%	NA	N/A	N/A
PALL CORP	PLL	10,020.86	0.07%	1.31%	11.00%	12.38%	0.0081%
PHILIP MORRIS INTERNATIONAL	PM	136,509.40	0.89%	4.55%	9.00%	13.76%	0.1220%
PNC FINANCIAL SERVICES GROUP	PNC	46,217.02	0.30%	2.18%	7.00%	9.26%	0.0278%
PENTAIR PLC	PNR	12,789.79	0.08%	1.75%	16.50%	18.40%	0.0153%
PINNACLE WEST CAPITAL	PNW	6,762.85	0.04%	3.85%	4.00%	7.93%	0.0035%
PEPCO HOLDINGS INC	POM	6,877.06	0.04%	3.92%	5.50%	9.53%	0.0043%
PPG INDUSTRIES INC	PPG	28,164.74	0.18%	1.31%	13.00%	14.40%	0.0264%
PPL CORP	PPL	23,749.72	0.15%	4.16%	0.00%	4.16%	0.0064%
PERRIGO CO PLC	PRGO	20,834.18	0.14%	0.27%	12.00%	12.29%	0.0166%
PRUDENTIAL FINANCIAL INC	PRU	38,714.74	0.25%	2.72%	10.00%	12.86%	0.0324%
PUBLIC STORAGE	PSA	32,306.67	N/A	3.01%	NA	N/A	N/A
PHILLIPS 66	PSX	39,205.33	N/A	2.74%	NA	N/A	N/A
PVH CORP	PVH	9,788.29	0.06%	0.13%	13.50%	13.63%	0.0087%
QUANTA SERVICES INC	PWR	7,267.19	N/A	0.00%	NA	N/A	N/A
PRAXAIR INC	PX	36,925.70	0.24%	2.06%	10.50%	12.67%	0.0304%
PIONEER NATURAL RESOURCES CC	PXD	24,593.48	0.16%	0.05%	23.00%	23.05%	0.0368%
QUALCOMM INC	QCOM	117,462.76	0.76%	2.39%	9.50%	12.00%	0.0916%
QEP RESOURCES INC	QEP	4,292.95	0.03%	0.33%	11.50%	11.85%	0.0033%
RYDER SYSTEM INC	R	4,843.61	0.03%	1.60%	14.50%	16.22%	0.0051%
REYNOLDS AMERICAN INC	RAI	34,597.21	0.22%	4.12%	9.50%	13.81%	0.0311%
REGENERON PHARMACEUTICALS	REGN	40,933.38	N/A	0.00%	NA	N/A	N/A
REGIONS FINANCIAL CORP	RF	13,998.75	0.09%	1.96%	72.50%	75.17%	0.0684%
ROBERT HALF INTL INC	RHI	7,814.87	0.05%	1.25%	12.00%	13.32%	0.0068%
RED HAT INC	RHT	11,481.56	N/A	0.00%	NA	N/A	N/A
TRANSOCEAN LTD	RIG	9,523.34	0.06%	11.08%	13.50%	25.33%	0.0157%
RALPH LAUREN CORP	RL	15,187.87	0.10%	1.04%	9.50%	10.59%	0.0105%
ROCKWELL AUTOMATION INC	ROK	14,912.24	0.10%	2.31%	8.50%	10.91%	0.0106%
ROPER INDUSTRIES INC	ROP	16,004.09	0.10%	0.51%	11.00%	11.54%	0.0120%
ROSS STORES INC	ROST	17,323.73	0.11%	0.97%	12.00%	13.02%	0.0147%
RANGE RESOURCES CORP	RRC	11,928.85	0.08%	0.22%	38.00%	38.26%	0.0297%
REPUBLIC SERVICES INC	RSG	14,090.01	0.09%	2.83%	8.50%	11.45%	0.0105%
RAYTHEON COMPANY	RTN	31,798.91	0.21%	2.34%	9.50%	11.95%	0.0247%
STARBUCKS CORP	SBUX	58,510.97	0.38%	1.64%	18.50%	20.30%	0.0772%
SCANA CORP	SCG	7,981.37	0.05%	3.73%	5.00%	8.82%	0.0046%
SCHWAB (CHARLES) CORP	SCHW	37,593.09	0.24%	0.83%	10.50%	11.38%	0.0278%
SPECTRA ENERGY CORP	SE	25,404.06	0.17%	3.80%	3.00%	6.86%	0.0113%

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SEALED AIR CORP	SEE	8,104.24	0.05%	1.35%	19.50%	20.98%	0.0111%
SHERWIN-WILLIAMS CO/THE	SHW	23,004.00	0.15%	0.92%	15.50%	16.50%	0.0247%
SIGMA-ALDRICH	SIAL	16,139.59	0.10%	0.68%	7.50%	8.20%	0.0086%
JM SMUCKER CO/THE	SJM	10,168.46	0.07%	2.55%	8.50%	11.16%	0.0074%
SCHLUMBERGER LTD	SLB	122,052.41	0.79%	1.64%	15.00%	16.77%	0.1330%
SNAP-ON INC	SNA	7,878.28	0.05%	1.56%	9.00%	10.63%	0.0054%
SANDISK CORP	SNDK	20,957.24	0.14%	1.29%	11.50%	12.87%	0.0175%
SCRIPPS NETWORKS INTER-CL A	SNI	10,077.73	0.07%	1.09%	9.00%	10.14%	0.0066%
SOUTHERN CO/THE	SO	42,237.22	0.27%	4.46%	3.50%	8.04%	0.0221%
SIMON PROPERTY GROUP INC	SPG	56,439.84	N/A	2.92%	NA	N/A	N/A
STAPLES INC	SPLS	8,629.07	0.06%	3.59%	-1.50%	2.06%	0.0012%
STERICYCLE INC	SRCL	10,865.18	N/A	0.00%	NA	N/A	N/A
SEMPRA ENERGY	SRE	26,963.33	0.18%	2.39%	4.50%	6.94%	0.0122%
SUNTRUST BANKS INC	STI	20,743.52	0.13%	2.01%	26.00%	28.27%	0.0381%
ST JUDE MEDICAL INC	STJ	18,787.34	0.12%	1.64%	8.50%	10.21%	0.0125%
STATE STREET CORP	STT	31,930.02	0.21%	1.55%	10.00%	11.63%	0.0241%
SEAGATE TECHNOLOGY	STX	N/A	N/A	0.00%	NA	N/A	N/A
CONSTELLATION BRANDS INC-A	STZ	15,824.81	N/A	0.00%	NA	N/A	N/A
STANLEY BLACK & DECKER INC	SWK	15,016.66	0.10%	2.16%	10.00%	12.27%	0.0120%
SOUTHWESTERN ENERGY CO	SWN	11,850.54	N/A	0.00%	NA	N/A	N/A
SAFEWAY INC	SWY	8,035.23	0.05%	2.64%	6.50%	9.22%	0.0048%
STRYKER CORP	SYK	33,610.04	0.22%	1.38%	7.50%	8.93%	0.0195%
SYMANTEC CORP	SYMC	17,633.26	0.11%	2.39%	15.00%	17.57%	0.0201%
SYSCO CORP	SY	22,774.63	0.15%	2.98%	12.00%	15.16%	0.0224%
AT&T INC	T	184,709.07	1.20%	5.20%	7.00%	12.38%	0.1486%
MOLSON COORS BREWING CO -B	TAP	N/A	N/A	0.00%	NA	N/A	N/A
TERADATA CORP	TDC	6,823.80	N/A	0.00%	NA	N/A	N/A
TECO ENERGY INC	TE	4,531.90	0.03%	4.55%	2.00%	6.60%	0.0019%
INTEGRYS ENERGY GROUP INC	TEG	5,701.36	0.04%	3.79%	3.50%	7.35%	0.0027%
TE CONNECTIVITY LTD	TEL	N/A	N/A	0.00%	NA	N/A	N/A
TARGET CORP	TGT	42,775.83	0.28%	3.12%	6.00%	9.21%	0.0256%
TENET HEALTHCARE CORP	THC	4,711.54	N/A	0.00%	NA	N/A	N/A
TIFFANY & CO	TIF	13,357.47	0.09%	1.48%	11.50%	13.06%	0.0113%
TJX COMPANIES INC	TJX	44,001.82	0.29%	1.10%	12.50%	13.67%	0.0391%
TORCHMARK CORP	TMK	6,854.10	0.04%	0.95%	5.50%	6.48%	0.0029%
THERMO FISHER SCIENTIFIC INC	TMO	47,298.96	0.31%	0.51%	11.00%	11.53%	0.0355%
TRIPADVISOR INC	TRIP	9,864.61	N/A	0.00%	NA	N/A	N/A
T ROWE PRICE GROUP INC	TROW	21,443.61	0.14%	2.13%	12.50%	14.76%	0.0206%
TRAVELERS COS INC/THE	TRV	34,210.01	0.22%	2.14%	9.50%	11.74%	0.0261%
TRACTOR SUPPLY COMPANY	TSCO	10,052.69	0.07%	0.87%	16.00%	16.94%	0.0111%
TYSON FOODS INC-CL A	TSN	15,465.68	0.10%	0.75%	13.50%	14.30%	0.0144%
TESORO CORP	TSO	8,962.13	0.06%	1.65%	15.50%	17.27%	0.0101%
TOTAL SYSTEM SERVICES INC	TSS	6,188.54	0.04%	1.19%	9.50%	10.74%	0.0043%
TIME WARNER CABLE	TWC	39,563.68	0.26%	2.20%	10.00%	12.31%	0.0316%
TIME WARNER INC	TWX	66,223.62	0.43%	1.64%	12.50%	14.24%	0.0613%
TEXAS INSTRUMENTS INC	TXN	54,061.43	0.35%	2.65%	8.00%	10.76%	0.0378%
TEXTRON INC	TXT	11,635.47	0.08%	0.19%	17.00%	17.21%	0.0130%
TYCO INTERNATIONAL LTD	TYC	N/A	N/A	0.00%	NA	N/A	N/A
UNDER ARMOUR INC-CLASS A	UA	14,755.78	N/A	0.00%	NA	N/A	N/A
UNIVERSAL HEALTH SERVICES-B	UHS	9,779.23	0.06%	0.40%	9.00%	9.42%	0.0060%
UNITEDHEALTH GROUP INC	UNH	92,043.96	0.60%	1.57%	10.00%	11.65%	0.0697%
UNUM GROUP	UNM	8,802.08	0.06%	1.91%	7.50%	9.48%	0.0054%
UNION PACIFIC CORP	UNP	106,914.15	0.69%	1.66%	11.00%	12.75%	0.0886%
UNITED PARCEL SERVICE-CL B	UPS	97,574.31	0.63%	2.47%	7.50%	10.06%	0.0638%
URBAN OUTFITTERS INC	URBN	4,251.06	N/A	0.00%	NA	N/A	N/A
UNITED RENTALS INC	URI	11,333.20	N/A	0.00%	NA	N/A	N/A
US BANCORP	USB	78,607.73	0.51%	2.23%	5.50%	7.79%	0.0398%
UNITED TECHNOLOGIES CORP	UTX	98,586.70	0.64%	2.18%	9.50%	11.79%	0.0755%
VISA INC-CLASS A SHARES	V	156,358.29	1.02%	0.76%	15.00%	15.82%	0.1608%
VARIAN MEDICAL SYSTEMS INC	VAR	9,151.86	N/A	0.00%	NA	N/A	N/A
VF CORP	VFC	30,809.75	0.20%	1.79%	13.50%	15.41%	0.0309%
VIACOM INC-CLASS B	VIAB	26,491.46	0.17%	1.91%	13.50%	15.53%	0.0267%
VALERO ENERGY CORP	VLO	25,895.45	0.17%	2.14%	15.00%	17.30%	0.0291%
VULCAN MATERIALS CO	VMC	8,637.08	N/A	0.37%	NA	N/A	N/A
VORNADO REALTY TRUST	VNO	20,303.54	0.13%	2.72%	6.50%	9.30%	0.0123%
VERISIGN INC	VRSN	7,288.41	N/A	0.00%	NA	N/A	N/A
VERTEX PHARMACEUTICALS INC	VRTX	27,111.64	N/A	0.00%	NA	N/A	N/A
VENTAS INC	VTR	20,458.04	N/A	4.24%	NA	N/A	N/A
VERIZON COMMUNICATIONS INC	VZ	212,465.87	1.38%	4.33%	10.50%	15.06%	0.2079%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
WALGREEN CO	WAG	63,637.91	0.41%	2.00%	11.00%	13.11%	0.0542%
WATERS CORP	WAT	9,470.15	N/A	0.00%	NA	N/A	N/A
WESTERN DIGITAL CORP	WDC	22,716.22	0.15%	1.64%	6.00%	7.69%	0.0114%
WISCONSIN ENERGY CORP	WEC	10,734.61	0.07%	3.23%	6.00%	9.33%	0.0065%
WELLS FARGO & CO	WFC	276,967.25	1.80%	2.62%	8.00%	10.72%	0.1930%
WHOLE FOODS MARKET INC	WFM	16,879.17	0.11%	1.10%	13.50%	14.67%	0.0161%
WHIRLPOOL CORP	WHR	13,643.78	0.09%	1.71%	7.50%	9.28%	0.0082%
WINDSTREAM HOLDINGS INC	WIN	5,870.91	0.04%	10.32%	4.00%	14.53%	0.0055%
WELLPOINT INC	WLP	34,182.63	0.22%	1.38%	6.50%	7.93%	0.0176%
WASTE MANAGEMENT INC	WM	22,607.56	0.15%	3.04%	6.50%	9.64%	0.0142%
WILLIAMS COS INC	WMB	40,273.31	0.26%	4.10%	8.00%	12.26%	0.0321%
WAL-MART STORES INC	WMT	267,275.23	1.74%	2.42%	7.50%	10.01%	0.1740%
WESTERN UNION CO	WU	9,475.23	0.06%	2.72%	5.00%	7.79%	0.0048%
WEYERHAEUSER CO	WY	17,802.16	0.12%	3.41%	17.00%	20.70%	0.0239%
WYNDHAM WORLDWIDE CORP	WYN	9,873.37	0.06%	1.75%	13.50%	15.37%	0.0099%
WYNN RESORTS LTD	WYNN	18,509.55	0.12%	3.33%	14.00%	17.56%	0.0211%
CIMAREX ENERGY CO	XEC	9,942.02	0.06%	0.56%	7.00%	7.58%	0.0049%
XCEL ENERGY INC	XEL	16,798.89	0.11%	3.59%	4.50%	8.17%	0.0089%
XL GROUP PLC	XL	N/A	N/A	0.00%	NA	N/A	N/A
XILINX INC	XLNX	11,326.61	0.07%	2.68%	8.50%	11.29%	0.0083%
EXXON MOBIL CORP	XOM	400,840.52	2.61%	2.89%	6.00%	8.98%	0.2340%
DENTSPLY INTERNATIONAL INC	XRAY	7,339.75	0.05%	0.51%	8.50%	9.03%	0.0043%
XEROX CORP	XRX	15,353.93	0.10%	1.85%	6.00%	7.90%	0.0079%
XYLEM INC	XYL	6,811.22	0.04%	1.36%	10.50%	11.94%	0.0053%
YAHOO! INC	YHOO	47,841.23	N/A	0.00%	NA	N/A	N/A
YUM! BRANDS INC	YUM	32,982.60	0.21%	2.20%	9.50%	11.80%	0.0253%
ZIONS BANCORPORATION	ZION	5,941.85	0.04%	0.54%	9.00%	9.56%	0.0037%
ZIMMER HOLDINGS INC	ZMH	18,732.25	0.12%	0.79%	9.50%	10.33%	0.0126%
ZOETIS INC	ZTS	21,677.29	N/A	0.68%	NA	N/A	N/A
Total Market Capitalization:		15,386,046.38					12.75%

Notes:

[1] Equals sum of Col. [9]

[2] Source: Bloomberg Professional

[3] Equals [1] - [2]

[4] Source: Value Line

[5] Equals weight in S&P 500 based on market capitalization

[6] Source: Value Line

[7] Source: Value Line

[8] Equals  $([6] \times (1 + (0.5 \times [7]))) + [7]$

[9] Equals Col. [5] x Col. [8]

Bloomberg and Value Line Beta Coefficients (Combined Proxy Group)

Company	Ticker	[1]	[2]
		Bloomberg	Value Line
Alliant Energy Corporation	LNT	0.779	0.80
Ameren Corporation	AEE	0.725	0.75
American Electric Power Company, Inc.	AEP	0.754	0.70
CMS Energy Corporation	CMS	0.762	0.75
DTE Energy Company	DTE	0.741	0.75
Duke Energy Corporation	DUK	0.585	0.60
Empire District Electric Company	EDE	0.705	0.65
Great Plains Energy Inc.	GXP	0.828	0.85
Hawaiian Electric Industries, Inc.	HE	0.748	0.80
IDACORP, Inc.	IDA	0.868	0.80
NextEra Energy, Inc.	NEE	0.771	0.70
Northeast Utilities	NU	0.686	0.75
OGE Energy Corp.	OGE	0.810	0.85
Otter Tail Corporation	OTTR	0.945	0.95
Pinnacle West Capital Corporation	PNW	0.807	0.70
PNM Resources, Inc.	PNM	0.847	0.85
Portland General Electric Company	POR	0.792	0.80
Southern Company	SO	0.571	0.60
TECO Energy, Inc.	TE	0.752	0.85
Westar Energy, Inc.	WR	0.699	0.75
Xcel Energy Inc.	XEL	0.711	0.70
Mean		0.757	0.76

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Value Line

Bloomberg and Value Line Beta Coefficients (Hevert Proxy Group)

Company	Ticker	[1]	[2]
		Bloomberg	Value Line
American Electric Power Company, Inc.	AEP	0.754	0.70
Duke Energy Corporation	DUK	0.585	0.60
Empire District Electric Company	EDE	0.705	0.65
Great Plains Energy Inc.	GXP	0.828	0.85
Hawaiian Electric Industries, Inc.	HE	0.748	0.80
IDACORP, Inc.	IDA	0.868	0.80
NextEra Energy, Inc.	NEE	0.771	0.70
Northeast Utilities	NU	0.686	0.75
Otter Tail Corporation	OTTR	0.945	0.95
Pinnacle West Capital Corporation	PNW	0.807	0.70
PNM Resources, Inc.	PNM	0.847	0.85
Portland General Electric Company	POR	0.792	0.80
Southern Company	SO	0.571	0.60
Westar Energy, Inc.	WR	0.699	0.75
Mean		0.758	0.75

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Value Line

Capital Asset Pricing Model Results  
Bloomberg and Value Line Derived Market Risk Premium (Combined Proxy Group)

	[1]	[2]	[3] Ex-Ante Market Risk Premium		[5] CAPM Result	
	Risk-Free Rate	Average Beta Coefficient	Bloomberg Market DCF Derived	Value Line Market DCF Derived	Bloomberg Market DCF Derived	Value Line Market DCF Derived
<b>PROXY GROUP BLOOMBERG AVERAGE BETA COEFFICIENT</b>						
Current 30-Year Treasury (30-day average) [7]	3.04%	0.757	10.45%	9.72%	10.95%	10.39%
Near-Term Projected 30-Year Treasury [8]	3.68%	0.757	10.45%	9.72%	11.59%	11.03%
Mean					11.27%	10.71%
<b>PROXY GROUP VALUE LINE AVERAGE BETA COEFFICIENT</b>						
Current 30-Year Treasury (30-day average) [7]	3.04%	0.760	10.45%	9.72%	10.98%	10.42%
Near-Term Projected 30-Year Treasury [8]	3.68%	0.760	10.45%	9.72%	11.62%	11.06%
Mean					11.30%	10.74%

Notes:

- [1] See Notes [7] and [8]
- [2] Source: Schedule RBH-R10
- [3] Source: Schedule RBH-R9
- [4] Source: Schedule RBH-R9
- [5] Equals Col. [1] + (Col. [2] x Col. [3])
- [6] Equals Col. [1] + (Col. [2] x Col. [4])
- [7] Source: Bloomberg Professional
- [8] Source: Blue Chip Financial Forecasts, Vol. 33, No. 11, November 1, 2014, at 2



Capital Asset Pricing Model Results  
Bloomberg and Value Line Derived Market Risk Premium (Hevert Proxy Group)

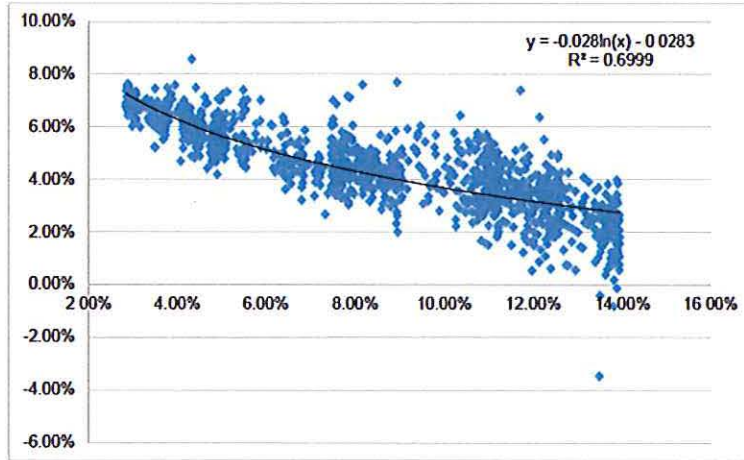
	[1]	[2]	[3]		[4]	[5]		[6]
	Risk-Free Rate	Average Beta Coefficient	Bloomberg Market DCF Derived	Value Line Market DCF Derived	Ex-Ante Market Risk Premium	Bloomberg Market DCF Derived	Value Line Market DCF Derived	CAPM Result
<b>PROXY GROUP BLOOMBERG AVERAGE BETA COEFFICIENT</b>								
Current 30-Year Treasury (30-day average) [7]	3.04%	0.758	10.45%	9.72%		10.96%	10.40%	
Near-Term Projected 30-Year Treasury [8]	3.68%	0.758	10.45%	9.72%		11.60%	11.05%	
Mean						11.28%	10.72%	
<b>PROXY GROUP VALUE LINE AVERAGE BETA COEFFICIENT</b>								
Current 30-Year Treasury (30-day average) [7]	3.04%	0.750	10.45%	9.72%		10.88%	10.33%	
Near-Term Projected 30-Year Treasury [8]	3.66%	0.750	10.45%	9.72%		11.52%	10.97%	
Mean						11.20%	10.65%	

**Notes:**

- [1] See Notes [7] and [8]
- [2] Source: Schedule RBH-R10
- [3] Source: Schedule RBH-R9
- [4] Source: Schedule RBH-R9
- [5] Equals Col. [1] + (Col. [2] x Col. [3])
- [6] Equals Col. [1] + (Col. [2] x Col. [4])
- [7] Source: Bloomberg Professional
- [8] Source: Blue Chip Financial Forecasts, Vol. 33, No. 11, November 1, 2014, at 2

Bond Yield Plus Risk Premium

[1]	[2]	[3]	[4]	[5]
Constant	Slope	30-Year Treasury Yield	Risk Premium	Return on Equity
-2.83%	-2.83%	Current	3.04%	7.06%
		Near Term Projected	3.68%	6.52%
		Long Term Projected	5.45%	5.41%



Notes:

- [1] Constant of regression equation
- [2] Slope of regression equation
- [3] Source: Current = Bloomberg Professional,  
Near Term Projected = Blue Chip Financial Forecasts, Vol. 33, No. 11, November 1, 2014, at 2,  
Long Term Projected = Blue Chip Financial Forecasts, Vol. 33, No. 6, June 1, 2014, at 14
- [4] Equals [1] + ln([3]) x [2]
- [5] Equals [3] + [4]
- [6] Source: SNL Financial
- [7] Source: SNL Financial (excludes Rate Riders)
- [8] Source: Bloomberg Professional, equals 201-trading day average (i.e. lag period) as of November 14, 2014
- [9] Equals [7] - [8]

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30- Year Treasury Yield	Risk Premium
01/01/1980	14.50%	9.36%	5.14%
01/07/1980	14.39%	9.38%	5.01%
01/09/1980	15.00%	9.40%	5.60%
01/14/1980	15.17%	9.42%	5.75%
01/17/1980	13.93%	9.44%	4.49%
01/23/1980	15.50%	9.47%	6.03%
01/30/1980	13.86%	9.52%	4.34%
01/31/1980	12.61%	9.53%	3.08%
02/06/1980	13.71%	9.58%	4.13%
02/13/1980	12.80%	9.63%	3.17%
02/14/1980	13.00%	9.65%	3.35%
02/19/1980	13.50%	9.68%	3.82%
02/27/1980	13.75%	9.76%	3.97%
02/29/1980	13.75%	9.81%	3.94%
02/29/1980	14.00%	9.81%	4.19%
02/29/1980	14.77%	9.81%	4.96%
03/07/1980	12.70%	9.89%	2.81%
03/14/1980	13.50%	9.97%	3.53%
03/26/1980	14.16%	10.10%	4.06%
03/27/1980	14.24%	10.12%	4.12%
03/28/1980	14.50%	10.13%	4.37%
04/11/1980	12.75%	10.27%	2.48%
04/14/1980	13.85%	10.29%	3.56%
04/16/1980	15.50%	10.31%	5.19%
04/22/1980	13.25%	10.35%	2.90%
04/22/1980	13.90%	10.35%	3.55%
04/24/1980	16.80%	10.38%	6.43%
04/29/1980	15.50%	10.41%	5.09%
05/06/1980	13.70%	10.45%	3.25%
05/07/1980	15.00%	10.45%	4.55%
05/08/1980	13.75%	10.46%	3.29%
05/09/1980	14.35%	10.47%	3.88%
05/13/1980	13.60%	10.48%	3.12%
05/15/1980	13.25%	10.49%	2.76%
05/19/1980	13.75%	10.51%	3.24%
05/27/1980	13.62%	10.54%	3.08%
05/27/1980	14.60%	10.54%	4.06%
05/29/1980	16.00%	10.56%	5.44%
05/30/1980	13.80%	10.56%	3.24%
06/02/1980	15.63%	10.57%	5.06%
06/09/1980	15.90%	10.60%	5.30%
06/10/1980	13.78%	10.60%	3.18%
06/12/1980	14.25%	10.61%	3.64%
06/19/1980	13.40%	10.62%	2.78%
06/30/1980	13.00%	10.65%	2.35%
06/30/1980	13.40%	10.65%	2.75%
07/09/1980	14.75%	10.67%	4.08%
07/10/1980	15.00%	10.68%	4.32%
07/15/1980	15.80%	10.70%	5.10%
07/18/1980	13.80%	10.71%	3.09%
07/22/1980	14.10%	10.72%	3.38%
07/24/1980	15.00%	10.73%	4.27%
07/25/1980	13.48%	10.73%	2.75%
07/31/1980	14.58%	10.75%	3.83%
08/08/1980	13.50%	10.78%	2.72%
08/08/1980	14.00%	10.78%	3.22%
08/08/1980	15.45%	10.78%	4.67%
08/11/1980	14.85%	10.78%	4.07%
08/14/1980	14.00%	10.79%	3.21%
08/14/1980	16.25%	10.79%	5.46%
08/25/1980	13.75%	10.82%	2.93%
08/27/1980	13.80%	10.83%	2.97%
08/29/1980	12.50%	10.84%	1.66%
09/15/1980	13.50%	10.88%	2.62%
09/15/1980	13.93%	10.88%	3.05%
09/15/1980	15.80%	10.88%	4.92%
09/24/1980	12.50%	10.93%	1.57%
09/24/1980	15.00%	10.93%	4.07%
09/26/1980	13.75%	10.94%	2.81%
09/30/1980	14.10%	10.96%	3.14%
09/30/1980	14.20%	10.96%	3.24%
10/01/1980	13.90%	10.97%	2.93%
10/03/1980	15.50%	10.98%	4.52%
10/07/1980	12.50%	10.99%	1.51%
10/09/1980	13.25%	11.00%	2.25%
10/09/1980	14.50%	11.00%	3.50%
10/09/1980	14.50%	11.00%	3.50%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
10/16/1980	16.10%	11.02%	5.08%
10/17/1980	14.50%	11.03%	3.47%
10/31/1980	13.75%	11.11%	2.64%
10/31/1980	14.25%	11.11%	3.14%
11/04/1980	15.00%	11.12%	3.88%
11/05/1980	13.75%	11.12%	2.63%
11/05/1980	14.00%	11.12%	2.88%
11/08/1980	13.75%	11.14%	2.61%
11/10/1980	14.85%	11.15%	3.70%
11/17/1980	14.00%	11.18%	2.82%
11/18/1980	14.00%	11.19%	2.81%
11/19/1980	13.00%	11.19%	1.81%
11/24/1980	14.00%	11.21%	2.79%
11/26/1980	14.00%	11.21%	2.79%
12/08/1980	14.15%	11.22%	2.93%
12/08/1980	15.10%	11.22%	3.88%
12/09/1980	15.35%	11.22%	4.13%
12/12/1980	15.45%	11.23%	4.22%
12/17/1980	13.25%	11.23%	2.02%
12/18/1980	15.80%	11.23%	4.57%
12/19/1980	14.50%	11.23%	3.27%
12/19/1980	14.64%	11.23%	3.41%
12/22/1980	13.45%	11.23%	2.22%
12/22/1980	15.00%	11.23%	3.77%
12/30/1980	14.50%	11.22%	3.28%
12/30/1980	14.95%	11.22%	3.73%
12/31/1980	13.39%	11.22%	2.17%
01/02/1981	15.25%	11.22%	4.03%
01/07/1981	14.30%	11.21%	3.09%
01/19/1981	15.25%	11.20%	4.05%
01/23/1981	13.10%	11.20%	1.90%
01/23/1981	14.40%	11.20%	3.20%
01/26/1981	15.25%	11.20%	4.05%
01/27/1981	15.00%	11.21%	3.79%
01/31/1981	13.47%	11.22%	2.25%
02/03/1981	15.25%	11.23%	4.02%
02/05/1981	15.75%	11.25%	4.50%
02/11/1981	15.60%	11.28%	4.32%
02/20/1981	15.25%	11.33%	3.92%
03/11/1981	15.40%	11.49%	3.91%
03/12/1981	14.51%	11.50%	3.01%
03/12/1981	16.00%	11.50%	4.50%
03/13/1981	13.02%	11.52%	1.50%
03/18/1981	16.19%	11.55%	4.64%
03/19/1981	13.75%	11.56%	2.19%
03/23/1981	14.30%	11.58%	2.72%
03/25/1981	15.30%	11.60%	3.70%
04/01/1981	14.53%	11.68%	2.85%
04/03/1981	19.10%	11.71%	7.39%
04/09/1981	15.00%	11.78%	3.22%
04/09/1981	15.30%	11.78%	3.52%
04/09/1981	16.50%	11.78%	4.72%
04/09/1981	17.00%	11.78%	5.22%
04/10/1981	13.75%	11.80%	1.95%
04/13/1981	13.57%	11.82%	1.75%
04/15/1981	15.30%	11.85%	3.45%
04/16/1981	13.50%	11.87%	1.63%
04/17/1981	14.10%	11.87%	2.23%
04/21/1981	14.00%	11.90%	2.10%
04/21/1981	16.80%	11.90%	4.90%
04/24/1981	16.00%	11.95%	4.05%
04/27/1981	12.50%	11.97%	0.53%
04/27/1981	13.61%	11.97%	1.64%
04/29/1981	13.65%	12.00%	1.65%
04/30/1981	13.50%	12.02%	1.48%
05/04/1981	16.22%	12.05%	4.17%
05/05/1981	14.40%	12.07%	2.33%
05/07/1981	16.25%	12.11%	4.14%
05/07/1981	16.27%	12.11%	4.16%
05/08/1981	13.00%	12.13%	0.87%
05/08/1981	16.00%	12.13%	3.87%
05/12/1981	13.50%	12.16%	1.34%
05/15/1981	15.75%	12.22%	3.53%
05/18/1981	14.88%	12.23%	2.65%
05/20/1981	16.00%	12.26%	3.74%
05/21/1981	14.00%	12.27%	1.73%
05/26/1981	14.90%	12.30%	2.60%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
05/27/1981	15.00%	12.31%	2.69%
05/29/1981	15.50%	12.34%	3.16%
06/01/1981	16.50%	12.35%	4.15%
06/03/1981	14.67%	12.37%	2.30%
06/05/1981	13.00%	12.39%	0.61%
06/10/1981	16.75%	12.42%	4.33%
06/17/1981	14.40%	12.46%	1.94%
06/18/1981	16.33%	12.47%	3.86%
06/25/1981	14.75%	12.51%	2.24%
06/26/1981	16.00%	12.52%	3.48%
06/30/1981	15.25%	12.54%	2.71%
07/01/1981	15.50%	12.56%	2.94%
07/01/1981	17.50%	12.56%	4.94%
07/10/1981	16.00%	12.62%	3.38%
07/14/1981	16.90%	12.64%	4.26%
07/15/1981	16.00%	12.65%	3.35%
07/17/1981	15.00%	12.67%	2.33%
07/20/1981	15.00%	12.68%	2.32%
07/21/1981	14.00%	12.69%	1.31%
07/28/1981	13.48%	12.74%	0.74%
07/31/1981	13.50%	12.78%	0.72%
07/31/1981	15.00%	12.78%	2.22%
07/31/1981	16.00%	12.78%	3.22%
08/05/1981	15.71%	12.83%	2.88%
08/10/1981	14.50%	12.87%	1.63%
08/11/1981	15.00%	12.88%	2.12%
08/20/1981	13.50%	12.95%	0.55%
08/20/1981	16.50%	12.95%	3.55%
08/24/1981	15.00%	12.97%	2.03%
08/28/1981	15.00%	13.01%	1.99%
09/03/1981	14.50%	13.05%	1.45%
09/10/1981	14.50%	13.11%	1.39%
09/11/1981	16.00%	13.12%	2.88%
09/16/1981	16.00%	13.15%	2.85%
09/17/1981	16.50%	13.16%	3.34%
09/23/1981	15.85%	13.20%	2.65%
09/28/1981	15.50%	13.23%	2.27%
10/09/1981	15.75%	13.33%	2.42%
10/15/1981	16.25%	13.37%	2.88%
10/16/1981	15.50%	13.38%	2.12%
10/16/1981	16.50%	13.38%	3.12%
10/19/1981	14.25%	13.39%	0.86%
10/20/1981	15.25%	13.41%	1.84%
10/20/1981	17.00%	13.41%	3.59%
10/23/1981	16.00%	13.45%	2.55%
10/27/1981	10.00%	13.48%	-3.48%
10/29/1981	14.75%	13.51%	1.24%
10/29/1981	16.50%	13.51%	2.99%
11/03/1981	15.17%	13.53%	1.64%
11/05/1981	16.60%	13.55%	3.05%
11/06/1981	15.17%	13.56%	1.61%
11/24/1981	15.50%	13.61%	1.89%
11/25/1981	15.25%	13.61%	1.64%
11/25/1981	15.35%	13.61%	1.74%
11/25/1981	16.10%	13.61%	2.49%
11/25/1981	16.10%	13.61%	2.49%
12/01/1981	15.70%	13.61%	2.09%
12/01/1981	16.00%	13.61%	2.39%
12/01/1981	16.49%	13.61%	2.88%
12/01/1981	16.50%	13.61%	2.89%
12/04/1981	16.00%	13.61%	2.39%
12/11/1981	16.25%	13.63%	2.62%
12/14/1981	14.00%	13.63%	0.37%
12/15/1981	15.81%	13.63%	2.18%
12/15/1981	16.00%	13.63%	2.37%
12/16/1981	15.25%	13.63%	1.62%
12/17/1981	16.50%	13.63%	2.87%
12/18/1981	15.45%	13.63%	1.82%
12/30/1981	14.25%	13.67%	0.58%
12/30/1981	16.00%	13.67%	2.33%
12/30/1981	16.25%	13.67%	2.58%
12/31/1981	16.15%	13.67%	2.48%
01/04/1982	15.50%	13.67%	1.83%
01/11/1982	14.50%	13.72%	0.78%
01/11/1982	17.00%	13.72%	3.28%
01/13/1982	14.75%	13.74%	1.01%
01/14/1982	15.75%	13.75%	2.00%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
01/15/1982	15.00%	13.76%	1.24%
01/15/1982	16.50%	13.76%	2.74%
01/22/1982	16.25%	13.79%	2.46%
01/27/1982	16.84%	13.81%	3.03%
01/28/1982	13.00%	13.81%	-0.81%
01/29/1982	15.50%	13.82%	1.68%
02/01/1982	15.85%	13.82%	2.03%
02/03/1982	16.44%	13.84%	2.60%
02/08/1982	15.50%	13.86%	1.64%
02/11/1982	16.00%	13.88%	2.12%
02/11/1982	16.20%	13.88%	2.32%
02/17/1982	15.00%	13.89%	1.11%
02/19/1982	15.17%	13.89%	1.28%
02/26/1982	15.25%	13.89%	1.36%
03/01/1982	15.03%	13.89%	1.14%
03/01/1982	16.00%	13.89%	2.11%
03/03/1982	15.00%	13.88%	1.12%
03/08/1982	17.10%	13.88%	3.22%
03/12/1982	16.25%	13.88%	2.37%
03/17/1982	17.30%	13.88%	3.42%
03/22/1982	15.10%	13.89%	1.21%
03/27/1982	15.40%	13.89%	1.51%
03/30/1982	15.50%	13.90%	1.60%
03/31/1982	17.00%	13.91%	3.09%
04/01/1982	14.70%	13.91%	0.79%
04/01/1982	16.50%	13.91%	2.59%
04/02/1982	15.50%	13.91%	1.59%
04/05/1982	15.50%	13.92%	1.58%
04/08/1982	16.40%	13.93%	2.47%
04/13/1982	14.50%	13.94%	0.56%
04/23/1982	15.75%	13.94%	1.81%
04/27/1982	15.00%	13.94%	1.06%
04/28/1982	15.75%	13.94%	1.81%
04/30/1982	14.70%	13.94%	0.76%
04/30/1982	15.50%	13.94%	1.56%
05/03/1982	16.60%	13.94%	2.66%
05/04/1982	16.00%	13.94%	2.06%
05/14/1982	15.50%	13.92%	1.58%
05/18/1982	15.42%	13.92%	1.50%
05/19/1982	14.69%	13.92%	0.77%
05/20/1982	15.00%	13.91%	1.09%
05/20/1982	15.10%	13.91%	1.19%
05/20/1982	15.50%	13.91%	1.59%
05/20/1982	16.30%	13.91%	2.39%
05/21/1982	17.75%	13.91%	3.84%
05/27/1982	15.00%	13.89%	1.11%
05/28/1982	15.50%	13.89%	1.61%
05/28/1982	17.00%	13.89%	3.11%
06/01/1982	13.75%	13.89%	-0.14%
06/01/1982	16.60%	13.89%	2.71%
06/09/1982	17.86%	13.88%	3.98%
06/14/1982	15.75%	13.88%	1.87%
06/15/1982	14.85%	13.88%	0.97%
06/18/1982	15.50%	13.87%	1.63%
06/21/1982	14.90%	13.87%	1.03%
06/23/1982	16.00%	13.86%	2.14%
06/23/1982	16.17%	13.86%	2.31%
06/24/1982	14.85%	13.86%	0.99%
06/25/1982	14.70%	13.86%	0.84%
07/01/1982	16.00%	13.84%	2.16%
07/02/1982	15.62%	13.84%	1.78%
07/02/1982	17.00%	13.84%	3.16%
07/13/1982	14.00%	13.82%	0.18%
07/13/1982	16.80%	13.82%	2.98%
07/14/1982	15.76%	13.82%	1.94%
07/14/1982	16.02%	13.82%	2.20%
07/19/1982	16.50%	13.80%	2.70%
07/22/1982	14.50%	13.77%	0.73%
07/22/1982	17.00%	13.77%	3.23%
07/27/1982	16.75%	13.75%	3.00%
07/29/1982	16.50%	13.74%	2.76%
08/11/1982	17.50%	13.68%	3.82%
08/18/1982	17.07%	13.63%	3.44%
08/20/1982	15.73%	13.60%	2.13%
08/25/1982	16.00%	13.57%	2.43%
08/26/1982	15.50%	13.56%	1.94%
08/30/1982	15.00%	13.55%	1.45%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
09/03/1982	16.20%	13.53%	2.67%
09/08/1982	15.00%	13.52%	1.48%
09/15/1982	13.08%	13.50%	-0.42%
09/15/1982	16.25%	13.50%	2.75%
09/16/1982	16.00%	13.50%	2.50%
09/17/1982	15.25%	13.50%	1.75%
09/23/1982	17.17%	13.47%	3.70%
09/24/1982	14.50%	13.46%	1.04%
09/27/1982	15.25%	13.46%	1.79%
10/01/1982	15.50%	13.42%	2.08%
10/15/1982	15.90%	13.32%	2.58%
10/22/1982	15.75%	13.24%	2.51%
10/22/1982	17.15%	13.24%	3.91%
10/29/1982	15.54%	13.16%	2.38%
11/01/1982	15.50%	13.15%	2.35%
11/03/1982	17.20%	13.13%	4.07%
11/04/1982	16.25%	13.11%	3.14%
11/05/1982	16.20%	13.09%	3.11%
11/09/1982	16.00%	13.05%	2.95%
11/23/1982	15.50%	12.89%	2.61%
11/23/1982	15.85%	12.89%	2.96%
11/30/1982	16.50%	12.81%	3.69%
12/01/1982	17.04%	12.79%	4.25%
12/06/1982	15.00%	12.73%	2.27%
12/06/1982	16.35%	12.73%	3.62%
12/10/1982	15.50%	12.66%	2.84%
12/13/1982	16.00%	12.65%	3.35%
12/14/1982	15.30%	12.63%	2.67%
12/14/1982	16.40%	12.63%	3.77%
12/20/1982	16.00%	12.57%	3.43%
12/21/1982	14.75%	12.56%	2.19%
12/21/1982	15.85%	12.56%	3.29%
12/22/1982	16.25%	12.54%	3.71%
12/22/1982	16.58%	12.54%	4.04%
12/22/1982	16.75%	12.54%	4.21%
12/29/1982	14.90%	12.48%	2.42%
12/29/1982	16.25%	12.48%	3.77%
12/30/1982	16.00%	12.47%	3.53%
12/30/1982	16.35%	12.47%	3.88%
12/30/1982	16.77%	12.47%	4.30%
01/05/1983	17.33%	12.40%	4.93%
01/11/1983	15.90%	12.34%	3.56%
01/12/1983	14.63%	12.33%	2.30%
01/12/1983	15.50%	12.33%	3.17%
01/20/1983	17.75%	12.24%	5.51%
01/21/1983	15.00%	12.22%	2.78%
01/24/1983	14.50%	12.21%	2.29%
01/24/1983	15.50%	12.21%	3.29%
01/25/1983	15.85%	12.19%	3.66%
01/27/1983	16.14%	12.17%	3.97%
02/01/1983	18.50%	12.13%	6.37%
02/04/1983	14.00%	12.10%	1.90%
02/10/1983	15.00%	12.06%	2.94%
02/21/1983	15.50%	11.98%	3.52%
02/22/1983	15.50%	11.97%	3.53%
02/23/1983	15.10%	11.96%	3.14%
02/23/1983	16.00%	11.96%	4.04%
03/02/1983	15.25%	11.89%	3.36%
03/09/1983	15.20%	11.82%	3.38%
03/15/1983	13.00%	11.77%	1.23%
03/18/1983	15.25%	11.73%	3.52%
03/23/1983	15.40%	11.69%	3.71%
03/24/1983	15.00%	11.67%	3.33%
03/29/1983	15.50%	11.63%	3.87%
03/30/1983	16.71%	11.61%	5.10%
03/31/1983	15.00%	11.59%	3.41%
04/04/1983	15.20%	11.58%	3.62%
04/08/1983	15.50%	11.51%	3.99%
04/11/1983	14.81%	11.49%	3.32%
04/19/1983	14.50%	11.38%	3.12%
04/20/1983	16.00%	11.36%	4.64%
04/29/1983	16.00%	11.24%	4.76%
05/01/1983	14.50%	11.24%	3.26%
05/09/1983	15.50%	11.15%	4.35%
05/11/1983	16.46%	11.12%	5.34%
05/12/1983	14.14%	11.11%	3.03%
05/18/1983	15.00%	11.05%	3.95%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
05/23/1983	14.90%	11.01%	3.89%
05/23/1983	15.50%	11.01%	4.49%
05/25/1983	15.50%	10.98%	4.52%
05/27/1983	15.00%	10.96%	4.04%
05/31/1983	14.00%	10.95%	3.05%
05/31/1983	15.50%	10.95%	4.55%
06/02/1983	14.50%	10.93%	3.57%
06/17/1983	15.03%	10.84%	4.19%
07/01/1983	14.80%	10.78%	4.02%
07/01/1983	14.90%	10.78%	4.12%
07/08/1983	16.25%	10.76%	5.49%
07/13/1983	13.20%	10.75%	2.45%
07/19/1983	15.00%	10.74%	4.26%
07/19/1983	15.10%	10.74%	4.36%
07/25/1983	16.25%	10.73%	5.52%
07/26/1983	15.90%	10.74%	5.16%
08/03/1983	16.34%	10.75%	5.59%
08/03/1983	16.50%	10.75%	5.75%
08/19/1983	15.00%	10.80%	4.20%
08/22/1983	15.50%	10.80%	4.70%
08/22/1983	16.40%	10.80%	5.60%
08/31/1983	14.75%	10.84%	3.91%
09/07/1983	15.00%	10.86%	4.14%
09/14/1983	15.78%	10.89%	4.89%
09/16/1983	15.00%	10.90%	4.10%
09/19/1983	14.50%	10.91%	3.59%
09/20/1983	16.50%	10.91%	5.59%
09/28/1983	14.50%	10.94%	3.58%
09/29/1983	15.50%	10.95%	4.55%
09/30/1983	15.25%	10.95%	4.30%
09/30/1983	16.15%	10.95%	5.20%
10/04/1983	14.80%	10.96%	3.84%
10/07/1983	16.00%	10.97%	5.03%
10/13/1983	15.52%	10.99%	4.53%
10/17/1983	15.50%	11.00%	4.50%
10/18/1983	14.50%	11.00%	3.50%
10/19/1983	16.25%	11.01%	5.24%
10/19/1983	16.50%	11.01%	5.49%
10/26/1983	15.00%	11.04%	3.96%
10/27/1983	15.20%	11.04%	4.16%
11/01/1983	16.00%	11.06%	4.94%
11/09/1983	14.90%	11.09%	3.81%
11/10/1983	14.35%	11.10%	3.25%
11/23/1983	16.00%	11.13%	4.87%
11/23/1983	16.15%	11.13%	5.02%
11/30/1983	15.00%	11.14%	3.86%
12/05/1983	15.25%	11.15%	4.10%
12/06/1983	15.07%	11.15%	3.92%
12/08/1983	15.90%	11.16%	4.74%
12/09/1983	14.75%	11.17%	3.58%
12/12/1983	14.50%	11.17%	3.33%
12/15/1983	15.56%	11.19%	4.37%
12/19/1983	14.80%	11.21%	3.59%
12/20/1983	14.69%	11.22%	3.47%
12/20/1983	16.00%	11.22%	4.78%
12/20/1983	16.25%	11.22%	5.03%
12/22/1983	14.75%	11.23%	3.52%
12/22/1983	15.75%	11.23%	4.52%
01/03/1984	14.75%	11.27%	3.48%
01/10/1984	15.90%	11.30%	4.60%
01/12/1984	15.60%	11.31%	4.29%
01/18/1984	13.75%	11.33%	2.42%
01/19/1984	15.90%	11.33%	4.57%
01/30/1984	16.10%	11.37%	4.73%
01/31/1984	15.25%	11.37%	3.88%
02/01/1984	14.80%	11.38%	3.42%
02/06/1984	13.75%	11.40%	2.35%
02/06/1984	14.75%	11.40%	3.35%
02/09/1984	15.25%	11.42%	3.83%
02/15/1984	15.70%	11.44%	4.26%
02/20/1984	15.00%	11.46%	3.54%
02/20/1984	15.00%	11.46%	3.54%
02/22/1984	14.75%	11.47%	3.28%
02/28/1984	14.50%	11.51%	2.99%
03/02/1984	14.25%	11.54%	2.71%
03/20/1984	16.00%	11.64%	4.36%
03/23/1984	15.50%	11.67%	3.83%



Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
03/26/1984	14.71%	11.68%	3.03%
04/02/1984	15.50%	11.71%	3.79%
04/06/1984	14.74%	11.75%	2.99%
04/11/1984	15.72%	11.78%	3.94%
04/17/1984	15.00%	11.81%	3.19%
04/18/1984	16.20%	11.82%	4.38%
04/25/1984	14.64%	11.85%	2.79%
04/30/1984	14.40%	11.87%	2.53%
05/16/1984	14.69%	11.98%	2.71%
05/16/1984	15.00%	11.98%	3.02%
05/22/1984	14.40%	12.02%	2.38%
05/29/1984	15.10%	12.06%	3.04%
06/13/1984	15.25%	12.15%	3.10%
06/15/1984	15.60%	12.17%	3.43%
06/22/1984	16.25%	12.21%	4.04%
06/29/1984	15.25%	12.26%	2.99%
07/02/1984	13.35%	12.27%	1.08%
07/10/1984	16.00%	12.31%	3.69%
07/12/1984	16.50%	12.32%	4.18%
07/13/1984	16.25%	12.33%	3.92%
07/17/1984	14.14%	12.35%	1.79%
07/18/1984	15.30%	12.36%	2.94%
07/18/1984	15.50%	12.36%	3.14%
07/19/1984	14.30%	12.37%	1.93%
07/24/1984	16.79%	12.39%	4.40%
07/31/1984	16.00%	12.43%	3.57%
08/03/1984	14.25%	12.44%	1.81%
08/17/1984	14.30%	12.49%	1.81%
08/20/1984	15.00%	12.49%	2.51%
08/27/1984	16.30%	12.51%	3.79%
08/31/1984	15.55%	12.52%	3.03%
09/06/1984	16.00%	12.53%	3.47%
09/10/1984	14.75%	12.54%	2.21%
09/13/1984	15.00%	12.55%	2.45%
09/17/1984	17.38%	12.56%	4.82%
09/26/1984	14.50%	12.57%	1.93%
09/28/1984	15.00%	12.57%	2.43%
09/28/1984	16.25%	12.57%	3.68%
10/09/1984	14.75%	12.58%	2.17%
10/12/1984	15.60%	12.59%	3.01%
10/22/1984	15.00%	12.59%	2.41%
10/26/1984	16.40%	12.58%	3.82%
10/31/1984	16.25%	12.58%	3.67%
11/07/1984	15.60%	12.58%	3.02%
11/09/1984	16.00%	12.58%	3.42%
11/14/1984	15.75%	12.58%	3.17%
11/20/1984	15.25%	12.58%	2.67%
11/20/1984	15.92%	12.58%	3.34%
11/23/1984	15.00%	12.58%	2.42%
11/28/1984	16.15%	12.57%	3.58%
12/03/1984	15.80%	12.56%	3.24%
12/04/1984	16.50%	12.56%	3.94%
12/18/1984	16.40%	12.53%	3.87%
12/19/1984	14.75%	12.53%	2.22%
12/19/1984	15.00%	12.53%	2.47%
12/20/1984	16.00%	12.53%	3.47%
12/28/1984	16.00%	12.50%	3.50%
01/03/1985	14.75%	12.49%	2.26%
01/10/1985	15.75%	12.47%	3.28%
01/11/1985	16.30%	12.46%	3.84%
01/23/1985	15.80%	12.43%	3.37%
01/24/1985	15.82%	12.43%	3.39%
01/25/1985	16.75%	12.42%	4.33%
01/30/1985	14.90%	12.40%	2.50%
01/31/1985	14.75%	12.39%	2.36%
02/08/1985	14.47%	12.35%	2.12%
03/01/1985	13.84%	12.31%	1.53%
03/08/1985	16.85%	12.28%	4.57%
03/14/1985	15.50%	12.25%	3.25%
03/15/1985	15.62%	12.25%	3.37%
03/29/1985	15.62%	12.17%	3.45%
04/03/1985	14.60%	12.14%	2.46%
04/09/1985	15.50%	12.11%	3.39%
04/16/1985	15.70%	12.06%	3.64%
04/22/1985	14.00%	12.02%	1.98%
04/26/1985	15.50%	11.98%	3.52%
04/29/1985	15.00%	11.97%	3.03%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
05/02/1985	14.68%	11.94%	2.74%
05/08/1985	15.62%	11.89%	3.73%
05/10/1985	16.50%	11.87%	4.63%
05/29/1985	14.61%	11.73%	2.88%
05/31/1985	16.00%	11.71%	4.29%
06/14/1985	15.50%	11.61%	3.89%
07/09/1985	15.00%	11.45%	3.55%
07/16/1985	14.50%	11.39%	3.11%
07/26/1985	14.50%	11.33%	3.17%
08/02/1985	14.80%	11.29%	3.51%
08/07/1985	15.00%	11.27%	3.73%
08/28/1985	14.25%	11.15%	3.10%
08/28/1985	15.50%	11.15%	4.35%
08/29/1985	14.50%	11.15%	3.35%
09/09/1985	14.60%	11.11%	3.49%
09/09/1985	14.90%	11.11%	3.79%
09/17/1985	14.90%	11.08%	3.82%
09/23/1985	15.00%	11.06%	3.94%
09/27/1985	15.50%	11.05%	4.45%
09/27/1985	15.80%	11.05%	4.75%
10/02/1985	14.00%	11.03%	2.97%
10/02/1985	14.75%	11.03%	3.72%
10/03/1985	15.25%	11.03%	4.22%
10/24/1985	15.40%	10.96%	4.44%
10/24/1985	15.82%	10.96%	4.86%
10/24/1985	15.85%	10.96%	4.89%
10/28/1985	16.00%	10.95%	5.05%
10/29/1985	16.65%	10.94%	5.71%
10/31/1985	15.06%	10.93%	4.13%
11/04/1985	14.50%	10.92%	3.58%
11/07/1985	15.50%	10.90%	4.60%
11/08/1985	14.30%	10.89%	3.41%
12/12/1985	14.75%	10.73%	4.02%
12/18/1985	15.00%	10.69%	4.31%
12/20/1985	14.50%	10.67%	3.83%
12/20/1985	14.50%	10.67%	3.83%
12/20/1985	15.00%	10.67%	4.33%
01/24/1986	15.40%	10.41%	4.99%
01/31/1986	15.00%	10.35%	4.65%
02/05/1986	15.00%	10.32%	4.68%
02/05/1986	15.75%	10.32%	5.43%
02/10/1986	13.30%	10.29%	3.01%
02/11/1986	12.50%	10.28%	2.22%
02/14/1986	14.40%	10.24%	4.16%
02/18/1986	16.00%	10.23%	5.77%
02/24/1986	14.50%	10.18%	4.32%
02/26/1986	14.00%	10.15%	3.85%
03/05/1986	14.90%	10.08%	4.82%
03/11/1986	14.50%	10.02%	4.48%
03/12/1986	13.50%	10.00%	3.50%
03/27/1986	14.10%	9.86%	4.24%
03/31/1986	13.50%	9.84%	3.68%
04/01/1986	14.00%	9.83%	4.17%
04/02/1986	15.50%	9.81%	5.69%
04/04/1986	15.00%	9.78%	5.22%
04/14/1986	13.40%	9.69%	3.71%
04/23/1986	15.00%	9.57%	5.43%
05/16/1986	14.50%	9.32%	5.18%
05/16/1986	14.50%	9.32%	5.18%
05/29/1986	13.90%	9.19%	4.71%
05/30/1986	15.10%	9.18%	5.92%
06/02/1986	12.81%	9.17%	3.64%
06/11/1986	14.00%	9.07%	4.93%
06/24/1986	16.63%	8.94%	7.69%
06/26/1986	12.00%	8.91%	3.09%
06/26/1986	14.75%	8.91%	5.84%
06/30/1986	13.00%	8.87%	4.13%
07/10/1986	14.34%	8.75%	5.59%
07/11/1986	12.75%	8.73%	4.02%
07/14/1986	12.60%	8.71%	3.89%
07/17/1986	12.40%	8.66%	3.74%
07/25/1986	14.25%	8.57%	5.68%
08/06/1986	13.50%	8.44%	5.06%
08/14/1986	13.50%	8.35%	5.15%
09/16/1986	12.75%	8.06%	4.69%
09/19/1986	13.25%	8.03%	5.22%
10/01/1986	14.00%	7.95%	6.05%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
10/03/1986	13.40%	7.93%	5.47%
10/31/1986	13.50%	7.77%	5.73%
11/05/1986	13.00%	7.75%	5.25%
12/03/1986	12.90%	7.58%	5.32%
12/04/1986	14.44%	7.58%	6.86%
12/16/1986	13.60%	7.52%	6.08%
12/22/1986	13.80%	7.51%	6.29%
12/30/1986	13.00%	7.49%	5.51%
01/02/1987	13.00%	7.49%	5.51%
01/12/1987	12.40%	7.47%	4.93%
01/27/1987	12.71%	7.46%	5.25%
03/02/1987	12.47%	7.47%	5.00%
03/03/1987	13.60%	7.47%	6.13%
03/04/1987	12.38%	7.47%	4.91%
03/10/1987	13.50%	7.47%	6.03%
03/13/1987	13.00%	7.47%	5.53%
03/31/1987	13.00%	7.46%	5.54%
04/06/1987	13.00%	7.47%	5.53%
04/14/1987	12.50%	7.49%	5.01%
04/16/1987	14.50%	7.50%	7.00%
04/27/1987	12.00%	7.54%	4.46%
05/05/1987	12.85%	7.58%	5.27%
05/12/1987	12.65%	7.62%	5.03%
05/28/1987	13.50%	7.70%	5.80%
06/15/1987	13.20%	7.78%	5.42%
06/29/1987	15.00%	7.83%	7.17%
06/30/1987	12.50%	7.84%	4.66%
07/08/1987	12.00%	7.86%	4.14%
07/10/1987	12.90%	7.86%	5.04%
07/15/1987	13.50%	7.88%	5.62%
07/16/1987	13.50%	7.88%	5.62%
07/16/1987	15.00%	7.88%	7.12%
07/27/1987	13.00%	7.92%	5.08%
07/27/1987	13.40%	7.92%	5.48%
07/27/1987	13.50%	7.92%	5.58%
07/31/1987	12.98%	7.95%	5.03%
08/26/1987	12.63%	8.06%	4.57%
08/26/1987	12.75%	8.06%	4.69%
08/27/1987	13.25%	8.06%	5.19%
09/09/1987	13.00%	8.14%	4.86%
09/30/1987	12.75%	8.31%	4.44%
09/30/1987	13.00%	8.31%	4.69%
10/02/1987	11.50%	8.33%	3.17%
10/15/1987	13.00%	8.43%	4.57%
11/02/1987	13.00%	8.55%	4.45%
11/19/1987	13.00%	8.64%	4.36%
11/30/1987	12.00%	8.68%	3.32%
12/03/1987	14.20%	8.70%	5.50%
12/15/1987	13.25%	8.77%	4.48%
12/16/1987	13.50%	8.78%	4.72%
12/16/1987	13.72%	8.78%	4.94%
12/17/1987	11.75%	8.79%	2.98%
12/18/1987	13.50%	8.80%	4.70%
12/21/1987	12.01%	8.81%	3.20%
12/22/1987	12.00%	8.81%	3.19%
12/22/1987	12.00%	8.81%	3.19%
12/22/1987	12.75%	8.81%	3.94%
12/22/1987	13.00%	8.81%	4.19%
01/20/1988	13.80%	8.94%	4.86%
01/26/1988	13.90%	8.95%	4.95%
01/29/1988	13.20%	8.96%	4.24%
02/04/1988	12.60%	8.96%	3.64%
03/01/1988	11.56%	8.94%	2.62%
03/23/1988	12.87%	8.92%	3.95%
03/24/1988	11.24%	8.92%	2.32%
03/30/1988	12.72%	8.92%	3.80%
04/01/1988	12.50%	8.92%	3.58%
04/07/1988	13.25%	8.93%	4.32%
04/25/1988	10.96%	8.96%	2.00%
05/03/1988	12.91%	8.97%	3.94%
05/11/1988	13.50%	8.99%	4.51%
05/16/1988	13.00%	8.99%	4.01%
06/30/1988	12.75%	9.00%	3.75%
07/01/1988	12.75%	8.99%	3.76%
07/20/1988	13.40%	8.96%	4.44%
08/05/1988	12.75%	8.92%	3.83%
08/23/1988	11.70%	8.93%	2.77%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30- Year Treasury Yield	Risk Premium
08/29/1988	12.75%	8.94%	3.81%
08/30/1988	13.50%	8.94%	4.56%
09/08/1988	12.60%	8.95%	3.65%
10/13/1988	13.10%	8.93%	4.17%
12/19/1988	13.00%	9.02%	3.98%
12/20/1988	12.25%	9.02%	3.23%
12/20/1988	13.00%	9.02%	3.98%
12/21/1988	12.90%	9.02%	3.88%
12/27/1988	13.00%	9.03%	3.97%
12/28/1988	13.10%	9.03%	4.07%
12/30/1988	13.40%	9.04%	4.36%
01/27/1989	13.00%	9.05%	3.95%
01/31/1989	13.00%	9.05%	3.95%
02/17/1989	13.00%	9.05%	3.95%
02/20/1989	12.40%	9.05%	3.35%
03/01/1989	12.76%	9.05%	3.71%
03/08/1989	13.00%	9.05%	3.95%
03/30/1989	14.00%	9.05%	4.95%
04/05/1989	14.20%	9.05%	5.15%
04/18/1989	13.00%	9.05%	3.95%
05/05/1989	12.40%	9.05%	3.35%
06/02/1989	13.20%	9.00%	4.20%
06/08/1989	13.50%	8.98%	4.52%
06/27/1989	13.25%	8.91%	4.34%
06/30/1989	13.00%	8.90%	4.10%
08/14/1989	12.50%	8.77%	3.73%
09/28/1989	12.25%	8.63%	3.62%
10/24/1989	12.50%	8.54%	3.96%
11/09/1989	13.00%	8.49%	4.51%
12/15/1989	13.00%	8.34%	4.66%
12/20/1989	12.90%	8.32%	4.58%
12/21/1989	12.90%	8.31%	4.59%
12/27/1989	12.50%	8.29%	4.21%
12/27/1989	13.00%	8.29%	4.71%
01/10/1990	12.80%	8.24%	4.56%
01/11/1990	12.90%	8.24%	4.66%
01/17/1990	12.80%	8.22%	4.58%
01/26/1990	12.00%	8.20%	3.80%
02/09/1990	12.10%	8.17%	3.93%
02/24/1990	12.86%	8.15%	4.71%
03/30/1990	12.90%	8.16%	4.74%
04/04/1990	15.76%	8.17%	7.59%
04/12/1990	12.52%	8.18%	4.34%
04/19/1990	12.75%	8.20%	4.55%
05/21/1990	12.10%	8.28%	3.82%
05/29/1990	12.40%	8.30%	4.10%
05/31/1990	12.00%	8.30%	3.70%
06/04/1990	12.90%	8.30%	4.60%
06/06/1990	12.25%	8.31%	3.94%
06/15/1990	13.20%	8.32%	4.88%
06/20/1990	12.92%	8.32%	4.60%
06/27/1990	12.90%	8.33%	4.57%
06/29/1990	12.50%	8.33%	4.17%
07/06/1990	12.10%	8.34%	3.76%
07/06/1990	12.35%	8.34%	4.01%
08/10/1990	12.55%	8.41%	4.14%
08/16/1990	13.21%	8.43%	4.78%
08/22/1990	13.10%	8.45%	4.65%
08/24/1990	13.00%	8.46%	4.54%
09/26/1990	11.45%	8.59%	2.86%
10/02/1990	13.00%	8.61%	4.39%
10/05/1990	12.84%	8.62%	4.22%
10/19/1990	13.00%	8.67%	4.33%
10/25/1990	12.30%	8.68%	3.62%
11/21/1990	12.70%	8.69%	4.01%
12/13/1990	12.30%	8.67%	3.63%
12/17/1990	12.87%	8.67%	4.20%
12/18/1990	13.10%	8.67%	4.43%
12/19/1990	12.00%	8.66%	3.34%
12/20/1990	12.75%	8.66%	4.09%
12/21/1990	12.50%	8.66%	3.84%
12/27/1990	12.79%	8.66%	4.13%
01/02/1991	13.10%	8.65%	4.45%
01/04/1991	12.50%	8.65%	3.85%
01/15/1991	12.75%	8.64%	4.11%
01/25/1991	11.70%	8.63%	3.07%
02/04/1991	12.50%	8.60%	3.90%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
02/07/1991	12.50%	8.59%	3.91%
02/12/1991	13.00%	8.58%	4.43%
02/14/1991	12.72%	8.57%	4.15%
02/22/1991	12.80%	8.55%	4.25%
03/06/1991	13.10%	8.53%	4.57%
03/08/1991	12.30%	8.52%	3.78%
03/08/1991	13.00%	8.52%	4.48%
04/22/1991	13.00%	8.49%	4.51%
05/07/1991	13.50%	8.47%	5.03%
05/13/1991	13.25%	8.47%	4.78%
05/30/1991	12.75%	8.44%	4.31%
06/12/1991	12.00%	8.41%	3.59%
06/25/1991	11.70%	8.39%	3.31%
06/28/1991	12.50%	8.38%	4.12%
07/01/1991	12.00%	8.38%	3.62%
07/03/1991	12.50%	8.37%	4.13%
07/19/1991	12.10%	8.34%	3.76%
08/01/1991	12.90%	8.32%	4.58%
08/16/1991	13.20%	8.29%	4.91%
09/27/1991	12.50%	8.23%	4.27%
09/30/1991	12.25%	8.23%	4.02%
10/17/1991	13.00%	8.20%	4.80%
10/23/1991	12.50%	8.20%	4.30%
10/23/1991	12.55%	8.20%	4.35%
10/31/1991	11.80%	8.19%	3.61%
11/01/1991	12.00%	8.19%	3.81%
11/05/1991	12.25%	8.19%	4.06%
11/12/1991	12.50%	8.18%	4.32%
11/12/1991	13.25%	8.18%	5.07%
11/25/1991	12.40%	8.18%	4.22%
11/26/1991	11.60%	8.18%	3.42%
11/26/1991	12.50%	8.18%	4.32%
11/27/1991	12.10%	8.18%	3.92%
12/18/1991	12.25%	8.15%	4.10%
12/19/1991	12.60%	8.15%	4.45%
12/19/1991	12.80%	8.15%	4.65%
12/20/1991	12.65%	8.14%	4.51%
01/09/1992	12.80%	8.09%	4.71%
01/16/1992	12.75%	8.07%	4.68%
01/21/1992	12.00%	8.06%	3.94%
01/22/1992	13.00%	8.06%	4.94%
01/27/1992	12.65%	8.05%	4.60%
01/31/1992	12.00%	8.04%	3.96%
02/11/1992	12.40%	8.03%	4.37%
02/25/1992	12.50%	8.01%	4.49%
03/16/1992	11.43%	7.98%	3.45%
03/18/1992	12.28%	7.98%	4.30%
04/02/1992	12.10%	7.95%	4.15%
04/09/1992	11.45%	7.94%	3.51%
04/10/1992	11.50%	7.93%	3.57%
04/14/1992	11.50%	7.93%	3.57%
05/05/1992	11.50%	7.89%	3.61%
05/12/1992	11.87%	7.88%	3.99%
05/12/1992	12.46%	7.88%	4.58%
06/01/1992	12.30%	7.87%	4.43%
06/12/1992	10.90%	7.86%	3.04%
06/26/1992	12.35%	7.85%	4.50%
06/29/1992	11.00%	7.85%	3.15%
06/30/1992	13.00%	7.85%	5.15%
07/13/1992	11.90%	7.84%	4.06%
07/13/1992	13.50%	7.84%	5.66%
07/22/1992	11.20%	7.83%	3.37%
08/03/1992	12.00%	7.81%	4.19%
08/06/1992	12.50%	7.80%	4.70%
09/22/1992	12.00%	7.71%	4.29%
09/28/1992	11.40%	7.71%	3.69%
09/30/1992	11.75%	7.70%	4.05%
10/02/1992	13.00%	7.70%	5.30%
10/12/1992	12.20%	7.70%	4.50%
10/16/1992	13.16%	7.70%	5.46%
10/30/1992	11.75%	7.71%	4.04%
11/03/1992	12.00%	7.71%	4.29%
12/03/1992	11.85%	7.68%	4.17%
12/15/1992	11.00%	7.66%	3.34%
12/16/1992	11.90%	7.66%	4.24%
12/16/1992	12.40%	7.66%	4.74%
12/17/1992	12.00%	7.66%	4.34%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
12/22/1992	12.30%	7.65%	4.65%
12/22/1992	12.40%	7.65%	4.75%
12/29/1992	12.25%	7.63%	4.62%
12/30/1992	12.00%	7.63%	4.37%
12/31/1992	11.90%	7.63%	4.27%
01/12/1993	12.00%	7.61%	4.39%
01/21/1993	11.25%	7.59%	3.66%
02/02/1993	11.40%	7.56%	3.84%
02/15/1993	12.30%	7.52%	4.78%
02/24/1993	11.90%	7.49%	4.41%
02/26/1993	11.80%	7.48%	4.32%
02/26/1993	12.20%	7.48%	4.72%
04/23/1993	11.75%	7.29%	4.46%
05/11/1993	11.75%	7.25%	4.50%
05/14/1993	11.50%	7.24%	4.26%
05/25/1993	11.50%	7.23%	4.27%
05/28/1993	11.00%	7.22%	3.78%
06/03/1993	12.00%	7.21%	4.79%
06/16/1993	11.50%	7.19%	4.31%
06/18/1993	12.10%	7.18%	4.92%
06/25/1993	11.67%	7.17%	4.50%
07/21/1993	11.38%	7.10%	4.28%
07/23/1993	10.46%	7.09%	3.37%
08/24/1993	11.50%	6.96%	4.54%
09/21/1993	10.50%	6.81%	3.69%
09/29/1993	11.47%	6.77%	4.70%
09/30/1993	11.60%	6.76%	4.84%
11/02/1993	10.80%	6.60%	4.20%
11/12/1993	12.00%	6.57%	5.43%
11/26/1993	11.00%	6.52%	4.48%
12/14/1993	10.55%	6.48%	4.07%
12/16/1993	10.60%	6.48%	4.12%
12/21/1993	11.30%	6.47%	4.83%
01/04/1994	10.07%	6.44%	3.63%
01/13/1994	11.00%	6.42%	4.58%
01/21/1994	11.00%	6.40%	4.60%
01/28/1994	11.35%	6.39%	4.96%
02/03/1994	11.40%	6.38%	5.02%
02/17/1994	10.60%	6.36%	4.24%
02/25/1994	11.25%	6.35%	4.90%
02/25/1994	12.00%	6.35%	5.65%
03/01/1994	11.00%	6.35%	4.65%
03/04/1994	11.00%	6.35%	4.65%
04/25/1994	11.00%	6.41%	4.59%
05/10/1994	11.75%	6.45%	5.30%
05/13/1994	10.50%	6.46%	4.04%
06/03/1994	11.00%	6.54%	4.46%
06/27/1994	11.40%	6.65%	4.75%
08/05/1994	12.75%	6.88%	5.87%
10/31/1994	10.00%	7.33%	2.67%
11/09/1994	10.85%	7.39%	3.46%
11/09/1994	10.85%	7.39%	3.46%
11/18/1994	11.20%	7.45%	3.75%
11/22/1994	11.60%	7.47%	4.13%
11/28/1994	11.06%	7.49%	3.57%
12/08/1994	11.50%	7.54%	3.96%
12/08/1994	11.70%	7.54%	4.16%
12/14/1994	10.95%	7.56%	3.39%
12/15/1994	11.50%	7.57%	3.93%
12/19/1994	11.50%	7.58%	3.92%
12/28/1994	12.15%	7.61%	4.54%
01/09/1995	12.28%	7.64%	4.64%
01/31/1995	11.00%	7.69%	3.31%
02/10/1995	12.60%	7.70%	4.90%
02/17/1995	11.90%	7.70%	4.20%
03/09/1995	11.50%	7.71%	3.79%
03/20/1995	12.00%	7.72%	4.28%
03/23/1995	12.81%	7.72%	5.09%
03/29/1995	11.60%	7.72%	3.88%
04/06/1995	11.10%	7.71%	3.39%
04/07/1995	11.00%	7.71%	3.29%
04/19/1995	11.00%	7.70%	3.30%
05/12/1995	11.63%	7.68%	3.95%
05/25/1995	11.20%	7.65%	3.55%
06/09/1995	11.25%	7.60%	3.65%
06/21/1995	12.25%	7.56%	4.69%
06/30/1995	11.10%	7.52%	3.58%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
09/11/1995	11.30%	7.20%	4.10%
09/27/1995	11.30%	7.12%	4.18%
09/27/1995	11.50%	7.12%	4.38%
09/27/1995	11.75%	7.12%	4.63%
09/29/1995	11.00%	7.11%	3.89%
11/09/1995	11.38%	6.90%	4.48%
11/09/1995	12.36%	6.90%	5.46%
11/17/1995	11.00%	6.86%	4.14%
12/04/1995	11.35%	6.78%	4.57%
12/11/1995	11.40%	6.74%	4.66%
12/20/1995	11.60%	6.70%	4.90%
12/27/1995	12.00%	6.66%	5.34%
02/05/1996	12.25%	6.48%	5.77%
03/29/1996	10.67%	6.42%	4.25%
04/08/1996	11.00%	6.42%	4.58%
04/11/1996	12.59%	6.43%	6.16%
04/11/1996	12.59%	6.43%	6.16%
04/24/1996	11.25%	6.43%	4.82%
04/30/1996	11.00%	6.43%	4.57%
05/13/1996	11.00%	6.44%	4.56%
05/23/1996	11.25%	6.43%	4.82%
06/25/1996	11.25%	6.48%	4.77%
06/27/1996	11.20%	6.48%	4.72%
08/12/1996	10.40%	6.57%	3.83%
09/27/1996	11.00%	6.71%	4.29%
10/16/1996	12.25%	6.76%	5.49%
11/05/1996	11.00%	6.81%	4.19%
11/26/1996	11.30%	6.83%	4.47%
12/18/1996	11.75%	6.83%	4.92%
12/31/1996	11.50%	6.83%	4.67%
01/03/1997	10.70%	6.83%	3.87%
02/13/1997	11.80%	6.82%	4.98%
02/20/1997	11.80%	6.82%	4.98%
03/31/1997	10.02%	6.80%	3.22%
04/02/1997	11.65%	6.80%	4.85%
04/28/1997	11.50%	6.81%	4.69%
04/29/1997	11.70%	6.81%	4.89%
07/17/1997	12.00%	6.77%	5.23%
12/12/1997	11.00%	6.60%	4.40%
12/23/1997	11.12%	6.57%	4.55%
02/02/1998	12.75%	6.39%	6.36%
03/02/1998	11.25%	6.29%	4.96%
03/06/1998	10.75%	6.27%	4.48%
03/20/1998	10.50%	6.22%	4.28%
04/30/1998	12.20%	6.12%	6.08%
07/10/1998	11.40%	5.94%	5.46%
09/15/1998	11.90%	5.78%	6.12%
11/30/1998	12.60%	5.58%	7.02%
12/10/1998	12.20%	5.54%	6.66%
12/17/1998	12.10%	5.52%	6.58%
02/05/1999	10.30%	5.38%	4.92%
03/04/1999	10.50%	5.34%	5.16%
04/06/1999	10.94%	5.32%	5.62%
07/29/1999	10.75%	5.52%	5.23%
09/23/1999	10.75%	5.70%	5.05%
11/17/1999	11.10%	5.90%	5.20%
01/07/2000	11.50%	6.05%	5.45%
01/07/2000	11.50%	6.05%	5.45%
02/17/2000	10.60%	6.17%	4.43%
03/28/2000	11.25%	6.20%	5.05%
05/24/2000	11.00%	6.18%	4.82%
07/18/2000	12.20%	6.16%	6.04%
09/29/2000	11.16%	6.03%	5.13%
11/28/2000	12.90%	5.89%	7.01%
11/30/2000	12.10%	5.88%	6.22%
01/23/2001	11.25%	5.79%	5.46%
02/08/2001	11.50%	5.77%	5.73%
05/08/2001	10.75%	5.62%	5.13%
06/26/2001	11.00%	5.62%	5.38%
07/25/2001	11.02%	5.60%	5.42%
07/25/2001	11.02%	5.60%	5.42%
07/31/2001	11.00%	5.59%	5.41%
08/31/2001	10.50%	5.56%	4.94%
09/07/2001	10.75%	5.55%	5.20%
09/10/2001	11.00%	5.55%	5.45%
09/20/2001	10.00%	5.55%	4.45%
10/24/2001	10.30%	5.54%	4.76%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
11/28/2001	10.60%	5.49%	5.11%
12/03/2001	12.88%	5.49%	7.39%
12/20/2001	12.50%	5.50%	7.00%
01/22/2002	10.00%	5.50%	4.50%
03/27/2002	10.10%	5.45%	4.65%
04/22/2002	11.80%	5.45%	6.35%
05/28/2002	10.17%	5.46%	4.71%
06/10/2002	12.00%	5.47%	6.53%
06/18/2002	11.16%	5.48%	5.68%
06/20/2002	11.00%	5.48%	5.52%
06/20/2002	12.30%	5.48%	6.82%
07/15/2002	11.00%	5.48%	5.52%
09/12/2002	12.30%	5.45%	6.85%
09/26/2002	10.45%	5.41%	5.04%
12/04/2002	11.55%	5.29%	6.26%
12/13/2002	11.75%	5.27%	6.48%
12/20/2002	11.40%	5.25%	6.15%
01/08/2003	11.10%	5.19%	5.91%
01/31/2003	12.45%	5.13%	7.32%
02/28/2003	12.30%	5.05%	7.25%
03/06/2003	10.75%	5.03%	5.72%
03/07/2003	9.96%	5.02%	4.94%
03/20/2003	12.00%	4.98%	7.02%
04/03/2003	12.00%	4.96%	7.04%
04/15/2003	11.15%	4.94%	6.21%
06/25/2003	10.75%	4.79%	5.96%
06/26/2003	10.75%	4.79%	5.96%
07/09/2003	9.75%	4.79%	4.96%
07/16/2003	9.75%	4.79%	4.96%
07/25/2003	9.50%	4.80%	4.70%
08/26/2003	10.50%	4.83%	5.67%
12/17/2003	9.85%	4.94%	4.91%
12/17/2003	10.70%	4.94%	5.76%
12/18/2003	11.50%	4.94%	6.56%
12/19/2003	12.00%	4.94%	7.06%
12/19/2003	12.00%	4.94%	7.06%
12/23/2003	10.50%	4.94%	5.56%
01/13/2004	12.00%	4.95%	7.05%
03/02/2004	10.75%	4.99%	5.76%
03/26/2004	10.25%	5.02%	5.23%
04/05/2004	11.25%	5.03%	6.22%
05/18/2004	10.50%	5.07%	5.43%
05/25/2004	10.25%	5.08%	5.17%
05/27/2004	10.25%	5.08%	5.17%
06/02/2004	11.22%	5.08%	6.14%
06/30/2004	10.50%	5.10%	5.40%
06/30/2004	10.50%	5.10%	5.40%
07/16/2004	11.60%	5.11%	6.49%
08/25/2004	10.25%	5.10%	5.15%
09/09/2004	10.40%	5.10%	5.30%
11/09/2004	10.50%	5.07%	5.43%
11/23/2004	11.00%	5.06%	5.94%
12/14/2004	10.97%	5.07%	5.90%
12/21/2004	11.25%	5.07%	6.18%
12/21/2004	11.50%	5.07%	6.43%
12/22/2004	10.70%	5.07%	5.63%
12/22/2004	11.50%	5.07%	6.43%
12/29/2004	9.85%	5.07%	4.78%
01/06/2005	10.70%	5.08%	5.62%
02/18/2005	10.30%	4.98%	5.32%
02/25/2005	10.50%	4.96%	5.54%
03/10/2005	11.00%	4.93%	6.07%
03/24/2005	10.30%	4.90%	5.40%
04/04/2005	10.00%	4.88%	5.12%
04/07/2005	10.25%	4.87%	5.38%
05/18/2005	10.25%	4.78%	5.47%
05/25/2005	10.75%	4.76%	5.99%
05/26/2005	9.75%	4.76%	4.99%
06/01/2005	9.75%	4.75%	5.00%
07/19/2005	11.50%	4.64%	6.86%
08/05/2005	11.75%	4.62%	7.13%
08/15/2005	10.13%	4.61%	5.52%
09/28/2005	10.00%	4.54%	5.46%
10/04/2005	10.75%	4.54%	6.21%
12/12/2005	11.00%	4.55%	6.45%
12/13/2005	10.75%	4.55%	6.20%
12/21/2005	10.29%	4.54%	5.75%



Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
12/21/2005	10.40%	4.54%	5.86%
12/22/2005	11.00%	4.54%	6.46%
12/22/2005	11.15%	4.54%	6.61%
12/28/2005	10.00%	4.54%	5.46%
12/28/2005	10.00%	4.54%	5.46%
01/05/2006	11.00%	4.53%	6.47%
01/27/2006	9.75%	4.52%	5.23%
03/03/2006	10.39%	4.53%	5.86%
04/17/2006	10.20%	4.61%	5.59%
04/26/2006	10.60%	4.64%	5.96%
05/17/2006	11.60%	4.69%	6.91%
06/06/2006	10.00%	4.74%	5.26%
06/27/2006	10.75%	4.80%	5.95%
07/06/2006	10.20%	4.83%	5.37%
07/24/2006	9.60%	4.86%	4.74%
07/26/2006	10.50%	4.86%	5.64%
07/28/2006	10.05%	4.86%	5.19%
08/23/2006	9.55%	4.89%	4.66%
09/01/2006	10.54%	4.90%	5.64%
09/14/2006	10.00%	4.91%	5.09%
10/06/2006	9.67%	4.92%	4.75%
11/21/2006	10.08%	4.95%	5.13%
11/21/2006	10.08%	4.95%	5.13%
11/21/2006	10.12%	4.95%	5.17%
12/01/2006	10.25%	4.95%	5.30%
12/01/2006	10.50%	4.95%	5.55%
12/07/2006	10.75%	4.95%	5.80%
12/21/2006	10.90%	4.95%	5.95%
12/21/2006	11.25%	4.95%	6.30%
12/22/2006	10.25%	4.95%	5.30%
01/05/2007	10.00%	4.95%	5.05%
01/11/2007	10.10%	4.95%	5.15%
01/11/2007	10.10%	4.95%	5.15%
01/11/2007	10.90%	4.95%	5.95%
01/12/2007	10.10%	4.95%	5.15%
01/13/2007	10.40%	4.95%	5.45%
01/19/2007	10.80%	4.94%	5.86%
03/21/2007	11.35%	4.87%	6.48%
03/22/2007	9.75%	4.86%	4.89%
05/15/2007	10.00%	4.81%	5.19%
05/17/2007	10.25%	4.81%	5.44%
05/17/2007	10.25%	4.81%	5.44%
05/22/2007	10.20%	4.80%	5.40%
05/22/2007	10.50%	4.80%	5.70%
05/23/2007	10.70%	4.80%	5.90%
05/25/2007	9.67%	4.80%	4.87%
06/15/2007	9.90%	4.82%	5.08%
06/21/2007	10.20%	4.83%	5.37%
06/22/2007	10.50%	4.83%	5.67%
06/28/2007	10.75%	4.84%	5.91%
07/12/2007	9.67%	4.86%	4.81%
07/19/2007	10.00%	4.87%	5.13%
07/19/2007	10.00%	4.87%	5.13%
08/15/2007	10.40%	4.88%	5.52%
10/09/2007	10.00%	4.91%	5.09%
10/17/2007	9.10%	4.91%	4.19%
10/31/2007	9.96%	4.90%	5.06%
11/29/2007	10.90%	4.87%	6.03%
12/06/2007	10.75%	4.86%	5.89%
12/13/2007	9.96%	4.86%	5.10%
12/14/2007	10.70%	4.86%	5.84%
12/14/2007	10.80%	4.86%	5.94%
12/19/2007	10.20%	4.86%	5.34%
12/20/2007	10.20%	4.85%	5.35%
12/20/2007	11.00%	4.85%	6.15%
12/28/2007	10.25%	4.85%	5.40%
12/31/2007	11.25%	4.85%	6.40%
01/08/2008	10.75%	4.83%	5.92%
01/17/2008	10.75%	4.81%	5.94%
01/28/2008	9.40%	4.80%	4.60%
01/30/2008	10.00%	4.79%	5.21%
01/31/2008	10.71%	4.79%	5.92%
02/29/2008	10.25%	4.75%	5.50%
03/12/2008	10.25%	4.73%	5.52%
03/25/2008	9.10%	4.68%	4.42%
04/22/2008	10.25%	4.60%	5.65%
04/24/2008	10.10%	4.60%	5.50%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
05/01/2008	10.70%	4.59%	6.11%
05/19/2008	11.00%	4.56%	6.44%
05/27/2008	10.00%	4.55%	5.45%
06/10/2008	10.70%	4.54%	6.16%
06/27/2008	10.50%	4.54%	5.96%
06/27/2008	11.04%	4.54%	6.50%
07/10/2008	10.43%	4.52%	5.91%
07/16/2008	9.40%	4.52%	4.88%
07/30/2008	10.80%	4.51%	6.29%
07/31/2008	10.70%	4.51%	6.19%
08/11/2008	10.25%	4.51%	5.74%
08/26/2008	10.18%	4.50%	5.68%
09/10/2008	10.30%	4.50%	5.80%
09/24/2008	10.65%	4.48%	6.17%
09/24/2008	10.65%	4.48%	6.17%
09/24/2008	10.65%	4.48%	6.17%
09/30/2008	10.20%	4.48%	5.72%
10/08/2008	10.15%	4.46%	5.69%
11/13/2008	10.55%	4.45%	6.10%
11/17/2008	10.20%	4.44%	5.76%
12/01/2008	10.25%	4.40%	5.85%
12/23/2008	11.00%	4.27%	6.73%
12/29/2008	10.00%	4.24%	5.76%
12/29/2008	10.20%	4.24%	5.96%
12/31/2008	10.75%	4.22%	6.53%
01/14/2009	10.50%	4.15%	6.35%
01/21/2009	10.50%	4.12%	6.38%
01/21/2009	10.50%	4.12%	6.38%
01/21/2009	10.50%	4.12%	6.38%
01/27/2009	10.76%	4.09%	6.67%
01/30/2009	10.50%	4.08%	6.42%
02/04/2009	8.75%	4.06%	4.69%
03/04/2009	10.50%	3.96%	6.54%
03/12/2009	11.50%	3.93%	7.57%
04/02/2009	11.10%	3.85%	7.25%
04/21/2009	10.61%	3.80%	6.81%
04/24/2009	10.00%	3.79%	6.21%
04/30/2009	11.25%	3.78%	7.47%
05/04/2009	10.74%	3.77%	6.97%
05/20/2009	10.25%	3.74%	6.51%
05/28/2009	10.50%	3.74%	6.76%
06/22/2009	10.00%	3.76%	6.24%
06/24/2009	10.80%	3.77%	7.03%
07/08/2009	10.63%	3.77%	6.86%
07/17/2009	10.50%	3.78%	6.72%
08/31/2009	10.25%	3.82%	6.43%
10/14/2009	10.70%	4.01%	6.69%
10/23/2009	10.88%	4.06%	6.82%
11/02/2009	10.70%	4.09%	6.61%
11/03/2009	10.70%	4.10%	6.60%
11/24/2009	10.25%	4.15%	6.10%
11/25/2009	10.75%	4.16%	6.59%
11/30/2009	10.35%	4.17%	6.18%
12/03/2009	10.50%	4.18%	6.32%
12/07/2009	10.70%	4.18%	6.52%
12/16/2009	10.90%	4.21%	6.69%
12/16/2009	11.00%	4.21%	6.79%
12/18/2009	10.40%	4.22%	6.18%
12/18/2009	10.40%	4.22%	6.18%
12/22/2009	10.20%	4.23%	5.97%
12/22/2009	10.40%	4.23%	6.17%
12/22/2009	10.40%	4.23%	6.17%
12/30/2009	10.00%	4.26%	5.74%
01/04/2010	10.80%	4.28%	6.52%
01/11/2010	11.00%	4.30%	6.70%
01/26/2010	10.13%	4.35%	5.78%
01/27/2010	10.40%	4.35%	6.05%
01/27/2010	10.40%	4.35%	6.05%
01/27/2010	10.70%	4.35%	6.35%
02/09/2010	9.80%	4.38%	5.42%
02/18/2010	10.60%	4.40%	6.20%
02/24/2010	10.18%	4.41%	5.77%
03/02/2010	9.63%	4.41%	5.22%
03/04/2010	10.50%	4.41%	6.09%
03/05/2010	10.50%	4.41%	6.09%
03/11/2010	11.90%	4.42%	7.48%
03/17/2010	10.00%	4.41%	5.59%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
03/25/2010	10.15%	4.42%	5.73%
04/02/2010	10.10%	4.43%	5.67%
04/27/2010	10.00%	4.46%	5.54%
04/29/2010	9.90%	4.46%	5.44%
04/29/2010	10.06%	4.46%	5.60%
04/29/2010	10.26%	4.46%	5.80%
05/12/2010	10.30%	4.45%	5.85%
05/12/2010	10.30%	4.45%	5.85%
05/28/2010	10.10%	4.44%	5.66%
05/28/2010	10.20%	4.44%	5.76%
06/07/2010	10.30%	4.44%	5.86%
06/16/2010	10.00%	4.44%	5.56%
06/28/2010	9.67%	4.43%	5.24%
06/28/2010	10.50%	4.43%	6.07%
06/30/2010	9.40%	4.43%	4.97%
07/01/2010	10.25%	4.43%	5.82%
07/15/2010	10.53%	4.43%	6.10%
07/15/2010	10.70%	4.43%	6.27%
07/30/2010	10.70%	4.41%	6.29%
08/04/2010	10.50%	4.41%	6.09%
08/06/2010	9.83%	4.41%	5.42%
08/25/2010	9.90%	4.37%	5.53%
09/03/2010	10.60%	4.35%	6.25%
09/14/2010	10.70%	4.33%	6.37%
09/16/2010	10.00%	4.33%	5.67%
09/16/2010	10.00%	4.33%	5.67%
09/30/2010	9.75%	4.29%	5.46%
10/14/2010	10.35%	4.24%	6.11%
10/28/2010	10.70%	4.21%	6.49%
11/02/2010	10.38%	4.20%	6.18%
11/04/2010	10.70%	4.20%	6.50%
11/19/2010	10.20%	4.18%	6.02%
11/22/2010	10.00%	4.18%	5.82%
12/01/2010	10.13%	4.16%	5.97%
12/06/2010	9.86%	4.15%	5.71%
12/09/2010	10.25%	4.15%	6.10%
12/13/2010	10.70%	4.15%	6.55%
12/14/2010	10.13%	4.15%	5.98%
12/15/2010	10.44%	4.15%	6.29%
12/17/2010	10.00%	4.15%	5.85%
12/20/2010	10.60%	4.15%	6.45%
12/21/2010	10.30%	4.14%	6.16%
12/27/2010	9.90%	4.14%	5.76%
12/29/2010	11.15%	4.14%	7.01%
01/05/2011	10.15%	4.13%	6.02%
01/12/2011	10.30%	4.12%	6.18%
01/13/2011	10.30%	4.12%	6.18%
01/18/2011	10.00%	4.12%	5.88%
01/20/2011	9.30%	4.12%	5.18%
01/20/2011	10.13%	4.12%	6.01%
01/31/2011	9.60%	4.12%	5.48%
02/03/2011	10.00%	4.12%	5.88%
02/25/2011	10.00%	4.14%	5.88%
03/25/2011	9.80%	4.18%	5.62%
03/30/2011	10.00%	4.18%	5.82%
04/12/2011	10.00%	4.21%	5.79%
04/25/2011	10.74%	4.23%	6.51%
04/26/2011	9.67%	4.23%	5.44%
04/27/2011	10.40%	4.24%	6.16%
05/04/2011	10.00%	4.24%	5.76%
05/04/2011	10.00%	4.24%	5.76%
05/24/2011	10.50%	4.27%	6.23%
06/08/2011	10.75%	4.30%	6.45%
06/16/2011	9.20%	4.32%	4.88%
06/17/2011	9.95%	4.32%	5.63%
07/13/2011	10.20%	4.36%	5.84%
08/01/2011	9.20%	4.39%	4.81%
08/08/2011	10.00%	4.38%	5.62%
08/11/2011	10.00%	4.38%	5.62%
08/12/2011	10.35%	4.37%	5.98%
08/19/2011	10.25%	4.36%	5.89%
09/02/2011	12.88%	4.32%	8.56%
09/22/2011	10.00%	4.24%	5.76%
10/12/2011	10.30%	4.14%	6.16%
10/20/2011	10.50%	4.10%	6.40%
11/30/2011	10.90%	3.87%	7.03%
11/30/2011	10.90%	3.87%	7.03%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
12/14/2011	10.00%	3.80%	6.20%
12/14/2011	10.30%	3.80%	6.50%
12/20/2011	10.20%	3.76%	6.44%
12/21/2011	10.20%	3.76%	6.44%
12/22/2011	9.90%	3.75%	6.15%
12/22/2011	10.40%	3.75%	6.65%
12/23/2011	10.19%	3.74%	6.45%
01/25/2012	10.50%	3.57%	6.93%
01/27/2012	10.50%	3.56%	6.94%
02/15/2012	10.20%	3.47%	6.73%
02/23/2012	9.90%	3.44%	6.46%
02/27/2012	10.25%	3.43%	6.82%
02/29/2012	10.40%	3.41%	6.99%
03/29/2012	10.37%	3.32%	7.05%
04/04/2012	10.00%	3.30%	6.70%
04/26/2012	10.00%	3.21%	6.79%
05/02/2012	10.00%	3.18%	6.82%
05/07/2012	9.80%	3.17%	6.63%
05/15/2012	10.00%	3.14%	6.86%
05/29/2012	10.05%	3.11%	6.94%
06/07/2012	10.30%	3.08%	7.22%
06/14/2012	9.40%	3.06%	6.34%
06/15/2012	10.40%	3.06%	7.34%
06/18/2012	9.60%	3.06%	6.54%
06/19/2012	9.25%	3.05%	6.20%
06/26/2012	10.10%	3.04%	7.06%
06/29/2012	10.00%	3.04%	6.96%
07/09/2012	10.20%	3.03%	7.17%
07/16/2012	9.80%	3.02%	6.78%
07/20/2012	9.31%	3.01%	6.30%
07/20/2012	9.81%	3.01%	6.80%
09/13/2012	9.80%	2.94%	6.86%
09/19/2012	9.80%	2.94%	6.86%
09/19/2012	10.05%	2.94%	7.11%
09/26/2012	9.50%	2.94%	6.56%
10/12/2012	9.60%	2.93%	6.67%
10/23/2012	9.75%	2.93%	6.82%
10/24/2012	10.30%	2.93%	7.37%
11/09/2012	10.30%	2.92%	7.38%
11/26/2012	10.40%	2.90%	7.50%
11/29/2012	9.75%	2.90%	6.85%
11/29/2012	9.88%	2.90%	6.98%
12/05/2012	9.71%	2.89%	6.82%
12/05/2012	10.40%	2.89%	7.51%
12/12/2012	9.80%	2.88%	6.92%
12/13/2012	9.50%	2.88%	6.62%
12/13/2012	10.50%	2.88%	7.62%
12/14/2012	10.40%	2.88%	7.52%
12/19/2012	9.71%	2.88%	6.83%
12/19/2012	10.25%	2.88%	7.37%
12/20/2012	9.50%	2.87%	6.63%
12/20/2012	9.80%	2.87%	6.93%
12/20/2012	10.25%	2.87%	7.38%
12/20/2012	10.25%	2.87%	7.38%
12/20/2012	10.30%	2.87%	7.43%
12/20/2012	10.40%	2.87%	7.53%
12/20/2012	10.45%	2.87%	7.58%
12/21/2012	10.20%	2.87%	7.33%
12/26/2012	9.80%	2.86%	6.94%
01/09/2013	9.70%	2.85%	6.85%
01/09/2013	9.70%	2.85%	6.85%
01/09/2013	9.70%	2.85%	6.85%
01/16/2013	9.60%	2.84%	6.76%
01/16/2013	9.60%	2.84%	6.76%
02/13/2013	10.20%	2.84%	7.36%
02/22/2013	9.75%	2.85%	6.90%
02/27/2013	10.00%	2.86%	7.14%
03/14/2013	9.30%	2.88%	6.42%
03/27/2013	9.80%	2.90%	6.90%
05/01/2013	9.84%	2.94%	6.90%
05/15/2013	10.30%	2.96%	7.34%
05/30/2013	10.20%	2.98%	7.22%
05/31/2013	9.00%	2.98%	6.02%
06/11/2013	10.00%	3.00%	7.00%
06/21/2013	9.75%	3.02%	6.73%
06/25/2013	9.80%	3.03%	6.77%
07/12/2013	9.36%	3.08%	6.28%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30- Year	
		Treasury Yield	Risk Premium
08/08/2013	9.83%	3.14%	6.69%
08/14/2013	9.15%	3.16%	5.99%
09/11/2013	10.20%	3.26%	6.94%
09/11/2013	10.25%	3.26%	6.99%
09/24/2013	10.20%	3.31%	6.89%
10/03/2013	9.65%	3.33%	6.32%
11/06/2013	10.20%	3.41%	6.79%
11/21/2013	10.00%	3.44%	6.56%
11/26/2013	10.00%	3.45%	6.55%
12/03/2013	10.25%	3.47%	6.78%
12/04/2013	9.50%	3.47%	6.03%
12/05/2013	10.20%	3.48%	6.72%
12/09/2013	8.72%	3.48%	5.24%
12/09/2013	9.75%	3.48%	6.27%
12/13/2013	9.75%	3.50%	6.25%
12/16/2013	9.95%	3.50%	6.45%
12/16/2013	9.95%	3.50%	6.45%
12/16/2013	10.12%	3.50%	6.62%
12/17/2013	9.50%	3.51%	5.99%
12/17/2013	10.95%	3.51%	7.44%
12/18/2013	8.72%	3.51%	5.21%
12/18/2013	9.80%	3.51%	6.29%
12/19/2013	10.15%	3.51%	6.64%
12/30/2013	9.50%	3.54%	5.96%
02/20/2014	9.20%	3.68%	5.52%
02/26/2014	9.75%	3.69%	6.06%
03/17/2014	9.55%	3.72%	5.83%
03/26/2014	9.40%	3.73%	5.67%
03/26/2014	9.96%	3.73%	6.23%
04/02/2014	9.70%	3.73%	5.97%
05/16/2014	9.80%	3.70%	6.10%
05/30/2014	9.70%	3.68%	6.02%
06/06/2014	10.40%	3.67%	6.73%
06/30/2014	9.55%	3.64%	5.91%
07/02/2014	9.62%	3.64%	5.98%
07/10/2014	9.95%	3.63%	6.32%
07/23/2014	9.75%	3.61%	6.14%
07/29/2014	9.45%	3.60%	5.85%
07/31/2014	9.90%	3.60%	6.30%
08/20/2014	9.75%	3.57%	6.18%
08/25/2014	9.60%	3.56%	6.04%
08/29/2014	9.80%	3.54%	6.26%
09/15/2014	10.25%	3.51%	6.74%
10/09/2014	9.80%	3.45%	6.35%
11/06/2014	9.56%	3.37%	6.19%
11/06/2014	10.20%	3.37%	6.83%
11/14/2014	10.20%	3.35%	6.85%

Number of Rate Cases: 1,433  
Average: 4.45%

Reported Authorized Returns on Equity for Vertically Integrated Electric Utilities  
Twelve Months Ending November 14, 2014

State	Docket	Utility	Authorized ROE	Decision Date
Kansas	D-13-WSEE-629-RTS	Westar Energy Inc.	10.00%	11/21/2013
Virginia	C-PUE-2013-00020	Virginia Electric & Power Co.	10.00%	11/26/2013
Florida	D-130140-EI	Gulf Power Co.	10.25%	12/03/2013
Washington	D-UE-130043	PacifiCorp	9.50%	12/04/2013
Wisconsin	D-4220-UR-119 (Elec)	Northern States Power Co - WI	10.20%	12/05/2013
Oregon	D-UE-262	Portland General Electric Co.	9.75%	12/09/2013
Louisiana	D-U-32707	Entergy Gulf States LA LLC	9.95%	12/16/2013
Louisiana	D-U-32708	Entergy Louisiana LLC	9.95%	12/16/2013
Nevada	D-13-06002	Sierra Pacific Power Co.	10.12%	12/16/2013
Arizona	D-E-04204A-12-0504	UNS Electric Inc.	9.50%	12/17/2013
Georgia	D-36989	Georgia Power Co.	10.95%	12/17/2013
Oregon	D-UE-263	PacifiCorp	9.80%	12/18/2013
Michigan	C-U-17274	Upper Peninsula Power Co.	10.15%	12/19/2013
Arkansas	D-13-028-U	Entergy Arkansas Inc.	9.50%	12/30/2013
North Dakota	C-PU-12-813	Northern States Power Co. - MN	9.75%	02/26/2014
New Mexico	C-12-00350-UT	Southwestern Public Service Co	9.96%	03/26/2014
Texas	D-41791	Entergy Texas Inc.	9.80%	05/16/2014
Wisconsin	D-6680-UR-119 (Elec)	Wisconsin Power and Light Co	10.40%	06/06/2014
Louisiana	D-UD-13-01	Entergy Louisiana LLC	9.95%	07/10/2014
Wyoming	D-20003-132-ER-13	Cheyenne Light Fuel Power Co.	9.90%	07/31/2014
Vermont	D-8190, 8191	Green Mountain Power Corp	9.60%	08/25/2014
Utah	D-13-035-184	PacifiCorp	9.80%	08/29/2014
Florida	D-140025-EI	Florida Public Utilities Co.	10.25%	09/15/2014
Nevada	D-14-05004	Nevada Power Co.	9.80%	10/09/2014
Illinois	D-14-0066	MidAmerican Energy Co.	9.56%	11/06/2014
Wisconsin	D-6690-UR-123 (Elec)	Wisconsin Public Service Corp.	10.20%	11/06/2014
Wisconsin	D-05-UR-107 (WEP-Elec)	Wisconsin Electric Power Co.	10.20%	11/14/2014

Mean: 9.96%  
Median: 9.95%  
Minimum: 9.50%  
Maximum: 10.95%

Source: Regulatory Research Associates

Capital Asset Pricing Model  
Murray Case No. ER-2012-0166 Results Compared to Updated 2014 Results

		Murray Results 2012						
		[1]	[2]	[3]		[4]	[5]	[6]
		Risk-Free Rate	Beta Coefficient	Historical Market Risk Premium		CAPM Result		
				Arithmetic	Geometric	Arithmetic MRP	Geometric MRP	
Alliant Energy	LNT	3.13%	0.75	5.70%	4.10%	7.41%	6.21%	
American Electric Power	AEP	3.13%	0.70	5.70%	4.10%	7.12%	6.00%	
Cleco Corp.	CNL	3.13%	0.70	5.70%	4.10%	7.12%	6.00%	
Great Plains Energy	GXP	3.13%	0.75	5.70%	4.10%	7.41%	6.21%	
IDACORP, Inc.	IDA	3.13%	0.70	5.70%	4.10%	7.12%	6.00%	
Pinnacle West Capital	PNW	3.13%	0.70	5.70%	4.10%	7.12%	6.00%	
Southern Company	SO	3.13%	0.55	5.70%	4.10%	6.27%	5.39%	
Westar Energy, Inc.	WR	3.13%	0.75	5.70%	4.10%	7.41%	6.21%	
Wisconsin Energy	WEC	3.13%	0.65	5.70%	4.10%	6.84%	5.80%	
Xcel Energy	XEL	3.13%	0.65	5.70%	4.10%	6.84%	5.80%	
Average:			0.69	5.70%	4.10%	7.06%	5.96%	

		Updated Murray Results 2014						
		[1]	[2]	[3]		[4]	[5]	[6]
		Risk-Free Rate	Beta Coefficient	Historical Market Risk Premium		CAPM Result		
				Arithmetic	Geometric	Arithmetic MRP	Geometric MRP	
Alliant Energy	LNT	3.17%	0.80	6.20%	4.64%	8.13%	6.88%	
American Electric Power	AEP	3.17%	0.70	6.20%	4.64%	7.51%	6.42%	
Cleco Corp.	CNL	3.17%	0.75	6.20%	4.64%	7.82%	6.65%	
Great Plains Energy	GXP	3.17%	0.85	6.20%	4.64%	8.44%	7.11%	
IDACORP, Inc.	IDA	3.17%	0.80	6.20%	4.64%	8.13%	6.88%	
Pinnacle West Capital	PNW	3.17%	0.70	6.20%	4.64%	7.51%	6.42%	
Southern Company	SO	3.17%	0.60	6.20%	4.64%	6.89%	5.95%	
Westar Energy, Inc.	WR	3.17%	0.75	6.20%	4.64%	7.82%	6.65%	
Wisconsin Energy	WEC	3.17%	0.65	6.20%	4.64%	7.20%	6.19%	
Xcel Energy	XEL	3.17%	0.70	6.20%	4.64%	7.51%	6.42%	
Average:			0.73	6.20%	4.64%	7.70%	6.56%	

Change in results from 2012 to 2014: 0.63% 0.60%  
Change in results from 2012 to 2014, excluding CNL and WEC: 0.66% 0.62%

Notes:

- [1] Source: Case No. ER-2014-0258, Schedule 16 and Case No. ER-2012-0166, Schedule 22.
- [2] Source: Case No. ER-2014-0258, Schedule 16 and Value Line. 2014 analysis relies on Value Line betas for consistency with 2012 analysis.
- [3] Source: Case No. ER-2014-0258, Schedule 16 and Case No. ER-2012-0166, Schedule 22.
- [4] Source: Case No. ER-2014-0258, Schedule 16 and Case No. ER-2012-0166, Schedule 22.
- [5] Equals Col. [1] + (Col. [2] x Col. [3])
- [6] Equals Col. [1] + (Col. [2] x Col. [4])

Value Line 3-5 Year Projections  
Price Change and EPS Growth

Company	Ticker	Proj. Stock Price Growth	Proj. Earnings Growth Rate
Alliant Energy Corporation	LNT	-3.54%	4.50%
Ameren Corporation	AEE	-6.06%	4.50%
American Electric Power Company, Inc.	AEP	-2.93%	4.50%
CMS Energy Corporation	CMS	-8.26%	6.50%
DTE Energy Company	DTE	-10.13%	6.50%
Great Plains Energy Inc.	GXP	-3.66%	6.00%
OGE Energy Corp.	OGE	24.38%	5.50%
Pinnacle West Capital Corporation	PNW	-7.81%	4.00%
PNM Resources, Inc.	PNM	21.19%	11.00%
Portland General Electric Company	POR	-18.28%	5.00%
Southern Company	SO	-3.89%	3.50%
TECO Energy, Inc.	TE	6.71%	4.00%
Westar Energy, Inc.	WR	9.96%	6.00%
Xcel Energy Inc.	XEL	-10.45%	5.50%
	Mean:	-0.91%	5.50%
	Median:	-3.78%	5.25%

Notes:

Source: Value Line Screener



Growth Rate Regression Analysis

Company	Ticker	Median P/E	Proj.		
			Earnings Growth Rate	Div Growth Rate	BV Growth Rate
ALLETE	ALE	NMF	6.00%	4.00%	4.50%
Alliant Energy	LNT	14.00	6.00%	4.50%	4.00%
Amer. Elec. Power	AEP	13.00	4.50%	4.50%	4.00%
Ameren Corp.	AEE	15.00	4.50%	2.00%	1.50%
Avista Corp.	AVA	16.00	5.50%	4.50%	4.00%
Black Hills	BKH	17.00	9.50%	4.00%	4.00%
CenterPoint Energy	CNP	15.00	3.50%	8.00%	2.00%
Cleco Corp.	CNL	14.00	3.50%	8.00%	4.00%
CMS Energy Corp.	CMS	14.00	6.50%	6.00%	6.00%
Consol. Edison	ED	15.00	2.00%	2.00%	3.50%
Dominion Resources	D	17.00	5.50%	5.00%	6.00%
DTE Energy	DTE	15.00	6.50%	5.00%	4.50%
Duke Energy	DUK	NMF	5.00%	2.00%	2.50%
Edison Int'l	EIX	12.00	2.50%	7.50%	6.00%
El Paso Electric	EE	15.00	3.00%	7.00%	5.50%
Empire Dist. Elec.	EDE	16.00	4.00%	4.50%	3.00%
Entergy Corp.	ETR	14.00	1.00%	2.50%	4.00%
Exelon Corp.	EXC	15.00	2.00%	-3.50%	5.00%
FirstEnergy Corp.	FE	15.00	4.50%	-4.00%	2.50%
G't Plains Energy	GXP	15.00	6.00%	6.00%	3.00%
Hawaiian Elec.	HE	19.00	4.00%	1.00%	4.00%
IDACORP, Inc.	IDA	14.00	1.50%	8.00%	4.00%
Integrus Energy	TEG	15.00	3.50%	1.50%	3.50%
ITC Holdings	ITC	NMF	15.50%	12.50%	11.50%
MGE Energy	MGEE	16.00	9.00%	4.00%	6.00%
NextEra Energy	NEE	14.00	6.00%	8.50%	7.00%
Northeast Utilities	NU	18.00	8.00%	7.50%	5.00%
NorthWestern Corp.	NWE	NMF	3.50%	4.50%	4.00%
OGE Energy	OGE	14.00	5.50%	9.00%	6.50%
Otter Tail Corp.	OTTR	23.00	15.50%	1.50%	3.00%
Pepco Holdings	POM	15.00	7.00%	0.00%	3.00%
PG&E Corp.	PCG	15.00	5.00%	2.50%	3.00%
Pinnacle West Capital	PNW	15.00	4.00%	3.00%	3.50%
PNM Resources	PNM	16.00	11.00%	12.00%	3.50%
Portland General	POR	NMF	5.00%	4.50%	4.00%
PPL Corp.	PPL	14.00	0.00%	2.00%	4.00%
Public Serv. Enterprise	PEG	14.00	2.00%	2.50%	5.00%
SCANA Corp.	SCG	14.00	5.00%	3.00%	5.50%
Sempra Energy	SRE	12.00	7.00%	7.00%	4.50%
Southern Co.	SO	16.00	3.50%	3.50%	4.00%
TECO Energy	TE	15.00	3.50%	1.50%	2.50%
UIL Holdings	UIL	17.00	4.50%	0.00%	4.50%
Vectren Corp.	VVC	16.00	9.00%	1.50%	2.50%
Westar Energy	WR	14.00	6.00%	3.00%	5.00%
Wisconsin Energy	WEC	15.00	5.50%	9.50%	3.00%
Xcel Energy Inc.	XEL	14.00	5.50%	5.00%	4.50%

Notes:

Source: Value Line Reports as of November 14, 2014  
 NMF and NA data excluded from regressions

Growth Rate Regression Analysis

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.571907666
R Square	0.327078379
Adjusted R Square	0.309823978
Standard Error	1.553141772
Observations	41

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	45.72715286	45.7271529	18.9562296	9.37451E-05
Residual	39	94.07772519	2.41224936		
Total	40	139.804878			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	13.2453779	0.504371336	26.2611631	2.0971E-26	12.22519058	14.26556522
Proj. EPS Growth Rate	37.23561603	8.552292833	4.35387524	9.3745E-05	19.93697097	54.53426109

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.22788715
R Square	0.051932553
Adjusted R Square	0.027623131
Standard Error	1.843522644
Observations	41

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	7.260424254	7.26042425	2.1363138	0.151858496
Residual	39	132.5444538	3.39857574		
Total	40	139.804878			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	15.6994109	0.462304793	33.9590052	1.4039E-30	14.76431119	16.63451061
Proj. DPS Growth Rate	-12.71310674	8.697995335	-1.46161342	0.1518585	-30.30646293	4.880249444

Growth Rate Regression Analysis

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.221342046
R Square	0.048992301
Adjusted R Square	0.024607489
Standard Error	1.846379099
Observations	41

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	6.849362713	6.84936271	2.00913174	0.164294954
Residual	39	132.9555153	3.40911578		
Total	40	139.804878			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	16.52305201	0.99668364	16.5780307	2.9589E-19	14.50706906	18.53903496
Proj. BVPS Growth Rate	-32.71099257	23.07754015	-1.41743844	0.16429495	-79.38972348	13.96773834

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.666828784
R Square	0.444660627
Adjusted R Square	0.399633111
Standard Error	1.448570155
Observations	41

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	62.16572477	20.7219083	9.8753087	6.40243E-05
Residual	37	77.63915328	2.09835549		
Total	40	139.804878			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	14.46926021	0.896455172	16.1405285	2.4771E-18	12.6528695	16.28565092
Proj. EPS Growth Rate	40.12533476	8.116336855	4.94377396	1.6781E-05	23.6800742	56.57059532
Proj. DPS Growth Rate	-16.4623725	7.279014956	-2.26162092	0.02968709	-31.21105774	-1.71368726
Proj. BVPS Growth Rate	-16.65901669	19.03468972	-0.87519245	0.38711535	-55.22696154	21.90892815

S&P 500 EARNINGS PER SHARE GROWTH /  
NOMINAL GDP GROWTH

	[1]	[2]	[3]	[4]	[5]
Year	S&P 500 Index	S&P 500 EPS	S&P 500 EPS Growth	Nominal GDP	Nominal GDP Growth
1968	106.50	5.76	-	942.5	-
1969	91.11	5.78	0.35%	1,019.9	8.21%
1970	90.05	5.13	-11.25%	1,075.9	5.49%
1971	99.17	5.70	11.11%	1,167.8	8.54%
1972	117.50	6.42	12.63%	1,282.4	9.81%
1973	94.78	8.16	27.10%	1,428.5	11.39%
1974	67.07	8.89	8.95%	1,548.8	8.42%
1975	88.70	7.96	-10.46%	1,688.9	9.05%
1976	104.70	9.91	24.50%	1,877.6	11.17%
1977	93.82	10.89	9.89%	2,086.0	11.10%
1978	96.11	12.33	13.22%	2,356.6	12.97%
1979	107.80	14.86	20.52%	2,632.1	11.69%
1980	133.50	14.82	-0.27%	2,862.5	8.75%
1981	123.80	15.36	3.64%	3,211.0	12.17%
1982	139.40	12.64	-17.71%	3,345.0	4.17%
1983	164.40	14.03	11.00%	3,638.1	8.76%
1984	164.50	16.64	18.60%	4,040.7	11.07%
1985	207.30	14.61	-12.20%	4,346.7	7.57%
1986	248.60	14.48	-0.89%	4,590.2	5.60%
1987	241.00	17.50	20.86%	4,870.2	6.10%
1988	276.50	23.76	35.77%	5,252.6	7.85%
1989	348.60	22.90	-3.62%	5,657.7	7.71%
1990	328.75	21.34	-6.81%	5,979.6	5.69%
1991	388.51	15.97	-25.16%	6,174.0	3.25%
1992	435.64	19.09	19.54%	6,539.3	5.92%
1993	465.95	21.88	14.61%	6,878.7	5.19%
1994	455.19	30.60	39.85%	7,308.8	6.25%
1995	614.57	33.96	10.98%	7,664.1	4.86%
1996	743.25	38.73	14.05%	8,100.2	5.69%
1997	962.37	39.72	2.56%	8,608.5	6.28%
1998	1,190.05	37.71	-5.06%	9,089.2	5.58%
1999	1,428.68	48.17	27.74%	9,660.6	6.29%
2000	1,330.93	50.00	3.80%	10,284.8	6.46%
2001	1,144.93	24.69	-50.62%	10,621.8	3.28%
2002	899.18	27.59	11.75%	10,977.5	3.35%
2003	1,080.64	48.74	76.66%	11,510.7	4.86%
2004	1,199.21	58.55	20.13%	12,274.9	6.64%
2005	1,262.07	69.93	19.44%	13,093.7	6.67%
2006	1,416.42	81.51	16.56%	13,855.9	5.82%
2007	1,479.22	66.18	-18.81%	14,477.6	4.49%
2008	877.56	14.88	-77.52%	14,718.6	1.66%
2009	1,110.38	50.97	242.54%	14,418.7	-2.04%
2010	1,241.53	77.35	51.76%	14,964.4	3.78%
2011	1,243.32	86.95	12.41%	15,517.9	3.70%
2012	1,422.29	86.51	-0.51%	16,163.2	4.16%
2013	1,807.78	100.20	15.82%	16,768.1	3.74%
<b>CAGR</b>		<b>6.55%</b>		<b>6.61%</b>	

Notes:

[1] Source: <http://www.econ.yale.edu/~shiller/data.htm>.

[2] Source: <http://www.econ.yale.edu/~shiller/data.htm>.

[3] Equals annual percent change of Column [2]

[4] Source: Bureau of Economic Analysis, Current-Dollar and Real GDP (Nov. 14, 2014)

[5] Equals annual percent change of Column [4]

**Re-creation of Staff Revenue Requirement Cost of Service Report, Schedule 12-4  
Multi-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity  
for the Comparable Electric Utility Companies  
Long-Term Growth at 50.00 Percent of Staff's Estimate of Gross Domestic Product**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	Growth Years 6	7	8	9	10	Grow h in Perpetuity	Cost of Equity
Alliant Energy	\$2.04	4.90%	4.45%	4.00%	3.55%	3.10%	2.65%	2.20%	6.50%
Ameren Corp.	\$1.64	8.43%	7.39%	6.35%	5.32%	4.28%	3.24%	2.20%	8.41%
American Electric Power	\$2.12	5.18%	4.68%	4.19%	3.69%	3.19%	2.70%	2.20%	7.11%
CMS Energy Corp.	\$1.08	5.98%	5.35%	4.72%	4.09%	3.46%	2.83%	2.20%	6.84%
DTE Energy Company	\$2.76	6.29%	5.61%	4.93%	4.25%	3.56%	2.88%	2.20%	6.94%
Great Plains Energy	\$0.98	4.78%	4.35%	3.92%	3.49%	3.06%	2.63%	2.20%	6.89%
OGE Energy Corp.	\$1.00	6.47%	5.76%	5.05%	4.34%	3.62%	2.91%	2.20%	5.94%
Pinnacle West Capital	\$2.38	3.95%	3.66%	3.37%	3.08%	2.78%	2.49%	2.20%	7.03%
PNM Resources, Inc.	\$0.74	7.80%	6.87%	5.93%	5.00%	4.07%	3.13%	2.20%	6.34%
Portland General Electric	\$1.12	7.84%	6.90%	5.96%	5.02%	4.08%	3.14%	2.20%	7.06%
Southern Company	\$2.10	3.71%	3.46%	3.21%	2.96%	2.70%	2.45%	2.20%	7.53%
TECO Energy, Inc.	\$0.88	6.65%	5.91%	5.17%	4.43%	3.68%	2.94%	2.20%	8.76%
Westar Energy, Inc.	\$1.40	3.38%	3.18%	2.99%	2.79%	2.59%	2.40%	2.20%	6.52%
Xcel Energy	\$1.20	4.97%	4.51%	4.05%	3.59%	3.12%	2.66%	2.20%	6.86%

Mean: **7.05%**  
Mean without OGE and TECO: **7.00%**

Sources: Columns 1 - 7 = Staff Revenue Requirement Cost of Service Report, Schedule 12.  
Column 8 = 50.00% of Staff's 4.40% GDP estimate (see Revenue Requirement Cost of Service Report, at 41.)

**Re-creation of Staff Revenue Requirement Cost of Service Report, Schedule 12-4  
Multi-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity  
for the Comparable Electric Utility Companies  
Long-Term Growth at Staff's 2.00 Percent Estimate of Inflation**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	Growth Years 6	7	8	9	10	Grow h in Perpetuity	Cost of Equity
Alliant Energy	\$2.04	4.90%	4.42%	3.93%	3.45%	2.97%	2.48%	2.00%	6.48%
Ameren Corp.	\$1.64	8.43%	7.36%	6.29%	5.22%	4.14%	3.07%	2.00%	8.51%
American Electric Power	\$2.12	5.18%	4.65%	4.12%	3.59%	3.06%	2.53%	2.00%	7.13%
CMS Energy Corp.	\$1.08	5.98%	5.32%	4.65%	3.99%	3.33%	2.66%	2.00%	6.84%
DTE Energy Company	\$2.76	6.29%	5.58%	4.86%	4.15%	3.43%	2.72%	2.00%	6.94%
Great Plains Energy	\$0.98	4.78%	4.32%	3.85%	3.39%	2.93%	2.46%	2.00%	6.89%
OGE Energy Corp.	\$1.00	6.47%	5.73%	4.98%	4.24%	3.49%	2.75%	2.00%	5.88%
Pinnacle West Capital	\$2.38	3.95%	3.63%	3.30%	2.98%	2.65%	2.33%	2.00%	7.04%
PNM Resources, Inc.	\$0.74	7.80%	6.83%	5.87%	4.90%	3.93%	2.97%	2.00%	6.31%
Portland General Electric	\$1.12	7.84%	6.87%	5.89%	4.92%	3.95%	2.97%	2.00%	7.06%
Southern Company	\$2.10	3.71%	3.43%	3.14%	2.86%	2.57%	2.29%	2.00%	7.58%
TECO Energy, Inc.	\$0.88	6.65%	5.88%	5.10%	4.33%	3.55%	2.78%	2.00%	8.89%
Westar Energy, Inc.	\$1.40	3.38%	3.15%	2.92%	2.69%	2.46%	2.23%	2.00%	6.50%
Xcel Energy	\$1.20	4.97%	4.48%	3.98%	3.49%	2.99%	2.50%	2.00%	6.86%

Mean: **7.07%**  
Mean without OGE and TECO: **7.01%**

Sources: Columns 1 - 7 = Staff Revenue Requirement Cost of Service Report, Schedule 12.  
Column 8 = Staff's 2.00% inflation estimate (see Revenue Requirement Cost of Service Report, at 41.)

**Step-by-Step Analysis of Staff Revenue Requirement Cost of Service Report, Schedule 12-4  
As Filed (4.40 Percent Growth Rate Scenario)  
Multiple-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity  
for the Comparable Electric Utility Companies**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	Growth Years 6	7	8	9	10	Grow h in Perpetuity	Cost of Equity
Alliant Energy	\$2.04	4.90%	4.82%	4.73%	4.65%	4.57%	4.48%	4.40%	8.22%
Ameren Corp.	\$1.64	8.43%	7.76%	7.09%	6.42%	5.74%	5.07%	4.40%	9.96%
American Electric Power	\$2.12	5.18%	5.05%	4.92%	4.79%	4.66%	4.53%	4.40%	8.77%
CMS Energy Corp.	\$1.08	5.98%	5.72%	5.45%	5.19%	4.93%	4.66%	4.40%	8.53%
DTE Energy Company	\$2.76	6.29%	5.98%	5.66%	5.35%	5.03%	4.72%	4.40%	8.62%
Great Plains Energy	\$0.98	4.78%	4.72%	4.65%	4.59%	4.53%	4.46%	4.40%	8.57%
OGE Energy Corp.	\$1.00	6.47%	6.13%	5.78%	5.44%	5.09%	4.75%	4.40%	7.71%
Pinnacle West Capital	\$2.38	3.95%	4.03%	4.10%	4.18%	4.25%	4.33%	4.40%	8.70%
PNM Resources, Inc.	\$0.74	7.80%	7.23%	6.67%	6.10%	5.53%	4.97%	4.40%	8.08%
Portland General Electric	\$1.12	7.84%	7.27%	6.69%	6.12%	5.55%	4.97%	4.40%	8.72%
Southern Company	\$2.10	3.71%	3.83%	3.94%	4.06%	4.17%	4.29%	4.40%	9.15%
TECO Energy, Inc.	\$0.88	6.65%	6.28%	5.90%	5.53%	5.15%	4.78%	4.40%	10.28%
Westar Energy, Inc.	\$1.40	3.38%	3.55%	3.72%	3.89%	4.06%	4.23%	4.40%	8.24%
Xcel Energy	\$1.20	4.97%	4.88%	4.78%	4.69%	4.59%	4.50%	4.40%	8.54%

Mean:	8.72%
Median:	8.59%
Mean without OGE and TECO:	8.67%
Median without OGE and TECO:	8.59%

Sources: Columns 1 - 7 = Staff Revenue Requirement Cost of Service Report, Schedule 12.  
Column 8 = Staff Revenue Requirement Cost of Service Report, at 41 and Schedule 12-4.

**Step-by-Step Analysis of Staff Revenue Requirement Cost of Service Report, Schedule 13-4  
Update to Mid-year Convention  
Multiple-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity  
for the Comparable Electric Utility Companies**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	Growth Years 6	7	8	9	10	Grow h in Perpetuity	Cost of Equity
Alliant Energy	\$2.04	4.90%	4.82%	4.73%	4.65%	4.57%	4.48%	4.40%	8.37%
Ameren Corp.	\$1.64	8.43%	7.76%	7.09%	6.42%	5.74%	5.07%	4.40%	10.22%
American Electric Power	\$2.12	5.18%	5.05%	4.92%	4.79%	4.66%	4.53%	4.40%	8.96%
CMS Energy Corp.	\$1.08	5.98%	5.72%	5.45%	5.19%	4.93%	4.66%	4.40%	8.70%
DTE Energy Company	\$2.76	6.29%	5.98%	5.66%	5.35%	5.03%	4.72%	4.40%	8.79%
Great Plains Energy	\$0.98	4.78%	4.72%	4.65%	4.59%	4.53%	4.46%	4.40%	8.74%
OGE Energy Corp.	\$1.00	6.47%	6.13%	5.78%	5.44%	5.09%	4.75%	4.40%	7.83%
Pinnacle West Capital	\$2.38	3.95%	4.03%	4.10%	4.18%	4.25%	4.33%	4.40%	8.88%
PNM Resources, Inc.	\$0.74	7.80%	7.23%	6.67%	6.10%	5.53%	4.97%	4.40%	8.22%
Portland General Electric	\$1.12	7.84%	7.27%	6.69%	6.12%	5.55%	4.97%	4.40%	8.90%
Southern Company	\$2.10	3.71%	3.83%	3.94%	4.06%	4.17%	4.29%	4.40%	9.36%
TECO Energy, Inc.	\$0.88	6.65%	6.28%	5.90%	5.53%	5.15%	4.78%	4.40%	10.56%
Westar Energy, Inc.	\$1.40	3.38%	3.55%	3.72%	3.89%	4.06%	4.23%	4.40%	8.39%
Xcel Energy	\$1.20	4.97%	4.88%	4.78%	4.69%	4.59%	4.50%	4.40%	8.71%

Mean:	8.90%
Median:	8.76%
Mean without OGE and TECO:	8.85%
Median without OGE and TECO:	8.76%

Sources: Columns 1 - 7 = Staff Revenue Requirement Cost of Service Report, Schedule 12.  
Sources: Column 8 = Staff Revenue Requirement Cost of Service Report, Schedules 13-1 through 13-4.

**Step-by-Step Analysis of Staff Revenue Requirement Cost of Service Report, Schedule 13-4  
Update to Mid-year Convention and Long-Term Payout Ratio = 65.00%  
Multiple-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity  
for the Comparable Electric Utility Companies**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	Growth Years 6	7	8	9	10	Grow h in Perpetuity	Cost of Equity
Alliant Energy	\$2.04	4.90%	4.82%	4.73%	4.65%	4.57%	4.48%	4.40%	8.56%
Ameren Corp.	\$1.64	8.43%	7.76%	7.09%	6.42%	5.74%	5.07%	4.40%	10.20%
American Electric Power	\$2.12	5.18%	5.05%	4.92%	4.79%	4.66%	4.53%	4.40%	9.00%
CMS Energy Corp.	\$1.08	5.98%	5.72%	5.45%	5.19%	4.93%	4.66%	4.40%	8.95%
DTE Energy Company	\$2.76	6.29%	5.98%	5.66%	5.35%	5.03%	4.72%	4.40%	9.19%
Great Plains Energy	\$0.98	4.78%	4.72%	4.65%	4.59%	4.53%	4.46%	4.40%	9.11%
OGE Energy Corp.	\$1.00	6.47%	6.13%	5.78%	5.44%	5.09%	4.75%	4.40%	8.75%
Pinnacle West Capital	\$2.38	3.95%	4.03%	4.10%	4.18%	4.25%	4.33%	4.40%	9.01%
PNM Resources, Inc.	\$0.74	7.80%	7.23%	6.67%	6.10%	5.53%	4.97%	4.40%	8.99%
Portland General Electric	\$1.12	7.84%	7.27%	6.69%	6.12%	5.55%	4.97%	4.40%	10.15%
Southern Company	\$2.10	3.71%	3.83%	3.94%	4.06%	4.17%	4.29%	4.40%	8.88%
TECO Energy, Inc.	\$0.88	6.65%	6.28%	5.90%	5.53%	5.15%	4.78%	4.40%	9.04%
Westar Energy, Inc.	\$1.40	3.38%	3.55%	3.72%	3.89%	4.06%	4.23%	4.40%	8.66%
Xcel Energy	\$1.20	4.97%	4.88%	4.78%	4.69%	4.59%	4.50%	4.40%	8.91%

Mean:	9.10%
Median	8.99%
Mean without OGE and TECO:	9.13%
Median without OGE and TECO:	8.99%

Sources: Columns 1 - 7 = Staff Revenue Requirement Cost of Service Report, Schedule 12.  
Column 8 = Staff Revenue Requirement Cost of Service Report, at 41 and Schedule 12-4.  
Column 9 = Adjusted to reflect the assumption that starting and mid-term payout ratios will converge to 65.00% in year 11.

**Step-by-Step Analysis of Staff Revenue Requirement Cost of Service Report, Schedule 13-4  
Update to Mid-year Convention, Long-Term Payout Ratio = 65.00%, and Long-Term Growth = 5.63%  
Multiple-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity  
for the Comparable Electric Utility Companies**

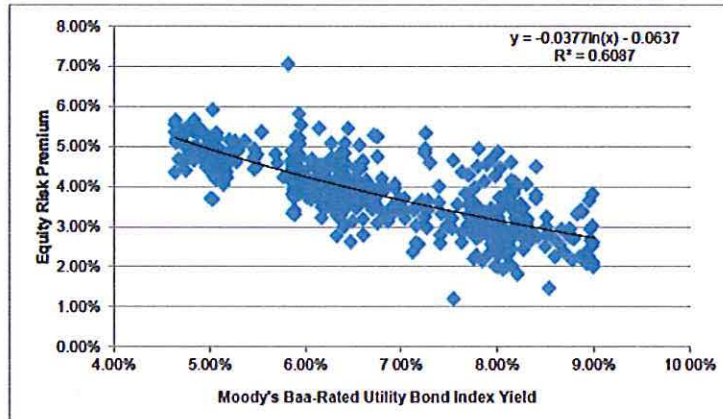
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	Growth Years 6	7	8	9	10	Grow h in Perpetuity	Cost of Equity
Alliant Energy	\$2.04	4.90%	5.02%	5.14%	5.26%	5.38%	5.51%	5.63%	9.54%
Ameren Corp.	\$1.64	8.43%	7.96%	7.50%	7.03%	6.56%	6.09%	5.63%	11.10%
American Electric Power	\$2.12	5.18%	5.25%	5.33%	5.40%	5.48%	5.55%	5.63%	9.96%
CMS Energy Corp.	\$1.08	5.98%	5.92%	5.86%	5.80%	5.74%	5.69%	5.63%	9.91%
DTE Energy Company	\$2.76	6.29%	6.18%	6.07%	5.96%	5.85%	5.74%	5.63%	10.14%
Great Plains Energy	\$0.98	4.78%	4.92%	5.06%	5.20%	5.34%	5.49%	5.63%	10.07%
OGE Energy Corp.	\$1.00	6.47%	6.33%	6.19%	6.05%	5.91%	5.77%	5.63%	9.73%
Pinnacle West Capital	\$2.38	3.95%	4.23%	4.51%	4.79%	5.07%	5.35%	5.63%	9.97%
PNM Resources, Inc.	\$0.74	7.80%	7.44%	7.08%	6.71%	6.35%	5.99%	5.63%	9.95%
Portland General Electric	\$1.12	7.84%	7.47%	7.10%	6.73%	6.36%	6.00%	5.63%	11.06%
Southern Company	\$2.10	3.71%	4.03%	4.35%	4.67%	4.99%	5.31%	5.63%	9.83%
TECO Energy, Inc.	\$0.88	6.65%	6.48%	6.31%	6.14%	5.97%	5.80%	5.63%	9.99%
Westar Energy, Inc.	\$1.40	3.38%	3.75%	4.13%	4.50%	4.88%	5.25%	5.63%	9.63%
Xcel Energy	\$1.20	4.97%	5.08%	5.19%	5.30%	5.41%	5.52%	5.63%	9.88%

Mean:	10.05%
Median	9.96%
Mean without OGE and TECO:	10.09%
Median without OGE and TECO:	9.96%

Sources: Columns 1 - 7 = Staff Revenue Requirement Cost of Service Report, Schedule 12.  
Column 8 = Federal Reserve, Bureau of Economic Analysis.  
Column 9 = Adjusted to reflect the assumption that starting and mid-term payout ratios will converge to 65.00% in year 11.

Moody's Utility Baa Bond Yield Plus Risk Premium

	[1]	[2]	[3]	[4]	[5]
	Constant	Slope	Moody's Utility Baa Yield	Risk Premium	Return on Equity
Moody's Utility Baa Yield:	-6.37%	-3.77%	4.76%	5.12%	9.88%



Notes:

- [1] Constant of regression equation
- [2] Slope of regression equation
- [3] Source: Staff Cost of Service Report, at 44
- [4] Equals [1] + [2] x ln([3])
- [5] Equals [3] + [4]
- [6] Source: SNL Financial
- [7] Source: SNL Financial
- [8] Source: Bloomberg Professional; Note, Moody's Baa Index Yield data is only available back to 1992  
Equals 201-trading day average (i.e. lag period) as of November 14, 2014
- [9] Equals [7] - [8]

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Moody's Utility Baa Yield	Risk Premium
11/02/1993	10.80%	7.90%	2.90%
11/12/1993	12.00%	7.87%	4.13%
11/26/1993	11.00%	7.84%	3.16%
12/14/1993	10.55%	7.80%	2.75%
12/16/1993	10.60%	7.80%	2.80%
12/21/1993	11.30%	7.80%	3.50%
01/04/1994	10.07%	7.78%	2.29%
01/13/1994	11.00%	7.77%	3.23%
01/21/1994	11.00%	7.75%	3.25%
01/28/1994	11.35%	7.74%	3.61%
02/03/1994	11.40%	7.73%	3.67%
02/17/1994	10.60%	7.71%	2.89%
02/25/1994	11.25%	7.71%	3.54%
02/25/1994	12.00%	7.71%	4.29%
03/01/1994	11.00%	7.70%	3.30%
03/04/1994	11.00%	7.70%	3.30%
04/25/1994	11.00%	7.74%	3.26%
05/10/1994	11.75%	7.77%	3.98%
05/13/1994	10.50%	7.78%	2.72%
06/03/1994	11.00%	7.84%	3.16%
06/27/1994	11.40%	7.94%	3.46%
08/05/1994	12.75%	8.14%	4.61%
10/31/1994	10.00%	8.53%	1.47%
11/09/1994	10.85%	8.60%	2.25%
11/09/1994	10.85%	8.60%	2.25%
11/18/1994	11.20%	8.65%	2.55%
11/22/1994	11.60%	8.67%	2.93%
11/28/1994	11.06%	8.69%	2.37%



[6] Date of Electric Rate Case	[7] Return on Equity	[8] Moody's Utility Baa Yield	[9] Risk Premium
12/08/1994	11.50%	8.75%	2.75%
12/08/1994	11.70%	8.75%	2.95%
12/14/1994	10.95%	8.77%	2.18%
12/15/1994	11.50%	8.78%	2.72%
12/19/1994	11.50%	8.79%	2.71%
12/28/1994	12.15%	8.82%	3.33%
01/09/1995	12.28%	8.86%	3.42%
01/31/1995	11.00%	8.93%	2.07%
02/10/1995	12.60%	8.95%	3.65%
02/17/1995	11.90%	8.96%	2.94%
03/09/1995	11.50%	8.98%	2.52%
03/20/1995	12.00%	8.98%	3.02%
03/23/1995	12.81%	8.98%	3.83%
03/29/1995	11.60%	8.99%	2.61%
04/06/1995	11.10%	8.99%	2.11%
04/07/1995	11.00%	8.99%	2.01%
04/19/1995	11.00%	8.99%	2.01%
05/12/1995	11.63%	8.96%	2.67%
05/25/1995	11.20%	8.94%	2.26%
06/09/1995	11.25%	8.91%	2.34%
06/21/1995	12.25%	8.88%	3.37%
06/30/1995	11.10%	8.85%	2.25%
09/11/1995	11.30%	8.58%	2.72%
09/27/1995	11.30%	8.51%	2.79%
09/27/1995	11.50%	8.51%	2.99%
09/27/1995	11.75%	8.51%	3.24%
09/29/1995	11.00%	8.49%	2.51%
11/09/1995	11.38%	8.30%	3.08%
11/09/1995	12.36%	8.30%	4.06%
11/17/1995	11.00%	8.26%	2.74%
12/04/1995	11.35%	8.21%	3.14%
12/11/1995	11.40%	8.18%	3.22%
12/20/1995	11.60%	8.14%	3.46%
12/27/1995	12.00%	8.11%	3.89%
02/05/1996	12.25%	7.98%	4.27%
03/29/1996	10.67%	7.92%	2.75%
04/08/1996	11.00%	7.92%	3.08%
04/11/1996	12.59%	7.93%	4.66%
04/11/1996	12.59%	7.93%	4.66%
04/24/1996	11.25%	7.95%	3.30%
04/30/1996	11.00%	7.95%	3.05%
05/13/1996	11.00%	7.97%	3.03%
05/23/1996	11.25%	7.98%	3.27%
06/25/1996	11.25%	8.01%	3.24%
06/27/1996	11.20%	8.01%	3.19%
08/12/1996	10.40%	8.09%	2.31%
09/27/1996	11.00%	8.18%	2.82%
10/16/1996	12.25%	8.22%	4.03%
11/05/1996	11.00%	8.25%	2.75%
11/26/1996	11.30%	8.26%	3.04%
12/18/1996	11.75%	8.27%	3.48%
12/31/1996	11.50%	8.27%	3.23%
01/03/1997	10.70%	8.27%	2.43%
02/13/1997	11.80%	8.24%	3.56%
02/20/1997	11.80%	8.24%	3.56%
03/31/1997	10.02%	8.21%	1.81%
04/02/1997	11.65%	8.21%	3.44%
04/28/1997	11.50%	8.20%	3.30%
04/29/1997	11.70%	8.20%	3.50%
07/17/1997	12.00%	8.14%	3.86%
12/12/1997	11.00%	7.96%	3.04%
12/23/1997	11.12%	7.94%	3.18%
02/02/1998	12.75%	7.81%	4.94%
03/02/1998	11.25%	7.71%	3.54%
03/06/1998	10.75%	7.70%	3.05%
03/20/1998	10.50%	7.65%	2.85%
04/30/1998	12.20%	7.55%	4.65%
07/10/1998	11.40%	7.40%	4.00%
09/15/1998	11.90%	7.30%	4.60%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] Moody's Utility Baa Yield	[9] Risk Premium
11/30/1998	12.60%	7.26%	5.34%
12/10/1998	12.20%	7.25%	4.95%
12/17/1998	12.10%	7.25%	4.85%
02/05/1999	10.30%	7.24%	3.06%
03/04/1999	10.50%	7.25%	3.25%
04/06/1999	10.94%	7.28%	3.66%
07/29/1999	10.75%	7.54%	3.21%
09/23/1999	10.75%	7.72%	3.03%
11/17/1999	11.10%	7.90%	3.20%
01/07/2000	11.50%	8.03%	3.47%
01/07/2000	11.50%	8.03%	3.47%
02/17/2000	10.60%	8.15%	2.45%
03/28/2000	11.25%	8.23%	3.02%
05/24/2000	11.00%	8.34%	2.66%
07/18/2000	12.20%	8.40%	3.80%
09/29/2000	11.16%	8.42%	2.74%
11/28/2000	12.90%	8.40%	4.50%
11/30/2000	12.10%	8.40%	3.70%
01/23/2001	11.25%	8.33%	2.92%
02/08/2001	11.50%	8.31%	3.19%
05/08/2001	10.75%	8.12%	2.63%
06/26/2001	11.00%	8.09%	2.91%
07/25/2001	11.02%	8.06%	2.96%
07/25/2001	11.02%	8.06%	2.96%
07/31/2001	11.00%	8.05%	2.95%
08/31/2001	10.50%	8.01%	2.49%
09/07/2001	10.75%	8.01%	2.74%
09/10/2001	11.00%	8.01%	2.99%
09/20/2001	10.00%	8.00%	2.00%
10/24/2001	10.30%	8.01%	2.29%
11/28/2001	10.60%	8.01%	2.59%
12/03/2001	12.88%	8.01%	4.87%
12/20/2001	12.50%	8.03%	4.47%
01/22/2002	10.00%	8.06%	1.94%
03/27/2002	10.10%	8.09%	2.01%
04/22/2002	11.80%	8.12%	3.68%
05/28/2002	10.17%	8.15%	2.02%
06/10/2002	12.00%	8.16%	3.84%
06/18/2002	11.16%	8.17%	2.99%
06/20/2002	11.00%	8.18%	2.82%
06/20/2002	12.30%	8.18%	4.12%
07/15/2002	11.00%	8.19%	2.81%
09/12/2002	12.30%	8.14%	4.16%
09/26/2002	10.45%	8.12%	2.33%
12/04/2002	11.55%	8.04%	3.51%
12/13/2002	11.75%	8.02%	3.73%
12/20/2002	11.40%	8.01%	3.39%
01/08/2003	11.10%	7.96%	3.14%
01/31/2003	12.45%	7.89%	4.56%
02/28/2003	12.30%	7.79%	4.51%
03/06/2003	10.75%	7.77%	2.98%
03/07/2003	9.96%	7.76%	2.20%
03/20/2003	12.00%	7.70%	4.30%
04/03/2003	12.00%	7.64%	4.36%
04/15/2003	11.15%	7.59%	3.56%
06/25/2003	10.75%	7.24%	3.51%
06/26/2003	10.75%	7.23%	3.52%
07/09/2003	9.75%	7.19%	2.56%
07/16/2003	9.75%	7.16%	2.59%
07/25/2003	9.50%	7.13%	2.37%
08/26/2003	10.50%	7.02%	3.48%
12/17/2003	9.85%	6.75%	3.10%
12/17/2003	10.70%	6.75%	3.95%
12/18/2003	11.50%	6.75%	4.75%
12/19/2003	12.00%	6.75%	5.25%
12/19/2003	12.00%	6.75%	5.25%
12/23/2003	10.50%	6.75%	3.75%
01/13/2004	12.00%	6.71%	5.29%
03/02/2004	10.75%	6.62%	4.13%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] Moody's Utility Baa Yield	[9] Risk Premium
03/26/2004	10.25%	6.60%	3.65%
04/05/2004	11.25%	6.60%	4.65%
05/18/2004	10.50%	6.61%	3.89%
05/25/2004	10.25%	6.60%	3.65%
05/27/2004	10.25%	6.60%	3.65%
06/02/2004	11.22%	6.60%	4.62%
06/30/2004	10.50%	6.57%	3.93%
06/30/2004	10.50%	6.57%	3.93%
07/16/2004	11.60%	6.56%	5.04%
08/25/2004	10.25%	6.53%	3.72%
09/09/2004	10.40%	6.51%	3.89%
11/09/2004	10.50%	6.43%	4.07%
11/23/2004	11.00%	6.42%	4.58%
12/14/2004	10.97%	6.41%	4.56%
12/21/2004	11.25%	6.41%	4.84%
12/21/2004	11.50%	6.41%	5.09%
12/22/2004	10.70%	6.41%	4.29%
12/22/2004	11.50%	6.41%	5.09%
12/29/2004	9.85%	6.41%	3.44%
01/06/2005	10.70%	6.41%	4.29%
02/18/2005	10.30%	6.33%	3.97%
02/25/2005	10.50%	6.31%	4.19%
03/10/2005	11.00%	6.27%	4.73%
03/24/2005	10.30%	6.23%	4.07%
04/04/2005	10.00%	6.21%	3.79%
04/07/2005	10.25%	6.20%	4.05%
05/18/2005	10.25%	6.08%	4.17%
05/25/2005	10.75%	6.07%	4.68%
05/26/2005	9.75%	6.06%	3.69%
06/01/2005	9.75%	6.05%	3.70%
07/19/2005	11.50%	5.95%	5.55%
08/05/2005	11.75%	5.93%	5.82%
08/15/2005	10.13%	5.92%	4.21%
09/28/2005	10.00%	5.87%	4.13%
10/04/2005	10.75%	5.87%	4.88%
12/12/2005	11.00%	5.93%	5.07%
12/13/2005	10.75%	5.93%	4.82%
12/21/2005	10.29%	5.93%	4.36%
12/21/2005	10.40%	5.93%	4.47%
12/22/2005	11.00%	5.94%	5.06%
12/22/2005	11.15%	5.94%	5.21%
12/28/2005	10.00%	5.94%	4.06%
12/28/2005	10.00%	5.94%	4.06%
01/05/2006	11.00%	5.94%	5.06%
01/27/2006	9.75%	5.94%	3.81%
03/03/2006	10.39%	5.96%	4.43%
04/17/2006	10.20%	6.05%	4.15%
04/26/2006	10.60%	6.08%	4.52%
05/17/2006	11.60%	6.14%	5.46%
06/06/2006	10.00%	6.19%	3.81%
06/27/2006	10.75%	6.25%	4.50%
07/06/2006	10.20%	6.28%	3.92%
07/24/2006	9.60%	6.32%	3.28%
07/26/2006	10.50%	6.33%	4.17%
07/28/2006	10.05%	6.33%	3.72%
08/23/2006	9.55%	6.36%	3.19%
09/01/2006	10.54%	6.36%	4.18%
09/14/2006	10.00%	6.37%	3.63%
10/06/2006	9.67%	6.37%	3.30%
11/21/2006	10.08%	6.39%	3.69%
11/21/2006	10.08%	6.39%	3.69%
11/21/2006	10.12%	6.39%	3.73%
12/01/2006	10.25%	6.38%	3.87%
12/01/2006	10.50%	6.38%	4.12%
12/07/2006	10.75%	6.38%	4.37%
12/21/2006	10.90%	6.38%	4.52%
12/21/2006	11.25%	6.38%	4.87%
12/22/2006	10.25%	6.37%	3.88%
01/05/2007	10.00%	6.37%	3.63%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] Moody's Utility Baa Yield	[9] Risk Premium
01/11/2007	10.10%	6.37%	3.73%
01/11/2007	10.10%	6.37%	3.73%
01/11/2007	10.90%	6.37%	4.53%
01/12/2007	10.10%	6.37%	3.73%
01/13/2007	10.40%	6.37%	4.03%
01/19/2007	10.80%	6.36%	4.44%
03/21/2007	11.35%	6.26%	5.09%
03/22/2007	9.75%	6.26%	3.49%
05/15/2007	10.00%	6.19%	3.81%
05/17/2007	10.25%	6.18%	4.07%
05/17/2007	10.25%	6.18%	4.07%
05/22/2007	10.20%	6.18%	4.02%
05/22/2007	10.50%	6.18%	4.32%
05/23/2007	10.70%	6.18%	4.52%
05/25/2007	9.67%	6.18%	3.49%
06/15/2007	9.90%	6.18%	3.72%
06/21/2007	10.20%	6.19%	4.01%
06/22/2007	10.50%	6.19%	4.31%
06/28/2007	10.75%	6.19%	4.56%
07/12/2007	9.67%	6.21%	3.46%
07/19/2007	10.00%	6.21%	3.79%
07/19/2007	10.00%	6.21%	3.79%
08/15/2007	10.40%	6.23%	4.17%
10/09/2007	10.00%	6.31%	3.69%
10/17/2007	9.10%	6.32%	2.78%
10/31/2007	9.96%	6.33%	3.63%
11/29/2007	10.90%	6.34%	4.56%
12/06/2007	10.75%	6.35%	4.40%
12/13/2007	9.96%	6.36%	3.60%
12/14/2007	10.70%	6.36%	4.34%
12/14/2007	10.80%	6.36%	4.44%
12/19/2007	10.20%	6.37%	3.83%
12/20/2007	10.20%	6.37%	3.83%
12/20/2007	11.00%	6.37%	4.63%
12/28/2007	10.25%	6.39%	3.86%
12/31/2007	11.25%	6.39%	4.86%
01/08/2008	10.75%	6.39%	4.36%
01/17/2008	10.75%	6.40%	4.35%
01/28/2008	9.40%	6.40%	3.00%
01/30/2008	10.00%	6.40%	3.60%
01/31/2008	10.71%	6.40%	4.31%
02/29/2008	10.25%	6.44%	3.81%
03/12/2008	10.25%	6.46%	3.79%
03/25/2008	9.10%	6.47%	2.63%
04/22/2008	10.25%	6.49%	3.76%
04/24/2008	10.10%	6.50%	3.60%
05/01/2008	10.70%	6.50%	4.20%
05/19/2008	11.00%	6.52%	4.48%
05/27/2008	10.00%	6.53%	3.47%
06/10/2008	10.70%	6.55%	4.15%
06/27/2008	10.50%	6.58%	3.92%
06/27/2008	11.04%	6.58%	4.46%
07/10/2008	10.43%	6.60%	3.83%
07/16/2008	9.40%	6.60%	2.80%
07/30/2008	10.80%	6.64%	4.16%
07/31/2008	10.70%	6.64%	4.06%
08/11/2008	10.25%	6.66%	3.59%
08/26/2008	10.18%	6.70%	3.48%
09/10/2008	10.30%	6.73%	3.57%
09/24/2008	10.65%	6.77%	3.88%
09/24/2008	10.65%	6.77%	3.88%
09/24/2008	10.65%	6.77%	3.88%
09/30/2008	10.20%	6.79%	3.41%
10/08/2008	10.15%	6.83%	3.32%
11/13/2008	10.55%	7.14%	3.41%
11/17/2008	10.20%	7.16%	3.04%
12/01/2008	10.25%	7.27%	2.98%
12/23/2008	11.00%	7.39%	3.61%
12/29/2008	10.00%	7.41%	2.59%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] Moody's Utility Baa Yield	[9] Risk Premium
12/29/2008	10.20%	7.41%	2.79%
12/31/2008	10.75%	7.42%	3.33%
01/14/2009	10.50%	7.47%	3.03%
01/21/2009	10.50%	7.49%	3.01%
01/21/2009	10.50%	7.49%	3.01%
01/21/2009	10.50%	7.49%	3.01%
01/27/2009	10.76%	7.52%	3.24%
01/30/2009	10.50%	7.53%	2.97%
02/04/2009	8.75%	7.55%	1.20%
03/04/2009	10.50%	7.64%	2.86%
03/12/2009	11.50%	7.67%	3.83%
04/02/2009	11.10%	7.76%	3.34%
04/21/2009	10.61%	7.83%	2.78%
04/24/2009	10.00%	7.85%	2.15%
04/30/2009	11.25%	7.87%	3.38%
05/04/2009	10.74%	7.88%	2.86%
05/20/2009	10.25%	7.92%	2.33%
05/28/2009	10.50%	7.94%	2.56%
06/22/2009	10.00%	7.98%	2.02%
06/24/2009	10.80%	7.98%	2.82%
07/08/2009	10.63%	7.98%	2.65%
07/17/2009	10.50%	7.96%	2.54%
08/31/2009	10.25%	7.63%	2.62%
10/14/2009	10.70%	7.28%	3.42%
10/23/2009	10.88%	7.22%	3.66%
11/02/2009	10.70%	7.17%	3.53%
11/03/2009	10.70%	7.17%	3.53%
11/24/2009	10.25%	7.05%	3.20%
11/25/2009	10.75%	7.04%	3.71%
11/30/2009	10.35%	7.02%	3.33%
12/03/2009	10.50%	7.00%	3.50%
12/07/2009	10.70%	6.98%	3.72%
12/16/2009	10.90%	6.93%	3.97%
12/16/2009	11.00%	6.93%	4.07%
12/18/2009	10.40%	6.92%	3.48%
12/18/2009	10.40%	6.92%	3.48%
12/22/2009	10.20%	6.90%	3.30%
12/22/2009	10.40%	6.90%	3.50%
12/22/2009	10.40%	6.90%	3.50%
12/30/2009	10.00%	6.86%	3.14%
01/04/2010	10.80%	6.84%	3.96%
01/11/2010	11.00%	6.80%	4.20%
01/26/2010	10.13%	6.70%	3.43%
01/27/2010	10.40%	6.69%	3.71%
01/27/2010	10.40%	6.69%	3.71%
01/27/2010	10.70%	6.69%	4.01%
02/09/2010	9.80%	6.60%	3.20%
02/18/2010	10.60%	6.55%	4.05%
02/24/2010	10.18%	6.52%	3.66%
03/02/2010	9.63%	6.49%	3.14%
03/04/2010	10.50%	6.48%	4.02%
03/05/2010	10.50%	6.47%	4.03%
03/11/2010	11.90%	6.44%	5.46%
03/17/2010	10.00%	6.41%	3.59%
03/25/2010	10.15%	6.37%	3.78%
04/02/2010	10.10%	6.33%	3.77%
04/27/2010	10.00%	6.26%	3.74%
04/29/2010	9.90%	6.25%	3.65%
04/29/2010	10.06%	6.25%	3.81%
04/29/2010	10.26%	6.25%	4.01%
05/12/2010	10.30%	6.21%	4.09%
05/12/2010	10.30%	6.21%	4.09%
05/28/2010	10.10%	6.17%	3.93%
05/28/2010	10.20%	6.17%	4.03%
06/07/2010	10.30%	6.17%	4.13%
06/16/2010	10.00%	6.17%	3.83%
06/28/2010	9.67%	6.17%	3.50%
06/28/2010	10.50%	6.17%	4.33%
06/30/2010	9.40%	6.17%	3.23%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] Moody's Utility Baa Yield	[9] Risk Premium
07/01/2010	10.25%	6.17%	4.08%
07/15/2010	10.53%	6.16%	4.37%
07/15/2010	10.70%	6.16%	4.54%
07/30/2010	10.70%	6.16%	4.54%
08/04/2010	10.50%	6.15%	4.35%
08/06/2010	9.83%	6.15%	3.68%
08/25/2010	9.90%	6.10%	3.80%
09/03/2010	10.60%	6.07%	4.53%
09/14/2010	10.70%	6.06%	4.64%
09/16/2010	10.00%	6.05%	3.95%
09/16/2010	10.00%	6.05%	3.95%
09/30/2010	9.75%	6.02%	3.73%
10/14/2010	10.35%	5.98%	4.37%
10/28/2010	10.70%	5.95%	4.75%
11/02/2010	10.38%	5.95%	4.43%
11/04/2010	10.70%	5.94%	4.76%
11/19/2010	10.20%	5.93%	4.27%
11/22/2010	10.00%	5.93%	4.07%
12/01/2010	10.13%	5.92%	4.21%
12/06/2010	9.86%	5.91%	3.95%
12/09/2010	10.25%	5.91%	4.34%
12/13/2010	10.70%	5.91%	4.79%
12/14/2010	10.13%	5.91%	4.22%
12/15/2010	10.44%	5.91%	4.53%
12/17/2010	10.00%	5.91%	4.09%
12/20/2010	10.60%	5.91%	4.69%
12/21/2010	10.30%	5.90%	4.40%
12/27/2010	9.90%	5.90%	4.00%
12/29/2010	11.15%	5.90%	5.25%
01/05/2011	10.15%	5.90%	4.25%
01/12/2011	10.30%	5.89%	4.41%
01/13/2011	10.30%	5.89%	4.41%
01/18/2011	10.00%	5.89%	4.11%
01/20/2011	9.30%	5.88%	3.42%
01/20/2011	10.13%	5.88%	4.25%
01/31/2011	9.60%	5.88%	3.72%
02/03/2011	10.00%	5.88%	4.12%
02/25/2011	10.00%	5.89%	4.11%
03/25/2011	9.80%	5.88%	3.92%
03/30/2011	10.00%	5.87%	4.13%
04/12/2011	10.00%	5.86%	4.14%
04/25/2011	10.74%	5.86%	4.88%
04/26/2011	9.67%	5.86%	3.81%
04/27/2011	10.40%	5.86%	4.54%
05/04/2011	10.00%	5.85%	4.15%
05/04/2011	10.00%	5.85%	4.15%
05/24/2011	10.50%	5.85%	4.65%
06/08/2011	10.75%	5.85%	4.90%
06/16/2011	9.20%	5.86%	3.34%
06/17/2011	9.95%	5.86%	4.09%
07/13/2011	10.20%	5.88%	4.32%
08/01/2011	9.20%	5.89%	3.31%
08/08/2011	10.00%	5.88%	4.12%
08/11/2011	10.00%	5.87%	4.13%
08/12/2011	10.35%	5.87%	4.48%
08/19/2011	10.25%	5.85%	4.40%
09/02/2011	12.88%	5.82%	7.06%
09/22/2011	10.00%	5.77%	4.23%
10/12/2011	10.30%	5.71%	4.59%
10/20/2011	10.50%	5.68%	4.82%
11/30/2011	10.90%	5.54%	5.36%
11/30/2011	10.90%	5.54%	5.36%
12/14/2011	10.00%	5.49%	4.51%
12/14/2011	10.30%	5.49%	4.81%
12/20/2011	10.20%	5.47%	4.73%
12/21/2011	10.20%	5.47%	4.73%
12/22/2011	9.90%	5.46%	4.44%
12/22/2011	10.40%	5.46%	4.94%
12/23/2011	10.19%	5.46%	4.73%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] Moody's Utility Baa Yield	[9] Risk Premium
01/25/2012	10.50%	5.37%	5.13%
01/27/2012	10.50%	5.36%	5.14%
02/15/2012	10.20%	5.30%	4.90%
02/23/2012	9.90%	5.28%	4.62%
02/27/2012	10.25%	5.27%	4.98%
02/29/2012	10.40%	5.26%	5.14%
03/29/2012	10.37%	5.20%	5.17%
04/04/2012	10.00%	5.19%	4.81%
04/26/2012	10.00%	5.14%	4.86%
05/02/2012	10.00%	5.13%	4.87%
05/07/2012	9.80%	5.12%	4.68%
05/15/2012	10.00%	5.10%	4.90%
05/29/2012	10.05%	5.08%	4.97%
06/07/2012	10.30%	5.07%	5.23%
06/14/2012	9.40%	5.07%	4.33%
06/15/2012	10.40%	5.06%	5.34%
06/18/2012	9.60%	5.06%	4.54%
06/19/2012	9.25%	5.06%	4.19%
06/26/2012	10.10%	5.06%	5.04%
06/29/2012	10.00%	5.05%	4.95%
07/09/2012	10.20%	5.05%	5.15%
07/16/2012	9.80%	5.04%	4.76%
07/20/2012	9.31%	5.04%	4.27%
07/20/2012	9.81%	5.04%	4.77%
09/13/2012	9.80%	4.99%	4.81%
09/19/2012	9.80%	4.99%	4.81%
09/19/2012	10.05%	4.99%	5.06%
09/26/2012	9.50%	4.98%	4.52%
10/12/2012	9.60%	4.96%	4.64%
10/23/2012	9.75%	4.94%	4.82%
10/24/2012	10.30%	4.93%	5.37%
11/09/2012	10.30%	4.90%	5.40%
11/28/2012	10.40%	4.86%	5.54%
11/29/2012	9.75%	4.86%	4.89%
11/29/2012	9.88%	4.86%	5.02%
12/05/2012	9.71%	4.85%	4.86%
12/05/2012	10.40%	4.85%	5.55%
12/12/2012	9.80%	4.84%	4.96%
12/13/2012	9.50%	4.84%	4.66%
12/13/2012	10.50%	4.84%	5.66%
12/14/2012	10.40%	4.83%	5.57%
12/19/2012	9.71%	4.83%	4.88%
12/19/2012	10.25%	4.83%	5.42%
12/20/2012	9.50%	4.83%	4.67%
12/20/2012	9.80%	4.83%	4.97%
12/20/2012	10.25%	4.83%	5.42%
12/20/2012	10.25%	4.83%	5.42%
12/20/2012	10.30%	4.83%	5.47%
12/20/2012	10.40%	4.83%	5.57%
12/20/2012	10.45%	4.83%	5.62%
12/21/2012	10.20%	4.82%	5.38%
12/26/2012	9.80%	4.82%	4.98%
01/09/2013	9.70%	4.79%	4.91%
01/09/2013	9.70%	4.79%	4.91%
01/09/2013	9.70%	4.79%	4.91%
01/16/2013	9.60%	4.78%	4.82%
01/16/2013	9.60%	4.78%	4.82%
02/13/2013	10.20%	4.74%	5.46%
02/22/2013	9.75%	4.73%	5.02%
02/27/2013	10.00%	4.73%	5.27%
03/14/2013	9.30%	4.72%	4.58%
03/27/2013	9.80%	4.71%	5.09%
05/01/2013	9.84%	4.66%	5.18%
05/15/2013	10.30%	4.64%	5.66%
05/30/2013	10.20%	4.64%	5.56%
05/31/2013	9.00%	4.64%	4.36%
06/11/2013	10.00%	4.64%	5.36%
06/21/2013	9.75%	4.65%	5.10%
06/25/2013	9.80%	4.65%	5.15%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] Moody's Utility Baa Yield	[9] Risk Premium
07/12/2013	9.36%	4.68%	4.68%
08/08/2013	9.83%	4.73%	5.10%
08/14/2013	9.15%	4.75%	4.40%
09/11/2013	10.20%	4.83%	5.37%
09/11/2013	10.25%	4.83%	5.42%
09/24/2013	10.20%	4.87%	5.33%
10/03/2013	9.65%	4.89%	4.76%
11/06/2013	10.20%	4.96%	5.24%
11/21/2013	10.00%	4.98%	5.02%
11/26/2013	10.00%	4.99%	5.01%
12/03/2013	10.25%	5.00%	5.25%
12/04/2013	9.50%	5.00%	4.50%
12/05/2013	10.20%	5.01%	5.19%
12/09/2013	8.72%	5.01%	3.71%
12/09/2013	9.75%	5.01%	4.74%
12/13/2013	9.75%	5.02%	4.73%
12/16/2013	9.95%	5.03%	4.92%
12/16/2013	9.95%	5.03%	4.92%
12/16/2013	10.12%	5.03%	5.09%
12/17/2013	9.50%	5.03%	4.47%
12/17/2013	10.95%	5.03%	5.92%
12/18/2013	8.72%	5.03%	3.69%
12/18/2013	9.80%	5.03%	4.77%
12/19/2013	10.15%	5.04%	5.11%
12/30/2013	9.50%	5.05%	4.45%
02/20/2014	9.20%	5.14%	4.06%
02/26/2014	9.75%	5.15%	4.60%
03/17/2014	9.55%	5.17%	4.38%
03/26/2014	9.40%	5.17%	4.23%
03/26/2014	9.96%	5.17%	4.79%
04/02/2014	9.70%	5.17%	4.53%
05/16/2014	9.80%	5.11%	4.69%
05/30/2014	9.70%	5.08%	4.62%
06/06/2014	10.40%	5.07%	5.33%
06/30/2014	9.55%	5.02%	4.53%
07/02/2014	9.62%	5.02%	4.60%
07/10/2014	9.95%	5.00%	4.95%
07/23/2014	9.75%	4.97%	4.78%
07/29/2014	9.45%	4.96%	4.49%
07/31/2014	9.90%	4.95%	4.95%
08/20/2014	9.75%	4.92%	4.83%
08/25/2014	9.60%	4.91%	4.69%
08/29/2014	9.80%	4.90%	4.90%
09/15/2014	10.25%	4.88%	5.37%
10/09/2014	9.80%	4.83%	4.97%
11/06/2014	9.56%	4.79%	4.78%
11/06/2014	10.20%	4.79%	5.42%
11/14/2014	10.20%	4.78%	5.42%
Average:			3.97%
Count:			559



Equity Duration Calculation  
Electric Proxy Group Companies

Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Average Growth	Threshold Mean ROE	Percent	Term	
								93.90%	60	
								Years to	% Value at	
								93.9% of Value	60 Years	
Aflant Energy Corp	LNT	\$2.04	\$58.87	3.47%	3.55%	4.73%	8.28%	81.00	87.00%	
American Electric Power Company Inc	AEP	\$2.12	\$54.64	3.88%	3.97%	4.80%	8.77%	73.00	89.00%	
Great Plains Energy Inc	GXP	\$0.92	\$25.53	3.60%	3.70%	5.32%	9.02%	78.00	87.00%	
IDACORP Inc	DA	\$1.88	\$57.66	3.26%	3.31%	3.33%	6.65%	85.00	85.00%	
Pinnacle West Capital Corp	PNW	\$2.39	\$58.03	4.10%	4.18%	3.97%	8.15%	69.00	91.00%	
PNM Resources Inc	PNM	\$0.74	\$26.95	2.75%	2.88%	9.61%	12.49%	102.00	79.00%	
Portland General Electric Company	POR	\$1.12	\$34.38	3.26%	3.36%	6.39%	9.75%	86.00	85.00%	
Southern Co	SO	\$2.10	\$45.29	4.64%	4.72%	3.56%	8.28%	61.00	93.00%	
Westar Energy Inc	WR	\$1.40	\$36.32	3.85%	3.93%	4.17%	8.10%	73.00	89.00%	
Xcel Energy Inc	XEL	\$1.20	\$32.06	3.74%	3.82%	4.39%	8.21%	75.00	89.00%	
Proxy Group Average							5.03%	8.77%	78.30	87.40%

Equity Duration Calculation	Price	D(0)	Growth Rate	Period	1	2	3	4	5	60	200
LNT Stated Price	\$ 58.87	\$ 2.04	4.73%	Dividend	\$ 2.09	\$ 2.19	\$ 2.29	\$ 2.40	\$ 2.51	\$ 31.97	\$ 20,734
LNT Implied Price	\$ 58.80			PV Factor	0.9235	0.8529	0.7877	0.7274	0.6718	0.0085	0.0000
				PV Cash Flow	1.9286	1.8654	1.8043	1.7452	1.6880	0.2703	0.0026
				Cumulative	1.9286	3.7940	5.5983	7.3435	9.0315	50.8921	58.80
					3.00%	6.00%	10.00%	12.00%	15.00%	87.00%	100.00%
AEP Stated Price	\$ 54.64	\$ 2.12	4.80%	Dividend	\$ 2.17	\$ 2.27	\$ 2.38	\$ 2.50	\$ 2.62	\$ 34.45	\$ 24,309
AEP Implied Price	\$ 54.61			PV Factor	0.9184	0.8453	0.7771	0.7144	0.6568	0.0085	0.0000
				PV Cash Flow	1.9958	1.9229	1.8527	1.7850	1.7198	0.2222	0.0012
				Cumulative	1.9958	3.9187	5.7714	7.5564	9.2763	48.7813	54.61
					4.00%	7.00%	11.00%	14.00%	17.00%	89.00%	100.00%
GXP Stated Price	\$ 25.53	\$ 0.92	5.32%	Dividend	\$ 0.94	\$ 0.99	\$ 1.05	\$ 1.10	\$ 1.16	\$ 20.07	\$ 28,321
GXP Implied Price	\$ 25.51			PV Factor	0.9173	0.8414	0.7719	0.7080	0.6495	0.0056	0.0000
				PV Cash Flow	0.8663	0.8370	0.8086	0.7811	0.7548	0.1130	0.0009
				Cumulative	0.8663	1.7033	2.5119	3.2930	4.0476	22.3149	25.51
					3.00%	7.00%	10.00%	13.00%	16.00%	87.00%	100.00%
IDA Stated Price	\$ 57.66	\$ 1.88	3.33%	Dividend	\$ 1.91	\$ 1.98	\$ 2.04	\$ 2.11	\$ 2.18	\$ 13.23	\$ 1,304
IDA Implied Price	\$ 57.58			PV Factor	0.9377	0.8792	0.8244	0.7730	0.7248	0.0210	0.0000
				PV Cash Flow	1.7922	1.7365	1.6825	1.6302	1.5795	0.2782	0.0033
				Cumulative	1.7922	3.5287	5.2112	6.8414	8.4209	48.9884	57.56
					3.00%	6.00%	9.00%	12.00%	15.00%	85.00%	100.00%
PNW Stated Price	\$ 58.03	\$ 2.38	3.97%	Dividend	\$ 2.43	\$ 2.52	\$ 2.62	\$ 2.73	\$ 2.84	\$ 24.09	\$ 5,585
PNW Implied Price	\$ 58.01			PV Factor	0.9246	0.8550	0.7905	0.7310	0.6759	0.0091	0.0000
				PV Cash Flow	2.2443	2.1575	2.0741	1.9939	1.9167	0.2190	0.0009
				Cumulative	2.2443	4.4018	6.4759	8.4697	10.3865	52.5884	58.01
					4.00%	8.00%	11.00%	15.00%	18.00%	91.00%	100.00%
PNM Stated Price	\$ 26.95	\$ 0.74	9.61%	Dividend	\$ 0.78	\$ 0.85	\$ 0.93	\$ 1.02	\$ 1.12	\$ 174.41	\$ 66,440,701
PNM Implied Price	\$ 26.80			PV Factor	0.8890	0.7902	0.7025	0.6245	0.5551	0.0009	0.0000
				PV Cash Flow	0.6894	0.6718	0.6546	0.6379	0.6216	0.1494	0.0040
				Cumulative	0.6894	1.3613	2.0159	2.6538	3.2753	21.2577	26.80
					3.00%	5.00%	8.00%	10.00%	12.00%	79.00%	100.00%
POR Stated Price	\$ 34.38	\$ 1.12	6.39%	Dividend	\$ 1.16	\$ 1.23	\$ 1.31	\$ 1.39	\$ 1.48	\$ 44.67	\$ 260,698
POR Implied Price	\$ 34.31			PV Factor	0.9111	0.8302	0.7564	0.6892	0.6280	0.0038	0.0000
				PV Cash Flow	1.0531	1.0208	0.9895	0.9592	0.9298	0.1680	0.0022
				Cumulative	1.0531	2.0739	3.0635	4.0227	4.9525	29.0603	34.31
					3.00%	6.00%	9.00%	12.00%	14.00%	85.00%	100.00%
SO Stated Price	\$ 45.29	\$ 2.10	3.56%	Dividend	\$ 2.14	\$ 2.21	\$ 2.29	\$ 2.37	\$ 2.46	\$ 16.80	\$ 2,240
SO Implied Price	\$ 45.28			PV Factor	0.9236	0.8530	0.7878	0.7276	0.6720	0.0085	0.0000
				PV Cash Flow	1.9740	1.8879	1.8057	1.7269	1.6517	0.1424	0.0003
				Cumulative	1.9740	3.8619	5.6676	7.3945	9.0462	42.1647	45.28
					4.00%	9.00%	13.00%	16.00%	20.00%	93.00%	100.00%
WR Stated Price	\$ 36.32	\$ 1.40	4.17%	Dividend	\$ 1.43	\$ 1.49	\$ 1.55	\$ 1.62	\$ 1.68	\$ 15.89	\$ 4,821
WR Implied Price	\$ 36.30			PV Factor	0.9251	0.8557	0.7916	0.7323	0.6774	0.0093	0.0000
				PV Cash Flow	1.3221	1.2739	1.2276	1.1829	1.1398	0.1483	0.0008
				Cumulative	1.3221	2.5960	3.8236	5.0064	6.1463	32.3945	36.30
					4.00%	7.00%	11.00%	14.00%	17.00%	89.00%	100.00%
XEL Stated Price	\$ 32.06	\$ 1.20	4.39%	Dividend	\$ 1.23	\$ 1.28	\$ 1.34	\$ 1.40	\$ 1.46	\$ 15.47	\$ 6,335
XEL Implied Price	\$ 32.04			PV Factor	0.9241	0.8539	0.7891	0.7292	0.6739	0.0088	0.0000
				PV Cash Flow	1.1332	1.0932	1.0546	1.0173	0.9813	0.1356	0.0009
				Cumulative	1.1332	2.2264	3.2810	4.2983	5.2796	28.3621	32.04
					4.00%	7.00%	10.00%	13.00%	16.00%	89.00%	100.00%

Comparison of Mr. Gorman's DCF Results Using Analysts' Growth Rates vs. Mr. Gorman's Long Term Sustainable Growth Rate

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Company	Ticker	13-Week Avg Stock Price	Annualized Dividend	Adjusted Yield	Analysts' Growth	MPG Long Term Sustainable Growth Rate	Dividend Yield	Adjusted Yield Check	Constant Growth DCF Check	MPG Constant Growth DCF	Constant Growth DCF with Sustainable Growth
American Electric Power Company, Inc.	AEP	\$53.81	\$2.00	3.90%	5.02%	4.60%	3.72%	3.90%	8.93%	8.93%	8.50%
Empire District Electric Company	EDE	\$25.71	\$1.02	4.09%	3.00%	4.60%	3.97%	4.09%	7.09%	7.09%	8.69%
Great Plains Energy Inc.	GXP	\$25.33	\$0.92	3.81%	5.00%	4.60%	3.63%	3.81%	8.81%	8.81%	8.41%
Hawaiian Electric Industries, Inc.	HE	\$26.09	\$1.24	4.94%	4.00%	4.60%	4.75%	4.94%	8.94%	8.94%	9.54%
IDACORP, Inc.	IDA	\$56.59	\$1.88	3.45%	4.00%	4.60%	3.32%	3.45%	7.45%	7.45%	8.05%
NextEra Energy, Inc.	NEE	\$96.32	\$2.90	3.21%	6.46%	4.60%	3.01%	3.21%	9.66%	9.66%	7.81%
Northeast Utilities	NU	\$46.18	\$1.57	3.62%	6.44%	4.60%	3.40%	3.62%	10.06%	10.06%	8.22%
Otter Tail Corporation	OTTR	\$28.39	\$1.21	N/A	N/A	4.60%	N/A	N/A	N/A	N/A	N/A
Pinnacle West Capital Corporation	PNW	\$56.95	\$2.38	4.35%	3.98%	4.60%	4.18%	4.35%	8.33%	8.33%	8.95%
PNM Resources, Inc.	PNM	\$26.46	\$0.74	3.03%	8.21%	4.60%	2.80%	3.03%	11.24%	11.24%	7.63%
Portland General Electric Company	POR	\$33.93	\$1.12	3.56%	7.81%	4.60%	3.30%	3.56%	11.37%	11.37%	8.16%
Southern Company	SO	\$44.75	\$2.10	4.86%	3.81%	4.60%	4.69%	4.86%	8.47%	8.47%	9.46%
Westar Energy, Inc.	WR	\$35.96	\$1.40	4.01%	3.03%	4.60%	3.89%	4.01%	7.04%	7.04%	8.61%
Mean					5.05%				8.95%	8.95%	8.50%
Median					4.50%				8.87%	8.87%	8.46%

Notes:

- [1] Source: Schedule MPG-4
- [2] Source: Schedule MPG-4
- [3] Source: Schedule MPG-4
- [4] Source: Schedule MPG-4
- [5] Source: Schedule MPG-9
- [6] Equals [2] / [1]
- [7] Equals [6] x (1+ [4])
- [8] Equals [4] + [7]
- [9] Source: Schedule MPG-4
- [10] Equals [5] + [7]

DuPont Analysis

Year	Profit Margin	Asset Turnover	Equity Multiplier	Return on Equity	Annual Increase in Net Plant
2007	7.41%	62.35%	226.26%	9.05%	
2008	6.68%	55.34%	236.21%	7.55%	15.34%
2009	7.61%	46.49%	234.47%	7.49%	7.60%
2010	8.76%	48.60%	235.46%	8.39%	5.47%
2011	9.35%	48.02%	236.32%	8.72%	4.96%
2012	10.02%	41.33%	232.79%	8.63%	13.42%
2013	10.45%	40.77%	234.60%	9.06%	6.13%
2017-2019	11.77%	40.63%	228.41%	9.81%	24.10%
2011-2013	9.93%	42.71%	234.57%	8.69%	
2017-2019	11.77%	40.63%	228.41%	9.81%	
Difference	1.84%	-1.87%	-8.16%	1.09%	

DuPont Analysis

	Net Profit	Revenue	Net Plant	Total Capital	Common Equity Ratio	Book Value per Share	Shares Outstanding	Reported Return on Com Equity	Profit Margin	Asset Turnover	Equity Multiplier	Calculated Return on Equity	Common Equity Check	ROE Check	Annual Increase in Net Plant
AEP	2007 \$ 1,147.00	\$ 13,380.00	\$ 29,870.00	\$ 24,342.00	41.46%	\$ 25.17	400.43	11.40%	8.57%	44.79%	256.40%	11.53%	100.01%	99.84%	
	2008 1,208.00	14,440.00	32,657.00	28,220.00	40.76%	\$ 26.33	459.07	11.30%	8.37%	43.77%	303.23%	11.22%	99.92%	99.91%	10.43%
	2009 1,365.00	13,469.00	34,344.00	23,963.00	45.46%	\$ 27.49	478.06	10.46%	10.12%	39.23%	261.23%	10.35%	99.66%	99.83%	4.1%
	2010 1,248.00	14,427.00	35,674.00	29,184.00	48.76%	\$ 28.33	489.81	9.16%	8.65%	40.44%	261.75%	9.16%	99.94%	100.63%	3.9%
	2011 1,513.00	15,116.00	36,971.00	29,747.00	49.36%	\$ 30.33	483.42	10.30%	10.01%	40.69%	252.10%	10.32%	99.96%	100.16%	3.6%
	2012 1,443.00	14,945.00	33,763.00	30,823.00	49.40%	\$ 31.37	485.67	9.50%	9.66%	38.65%	254.67%	9.48%	100.06%	99.76%	4.6%
	2013 1,549.00	15,357.00	40,997.00	32,913.00	43.96%	\$ 32.68	437.78	9.60%	10.06%	37.45%	254.73%	9.62%	99.95%	100.25%	5.8%
	2017-2019 1,975.00	19,650.00	51,000.00	41,500.00	48.00%	\$ 40.50	493.00	10.00%	10.05%	38.53%	253.55%	9.82%	100.26%	99.26%	24.4%
DUK	2007 \$ 1,522.00	\$ 12,720.00	\$ 31,110.00	\$ 30,697.00	69.10%	\$ 50.40	420.62	7.20%	11.97%	40.89%	146.66%	7.18%	99.94%	99.65%	
	2008 1,279.00	13,207.00	34,039.00	34,233.00	61.30%	\$ 49.51	423.96	6.10%	9.68%	38.60%	162.17%	6.09%	100.01%	99.56%	9.4%
	2009 1,461.00	12,731.00	37,950.00	37,863.00	57.40%	\$ 49.65	436.29	6.70%	11.43%	33.55%	174.62%	6.72%	100.07%	100.33%	11.5%
	2010 1,765.00	14,272.00	40,344.00	40,457.00	55.70%	\$ 50.84	442.90	7.60%	12.37%	35.28%	179.03%	7.83%	99.94%	100.42%	6.3%
	2011 1,839.00	14,529.00	42,681.00	41,451.00	54.69%	\$ 51.14	445.29	8.10%	12.66%	34.06%	187.47%	8.05%	100.07%	99.77%	5.7%
	2012 2,136.00	19,624.00	63,558.00	77,307.00	52.95%	\$ 58.04	704.00	5.20%	10.53%	28.62%	167.64%	5.22%	99.91%	100.44%	60.7%
	2013 2,813.00	24,553.00	69,490.00	79,432.00	52.00%	\$ 58.54	709.00	6.60%	11.44%	35.40%	163.13%	6.81%	100.00%	100.09%	1.4%
	2017-2019 3,765.00	28,300.00	68,400.00	66,600.00	49.00%	\$ 65.00	711.00	8.00%	13.30%	32.01%	150.65%	8.12%	99.67%	101.50%	27.2%
EDE	2007 \$ 33.20	\$ 490.20	\$ 1,178.90	\$ 1,081.10	49.90%	\$ 16.04	33.61	6.20%	6.77%	41.66%	218.53%	6.15%	99.93%	99.26%	
	2008 39.70	518.20	1,342.80	1,140.40	46.40%	\$ 15.56	33.68	7.50%	7.66%	38.69%	253.77%	7.50%	99.92%	100.04%	13.9%
	2009 41.30	497.20	1,459.00	1,240.30	43.40%	\$ 15.75	38.11	6.90%	8.31%	34.06%	243.04%	6.63%	99.99%	99.71%	8.7%
	2010 47.40	541.30	1,519.10	1,359.70	45.70%	\$ 15.82	41.58	7.20%	8.76%	35.63%	230.94%	7.21%	100.00%	100.03%	4.1%
	2011 55.00	576.60	1,563.70	1,358.20	50.10%	\$ 16.53	41.98	7.90%	9.53%	36.89%	225.16%	7.92%	99.92%	100.25%	2.9%
	2012 55.70	557.10	1,657.60	1,409.40	50.90%	\$ 16.90	42.48	7.80%	10.00%	33.61%	231.06%	7.76%	100.07%	99.54%	6.0%
	2013 63.40	534.50	1,751.50	1,493.60	50.20%	\$ 17.43	43.04	8.50%	10.67%	33.92%	233.65%	8.46%	100.05%	99.43%	5.7%
	2017-2019 65.00	790.00	2,000.00	1,600.00	50.00%	\$ 20.25	47.00	9.00%	10.76%	39.50%	210.53%	8.65%	100.18%	99.42%	14.2%
GYP	2007 \$ 159.20	\$ 3,267.10	\$ 3,444.50	\$ 2,709.60	57.90%	\$ 18.18	86.23	10.16%	4.87%	94.65%	219.54%	10.15%	99.92%	100.46%	
	2008 119.50	1,670.10	6,081.30	5,148.20	49.60%	\$ 21.59	119.26	4.60%	7.16%	27.45%	233.25%	4.68%	99.94%	101.76%	76.6%
	2009 135.60	1,555.00	6,651.10	6,044.50	46.20%	\$ 20.62	135.42	4.60%	6.90%	29.64%	233.17%	4.66%	99.99%	101.16%	9.4%
	2010 211.70	2,255.50	6,692.30	5,687.60	49.20%	\$ 21.26	135.71	7.30%	9.30%	32.72%	233.75%	7.33%	99.94%	100.46%	3.6%
	2011 174.40	2,318.00	7,653.50	5,741.20	51.60%	\$ 21.74	136.14	6.60%	7.62%	32.66%	233.10%	6.59%	99.91%	101.50%	4.7%
	2012 199.50	2,309.90	7,402.10	6,135.60	54.40%	\$ 21.75	153.53	5.90%	8.65%	31.21%	221.76%	5.99%	100.04%	101.51%	4.9%
	2013 250.20	2,446.30	7,746.40	7,029.10	49.40%	\$ 22.58	153.87	7.20%	10.23%	31.66%	223.09%	7.21%	100.06%	100.06%	4.7%
	2017-2019 305.00	3,050.00	8,650.00	7,275.00	56.00%	\$ 26.00	156.50	7.50%	10.00%	35.26%	212.32%	7.43%	99.85%	99.82%	11.7%

DuPont Analysis

		Net Profit	Revenue	Net Plant	Total Capital	Common Equity Ratio	Book Value per Share	Shares Outstanding	Reported Return on Com Equity	Prft Margin	Asset Turnover	Equity Multiplier	Calculated Return on Equity	Common Equity Check	ROE Check	Annual Increase in Net Plant
HE	2007	\$3.60	2,556.40	2,743.45	2,801.80	51.00%	\$ 15.29	83.43	7.20%	3.65%	92.45%	215.01%	7.34%	99.96%	101.89%	
	2008	\$2.20	3,218.90	2,907.40	2,635.20	52.70%	\$ 15.35	90.52	6.50%	2.66%	110.71%	209.35%	6.64%	100.05%	102.14%	6.0%
	2009	\$4.90	2,309.60	3,028.60	2,840.80	50.70%	\$ 15.68	92.52	5.60%	3.68%	74.76%	214.44%	5.69%	100.03%	101.63%	8.2%
	2010	\$115.40	2,655.00	3,165.90	2,732.90	54.30%	\$ 15.67	94.69	7.70%	4.33%	84.16%	213.34%	7.76%	99.99%	100.99%	2.5%
	2011	\$140.10	3,242.30	3,334.50	2,841.30	53.60%	\$ 15.65	96.04	9.00%	4.32%	97.23%	217.73%	9.15%	100.02%	101.65%	5.3%
	2012	\$164.90	3,375.00	3,594.60	3,001.00	53.10%	\$ 16.23	97.93	10.20%	4.69%	93.69%	225.59%	10.35%	100.05%	101.45%	7.6%
	2013	\$163.40	3,233.50	3,658.90	3,142.60	55.00%	\$ 17.05	101.26	9.40%	5.05%	83.92%	223.24%	9.45%	99.94%	100.56%	7.3%
	2017-2019	\$225.00	4,150.00	4,950.00	4,600.00	49.50%	\$ 20.50	111.00	10.00%	5.42%	83.84%	217.39%	9.68%	99.63%	98.81%	28.3%
DA	2007	\$ 82.30	\$ 879.40	\$ 2,816.60	\$ 2,964.20	51.10%	\$ 26.79	45.06	6.80%	9.36%	33.61%	216.59%	6.81%	99.92%	100.18%	
	2008	\$9.40	\$60.00	\$2,758.20	\$2,455.60	52.40%	\$ 27.76	49.62	7.60%	10.25%	34.62%	211.74%	7.55%	99.56%	99.40%	5.4%
	2009	\$124.40	\$1,049.60	\$2,917.00	\$2,807.10	43.80%	\$ 29.17	47.90	8.90%	11.65%	35.99%	208.60%	8.50%	99.65%	99.59%	5.8%
	2010	\$142.50	\$1,036.00	\$3,161.40	\$3,020.40	60.70%	\$ 31.01	49.41	9.30%	13.75%	32.77%	203.45%	9.31%	100.06%	100.06%	8.4%
	2011	\$166.50	\$1,026.60	\$3,406.60	\$3,045.20	54.40%	\$ 33.19	49.95	10.16%	16.25%	30.14%	205.64%	10.07%	100.06%	99.75%	7.6%
	2012	\$168.50	\$1,080.70	\$3,536.00	\$3,225.40	54.50%	\$ 35.07	50.16	9.60%	15.63%	30.56%	201.16%	9.61%	100.07%	100.09%	3.6%
	2013	\$162.40	\$1,245.20	\$3,665.00	\$3,465.90	53.40%	\$ 36.64	50.23	9.80%	14.64%	34.00%	198.02%	9.86%	99.56%	99.55%	3.6%
	2017-2019	\$190.00	\$1,360.00	\$4,740.00	\$4,415.00	51.50%	\$ 44.90	50.20	8.50%	13.69%	28.69%	209.47%	8.36%	99.13%	98.31%	29.3%
NEE	2007	\$1,312.00	\$15,263.00	\$28,652.00	\$22,015.00	43.80%	\$ 26.55	407.55	12.20%	8.60%	53.27%	266.70%	12.21%	99.91%	100.10%	
	2008	\$1,639.00	\$16,410.00	\$32,411.00	\$25,514.00	45.80%	\$ 28.57	408.92	14.00%	9.69%	50.63%	277.30%	14.03%	99.05%	100.19%	13.1%
	2009	\$1,615.00	\$15,643.00	\$36,078.00	\$29,267.00	44.30%	\$ 31.35	413.62	12.60%	10.32%	43.36%	278.27%	12.46%	100.01%	99.65%	11.3%
	2010	\$1,967.00	\$15,317.00	\$39,075.00	\$32,474.00	44.50%	\$ 34.36	420.66	13.50%	12.78%	39.20%	270.40%	13.64%	100.07%	100.31%	8.3%
	2011	\$2,021.00	\$15,341.00	\$42,490.00	\$35,753.00	41.80%	\$ 35.92	416.00	13.60%	13.17%	36.10%	284.31%	13.52%	99.99%	100.17%	8.7%
	2012	\$1,911.00	\$14,256.00	\$49,413.00	\$39,245.00	49.90%	\$ 37.93	424.00	11.90%	13.40%	28.65%	307.65%	11.91%	100.11%	100.05%	16.3%
	2013	\$2,062.00	\$15,138.00	\$52,720.00	\$42,009.00	42.90%	\$ 41.47	435.00	11.40%	13.62%	28.71%	292.53%	11.44%	100.10%	100.37%	6.7%
	2017-2019	\$3230	\$18,000.00	\$62,100.00	\$52,400.00	51.60%	\$ 57.25	470.00	12.00%	17.94%	28.99%	230.12%	11.97%	99.71%	99.74%	17.6%
NU	2007	\$ 251.50	\$ 5,822.20	\$ 7,229.60	\$ 7,431.10	39.20%	\$ 18.65	156.22	8.40%	4.32%	60.53%	248.20%	8.63%	100.02%	102.76%	
	2008	\$296.20	\$5,800.10	\$8,207.90	\$7,920.20	38.10%	\$ 19.58	155.83	9.60%	5.11%	70.66%	271.60%	9.81%	100.00%	102.17%	13.5%
	2009	\$335.60	\$4,439.40	\$8,840.00	\$8,629.50	41.60%	\$ 20.37	175.62	9.20%	6.17%	61.53%	246.84%	9.37%	99.69%	101.66%	7.7%
	2010	\$377.60	\$4,638.20	\$9,667.70	\$8,741.60	43.60%	\$ 21.60	176.45	9.60%	7.71%	51.20%	251.03%	9.81%	100.00%	101.15%	8.2%
	2011	\$400.30	\$4,466.70	\$10,403.00	\$8,656.00	45.30%	\$ 22.65	177.18	9.60%	8.56%	42.93%	259.31%	9.66%	100.02%	101.82%	8.7%
	2012	\$533.00	\$2,273.80	\$16,605.00	\$16,676.00	55.40%	\$ 29.41	314.05	5.70%	8.50%	37.76%	179.75%	5.77%	99.56%	101.22%	59.6%
	2013	\$793.70	\$7,301.20	\$17,576.00	\$17,544.00	54.60%	\$ 30.49	315.27	8.20%	10.87%	41.54%	182.81%	8.26%	99.56%	100.68%	5.6%
	2017-2019	\$1,120.00	\$8,650.00	\$23,900.00	\$21,600.00	53.50%	\$ 30.50	325.00	9.50%	12.95%	38.16%	204.92%	9.60%	101.71%	101.08%	36.0%
OTTR	2007	\$ 54.00	\$ 1,238.60	\$ 854.00	\$ 632.10	59.40%	\$ 17.55	29.85	10.20%	4.36%	145.07%	162.69%	10.31%	99.66%	101.04%	
	2008	\$5.10	\$1,311.20	\$1,037.60	\$1,032.50	65.60%	\$ 19.14	35.38	5.10%	2.65%	126.37%	153.16%	5.16%	99.56%	101.61%	21.5%
	2009	\$6.00	\$1,039.50	\$1,098.60	\$1,124.40	59.60%	\$ 18.78	35.81	3.60%	2.50%	84.62%	163.36%	3.87%	100.02%	101.76%	5.9%
	2010	\$13.60	\$1,119.10	\$1,168.70	\$1,063.30	58.40%	\$ 17.67	36.00	2.00%	1.22%	100.94%	175.25%	2.15%	99.56%	107.46%	0.9%
	2011	\$16.40	\$1,077.90	\$1,077.50	\$1,058.90	54.00%	\$ 15.83	36.10	2.70%	1.52%	100.04%	183.44%	2.87%	99.94%	105.23%	-2.6%
	2012	\$39.00	\$59.20	\$1,049.50	\$69.20	54.40%	\$ 14.43	36.17	7.30%	4.54%	81.87%	201.13%	7.47%	100.02%	102.35%	-2.6%
	2013	\$50.20	\$93.30	\$1,187.00	\$24.40	57.90%	\$ 14.74	36.27	9.40%	5.62%	76.55%	218.04%	9.35%	99.69%	99.76%	11.2%
	2017-2019	\$90.00	\$1,325.00	\$1,590.00	\$1,425.00	51.00%	\$ 18.15	40.00	12.50%	6.79%	65.45%	213.26%	12.36%	99.90%	99.07%	32.6%
PMW	2007	\$ 298.60	\$ 3,523.60	\$ 8,438.40	\$ 6,658.70	53.00%	\$ 35.15	100.49	8.60%	8.46%	41.77%	239.05%	8.47%	100.09%	99.61%	
	2008	\$213.60	\$3,367.10	\$8,516.70	\$6,477.60	53.20%	\$ 34.16	100.69	6.20%	6.34%	37.76%	258.75%	6.20%	100.01%	99.97%	5.7%
	2009	\$223.20	\$3,297.10	\$9,257.50	\$6,658.60	49.60%	\$ 32.69	101.43	6.90%	6.95%	35.61%	278.14%	6.91%	99.63%	100.16%	3.6%
	2010	\$330.40	\$3,263.60	\$9,578.60	\$6,729.10	54.70%	\$ 33.66	103.77	9.00%	10.12%	34.07%	260.24%	8.66%	100.06%	99.74%	3.5%
	2011	\$323.20	\$3,211.40	\$9,962.30	\$6,840.90	55.90%	\$ 34.68	109.25	8.60%	10.13%	32.54%	260.52%	8.58%	99.53%	99.60%	4.0%
	2012	\$37.40	\$3,301.60	\$10,396.00	\$7,171.90	55.40%	\$ 36.20	109.74	9.60%	11.73%	31.76%	261.65%	9.75%	99.94%	99.45%	4.4%
	2013	\$46.10	\$3,454.60	\$10,639.00	\$6,950.90	60.00%	\$ 38.07	110.18	9.70%	11.76%	31.73%	259.60%	9.66%	100.00%	99.81%	4.7%
	2017-2019	\$95.00	\$4,200.00	\$13,600.00	\$8,600.00	60.50%	\$ 45.25	117.50	9.50%	12.02%	30.65%	255.45%	9.49%	99.87%	99.65%	24.9%

DuPont Analysis																
		Net Profit	Revenue	Net Plant	Total Capital	Common Equity Ret's	Book Value per Share	Shares Outstanding	Reported Return on Com Equity	Profit Margin	Asset Turnover	Equity Multiplier	Calculated Return on Equity	Common Equity Check	ROE Check	Annual Increase in Net Plant
PTM	2007	59.50	1,914.00	2,935.40	2,935.50	57.60%	\$ 22.03	78.61	3.50%	3.13%	65.20%	173.59%	3.64%	100.07%	101.21%	
	2008	8.10	1,959.50	3,192.00	3,025.40	54.00%	\$ 18.63	86.53	0.50%	0.41%	61.30%	155.39%	0.50%	100.05%	99.16%	8.7%
	2009	53.50	1,647.70	3,332.40	3,214.90	51.00%	\$ 18.90	86.67	3.20%	3.25%	49.44%	203.24%	3.26%	99.91%	101.97%	4.4%
	2010	60.00	1,873.50	3,444.40	3,109.30	49.20%	\$ 17.60	86.67	5.20%	4.76%	49.59%	225.81%	5.24%	100.00%	100.66%	3.4%
	2011	56.60	1,700.60	3,627.10	3,245.60	43.10%	\$ 19.62	79.65	6.10%	5.65%	46.89%	232.34%	6.16%	100.10%	101.44%	5.5%
	2012	105.60	1,342.40	3,746.50	3,277.90	43.70%	\$ 20.05	79.65	6.60%	7.87%	35.83%	234.69%	6.62%	100.04%	100.23%	3.3%
	2013	113.50	1,387.90	3,933.90	3,344.00	49.70%	\$ 20.87	79.65	6.80%	8.16%	35.25%	236.70%	6.83%	100.02%	100.43%	5.0%
	2017-2019	150.00	1,585.00	5,020.00	4,195.00	46.50%	\$ 24.80	80.00	9.50%	11.99%	31.57%	257.35%	9.74%	100.48%	102.53%	27.6%
PCR	2007	\$ 145.00	\$ 1,743.00	\$ 3,066.00	\$ 2,629.00	50.10%	\$ 21.05	62.53	11.00%	8.32%	56.55%	232.76%	11.01%	99.63%	100.08%	
	2008	87.00	1,745.00	3,301.00	2,518.00	53.80%	\$ 21.64	62.58	6.40%	4.99%	52.86%	243.67%	6.42%	99.97%	100.35%	7.7%
	2009	95.00	1,604.00	3,658.00	3,160.00	49.70%	\$ 20.50	75.21	6.20%	5.27%	46.76%	250.41%	6.17%	100.07%	99.45%	16.9%
	2010	125.00	1,783.00	4,133.00	3,350.00	47.00%	\$ 21.14	75.32	7.50%	7.01%	43.14%	269.40%	7.55%	99.94%	99.31%	7.1%
	2011	147.00	1,813.00	4,285.00	3,293.00	50.40%	\$ 22.07	75.36	8.60%	8.11%	42.31%	257.76%	8.84%	100.06%	100.56%	3.7%
	2012	141.00	1,825.00	4,392.00	3,264.00	52.90%	\$ 22.87	75.56	8.20%	7.81%	41.10%	254.36%	8.17%	100.03%	99.59%	2.5%
	2013	137.00	1,810.00	4,630.00	3,735.00	43.70%	\$ 23.30	78.09	7.50%	7.57%	37.09%	268.29%	7.53%	100.03%	100.42%	11.1%
	2017-2019	235.00	2,175.00	5,700.00	4,700.00	55.50%	\$ 29.00	90.00	9.00%	10.60%	38.16%	218.52%	9.01%	100.06%	100.10%	16.8%
SO	2007	\$ 1,762.00	\$ 15,353.00	\$ 33,327.00	\$ 27,603.00	44.90%	\$ 16.23	783.10	14.00%	11.61%	45.07%	268.65%	14.35%	99.81%	102.65%	
	2008	1,807.00	17,127.00	35,878.00	31,174.00	42.60%	\$ 17.03	777.19	13.10%	10.55%	47.74%	270.16%	13.61%	99.56%	103.87%	7.7%
	2009	1,910.00	15,743.00	39,280.00	34,091.00	43.60%	\$ 18.15	819.65	12.40%	12.13%	40.13%	263.53%	12.65%	100.09%	103.63%	9.3%
	2010	2,040.00	17,459.00	42,002.00	35,433.00	45.70%	\$ 19.21	843.34	12.20%	11.69%	41.56%	269.33%	12.66%	100.03%	103.25%	7.1%
	2011	2,238.00	17,657.00	45,010.00	37,307.00	47.10%	\$ 20.52	855.13	12.50%	12.84%	39.25%	266.15%	12.91%	100.04%	103.28%	7.2%
	2012	2,415.00	16,537.00	48,390.00	38,653.00	47.30%	\$ 21.03	867.77	12.80%	14.60%	34.17%	264.67%	13.21%	100.10%	103.20%	7.5%
	2013	2,439.00	17,037.00	51,208.00	41,483.00	45.60%	\$ 21.43	837.09	12.50%	14.27%	33.37%	269.53%	12.84%	100.06%	102.70%	5.6%
	2017-2019	3,160.00	21,250.00	68,200.00	58,300.00	42.50%	\$ 26.25	940.00	12.50%	14.87%	32.10%	267.16%	12.75%	99.59%	102.03%	29.3%
WR	2007	\$ 168.40	\$ 1,726.60	\$ 4,603.70	\$ 3,733.30	43.60%	\$ 19.14	95.45	9.20%	9.75%	35.96%	262.76%	9.21%	99.55%	100.13%	
	2008	136.60	1,839.00	5,533.50	4,600.10	49.70%	\$ 20.18	103.31	6.20%	7.44%	33.23%	253.04%	6.26%	99.55%	100.50%	15.2%
	2009	141.30	1,658.20	5,771.70	4,669.60	46.10%	\$ 20.59	109.07	6.30%	7.60%	32.20%	267.25%	6.30%	100.10%	99.97%	4.3%
	2010	203.90	2,056.20	6,909.50	5,180.90	46.00%	\$ 21.25	112.13	8.50%	9.92%	32.59%	264.75%	8.56%	99.58%	100.65%	9.3%
	2011	214.00	2,171.00	6,745.40	5,531.00	50.10%	\$ 22.30	125.70	7.70%	9.69%	32.18%	243.43%	7.72%	101.16%	100.30%	6.9%
	2012	275.10	2,251.50	7,335.70	5,933.20	48.60%	\$ 22.83	126.50	9.40%	12.15%	30.83%	253.14%	9.49%	99.92%	100.99%	8.8%
	2013	292.50	2,370.70	7,548.50	6,131.10	50.00%	\$ 23.63	123.25	9.60%	12.34%	30.21%	255.02%	9.54%	99.60%	99.39%	7.0%
	2017-2019	350.00	2,800.00	9,200.00	8,000.00	50.00%	\$ 29.65	135.00	9.50%	13.93%	30.43%	230.06%	9.75%	100.07%	102.63%	17.2%

Source: Value Line

Retention Ratio and Earnings Growth

Company	1999	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
American Electric Power Company, Inc.	Earnings per Share [1]	2.81	2.89	1.04	3.27	2.66	2.53	2.61	2.64	2.69	2.69	2.69	2.69	2.69	2.69	2.69
	Dividends per Share [2]	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
	Payout Ratio [3]	85.41%	83.22%	230.77%	73.39%	83.92%	85.22%	93.64%	93.19%	89.45%	89.24%	89.24%	89.24%	89.24%	89.24%	89.24%
	Earnings Growth [4]	N/A	-4.27%	-61.34%	214.42%	-12.54%	-11.54%	3.16%	1.15%	8.33%	0.00%	4.59%	-0.67%	-12.45%	20.33%	-4.79%
	Average Earnings Growth [5]	24.55%	26.43%	33.93%	-2.29%	0.22%	3.44%	2.67%	-0.65%	2.35%	1.62%	1.84%	N/A	N/A	N/A	N/A
Duke Energy Corporation	Earnings per Share [1]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.76	3.60	3.03	3.39	4.14
	Dividends per Share [2]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.53	2.70	2.62	2.51	2.97
	Payout Ratio [3]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	71.67%	69.11%	83.15%	72.32%	71.74%
	Earnings Growth [4]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	30.43%	-15.83%	11.83%	18.55%	2.99%
	Average Earnings Growth [5]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.61%	1.45%	6.07%	N/A	N/A	N/A
Empire District Electric	Earnings per Share [1]	1.53	1.19	1.35	0.59	1.19	1.29	0.68	0.92	1.41	1.09	1.17	1.18	1.17	1.31	1.32
	Dividends per Share [2]	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
	Payout Ratio [3]	80.39%	103.36%	90.37%	208.81%	103.36%	92.25%	177.78%	133.70%	87.23%	112.83%	105.98%	104.24%	104.24%	93.85%	75.76%
	Earnings Growth [4]	N/A	-26.14%	19.47%	-56.30%	101.69%	8.40%	-33.33%	6.55%	53.26%	-22.70%	7.34%	0.65%	-0.65%	11.97%	0.76%
	Average Earnings Growth [5]	8.43%	7.99%	5.49%	27.42%	2.52%	2.31%	8.15%	7.55%	-0.65%	4.02%	4.97%	N/A	N/A	N/A	N/A
Great Plains Energy Inc.	Earnings per Share [1]	1.69	1.26	2.05	1.59	2.04	2.27	2.46	2.18	1.82	1.69	1.18	1.03	1.53	1.25	1.35
	Dividends per Share [2]	1.64	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65
	Payout Ratio [3]	96.77%	131.75%	80.50%	104.42%	81.37%	73.13%	67.45%	76.15%	102.47%	83.25%	143.10%	80.56%	54.25%	67.20%	63.70%
	Earnings Growth [4]	N/A	-33.33%	62.70%	-22.44%	23.30%	11.27%	8.37%	-11.38%	-25.89%	14.81%	-37.63%	-11.21%	43.54%	-18.30%	8.00%
	Average Earnings Growth [5]	9.50%	17.64%	2.83%	2.18%	-0.52%	-10.36%	-14.22%	-2.23%	-0.76%	-2.12%	9.41%	N/A	N/A	N/A	N/A
Hawaiian Electric Industries, Inc.	Earnings per Share [1]	1.49	1.45	1.27	1.62	1.62	1.55	1.59	1.45	1.33	1.11	1.07	0.51	1.21	1.44	1.67
	Dividends per Share [2]	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24
	Payout Ratio [3]	83.76%	85.52%	97.64%	77.50%	76.54%	78.43%	51.16%	84.53%	83.23%	111.71%	115.82%	136.26%	102.45%	66.11%	74.25%
	Earnings Growth [4]	N/A	-2.03%	-12.41%	25.98%	1.25%	-2.47%	-13.92%	7.39%	-8.06%	-16.54%	-3.60%	-14.95%	32.97%	19.01%	15.87%
	Average Earnings Growth [5]	2.05%	-0.31%	3.64%	-3.34%	-6.90%	-7.12%	-2.33%	-2.21%	3.35%	8.63%	10.00%	N/A	N/A	N/A	N/A
IDCORP, Inc.	Earnings per Share [1]	2.37	2.43	3.50	3.35	1.63	0.95	1.95	1.75	2.35	1.65	2.18	2.44	2.55	3.35	3.37
	Dividends per Share [2]	1.66	1.65	1.65	1.66	1.66	1.70	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
	Payout Ratio [3]	70.00%	67.86%	47.14%	50.15%	104.29%	177.78%	61.54%	68.57%	51.06%	64.52%	55.05%	45.45%	40.63%	35.71%	40.63%
	Earnings Growth [4]	N/A	2.53%	41.03%	-4.29%	-51.34%	-41.10%	97.92%	-7.89%	34.29%	-20.65%	17.20%	21.10%	11.74%	13.90%	0.30%
	Average Earnings Growth [5]	-13.03%	9.64%	-1.34%	6.37%	12.47%	24.13%	8.77%	12.70%	8.62%	12.85%	11.01%	N/A	N/A	N/A	N/A
NextEra Energy, Inc.	Earnings per Share [1]	1.95	2.04	2.07	2.31	2.01	2.45	2.45	2.32	3.23	3.27	4.07	3.97	4.74	4.92	4.56
	Dividends per Share [2]	1.00	1.04	1.03	1.12	1.18	1.20	1.30	1.42	1.50	1.64	1.78	1.83	2.00	2.20	2.40
	Payout Ratio [3]	51.81%	50.96%	52.17%	48.43%	57.71%	48.96%	52.65%	51.21%	45.41%	50.15%	43.73%	47.61%	42.16%	45.64%	52.63%
	Earnings Growth [4]	N/A	5.70%	1.47%	11.56%	-12.99%	21.89%	0.41%	-5.69%	39.22%	1.24%	24.45%	-2.48%	19.40%	1.69%	-5.39%
	Average Earnings Growth [5]	5.53%	4.45%	3.03%	8.57%	11.41%	11.93%	11.36%	16.32%	8.17%	7.54%	3.63%	N/A	N/A	N/A	N/A
Northeast Utilities	Earnings per Share [1]	N/A	N/A	N/A	1.37	1.05	1.24	0.51	0.55	0.82	1.59	1.66	1.91	2.10	2.22	1.65
	Dividends per Share [2]	N/A	0.10	0.40	0.45	0.53	0.53	0.63	0.63	0.73	0.73	0.83	0.95	1.03	1.10	
	Payout Ratio [3]	N/A	N/A	N/A	32.85%	49.07%	63.77%	69.23%	69.30%	69.02%	43.06%	44.62%	43.74%	49.05%	49.55%	69.64%
	Earnings Growth [4]	N/A	N/A	N/A	N/A	-21.17%	14.81%	-28.61%	7.69%	-16.33%	93.60%	16.56%	2.69%	9.95%	5.71%	-14.66%
	Average Earnings Growth [5]	N/A	N/A	N/A	-8.32%	14.65%	15.13%	20.59%	21.44%	25.65%	4.09%	7.69%	N/A	N/A	N/A	N/A
Oquirrhui Corporation	Earnings per Share [1]	1.20	1.45	1.69	1.63	1.73	1.51	1.50	1.78	1.69	1.78	1.69	0.71	0.33	0.45	1.08
	Dividends per Share [2]	0.95	0.99	1.02	1.04	1.05	1.05	1.10	1.12	1.15	1.17	1.19	1.19	1.19	1.19	1.19
	Payout Ratio [3]	79.17%	68.28%	60.35%	61.90%	59.22%	71.52%	73.33%	62.92%	63.05%	66.73%	109.17%	187.61%	313.16%	264.44%	113.33%
	Earnings Growth [4]	N/A	12.40%	10.34%	5.09%	6.55%	-19.64%	-0.66%	13.67%	-5.09%	5.33%	-33.76%	-34.66%	-45.43%	18.42%	133.33%
	Average Earnings Growth [5]	3.73%	1.32%	3.25%	9.72%	6.55%	-4.10%	-10.93%	-23.97%	-19.27%	6.33%	20.15%	N/A	N/A	N/A	N/A
Prinacle West Capital Corp.	Earnings per Share [1]	2.85	3.16	3.35	3.63	2.53	2.57	2.58	2.24	3.17	2.69	2.12	2.23	3.08	2.99	3.50
	Dividends per Share [2]	1.23	1.33	1.43	1.53	1.63	1.73	1.83	1.93	2.03	2.10	2.10	2.10	2.10	2.10	2.10
	Payout Ratio [3]	43.16%	41.82%	42.65%	41.53%	64.43%	63.65%	70.93%	86.16%	64.04%	70.99%	99.06%	92.92%	68.15%	70.23%	78.29%
	Earnings Growth [4]	N/A	11.55%	5.35%	8.55%	-31.25%	-0.49%	2.33%	-13.15%	41.52%	-8.82%	-26.38%	6.69%	35.25%	-2.92%	17.06%
	Average Earnings Growth [5]	-9.97%	-2.81%	-6.52%	-0.15%	4.74%	-0.85%	-0.01%	8.65%	0.95%	5.73%	12.32%	N/A	N/A	N/A	N/A



Step-By-Step Adjustment of Mr. Gorman's Multi-Stage DCF Model  
Re-Creation of Schedule MPG-9

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
		Stock Price	Annualized Dividend	First-Stage Growth	Year 6	Second-Stage Growth			Year 9	Year 10	Third-Stage Growth
<b>Electric Group</b>											
American Electric Power Company, Inc.	AEP	\$53.81	\$2.00	5.02%	4.95%	4.88%	4.81%	4.74%	4.67%	4.60%	8.59%
Empire District Electric Company	EDE	\$25.71	\$1.02	3.00%	3.27%	3.53%	3.80%	4.07%	4.33%	4.60%	8.34%
Great Plains Energy Inc.	GXP	\$25.33	\$0.92	5.00%	4.93%	4.87%	4.80%	4.73%	4.67%	4.60%	8.49%
Hawaiian Electric Industries, Inc.	HE	\$26.09	\$1.24	4.00%	4.10%	4.20%	4.30%	4.40%	4.50%	4.60%	9.39%
IDACORP, Inc.	IDA	\$56.59	\$1.88	4.00%	4.10%	4.20%	4.30%	4.40%	4.50%	4.60%	7.94%
NextEra Energy, Inc.	NEE	\$96.32	\$2.90	6.46%	6.15%	5.84%	5.53%	5.22%	4.91%	4.60%	8.14%
Northeast Utilities	NU	\$46.18	\$1.57	6.44%	6.13%	5.82%	5.52%	5.21%	4.91%	4.60%	8.59%
Otter Tail Corporation	OTTR	\$28.39	\$1.21	N/A	n/a	n/a	n/a	n/a	n/a	4.60%	n/a
Pinnacle West Capital Corporation	PNW	\$56.95	\$2.38	3.98%	4.09%	4.19%	4.29%	4.39%	4.50%	4.60%	8.80%
PNM Resources, Inc.	PNM	\$26.46	\$0.74	8.21%	7.61%	7.01%	6.41%	5.80%	5.20%	4.60%	8.28%
Portland General Electric Company	POR	\$33.93	\$1.12	7.81%	7.28%	6.74%	6.21%	5.67%	5.14%	4.60%	8.82%
Southern Company	SO	\$44.75	\$2.10	3.61%	3.77%	3.94%	4.10%	4.27%	4.43%	4.60%	9.21%
Westar Energy, Inc.	WR	\$35.96	\$1.40	3.03%	3.29%	3.56%	3.82%	4.08%	4.34%	4.60%	8.28%
			Mean	5.05%	4.97%	4.90%	4.82%	4.75%	4.67%	4.60%	8.57%
			Median	4.50%	4.52%	4.53%	4.55%	4.57%	4.58%	4.60%	8.54%

Notes:

- [1] 13-week average stock price; Source: Schedule MPG-9
- [2] Source: Attachment MPG-9
- [3] Source: Attachment MPG-9
- [4] Equals  $(3) + ((9) - (3))/6$
- [5] Equals  $(4) + ((9) - (3))/6$
- [6] Equals  $(5) + ((9) - (3))/6$
- [7] Equals  $(6) + ((9) - (3))/6$
- [8] Equals  $(7) + ((9) - (3))/6$
- [9] Source: Schedule MPG-9
- [10] IRR based on stock price ([1]) and 200 years of projected dividends



Step-By-Step Adjustment of Mr. Gorman's Multi-Stage DCF Model  
 Step 1: Adjust The IRR Calculation To Reflect The Mid-Year Convention

Company	Ticker	[1] Stock Price	[2] Annualized Dividend	[3] First-Stage Growth	[6] Second-Stage Growth					[9] Thrd-Stage Growth	[10] Multi-Stage Growth DCF
					[4] Year 6	[5] Year 7	[6] Year 8	[7] Year 9	[8] Year 10		
Electric Group											
American Electric Power Company, Inc.	AEP	\$53.81	\$2.00	5.02%	4.95%	4.88%	4.81%	4.74%	4.67%	4.60%	8.76%
Empire District Electric Company	EDE	\$25.71	\$1.02	3.00%	3.27%	3.53%	3.80%	4.07%	4.33%	4.60%	8.50%
Great Plains Energy Inc.	GXP	\$25.33	\$0.92	5.00%	4.93%	4.87%	4.80%	4.73%	4.67%	4.60%	8.65%
Hawaiian Electric Industries, Inc.	HE	\$28.09	\$1.24	4.00%	4.10%	4.20%	4.30%	4.40%	4.50%	4.60%	9.61%
IDACORP, Inc.	IDA	\$56.59	\$1.88	4.00%	4.10%	4.20%	4.30%	4.40%	4.50%	4.60%	8.07%
NextEra Energy, Inc.	NEE	\$96.32	\$2.90	6.46%	6.15%	5.84%	5.53%	5.22%	4.91%	4.60%	8.28%
Northeast Utilities	NU	\$46.18	\$1.57	6.44%	6.13%	5.82%	5.52%	5.21%	4.91%	4.60%	8.75%
Otter Tail Corporation	OTTR	\$28.39	\$1.21	N/A	n/a	n/a	n/a	n/a	n/a	4.60%	n/a
Pinnacle West Capital Corporation	PNW	\$56.95	\$2.38	3.98%	4.09%	4.19%	4.29%	4.39%	4.50%	4.60%	8.98%
PNM Resources, Inc.	PNM	\$26.46	\$0.74	8.21%	7.61%	7.01%	6.41%	5.80%	5.20%	4.60%	8.42%
Portland General Electric Company	POR	\$33.93	\$1.12	7.81%	7.28%	6.74%	6.21%	5.67%	5.14%	4.60%	8.99%
Southern Company	SO	\$44.75	\$2.10	3.61%	3.77%	3.94%	4.10%	4.27%	4.43%	4.60%	9.42%
Westar Energy, Inc.	WR	\$35.96	\$1.40	3.03%	3.29%	3.56%	3.82%	4.08%	4.34%	4.60%	8.43%
Mean				5.05%	4.97%	4.90%	4.82%	4.75%	4.67%	4.60%	8.74%
Median				4.50%	4.52%	4.53%	4.55%	4.57%	4.58%	4.60%	8.70%

Notes:

- [1] 13-week average stock price; Source: Schedule MPG-9
- [2] Source: Schedule MPG-9
- [3] Source: Schedule MPG-9
- [4] Equals [3] + ([9] - [3])/6
- [5] Equals [4] + ([9] - [3])/6
- [6] Equals [5] + ([9] - [3])/6
- [7] Equals [6] + ([9] - [3])/6
- [8] Equals [7] + ([9] - [3])/6
- [9] Source: Schedule MPG-9
- [10] IRR based on stock price ([1]) and 200 years of projected dividends using the mid-year convention

Step-By-Step Adjustment of Mr. Gorman's Multi-Stage DCF Model  
Step 2: Correct Long-Term Growth Estimate

Company	Ticker	[1] Stock Price	[2] Annualized Dividend	[3] First-Stage Growth	[6] Second-Stage Growth					[9] Third-Stage Growth	[10] Multi-Stage Growth DCF
					[4] Year 6	[5] Year 7	[6] Year 8	[7] Year 9	[8] Year 10		
<b>Electric Group</b>											
American Electric Power Company, Inc.	AEP	\$53.81	\$2.00	5.02%	5.12%	5.22%	5.33%	5.43%	5.53%	5.63%	9.58%
Empire District Electric Company	EDE	\$25.71	\$1.02	3.00%	3.44%	3.88%	4.31%	4.75%	5.19%	5.63%	9.33%
Great Plains Energy Inc.	GXP	\$25.33	\$0.92	5.00%	5.10%	5.21%	5.31%	5.42%	5.52%	5.63%	9.48%
Hawaiian Electric Industries, Inc.	HE	\$28.09	\$1.24	4.00%	4.27%	4.54%	4.81%	5.08%	5.36%	5.63%	10.39%
IDACORP, Inc.	IDA	\$58.59	\$1.88	4.00%	4.27%	4.54%	4.81%	5.08%	5.36%	5.63%	8.91%
NextEra Energy, Inc.	NEE	\$96.32	\$2.90	6.46%	6.32%	6.18%	6.04%	5.90%	5.77%	5.63%	9.12%
Northeast Utilities	NU	\$46.18	\$1.57	6.44%	6.30%	6.17%	6.03%	5.90%	5.76%	5.63%	9.57%
Otter Tail Corporation	OTTR	\$28.39	\$1.21	N/A	n/a	n/a	n/a	n/a	n/a	5.63%	n/a
Pinnacle West Capital Corporation	PNW	\$56.95	\$2.38	3.98%	4.26%	4.53%	4.81%	5.08%	5.35%	5.63%	9.79%
PNM Resources, Inc.	PNM	\$26.46	\$0.74	8.21%	7.78%	7.35%	6.92%	6.49%	6.06%	5.63%	9.25%
Portland General Electric Company	POR	\$33.93	\$1.12	7.81%	7.45%	7.08%	6.72%	6.35%	5.99%	5.63%	9.80%
Southern Company	SO	\$44.75	\$2.10	3.61%	3.94%	4.28%	4.62%	4.95%	5.29%	5.63%	10.21%
Westar Energy, Inc.	WR	\$35.96	\$1.40	3.03%	3.47%	3.90%	4.33%	4.76%	5.20%	5.63%	9.26%
<b>Mean</b>				<b>5.05%</b>	<b>5.14%</b>	<b>5.24%</b>	<b>5.34%</b>	<b>5.43%</b>	<b>5.53%</b>	<b>5.63%</b>	<b>9.66%</b>
<b>Median</b>				<b>4.50%</b>	<b>4.69%</b>	<b>4.88%</b>	<b>5.06%</b>	<b>5.25%</b>	<b>5.44%</b>	<b>5.63%</b>	<b>9.53%</b>

Notes:

- [1] 13-week average stock price; Source: Attachment MPG-9
- [2] Source: Schedule MPG-9
- [3] Source: Schedule MPG-9
- [4] Equals [3] + ([9] - [3])<sup>6</sup>
- [5] Equals [4] + ([9] - [3])<sup>6</sup>
- [6] Equals [5] + ([9] - [3])<sup>6</sup>
- [7] Equals [6] + ([9] - [3])<sup>6</sup>
- [8] Equals [7] + ([9] - [3])<sup>6</sup>
- [9] Source: Schedule RBH-R8
- [10] IRR based on stock price ([1]) and 200 years of projected dividends using the mid-year convention

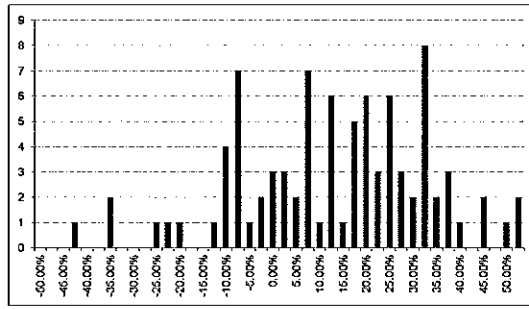
Mr. Gorman's Multi-Stage DCF Growth Model  
Implied Growth Rate to Produce Average Authorized ROE as DCF Result

Company	Ticker	[1] Stock Price	[2] Annualized Dividend	[3] First-Stage Growth	[5] Second-Stage Growth					[9] Third-Stage Growth	[10] Multi-Stage Growth DCF
					[4] Year 6	[5] Year 7	[6] Year 8	[7] Year 9	[8] Year 10		
Combined Group											
American Electric Power Company, Inc.	AEP	\$53.81	\$2.00	5.02%	5.24%	5.46%	5.68%	5.90%	6.12%	6.35%	9.98%
Empire District Electric Company	EDE	\$25.71	\$1.02	3.00%	3.56%	4.12%	4.67%	5.23%	5.79%	6.35%	9.75%
Great Plains Energy Inc.	GXP	\$25.33	\$0.92	5.00%	5.22%	5.45%	5.67%	5.90%	6.12%	6.35%	9.89%
Hawaiian Electric Industries, Inc.	HE	\$26.09	\$1.24	4.00%	4.39%	4.78%	5.17%	5.56%	5.95%	6.35%	10.71%
IDACORP, Inc.	IDA	\$56.59	\$1.88	4.00%	4.39%	4.78%	5.17%	5.56%	5.95%	6.35%	9.37%
NextEra Energy, Inc.	NEE	\$96.32	\$2.90	6.46%	6.44%	6.42%	6.40%	6.38%	6.36%	6.35%	9.56%
Northeast Utilities	NU	\$46.18	\$1.57	6.44%	6.42%	6.41%	6.39%	6.38%	6.36%	6.35%	9.98%
Otter Tail Corporation	OTTR	\$28.39	\$1.21	N/A	n/a	n/a	n/a	n/a	n/a	6.35%	n/a
Pinnacle West Capital Corporation	PNW	\$56.95	\$2.38	3.98%	4.38%	4.77%	5.16%	5.56%	5.95%	6.35%	10.17%
PNM Resources, Inc.	PNM	\$26.46	\$0.74	8.21%	7.90%	7.59%	7.28%	6.97%	6.66%	6.35%	9.69%
Portland General Electric Company	POR	\$33.93	\$1.12	7.81%	7.57%	7.32%	7.08%	6.83%	6.59%	6.35%	10.19%
Southern Company	SO	\$44.75	\$2.10	3.61%	4.06%	4.52%	4.98%	5.43%	5.89%	6.35%	10.55%
Westar Energy, Inc.	WR	\$35.96	\$1.40	3.03%	3.59%	4.14%	4.69%	5.24%	5.79%	6.35%	9.69%
Mean				5.05%	5.26%	5.48%	5.70%	5.91%	6.13%	6.35%	9.96%
Median				4.50%	4.81%	5.12%	5.42%	5.73%	6.04%	6.35%	9.93%

Notes:

- [1] 13-week average stock price; Source: Schedule MPG-9
- [2] Source: Schedule MPG-9
- [3] Source: Schedule MPG-9
- [4] Equals [3] + ([9] - [3])/6
- [5] Equals [4] + ([9] - [3])/6
- [6] Equals [5] + ([9] - [3])/6
- [7] Equals [6] + ([9] - [3])/6
- [8] Equals [7] + ([9] - [3])/6
- [9] Implicit Growth Rate
- [10] IRR based on stock price ([1]) and 200 years of projected dividends

Frequency Distribution of Observed Market Returns, 1926 - 2013



Source: Morningstar, Inc., "Global Stocks, Bonds, BFs and Inflation 2014 Classic Yearbook, at 196-197.

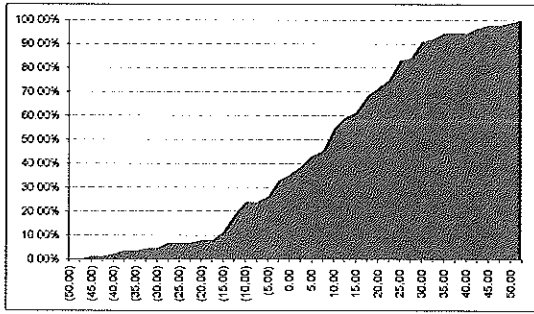
Frequency Distribution of Observed Market Returns, 1926 - 2013

Source: Morningstar, Inc., *bbotson Stocks, Bonds, BFs and Inflation 2014 Classic Yearbook*, at 196-197.

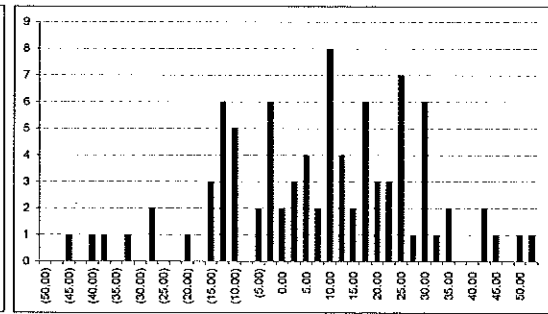
Large Company  
(Table A-1, pg  
196-197)

Year	Jan-Dec*	Bn	Frequency	Cumulative %		
1926	0.1162	11.62	-50.00%	-50.00	0	0.00%
1927	0.3749	37.49	-47.50%	-47.50	0	0.00%
1928	0.4361	43.61	-45.00%	-45.00	0	0.00%
1929	-0.0842	-8.42	-42.50%	-42.50	1	1.14%
1930	-0.2490	-24.90	-40.00%	-40.00	0	1.14%
1931	-0.4334	-43.34	-37.50%	-37.50	0	1.14%
1932	-0.0819	-8.19	-35.00%	-35.00	2	3.41%
1933	0.5399	53.99	-32.50%	-32.50	0	3.41%
1934	-0.0144	-1.44	-30.00%	-30.00	0	3.41%
1935	0.4767	47.67	-27.50%	-27.50	0	3.41%
1936	0.3392	33.92	-25.00%	-25.00	1	4.55%
1937	-0.3503	-35.03	-22.50%	-22.50	1	5.68%
1938	0.3112	31.12	-20.00%	-20.00	1	6.82%
1939	-0.0041	-0.41	-17.50%	-17.50	0	6.82%
1940	-0.0978	-9.78	-15.00%	-15.00	0	6.82%
1941	-0.1159	-11.59	-12.50%	-12.50	1	7.95%
1942	0.2034	20.34	-10.00%	-10.00	4	12.50%
1943	0.2590	25.90	-7.50%	-7.50	7	20.45%
1944	0.1975	19.75	-5.00%	-5.00	1	21.59%
1945	0.3644	36.44	-2.50%	-2.50	2	23.86%
1946	-0.0807	-8.07	0.00%	0.00	3	27.27%
1947	0.0571	5.71	2.50%	2.50	3	30.68%
1948	0.0550	5.50	5.00%	5.00	2	32.95%
1949	0.1879	18.79	7.50%	7.50	7	40.91%
1950	0.3171	31.71	10.00%	10.00	1	42.05%
1951	0.2402	24.02	12.50%	12.50	6	48.86%
1952	0.1837	18.37	15.00%	15.00	1	50.00%
1953	-0.0099	-0.99	17.50%	17.50	5	55.68%
1954	0.5262	52.62	20.00%	20.00	6	62.50%
1955	0.3156	31.56	22.50%	22.50	3	65.91%
1956	0.0856	8.56	25.00%	25.00	6	72.73%
1957	-0.1078	-10.78	27.50%	27.50	3	76.14%
1958	0.4336	43.36	30.00%	30.00	2	78.41%
1959	0.1196	11.96	32.50%	32.50	8	87.50%
1960	0.0047	0.47	35.00%	35.00	2	89.77%
1961	0.2689	26.89	37.50%	37.50	3	93.18%
1962	-0.0873	-8.73	40.00%	40.00	1	94.32%
1963	0.2280	22.80	42.50%	42.50	0	94.32%
1964	0.1648	16.48	45.00%	45.00	2	96.59%
1965	0.1245	12.45	47.50%	47.50	0	96.59%
1966	-0.1006	-10.06	50.00%	50.00	1	97.73%
1967	0.2393	23.93	51.00%	51.00	2	100.00%
1968	0.1106	11.06				
1969	-0.0850	-8.50				
1970	0.0386	3.86				
1971	0.1430	14.30	MRP	Rank:		
1972	0.1899	18.99	13.49	48.90%		
1973	-0.1469	-14.69	12.75	48.40%		
1974	-0.2647	-26.47			Observations > 12.75	45
1975	0.3723	37.23			Observations > 13.49	45
1976	0.2393	23.93				
1977	-0.0716	-7.16				
1978	0.0657	6.57				
1979	0.1861	18.61				
1980	0.3250	32.50				
1981	-0.0492	-4.92				
1982	0.2155	21.55				
1983	0.2256	22.56				
1984	0.0627	6.27				
1985	0.3173	31.73				
1986	0.1867	18.67				
1987	0.0525	5.25				
1988	0.1661	16.61				
1989	0.3169	31.69				
1990	-0.0310	-3.10				
1991	0.3047	30.47				
1992	0.0762	7.62				
1993	0.1008	10.08				
1994	0.0132	1.32				
1995	0.3758	37.58				
1996	0.2293	22.96				
1997	0.3336	33.36				
1998	0.2858	28.58				
1999	0.2104	21.04				
2000	-0.0910	-9.10				
2001	-0.1189	-11.89				
2002	-0.2210	-22.10				
2003	0.2868	28.68				
2004	0.1088	10.88				
2005	0.0491	4.91				
2006	0.1579	15.79				
2007	0.0549	5.49				
2008	-0.3700	-37.00				
2009	0.2646	26.46				
2010	0.1506	15.06				
2011	0.0211	2.11				
2012	0.1600	16.00				
2013	0.3239	32.39				
Average	0.1205					
Std. Dev.	0.2019					

Cumulative Probability of Market Risk Premia, 1926 - 2013



Frequency Distribution of Market Risk Premium, 1926 - 2013



Source: Morningstar, Inc., Ibbotson Stocks, Bonds, BFs and Inflation 2014 Classic Yearbook, at 196-197, 208-209.

Market Risk Premium, 1926 - 2013

Source: Morningstar, Inc., Ibbotson Stocks, Bonds, BFs and Inflation 2014 Classic Yearbook, at 196-197, 208-209.

Year	Large Company Stocks	Long-Term Government Bond	MRP			Cumulative %
	Total Returns (Table A-1, pg 196-197)	Income Returns (Table A-7, pg 208)		Bin	Frequency	
	Jan-Dec*	Jan-Dec*				
1926	0.1162	0.0373	7.8900	-50.00%	-50.00	0
1927	0.3749	0.0341	34.0800	-47.50%	-47.50	0
1928	0.4361	0.0322	40.3900	-45.00%	-45.00	1
1929	-0.0842	0.0347	-11.8900	-42.50%	-42.50	0
1930	-0.2490	0.0332	-28.2200	-40.00%	-40.00	1
1931	-0.4334	0.0333	-46.6700	-37.50%	-37.50	1
1932	-0.0819	0.0369	-11.8800	-35.00%	-35.00	0
1933	0.5399	0.0312	50.8700	-32.50%	-32.50	1
1934	-0.0144	0.0318	-4.6200	-30.00%	-30.00	0
1935	0.4767	0.0281	44.8600	-27.50%	-27.50	2
1936	0.3392	0.0277	31.1500	-25.00%	-25.00	0
1937	-0.3503	0.0266	-37.6900	-22.50%	-22.50	0
1938	0.3112	0.0264	28.4800	-20.00%	-20.00	1
1939	-0.0041	0.0240	-2.8100	-17.50%	-17.50	0
1940	-0.0978	0.0223	-12.0100	-15.00%	-15.00	3
1941	-0.1159	0.0194	-13.5300	-12.50%	-12.50	6
1942	0.2034	0.0246	17.8600	-10.00%	-10.00	5
1943	0.2590	0.0244	23.4600	-7.50%	-7.50	0
1944	0.1975	0.0246	17.2900	-5.00%	-5.00	2
1945	0.3644	0.0234	34.1000	-2.50%	-2.50	6
1946	-0.0807	0.0204	-10.1100	0.00%	0.00	2
1947	0.0571	0.0213	3.5800	2.50%	2.50	3
1948	0.0550	0.0240	3.1000	5.00%	5.00	4
1949	0.1879	0.0225	16.5400	7.50%	7.50	2
1950	0.3171	0.0212	29.5900	10.00%	10.00	8
1951	0.2402	0.0238	21.6400	12.50%	12.50	4
1952	0.1837	0.0266	15.7100	15.00%	15.00	2
1953	-0.0099	0.0284	-3.8300	17.50%	17.50	6
1954	0.5262	0.0279	49.8300	20.00%	20.00	3
1955	0.3156	0.0275	28.8100	22.50%	22.50	3
1956	0.0656	0.0299	3.5700	25.00%	25.00	7
1957	-0.1078	0.0344	-14.2200	27.50%	27.50	1
1958	0.4336	0.0327	40.0900	30.00%	30.00	6
1959	0.1196	0.0401	7.9500	32.50%	32.50	1
1960	0.0047	0.0426	-3.7900	35.00%	35.00	2
1961	0.2669	0.0383	23.0500	37.50%	37.50	0
1962	-0.0873	0.0400	-12.7300	40.00%	40.00	0
1963	0.2280	0.0389	18.9100	42.50%	42.50	2
1964	0.1648	0.0415	12.3300	45.00%	45.00	1
1965	0.1245	0.0419	8.2600	47.50%	47.50	0
1966	-0.1006	0.0449	-14.5500	50.00%	50.00	1
1967	0.2398	0.0459	19.3900	51.00%	51.00	1
1968	0.1106	0.0550	5.5600			88
1969	-0.0850	0.0595	-14.4500			
1970	0.0388	0.0674	-2.8800			
1971	0.1430	0.0632	7.9800			
1972	0.1899	0.0587	13.1200			
1973	-0.1469	0.0651	-21.2000			
1974	-0.2647	0.0727	-33.7400			
1975	0.3723	0.0799	29.2400			
1976	0.2393	0.0769	16.0400			
1977	-0.0716	0.0714	-14.3000			
1978	0.0657	0.0790	-1.3300			
1979	0.1861	0.0886	9.7500			
1980	0.3250	0.0997	22.5300			
1981	-0.0492	0.1155	-16.4700			
1982	0.2155	0.1350	8.0500			
1983	0.2256	0.1038	12.1600			
1984	0.0627	0.1174	-5.4700			
1985	0.3173	0.1125	20.4600			
1986	0.1867	0.0898	9.6900			
1987	0.0525	0.0792	-2.6700			
1988	0.1661	0.0897	7.6400			
1989	0.3169	0.0881	22.8600			
1990	-0.0310	0.0819	-11.2900			
1991	0.3047	0.0822	22.2500			
1992	0.0762	0.0726	0.3600			
1993	0.1008	0.0717	2.9100			
1994	0.0132	0.0659	-5.2700			
1995	0.3758	0.0760	29.9600			
1996	0.2296	0.0618	16.7800			
1997	0.3336	0.0664	26.7200			
1998	0.2858	0.0583	22.7500			
1999	0.2104	0.0557	15.4700			
2000	-0.0910	0.0650	-15.6000			
2001	-0.1189	0.0553	-17.4200			
2002	-0.2210	0.0559	-27.6900			
2003	0.2868	0.0480	23.8800			
2004	0.1088	0.0502	5.8600			
2005	0.0491	0.0469	0.2200			
2006	0.1579	0.0468	11.1100			
2007	0.0549	0.0486	0.6300			
2008	-0.3700	0.0445	-41.4500			
2009	0.2646	0.0347	22.9900			
2010	0.1506	0.0425	10.8100			
2011	0.0211	0.0381	-1.7000			
2012	0.1600	0.0240	13.6000			
2013	0.3239	0.0286	29.5300			
Average	0.1205	0.0509	6.9582			
Std. Dev.	0.2019	0.0264				

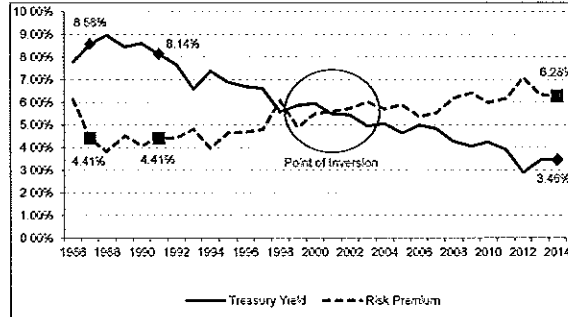
MRP	Rank:	
10.45	54.70%	
Observations above 10.45:	40	
Total Observations:	88	
	45.45%	

Analysis Using Mr. Gorman's Equity Risk Premium Data

Year	Authorized Electric Returns	30-Year Treasury Yield	Indicated Risk Premium
1986	13.93%	7.80%	6.13%
1987	12.99%	8.58%	4.41%
1988	12.79%	8.96%	3.83%
1989	12.97%	8.45%	4.52%
1990	12.70%	8.61%	4.09%
1991	12.55%	8.14%	4.41%
1992	12.09%	7.67%	4.42%
1993	11.41%	6.60%	4.81%
1994	11.34%	7.37%	3.97%
1995	11.55%	6.88%	4.67%
1996	11.39%	6.70%	4.69%
1997	11.40%	6.61%	4.79%
1998	11.66%	5.58%	6.08%
1999	10.77%	5.87%	4.90%
2000	11.43%	5.94%	5.49%
2001	11.09%	5.49%	5.60%
2002	11.16%	5.43%	5.73%
2003	10.97%	4.96%	6.01%
2004	10.75%	5.05%	5.70%
2005	10.54%	4.65%	5.89%
2006	10.36%	4.99%	5.37%
2007	10.36%	4.83%	5.53%
2008	10.46%	4.28%	6.18%
2009	10.48%	4.07%	6.41%
2010	10.24%	4.25%	5.99%
2011	10.07%	3.91%	6.16%
2012	10.01%	2.92%	7.09%
2013	9.79%	3.45%	6.34%
2014	9.74%	3.46%	6.28%
Average	11.28%	5.91%	5.36%
2005 - 2014 Minimum			5.37%
2005 - 2014 Maximum			7.09%
Expected Treasury Yield			4.10%
2005 - 2014 Min ROE			9.47%
2005 - 2014 Max ROE			11.19%
Weighted ROE			10.76%

Source: Schedule MPG-11

Correlation: -0.8764



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.8763942
R Square	0.7680667
Adjusted R Square	0.7594766
Standard Error	0.0042277
Observations	29

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.00159809	0.001598085	89.41280271	4.65073E-10
Residual	27	0.00048257	1.78731E-05		
Total	28	0.00208066			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.0791172	0.00280819	28.17369901	1.48083E-21	0.073355258	0.0848791	0.07335526	0.08487913
30-Year Treasury Yield	-0.4311476	0.04559593	-9.455834321	4.65073E-10	-0.52470267	-0.337592	-0.52470267	-0.33759243

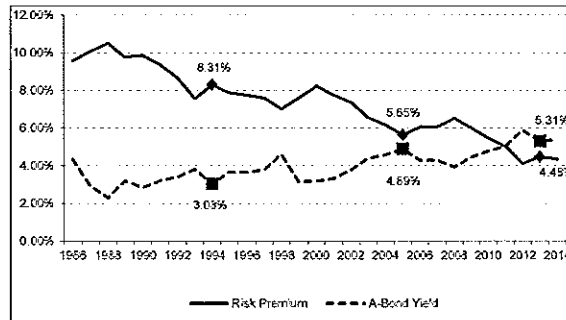


Analysis Using Mr. Gorman's Equity Risk Premium Data

Year	Authorized Electric Returns	Average A Rated Utility Bond Yield	Indicated Risk Premium
1986	13.93%	9.58%	4.35%
1987	12.99%	10.10%	2.89%
1988	12.79%	10.49%	2.30%
1989	12.97%	9.77%	3.20%
1990	12.70%	9.86%	2.84%
1991	12.55%	9.36%	3.19%
1992	12.09%	8.69%	3.40%
1993	11.41%	7.59%	3.82%
1994	11.34%	8.31%	3.03%
1995	11.55%	7.89%	3.66%
1996	11.39%	7.75%	3.64%
1997	11.40%	7.60%	3.80%
1998	11.66%	7.04%	4.62%
1999	10.77%	7.62%	3.15%
2000	11.43%	8.24%	3.19%
2001	11.09%	7.76%	3.33%
2002	11.16%	7.37%	3.79%
2003	10.97%	6.58%	4.39%
2004	10.75%	6.16%	4.59%
2005	10.54%	5.65%	4.89%
2006	10.36%	6.07%	4.29%
2007	10.36%	6.07%	4.29%
2008	10.46%	6.53%	3.93%
2009	10.48%	6.04%	4.44%
2010	10.24%	5.46%	4.78%
2011	10.07%	5.04%	5.03%
2012	10.01%	4.13%	5.88%
2013	9.79%	4.48%	5.31%
2014	9.74%	4.36%	5.38%
Average	11.28%	7.30%	3.98%
2005 - 2014 Minimum			3.93%
2005 - 2014 Maximum			5.88%
Expected Treasury Yield			4.71%
2005 - 2014 Min ROE			8.64%
2005 - 2014 Max ROE			10.59%
Weighted ROE			10.10%

Source: Schedule MPG-12

Correlation: -0.8985



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.8985491
R Square	0.8073906
Adjusted R Square	0.8002569
Standard Error	0.0038936
Observations	29

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.00171584	0.001715844	113.1800406	3.70115E-11
Residual	27	0.00040933	1.51603E-05		
Total	28	0.00212517			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.071654	0.003081	23.25672403	2.15312E-19	0.065332296	0.0779757	0.0653323	0.07797568
A Rated Util Bond Yield	-0.4366978	0.04104745	-10.63861084	3.70115E-11	-0.5209102	-0.352465	-0.5209102	-0.3524654

Analysis Using Mr. Gorman's Equity Risk Premium Data

Year	Authorized Electric Returns	Average A Rated Utility Bond Yield	30-Year Treasury Yield	Credit Spread	Indicated Risk Premium
1986	13.93%	9.58%	7.80%	1.78%	6.13%
1987	12.99%	10.10%	8.58%	1.52%	4.41%
1988	12.79%	10.49%	8.96%	1.53%	3.83%
1989	12.97%	9.77%	8.45%	1.32%	4.52%
1990	12.70%	9.86%	8.61%	1.25%	4.09%
1991	12.55%	9.36%	8.14%	1.22%	4.41%
1992	12.09%	8.69%	7.67%	1.02%	4.42%
1993	11.41%	7.59%	6.60%	0.99%	4.81%
1994	11.34%	8.31%	7.37%	0.94%	3.97%
1995	11.55%	7.89%	6.88%	1.01%	4.67%
1996	11.39%	7.75%	6.70%	1.05%	4.69%
1997	11.40%	7.60%	6.61%	0.99%	4.79%
1998	11.66%	7.04%	5.58%	1.46%	6.08%
1999	10.77%	7.62%	5.87%	1.75%	4.90%
2000	11.43%	8.24%	5.94%	2.30%	5.49%
2001	11.09%	7.76%	5.49%	2.27%	5.60%
2002	11.16%	7.37%	5.43%	1.94%	5.73%
2003	10.97%	6.58%	4.96%	1.62%	6.01%
2004	10.75%	6.16%	5.05%	1.11%	5.70%
2005	10.54%	5.65%	4.65%	1.00%	5.89%
2006	10.36%	6.07%	4.99%	1.08%	5.37%
2007	10.36%	6.07%	4.83%	1.24%	5.53%
2008	10.46%	6.53%	4.28%	2.25%	6.18%
2009	10.46%	6.04%	4.07%	1.97%	6.41%
2010	10.24%	5.46%	4.25%	1.21%	5.99%
2011	10.07%	5.04%	3.91%	1.13%	6.16%
2012	10.01%	4.13%	2.92%	1.21%	7.09%
2013	9.79%	4.48%	3.45%	1.03%	6.34%
2014	9.74%	4.36%	3.46%	0.90%	6.28%
Average	11.28%	7.30%	5.91%	1.38%	5.36%

Source: Schedules MPG-11 & MPG-12

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.8997817
R Square	0.8096071
Adjusted R Square	0.7949615
Standard Error	0.0039034
Observations	29

ANOVA					
	df	SS	MS	F	Significance F
Regression	2	0.00168452	0.000842258	55.27984424	4.31977E-10
Residual	26	0.00039614	1.52363E-05		
Total	28	0.00208066			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.0733029	0.00356117	20.58394336	1.2851E-17	0.065982607	0.080623	0.06598281	0.08062298
30-Year Treasury Yield	-0.4283508	0.04211473	-10.17104414	1.48753E-10	-0.51491889	-0.341783	-0.51491889	-0.34178274
Credit Spread	0.4084431	0.17148865	2.381749935	0.024836399	0.055943111	0.760943	0.05594311	0.76094303

Analysis Using Mr. Gorman's Equity Risk Premium Data

Mr. Gorman's Projected Treasury Yield: 4.10%  
 Mr. Gorman's Current Utility Bond Yield: 4.71%

HIGH RANK	YEAR	RISK PREMIUM	ROE	LOW RANK	YEAR	RISK PREMIUM	ROE	WEIGHTED ROE
Treasury Yield-Based Risk Premium								
1	2012	7.09%	11.19%	29	1988	3.83%	7.93%	10.37%
2	2009	6.41%	10.51%	28	1994	3.97%	8.07%	9.90%
3	2013	6.34%	10.44%	27	1990	4.09%	8.19%	9.88%
4	2014	6.28%	10.38%	26	1987	4.41%	8.51%	9.91%
5	2008	6.18%	10.28%	25	1991	4.41%	8.51%	9.84%
6	2011	6.16%	10.26%	24	1992	4.42%	8.52%	9.83%
7	1986	6.13%	10.23%	23	1989	4.52%	8.62%	9.83%
8	1998	6.08%	10.18%	22	1995	4.67%	8.77%	9.83%
9	2003	6.01%	10.11%	21	1996	4.69%	8.79%	9.78%
10	2010	5.99%	10.09%	20	1997	4.79%	8.89%	9.79%
A-Utility Bond-Based Risk Premium								
1	2012	5.88%	10.59%	29	1988	2.30%	7.01%	9.69%
2	2014	5.38%	10.09%	28	1990	2.84%	7.55%	9.46%
3	2013	5.31%	10.02%	27	1987	2.89%	7.60%	9.42%
4	2011	5.03%	9.74%	26	1994	3.03%	7.74%	9.24%
5	2005	4.89%	9.60%	25	1999	3.15%	7.86%	9.17%
6	2010	4.78%	9.49%	24	2000	3.19%	7.90%	9.09%
7	1998	4.62%	9.33%	23	1991	3.19%	7.90%	8.97%
8	2004	4.59%	9.30%	22	1989	3.20%	7.91%	8.95%
9	2009	4.44%	9.15%	21	2001	3.33%	8.04%	8.87%
10	2003	4.39%	9.10%	20	1992	3.40%	8.11%	8.85%
Estimated Return on Equity (Midpoint)								
1								10.03%
2								9.68%
3								9.65%
4								9.57%
5								9.50%
6								9.46%
7								9.40%
8								9.39%
9								9.33%
10								9.32%

Source: Schedules MPG-11, MPG-12 and MPG-14  
 Note: Differences due to rounding

```

DATASET NAME DataSet2 WINDOW=FRONT.
DATASET ACTIVATE DataSet1.
DATASET CLOSE DataSet2.
NEW FILE.
DATASET NAME DataSet3 WINDOW=FRONT.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT VAR00002
  /METHOD=ENTER VAR00001
  /RESIDUALS DURBIN.

```

**Regression**

Notes		
Output Created		09-DEC-2014 12:57:31
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	25
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT VAR00002 /METHOD=ENTER VAR00001 /RESIDUALS DURBIN.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01
	Memory Required	2400 bytes
	Additional Memory Required for Residual Plots	0 bytes

[DataSet3]

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	30yrTYield <sup>b</sup>		Enter

a. Dependent Variable: ResPremium  
b. All requested variables entered.

**Model Summary<sup>a</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.878 <sup>b</sup>	.768	.759	6042276509	1.902

a. Predictors: (Constant), 30yrTYield  
b. Dependent Variable: ResPremium

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.002	1	.002	89.413	.000 <sup>b</sup>
	Residual	.000	27	.000		
	Total	.002	28			

a. Dependent Variable: ResPremium  
b. Predictors: (Constant), 30yrTYield

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.078	.003		28.174	.000
	30yrTYield	-.431	.045	-.876	-9.456	.000

a. Dependent Variable: ResPremium

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.043459804	.066524349	.053022207	.0075548243	25
Residual	-.0078416344	.0158219503	.0000000000	.0041515002	25
Std. Predicted Value	-1.733	1.703	.000	1.000	25
Std. Residual	-1.603	3.742	.000	.592	25

a. Dependent Variable: ResPremium

areg var0002 with var0001  
/method=FW.

**Autoregression**

Notes		
Output Created		09-DEC-2014 12:58:43
Comments		
Input	Active Dataset Filter	DataSet <none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	25
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing
	Cases Used	Cases with missing values that successively occur at the beginning or end of the series are stripped. All other cases may not contain any missing value
Syntax		areg var0002 with var0001 /method=FW.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01
Use	From	First observation
	To	Last observation
Predict	From	First observation following the use period
	To	Last observation
Time Series Settings (TSSET)	Amount of Output	PRINT DEFAULT
	Saving New Variables	NEWVAR CURRENT
	Maximum Number of Lags in Autocorrelation or Partial Autocorrelation Plots	MXAUTO 16
	Maximum Number of Lags in Cross-Correlation Plots	MXCROSS 7
	Maximum Number of New Variables Generated Per Procedure	MXNEWVAR 60
	Maximum Number of New Cases Per Procedure	MXPREDICT 1000
	Treatment of User-Missing Values	MISSING EXCLUDE
	Confidence Interval Percentage Value	CN 95
	Tolerance for Entering Variables in Regression Equations	TOLER .0001
	Maximum Iterative Parameter Change	CONVERGE .001
	Method of Calculating Std. Errors for Autocorrelations	ACFSE IND
	Length of Seasonal Period	Unspecified
	Variable Whose Values Label Observations in Plots	Unspecified
Variables Created or Modified	Equations Include	CONSTANT
	FIT#1	Fit for VAR00002 from AREG, MOD_1
	ERR#1	Error for VAR00002 from AREG, MOD_1
	LCL#1	95% LCL for VAR00002 from AREG, MOD_1
	UCL#1	95% UCL for VAR00002 from AREG, MOD_1
	SEP#1	SE of Fit for VAR00002 from AREG, MOD_1

**Model Description**

Model Name		MOD_1
Dependent Series		RiskPremium
Independent Series	1	30yrYield
Constant		Included
AR		1

Applying the model specifications from MOD\_1

**Iteration Termination Criteria**

Maximum Parameter Change Less Than	001
Number of Iterations Equal to	10

Case Processing Summary

Series Length		25
Number of Cases Skipped Due to Missing Values	At the Beginning of the Series	0
	At the End of the Series	0
Number of Cases with Missing Values within the Series		0
Number of Forecasted Cases		0
Number of New Cases Added to the Current Working File		0

Requested Initial Configuration

Rho (AR1)		AUTO
Regression Coefficients	30yTrYield	AUTO*
Constant		AUTO*

a. The prior parameter value is invalid and is reset to 0.1.

Iteration 0

Autocorrelation Coefficient

Rho (AR1)	Std. Error
0	.004

The Prais-Winsten estimation method is used.

Model Fit Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.878	.763	.759	.004	1.303

The Prais-Winsten estimation method is used.

ANOVA

	Sum of Squares	df	Mean Square
Regression	.002	1	.002
Residual	.000	27	.000

The Prais-Winsten estimation method is used.

Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
30yTrYield	-.431	.046	-.878		-9.456	.000
(Constant)	.079	.003			28.174	.000

The Prais-Winsten estimation method is used.

Iteration History

	Rho (AR1)		Durbin-Watson	Mean Squared Errors
	Value	Std. Error		
0	.097	.195	1.473	.000
1	.089	.195	1.477	.000
2*	.089	.195	1.477	.000

The Prais-Winsten estimation method is used.

a. The estimation terminated at this iteration, because all the parameter estimates changed by less than .001.

Final Iteration 2

Autocorrelation Coefficient

Rho (AR1)	Std. Error
.089	.195

The Prais-Winsten estimation method is used.

Model Fit Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.881	.741	.721	.004	1.477

The Prais-Winsten estimation method is used.

ANOVA

	Sum of Squares	df	Mean Square
Regression	.001	1	.001
Residual	.000	28	.000

The Prais-Winsten estimation method is used.

Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
30yTrYield	-.433	.050	-.861		-8.623	.000
(Constant)	.079	.003			25.633	.000

The Prais-Winsten estimation method is used.

```

DATASET ACTIVATE DataSet4.
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) ECUT(.10)
/NOORIGIN
/DEPENDENT VAR00002
/METHOD=ENTER VAR00001
/RESIDUALS DURBIN.

```

**Regression**

Notes		09-DEC-2014 13:04:55
Output Created		
Comments		
Input	Active Dataset Filter Weight Split File N of Rows in Working Data File	DataSet4 <none> <none> <none> 29
Missing Value Handling	Definition of Missing Cases Used	User-defined missing values are treated as missing. Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) ECUT(.10) /NOORIGIN /DEPENDENT VAR00002 /METHOD=ENTER VAR00001 /RESIDUALS DURBIN.
Resources	Processor Time Elapsed Time Memory Required Additional Memory Required for Residual Plots	00:00:00.00 00:00:00.00 2608 bytes 0 bytes

[DataSet4]

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	A_UsrlyBondYield <sup>b</sup>		Enter

a. Dependent Variable: RiskPremium  
b. All requested variables entered.

**Model Summary<sup>a</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.699 <sup>b</sup>	.607	.600	0033232264	1.303

a. Predictors: (Constant), A\_UsrlyBondYield  
b. Dependent Variable: RiskPremium

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.002	1	.002	113.181	.000 <sup>b</sup>
	Residual	.000	27	.000		
	Total	.002	28			

a. Dependent Variable: RiskPremium  
b. Predictors: (Constant), A\_UsrlyBondYield

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.072	.003		23.257	.000
	A_UsrlyBondYield	-.437	.041	-.699	-10.632	.000

a. Dependent Variable: RiskPremium

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.025845459	.053515276	.039791759	.0078281510	29
Residual	-.0059763325	.0136806372	.0000000000	.0033234456	29
Std. Predicted Value	-1.782	1.782	.000	1.000	29
Std. Residual	-1.767	3.514	.000	.992	29

a. Dependent Variable: RiskPremium

areg var0002 with var0001  
/method=FW.

**Autoregression**

Notes

Output Created		09-DEC-2014 13:05:45
Comments		
Input	Active Dataset	DataSet4
	FPr	<none>
	Weight	<none>
	SPR File	<none>
	N of Rows in Working Data File	29
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Cases with missing values that successively occur at the beginning or end of the series are skipped. All other cases may not contain any missing values.
Syntax		
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03
Use	From	First observation
	To	Last observation
Predict	From	First observation following the use period
	To	Last observation
Time Series Settings (TSET)		
	Amount of Output	PRINT DEFAULT
	Saving New Variables	NEWVAR CURRENT
	Maximum Number of Lags in Autocorrelation or Partial Autocorrelation Plots	MAXAUTO 16
	Maximum Number of Lags in Cross-Correlation Plots	MAXCROSS 7
	Maximum Number of New Variables Generated Per Procedure	MAXNEWVAR 60
	Maximum Number of New Cases Per Procedure	MAXPREDICT 1000
	Treatment of User-Missing Values	MISSING EXCLUDE
	Confidence Interval Percentage Value	CIN 95
	Tolerance for Entering Variables in Regression Equations	TOLER .0001
	Maximum Iterative Parameter Change	CNVERGE .001
	Method of Calculating Std. Errors for Autocorrelations	ACFSE IND
	Length of Seasonal Period	Unspecified
	Variable Whose Values Label Observations in Plots	Unspecified
Variables Created or Modified		
	Equations Include	CONSTANT
	FIT#1	Ft for VAR0002 from AREG, MOD_4
	ERR#1	Error for VAR0002 from AREG, MOD_4
	LCL#1	95% LCL for VAR0002 from AREG, MOD_4
	UCL#1	95% UCL for VAR0002 from AREG, MOD_4
	SEP#1	SE of F1 for VAR0002 from AREG, MOD_4

**Model Description**

Model Name		MOD_4
Dependent Series		RatPremLm
Independent Series	1	A_10tyBondYield
Constant		Included
AR		1

Applying the model specifications from MOD\_4

**Iteration Termination Criteria**

Maximum Parameter Change Less Than	0.01
Number of Iterations Equal to	10



Case Processing Summary

Series Length		29
Number of Cases Skipped Due to Missing Values	At the Beginning of the Series	0
	At the End of the Series	0
Number of Cases with Missing Values within the Series		0
Number of Forecasted Cases		0
Number of New Cases Added to the Current Working File		0

Requested Initial Configuration

Rho (AR1)		AUTO
Regression Coefficients	A_UtilityBondYield	AUTO <sup>a</sup>
Constant		AUTO <sup>a</sup>

a. The prior parameter value is invalid and is reset to 0.1.

Iteration 0

Autocorrelation Coefficient

Rho (AR1)	Std. Error
0	.003

The Prais-Winsten estimation method is used.

Model Fit Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.829	.807	.800	.004	1.905

The Prais-Winsten estimation method is used.

ANOVA

	Sum of Squares	df	Mean Square
Regression	.002	1	.002
Residual	.000	27	.000

The Prais-Winsten estimation method is used.

Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
A_UtilityBondYield	-.437	.041	-.899	-10.639	.000
(Constant)	.072	.003		23.257	.000

The Prais-Winsten estimation method is used.

Iteration History

	Rho (AR1)		Durbin-Watson	Mean Squared Errors
	Value	Std. Error		
0	.118	.195	1.524	.000
1	.119	.195	1.531	.000
2 <sup>a</sup>	.119	.195	1.531	.000

The Prais-Winsten estimation method is used.

a. The estimation terminated at this iteration, because all the parameter estimates changed by less than .001.

Final Iteration 2

Autocorrelation Coefficient

Rho (AR1)	Std. Error
.119	.195

The Prais-Winsten estimation method is used.

Model Fit Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.831	.778	.759	.004	1.531

The Prais-Winsten estimation method is used.

ANOVA

	Sum of Squares	df	Mean Square
Regression	.001	1	.001
Residual	.000	28	.000

The Prais-Winsten estimation method is used.

Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
A_UtilityBondYield	-.439	.046	-.831	-9.502	.000
(Constant)	.072	.003		20.721	.000

The Prais-Winsten estimation method is used.

```

DATASET ACTIVATE DataSet5.
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT VAR00003
/METHOD=ENTER VAR00001 VAR00002
/RESIDUALS DURBIN.

```

**Regression**

Output Created		Notes	09-DEC-2014 13:08:09
Comments			
Input	Active Dataset Filter Weight Split File N of Rows in Working Data File	DataSet <none> <none> <none> 29	
Missing Value Handling	Definition of Missing Cases Used	User-defined missing values are treated as missing Statistics are based on cases with no missing values for any variable used	
Syntax		REGRESSION MISSING LISTWISE STATISTICS COEFF OUTS R ANOVA CRITERIA=PIN(.05) POUT(.10) NOORIGIN DEPENDENT VAR00003 METHOD=ENTER VAR00001 VAR00002 RESIDUALS DURBIN.	
Resources	Processor Time Elapsed Time Memory Required Additional Memory Required for Residual Plots		00:00:00.02 00:00:00.02 3104 bytes 0 bytes

[DataSet5]

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	CreditSpread, 30yTYield <sup>b</sup>		Enter

a. Dependent Variable: RiskPremium  
b. All requested variables entered

**Model Summary<sup>a</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.900 <sup>b</sup>	.810	.795	.0039033927	1.331

a. Predictors: (Constant), CreditSpread, 30yTYield  
b. Dependent Variable: RiskPremium

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.072	2	.036	65.280	.000
	Residual	.000	26	.000		
	Total	.072	28			

a. Dependent Variable: RiskPremium  
b. Predictors: (Constant), CreditSpread, 30yTYield

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.073	.004		20.584	.000
	30yTYield	-.428	.042	-.871	-10.171	.000
	CreditSpread	.408	.171	.204	2.392	.026

a. Dependent Variable: RiskPremium

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.041178476	.065733972	.053422207	.0077524281	26
Residual	-.0062959735	.0141410222	.0000000000	.0037614033	26
Std. Predicted Value	-1.604	1.562	.000	1.000	26
Std. Residual	-1.614	3.623	.000	.664	26

a. Dependent Variable: RiskPremium

```

areg var00003 with var00001 var00002
/method=FX.

```

**Autoregression**

**Notes**

Output Created		09-DEC-2014 13:10:12
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
Missing Value Handling	N of Rows in Working Data File	25
	Definition of Missing	User-defined missing values are treated as missing
Cases Used	Cases Used	Cases with missing values that successively occur at the beginning or end of the series are skipped. All other cases may not contain any missing values
	Syntax	step va=00003 with va=00001 va=00002 method: FW
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02
Use	From	First observation
	To	Last observation
Predict	From	First observation following the use period
	To	Last observation
Time Series Settings (TSET)	Amount of Output	PRINT DEFAULT
	Saving New Variables	NEWVAR CURRENT
	Maximum Number of Lags in Autocorrelation or Partial Autocorrelation Plots	MAXAUTO 16
	Maximum Number of Lags in Cross-Correlation Plots	MAXCROSS 7
	Maximum Number of New Variables Generated Per Procedure	MAXNEWVAR 60
	Maximum Number of New Cases Per Procedure	MAXPREDICT 1000
	Treatment of User-Missing Values	MISSING EXCLUDE
	Confidence Interval Percentage Value	CIN 95
	Tolerance for Entering Variables in Regression Equations	TOLER .0001
	Maximum Iterative Parameter Change	CONVERGE .001
	Method of Calculating Std. Errors for Autocorrelations	ACFSE IID
	Length of Seasonal Period	Unspecified
	Variable Whose Values Label Observations in Plots	Unspecified
	Equations Include	CONSTANT
Variables Created or Modified	FIT#1 Fit for VAR00003 from AREG, MOD_5 ERR#1 Error for VAR00003 from AREG, MOD_5 LCL#1 95% LCL for VAR00003 from AREG, MOD_5 UCL#1 95% UCL for VAR00003 from AREG, MOD_5 SEP#1 SE of FR for VAR00003 from AREG, MOD_5	

**Model Description**

Model Name	MOD_5
Dependent Series	RelPremium
Independent Series	30yTrYield
Constant	CredISpread
AR	Included

Applying the model specifications from MOD\_5

**Iteration Termination Criteria**

Maximum Parameter Change Less Than	.001
Number of Iterations Equal to	10

**Case Processing Summary**

Series Length		25
Number of Cases Skipped Due to Missing Values	At the Beginning of the Series	0
	At the End of the Series	0
Number of Cases with Missing Values within the Series		0
Number of Forecasted Cases		0
Number of New Cases Added to the Current Working File		0

Requested Initial Configuration

Rho (AR1)		AUTO
Regression Coefficients	30yrTYield CreditSpread	AUTO*
Constant		AUTO*

a. The prior parameter value is invalid and is reset to 0.1.

Iteration 0

Autocorrelation Coefficient

Rho (AR1)	Std. Error
0	.000

The Prais-Winsten estimation method is used.

Model Fit Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.900	.810	.795	.004	1.331

The Prais-Winsten estimation method is used.

ANOVA

	Sum of Squares	df	Mean Square
Regression	.002	2	.001
Residual	.000	26	.000

The Prais-Winsten estimation method is used.

Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
30yrTYield	-.428	.042	-.871	-10.171	.000
CreditSpread	.408	.171	.204	2.382	.025
(Constant)	.073	.004		20.584	.000

The Prais-Winsten estimation method is used.

Iteration History

	Value	Rho (AR1)		Durbin-Watson	Mean Squared Error
		Value	Std. Error		
0	.056	.056	.200	1.455	.000
1	.051	.051	.200	1.493	.000
2 <sup>a</sup>	.051	.051	.200	1.493	.000

The Prais-Winsten estimation method is used.

a. The estimation terminated at this iteration, because all the parameter estimates changed by less than .001.

Final Iteration 2

Autocorrelation Coefficient

Rho (AR1)	Std. Error
.051	.200

The Prais-Winsten estimation method is used.

Model Fit Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.891	.784	.769	.004	1.493

The Prais-Winsten estimation method is used.

ANOVA

	Sum of Squares	df	Mean Square
Regression	.002	2	.001
Residual	.000	25	.000

The Prais-Winsten estimation method is used.

Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
30yrTYield	-.430	.045	-.861	-9.450	.000
CreditSpread	.420	.182	.210	2.312	.025
(Constant)	.073	.004		19.282	.000

The Prais-Winsten estimation method is used.

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a )  
Ameren Missouri's Tariffs to Increase Its Revenues ) Case No. ER-2014-0258  
for Electric Service. )

AFFIDAVIT OF ROBERT B. HEVERT

COMMONWEALTH OF MASSACHUSETTS )  
 ) ss  
COUNTY OF MIDDLESEX )

Robert B. Hevert, being first duly sworn on his oath, states:

1. My name is Robert B. Hevert and my office is located in Framingham, Massachusetts and I am Managing Partner of Sussex Economic Advisors, LLC.

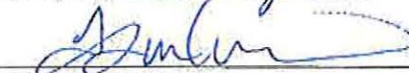
2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Union Electric Company d/b/a Ameren Missouri consisting of 125 pages and Schedule(s) RBH-7 to RBH-28, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.



Robert B. Hevert

Subscribed and sworn to before me this 12<sup>th</sup> day of January, 2015.



Notary Public

My commission expires:



AMBERLY H. DAO  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
April 16, 2015

