

BEFORE THE CORPORATION COMMISSION OF OKLAHOMA

IN THE MATTER OF THE APPLICATION OF)
OKLAHOMA GAS AND ELECTRIC COMPANY)
FOR AN ORDER OF THE COMMISSION) CAUSE NO. PUD 201500273
AUTHORIZING APPLICANT TO MODIFY ITS)
RATES, CHARGES, AND TARIFFS FOR RETAIL)
ELECTRIC SERVICE IN OKLAHOMA)

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CORPORATION COMMISSION
OF OKLAHOMA

Direct Testimony

Of

Robert B. Hevert

on behalf of

Oklahoma Gas and Electric Company

December 18, 2015

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I. WITNESS IDENTIFICATION AND QUALIFICATIONS

1 **Q. Please state your name, affiliation, and business address.**

2 A. My name is Robert B. Hevert. I am Managing Partner of Sussex Economic Advisors, LLC
3 (“Sussex”). My business address is 1900 West Park Drive, Suite 250, Westborough,
4 Massachusetts 01581.

5 **Q. On whose behalf are you submitting this testimony?**

6 A. I am submitting this direct testimony (“Direct Testimony”) before the Oklahoma Corporation
7 Commission (“Commission”) on behalf of Oklahoma Gas and Electric Company, Inc.
8 (“OG&E”, or the “Company”), which is a wholly-owned subsidiary of OGE Energy Corp..

9 **Q. Please describe your educational background.**

10 A. I hold a Bachelor’s degree in Business and Economics from the University of Delaware, and
11 an MBA with a concentration in Finance from the University of Massachusetts. I also hold
12 the Chartered Financial Analyst designation.

13 **Q. Please describe your experience in the energy and utility industries.**

14 A. I have worked in regulated industries for over twenty-five years, having served as an
15 executive and manager with consulting firms, a financial officer of a publicly-traded natural
16 gas utility (at the time, Bay State Gas Company), and an analyst at a telecommunications
17 utility. In my role as a consultant, I have advised numerous clients, including regulatory
18 bodies, on a wide range of financial and economic issues including corporate and asset-based
19 transactions, asset and enterprise valuation, transaction due diligence, dividend policy, and
20 strategic matters. As an expert witness, I have provided testimony in approximately 150

1 proceedings regarding various financial and regulatory matters before numerous state utility
2 regulatory agencies and the Federal Energy Regulatory Commission. A summary of my
3 professional and educational background, including a list of my testimony in prior
4 proceedings, is included in Attachment A to my Direct Testimony.

II. PURPOSE AND OVERVIEW OF TESTIMONY

5 **Q. What is the purpose of your Direct Testimony?**

6 A. The purpose of my Direct Testimony is to present evidence and provide the Commission
7 with a recommendation regarding the Company's return on equity ("ROE"),¹ and assess the
8 reasonableness of OG&E's capital structure to be used for ratemaking purposes. The
9 analyses and conclusions contained in my Direct Testimony are supported by the data
10 presented in Exhibit RBH-1 through Exhibit RBH-10, which have been prepared by me or
11 under my direction.

12 **Q. What are your conclusions regarding the appropriate Cost of Equity and capital
13 structure for OG&E?**

14 A. My analyses indicate that OG&E's Cost of Equity currently is in the range of 10.25 percent
15 to 10.75 percent. The Company's proposed ROE, 10.25 percent, lies at the low end of that
16 range. As such, I conclude that the Company's proposal is reasonable, if not conservative.
17 Based on the quantitative and qualitative analyses discussed throughout my Direct
18 Testimony and the Company's risk profile, I conclude that an ROE of 10.50 percent is a
19 reasonable estimate of OG&E's Cost of Equity. As to OG&E's requested capital structure,

¹ Throughout my Direct Testimony, I interchangeably use the terms "ROE" and "Cost of Equity".

1 which includes 53.31 percent common equity and 46.69 percent long-term debt, I conclude
2 that it is within the range of those in place at similarly situated utilities, whose capital
3 structures include common equity ratios in the range of 47.11 percent to 65.05 percent.

4 **Q. Please provide a brief overview of the analyses that led to your ROE recommendation.**

5 A. Because all financial models are subject to various assumptions and constraints, equity
6 analysts and investors tend to use multiple methods to develop their return requirements. I
7 therefore relied on three widely accepted approaches: (1) the Discounted Cash Flow
8 (“DCF”) model, including the Constant Growth, and Multi-Stage forms; (2) the Capital
9 Asset Pricing Model (“CAPM”); and (3) the Bond Yield Plus Risk Premium approach.

10 In addition to the methodologies noted above, my recommendation also takes into
11 consideration: (1) the risk associated with cost recovery for compliance with environmental
12 regulations; (2) the risks associated with the Company’s need to fund substantial future
13 capital expenditures; (3) the need to account for flotation costs; and (4) the effect of OG&E’s
14 rate mechanisms on the Company’s relative risk profile. While I did not make any explicit
15 adjustments to my ROE estimates for those factors, I did take them into consideration in
16 determining where the Company’s Cost of Equity falls within the range of analytical results.

17 **Q. How is the remainder of your Direct Testimony organized?**

18 A. The remainder of my Direct Testimony is organized as follows:

- 19 • Section III – discusses the regulatory guidelines and financial considerations
20 pertinent to the development of the cost of capital;
- 21 • Section IV – explains my selection of the proxy companies used to develop my
22 analytical results;

- 1 • Section V – explains my analyses and the analytical bases for my ROE
2 recommendation;
- 3 • Section VI – provides a discussion of specific business risks and other considerations
4 that have a direct bearing on OG&E’s Cost of Equity;
- 5 • Section VII – highlights the current capital market conditions and their effect on
6 OG&E’s Cost of Equity;
- 7 • Section VIII – provides my analysis of OG&E’s capital structure; and
- 8 • Section IX – summarizes my conclusions and recommendations.

III. REGULATORY GUIDELINES AND FINANCIAL CONSIDERATIONS

9 **Q. Before addressing the specific aspects of this proceeding, please provide an overview of**
10 **the issues surrounding the Cost of Equity in regulatory proceedings, generally.**

11 A. In very general terms, the Cost of Equity is the return that investors require to make an
12 equity investment in a firm. That is, investors will provide funds to a firm only if the return
13 that they *expect* is equal to, or greater than, the return that they *require* to accept the risk of
14 providing funds to the firm. From the firm’s perspective, that required return, whether it is
15 provided to debt or equity investors, has a cost. Individually, we speak of the “cost of debt”
16 and the “Cost of Equity” as measures of those costs; together, they are referred to as the
17 “cost of capital.”

18 The cost of capital (including the costs of both debt and equity) is based on the
19 economic principle of “opportunity costs.” Investing in any asset, whether debt or equity
20 securities, implies a forgone opportunity to invest in alternative assets. For an investment to

1 be sensible, its expected return must be at least equal to the return expected on alternative,
2 comparable risk investment opportunities.

3 Although both debt and equity have required costs, they differ in certain fundamental
4 ways. Most noticeably, the cost of debt is contractually defined and can be directly observed
5 as the interest rate or yield on debt securities.² The Cost of Equity, on the other hand, is
6 neither directly observable nor a contractual obligation. Rather, equity investors have a
7 claim on cash flows only after debt holders are paid; the uncertainty (or risk) associated with
8 those residual cash flows determines the Cost of Equity. Because equity investors bear the
9 “residual risk,” they take greater risks and require higher returns than debt holders. In that
10 basic sense, equity and debt investors differ: they invest in different securities, face different
11 risks, and require different returns.

12 Whereas the cost of debt can be directly observed, the Cost of Equity must be
13 estimated or inferred based on market data and various financial models. As discussed
14 throughout my Direct Testimony, each of those models is subject to certain assumptions,
15 which may be more or less applicable under differing market conditions. In addition,
16 because the Cost of Equity is premised on opportunity costs, the models typically are applied
17 to a group of “comparable” or “proxy” companies. The choice of models (including their
18 inputs), the selection of proxy companies, and the interpretation of the model results all
19 require the application of well supported and reasoned judgment. That judgment should
20 consider data and information that is not necessarily included in the models themselves. In
21 the end, the estimated Cost of Equity should reflect the return that investors require in light
22 of the subject company’s risks, and the returns available on comparable investments.

1 **Q. Please provide a brief summary of the guidelines established by the United States**
2 **Supreme Court (“the Court”) for the purpose of determining the Return on Equity.**

3 A. The Court established the guiding principles for establishing a fair return for capital in two
4 cases: (1) *Bluefield Water Works and Improvement Co. v. Public Service Comm’n.*
5 (*“Bluefield”*);³ and (2) *Federal Power Comm’n v. Hope Natural Gas Co.* (*“Hope”*).⁴ In
6 *Bluefield*, the Court stated:

7 A public utility is entitled to such rates as will permit it to earn a return on
8 the value of the property which it employs for the convenience of the public
9 equal to that generally being made at the same time and in the same general
10 part of the country on investments in other business undertakings which are
11 attended by corresponding, risks and uncertainties; but it has no
12 constitutional right to profits such as are realized or anticipated in highly
13 profitable enterprises or speculative ventures. The return should be
14 reasonably sufficient to assure confidence in the financial soundness of the
15 utility and should be adequate, under efficient and economical management,
16 to maintain and support its credit and enable it to raise the money necessary
17 for the proper discharge of its public duties.⁵

18 The Court therefore recognized that: (1) a regulated company cannot remain financially
19 sound unless the return it is allowed to earn on its invested capital is at least equal to the cost
20 of capital (the principle relating to the demand for capital); and (2) a regulated company will
21 not be able to attract capital if it does not offer investors an opportunity to earn a return on
22 their investment equal to the return they expect to earn on other investments of the same risk
23 (the principle relating to the supply of capital).

24 In *Hope*, the Court reiterated the financial integrity and capital attraction principles of
25 the *Bluefield* case:

² The observed interest rate may be adjusted to reflect issuance or other directly observable costs.
³ *Bluefield Waterworks & Improvement Co., v. Public Service Commission of West Virginia*, 262 U.S. 679, 692-93 (1923).
⁴ *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944).
⁵ *Bluefield Waterworks & Improvement Co., v. Public Service Commission of West Virginia*, 262 U.S. 679, 692-

1 From the investor or company point of view it is important that there be
2 enough revenue not only for operating expenses but also for the capital costs
3 of the business. These include service on the debt and dividends on the
4 stock... By that standard the return to the equity owner should be
5 commensurate with returns on investments in other enterprises having
6 corresponding risks. That return, moreover, should be sufficient to assure
7 confidence in the financial integrity of the enterprise, so as to maintain its
8 credit and to attract capital.⁶

9 In summary, the Court clearly has recognized that the fair Rate of Return on Equity
10 should be: (1) comparable to returns investors expect to earn on other investments of similar
11 risk; (2) sufficient to assure confidence in the company's financial integrity; and (3)
12 adequate to maintain and support the company's credit and to attract capital.

13 **Q. Do prior Orders by the Commission provide similar guidance?**

14 A. Yes. In its Order in Cause No. PUD 200600285, the Commission cited the Oklahoma
15 Supreme Court (*Southwestern Public Service Company v. State of Oklahoma*, 637 P2d 92)
16 which stated, in relevant part:

17 The constitutional safeguard afforded to a utility is summarized in Alabama
18 Public Service Com. v. South Cent. Bell Tel. Co., (Ala., 348 So.2d 443) as
19 follows: 'The just compensation safeguarded to a utility by the 14th Am. to
20 the U.S. Const. is a reasonable return on the value of the property used at the
21 time that is being used for the public service, and rates not sufficient to yield
22 that return are confiscatory. The determination of a fair rate of return is
23 governed by the following legal principles: (1) it cannot be developed by a
24 rule of thumb calculation, but must be determined in the exercise of a fair,
25 enlightened and independent judgment in light of all relevant facts; (2) it
26 must be equal to that generally being earned by others in the same general
27 locality in business undertakings attended by corresponding risks, and
28 uncertainties; (3) it must be sufficient to insure the investor's confidence in
29 the financial soundness of the utility enterprise and enough to maintain and
30 support its credit so that it will be able to raise the money necessary to
31 improve and expand its service to the discharge of all its public duties; (4) in
32 determining the reasonableness of its rates it is necessary to consider effect of

93 (1923).

⁶ Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591, 603 (1944).

1 the rates imposed in light of the utility's present situation and in light of its
2 requirements and opportunities.⁷

3 Based on the guidance provided by the Court and the Commission, the ROE
4 authorized in this proceeding should provide OG&E the opportunity to earn a fair and
5 reasonable return, and should enable efficient access to external capital under a variety of
6 market conditions.

7 **Q. Aside from the standards established by the Court and the Commission, why is it**
8 **important for a utility to be allowed the opportunity to earn a return adequate to**
9 **attract equity capital at reasonable terms?**

10 A. A return that is adequate to attract capital at reasonable terms enables the utility to provide
11 service while maintaining its financial integrity. As discussed above, and in keeping with
12 the *Hope* and *Bluefield* standards, that return should be commensurate with the returns
13 expected elsewhere in the market for investments of equivalent risk. Based on those
14 standards, the Commission's decision in this case should provide the Company with the
15 opportunity to earn an ROE that is: (1) adequate to attract capital at reasonable terms,
16 thereby enabling it to continue to provide safe and reliable electric service; (2) sufficient to
17 ensure its financial integrity; and (3) commensurate with returns on investments in
18 enterprises having corresponding risks. To the extent the Company is provided a reasonable
19 opportunity to earn its market-based Cost of Equity, neither customers nor shareholders
20 should be disadvantaged. In fact, a return that is adequate to attract capital at reasonable

⁷ Order No. 545168, Cause No. PUD 200600285, Application of Public Service Company of Oklahoma, an Oklahoma Corporation, for an Adjustment to its Rates and Charges for Electric Service in the State of Oklahoma, issued October 9, 2007, at 134.

1 terms enables OG&E to provide safe, reliable electric utility service while maintaining its
2 financial integrity.

3 **Q. How is the Cost of Equity estimated in regulatory proceedings?**

4 A. As noted earlier (and as discussed in more detail later in my Direct Testimony), in regulatory
5 proceedings the Cost of Equity is estimated by the use of various financial models. By their
6 very nature, those models produce a range of results from which the ROE is determined. In
7 regulatory proceedings, therefore, the ROE determination should be based on a
8 comprehensive review of relevant data and information; it does not necessarily lend itself to
9 a strict mathematical or formulaic solution. The key consideration for regulators in
10 determining the ROE is to ensure that the overall analysis reasonably reflects investors' view
11 of the financial markets in general, and the subject company (in the context of the proxy
12 companies) in particular. Both practitioners and academics, however, recognize that
13 financial models simply are tools to be used in the ROE estimation process, and that strict
14 adherence to any single approach, or to the results of any single approach, can lead to flawed
15 or misleading conclusions. That position is consistent with the *Hope* and *Bluefield* principle
16 that it is the analytical result, as opposed to the methodology employed that is controlling in
17 arriving at ROE determinations.⁸ Thus, a reasonable ROE estimate arising from regulatory
18 proceedings appropriately considers alternative methodologies and the reasonableness of
19 their individual and collective results in the context of observable, relevant market
20 information.

21 In summary, the Cost of Equity is established by the market, but estimated in the
22 regulatory process. That is, the market-required ROE is not established by regulatory

1 decisions, it is estimated based on the various analyses and data presented to the presiding
2 commission. Although the standards established in prior cases provide considerable
3 guidance in assessing that information, the authorized return may not always approximate
4 the market-required return. To the extent that the authorized return falls well short of
5 investors' return requirements, it is quite possible that investors would see an additional
6 element of risk, and the market-required return would increase. In that regard, regulatory
7 commissions have the considerable task of estimating the return required by investors
8 without influencing that return by virtue of their ROE determination. The analyses and
9 information provided in the balance of my Direct Testimony are meant to assist the
10 Commission in that task.

IV. PROXY GROUP SELECTION

11 **Q. As a preliminary matter, why is it necessary to select a group of proxy companies to**
12 **determine the Cost of Equity for OG&E?**

13 A. Since the ROE is a market-based concept and OG&E (which is a wholly owned operating
14 subsidiary of OGE Energy Corp.) is not a publicly traded entity, it is necessary to establish a
15 group of comparable, publicly traded companies to serve as its "proxy". Even if OG&E
16 were a publicly traded entity, short-term events could bias its market value during a given
17 period of time.⁹ A significant benefit of using a proxy group is that it moderates the effects
18 of anomalous, temporary events associated with any one company.

⁸ See, *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944).

⁹ For example, on May 6, 2010, the market sustained what has come to be known as the "flash crash", in which stock prices moved significantly during the course of the trading day without any specific information that would support such erratic movement. While that is an extreme example, there is little question that events and information affect securities prices every day; at times, those effects can be due to unusual, extraneous factors.

1 **Q. Does the selection of a proxy group suggest that analytical results will be tightly**
2 **clustered around average (i.e., mean) results?**

3 A. No. For example, the Constant Growth DCF approach defines the Cost of Equity as the sum
4 of the expected dividend yield and projected long-term growth. Despite the care taken to
5 ensure risk comparability, market expectations with respect to future risks and growth
6 opportunities will vary from company to company. Therefore, even within a group of
7 similarly situated companies, it is common for analytical results to reflect a seemingly wide
8 range. At issue is how to estimate the Cost of Equity from within that range. As the
9 Commission has observed, such a determination must consider a range of relevant
10 quantitative and qualitative information.

11 **Q. Please provide a summary profile of OG&E.**

12 A. OG&E provides electric generation, transmission and distribution services to more than
13 821,000 retail customers in Oklahoma and western Arkansas.¹⁰ OG&E's long-term issuer
14 credit ratings from Standard & Poor's ("S&P"), Moody's Investors Service ("Moody's"),
15 and Fitch Ratings currently are A-, A1, and A, respectively.¹¹

16 **Q. How did you select the companies included in your proxy group?**

17 A. Because it is used as the basis of estimating the Cost of Equity for the subject company, the
18 chosen proxy group should include companies that are fundamentally comparable to the
19 subject company, and should be large enough in number to have confidence in the analytical
20 results. In selecting a proxy group, my objective, therefore, was to balance these objectives
21 by selecting companies that are highly representative of the risks and prospects faced by

¹⁰ See OGE Energy Corp., SEC Form 10-Q for the quarter ended September 30, 2015, at 18.

¹¹ Source: SNL Financial.

1 OG&E, while at the same time ensuring that there is a sufficient number of companies in the
2 proxy group. Based on those two considerations, I began with the universe of companies
3 that Value Line classifies as Electric Utilities, and applied the following screening criteria:

- 4 • Because certain of the models used in my analyses assume that earnings and
5 dividends grow over time, I excluded companies that do not consistently pay
6 quarterly cash dividends;
- 7 • To ensure that the growth rates used in my analyses are not biased by a single
8 analyst, I excluded companies that were not covered by at least two utility industry
9 equity analysts;
- 10 • I excluded companies that do not have investment grade senior unsecured bond
11 and/or corporate credit ratings from S&P;
- 12 • I included only vertically integrated electric utilities, *i.e.* utilities that own and
13 operate regulated generation, transmission and distribution assets;
- 14 • To ensure that the analytical results represent regulated utility operations, I excluded
15 companies with less than 60.00 percent of total net operating income derived from
16 regulated utility operations over the three most recently reported fiscal years;
- 17 • To ensure that the analytical results represent regulated electric utility operations, I
18 excluded companies whose regulated electric operating income over the three most
19 recently reported fiscal years represented less than 60.00 percent of total regulated
20 operating income;
- 21 • I excluded companies whose coal-fired generation constituted less than 10.00 percent
22 of net generation; and

1 • To ensure that the results of my analyses are not skewed by event-driven swings in
2 market data, I eliminated companies that are currently known to be party to a merger
3 or other significant transaction.

4 **Q. Why do you exclude utilities that derive less than 60.00 percent of their total regulated**
5 **net operating income from electric operations?**

6 A. The Value Line Electric universe contains both electric-only, and combination electric and
7 gas utilities. Because the operational risks and financial characteristics of natural gas
8 distribution operations may differ from those of electric distribution operations, I believe it is
9 important to limit the proxy group to utilities that derive a predominant proportion of their
10 net income from regulated electric operations.

11 **Q. Did you include OGE Energy Corp. in your analysis?**

12 A. No. In order to avoid the circular logic that otherwise would occur, it is my practice to
13 exclude the subject company, or its parent holding company, from the proxy group.

14 **Q. What companies met those screening criteria?**

15 A. The criteria discussed above resulted in a proxy group of the following 19 companies:

1

Table 1: Proxy Group Screening Results

Company	Ticker
ALLETE, Inc.	ALE
Alliant Energy Corporation	LNT
Ameren Corporation	AEE
American Electric Power Company, Inc.	AEP
Avista Corporation	AVA
CMS Energy Corporation	CMS
Dominion Resources, Inc.	D
DTE Energy Company	DTE
Empire District Electric Company	EDE
Great Plains Energy Inc.	GXP
IDACORP, Inc.	IDA
NorthWestern Corporation	NWE
Otter Tail Corporation	OTTR
Pinnacle West Capital Corporation	PNW
PNM Resources, Inc.	PNM
Portland General Electric Company	POR
SCANA Corporation	SCG
Westar Energy, Inc.	WR
Xcel Energy Inc.	XEL

V. COST OF EQUITY ESTIMATION

2 **Q. Please briefly discuss the ROE in the context of the regulated rate of return.**

3 A. Regulated utilities principally use common stock and long-term debt to finance their
4 permanent property, plant, and equipment. The rate of return (“ROR”) for a regulated utility
5 is based on its weighted average cost of capital, in which the costs of the individual sources
6 of capital are weighted by their respective book values. As noted above, the Cost of Equity
7 is market-based and, therefore, must be estimated based on observable market information.

1 **Q. How is the market-required ROE estimated?**

2 A. Because the Cost of Equity is not directly observable, it must be estimated based on both
3 quantitative and qualitative information. Although a number of empirical models have been
4 developed for that purpose, all are subject to limiting assumptions or other constraints.
5 Consequently, many finance texts recommend using multiple approaches to estimate the
6 Cost of Equity.¹² When faced with the task of estimating the Cost of Equity, analysts and
7 investors are inclined to gather and evaluate as much relevant data as reasonably can be
8 analyzed and, therefore, rely on multiple analytical approaches.

9 As a practical matter, no individual model is more reliable than all others under all
10 market conditions, and equity analysts and investors tend to use multiple methodologies in
11 developing their return requirements. Therefore, it is both prudent and appropriate to use
12 multiple methodologies in order to mitigate the effects of assumptions and inputs associated
13 with any single approach. As such, I have considered the results of the Constant Growth
14 and Multi-Stage forms of the DCF model, the Capital Asset Pricing Model, and the Bond
15 Yield Plus Risk Premium approach.

16 ***Constant Growth DCF Model***

17 **Q. Please describe the Constant Growth DCF approach.**

18 A. The Constant Growth DCF approach is based on the theory that a stock's current price
19 represents the present value of all expected future cash flows. In its simplest form, the
20 Constant Growth DCF model expresses the Cost of Equity as the discount rate that sets the
21 current price equal to expected cash flows:

¹² See, e.g., Eugene Brigham, Louis Gapenski, Financial Management: Theory and Practice, 7th Ed., 1994, at 341, and Tom Copeland, Tim Koller and Jack Murrin, Valuation: Measuring and Managing the Value of Companies,

1
$$P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \dots + \frac{D_\infty}{(1+k)^\infty}$$
 Equation [1]

2 Where P_0 represents the current stock price, $D_1 \dots D_\infty$ represent expected future dividends,
3 and k is the discount rate, or required ROE. Equation [1] is a standard present value
4 calculation that can be simplified and rearranged into the familiar form:

5
$$k = \frac{D(1+g)}{P_0} + g$$
 Equation [2]

6 Equation [2] is often referred to as the “Constant Growth DCF” model, in which the first
7 term is the expected dividend yield, and the second term (“ g ”) is the expected long-term
8 growth rate.

9 **Q. What principal assumptions are required under the Constant Growth DCF model?**

10 A. The Constant Growth DCF model assumes: (1) earnings, book value, and dividends all grow
11 at the same, constant rate in perpetuity; (2) the dividend payout ratio remains constant; (3)
12 the discount rate is greater than the expected growth rate; and (4) the Price to Earnings
13 (“P/E”) multiple, and the estimated Cost of Equity both remain constant in perpetuity.

14 **Q. What market data did you use to calculate the dividend yield in your DCF model?**

15 A. The dividend yield is based on the proxy companies’ current annualized dividend and
16 average closing stock prices over the 30-, 90-, and 180-trading day periods as of October 30,
17 2015.

18 **Q. Why did you use three averaging periods to calculate an average stock price?**

19 A. I did so to ensure that the model’s results are not skewed by anomalous events that may
20 affect stock prices on any given trading day. At the same time, the averaging period should

3rd ed., 2000, at 214.

1 be reasonably representative of expected capital market conditions over the long term. In my
2 view, using 30-, 90-, and 180-day averaging periods reasonably balances those concerns.

3 **Q. Did you make any adjustments to the dividend yield to account for expected growth in**
4 **dividends during the current year?**

5 A. Yes, I did. Since utility companies tend to increase their quarterly dividends at different
6 times throughout the year, it is reasonable to assume that dividend increases will be evenly
7 distributed over calendar quarters. Given that assumption, it is appropriate to calculate the
8 expected dividend yield by applying one-half of the long-term growth rate to the current
9 dividend yield. That adjustment ensures that the expected dividend yield is, on average,
10 representative of the coming twelve-month period, and does not overstate the dividends to be
11 paid during that time.

12 **Q. Is it important to select appropriate measures of long-term growth in applying the DCF**
13 **model?**

14 A. Yes. In its Constant Growth form, the DCF model (*i.e.*, as presented in Equation [2] above)
15 assumes a single growth estimate in perpetuity. Accordingly, in order to reduce the long-
16 term growth rate to a single measure, one must assume a fixed payout ratio, and the same
17 constant growth rate for earnings per share (“EPS”), dividends per share, and book value per
18 share. Since dividend growth can only be sustained by earnings growth, the model should
19 incorporate a variety of measures of long-term earnings growth. That can be accomplished
20 by averaging measures of long-term growth that tend to be least influenced by capital
21 allocation decisions companies may make in response to near-term changes in the business
22 environment. Because such decisions may directly affect near-term dividend payout ratios,
23 estimates of earnings growth are more indicative of long-term investor expectations than are

1 dividend growth estimates. For the purposes of the Constant Growth DCF model, therefore,
2 growth in EPS represents the appropriate measure of long-term growth.

3 **Q. Please summarize your inputs to the Constant Growth DCF model.**

4 A. I applied the DCF model to the proxy group of electric utility companies using the following
5 inputs for the price and dividend terms:

- 6 • The average daily closing prices for the 30-trading days, 90-trading days, and 180-
7 trading days ended October 30, 2015, for the term P_0 ; and
- 8 • The annualized dividend per share as of October 30, 2015 for the term D_0 .

9 I then calculated the DCF results using each of the following growth terms:

- 10 • The Zacks consensus long-term earnings growth estimates;
- 11 • The First Call consensus long-term earnings growth estimates; and
- 12 • The Value Line earnings growth estimates.¹³

13 **Q. How did you calculate the DCF results?**

14 A. For each proxy company, I calculated the mean, mean high, and mean low results. For the
15 mean result, I combined the average of the EPS growth rate estimates reported by Value
16 Line, Zacks, and First Call with the subject company's dividend yield for each proxy
17 company and then calculated the average result for those estimates. I calculated the high
18 DCF result by combining the maximum EPS growth rate estimate as reported by Value Line,
19 Zacks, and First Call with the subject company's dividend yield. The mean high result
20 simply is the average of those estimates. I used the same approach to calculate the low DCF

¹³ Zacks Investment Research and Thomson Reuters First Call are widely known for providing consensus EPS estimates compiled from equity analysts. Value Line Investment Survey is a widely referenced financial publication.

1 result, using instead the minimum of the Value Line, Zacks, and First Call estimate for each
2 proxy company, and calculating the average result for those estimates.

3 **Q. What are the results of your DCF analyses?**

4 A. My Constant Growth DCF results are summarized in Table 2 below (*see* also Exhibit RBH-
5 1). As discussed in more detail in Section VII, the proxy companies have traded at P/E ratios
6 well in excess of their historical average and for a time, in excess of the market. Because
7 that condition is unlikely to persist, it violates two principal assumptions of the Constant
8 Growth DCF model, *i.e.*, that the P/E ratio will not change, and that the ROE stays constant
9 in perpetuity. As such, the model's results should be viewed with considerable caution.

10 **Table 2: Mean DCF Results**

	Mean Low	Mean	Mean High
30-Day Average	8.59%	9.30%	9.98%
90-Day Average	8.71%	9.42%	10.10%
180-Day Average	8.68%	9.39%	10.06%

11
12 ***Multi-Stage DCF Model***

13 **Q. What other form of the DCF model have you used to estimate the Company's Cost of**
14 **Equity?**

15 A. To address certain limiting assumptions underlying the Constant Growth form of the DCF
16 model, I also considered the Multi-Stage (three-stage) DCF Model. The Multi-Stage model,
17 which is an extension of the Constant Growth form, enables the analyst to specify growth
18 rates over three distinct stages. As with the Constant Growth form of the DCF model, the
19 Multi-Stage form defines the Cost of Equity as the discount rate that sets the current price

1 equal to the discounted value of future cash flows. Unlike the Constant Growth form,
2 however, the Multi-Stage model must be solved in an iterative fashion.¹⁴

3 **Q. Please generally describe the structure of your Multi-Stage DCF model.**

4 A. The Multi-Stage DCF model sets the subject company's stock price equal to the present
5 value of future cash flows received over three "stages." In the first two stages, "cash flows"
6 are defined as projected dividends. In the third stage, "cash flows" equal both dividends and
7 the expected price at which the stock will be sold at the end of the period (*i.e.*, the terminal
8 price). I calculated the terminal price based on the Gordon model,¹⁵ which defines the price
9 as the expected dividend divided by the difference between the Cost of Equity (*i.e.*, the
10 discount rate) and the long-term expected growth rate. In essence, the terminal price is
11 defined by the present value of the remaining "cash flows" in perpetuity. In each of the three
12 stages, the dividend is the product of the projected earnings per share and the expected
13 dividend payout ratio. A summary description of the model is provided in Table 3 (below).

¹⁴ That is, an iterative function must be used to determine the internal rate of return such that present value of cash flows equals the subject company's stock price.

¹⁵ See Morningstar, Inc., 2013 Ibbotson Stocks, Bonds, Bills and Inflation Valuation Yearbook, at 48-52.

Table 3: Multi-Stage DCF Structure

Stage	0	1	2	3
Cash Flow Component	Initial Stock Price	Expected Dividend	Expected Dividend	Expected Dividend + Terminal Value
Inputs	Stock Price; Earnings Per Share (“EPS”); Dividends Per Share (“DPS”)	Expected EPS; Expected DPS	Expected EPS; Expected DPS	Expected EPS; Expected DPS; Terminal Value
Assumptions	30-, 90-, and 180-day average stock price	EPS Growth Rate; Payout Ratio	Growth Rate Change; Payout Ratio Change	Long-term Growth Rate; Long-term Payout Ratio

1 **Q. What are the analytical benefits of the three-stage DCF model?**

2 A. The principal benefits relate to the flexibility provided by the model's formulation. Since the
3 model provides the ability to specify near, intermediate, and long-term growth rates, for
4 example, it avoids the sometimes limiting assumption that the subject company will grow at
5 the same, constant rate in perpetuity. In addition, by calculating the dividend as the product
6 of earnings per share and the dividend payout ratio, the model enables analysts to reflect
7 assumptions regarding the timing and extent of changes in the payout ratio to reflect, for
8 example, increases or decreases in expected capital spending, or transition from current
9 payout levels to long-term expected levels. In that regard, because the model relies on
10 multiple sources of earnings growth rate assumptions, it is not limited to a single source,
11 such as Value Line, for all inputs, and mitigates the potential bias associated with relying on
12 a single source of growth estimates.¹⁶

13 The model also enables analysts to assess the reasonableness of the inputs and results
14 by reference to certain market-based metrics. For example, the estimated terminal stock
15 price can be divided by the expected EPS (in the terminal year) to calculate an average P/E
16 ratio. Similarly, the terminal P/E ratio can be divided by the terminal growth rate to develop
17 a Price to Earnings Growth ("PEG") ratio. To the extent that either the projected P/E or PEG
18 ratios are inconsistent with either historical or expected levels, it may indicate incorrect or
19 inconsistent assumptions within the balance of the model.

20 **Q. Please summarize your inputs to the Multi-Stage DCF model.**

21 A. I applied the Multi-Stage DCF model to the proxy group described earlier in my Direct

¹⁶ See Harris and Marston, Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts, Financial Management 21 (Summer 1992).

1 Testimony. My assumptions with respect to the various model inputs are described in Table
 2 4 (below).

3 **Table 4: Multi-Stage DCF Model Assumptions**

Stage	Initial	First	Transition	Terminal
Stock Price	30-, 90-, and 180-day average stock price as of October 30, 2015 Exhibit RBH-2 Col. [1]			
Earnings Growth	2014 actual EPS escalated by Period 1 growth rate Exhibit RBH-2 Col. [14]	EPS growth as average of (1) Value Line; (2) Zacks; and (3) First Call Exhibit RBH-2 Col [5] applied to Cols. [15] – [19]	Transition to Long-term GDP ¹⁷ growth Exhibit RBH-2 applied to Cols. [20] – [24]	Long-term GDP growth Exhibit RBH-2 Col [6] applied to Cols. [25] – [30]
Payout Ratio	Value Line company-specific	Value Line company-specific Exhibit RBH-2 Cols. [31] – [35]	Transition to long-term industry payout ratio Exhibit RBH-2 Cols. [36] – [40]	Long-term expected payout ratio Exhibit RBH-2 Cols. [41] – [46]
Terminal Value				Expected dividend in final year divided by solved Cost of Equity less long-term growth rate Exhibit RBH-2 Col. [63]

¹⁷ Gross Domestic Product.

1 **Q. How did you calculate the long-term Gross Domestic Product (“GDP”) growth rate?**

2 A. The long-term growth rate of 5.22 percent is based on the real GDP growth rate of 3.25
3 percent from 1929 through 2014,¹⁸ and an inflation rate of 1.91 percent.¹⁹ The GDP growth
4 rate is calculated as the compound growth rate in the chain-weighted GDP for the period
5 from 1929 through 2014. The rate of inflation of 1.91 percent is a compound annual forward
6 rate starting in ten years (*i.e.*, 2025, which is the beginning of the terminal period) and is
7 based on the 180-day average projected inflation based on the spread between yields on
8 long-term nominal Treasury Securities and long-term Treasury Inflation Protected Securities,
9 known as the “TIPS spread.”

10 In essence, the real GDP growth rate projection is based on the assumption that
11 absent specific knowledge to the contrary, it is reasonable to assume that over time real GDP
12 growth will revert to its long-term mean. Moreover, since estimating the Cost of Equity is a
13 market-based exercise, it is important to reflect the sentiments and expectations of investors
14 to the extent possible. In that important respect, the TIPS spread represents the collective
15 views of investors regarding long-term inflation expectations. Equally important, by using
16 forward yields we are able to infer the level of long-term inflation expected by investors as
17 of the terminal period of the Multi-Stage model (that is, ten years in the future).

18 **Q. What were your specific assumptions with respect to the payout ratio?**

19 A. As noted in Table 4, for the first two periods, I relied on the first year and long-term
20 projected payout ratios reported by Value Line²⁰ for each of the proxy companies. I then
21 assumed that by the end of the second period (*i.e.*, the end of year 10), the payout ratio will

¹⁸ See Bureau of Economic Analysis, “Current-Dollar and ‘Real’ Gross Domestic Product,” October 29, 2015 update.

1 converge to the historical industry average payout ratio of 67.30 percent.²¹

2 **Q. What are the results of your Multi-Stage DCF analysis?**

3 A. Table 5 (see also Exhibit RBH-2) presents the Multi-Stage DCF analysis results. Using the
4 Gordon model to calculate the terminal stock price, the Multi-Stage DCF analysis produces a
5 range of results from 9.44 percent to 9.96 percent.

6 **Table 5: Multi-Stage DCF Model Results**

	Mean Low	Mean	Mean High
30-Day Average	9.44%	9.63%	9.81%
90-Day Average	9.57%	9.77%	9.96%
180-Day Average	9.54%	9.73%	9.92%

7
8 ***CAPM Analysis***

9 **Q. Please briefly describe the general form of the CAPM.**

10 A. The CAPM is a risk premium method that estimates the Cost of Equity for a given security
11 as a function of a risk-free return plus a risk premium (to compensate investors for the non-
12 diversifiable or “systematic” risk of that security). As shown in Equation [3], the CAPM is
13 defined by four components, each of which theoretically must be a forward-looking estimate:

14
$$K_e = r_f + \beta(r_m - r_f) \text{ Equation [3]}$$

15 where:

16 K_e = the required market ROE;

17 β = Beta of an individual security;

18 r_f = the risk free rate of return; and

19 See Board of Governors of the Federal Reserve System, “Table H.15 Selected Interest Rates.”

20 As reported in the Value Line Investment Survey company reports as “All Div’ds to Net Prof.”

21 Source: Bloomberg Professional

1 r_m = the required return on the market as a whole.

2
3 In Equation [3], the term $(r_m - r_f)$ represents the Market Risk Premium.²² According to the
4 theory underlying the CAPM, since unsystematic risk can be diversified away by adding
5 securities to investment portfolios, investors should be concerned only with systematic or
6 non-diversifiable risk. Non-diversifiable risk is measured by the Beta coefficient, which is
7 defined as:

8
$$\beta_j = \frac{\sigma_j}{\sigma_m} \times \rho_{j,m}$$
 Equation [4]

9 where σ_j is the standard deviation of returns for company “j”; σ_m is the standard deviation of
10 returns for the broad market (as measured, for example, by the S&P 500 Index), and $\rho_{j,m}$ is
11 the correlation of returns between company *j* and the broad market. The Beta coefficient
12 therefore represents both relative volatility (*i.e.*, the standard deviation) of returns, and the
13 correlation in returns between the subject company and the overall market. Intuitively,
14 higher Beta coefficients indicate that the subject company’s returns have moved in tandem
15 with the overall market. Consequently, a company with a Beta coefficient of 1.00 is as risky
16 as the market.

²² The Market Risk Premium is defined as the incremental return of the market portfolio over the risk-free rate.

1 **Q. What estimates of the risk-free rate did you include in your CAPM analysis?**

2 A. I used two different measures of the risk-free rate: (1) the current 30-day average yield on
3 30-year Treasury bonds (*i.e.*, 2.90 percent); and (2) the near-term (that is, through the fourth
4 calendar quarter of 2016) projected 30-year Treasury yield (*i.e.*, 3.48 percent).

5 **Q. Why have you relied upon the 30-year Treasury yield for your CAPM analysis?**

6 A. Investors in utility equity securities commit capital to an investment that will produce cash
7 flows over an indefinite time period. In determining the security most relevant to the
8 application of the CAPM, it is important to select the term (or maturity) that best matches the
9 life of the underlying investment.²³ Electric utilities typically are long-duration investments
10 and, as such, the 30-year Treasury yield is more suitable for the purpose of calculating the
11 Cost of Equity.²⁴

12 **Q. Please describe your *ex-ante* (*i.e.*, forward-looking) approach to estimating the Market
13 Risk Premium.**

14 A. The approach is based on the market-required return, less the current 30-year Treasury yield.
15 To estimate the market required return, I calculated the market capitalization weighted
16 average total return based on the Constant Growth DCF model. To do so, I relied on data
17 from two sources: (1) Bloomberg; and (2) Value Line.²⁵ With respect to Bloomberg-derived
18 growth estimates, I calculated the expected dividend yield (using the same one-half growth

²³ *See, for example*, 2011 CFA Curriculum Level I, Volume 4 at 52.

²⁴ In finance, “duration” (whether for bonds or equity) typically refers to the present value weighted time to receive the security’s cash flows. In terms of its practical application, duration is a measure of the percentage change in the market price of a given stock in response to a change in the implied long-term return of that stock. A common investment strategy is to match the duration of investments with the term of the underlying asset in which the funds are being invested, or the term of a liability being funded. Since the term of the risk-free rate should match the life of the underlying investment, it is appropriate to consider the Equity Duration of the subject company when selecting the Treasury yield used as the risk-free rate in the CAPM.

²⁵ *See* Exhibit RBH-3.

1 rate assumption described earlier), and combined that amount with the projected earnings
2 growth rate to arrive at the market capitalization weighted average DCF result. I performed
3 that calculation for each of the S&P 500 companies for which Bloomberg provided
4 consensus growth rates. I then subtracted the current 30-year Treasury yield from that
5 amount to arrive at the market DCF-derived *ex-ante* market risk premium estimate. In the
6 case of Value Line, I performed the same calculation, again using all companies for which
7 five-year earnings growth rates were available. The results of those calculations are
8 provided in Exhibit RBH-3.

9 **Q. How did you apply your expected Market Risk Premium and risk-free rate estimates?**

10 A. I relied on the *ex-ante* Market Risk Premia discussed above, together with the current and
11 near-term projected 30-year Treasury yields as inputs to my CAPM analyses.

12 **Q. What Beta coefficient did you use in your CAPM model?**

13 A. As shown in Exhibit RBH-4, I considered the Beta coefficients reported by two sources:
14 Bloomberg and Value Line. While both of those services adjust their calculated (or “raw”)
15 Beta coefficients to reflect the tendency of the Beta coefficient to regress to the market mean
16 of 1.00, Value Line calculates the Beta coefficient over a five-year period, while
17 Bloomberg’s calculation is based on two years of data.

18 **Q. What are the results of your CAPM analyses?**

19 A. As shown in Table 6 (below) the CAPM analyses suggest an ROE range of 9.21 percent to
20 11.33 percent (*see* also Exhibit RBH-5).

1 **Table 6: Summary of CAPM Results²⁶**

	Bloomberg Derived Market Risk Premium	Value Line Derived Market Risk Premium
<i>Average Bloomberg Beta Coefficient</i>		
Current 30-Year Treasury (2.90%)	9.58%	9.21%
Near-Term Projected 30-Year Treasury (3.48%)	10.16%	9.79%
<i>Average Value Line Beta Coefficient</i>		
Current 30-Year Treasury (2.90%)	10.75%	10.31%
Near-Term Projected 30-Year Treasury (3.48%)	11.33%	10.90%

2
3 ***Bond Yield Plus Risk Premium Analysis***

4 **Q. Please describe the Bond Yield Plus Risk Premium approach.**

5 A. This approach is based on the basic financial tenet that equity investors bear the residual risk
6 associated with ownership and therefore require a premium over the return they would have
7 earned as a bondholder. That is, since returns to equity holders are more risky than returns
8 to bondholders, equity investors must be compensated for bearing that additional risk. Risk
9 premium approaches, therefore, estimate the Cost of Equity as the sum of the equity risk
10 premium and the yield on a particular class of bonds. As noted in my discussion of the
11 CAPM, since the equity risk premium is not directly observable, it typically is estimated
12 using a variety of approaches, some of which incorporate *ex-ante*, or forward-looking
13 estimates of the Cost of Equity, and others that consider historical, or *ex-post*, estimates. An
14 alternative approach is to use actual authorized returns for electric utilities to estimate the
15 Equity Risk Premium.

²⁶ See Exhibit RBH-5.

1 **Q. Please explain how you performed your Bond Yield Plus Risk Premium analysis.**

2 A. As suggested above, I first defined the Risk Premium as the difference between the
3 authorized ROE and the then-prevailing level of long-term (*i.e.*, 30-year) Treasury yield. I
4 then gathered data for 1,457 electric utility rate proceedings between January 1980 and
5 October 30, 2015. In addition to the authorized ROE, I also calculated the average period
6 between the filing of the case and the date of the final order (the “lag period”). In order to
7 reflect the prevailing level of interest rates during the pendency of the proceedings, I
8 calculated the average 30-year Treasury yield over the average lag period (approximately
9 200 days).

10 Because the data cover a number of economic cycles, the analysis also may be used
11 to assess the stability of the Equity Risk Premium. Prior research, for example, has shown
12 that the Equity Risk Premium is inversely related to the level of interest rates.²⁷ That
13 analysis is particularly relevant given the relatively low, but increasing level of current
14 Treasury yields.

15 **Q. How did you analyze the relationship between interest rates and the Equity Risk
16 Premium?**

17 A. The basic method used was regression analysis, in which the observed Equity Risk Premium
18 is the dependent variable, and the average 30-year Treasury yield is the independent
19 variable. Relative to the long-term historical average, the analytical period includes interest
20 rates and authorized ROEs that are quite high during one period (*i.e.*, the 1980s) and that are

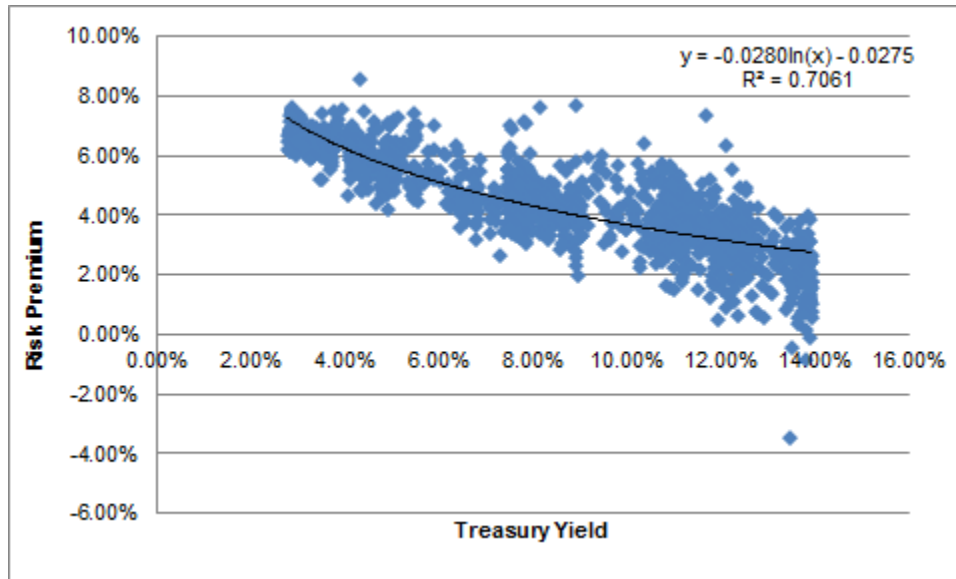
²⁷ See, e.g., Robert S. Harris and Felicia C. Marston, *Estimating Shareholder Risk Premia Using Analysts’ Growth Forecasts*, Financial Management, Summer 1992, at 63-70; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *The Risk Premium Approach to Measuring a Utility’s Cost of Equity*, Financial 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.

1 quite low during another (*i.e.*, the post-Lehman bankruptcy period). To account for that
2 variability, I used the semi-log regression,²⁸ in which the Equity Risk Premium is expressed
3 as a function of the natural log of the 30-year Treasury yield (“T₃₀”):

$$4 \quad RP = \alpha + \beta(\text{LN}(T_{30})) \text{ Equation [5]}^{29}$$

5 As shown on Figure 1 (below), the semi-log form is useful when measuring an absolute
6 change in the dependent variable (in this case, the Risk Premium) relative to a proportional
7 change in the independent variable (the 30-year Treasury yield).

8 **Figure 1: Equity Risk Premium³⁰**



9
10 As Figure 1 illustrates, over time there has been a statistically significant, negative
11 relationship between the 30-year Treasury yield and the Equity Risk Premium.
12 Consequently, simply applying the long-term average Equity Risk Premium of 4.48 percent

²⁸ The semi-log regression transforms the observed Treasury yields to their natural log, but the observed Equity Risk Premium is not so transformed. In the case of historically low or high interest rates, the semi-log model allows us to examine the relationship between a proportional change in interest rates, rather than an absolute basis point change, and the Equity Risk Premium.

²⁹ In Equation [5], “ α ” is the constant term and “ β ” is the slope coefficient. “LN” represents the natural logarithm.

1 would significantly understate the Cost of Equity and produce results well below any
2 reasonable estimate. Based on the regression coefficients in Figure 1, however, the implied
3 ROE is between 10.05 percent and 10.58 percent (*see* Table 7 and Exhibit RBH-6).

4 **Table 7: Summary of Bond Yield Plus Risk Premium Results**

	Return on Equity
Current 30-Year Treasury (2.90%)	10.05%
Near-Term Projected 30-Year Treasury (3.48%)	10.12%
Long-Term Projected 30-Year Treasury (4.90%)	10.58%

VI. BUSINESS RISKS AND OTHER CONSIDERATIONS

5 **Q. Do the mean DCF, CAPM, and Risk Premium results for the proxy group provide an**
6 **appropriate estimate for the Cost of Equity for OG&E?**

7 A. No, the mean results do not necessarily provide an appropriate estimate of OG&E's Cost of
8 Equity. In my view, there are additional factors that must be taken into consideration when
9 determining where OG&E's Cost of Equity falls within the range of results, including: (1)
10 the risk associated with cost recovery for compliance with environmental regulations; (2)
11 OG&E's planned capital investment program; (3) flotation costs; and (4) the effect, if any, of
12 OG&E's rate mechanisms on the Company's relative risk profile. Those factors, which are
13 discussed below, should be considered in terms of their overall effect on OG&E's business
14 risk and investor earnings and, therefore, it's Cost of Equity.

³⁰ See Exhibit RBH-6.

1 ***Cost Recovery for Environmental Compliance Plans***

2 **Q. Please provide an overview of the recovery risks associated with OG&E's**
3 **environmental compliance plan.**

4 A. OG&E announced a compliance plan to comply with the Environmental Protection Agency's
5 ("EPA") Regional Haze Rule ("RHR") and the Mercury and Air Toxics Standards
6 ("MATS") Rule.³¹ That plan includes the installation of scrubbers on the two Sooner coal-
7 fired generating units, the installation of Activated Carbon Injection on all five of OG&E's
8 existing coal-fired units, and the ultimate conversion of Muskogee Units 4 and 5 to natural
9 gas-fired units. This plan will reduce OG&E's coal-fired generation from approximately
10 2,500 megawatts to 1,500 megawatts by the year 2019.

11 In a 2014 report, S&P noted that power generators have addressed environmental
12 compliance for coal-fired generating plants by implementing three strategies: (1) adding
13 environmental controls to coal-fired plants; (2) switching to burning natural gas; or (3)
14 retiring coal-fired plants outright.³² To the extent those strategies increase costs for utilities,
15 the companies' credit profiles may come under pressure, especially without cost recovery
16 mechanisms. As S&P noted:

17 Higher costs could become a key credit issue for regulated utilities given the
18 importance of managing customer rate increases, which has implications for
19 relations with regulators, as well as economic and political ramifications that
20 could heighten business risk. Any rating actions would likely not occur until
21 there is further clarity from a utility about early plant retirements and related
22 cost recovery. For utilities that have significant coal-fired generation,
23 recovery mechanisms will be extremely important to continue to support

³¹ Report of the Administrative Law Judge, Cause No. PUD 201400229, Application of Oklahoma Gas and Electric Company for Commission Authorization of a Plan to Comply with the Federal Clean Air Act and Cost Recovery; and for Approval of the Mustang Modernization and Cost Recovery, issued June 8, 2015, at 2-7.

³² S&P Research, *The Clean Power Plan Will Spur Further Coal Plant Closings, but How Will U.S. Utilities Recover the Costs?* (September 2, 2014), at 2.

1 operating cash flow and maintain robust financial measures.³³

2 **Q. What are your conclusions regarding the cost recovery risk associated with OG&E's**
3 **environmental compliance plan?**

4 A. There are substantial uncertainties with regard to funding the capital asset investments
5 required to meet environmental regulations. In Cause No. PUD 201400229, OG&E
6 requested approval of its environmental compliance plan, including associated cost recovery.
7 However, on December 2, 2015 the Commission denied the Company's application in that
8 Cause.³⁴ As a result, the Company faces significant uncertainty associated with its
9 environmental compliance plan and its ability to recover the associated costs in a timely
10 manner. Consistent with observations expressed in recent equity analyst reports,³⁵ such
11 conditions increase the risk faced by shareholders and, therefore, increase the Company's
12 required ROE. Because investors consider such increased risks in establishing their return
13 requirements, the Commission likewise should consider the effect of the additional risk
14 associated with environmental mandates in determining OG&E's authorized ROE.

15 ***Capital Expenditures***

16 **Q. Please summarize OG&E's capital expenditure plans.**

17 A. As shown in Figure 2, OG&E currently plans to invest approximately \$2.90 billion of
18 additional capital over the period including 2015-2019. That amount includes approximately
19 \$1.10 billion in environmental compliance expenditures and plant modernization costs and

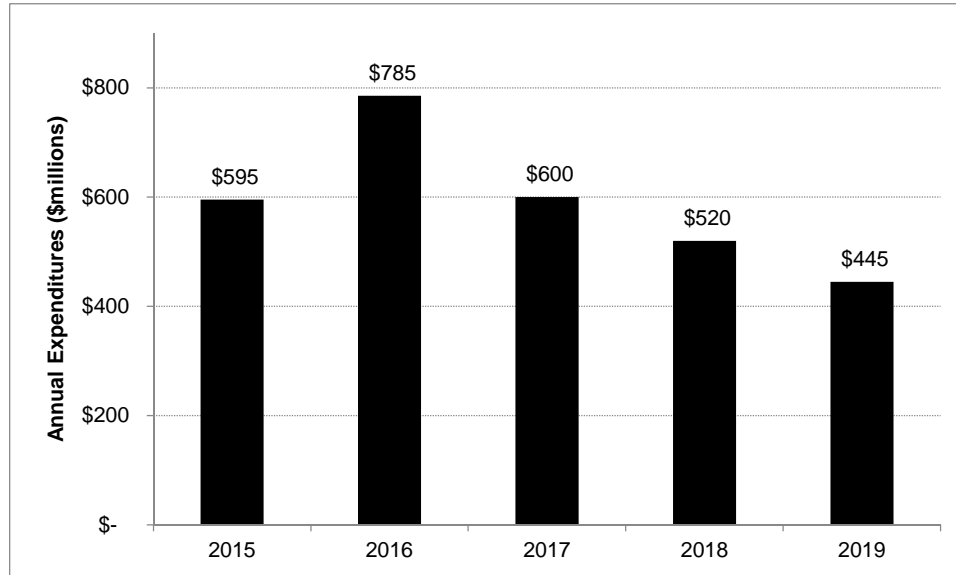
³³ *Ibid.*

³⁴ *See*, Order No. 647346, Cause No. PUD 201400229, Application of Oklahoma Gas and Electric Company for Commission Authorization of a Plan to Comply with the Federal Clean Air Act and Cost Recovery; and for Approval of the Mustang Modernization and Cost Recovery, issued December 2, 2015, at 22.

³⁵ *See*, for example, Wells Fargo Equity Research, OGE Energy Corp., *OGE: Still Waiting for the Skies to Part*, November 5, 2015 at 1.

1 additional infrastructure investments in OG&E's distribution, transmission, and generation
2 systems.

3 **Figure 2: Oklahoma Gas & Electric Capital Expenditure Forecast³⁶**



4
5 **Q. Do credit rating agencies recognize risk associated with increased capital expenditures?**

6 A. Yes, they do. From the perspective of debt investors, the additional pressure on cash flows
7 associated with high levels of capital expenditures exerts corresponding pressure on credit
8 metrics and, therefore, credit ratings. S&P has noted that:

9 For regulated utilities, infrastructure spending leads to rate-base growth. But
10 for a company to preserve its financial strength, it must be able to quickly
11 begin recovering this spending.

12 ***

13 With all these incremental investments, a perfect regulatory storm could arise
14 if costs for fuel and purchased gas rise sharply at the same time that utilities
15 need to raise rates to recover the costs related to infrastructure spending for
16 mandated environmental upgrades, new generation construction, renewable
17 requirements, or pipeline replacements. If this happens, regulators could
18 decide to allow only partial recovery of incurred capital costs through rate

³⁶ See OGE Energy Corp., SEC Form 10-Q for the fiscal quarter ended September 30, 2015, at 24.

1 increases to reduce rate spikes for customers and possibly defer the
2 remaining balance. Because deferrals do not provide the cash flow needed
3 for utilities to service their debt obligations, utility credit quality could be
4 affected. To retain critical access to the debt markets, utilities will need to
5 continue to seek and receive supportive cost recovery from regulators.³⁷
6

7 The rating agency views noted above also are consistent with certain observations discussed
8 earlier in my testimony: (1) the benefits of maintaining a strong financial profile are
9 significant when capital access is required, and become particularly acute during periods of
10 market instability; and (2) the Commission's decision in this proceeding will have a direct
11 bearing on the Company's credit profile, and its ability to access the capital needed to fund
12 its investments.

13 **Q. Why is it important for a utility to be allowed the opportunity to earn a return that is**
14 **adequate to attract capital at reasonable terms?**

15 A. The allowed ROE should enable the subject utility to finance capital expenditures and
16 working capital requirements at reasonable rates, and to maintain its financial integrity in a
17 variety of economic and capital market conditions. As discussed throughout my Direct
18 Testimony, a return that is adequate to attract capital at reasonable terms enables the utility
19 to provide safe, reliable service while maintaining its financial soundness. To the extent a
20 utility is provided the opportunity to earn its market-based cost of capital, neither customers
21 nor shareholders should be disadvantaged.

22 The ratemaking process is based on the principle that, in order for investors and
23 companies to commit the capital needed to provide safe and reliable utility services, the
24 utility must have the opportunity to recover the return of, and the market-required return on,

³⁷ Standard & Poor's, *U.S. Utilities' Capital Spending is Rising, and Cost-Recovery is Vital*, RatingsDirect, May 14, 2012, at 6.

1 invested capital. Regulatory commissions recognize that since utility operations are capital
2 intensive, regulatory decisions should enable the utility to attract capital at reasonable terms;
3 doing so balances the long-term interests of the utility and its ratepayers.

4 Further, the financial community carefully monitors utility companies' current and
5 expected financial conditions, as well as the regulatory environment in which those
6 companies operate. In that respect, the regulatory environment is one of the most important
7 factors considered in both debt and equity investors' assessments of risk. That is especially
8 important during periods in which the utility expects to make significant capital investments
9 and, therefore, may require access to capital markets.

10 **Q. How do these considerations apply to OG&E and its capital spending plans?**

11 A. It is clear that OG&E's capital expenditure program is significant, and is an important
12 concern for investors. In that regard, OGE Energy Corp., OG&E's parent, believes the risks
13 associated with capital expenditures are of sufficient interest to be disclosed in its Securities
14 and Exchange Commission 10-K filings. The "Risk Factors" section of OGE Energy Corp.'s
15 2014 10-K filing noted:

16 *We may not be able to recover the costs of our substantial planned*
17 *investment in capital improvements and additions.*

18 OG&E's business plan calls for extensive investment in capital improvements
19 and additions, including the installation of environmental upgrades and
20 retrofits and modernizing existing infrastructure as well as other initiatives.
21 Significant portions of OG&E's facilities were constructed many years ago.
22 Older generation equipment, even if maintained in accordance with good
23 engineering practices, may require significant capital expenditures to
24 maintain efficiency, to comply with changing environmental requirements or
25 to provide reliable operations. OG&E currently provides service at rates
26 approved by one or more regulatory commissions. If these regulatory
27 commissions do not approve adjustments to the rates OG&E charges, it
28 would not be able to recover the costs associated with its planned extensive
29 investment. This could adversely affect OG&E's financial position and
30 results of operations. While OG&E may seek to limit the impact of any

1 denied recovery by attempting to reduce the scope of its capital investment,
2 there can no assurance as to the effectiveness of any such mitigation efforts,
3 particularly with respect to previously incurred costs and commitments.³⁸

4 It also is clear that the financial community recognizes the need for timely cost recovery for
5 those capital expenditures. For example, in an October 2015 report regarding OG&E,
6 Moody's specifically noted that absent sufficient regulatory support and timely cost
7 recovery, the Company's sizable capital spending program negatively affects its financial
8 metrics. As Moody's explained:

9 Cost recovery and timely regulatory rate approvals will be increasingly
10 important over the next five years as OG&E embarks on a \$1.1 billion capital
11 plan to fit its generation fleet for environmental compliance standards.

12 ...

13 The execution of these projects and securing timely cost recovery for
14 investments of this magnitude, duration and importance is the greatest
15 challenge to OG&E's credit profile over the next five years. Beyond the
16 traditional regulatory risk that exists for about \$305 million of annual base
17 capex and \$130 million of transmission capex through 2018, OG&E is
18 attempting to address recovery of its environmental expenditures according
19 to allowances made under HB 1910, which pertain to pre-approval of capital
20 expenditures related to the Federal Clean Air Act, construction of new
21 generation facilities and the implementation of interim rates to recover such
22 costs. As such, OG&E filed a plan with the OCC asking the commission to
23 predetermine the prudence of certain costs associated with the environmental
24 remediation and for approval of recovery mechanisms for associated costs
25 (including recovery of Construction Work In Progress). The result of this
26 application and OCC's ultimate recovery decisions will dictate the impact to
27 OG&E's key financial metrics and credit profile in the years ahead.

28 While OG&E has provided the aforementioned plans to the OCC for over
29 one year, there has yet to be regulatory clarity provided to the company for
30 these environmental investments. We view this as a credit negative since the
31 regulatory overhang and uncertainty is providing OG&E with a small
32 window of opportunity to adjust plans if needed. We expect that these
33 investments will commence in time to comply with Federal regulations,
34 therefore reducing financial metrics, which could pressure the rating over the
35 intermediate-term.³⁹

³⁸ See OGE Energy Corp., SEC Form 10-K, for the Fiscal Year Ended December 31, 2014, at 20.

³⁹ Moody's Investor Service, *Credit Opinion: Oklahoma Gas & Electric Company*, October 30, 2015, at 2-3.

1 From the investor’s perspective, the additional pressure on cash flows associated with high
2 levels of capital expenditures exerts corresponding pressure on credit metrics and, therefore,
3 credit ratings. That view also is consistent with certain observations discussed in Section III
4 of my Direct Testimony: (1) the benefits of maintaining a strong financial profile are
5 significant when capital access is required; and (2) the Commission’s decision in this
6 proceeding will have a direct bearing on the Company’s credit profile, and on its ability to
7 access the capital needed to fund its investments.⁴⁰

8 **Q. Have you also considered the relationship between capital expenditures and the earned**
9 **return on common equity?**

10 A. Yes. In particular, I considered the relationship between capital expenditures and the
11 “DuPont” formula determinants of earned ROE. The DuPont formula is commonly used by
12 financial analysts to monitor specific operational and financial drivers of a company’s earned
13 ROE. The formula expands the calculation of the Return on Common Equity into the
14 product of three financial metrics: (1) the Profit Margin (net income/revenues); (2) Asset
15 Turnover (revenues/net plant); and (3) the Equity Multiplier (net plant/equity).⁴¹

16 As Exhibit RBH-7 demonstrates, from 2003 through 2014 the Asset Turnover rate
17 declined from 59.91 percent to 40.29 percent; it is expected to remain at approximately the
18 same level through Value Line’s 2018 – 2020 projection period.⁴² Over that same period
19 (*i.e.*, 2003 through 2018 – 2020), according to Value Line data, average Net Plant is
20 expected to experience a cumulative increase of approximately 198.81 percent.⁴³ Because

⁴⁰ Moody’s, Global Infrastructure Finance, Rating Methodology: Regulated Electric and Gas Utilities, August 2009, at 7.

⁴¹ That is, $ROE = (\text{earnings} / \text{revenue}) \times (\text{revenue} / \text{assets}) \times (\text{assets} / \text{equity})$.

⁴² Based on the proxy companies.

⁴³ Also based on data from Value Line.

1 (as noted above) the utility industry is going through a period of increased capital
2 investment, the lag between the addition of net plant and revenue generated by those
3 investments dilutes the Asset Turnover ratio, at least in the near term.

4 To gain an additional perspective on the relationship between plant additions and
5 Asset Turnover, I performed a regression analysis in which the annual change in the Asset
6 Turnover rate was the dependent variable, and the annual change in Net Plant was the
7 independent variable. As shown in Exhibit RBH-7, that analysis indicates a statistically
8 significant negative relationship between the two variables, such that as annual net plant
9 increases, the Asset Turnover ratio decreases. This, in turn, suggests that an increase in
10 capital expenditures also negatively affects the Return on Common Equity, causing greater
11 financial stress to the utility. Recall that under the “DuPont” formula, the Asset Turnover
12 ratio is a component of the Return on Common Equity. As capital expenditures (*i.e.*, net
13 plant) increase, absent a proportionate increase in revenues, the Asset Turnover ratio will
14 decrease, resulting in a decrease in the Return on Common Equity. To the extent investors
15 value companies such as OG&E based on earnings and cash flow, this additional financial
16 strain is a key concern.

17 **Q. What are your conclusions regarding the effect of OG&E’s capital investment plan on**
18 **its risk profile and cost of capital?**

19 A. OG&E’s capital expenditure program is significant and will place additional pressure on its
20 cash flows making regulatory support more important in terms of OG&E’s ability to finance
21 these expenditures and earn a reasonable return on its planned investments. As such, the
22 Commission’s decision in this proceeding will have a direct bearing on OG&E’s ability to

1 maintain its financial profile, and its ability to access the capital market at reasonable cost
2 rates.

3 ***Flotation Costs***

4 **Q. What are flotation costs?**

5 A. Flotation costs are the costs associated with the sale of new issues of common stock. These
6 costs include out-of-pocket expenditures for preparation, filing, underwriting, and other
7 issuance costs of common stock.

8 **Q. Why is it important to recognize flotation costs in the allowed ROE?**

9 A. In order to attract and retain new investors, a regulated utility must have the opportunity to
10 earn a return that is both competitive and compensatory. To the extent that a company is
11 denied the opportunity to recover prudently incurred flotation costs, actual returns will fall
12 short of expected (or required) returns, thereby diminishing its ability to attract adequate
13 capital on reasonable terms.

14 **Q. Are flotation costs part of the utility's invested costs or part of the utility's expenses?**

15 A. Flotation costs are part of the invested costs of the utility, which are properly reflected on the
16 balance sheet under "paid in capital." They are not current expenses, and therefore are not
17 reflected on the income statement. Rather, like investments in rate base or the issuance costs
18 of long-term debt, flotation costs are incurred over time. As a result, the great majority of a
19 utility's flotation cost is incurred prior to the test year, but remains part of the cost structure
20 that exists during the test year and beyond, and as such, should be recognized for ratemaking
21 purposes. Therefore, recovery of flotation costs is appropriate even if no new issuances are
22 planned in the near future because failure to allow such cost recovery may deny OG&E the
23 opportunity to earn its required rate of return in the future.

1 **Q. Is the need to consider flotation costs eliminated because OG&E is a wholly-owned**
2 **subsidiary of OGE Energy Corp.?**

3 A. No. Although the Company is a wholly owned subsidiary of OGE Energy Corp., it is
4 appropriate to consider flotation costs because wholly owned subsidiaries receive equity
5 capital from their parents and provide returns on the capital that roll up to the parent, which
6 is designated to attract and raise capital based on the returns of those subsidiaries. To deny
7 recovery of issuance costs associated with the capital that is invested in the subsidiaries
8 ultimately would penalize the investors that fund the utility operations and would inhibit the
9 utility's ability to obtain new equity capital at a reasonable cost. This is important for
10 companies such as OG&E that are planning continued capital expenditures in the near term,
11 and for which access to capital (at reasonable cost rates) to fund such required expenditures
12 will be critical.

13 **Q. Do the DCF and CAPM models already incorporate investor expectations of a return in**
14 **order to compensate for flotation costs?**

15 A. No. The models used to estimate the appropriate ROE assume no "friction" or transaction
16 costs, as these costs are not reflected in the market price (in the case of the DCF model) or
17 risk premium (in the case of the CAPM and the Bond Yield Plus Risk Premium model).
18 Therefore, it is appropriate to consider flotation costs when determining where within the
19 range of reasonable results OG&E's return should fall.

20 **Q. Is the need to consider flotation costs recognized by the academic and financial**
21 **communities?**

22 A. Yes. The need to reimburse investors for equity issuance costs is recognized by the
23 academic and financial communities in the same spirit that investors are reimbursed for the

1 costs of issuing debt. This treatment is consistent with the philosophy of a fair rate of return.

2 As explained by Dr. Shannon Pratt:

3 Flotation costs occur when a company issues new stock. The business
4 usually incurs several kinds of flotation or transaction costs, which reduce the
5 actual proceeds received by the business. Some of these are direct out-of-
6 pocket outlays, such as fees paid to underwriters, legal expenses, and
7 prospectus preparation costs. Because of this reduction in proceeds, the
8 business's required returns must be greater to compensate for the additional
9 costs. Flotation costs can be accounted for either by amortizing the cost, thus
10 reducing the net cash flow to discount, or by incorporating the cost into the
11 cost of equity capital. Since flotation costs typically are not applied to
12 operating cash flow, they must be incorporated into the cost of equity
13 capital.⁴⁴

14 **Q. Have you calculated the effect of flotation costs on the return on equity?**

15 A. Yes, I have. I modified the DCF calculation to derive the dividend yield that would
16 reimburse investors for direct issuance costs. Based on the weighted average issuance costs
17 shown in Exhibit RBH-8, a reasonable estimate of flotation costs is approximately 0.12
18 percent (12 basis points).

19 **Q. Are you proposing to adjust your recommended ROE by 12 basis points to reflect the**
20 **effect of flotation costs on OG&E's ROE?**

21 A. No. Rather, I have considered the effect of flotation costs, in addition to the Company's
22 other business risks, in determining where the Company's ROE falls within the range of
23 results.

⁴⁴ Shannon P. Pratt, Roger J. Grabowski, Cost of Capital: Applications and Examples, 4th ed. (John Wiley & Sons, Inc., 2010), page 586.

1 **Rate Mechanisms**

2 **Q. How common are cost recovery mechanisms?**

3 A. Adjustment mechanisms to recover fuel costs, purchased power expenses, energy efficiency
4 and demand-side program costs, new plant investment, and other expenses are very
5 common.⁴⁵ The implementation of alternative regulation mechanisms has become an
6 increasingly visible issue to investors.

7 **Q. Are cost recovery mechanisms common among the proxy companies?**

8 A. Yes, they are. Exhibit RBH-9 provides a summary of revenue stabilization mechanisms and
9 cost trackers currently in effect at each electric utility subsidiary within the proxy group. As
10 Exhibit RBH-9 demonstrates, there are a substantial number of cost recovery mechanisms in
11 place at the proxy companies. Exhibit RBH-9 also includes a summary of the alternative
12 regulation and incentive plans currently in effect at the proxy companies. Those regulatory
13 constructs include formula-based rate plans, which provide comprehensive adjustment
14 mechanisms that automatically adjust rates in the event that earned return is above or below
15 an authorized range.

16 **Q. Do the Company's regulatory recovery mechanisms reduce its Cost of Equity?**

17 A. No, they do not. The principal analytical issue is whether the Company is so less risky than
18 its peers as a direct result of its recovery mechanisms that investors would specifically and
19 measurably reduce their return requirements. The fact that the Company's existing recovery
20 mechanisms may, to a degree, stabilize the Company's revenues will not affect its Cost of
21 Equity unless it can be demonstrated that: (1) the Company is materially less risky than the

⁴⁵ See Exhibit RBH-9.

1 proxy group by virtue of those mechanisms; and (2) investors are likely to react to the
2 incremental effect of those mechanisms. Because revenue stabilization and cost recovery
3 mechanisms are common among the proxy companies, there is no reason to assume that
4 OG&E would be materially less risky, and that its Cost of Equity would be lower than its
5 peers' as a result of its recovery mechanisms.

VII. CAPITAL MARKET ENVIRONMENT

6 **Q. Do economic conditions influence the required cost of capital and required return on
7 common equity?**

8 A. Yes. As discussed in Section V, the models used to estimate the Cost of Equity are meant to
9 reflect, and therefore are influenced by, current and expected capital market conditions. As
10 to the analyses used to estimate the Cost of Equity, it is important to assess the
11 reasonableness of any financial model's results in the context of observable market data. To
12 the extent that certain ROE estimates are incompatible with such data or inconsistent with
13 basic financial principles, it is appropriate to consider whether alternative estimation
14 techniques are likely to provide more meaningful and reliable results.

15 **Q. Do you have any general observations regarding the relationship between current
16 capital market conditions and OG&E's Cost of Equity?**

17 A. Yes, I do. Much has been reported about the Federal Reserve's Quantitative Easing policy,
18 and its effect on interest rates. The issue as to how investors will react when the Federal
19 Reserve completes its market intervention and begins "normalizing" interest rates is less
20 clear. A viable outcome is that investors will perceive greater chances for economic growth,
21 which will increase the growth rates included in the Constant Growth DCF model. At the

1 same time, higher growth and the absence of Federal market intervention could provide the
2 opportunity for interest rates to increase, thereby increasing the dividend yield portion of the
3 DCF model. In that case, both terms of the Constant Growth DCF model would increase,
4 producing increased ROE estimates.

5 At this time, however, market data is somewhat disjointed. As a consequence, it is
6 difficult to rely on a single model to estimate the Company's Cost of Equity. A more
7 reasoned approach is to understand the relationships among Federal Reserve policies,
8 interest rates and risk, and assess how those factors may affect different models and their
9 results. For the reasons discussed below, the current market is one in which it is very
10 important to consider a broad range of data and models when determining the Cost of Equity.

11 **Q. Please summarize the effect of recent Federal Reserve policies on interest rates and the**
12 **cost of capital.**

13 A. Beginning in 2008, the Federal Reserve proceeded on a steady path of initiatives intended to
14 lower long-term Treasury yields.⁴⁶ The Federal Reserve policy actions “were designed to
15 put downward pressure on longer-term interest rates by having the Federal Reserve take onto
16 its balance sheet some of the duration and prepayment risks that would otherwise have been
17 borne by private investors.”⁴⁷ Under that policy, “Securities held outright” on the Federal
18 Reserve’s balance sheet increased from approximately \$489 billion at the beginning of
19 October 2008 to \$4.25 trillion by the end of October 2015.⁴⁸ To put that increase in context,
20 the securities held by the Federal Reserve represented approximately 3.29 percent of GDP at
21 the end of September 2008, and had risen to approximately 23.55 percent of GDP in October

⁴⁶ See Federal Reserve Press Release (June 19, 2013).

⁴⁷ Federal Reserve Bank of New York, *Domestic Open Market Operations During 2012*, April 2013, at 29.

1 2015.⁴⁹ As of the end of 2014, the Federal Reserve held approximately 45.00 percent of the
2 outstanding supply of long-term Treasury Securities with ten to thirty years remaining until
3 maturity.⁵⁰ As such, the Federal Reserve policy actions have represented a significant source
4 of liquidity, and has had a substantial effect on capital markets.

5 **Q. Is the Federal Reserve expected to maintain these policies?**

6 A. The Federal Reserve began “tapering” its asset purchases in December 2013, and although
7 the future pace of such reductions was not on a “preset course,” it was completed in October
8 2014. In July 2015, Federal Reserve Chair Janet Yellen noted that if the broad economy
9 continues to improve, it would be appropriate to begin the process of normalizing monetary
10 policy by increasing the Federal Funds rate at some point in 2015.⁵¹ In September 2015,
11 Chair Yellen stated that “...most of my colleagues and I anticipate that it will likely be
12 appropriate to raise the target range for the federal funds rate sometime later this year and to
13 continue boosting short-term rates at a gradual pace thereafter as the labor market improves
14 further and inflation moves back to our 2 percent objective.”⁵² More recently, the October
15 2015 Federal Open Market Committee meeting minutes noted that:

16 Some participants thought that the conditions for beginning the policy
17 normalization process had already been met. Most participants anticipated
18 that, based on their assessment of the current economic situation and their
19 outlook for economic activity, the labor market, and inflation, these
20 conditions could well be met by the time of the next meeting.⁵³

⁴⁸ Source: Federal Reserve Board Schedule H.4.1. “Securities held outright” include U.S. Treasury securities, Federal agency debt securities, and mortgage-backed securities.

⁴⁹ Source: Federal Reserve Board Schedule H.4.1; Bureau of Economic Analysis, 2015 data as of the third calendar quarter.

⁵⁰ Federal Reserve Bank of New York, *Domestic Open Market Operations During 2014*, at 17.

⁵¹ *Recent Developments and the Outlook for the Economy*, Remarks by Janet L. Yellen, Chair Board of Governors of the Federal Reserve System, at The City Club of Cleveland, Cleveland, Ohio, July 10, 2015.

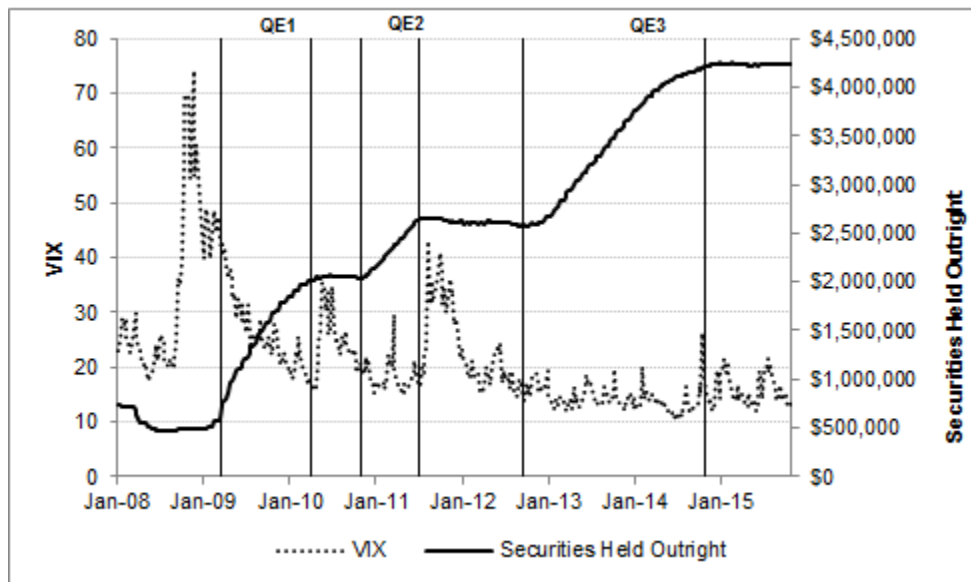
⁵² *Inflation Dynamics and Monetary Policy*, Remarks by Janet L. Yellen, Chair Board of Governors of the Federal Reserve System, September 24, 2015.

⁵³ *Minutes of the Federal Open Market Committee, October 27–28, 2015*, at 8.

1 Subsequent to the release of those meeting minutes, the market-based implied probability of
2 a December 2015 rate increase was approximately 72.00 percent.⁵⁴

3 Just as market intervention by the Federal Reserve has reduced interest rates, it also
4 has had the effect of reducing market volatility. As shown in Figure 2 (below), each time the
5 Federal Reserve began to purchase bonds (as evidenced by the increase in “Securities Held
6 Outright” on its balance sheet), volatility subsequently declined. In fact, in September 2012,
7 when the Federal Reserve began to purchase long-term securities at a pace of \$85 billion per
8 month, volatility (as measured by the CBOE Volatility Index, known as the “VIX”) fell, and
9 through October 2014 remained in a relatively narrow range. The reason is quite straight-
10 forward: Investors became confident that the Federal Reserve would intervene if markets
11 were to become unstable.

12 **Figure 2: VIX and Federal Reserve Asset Purchases⁵⁵**



13 ⁵⁴ <http://www.cmegroup.com/trading/interest-rates/fed-funds-flash.html>, accessed November 19, 2015.

⁵⁵ Source: Federal Reserve Economic Data (FRED), Federal Reserve Bank of St. Louis; Federal Reserve Statistical Release H.4.1, Factors Affecting Reserve Balances.

1 The important analytical issue is whether we can infer that risk aversion among investors is
2 at a historically low level, implying a Cost of Equity that is well below recently authorized
3 returns. Given the negative correlation between the expansion of the Federal Reserve's
4 balance sheet and the VIX, it is difficult to conclude that fundamental risk aversion and
5 investor return requirements have fallen. If it were the case that investors believe that
6 volatility will remain at low levels (that is, that market risk and uncertainty will remain low),
7 it is not clear why they would decrease their return requirements for defensive sectors such
8 as utilities. In that respect, it appears that the Constant Growth DCF results are at odds with
9 market conditions.

10 **Q. Has the Federal Reserve's quantitative easing policy been associated with changes in**
11 **the proxy companies' trading levels?**

12 A. Yes. From January 2000 through the end of August 2012 (that is, immediately prior to the
13 third round of Quantitative Easing), the proxy group's average P/E ratio traded at a 6.00
14 percent discount to the market, as measured by the S&P 500 Index. From September 2012
15 through May 2013, when the Federal Reserve announced it would begin to taper its asset
16 purchases, the proxy group traded at a 23.00 percent premium to the market. In fact,
17 between September 2012 and October 30, 2015, the proxy group P/E ratio traded at a 16.00
18 percent premium to the market.

19 More recently, even after the Federal Reserve noted that it would be "patient" in
20 assessing when it would normalize monetary policy, the proxy group's average P/E ratio fell
21 to approximately 105.00 percent of the market P/E (*i.e.*, a 5.00 percent premium) since the
22 beginning of September 2015, closer to the long-term relationship. Given the convergence
23 in the proxy group and market average P/E ratios, it may be that investors saw the electric

1 utility sector as somewhat over-valued relative to the market, and bid prices down in
2 response. Importantly, the Constant Growth DCF model assumes constancy (in perpetuity)
3 of both the P/E ratio, and the required Return on Equity. Because those conditions are
4 unlikely to persist, they violate principal assumptions of the Constant Growth DCF model
5 and suggest that the model's results should be viewed with considerable caution.

6 **Q. Does your recommendation consider the interest rate environment?**

7 A. Yes, it does. From an analytical perspective, it is important that the inputs and assumptions
8 used to arrive at an ROE recommendation, including assessments of capital market
9 conditions, are consistent with the recommendation itself. Although I appreciate that all
10 analyses require an element of judgment, the application of that judgment must be made in
11 the context of the quantitative and qualitative information available to the analyst and the
12 capital market environment in which the analyses were undertaken. Because the Cost of
13 Equity is forward-looking, the salient issue is whether investors see the likelihood of
14 increased interest rates during the period in which the rates set in this proceeding will be in
15 effect. In that regard, market price data reported by the CME Group indicates that investors
16 see a 96.00 percent probability of a Federal Funds rate increase within the coming year.⁵⁶

17 As to long-term interest rates, the approximately 50 economists surveyed by Blue
18 Chip Financial Forecast see the 30-year Treasury yield as increasing to 4.30 percent by
19 2017.⁵⁷ Those projections are supported by the fact that investors currently are willing to
20 pay nearly twice the premium for the option to sell long-term Government bonds in January
21 2018 (with an exercise price equal to the current price) than they are willing to pay for the

⁵⁶ <http://www.cmegroup.com/trading/interest-rates/fed-funds-flash.html>, accessed November 19, 2015.

⁵⁷ See, Blue Chip Financial Forecast, Vol. 34 No. 6, June 1, 2015, at 14.

1 option to buy those bonds.⁵⁸ Because the prices of bonds move inversely to interest rates,⁵⁹
2 those option prices indicate that investors believe it is considerably more likely that interest
3 rates will increase over the coming year, than it is likely that they will decrease.

4 It is important to remember that the Cost of Equity is by its nature forward-looking,
5 and that the model inputs used to estimate the Cost of Equity should reflect investors'
6 expectations. In light of current capital market conditions, it is particularly important to
7 reflect forward-looking interest rate expectations in the CAPM and Risk Premium analyses.
8 Given that: (1) Federal monetary policy is likely moving toward a process of
9 “normalization”; and (2) economists and market data indicate expectations for increasing
10 interest rates into 2017, I believe that an ROE in the range of 10.25 percent to 10.75 percent
11 reflects the prevailing and expected capital market environment.

VIII. CAPITAL STRUCTURE

12 **Q. What is OG&E’s recommended capital structure?**

13 A. OG&E’s proposed capital structure includes 53.31 percent common equity, and 46.69
14 percent long-term debt.

15 **Q. How does the capital structure affect the Cost of Equity?**

16 A. The capital structure relates to financial risk, which represents the risk that a company may
17 not have adequate cash flows to meet its financial obligations, and is a function of the
18 percentage of debt (or financial leverage) in its capital structure. In that regard, as the
19 percentage of debt in the capital structure increases, so do the fixed obligations for the

⁵⁸ Source: <http://www.nasdaq.com/symbol/tlt/option-chain?dateindex=7>
⁵⁹ That is, as interest rates move up (down), bond prices move down (up).

1 repayment of that debt. Consequently, as the degree of financial leverage increases, the risk
2 of financial distress (*i.e.*, financial risk) also increases. Since the capital structure can affect
3 the subject company's overall level of risk, it is an important consideration in establishing a
4 just and reasonable Return on Equity.

5 **Q. How did you assess the reasonableness of OG&E's recommended capital structure with**
6 **respect to the proxy group?**

7 A. As discussed in Section IV, the proxy group has been selected to reflect comparable
8 companies in terms of financial, business, and regulatory risks. Therefore, it is appropriate
9 to compare the capital structures of the proxy group companies to that of the subject
10 company in order to assess whether the proposed capital structure is consistent with industry
11 standards for companies with commensurate risk profiles. To the extent that OG&E's
12 capital structure differs from industry standards, the difference in financial risk should be
13 considered when estimating its required ROE.

14 **Q. Please describe your analysis of OG&E's capital structure relative to industry practice.**

15 A. As a measure of industry practice, I calculated the average capital structure for each of the
16 utility operating companies held by the proxy companies over the last eight fiscal quarters.
17 As shown in Exhibit RBH-10, the proxy group average capital structure over that period
18 includes 52.85 percent common equity and 47.15 percent long-term debt; the average
19 common equity ratios (on a company-specific basis) range from 47.11 percent to 65.05
20 percent. Based on that review, it is apparent that OG&E's capital structure is consistent with
21 those in place at the proxy companies.

1 **Q. What is the basis for using average capital components rather than a point-in-time**
2 **measurement?**

3 A. Measuring the capital components at a particular point in time can skew the capital structure
4 by the specific circumstances of a particular period. Therefore, it is more appropriate to
5 normalize the relative relationship between the components over a period of time.

6 **Q. What is your conclusion regarding an appropriate capital structure for OG&E?**

7 A. Considering the range of proxy company average equity ratios from 47.11 percent to 65.05
8 percent, I believe that OG&E's 53.31 percent common equity ratio is appropriate.

IX. CONCLUSIONS AND RECOMMENDATIONS

9 **Q. What is your conclusion regarding the Company's Cost of Equity and capital**
10 **structure?**

11 A. As discussed throughout my Direct Testimony, all of the models used to estimate the Cost of
12 Equity are subject to certain assumptions, which may become more or less relevant as
13 market conditions, and market data, change. It therefore is important to consider a variety of
14 empirical and qualitative information in reviewing analytical results and arriving at ROE
15 recommendations. That review includes an assessment of the various models used, and the
16 consistency of their underlying assumptions with current and expected market conditions. In
17 the end, it is the reasonableness and consistency of the ROE determination that is of
18 principal concern to investors. With those points in mind, I applied and reviewed the
19 following models:

- 1 • *Constant Growth DCF Model* – As discussed earlier in my Direct Testimony,
2 the proxy companies have traded at P/E ratios well in excess of their
3 historical average and, for a time, in excess of the market. Because that
4 condition is unlikely to persist, it violates two principal assumptions of the
5 Constant Growth DCF model, *i.e.*, that the P/E ratio will not change, and that
6 the ROE stays constant in perpetuity. As a practical matter, the Constant
7 Growth DCF results are well below a highly observable and relevant
8 benchmark: the returns authorized for vertically integrated electric utilities.
9 As such, considering multiple methods, including the Multi-Stage DCF
10 model, the CAPM approach, and the Bond Yield Plus Risk Premium model,
11 is more appropriate in current market conditions.
- 12 • *Multi-Stage DCF Model* – Because the Multi-Stage DCF Model provides the
13 ability to specify near, intermediate, and long-term growth rates, it avoids the
14 sometimes limiting assumption that the subject company will grow at the
15 same, constant rate in perpetuity. The model also enables analysts to assess
16 the reasonableness of the inputs and results by reference to certain market-
17 based metrics. Using the Gordon model to calculate the terminal stock price,
18 the Multi-Stage DCF analysis produces a range of results from 9.44 percent
19 to 9.96 percent.
- 20 • *CAPM Approach* – Unlike the DCF-based methods, the CAPM, is a risk
21 premium-based method, assumes that investors must be compensated for the
22 time value of money and for taking on additional risk. The time value of
23 money is measured by long-term Treasury yields; compensation for

1 additional risk is measured by the stock's Beta coefficient and the expected
2 Market Risk Premium. The Market Risk Premium reflects the additional
3 return that investors expect to receive by investing in the market as a whole
4 over the return they would receive by investing only in long-term Treasury
5 bonds. The CAPM analyses produce an ROE range of 9.21 percent to 11.33
6 percent.

- 7 • *Bond Yield Plus Risk Premium Analysis* – This risk premium-based method
8 assumes that the Cost of Equity equals the sum of (1) long-term Treasury
9 bond yields, and (2) an Equity Risk Premium, which represents the additional
10 risk associated with investing in utility stocks. This model focuses on the
11 relationship between interest rates and the Equity Risk Premium and
12 demonstrates that over time, there has been a statistically significant,
13 negative relationship between the two. Based a regression analysis of that
14 relationship, the estimated Cost of Equity is for an electric utility is between
15 10.05 percent and 10.58 percent.

1 In addition, to the models discussed above, I reviewed other factors related to the capital
2 market environment and the Company's relative risk profile:

- 3 • *Cost Recovery for Compliance with Environmental Regulations* – The
4 Company's proposed environmental compliance plan was denied by the
5 Commission. As such, shareholders face additional risks associated with the
6 uncertainty surrounding the plan by which the Company will comply with
7 federal environmental mandates, including its ability to recover associated
8 costs on a timely basis.
- 9 • *Capital Expenditures* – OG&E's capital expenditure program is significant
10 and will place additional pressure on its cash flows, making regulatory
11 support more important in terms of the Company's ability to finance these
12 expenditures and earn a reasonable return on its planned investments.
- 13 • *Flotation Costs* – Because the issuance (or "flotation") costs reduce the
14 amount of equity received when the Company sells stock, it is reasonable to
15 reflect those necessary, legitimate expenses when estimating the Cost of
16 Equity. Based on the weighted average issuance costs shown in Exhibit
17 RBH-8, a reasonable estimate of flotation costs is approximately 0.12 percent
18 (12 basis points). Rather than adjusting my recommended ROE by 12 basis
19 points, I have considered the effect of flotation costs in determining where
20 the Company's ROE falls within the range of results.
- 21 • *Rate Mechanisms* – Because revenue stabilization and cost recovery
22 mechanisms are common among the proxy companies, there is no reason to
23 assume that OG&E would be materially less risky, and that its Cost of Equity

1 would be lower than its peers' as a result of its recovery mechanisms. As a
2 result, I do not believe that it is appropriate to adjust the Company's ROE for
3 any reduction in risk related to cost recovery riders.

- 4 • *Capital Market Environment* – Federal Reserve monetary policy is likely
5 moving toward a process of “normalization” and economists and market data
6 indicate expectations for increasing interest rates into 2017. As such, it is
7 important to remember that the Cost of Equity is a forward-looking concept,
8 and that the model inputs used should reflect investors' expectations
9 regarding future capital market conditions. Therefore, to the extent that
10 certain Cost of Equity models are incompatible with such data, it is
11 appropriate to consider whether alternative estimation techniques are likely
12 to provide more meaningful and reliable results.

13 Reviewing the results of the DCF, CAPM, and Bond Yield Plus Risk Premium
14 models, I believe that an ROE in the range of 10.25 percent to 10.75 percent represents the
15 range of equity investors' required ROE for investment in vertically integrated electric
16 utilities in today's capital markets. Within my recommended range, I believe that 10.50
17 percent reasonably represents the ROE required to invest in a company with a risk profile
18 comparable to OG&E.

19 My recommended range recognizes that certain models, in particular Discounted
20 Cash Flow-based approaches, are based on assumptions that are inconsistent with current
21 and expected market conditions. As discussed earlier, for example, the Constant Growth
22 DCF model assumes that the Cost of Equity, estimated during a period in which the Federal
23 Reserve has directly influenced long-term interest rates and equity market volatility, will

1 remain constant forever. That is the case even though Federal monetary policy eventually
2 will be “normalized”. In my view, that fundamental inconsistency suggests that the
3 Constant Growth DCF results should be viewed with considerable caution, and given less
4 weight than under more “normal” market conditions.

5 My ROE recommendation also considers a variety of factors including the current
6 financial environment, flotation costs, and OG&E’s relative risk profile. As to the
7 Company’s relative risk, I have considered the risks associated with environmental
8 regulations, OG&E’s planned capital investment program, and the effect, if any, of OG&E’s
9 rate mechanisms on the Company’s relative risk profile. As discussed throughout my
10 testimony, although those factors are very relevant to investors, they do not lend themselves
11 to direct quantification. Consequently, the application of judgment in assessing their effects
12 on the Cost of Equity is unavoidable.

13 On balance, considering the applicability of models to market conditions, and taking
14 into consideration both company-specific factors and general market conditions, I believe
15 that a reasonable estimate of the Company’s Cost of Equity lies in the range of 10.25 percent
16 to 10.75 percent. The Company’s proposed ROE, 10.25 percent, falls at the low end of that
17 range. As such, I conclude that the Company’s proposal is reasonable, if not quite
18 conservative. Lastly, I conclude that OG&E’s proposed capital structure, which consists of
19 53.31 percent common equity and 46.69 percent long-term debt, is reasonable.

20 **Q. Does this conclude your pre-filed Direct Testimony?**

21 A. Yes, it does.

Robert B. Hevert, CFA
Managing Partner
Sussex Economic Advisors, LLC

Mr. Hevert is an economic and financial consultant with broad experience in regulated industries. He has an extensive background in the areas of corporate finance, corporate strategic planning, energy market assessment, mergers, and acquisitions, asset-based transactions, feasibility and due diligence analyses, and providing expert testimony in litigated proceedings. Mr. Hevert has significant management experience with both operating and professional services companies.

REPRESENTATIVE PROJECT EXPERIENCE

Litigation Support and Expert Testimony

Provided expert testimony and support of litigation in various regulatory proceedings on a variety of energy and economic issues including: cost of capital for ratemaking purposes; the proposed transfer of power purchase agreements; procurement of residual service electric supply; the legal separation of generation assets; merger-related synergies; assessment of economic damages; and specific financing transactions. Services provided include collaborating with counsel, business and technical staff to develop litigation strategies, preparing and reviewing discovery and briefing materials, preparing presentation materials and participating in technical sessions with regulators and intervenors.

Financial and Economic Advisory Services

Retained by numerous leading energy companies and financial institutions throughout North America to provide services relating to the strategic evaluation, acquisition, sale or development of a variety of regulated and non-regulated enterprises. Specific services have included: developing strategic and financial analyses and managing multi-faceted due diligence reviews of proposed corporate M&A counter-parties; developing, screening and recommending potential M&A transactions and facilitating discussions between senior utility executives regarding transaction strategy and structure; performing valuation analyses and financial due diligence reviews of electric generation projects, retail marketing companies, and wholesale trading entities in support of significant M&A transactions.

Specific divestiture-related services have included advising both buy and sell-side clients in transactions for physical and contractual electric generation resources. Sell-side services have included: development and implementation of key aspects of asset divestiture programs such as marketing, offering memorandum development, development of transaction terms and conditions, bid process management, bid evaluation, negotiations, and regulatory approval process. Buy-side services have included comprehensive asset screening, selection, valuation and due diligence reviews. Both buy and sell-side services have included the use of sophisticated asset valuation techniques, and the development and delivery of fairness opinions.

Specific corporate finance experience while a Vice President with Bay State Gas included: negotiation, placement and closing of both private and public long-term debt, preferred and common equity; structured and project financing; corporate cash management; financial analysis, planning and forecasting; and various aspects of investor relations.

Regulatory Analysis and Ratemaking

On behalf of electric, natural gas and combination utilities throughout North America, provided services relating to energy industry restructuring including merchant function exit, residual energy supply obligations, and stranded cost assessment and recovery. Specific services provided include: performing strategic review and development of merchant function exit strategies including analysis of provider of last

resort obligations in both electric and gas markets; and developing value optimizing strategies for physical generation assets.

Energy Market Assessment

Retained by numerous leading energy companies and financial institutions nationwide to manage or provide assessments of regional energy markets throughout the U.S. and Canada. Such assessments have included development of electric and natural gas price forecasts, analysis of generation project entry and exit scenarios, assessment of natural gas and electric transmission infrastructure, market structure and regulatory situation analysis, and assessment of competitive position. Market assessment engagements typically have been used as integral elements of business unit or asset-specific strategic plans or valuation analyses.

Resource Procurement, Contracting and Analysis

Assisted various clients in evaluating alternatives for acquiring fuel and power supplies, including the development and negotiation of energy contracts and tolling agreements. Assignments also have included developing generation resource optimization strategies. Provided advice and analyses of transition service power supply contracts in the context of both physical and contractual generation resource divestiture transactions.

Business Strategy and Operations

Retained by numerous leading North American energy companies and financial institutions nationwide to provide services relating to the development of strategic plans and planning processes for both regulated and non-regulated enterprises. Specific services provided include: developing and implementing electric generation strategies and business process redesign initiatives; developing market entry strategies for retail and wholesale businesses including assessment of asset-based marketing and trading strategies; and facilitating executive level strategic planning retreats. As Vice President, of Bay State was responsible for the company's strategic planning and business development processes, played an integral role in developing the company's non-regulated marketing affiliate, EnergyUSA, and managed the company's non-regulated investments, partnerships and strategic alliances.

PROFESSIONAL HISTORY

Sussex Economic Advisors, LLC (2012 – Present)

Managing Partner

Concentric Energy Advisors, Inc. (2002 – 2012)

President

Navigant Consulting, Inc. (1997 – 2001)

Managing Director (2000 – 2001)

Director (1998 – 2000)

Vice President, REED Consulting Group (1997 – 1998)

Bay State Gas Company (now Columbia Gas Company of Massachusetts) (1987 – 1997)

Vice President and Assistant Treasurer

Boston College (1986 – 1987)

Financial Analyst

General Telephone Company of the South (1984 – 1986)

Revenue Requirements Analyst

EDUCATION

M.B.A., University of Massachusetts at Amherst, 1984
B.S., University of Delaware, 1982

DESIGNATIONS AND PROFESSIONAL AFFILIATIONS

Chartered Financial Analyst, 1991
Association for Investment Management and Research
Boston Security Analyst Society

PUBLICATIONS/PRESENTATIONS

Has made numerous presentations throughout the United States and Canada on several topics, including:

- Generation Asset Valuation and the Use of Real Options
 - Retail and Wholesale Market Entry Strategies
 - The Use Strategic Alliances in Restructured Energy Markets
 - Gas Supply and Pipeline Infrastructure in the Northeast Energy Markets
 - Nuclear Asset Valuation and the Divestiture Process
-

AVAILABLE UPON REQUEST

Extensive client and project listings, and specific references.

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Regulatory Commission of Alaska				
ENSTAR Natural Gas Company	08/14	ENSTAR Natural Gas Company	Matter No. TA 262-4	Return on Equity
Arizona Corporation Commission				
Southwest Gas Corporation	11/10	Southwest Gas Corporation	Docket No. G-01551A-10-0458	Return on Equity
Arkansas Public Service Commission				
SourceGas Arkansas, Inc.	12/15	SourceGas Arkansas, Inc.	Docket No. 15-078-U	Merger Approval
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Arkansas Gas	11/15	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Arkansas Gas	Docket No. 15-098-U	Return on Equity
SourceGas Arkansas, Inc.	03/15	SourceGas Arkansas, Inc.	Docket No. 15-011-U	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Arkansas Gas	01/07	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Arkansas Gas	Docket No. 06-161-U	Return on Equity
California Public Utilities Commission				
Southwest Gas Corporation	12/12	Southwest Gas Corporation	Docket No. A-12-12-024	Return on Equity
Colorado Public Utilities Commission				
Xcel Energy, Inc.	03/15	Public Service Company of Colorado	Docket No. 15AL-0135G	Return on Equity (gas)
Xcel Energy, Inc.	06/14	Public Service Company of Colorado	Docket No. 14AL-0660E	Return on Equity (electric)
Xcel Energy, Inc.	12/12	Public Service Company of Colorado	Docket No. 12AL-1268G	Return on Equity (gas)
Xcel Energy, Inc.	11/11	Public Service Company of Colorado	Docket No. 11AL-947E	Return on Equity (electric)
Xcel Energy, Inc.	12/10	Public Service Company of Colorado	Docket No. 10AL-963G	Return on Equity (electric)
Atmos Energy Corporation	07/09	Atmos Energy Colorado-Kansas Division	Docket No. 09AL-507G	Return on Equity (gas)

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Xcel Energy, Inc.	12/06	Public Service Company of Colorado	Docket No. 06S-656G	Return on Equity (gas)
Xcel Energy, Inc.	04/06	Public Service Company of Colorado	Docket No. 06S-234EG	Return on Equity (electric)
Xcel Energy, Inc.	08/05	Public Service Company of Colorado	Docket No. 05S-369ST	Return on Equity (steam)
Xcel Energy, Inc.	05/05	Public Service Company of Colorado	Docket No. 05S-246G	Return on Equity (gas)
Connecticut Public Utilities Regulatory Authority				
Connecticut Light and Power Company	06/14	Connecticut Light and Power Company	Docket No. 14-05-06	Return on Equity
Southern Connecticut Gas Company	09/08	Southern Connecticut Gas Company	Docket No. 08-08-17	Return on Equity
Southern Connecticut Gas Company	12/07	Southern Connecticut Gas Company	Docket No. 05-03-17PH02	Return on Equity
Connecticut Natural Gas Corporation	12/07	Connecticut Natural Gas Corporation	Docket No. 06-03-04PH02	Return on Equity
Delaware Public Service Commission				
Delmarva Power & Light Company	03/13	Delmarva Power & Light Company	Case No. 13-115	Return on Equity
Delmarva Power & Light Company	12/12	Delmarva Power & Light Company	Case No. 12-546	Return on Equity
Delmarva Power & Light Company	03/12	Delmarva Power & Light Company	Case No. 11-528	Return on Equity
District of Columbia Public Service Commission				
Potomac Electric Power Company	03/13	Potomac Electric Power Company	Formal Case No. FC1103-2013-E	Return on Equity
Potomac Electric Power Company	07/11	Potomac Electric Power Company	Formal Case No. FC1087	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Federal Energy Regulatory Commission				
Sabine Pipeline, LLC	09/15	Sabine Pipeline, LLC	Docket No. RP15-1322-000	Return on Equity
Nextera Energy Transmission West, LLC	07/15	Nextera Energy Transmission West, LLC	Docket No. ER15-2239-000	Return on Equity
Maritimes & Northeast Pipeline, LLC	05/15	Maritimes & Northeast Pipeline, LLC	Docket No. RP15-1026-000	Return on Equity
Public Service Company of New Mexico	12/12	Public Service Company of New Mexico	Docket No. ER13-685-000	Return on Equity
Public Service Company of New Mexico	10/10	Public Service Company of New Mexico	Docket No. ER11-1915-000	Return on Equity
Portland Natural Gas Transmission System	05/10	Portland Natural Gas Transmission System	Docket No. RP10-729-000	Return on Equity
Florida Gas Transmission Company, LLC	10/09	Florida Gas Transmission Company, LLC	Docket No. RP10-21-000	Return on Equity
Maritimes and Northeast Pipeline, LLC	07/09	Maritimes and Northeast Pipeline, LLC	Docket No. RP09-809-000	Return on Equity
Spectra Energy	02/08	Saltville Gas Storage	Docket No. RP08-257-000	Return on Equity
Panhandle Energy Pipelines	08/07	Panhandle Energy Pipelines	Docket No. PL07-2-000	Response to draft policy statement regarding inclusion of MLPs in proxy groups for determination of gas pipeline ROEs
Southwest Gas Storage Company	08/07	Southwest Gas Storage Company	Docket No. RP07-541-000	Return on Equity
Southwest Gas Storage Company	06/07	Southwest Gas Storage Company	Docket No. RP07-34-000	Return on Equity
Sea Robin Pipeline LLC	06/07	Sea Robin Pipeline LLC	Docket No. RP07-513-000	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Transwestern Pipeline Company	09/06	Transwestern Pipeline Company	Docket No. RP06-614-000	Return on Equity
GPU International and Aquila	11/00	GPU International	Docket No. EC01-24-000	Market Power Study
Florida Public Service Commission				
Tampa Electric Company	04/13	Tampa Electric Company	Docket No. 130040-EI	Return on Equity
Georgia Public Service Commission				
Atlanta Gas Light Company	05/10	Atlanta Gas Light Company	Docket No. 31647-U	Return on Equity
Hawaii Public Utilities Commission				
Maui Electric Company, Limited	12/14	Maui Electric Company, Limited	Docket No. 2014-0318	Return on Equity
Hawaiian Electric Company	06/14	Hawaiian Electric Light Company	Docket No. 2013-0373	Return on Equity
Hawaii Electric Light Company	08/12	Hawaiian Electric Light Company	Docket No. 2012-0099	Return on Equity
Illinois Commerce Commission				
Ameren Illinois Company d/b/a Ameren Illinois	01/15	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 15-0142	Return on Equity
Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	03/14	Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	Docket No. 14-0371	Return on Equity
Ameren Illinois Company d/b/a Ameren Illinois	01/13	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 13-0192	Return on Equity
Ameren Illinois Company d/b/a Ameren Illinois	02/11	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 11-0279	Return on Equity (electric)
Ameren Illinois Company d/b/a Ameren Illinois	02/11	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 11-0282	Return on Equity (gas)
Indiana Utility Regulatory Commission				
Duke Energy Indiana, Inc.	12/14	Duke Energy Indiana, Inc.	Cause No. 44526	Return on Equity
Northern Indiana Public Service Company	05/09	Northern Indiana Public Service Company	Cause No. 43894	Assessment of Valuation Approaches

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Kansas Corporation Commission				
Kansas City Power & Light Company	01/15	Kansas City Power & Light Company	Docket No. 15-KCPE-116-RTS	Return on Equity
Maine Public Utilities Commission				
Maine Public Utilities Commission	02/14	Maine Public Utilities Commission	2014-00071	Review of Natural Gas Capacity Options
Central Maine Power Company	06/11	Central Maine Power Company	Docket No. 2010-327	Response to Bench Analysis provided by Commission Staff relating to the Company's credit and collections processes
Maryland Public Service Commission				
Potomac Electric Power Company	12/13	Potomac Electric Power Company	Case No. 9336	Return on Equity
Delmarva Power & Light Company	03/13	Delmarva Power & Light Company	Case No. 9317	Return on Equity
Potomac Electric Power Company	11/12	Potomac Electric Power Company	Case No. 9311	Return on Equity
Potomac Electric Power Company	12/11	Potomac Electric Power Company	Case No. 9286	Return on Equity
Delmarva Power & Light Company	12/11	Delmarva Power & Light Company	Case No. 9285	Return on Equity
Delmarva Power & Light Company	12/10	Delmarva Power & Light Company	Case No. 9249	Return on Equity
Massachusetts Department of Public Utilities				
National Grid	11/15	Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid	DPU 15-155	Return on Equity
Fitchburg Gas and Electric Light Company d/b/a Unitil	06/15	Fitchburg Gas and Electric Light Company d/b/a Unitil	DPU 15-80	Return on Equity
NSTAR Gas Company	12/14	NSTAR Gas Company	DPU 14-150	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Fitchburg Gas and Electric Light Company d/b/a Unitil	07/13	Fitchburg Gas and Electric Light Company d/b/a Unitil	DPU 13-90	Return on Equity
Bay State Gas Company d/b/a Columbia Gas of Massachusetts	04/12	Bay State Gas Company d/b/a Columbia Gas of Massachusetts	DPU 12-25	Capital Cost Recovery
National Grid	08/09	Massachusetts Electric Company d/b/a National Grid	DPU 09-39	Revenue Decoupling and Return on Equity
National Grid	08/09	Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid	DPU 09-38	Return on Equity – Solar Generation
Bay State Gas Company	04/09	Bay State Gas Company	DPU 09-30	Return on Equity
NSTAR Electric	09/04	NSTAR Electric	DTE 04-85	Divestiture of Power Purchase Agreement
NSTAR Electric	08/04	NSTAR Electric	DTE 04-78	Divestiture of Power Purchase Agreement
NSTAR Electric	07/04	NSTAR Electric	DTE 04-68	Divestiture of Power Purchase Agreement
NSTAR Electric	07/04	NSTAR Electric	DTE 04-61	Divestiture of Power Purchase Agreement
NSTAR Electric	06/04	NSTAR Electric	DTE 04-60	Divestiture of Power Purchase Agreement
Unitil Corporation	01/04	Fitchburg Gas and Electric	DTE 03-52	Integrated Resource Plan; Gas Demand Forecast
Bay State Gas Company	01/93	Bay State Gas Company	DPU 93-14	Shelf Registration
Bay State Gas Company	01/91	Bay State Gas Company	DPU 91-25	Shelf Registration
Minnesota Public Utilities Commission				
Minnesota Energy Resources Corporation	09/15	Minnesota Energy Resources Corporation	Docket No. G-011/GR-15-736	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas	08/15	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas	Docket No. G-008/GR-15-424	Return on Equity
Xcel Energy, Inc.	11/13	Northern States Power Company	Docket No. E002/GR-13-868	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas	08/13	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas	Docket No. G-008/GR-13-316	Return on Equity
Xcel Energy, Inc.	11/12	Northern States Power Company	Docket No. E002/GR-12-961	Return on Equity
Otter Tail Power Corporation	04/10	Otter Tail Power Company	Docket No. E-017/GR-10-239	Return on Equity
Minnesota Power a division of ALLETE, Inc.	11/09	Minnesota Power	Docket No. E-015/GR-09-1151	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas	11/08	CenterPoint Energy Minnesota Gas	Docket No. G-008/GR-08-1075	Return on Equity
Otter Tail Power Corporation	10/07	Otter Tail Power Company	Docket No. E-017/GR-07-1178	Return on Equity
Xcel Energy, Inc.	11/05	Northern States Power Company -Minnesota	Docket No. E-002/GR-05-1428	Return on Equity (electric)
Xcel Energy, Inc.	09/04	Northern States Power Company - Minnesota	Docket No. G-002/GR-04-1511	Return on Equity (gas)
Mississippi Public Service Commission				
CenterPoint Energy Resources, Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Mississippi Gas	07/09	CenterPoint Energy Mississippi Gas	Docket No. 09-UN-334	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Missouri Public Service Commission				
Kansas City Power & Light Company	10/14	Kansas City Power & Light Company	Case No. ER-2014-0370	Return on Equity (electric)
Union Electric Company d/b/a Ameren Missouri	07/14	Union Electric Company d/b/a Ameren Missouri	Case No. ER-2014-0258	Return on Equity (electric)
Union Electric Company d/b/a Ameren Missouri	06/14	Union Electric Company d/b/a Ameren Missouri	Case No. EC-2014-0223	Return on Equity (electric)
Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	02/14	Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	Case No. GR-2014-0152	Return on Equity
Laclede Gas Company	12/12	Laclede Gas Company	Case No. GR-2013-0171	Return on Equity
Union Electric Company d/b/a Ameren Missouri	02/12	Union Electric Company d/b/a Ameren Missouri	Case No. ER-2012-0166	Return on Equity (electric)
Union Electric Company d/b/a AmerenUE	09/10	Union Electric Company d/b/a AmerenUE	Case No. ER-2011-0028	Return on Equity (electric)
Union Electric Company d/b/a AmerenUE	06/10	Union Electric Company d/b/a AmerenUE	Case No. GR-2010-0363	Return on Equity (gas)
Montana Public Service Commission				
Northwestern Corporation	09/12	Northwestern Corporation d/b/a Northwestern Energy	Docket No. D2012.9.94	Return on Equity (gas)
Nevada Public Utilities Commission				
Southwest Gas Corporation	04/12	Southwest Gas Corporation	Docket No. 12-04005	Return on Equity (gas)
Nevada Power Company	06/11	Nevada Power Company	Docket No. 11-06006	Return on Equity (electric)
New Hampshire Public Utilities Commission				
Liberty Utilities d/b/a EnergyNorth Natural Gas	08/14	Liberty Utilities d/b/a EnergyNorth Natural Gas	Docket No. DG 14-180	Return on Equity
Liberty Utilities d/b/a Granite State Electric Company	03/13	Liberty Utilities d/b/a Granite State Electric Company	Docket No. DE 13-063	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
EnergyNorth Natural Gas d/b/a National Grid NH	02/10	EnergyNorth Natural Gas d/b/a National Grid NH	Docket No. DG 10-017	Return on Equity
Unitil Energy Systems, Inc. ("Unitil"), EnergyNorth Natural Gas, Inc. d/b/a National Grid NH, Granite State Electric Company d/b/a National Grid, and Northern Utilities, Inc. – New Hampshire Division	08/08	Unitil Energy Systems, Inc. ("Unitil"), EnergyNorth Natural Gas, Inc. d/b/a National Grid NH, Granite State Electric Company d/b/a National Grid, and Northern Utilities, Inc. – New Hampshire Division	Docket No. DG 07-072	Carrying Charge Rate on Cash Working Capital
New Jersey Board of Public Utilities				
Pepco Holdings, Inc.	04/14	Atlantic City Electric Company	Docket No. ER14030245	Return on Equity
Orange and Rockland Utilities	11/13	Rockland Electric Company	Docket No. ER13111135	Return on Equity
Atlantic City Electric Company	12/12	Atlantic City Electric Company	Docket No. ER12121071	Return on Equity
Atlantic City Electric Company	08/11	Atlantic City Electric Company	Docket No. ER11080469	Return on Equity
Pepco Holdings, Inc.	09/06	Atlantic City Electric Company	Docket No. EM06090638	Divestiture and Valuation of Electric Generating Assets
Pepco Holdings, Inc.	12/05	Atlantic City Electric Company	Docket No. EM05121058	Market Value of Electric Generation Assets; Auction
Conectiv	06/03	Atlantic City Electric Company	Docket No. EO03020091	Market Value of Electric Generation Assets; Auction Process
New Mexico Public Regulation Commission				
Public Service Company of New Mexico	08/15	Public Service Company of New Mexico	Case No. 15-00261-UT	Return on Equity (electric)
Public Service Company of New Mexico	12/14	Public Service Company of New Mexico	Case No. 14-00332-UT	Return on Equity (electric)
Public Service Company of New Mexico	12/14	Public Service Company of New Mexico	Case No. 13-00390-UT	Cost of Capital and Financial Integrity

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Southwestern Public Service Company	02/11	Southwestern Public Service Company	Case No. 10-00395-UT	Return on Equity (electric)
Public Service Company of New Mexico	06/10	Public Service Company of New Mexico	Case No. 10-00086-UT	Return on Equity (electric)
Public Service Company of New Mexico	09/08	Public Service Company of New Mexico	Case No. 08-00273-UT	Return on Equity (electric)
Xcel Energy, Inc.	07/07	Southwestern Public Service Company	Case No. 07-00319-UT	Return on Equity (electric)
New York State Public Service Commission				
Consolidated Edison Company of New York, Inc.	01/15	Consolidated Edison Company of New York, Inc.	Case No. 15-E-0050	Return on Equity (electric)
Orange and Rockland Utilities, Inc.	11/14	Orange and Rockland Utilities, Inc.	Case Nos. 14-E-0493 and 14-G-0494	Return on Equity (electric and gas)
Consolidated Edison Company of New York, Inc.	01/13	Consolidated Edison Company of New York, Inc.	Case No. 13-E-0030	Return on Equity (electric)
Niagara Mohawk Corporation d/b/a National Grid for Electric Service	04/12	Niagara Mohawk Corporation d/b/a National Grid for Electric Service	Case No. 12-E-0201	Return on Equity (electric)
Niagara Mohawk Corporation d/b/a National Grid for Gas Service	04/12	Niagara Mohawk Corporation d/b/a National Grid for Gas Service	Case No. 12-G-0202	Return on Equity (gas)
Orange and Rockland Utilities, Inc.	07/11	Orange and Rockland Utilities, Inc.	Case No. 11-E-0408	Return on Equity (electric)
Orange and Rockland Utilities, Inc.	07/10	Orange and Rockland Utilities, Inc.	Case No. 10-E-0362	Return on Equity (electric)
Consolidated Edison Company of New York, Inc.	11/09	Consolidated Edison Company of New York, Inc.	Case No. 09-G-0795	Return on Equity (gas)
Consolidated Edison Company of New York, Inc.	11/09	Consolidated Edison Company of New York, Inc.	Case No. 09-S-0794	Return on Equity (steam)

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Niagara Mohawk Power Corporation	07/01	Niagara Mohawk Power Corporation	Case No. 01-E-1046	Power Purchase and Sale Agreement; Standard Offer Service Agreement
North Carolina Utilities Commission				
Duke Energy Carolinas, LLC	02/13	Duke Energy Carolinas, LLC	Docket No. E-7, Sub 1026	Return on Equity
Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.	10/12	Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.	Docket No. E-2, Sub 1023	Return on Equity
Virginia Electric and Power Company d/b/a Dominion North Carolina Power	03/12	Virginia Electric and Power Company d/b/a Dominion North Carolina Power	Docket No. E-22, Sub 479	Return on Equity (electric)
Duke Energy Carolinas, LLC	07/11	Duke Energy Carolinas, LLC	Docket No. E-7, Sub 989	Return on Equity (electric)
North Dakota Public Service Commission				
Otter Tail Power Company	11/08	Otter Tail Power Company	Docket No. 08-862	Return on Equity (electric)
Oklahoma Corporation Commission				
Public Service Company of Oklahoma	07/15	Public Service Company of Oklahoma	Cause No. PUD201500208	Return on Equity
Oklahoma Gas & Electric Company	07/11	Oklahoma Gas & Electric Company	Cause No. PUD201100087	Return on Equity
CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Oklahoma Gas	03/09	CenterPoint Energy Oklahoma Gas	Cause No. PUD200900055	Return on Equity
Pennsylvania Public Utility Commission				
Pike County Light & Power Company	01/14	Pike County Light & Power Company	Docket No. R-2013-2397237	Return on Equity (electric & gas)

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Veolia Energy Philadelphia, Inc.	12/13	Veolia Energy Philadelphia, Inc.	Docket No. R-2013-2386293	Return on Equity (steam)
Rhode Island Public Utilities Commission				
The Narragansett Electric Company d/b/a National Grid	04/12	The Narragansett Electric Company d/b/a National Grid	Docket No. 4323	Return on Equity (electric & gas)
National Grid RI – Gas	08/08	National Grid RI – Gas	Docket No. 3943	Revenue Decoupling and Return on Equity
South Carolina Public Service Commission				
Duke Energy Carolinas, LLC	03/13	Duke Energy Carolinas, LLC	Docket No. 2013-59-E	Return on Equity
South Carolina Electric & Gas	06/12	South Carolina Electric & Gas	Docket No. 2012-218-E	Return on Equity
Duke Energy Carolinas, LLC	08/11	Duke Energy Carolinas, LLC	Docket No. 2011-271-E	Return on Equity
South Carolina Electric & Gas	03/10	South Carolina Electric & Gas	Docket No. 2009-489-E	Return on Equity
South Dakota Public Utilities Commission				
Otter Tail Power Company	08/10	Otter Tail Power Company	Docket No. EL10-011	Return on Equity (electric)
Northern States Power Company	06/09	South Dakota Division of Northern States Power	Docket No. EL09-009	Return on Equity (electric)
Otter Tail Power Company	10/08	Otter Tail Power Company	Docket No. EL08-030	Return on Equity (electric)
Texas Public Utility Commission				
Wind Energy Transmission Texas, LLC	05/15	Wind Energy Transmission Texas, LLC	Docket No. 44746	Return on Equity
Cross Texas Transmission	12/14	Cross Texas Transmission	Docket No. 43950	Return on Equity
Southwestern Public Service Company	12/14	Southwestern Public Service Company	Docket No. 43695	Return on Equity (electric)
Sharyland Utilities, L.P.	05/13	Sharyland Utilities, L.P.	Docket No. 41474	Return on Equity
Wind Energy Texas Transmission, LLC	08/12	Wind Energy Texas Transmission, LLC	Docket No. 40606	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Southwestern Electric Power Company	07/12	Southwestern Electric Power Company	Docket No. 40443	Return on Equity
Oncor Electric Delivery Company, LLC	01/11	Oncor Electric Delivery Company, LLC	Docket No. 38929	Return on Equity
Texas-New Mexico Power Company	08/10	Texas-New Mexico Power Company	Docket No. 38480	Return on Equity (electric)
CenterPoint Energy Houston Electric LLC	06/10	CenterPoint Energy Houston Electric LLC	Docket No. 38339	Return on Equity
Xcel Energy, Inc.	05/10	Southwestern Public Service Company	Docket No. 38147	Return on Equity (electric)
Texas-New Mexico Power Company	08/08	Texas-New Mexico Power Company	Docket No. 36025	Return on Equity (electric)
Xcel Energy, Inc.	05/06	Southwestern Public Service Company	Docket No. 32766	Return on Equity (electric)
Texas Railroad Commission				
Centerpoint Energy Resources Corp. d/b/a Centerpoint Energy Entex and Centerpoint Energy Texas Gas	03/15	Centerpoint Energy Resources Corp. d/b/a Centerpoint Energy Entex and Centerpoint Energy Texas Gas	GUD 10432	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	07/12	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	GUD 10182	Return on Equity
Atmos Energy Corporation – West Texas Division	06/12	Atmos Energy Corporation – West Texas Division	GUD 10175	Return on Equity
Atmos Energy Corporation – Mid-Texas Division	06/12	Atmos Energy Corporation – Mid-Texas Division	GUD 10171	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	12/10	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	GUD 10038	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Atmos Pipeline – Texas	09/10	Atmos Pipeline - Texas	GUD 10000	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	07/09	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	GUD 9902	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Texas Gas	03/08	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Texas Gas	GUD 9791	Return on Equity
Utah Public Service Commission				
Questar Gas Company	12/07	Questar Gas Company	Docket No. 07-057-13	Return on Equity
Vermont Public Service Board				
Central Vermont Public Service Corporation; Green Mountain Power	02/12	Central Vermont Public Service Corporation; Green Mountain Power	Docket No. 7770	Merger Policy
Central Vermont Public Service Corporation	12/10	Central Vermont Public Service Corporation	Docket No. 7627	Return on Equity (electric)
Green Mountain Power	04/06	Green Mountain Power	Docket Nos. 7175 and 7176	Return on Equity (electric)
Vermont Gas Systems, Inc.	12/05	Vermont Gas Systems	Docket Nos. 7109 and 7160	Return on Equity (gas)
Virginia State Corporation Commission				
Virginia Electric and Power Company	12/15	Virginia Electric and Power Company	Case Nos. PUE-2015-00027, PUE-2015-00059, PUE-2015-00060, and PUE-2015-00061	Return on Equity
Virginia Electric and Power Company	03/15	Virginia Electric and Power Company	Case No. PUE-2015-00027	Return on Equity
Virginia Electric and Power Company	03/13	Virginia Electric and Power Company	Case No. PUE-2013-00020	Return on Equity
Virginia Natural Gas, Inc.	02/11	Virginia Natural Gas, Inc.	Case No. PUE-2010-00142	Capital Structure

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Columbia Gas Of Virginia, Inc.	06/06	Columbia Gas Of Virginia, Inc.	Case No. PUE-2005-00098	Merger Synergies
Dominion Resources	10/01	Virginia Electric and Power Company	Case No. PUE000584	Corporate Structure and Electric Generation Strategy

Expert Report

United States District Court, Western District of Texas, Austin Division				
Southwestern Public Service Company	02/12	Southwestern Public Service Company	C.A. No. A-09-CA-917-SS	PURPA and FERC regulations

Constant Growth Discounted Cash Flow Model
30 Day Average Stock Price

Company	Ticker	[1] Annualized Dividend	[2] Average Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Zacks Earnings Growth	[6] First Call Earnings Growth	[7] Value Line Earnings Growth	[8] Average Earnings Growth	[9] Low ROE	[10] Mean ROE
ALLETE, Inc.	ALE	\$2.02	\$50.58	3.99%	4.11%	NA	5.50%	6.50%	6.00%	9.60%	10.11%
Alliant Energy Corporation	LNT	\$2.20	\$59.06	3.72%	3.83%	5.30%	5.75%	6.00%	5.68%	9.12%	9.51%
Ameren Corporation	AME	\$1.70	\$42.92	3.96%	4.09%	6.80%	6.25%	7.00%	6.68%	10.33%	10.78%
American Electric Power Company, Inc.	AEP	\$2.24	\$57.02	3.93%	4.02%	4.70%	4.63%	5.00%	4.78%	8.65%	8.80%
Avista Corporation	AVA	\$1.32	\$33.45	3.95%	4.05%	NA	5.00%	5.00%	5.00%	9.05%	9.05%
CMS Energy Corporation	CMS	\$1.16	\$35.61	3.26%	3.36%	6.50%	6.76%	5.50%	6.25%	8.85%	9.61%
Dominion Resources, Inc.	D	\$2.59	\$71.19	3.64%	3.76%	6.30%	5.38%	8.00%	6.56%	9.12%	10.32%
DTE Energy Company	DTE	\$2.92	\$81.21	3.60%	3.69%	5.50%	4.94%	5.00%	5.15%	8.62%	8.83%
Empire District Electric Company	EDE	\$1.04	\$22.62	4.60%	4.69%	5.00%	4.00%	3.00%	4.00%	7.67%	8.69%
Great Plains Energy Inc.	GXP	\$0.98	\$27.11	3.61%	3.72%	6.10%	6.37%	5.00%	5.82%	8.71%	9.54%
IDACORP, Inc.	IDA	\$2.04	\$66.17	3.08%	3.13%	4.00%	4.00%	1.00%	3.00%	4.10%	6.13%
NorthWestern Corporation	NWE	\$1.92	\$54.44	3.53%	3.63%	5.00%	6.81%	6.50%	6.10%	8.62%	9.74%
Otter Tail Corporation	OTTR	\$1.23	\$27.08	4.54%	4.71%	NA	6.00%	9.00%	7.50%	10.68%	12.21%
Pinnacle West Capital Corporation	PNW	\$2.50	\$64.21	3.89%	3.99%	5.20%	5.37%	4.00%	4.86%	7.97%	8.84%
PNM Resources, Inc.	PNM	\$0.80	\$27.83	2.87%	3.00%	8.50%	8.56%	9.00%	8.69%	11.50%	11.69%
Portland General Electric Company	POR	\$1.20	\$37.31	3.22%	3.29%	4.10%	3.92%	6.00%	4.67%	7.20%	7.96%
SCANA Corporation	SCG	\$2.18	\$56.09	3.89%	3.97%	4.20%	4.45%	4.50%	4.38%	8.17%	8.36%
Westar Energy, Inc.	WR	\$1.44	\$39.10	3.68%	3.76%	3.90%	3.40%	6.00%	4.43%	7.15%	8.20%
Xcel Energy Inc.	XEL	\$1.28	\$35.57	3.60%	3.68%	5.00%	4.68%	4.50%	4.73%	8.18%	8.41%
PROXY GROUP MEAN				3.71%	3.82%	5.38%	5.36%	5.61%	5.49%	8.59%	9.30%
PROXY GROUP MEDIAN				3.68%	3.76%	5.10%	5.37%	5.50%	5.15%	8.65%	9.05%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 30-trading day average as of October 30, 2015
- [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]
		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
ALLETE, Inc.	ALE	\$2.02	\$49.04	4.12%	4.24%	NA	5.50%	6.50%	6.00%	9.73%	10.24%
Alliant Energy Corporation	LNT	\$2.20	\$59.00	3.73%	3.83%	5.30%	5.75%	6.00%	5.68%	9.13%	9.52%
Ameren Corporation	AEE	\$1.70	\$40.96	4.15%	4.29%	6.80%	6.25%	7.00%	6.68%	10.53%	10.97%
American Electric Power Company, Inc.	AEP	\$2.24	\$55.87	4.01%	4.11%	4.70%	4.63%	5.00%	4.78%	8.73%	8.88%
Avista Corporation	AVA	\$1.32	\$32.37	4.08%	4.18%	NA	5.00%	5.00%	5.00%	9.18%	9.18%
CMS Energy Corporation	CMS	\$1.16	\$34.22	3.39%	3.50%	6.50%	6.76%	5.50%	6.25%	8.98%	9.75%
Dominion Resources, Inc.	D	\$2.59	\$70.50	3.67%	3.79%	6.30%	5.38%	8.00%	6.56%	9.15%	10.35%
DTE Energy Company	DTE	\$2.92	\$79.28	3.68%	3.78%	5.50%	4.94%	5.00%	5.15%	8.71%	8.92%
Empire District Electric Company	EDE	\$1.04	\$22.41	4.64%	4.73%	5.00%	4.00%	3.00%	4.00%	7.71%	8.73%
Great Plains Energy Inc.	GXP	\$0.98	\$25.99	3.77%	3.88%	6.10%	6.37%	5.00%	5.82%	8.87%	9.70%
IDACORP, Inc.	IDA	\$2.04	\$61.84	3.30%	3.35%	4.00%	4.00%	1.00%	3.00%	4.32%	6.35%
NorthWestern Corporation	NWE	\$1.92	\$52.74	3.64%	3.75%	5.00%	6.81%	6.50%	6.10%	8.73%	9.85%
Otter Tail Corporation	OTTR	\$1.23	\$26.71	4.61%	4.78%	NA	6.00%	9.00%	7.50%	10.74%	12.28%
Pinnacle West Capital Corporation	PNW	\$2.50	\$61.79	4.05%	4.14%	5.20%	5.37%	4.00%	4.86%	8.13%	9.00%
PNM Resources, Inc.	PNM	\$0.80	\$26.54	3.01%	3.14%	8.50%	8.56%	9.00%	8.69%	11.64%	11.83%
Portland General Electric Company	POR	\$1.20	\$35.76	3.36%	3.43%	4.10%	3.92%	6.00%	4.67%	7.34%	8.11%
SCANA Corporation	SCG	\$2.18	\$54.30	4.01%	4.10%	4.20%	4.45%	4.50%	4.38%	8.30%	8.49%
Westar Energy, Inc.	WR	\$1.44	\$37.47	3.84%	3.93%	3.90%	3.40%	6.00%	4.43%	7.31%	8.36%
Xcel Energy Inc.	XEL	\$1.28	\$34.40	3.72%	3.81%	5.00%	4.68%	4.50%	4.73%	8.31%	8.54%
PROXY GROUP MEAN				3.83%	3.94%	5.38%	5.36%	5.61%	5.49%	8.71%	9.42%
PROXY GROUP MEDIAN				3.77%	3.88%	5.10%	5.37%	5.50%	5.15%	8.73%	9.18%

Notes:

- [1] Source: Bloomberg Professional
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- [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

Company	Ticker	[1] Annualized Dividend	[2] Average Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Zacks Earnings Growth	[6] First Call Earnings Growth	[7] Value Line Earnings Growth	[8] Average Earnings Growth	[9] Low ROE	[10] Mean ROE
ALLETE, Inc.	ALE	\$2.02	\$50.09	4.03%	4.15%	NA	5.50%	6.50%	6.00%	9.64%	10.15%
Alliant Energy Corporation	LNT	\$2.20	\$60.23	3.65%	3.76%	5.30%	5.75%	6.00%	5.68%	9.05%	9.44%
Ameren Corporation	AEE	\$1.70	\$40.94	4.15%	4.29%	6.80%	6.25%	7.00%	6.68%	10.53%	10.97%
American Electric Power Company, Inc.	AEP	\$2.24	\$55.93	4.01%	4.10%	4.70%	4.63%	5.00%	4.78%	8.73%	8.88%
Avista Corporation	AVA	\$1.32	\$32.56	4.05%	4.16%	NA	5.00%	5.00%	5.00%	9.16%	9.16%
CMS Energy Corporation	CMS	\$1.16	\$34.14	3.40%	3.50%	6.50%	6.76%	5.50%	6.25%	8.99%	9.76%
Dominion Resources, Inc.	D	\$2.59	\$70.68	3.66%	3.78%	6.30%	5.38%	8.00%	6.56%	9.14%	10.34%
DTE Energy Company	DTE	\$2.92	\$79.39	3.68%	3.77%	5.50%	4.94%	5.00%	5.15%	8.71%	8.92%
Empire District Electric Company	EDE	\$1.04	\$23.23	4.48%	4.77%	5.00%	4.00%	3.00%	4.00%	7.54%	8.57%
Great Plains Energy Inc.	GXP	\$0.98	\$26.08	3.76%	3.87%	6.10%	6.37%	5.00%	5.82%	8.85%	9.69%
IDACORP, Inc.	IDA	\$2.04	\$61.17	3.33%	3.38%	4.00%	4.00%	1.00%	3.00%	4.35%	6.38%
NorthWestern Corporation	NWE	\$1.92	\$52.56	3.65%	3.76%	5.00%	6.81%	6.50%	6.10%	8.74%	9.87%
Otter Tail Corporation	OTTR	\$1.23	\$28.37	4.34%	4.50%	NA	6.00%	9.00%	7.50%	10.47%	12.00%
Pinnacle West Capital Corporation	PNW	\$2.50	\$61.73	4.05%	4.15%	5.20%	5.37%	4.00%	4.86%	8.13%	9.00%
PNM Resources, Inc.	PNM	\$0.80	\$26.95	2.97%	3.10%	8.50%	8.56%	9.00%	8.69%	11.59%	11.78%
Portland General Electric Company	POR	\$1.20	\$35.69	3.36%	3.44%	4.10%	3.92%	6.00%	4.67%	7.35%	8.11%
SCANA Corporation	SCG	\$2.18	\$54.07	4.03%	4.12%	4.20%	4.45%	4.50%	4.38%	8.32%	8.50%
Westar Energy, Inc.	WR	\$1.44	\$37.40	3.85%	3.94%	3.90%	3.40%	6.00%	4.43%	7.32%	8.37%
Xcel Energy Inc.	XEL	\$1.28	\$34.26	3.74%	3.82%	5.00%	4.68%	4.50%	4.73%	8.32%	8.55%
PROXY GROUP MEAN				3.80%	3.90%	5.38%	5.36%	5.61%	5.49%	8.68%	9.39%
PROXY GROUP MEDIAN				3.76%	3.87%	5.10%	5.37%	5.50%	5.15%	8.74%	9.16%

Notes:

- [1] Source: Bloomberg Professional
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- [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])

<u>[11]</u>
<u>High ROE</u>
10.62%
9.84%
11.10%
9.03%
9.05%
10.13%
11.78%
9.19%
9.71%
10.10%
7.14%
10.46%
13.75%
9.37%
12.00%
9.31%
8.47%
9.79%
8.69%
<u>9.98%</u>
<u>9.79%</u>

<u>[11]</u>	<u>High ROE</u>
	10.75%
	9.84%
	11.30%
	9.11%
	9.18%
	10.26%
	11.82%
	9.28%
	9.76%
	10.26%
	7.36%
	10.57%
	13.81%
	9.52%
	12.15%
	9.46%
	8.61%
	9.96%
	8.81%
	<u>10.10%</u>
	<u>9.84%</u>

[11]

High ROE
10.66%
9.76%
11.30%
9.11%
9.16%
10.27%
11.81%
9.28%
9.59%
10.25%
7.40%
10.59%
13.53%
9.53%
12.10%
9.46%
8.62%
9.97%
8.83%
10.06%
9.76%

Constant Growth Discounted Cash Flow Model
30 Day Average Stock Price

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	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
ALLETE, Inc.	\$2.02	\$50.58	3.99%	4.11%	NA	5.50%	6.50%	6.00%	9.60%	10.11%	10.62%
Alliant Energy Corporation	\$2.20	\$59.06	3.72%	3.83%	5.30%	5.75%	6.00%	5.68%	9.12%	9.51%	9.84%
Ameren Corporation	\$1.70	\$42.92	3.96%	4.09%	6.80%	6.25%	7.00%	6.88%	10.33%	10.78%	11.10%
American Electric Power Company, Inc.	\$2.24	\$57.02	3.93%	4.02%	4.70%	4.63%	5.00%	4.78%	8.65%	8.80%	9.03%
Avista Corporation	\$1.32	\$33.45	3.95%	4.05%	NA	5.00%	5.00%	5.00%	9.05%	9.05%	9.05%
CMS Energy Corporation	\$1.16	\$35.61	3.26%	3.36%	6.50%	6.76%	5.50%	6.25%	8.85%	9.61%	10.13%
Dominion Resources, Inc.	\$2.59	\$71.19	3.64%	3.76%	6.30%	5.38%	8.00%	6.56%	9.12%	10.32%	11.78%
DTE Energy Company	\$2.92	\$81.21	3.60%	3.69%	5.50%	4.94%	5.00%	5.15%	8.62%	8.83%	9.19%
Empire District Electric Company	\$1.04	\$22.62	4.60%	4.69%	5.00%	4.00%	3.00%	4.00%	7.67%	8.69%	9.71%
Great Plains Energy Inc.	\$0.98	\$27.11	3.61%	3.72%	6.10%	6.37%	5.00%	5.82%	8.71%	9.54%	10.10%
IDACORP, Inc.	\$2.04	\$66.17	3.08%	3.13%	4.00%	4.00%	1.00%	3.00%	4.10%	6.13%	7.14%
NorthWestern Corporation	\$1.92	\$54.44	3.53%	3.63%	5.00%	6.81%	6.50%	6.10%	8.62%	9.74%	10.46%
Offer Tail Corporation	\$1.23	\$27.08	4.54%	4.71%	NA	6.00%	9.00%	7.50%	10.68%	12.21%	13.75%
Pinnacle West Capital Corporation	\$2.50	\$64.21	3.89%	3.99%	5.20%	5.37%	4.00%	4.86%	7.97%	8.84%	9.37%
PNM Resources, Inc.	\$0.80	\$27.83	2.87%	3.00%	8.50%	8.56%	9.00%	8.69%	11.50%	11.69%	12.00%
Portland General Electric Company	\$1.20	\$37.31	3.22%	3.29%	4.10%	3.92%	6.00%	4.67%	7.20%	7.96%	9.31%
SCANA Corporation	\$2.18	\$56.09	3.89%	3.97%	4.20%	4.45%	4.50%	4.38%	8.17%	8.36%	8.47%
Westar Energy, Inc.	\$1.44	\$39.10	3.68%	3.76%	3.90%	3.40%	6.00%	4.43%	7.15%	8.20%	9.79%
Xcel Energy Inc.	\$1.28	\$35.57	3.60%	3.68%	5.00%	4.68%	4.50%	4.73%	8.18%	8.41%	8.69%
PROXY GROUP MEAN			3.71%	3.82%	5.38%	5.36%	5.61%	5.49%	8.59%	9.30%	9.98%
PROXY GROUP MEDIAN			3.68%	3.76%	5.10%	5.37%	5.50%	5.15%	8.65%	9.05%	9.79%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 30-trading day average as of October 30, 2015
- [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] Annualized Dividend	[2] Average Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Zacks Earnings Growth	[6] First Call Earnings Growth	[7] Value Line Earnings Growth	[8] Average Earnings Growth	[9] Low ROE	[10] Mean ROE	[11] High ROE
ALLETE, Inc.	ALE	\$2.02	\$49.04	4.12%	4.24%	NA	5.50%	6.50%	6.00%	9.73%	10.24%	10.75%
Alliant Energy Corporation	LNT	\$2.20	\$59.00	3.73%	3.83%	5.30%	5.75%	6.00%	5.88%	9.13%	9.52%	9.84%
Ameren Corporation	AME	\$1.70	\$40.96	4.15%	4.29%	6.80%	6.25%	7.00%	6.68%	10.53%	10.97%	11.30%
American Electric Power Company, Inc.	AEP	\$2.24	\$55.87	4.01%	4.11%	4.70%	4.63%	5.00%	4.78%	8.73%	8.88%	9.11%
Avista Corporation	AVA	\$1.32	\$32.37	4.08%	4.18%	NA	5.00%	5.00%	5.00%	9.18%	9.18%	9.18%
CMS Energy Corporation	CMS	\$1.16	\$34.22	3.39%	3.50%	6.50%	6.76%	5.50%	6.25%	8.98%	9.75%	10.26%
Dominion Resources, Inc.	D	\$2.59	\$70.50	3.67%	3.79%	6.30%	5.38%	8.00%	6.56%	9.15%	10.35%	11.82%
DTE Energy Company	DTE	\$2.92	\$79.28	3.68%	3.78%	5.50%	4.94%	5.00%	5.15%	8.92%	8.92%	9.28%
Empire District Electric Company	EDE	\$1.04	\$22.41	4.64%	4.73%	5.00%	4.00%	3.00%	4.00%	7.71%	8.73%	9.76%
Great Plains Energy Inc.	GXP	\$0.98	\$25.99	3.77%	3.88%	6.10%	6.37%	5.00%	5.82%	8.87%	9.70%	10.26%
IDACORP, Inc.	IDA	\$2.04	\$61.84	3.30%	3.35%	4.00%	4.00%	1.00%	3.00%	4.32%	6.35%	7.36%
NorthWestern Corporation	NWE	\$1.92	\$52.74	3.64%	3.75%	5.00%	6.81%	6.50%	6.10%	8.73%	9.85%	10.57%
Offer Tail Corporation	OTTR	\$1.23	\$26.71	4.61%	4.78%	NA	6.00%	9.00%	7.50%	10.74%	12.28%	13.81%
Pinnacle West Capital Corporation	PNW	\$2.50	\$61.79	4.05%	4.14%	5.20%	5.37%	4.00%	4.86%	8.13%	9.00%	9.52%
PNM Resources, Inc.	PNM	\$0.80	\$26.54	3.01%	3.14%	8.50%	8.56%	9.00%	8.69%	11.64%	11.83%	12.15%
Portland General Electric Company	POR	\$1.20	\$35.76	3.36%	3.43%	4.10%	3.92%	6.00%	4.67%	7.34%	8.11%	9.46%
SCANA Corporation	SCG	\$2.18	\$54.30	4.01%	4.10%	4.20%	4.45%	4.50%	4.38%	8.30%	8.49%	8.61%
Wester Energy, Inc.	WR	\$1.44	\$37.47	3.84%	3.93%	3.90%	3.40%	6.00%	4.43%	7.31%	8.36%	9.96%
Xcel Energy Inc.	XEL	\$1.28	\$34.40	3.72%	3.81%	5.00%	4.68%	4.50%	4.73%	8.31%	8.54%	8.81%
PROXY GROUP MEAN				3.83%	3.94%	5.38%	5.36%	5.61%	5.49%	8.71%	9.42%	10.10%
PROXY GROUP MEDIAN				3.77%	3.88%	5.10%	5.37%	5.50%	5.15%	8.73%	9.18%	9.84%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 30-trading day average as of October 30, 2015
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [8])
- [5] Source: Zacks
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- [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

Company	Ticker	[1] Annualized Dividend	[2] Average Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Zacks Earnings Growth	[6] First Call Earnings Growth	[7] Value Line Earnings Growth	[8] Average Earnings Growth	[9] Low ROE	[10] Mean ROE	[11] High ROE
ALLETE, Inc.	ALE	\$2.02	\$50.09	4.03%	4.15%	NA	5.50%	6.50%	6.00%	9.64%	10.15%	10.66%
Alliant Energy Corporation	LNT	\$2.20	\$60.23	3.65%	3.76%	5.30%	5.75%	6.00%	5.68%	9.05%	9.44%	9.76%
Ameren Corporation	AEE	\$1.70	\$40.94	4.15%	4.29%	6.80%	6.25%	7.00%	6.68%	10.53%	10.97%	11.30%
American Electric Power Company, Inc.	AEP	\$2.24	\$55.93	4.01%	4.10%	4.70%	4.63%	5.00%	4.78%	8.73%	8.88%	9.11%
Avista Corporation	AVA	\$1.32	\$32.56	4.05%	4.16%	NA	5.00%	5.00%	5.00%	9.16%	9.16%	9.16%
CMS Energy Corporation	CMS	\$1.16	\$34.14	3.40%	3.50%	6.50%	6.76%	5.50%	6.25%	8.99%	9.76%	10.27%
Dominion Resources, Inc.	D	\$2.59	\$70.68	3.66%	3.78%	6.30%	5.38%	8.00%	6.56%	9.14%	10.34%	11.81%
DTE Energy Company	DTE	\$2.92	\$79.39	3.68%	3.77%	5.50%	4.94%	5.00%	5.15%	8.71%	8.92%	9.28%
Empire District Electric Company	EDE	\$1.04	\$23.23	4.48%	4.57%	5.00%	4.00%	3.00%	4.00%	7.54%	8.57%	9.59%
Great Plains Energy Inc.	GXP	\$0.98	\$26.08	3.76%	3.87%	6.10%	6.37%	5.00%	5.82%	8.85%	9.69%	10.25%
IDACORP, Inc.	IDA	\$2.04	\$61.17	3.33%	3.38%	4.00%	4.00%	1.00%	3.00%	4.35%	6.38%	7.40%
NorthWestern Corporation	NWE	\$1.92	\$52.56	3.65%	3.76%	5.00%	6.81%	6.50%	6.10%	8.74%	9.87%	10.59%
Offet Tail Corporation	OTTR	\$1.23	\$28.37	4.34%	4.50%	NA	6.00%	9.00%	7.50%	10.47%	12.00%	13.53%
Pinnacle West Capital Corporation	PNW	\$2.50	\$61.73	4.05%	4.15%	5.20%	5.37%	4.00%	4.86%	8.13%	9.00%	9.53%
PNM Resources, Inc.	PNM	\$0.80	\$26.95	2.97%	3.10%	8.50%	8.56%	9.00%	8.69%	11.59%	11.78%	12.10%
Portland General Electric Company	POR	\$1.20	\$35.69	3.36%	3.44%	4.10%	3.92%	6.00%	4.67%	7.35%	8.11%	9.46%
SCANA Corporation	SCG	\$2.18	\$54.07	4.03%	4.12%	4.20%	4.45%	4.50%	4.38%	8.32%	8.50%	8.62%
Westar Energy, Inc.	WR	\$1.44	\$37.40	3.85%	3.94%	3.90%	3.40%	6.00%	4.43%	7.32%	8.37%	9.97%
Xcel Energy Inc.	XEL	\$1.28	\$34.26	3.74%	3.82%	5.00%	4.68%	4.50%	4.73%	8.32%	8.55%	8.83%
PROXY GROUP MEAN				3.80%	3.90%	5.38%	5.36%	5.61%	5.49%	8.68%	9.39%	10.06%
PROXY GROUP MEDIAN				3.76%	3.87%	5.10%	5.37%	5.50%	5.15%	8.74%	9.16%	9.76%

Notes:

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- [8] Equals Average([5], [6], [7])
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- [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	Stock	EPS Growth Rate Estimates										Long-Term Payout Ratio	Iterative Solution	Terminal	Terminal											
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)					(11)	(12)	(13)								
Company	Ticker	Price	Zacks	Fitch	Call	Value	Line	Average	Growth	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
ALLETE, Inc.	ALE	\$50.58	NA	5.00%	8.50%	5.00%	5.22%	6.00%	6.22%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%
Alliant Energy Corporation	LNT	\$69.06	5.30%	5.75%	6.00%	5.68%	5.22%	6.10%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%
Ameren Corporation	AEE	\$42.82	6.30%	6.25%	7.00%	6.88%	5.22%	69.00%	66.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
American Electric Power Company, Inc.	AEP	\$57.02	4.70%	4.83%	5.00%	4.78%	5.22%	63.00%	66.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Avista Corporation	AVA	\$33.45	NA	5.00%	5.00%	5.00%	5.22%	69.00%	65.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
CMS Energy Corporation	CMS	\$35.61	6.50%	6.78%	6.50%	6.25%	5.22%	61.00%	62.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Dominion Resources, Inc.	D	\$71.19	6.30%	5.38%	6.00%	5.65%	5.22%	73.00%	72.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
DTE Energy Company	DTE	\$61.21	5.50%	4.94%	5.00%	5.15%	5.22%	64.00%	61.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Empire District Electric Company	EDE	\$22.62	5.00%	4.00%	3.00%	4.00%	5.22%	60.00%	67.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Great Plains Energy Inc.	GXP	\$27.11	6.10%	6.37%	5.00%	5.82%	5.22%	70.00%	61.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
IDACORP, Inc.	IDA	\$68.17	4.00%	4.00%	1.00%	3.00%	5.22%	52.00%	58.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
NorthWestern Corporation	NWE	\$54.44	5.00%	6.81%	6.50%	6.10%	5.22%	64.00%	56.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Otter Tail Corporation	OTTR	\$27.06	NA	6.00%	6.00%	7.50%	5.22%	70.00%	69.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Pinnacle West Capital Corporation	PNW	\$64.21	5.20%	6.37%	4.00%	4.85%	5.22%	63.00%	64.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
PNM Resources, Inc.	PNM	\$27.83	6.50%	6.66%	6.00%	6.80%	5.22%	61.00%	55.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Portland General Electric Company	POR	\$37.31	4.10%	3.92%	0.00%	4.67%	5.22%	54.00%	63.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
SCANA Corporation	SCG	\$56.09	4.20%	4.45%	4.50%	4.88%	5.22%	57.00%	66.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Westar Energy, Inc.	WR	\$39.10	3.90%	3.40%	6.00%	4.43%	5.22%	61.00%	55.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Xcel Energy Inc.	XEL	\$36.57	5.00%	4.68%	4.80%	4.73%	5.22%	62.00%	65.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%

	MEAN	10.25%	8.87%

Projected Annual Earnings per Share	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ALLETE, Inc.	ALE	\$2.90	\$3.07	\$3.26	\$3.45	\$3.66	\$3.88	\$4.11	\$4.34	\$4.59	\$4.84	\$5.10	\$5.36	\$5.65	\$5.94	\$6.25	\$6.58	\$6.92
Alliant Energy Corporation	LNT	\$3.46	\$3.68	\$3.89	\$4.11	\$4.34	\$4.59	\$4.85	\$5.11	\$5.39	\$5.68	\$5.98	\$6.29	\$6.62	\$6.97	\$7.33	\$7.72	\$8.12
Ameren Corporation	AEE	\$2.40	\$2.56	\$2.73	\$2.91	\$3.11	\$3.32	\$3.53	\$3.75	\$3.97	\$4.20	\$4.43	\$4.66	\$4.90	\$5.16	\$5.43	\$5.71	\$6.01
American Electric Power Company, Inc.	AEP	\$3.34	\$3.67	\$3.97	\$4.24	\$4.53	\$4.82	\$5.12	\$5.44	\$5.77	\$6.12	\$6.48	\$6.84	\$7.20	\$7.58	\$7.98	\$8.40	\$8.83
Avista Corporation	AVA	\$1.64	\$1.63	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	\$2.86	\$3.01	\$3.17	\$3.34	\$3.51	\$3.68	\$3.85	\$4.03
CMS Energy Corporation	CMS	\$1.74	\$1.85	\$1.96	\$2.09	\$2.22	\$2.35	\$2.50	\$2.65	\$2.80	\$2.98	\$3.14	\$3.32	\$3.45	\$3.63	\$3.82	\$4.02	\$4.23
Dominion Resources, Inc.	D	\$3.06	\$3.25	\$3.46	\$3.69	\$3.93	\$4.19	\$4.46	\$4.73	\$5.01	\$5.29	\$5.58	\$5.87	\$6.18	\$6.50	\$6.84	\$7.20	\$7.57
DTE Energy Company	DTE	\$6.10	\$6.30	\$6.64	\$6.93	\$7.23	\$7.55	\$7.89	\$8.25	\$8.63	\$9.02	\$9.44	\$9.88	\$10.34	\$10.82	\$11.34	\$11.89	\$12.45
Empire District Electric Company	EDE	\$1.55	\$1.61	\$1.68	\$1.74	\$1.81	\$1.89	\$1.97	\$2.05	\$2.15	\$2.25	\$2.36	\$2.48	\$2.62	\$2.75	\$2.90	\$3.05	\$3.21
Great Plains Energy Inc.	GXP	\$1.57	\$1.69	\$1.78	\$1.86	\$1.97	\$2.08	\$2.20	\$2.33	\$2.46	\$2.59	\$2.73	\$2.87	\$3.02	\$3.18	\$3.34	\$3.52	\$3.70
IDACORP, Inc.	IDA	\$3.88	\$3.97	\$4.08	\$4.21	\$4.34	\$4.48	\$4.61	\$4.79	\$4.92	\$5.06	\$5.21	\$5.36	\$5.54	\$5.69	\$5.84	\$6.01	\$6.19
NorthWestern Corporation	NWE	\$2.00	\$3.17	\$3.37	\$3.57	\$3.79	\$4.02	\$4.26	\$4.51	\$4.78	\$5.03	\$5.30	\$5.57	\$5.88	\$6.17	\$6.49	\$6.83	\$7.18
Otter Tail Corporation	OTTR	\$1.55	\$1.67	\$1.79	\$1.93	\$2.07	\$2.23	\$2.38	\$2.54	\$2.71	\$2.87	\$3.03	\$3.19	\$3.35	\$3.53	\$3.71	\$3.91	\$4.11
Pinnacle West Capital Corporation	PNW	\$5.59	\$3.75	\$3.94	\$4.13	\$4.33	\$4.54	\$4.76	\$5.00	\$5.25	\$5.52	\$5.80	\$6.11	\$6.42	\$6.76	\$7.11	\$7.48	\$7.87
PNM Resources, Inc.	PNM	\$1.45	\$1.58	\$1.71	\$1.86	\$2.02	\$2.20	\$2.38	\$2.58	\$2.73	\$2.91	\$3.08	\$3.24	\$3.58	\$3.77	\$3.97	\$4.18	\$4.41
Portland General Electric Company	POR	\$2.18	\$2.28	\$2.38	\$2.50	\$2.62	\$2.74	\$2.87	\$3.01	\$3.16	\$3.32	\$3.48	\$3.67	\$3.88	\$4.06	\$4.27	\$4.50	\$4.73
SCANA Corporation	SCG	\$3.70	\$3.56	\$4.19	\$4.31	\$4.50	\$4.70	\$4.91	\$5.14	\$5.36	\$5.65	\$5.93	\$6.25	\$6.57	\$6.92	\$7.28	\$7.66	\$8.06
Westar Energy, Inc.	WR	\$2.35	\$2.46	\$2.58	\$2.68	\$2.80	\$2.92	\$3.05	\$3.20	\$3.35	\$3.50	\$3.70	\$3.89	\$4.09	\$4.30	\$4.53	\$4.77	\$5.01
Xcel Energy Inc.	XEL	\$2.03	\$2.13	\$2.23	\$2.33	\$2.44	\$2.56	\$2.68	\$2.81	\$2.95	\$3.10	\$3.25	\$3.43	\$3.61	\$3.80	\$4.00	\$4.20	\$4.42

Projected Annual Dividend Payout Ratio	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ALLETE, Inc.	ALE	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	62.05%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%
Alliant Energy Corporation	LNT	61.00%	61.50%	62.00%	62.50%	63.00%	63.72%	64.43%	65.15%	65.87%	66.59%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Ameren Corporation	AEE	60.00%	65.75%	62.50%	62.50%	66.00%	67.88%	69.77%	71.65%	73.54%	75.42%	77.30%	77.30%	77.30%	77.30%	77.30%	77.30%
American Electric Power Company, Inc.	AEP	63.00%	63.75%	64.50%	65.25%	66.00%	66.22%	66.43%	66.64%	66.85%	67.06%	67.27%	67.48%	67.69%	67.90%	68.11%	68.32%
Avista Corporation	AVA	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%
CMS Energy Corporation	CMS	61.00%	61.20%	61.50%	61.75%	62.00%	62.25%	62.50%	62.75%	63.00%	63.25%	63.50%	63.75%	64.00%	64.25%	64.50%	64.75%
Dominion Resources, Inc.	D	73.00%	72.75%	72.50%	72.25%	72.00%	71.25%	70.43%	69.65%	68.87%	68.09%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
DTE Energy Company	DTE	64.00%	63.25%	62.50%	61.75%	61.00%	60.25%	61.00%	61.75%	62.50%	63.25%	64.00%	64.75%	65.50%	66.25%	67.00%	67.75%
Empire District Electric Company	EDE	80.0															

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

Inputs	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
		Stock Price	Zacks	EPS Growth Rate Estimate	First Call Value Line	Average	Long-Term	Payout Ratio	2015	2019	2025	Proof	ROE	P/E Ratio
Company	Ticker	Price	Zacks	First Call	Value Line	Average	Growth	2015	2019	2025	Proof	ROE	P/E Ratio	PEG Ratio
ALLETE, Inc.	ALE	\$40.04	NA	5.00%	6.00%	8.00%	5.22%	81.00%	61.00%	67.30%	60.00	9.91%	15.00	2.89
Alleant Energy Corporation	LNT	\$69.00	5.30%	5.75%	6.00%	5.98%	5.22%	61.00%	63.00%	67.30%	60.00	8.93%	15.36	2.94
Ameren Corporation	AEE	\$40.96	6.80%	6.25%	7.00%	6.85%	5.22%	60.00%	65.00%	67.30%	60.00	10.06%	14.64	2.80
American Electric Power Company, Inc.	AEP	\$55.87	4.70%	4.69%	5.00%	4.79%	5.22%	63.00%	66.00%	67.30%	60.00	9.67%	15.81	3.05
Avista Corporation	AVA	\$32.37	NA	6.00%	5.00%	6.00%	5.22%	60.00%	65.00%	67.30%	60.00	9.53%	16.43	3.16
CMS Energy Corporation	CMS	\$34.22	6.50%	6.76%	5.50%	6.25%	5.22%	61.00%	62.00%	67.30%	60.00	9.34%	17.21	3.30
Dominion Resources, Inc.	D	\$70.50	6.30%	5.98%	8.00%	6.56%	5.22%	73.00%	72.00%	67.30%	60.00	8.91%	19.22	3.68
DTE Energy Company	DTE	\$79.28	5.50%	4.94%	5.60%	5.15%	5.22%	64.00%	61.00%	67.30%	60.00	10.07%	14.59	2.89
Empire District Electric Company	EDF	\$22.41	5.00%	4.00%	3.00%	4.00%	5.22%	60.00%	67.00%	67.30%	60.00	10.01%	14.76	2.83
Great Plains Energy Inc.	GXP	\$25.99	6.10%	6.37%	6.00%	5.92%	5.22%	70.00%	61.00%	67.30%	60.00	9.54%	15.30	3.14
IdACORP, Inc.	IDA	\$61.84	4.00%	4.00%	1.00%	3.00%	5.22%	52.00%	59.00%	67.30%	60.00	9.22%	17.72	3.59
NorthWestern Corporation	NWE	\$52.74	5.00%	6.81%	6.60%	6.10%	5.22%	64.00%	69.00%	67.30%	60.00	9.74%	15.66	3.00
Other Tail Corporation	OTTR	\$26.71	NA	6.00%	8.00%	7.80%	5.22%	76.00%	59.00%	67.30%	60.00	10.86%	13.78	2.64
Pinnacle West Capital Corporation	PNW	\$61.79	5.20%	5.37%	4.00%	4.86%	5.22%	63.00%	64.00%	67.30%	60.00	9.54%	16.41	3.14
PNM Resources, Inc.	PNM	\$26.54	8.50%	8.50%	9.00%	8.89%	5.22%	51.00%	59.00%	67.30%	60.00	10.22%	14.17	2.71
Portland General Electric Company	PGRE	\$35.76	4.10%	4.87%	6.00%	4.87%	5.22%	64.00%	63.00%	67.30%	60.00	9.58%	15.30	3.14
SCANA Corporation	SCG	\$54.30	4.20%	4.45%	4.50%	4.38%	5.22%	57.00%	55.00%	67.30%	60.00	10.12%	14.45	2.77
Westar Energy, Inc.	WR	\$37.47	3.90%	3.40%	6.00%	4.43%	5.22%	61.00%	55.00%	67.30%	60.00	9.66%	15.97	3.08
Xcel Energy Inc.	XEL	\$34.40	5.00%	4.68%	4.50%	4.73%	5.22%	62.00%	65.00%	67.30%	60.00	9.59%	16.23	3.11

MEAN 9.77%
MAX 10.36%
MIN 6.91%

Projected Annual Earnings per Share	Ticker	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ALLETE, Inc.	ALE	\$2.90	\$3.07	\$3.25	\$3.45	\$3.66	\$3.88	\$4.11	\$4.34	\$4.59	\$4.84	\$5.10	\$5.36	\$5.65	\$5.94	\$6.24	\$6.54	\$6.82
Alleant Energy Corporation	LNT	\$3.48	\$3.68	\$3.89	\$4.11	\$4.34	\$4.59	\$4.85	\$5.11	\$5.39	\$5.68	\$5.98	\$6.29	\$6.62	\$6.97	\$7.33	\$7.72	\$8.12
Ameren Corporation	AEE	\$2.40	\$2.56	\$2.73	\$2.91	\$3.11	\$3.32	\$3.53	\$3.75	\$3.97	\$4.20	\$4.43	\$4.66	\$4.90	\$5.16	\$5.43	\$5.71	\$6.01
American Electric Power Company, Inc.	AEP	\$3.34	\$3.50	\$3.67	\$3.84	\$4.03	\$4.22	\$4.42	\$4.64	\$4.87	\$5.12	\$5.38	\$5.66	\$5.96	\$6.27	\$6.60	\$6.94	\$7.30
Avista Corporation	AVA	\$1.84	\$1.93	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	\$2.86	\$3.01	\$3.17	\$3.34	\$3.51	\$3.69	\$3.89	\$4.09
CMS Energy Corporation	CMS	\$1.74	\$1.85	\$1.96	\$2.09	\$2.22	\$2.36	\$2.50	\$2.65	\$2.80	\$2.98	\$3.11	\$3.28	\$3.46	\$3.63	\$3.82	\$4.02	\$4.23
Dominion Resources, Inc.	D	\$3.06	\$3.26	\$3.46	\$3.69	\$3.93	\$4.19	\$4.46	\$4.73	\$5.01	\$5.28	\$5.58	\$5.87	\$6.18	\$6.50	\$6.84	\$7.20	\$7.57
DTE Energy Company	DTE	\$5.10	\$5.36	\$5.64	\$5.93	\$6.23	\$6.55	\$6.89	\$7.25	\$7.63	\$8.02	\$8.44	\$8.88	\$9.34	\$9.83	\$10.34	\$10.88	\$11.45
Empire District Electric Company	EDF	\$1.64	\$1.61	\$1.63	\$1.74	\$1.81	\$1.89	\$1.97	\$2.05	\$2.15	\$2.25	\$2.36	\$2.48	\$2.62	\$2.75	\$2.90	\$3.05	\$3.21
Great Plains Energy Inc.	GXP	\$1.67	\$1.66	\$1.76	\$1.80	\$1.97	\$2.08	\$2.20	\$2.33	\$2.46	\$2.59	\$2.73	\$2.87	\$3.02	\$3.18	\$3.34	\$3.52	\$3.70
IdACORP, Inc.	IDA	\$3.85	\$3.97	\$4.08	\$4.21	\$4.33	\$4.46	\$4.61	\$4.76	\$4.98	\$5.21	\$5.46	\$5.74	\$6.04	\$6.36	\$6.69	\$7.04	\$7.41
NorthWestern Corporation	NWE	\$2.00	\$2.17	\$2.37	\$2.57	\$2.79	\$3.02	\$3.26	\$3.51	\$3.76	\$4.01	\$4.28	\$4.57	\$4.86	\$5.17	\$5.49	\$5.83	\$6.19
Other Tail Corporation	OTTR	\$1.95	\$1.67	\$1.70	\$1.97	\$2.07	\$2.23	\$2.38	\$2.54	\$2.71	\$2.87	\$3.03	\$3.19	\$3.35	\$3.51	\$3.67	\$3.83	\$3.99
Pinnacle West Capital Corporation	PNW	\$3.58	\$3.76	\$3.94	\$4.13	\$4.32	\$4.52	\$4.76	\$5.00	\$5.24	\$5.48	\$5.72	\$5.96	\$6.21	\$6.46	\$6.71	\$6.97	\$7.23
PNM Resources, Inc.	PNM	\$1.45	\$1.58	\$1.71	\$1.86	\$2.02	\$2.20	\$2.38	\$2.56	\$2.73	\$2.91	\$3.08	\$3.24	\$3.41	\$3.58	\$3.77	\$3.97	\$4.16
Portland General Electric Company	PGRE	\$2.18	\$2.28	\$2.39	\$2.50	\$2.62	\$2.74	\$2.87	\$3.01	\$3.16	\$3.32	\$3.49	\$3.67	\$3.86	\$4.06	\$4.27	\$4.50	\$4.73
SCANA Corporation	SCG	\$3.70	\$3.96	\$4.13	\$4.31	\$4.50	\$4.70	\$4.91	\$5.14	\$5.38	\$5.65	\$5.94	\$6.25	\$6.57	\$6.92	\$7.28	\$7.66	\$8.06
Westar Energy, Inc.	WR	\$2.35	\$2.45	\$2.56	\$2.68	\$2.80	\$2.92	\$3.05	\$3.20	\$3.35	\$3.52	\$3.70	\$3.89	\$4.09	\$4.30	\$4.53	\$4.77	\$5.01
Xcel Energy Inc.	XEL	\$2.03	\$2.18	\$2.33	\$2.33	\$2.44	\$2.56	\$2.66	\$2.81	\$2.95	\$3.10	\$3.26	\$3.43	\$3.61	\$3.80	\$4.00	\$4.20	\$4.42

Projected Annual Dividend Payout Ratio	Ticker	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ALLETE, Inc.	ALE	61.00%	61.00%	61.00%	61.00%	61.00%	62.05%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Alleant Energy Corporation	LNT	61.00%	61.00%	62.00%	62.00%	62.00%	63.72%	64.43%	65.19%	65.87%	66.55%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Ameren Corporation	AEE	68.00%	65.75%	62.50%	60.25%	58.00%	57.98%	59.77%	61.69%	63.64%	65.62%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
American Electric Power Company, Inc.	AEP	63.00%	63.75%	64.50%	65.25%	66.00%	66.22%	66.43%	66.65%	66.87%	67.09%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Avista Corporation	AVA	69.00%	66.00%	67.00%	66.00%	65.00%	65.38%	65.77%	66.15%	66.54%	66.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
CMS Energy Corporation	CMS	61.00%	61.25%	61.50%	61.75%	62.00%	62.88%	63.77%	64.65%	65.54%	66.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Dominion Resources, Inc.	D	73.00%	72.76%	72.50%	72.25%	72.00%	71.22%	70.45%	69.68%	68.91%	68.14%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
DTE Energy Company	DTE	64.00%	63.25%	62.50%	61.75%	61.00%	62.05%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Empire District Electric Company	EDF	60.00%	60.75%	61.50%	62.25%	63.00%	63.75%	64.50%	65.25%	66.00%	66.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Great Plains Energy Inc.	GXP	70.00%	67.75%	65.50%	63.25%	61.00%	62.05%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
IdACORP, Inc.	IDA	62.00%	63.50%	65.00%	66.50%	68.00%	69.55%	71.10%	72.65%	74.20%	75.75%	77.30%	77.30%	77.30%	77.30%	77.30%	77.30%
NorthWestern Corporation	NWE	64.00%	62.75%	61.50%	60.25%	59.00%	60.38%	61.77%	63.15%	64.54%	65.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Other Tail Corporation	OTTR	76.00%	74.00%	68.00%	64.00%	60.00%	60.38%	61.77%	63.15%	64.54%	65.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Pinnacle West Capital Corporation	PNW	63.00%	63.25%	63.50%	63.75%	64.00%	64.59%	65.19%	65.78%	66.38%	66.97%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
PNM Resources, Inc.	PNM	51.00%	52.00%	53.00%	54.00%	55.00%	57.05%	59.10%	61.15%	63.20%	65.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Portland General Electric Company	PGRE	54.00%	63.75%	53.50%	53.25%	53.00%	55.36%	57.77%	60.15%	62.54%	64.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
SCANA Corporation	SCG	57.00%	56.75%	56.50%	56.25%	56.00%	57.85%	59.77%	61.68%	63.54%	65.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Westar Energy, Inc.	WR	61.00%	59.50%	58.00%	56.50%	55.00%	57.05%	58.10%	61.15%	63.20%	65.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Xcel Energy Inc.	XEL	62.00%	62.75%	63.50%	64.25%	65.00%	65.38%	65.77%	66.15%	66.54%	66.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%

Projected Annual Cash Flows	Ticker	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value
ALLETE, Inc.	ALE	\$1.68	\$1.99															

Multi-Stage Growth Discounted Cash Flow Model
180 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	Terminal							
Company	Ticker	Price	Zacks	First Call	Value Line	Average	Growth	2015	2019	2025	Proof	ROE	P/E Ratio	PEG Ratio				
ALLETE, Inc.	ALE	\$80.09	5.00%	5.50%	5.00%	5.00%	5.22%	61.00%	61.00%	67.30%	90.00	9.82%	15.41	2.88				
Alliant Energy Corporation	LNT	\$69.23	5.30%	5.75%	6.00%	5.89%	5.22%	62.00%	62.00%	67.30%	90.00	9.74%	14.68	3.00				
Ameren Corporation	AEE	\$40.94	6.80%	6.25%	7.00%	6.68%	5.22%	66.00%	66.00%	67.30%	90.00	10.08%	14.83	2.80				
American Electric Power Company, Inc.	AEP	\$55.93	4.70%	4.83%	5.00%	4.78%	5.22%	63.00%	66.00%	67.30%	90.00	9.67%	15.82	3.05				
Avista Corporation	AVA	\$32.56	NA	5.00%	5.00%	5.00%	5.22%	69.00%	69.00%	67.30%	90.00	9.51%	16.53	3.17				
CMS Energy Corporation	CMS	\$34.14	6.50%	6.76%	5.50%	6.25%	5.22%	61.00%	62.00%	67.30%	90.00	9.38%	17.17	3.29				
Domination Resources, Inc.	D	\$70.68	6.30%	5.38%	6.00%	5.66%	5.22%	73.00%	72.00%	67.30%	90.00	8.90%	19.27	3.00				
DTE Energy Company	DTE	\$79.39	5.50%	4.94%	5.00%	5.15%	5.22%	64.00%	61.00%	67.30%	90.00	10.37%	14.61	2.80				
Empire District Electric Company	EDF	\$23.23	5.00%	4.00%	3.00%	4.00%	5.22%	80.00%	67.00%	67.30%	90.00	10.27%	14.60	2.80				
Great Plains Energy Inc.	GXP	\$26.08	6.10%	6.37%	5.00%	5.62%	5.22%	70.00%	61.00%	67.30%	90.00	10.00%	14.83	2.84				
IDACORP, Inc.	IDA	\$91.17	4.00%	4.00%	1.00%	3.00%	5.22%	52.00%	58.00%	67.30%	90.00	9.26%	17.58	3.36				
NorthWestern Corporation	NWE	\$52.58	5.00%	9.81%	6.50%	6.10%	5.22%	64.00%	50.00%	67.30%	90.00	10.09%	15.61	2.99				
Other Tail Corporation	OTTR	\$28.37	NA	6.00%	9.00%	7.50%	5.22%	79.00%	39.00%	67.30%	90.00	10.09%	14.63	2.80				
Pinnacle West Capital Corporation	PNW	\$91.73	5.20%	5.37%	4.00%	4.89%	5.22%	63.00%	64.00%	67.30%	90.00	9.24%	16.40	3.14				
PNM Resources, Inc.	PNM	\$26.95	6.60%	6.59%	9.00%	6.69%	5.22%	51.00%	55.00%	67.30%	90.00	10.14%	14.38	2.76				
Portland General Electric Company	POR	\$35.69	4.10%	3.92%	6.00%	4.67%	5.22%	54.00%	53.00%	67.30%	90.00	9.65%	16.96	3.13				
SCANA Corporation	SCG	\$54.07	4.20%	4.45%	4.50%	4.38%	5.22%	57.00%	56.00%	67.30%	90.00	10.14%	14.38	2.76				
Westar Energy, Inc.	WR	\$37.40	3.90%	3.40%	6.00%	4.43%	5.22%	61.00%	55.00%	67.30%	90.00	9.86%	15.94	3.05				
Xcel Energy Inc.	XEL	\$34.26	8.00%	4.68%	4.50%	4.73%	5.22%	62.00%	65.00%	67.30%	90.00	9.60%	16.16	3.10				
												MEAN	9.75%					
												MIN	8.90%					
Projected Annual Earnings per Share																		
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ALLETE, Inc.	ALE	\$2.00	\$3.07	\$3.26	\$3.45	\$3.66	\$3.88	\$4.11	\$4.34	\$4.59	\$4.84	\$5.10	\$5.36	\$5.65	\$5.94	\$6.23	\$6.58	\$6.92
Alliant Energy Corporation	LNT	\$3.48	\$3.68	\$3.89	\$4.11	\$4.34	\$4.58	\$4.85	\$5.11	\$5.39	\$5.68	\$5.98	\$6.29	\$6.62	\$6.97	\$7.33	\$7.72	\$8.12
Ameren Corporation	AEE	\$2.40	\$2.58	\$2.73	\$2.91	\$3.11	\$3.32	\$3.55	\$3.75	\$3.97	\$4.20	\$4.43	\$4.66	\$4.90	\$5.16	\$5.43	\$5.71	\$6.01
American Electric Power Company, Inc.	AEP	\$3.34	\$3.50	\$3.67	\$3.84	\$4.03	\$4.22	\$4.42	\$4.64	\$4.87	\$5.12	\$5.36	\$5.65	\$5.96	\$6.27	\$6.60	\$6.94	\$7.30
Avista Corporation	AVA	\$1.84	\$1.93	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	\$2.86	\$3.01	\$3.17	\$3.34	\$3.51	\$3.69	\$3.89	\$4.09
CMS Energy Corporation	CMS	\$1.74	\$1.85	\$1.96	\$2.08	\$2.22	\$2.38	\$2.56	\$2.75	\$2.96	\$3.19	\$3.45	\$3.73	\$4.02	\$4.32	\$4.64	\$4.99	\$5.37
Domination Resources, Inc.	D	\$3.05	\$3.25	\$3.46	\$3.69	\$3.93	\$4.19	\$4.46	\$4.73	\$5.01	\$5.29	\$5.68	\$6.07	\$6.47	\$6.87	\$7.27	\$7.67	\$8.07
DTE Energy Company	DTE	\$5.16	\$5.36	\$5.64	\$5.93	\$6.23	\$6.55	\$6.89	\$7.25	\$7.63	\$8.02	\$8.44	\$8.88	\$9.34	\$9.83	\$10.34	\$10.88	\$11.45
Empire District Electric Company	EDF	\$1.58	\$1.61	\$1.68	\$1.74	\$1.81	\$1.89	\$1.97	\$2.05	\$2.15	\$2.25	\$2.36	\$2.48	\$2.62	\$2.76	\$2.90	\$3.05	\$3.21
Great Plains Energy Inc.	GXP	\$1.57	\$1.66	\$1.76	\$1.86	\$1.97	\$2.08	\$2.20	\$2.33	\$2.46	\$2.59	\$2.73	\$2.87	\$3.02	\$3.18	\$3.34	\$3.52	\$3.70
IDACORP, Inc.	IDA	\$3.85	\$3.97	\$4.08	\$4.21	\$4.33	\$4.46	\$4.61	\$4.76	\$4.98	\$5.21	\$5.46	\$5.74	\$6.04	\$6.36	\$6.69	\$7.04	\$7.41
NorthWestern Corporation	NWE	\$2.00	\$2.17	\$2.37	\$2.61	\$2.92	\$3.30	\$3.76	\$4.31	\$4.95	\$5.67	\$6.48	\$7.37	\$8.34	\$9.39	\$10.53	\$11.76	\$13.08
Other Tail Corporation	OTTR	\$1.55	\$1.67	\$1.79	\$1.93	\$2.07	\$2.23	\$2.38	\$2.54	\$2.72	\$2.91	\$3.10	\$3.30	\$3.51	\$3.73	\$3.95	\$4.17	\$4.41
Pinnacle West Capital Corporation	PNW	\$3.50	\$3.75	\$3.94	\$4.13	\$4.33	\$4.54	\$4.76	\$5.00	\$5.25	\$5.52	\$5.80	\$6.11	\$6.42	\$6.76	\$7.11	\$7.48	\$7.87
PNM Resources, Inc.	PNM	\$1.49	\$1.58	\$1.71	\$1.86	\$2.02	\$2.20	\$2.38	\$2.56	\$2.73	\$2.91	\$3.08	\$3.24	\$3.41	\$3.58	\$3.77	\$3.97	\$4.18
Portland General Electric Company	POR	\$2.18	\$2.28	\$2.39	\$2.50	\$2.62	\$2.74	\$2.87	\$3.01	\$3.16	\$3.32	\$3.49	\$3.67	\$3.86	\$4.06	\$4.27	\$4.50	\$4.76
SCANA Corporation	SCG	\$3.79	\$3.96	\$4.13	\$4.31	\$4.50	\$4.70	\$4.91	\$5.14	\$5.38	\$5.65	\$5.94	\$6.25	\$6.57	\$6.92	\$7.28	\$7.66	\$8.06
Westar Energy, Inc.	WR	\$2.35	\$2.45	\$2.56	\$2.68	\$2.80	\$2.92	\$3.05	\$3.20	\$3.35	\$3.52	\$3.70	\$3.89	\$4.09	\$4.30	\$4.53	\$4.77	\$5.01
Xcel Energy Inc.	XEL	\$2.63	\$2.19	\$2.23	\$2.33	\$2.44	\$2.56	\$2.68	\$2.81	\$2.95	\$3.10	\$3.26	\$3.43	\$3.61	\$3.80	\$4.00	\$4.20	\$4.42
Projected Annual Dividend Payout Ratio																		
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
ALLETE, Inc.	ALE	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Alliant Energy Corporation	LNT	61.00%	61.00%	62.00%	62.00%	63.00%	63.72%	64.43%	65.13%	65.81%	66.50%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Ameren Corporation	AEE	60.00%	65.75%	62.50%	60.25%	60.00%	57.88%	59.77%	61.65%	63.54%	65.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
American Electric Power Company, Inc.	AEP	60.00%	63.75%	64.50%	65.25%	66.00%	69.22%	66.43%	66.65%	66.87%	67.09%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Avista Corporation	AVA	69.00%	68.00%	67.00%	65.00%	65.38%	65.38%	65.77%	66.16%	66.54%	66.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
CMS Energy Corporation	CMS	61.00%	61.25%	61.50%	61.75%	62.00%	62.25%	62.50%	62.75%	63.00%	63.25%	63.50%	63.75%	64.00%	64.25%	64.50%	64.75%	
Domination Resources, Inc.	D	73.00%	72.75%	72.50%	72.25%	72.00%	71.25%	70.45%	69.65%	68.87%	68.09%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
DTE Energy Company	DTE	64.00%	63.25%	62.50%	61.75%	61.00%	60.25%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Empire District Electric Company	EDF	80.00%	79.75%	79.50%	79.25%	79.00%	79.00%	79.00%	79.15%	79.30%	79.45%	79.60%	79.75%	79.90%	80.05%	80.20%	80.35%	
Great Plains Energy Inc.	GXP	70.00%	67.75%	65.50%	63.25%	61.00%	62.05%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
IDACORP, Inc.	IDA	52.00%	53.50%	55.00%	56.50%	58.00%	59.56%	61.10%	62.65%	64.20%	65.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
NorthWestern Corporation	NWE	64.00%	62.75%	61.50%	60.25%	59.00%	60.38%	61.77%	63.15%	64.54%	65.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Other Tail Corporation	OTTR	75.00%	74.00%	73.00%	72.00%	71.00%	70.00%	69.00%	68.00%	67.00%	66.00%	65.00%	64.00%	63.00%	62.00%	61.00%	60.00%	
Pinnacle West Capital Corporation	PNW	63.00%	63.25%	63.50%	63.75%	64.00%	64.25%	64.50%	64.75%	65.00%	65.25%	65.50%	65.75%	66.00%	66.25%	66.50%	66.75%	
PNM Resources, Inc.	PNM	51.00%	52.00%	53.00%	54.00%	55.00%	57.05%	59.10%	61.15%	63.20%	65.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Portland General Electric Company	POR	54.00%	53.75%	53.50%	53.25%	53.00%	53.38%	53.77%	54.15%	54.54%	54.92%	55.30%	55.68%	56.06%	56.44%	56.82%	57.20%	
SCANA Corporation	SCG	57.00%	56.75%	56.50%	56.25%	56.00%	57.88%	59.77%	61.65%	63.54%	65.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Westar Energy, Inc.	WR	61.00%	60.50%	60.00%	59.50%	59.00%	59.00%	59.15%	59.30%	59.45%	59.60%	59.75%	59.90%	60.05%	60.20%	60.35%	60.50%	
Xcel Energy Inc.	XEL	62.00%	62.75%	63.50%	64.25%	65.00%	65.75%	66.50%	67.25%	68.00%	68.75%	69.50%	70.25%	71.00%	71.75%	72.50%	73.25%	
Projected Annual Cash Flows																		
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value
ALLETE, Inc.	ALE	\$1.88	\$1.89	\$2.11	\$2.23	\$2.37	\$2.55	\$2.74	\$2.94	\$3.16	\$3.38	\$3.61	\$3.84	\$4.08	\$4.31	\$4.54	\$4.78	\$106.64
Alliant Energy Corporation	LNT	\$2.24	\$2.30	\$2.55	\$2.71	\$2.89	\$3.09	\$3.29	\$3.51	\$3.74	\$3.98	\$4.24	\$4.48	\$4.69	\$4.94	\$5.18	\$5.43	\$127.29
Ameren Corporation	AEE	\$1.77	\$1.80	\$1.82	\$1.84	\$1.86	\$2.04	\$2.24	\$2.45	\$2.67	\$2.90	\$3.14	\$3.39	\$3.65	\$3.84	\$4.04	\$4.24	\$87.94
American Electric Power Company, Inc.</																		

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

Inputs	Stock	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	
		Price	Zacks	First Call	Value Line	Low	Growth	2015	2016	2025	Proof	ROE	P/E Ratio	PEG Ratio	Terminal
Company	Ticker	Price	Zacks	First Call	Value Line	Low	Growth	2015	2016	2025	Proof	ROE	P/E Ratio	PEG Ratio	Terminal
ALLETE, Inc.	ALE	\$66.58	NA	5.90%	6.50%	5.50%	5.22%	61.00%	61.00%	67.30%	60.00	9.63%	16.07	3.08	2030
Alliant Energy Corporation	LNT	\$69.06	5.30%	5.75%	6.00%	6.30%	5.22%	61.00%	63.00%	67.30%	60.00	9.72%	16.76	3.02	2030
Ameren Corporation	AEE	\$42.82	6.80%	6.35%	7.00%	6.25%	5.22%	69.00%	69.00%	67.30%	60.00	9.72%	16.76	3.02	2030
American Electric Power Company, Inc.	AEP	\$37.45	NA	4.83%	5.00%	4.83%	5.22%	63.00%	65.00%	67.30%	60.00	9.84%	16.40	3.14	2030
Avista Corporation	AVA	\$33.45	NA	5.00%	5.00%	5.00%	5.22%	69.00%	65.00%	67.30%	60.00	9.39%	16.69	3.25	2030
CMS Energy Corporation	CMS	\$35.61	6.50%	6.75%	5.50%	5.50%	5.22%	61.00%	62.00%	67.30%	60.00	8.95%	18.81	3.60	2030
Dominion Resources, Inc.	D	\$71.19	6.30%	5.38%	6.00%	6.38%	5.22%	73.00%	72.00%	67.30%	60.00	8.60%	20.69	4.02	2030
DTE Energy Company	DTE	\$81.21	5.50%	4.94%	5.00%	4.94%	5.22%	64.00%	61.00%	67.30%	60.00	9.90%	16.15	2.90	2030
Empire District Electric Company	EDF	\$22.82	3.00%	4.00%	3.00%	3.00%	5.22%	62.00%	62.00%	67.30%	60.00	9.54%	15.00	2.87	2030
Great Plains Energy Inc.	GXP	\$27.11	6.10%	6.35%	5.00%	5.00%	5.22%	70.00%	61.00%	67.30%	60.00	9.58%	16.26	3.11	2030
IdACORP, Inc.	IDA	\$68.17	4.00%	4.00%	1.00%	1.00%	5.22%	52.00%	58.00%	67.30%	60.00	8.48%	21.70	4.16	2030
NorthWestern Corporation	NWE	\$64.44	5.00%	6.81%	6.50%	5.00%	5.22%	64.00%	50.00%	67.30%	60.00	9.30%	17.35	3.32	2030
Otter Tail Corporation	OTTR	\$27.08	NA	6.00%	6.00%	6.00%	5.22%	79.00%	59.00%	67.30%	60.00	9.83%	16.36	2.94	2030
Pinnacle West Capital Corporation	PNW	\$64.21	5.20%	5.37%	4.00%	4.00%	5.22%	63.00%	64.00%	67.30%	60.00	9.14%	18.05	3.46	2030
PNM Resources, Inc.	PNM	\$27.83	6.50%	6.99%	6.00%	6.50%	5.22%	51.00%	55.00%	67.30%	60.00	9.94%	15.00	2.87	2030
Portland General Electric Company	POR	\$37.31	6.10%	6.00%	5.00%	5.00%	5.22%	64.00%	53.00%	67.30%	60.00	9.17%	17.94	3.44	2030
SCANA Corporation	SCG	\$56.00	4.20%	4.45%	4.80%	4.20%	5.22%	57.00%	58.00%	67.30%	60.00	9.81%	15.09	2.89	2030
Weslar Energy, Inc.	WR	\$39.10	3.90%	3.40%	6.00%	3.40%	5.22%	61.00%	55.00%	67.30%	60.00	9.19%	17.82	3.41	2030
Xcel Energy Inc.	XEL	\$35.57	5.00%	4.68%	4.50%	4.50%	5.22%	62.00%	65.00%	67.30%	60.00	9.38%	17.04	3.26	2030

MEAN 9.44%
MAX 9.84%
MIN 8.48%

Projected Annual Earnings per Share	Company	Ticker	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
			2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ALLETE, Inc.	ALE	\$2.60	\$3.23	\$3.41	\$3.50	\$3.79	\$4.00	\$4.21	\$4.44	\$4.67	\$4.92	\$5.18	\$5.45	\$5.73	\$6.03	\$6.35	\$6.68	\$7.03	\$7.39
Alliant Energy Corporation	LNT	\$4.46	\$3.66	\$3.86	\$4.06	\$4.26	\$4.51	\$4.74	\$4.99	\$5.25	\$5.53	\$5.82	\$6.13	\$6.45	\$6.78	\$7.14	\$7.51	\$7.90	\$8.29
Ameren Corporation	AEE	\$2.40	\$2.55	\$2.71	\$2.88	\$3.06	\$3.25	\$3.45	\$3.65	\$3.89	\$4.08	\$4.28	\$4.52	\$4.76	\$5.00	\$5.26	\$5.54	\$5.83	\$6.13
American Electric Power Company, Inc.	AEP	\$3.34	\$3.49	\$3.66	\$3.83	\$4.00	\$4.19	\$4.39	\$4.60	\$4.82	\$5.07	\$5.33	\$5.60	\$5.90	\$6.20	\$6.53	\$6.87	\$7.23	\$7.60
Avista Corporation	AVA	\$1.84	\$1.93	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	\$2.86	\$3.01	\$3.17	\$3.34	\$3.51	\$3.69	\$3.89	\$4.09	\$4.30
CMS Energy Corporation	CMS	\$1.74	\$1.84	\$1.94	\$2.04	\$2.15	\$2.27	\$2.40	\$2.53	\$2.66	\$2.80	\$2.95	\$3.11	\$3.27	\$3.44	\$3.62	\$3.81	\$4.01	\$4.21
Dominion Resources, Inc.	D	\$4.66	\$3.21	\$3.39	\$3.57	\$3.76	\$3.95	\$4.16	\$4.40	\$4.65	\$4.90	\$5.15	\$5.41	\$5.68	\$5.96	\$6.24	\$6.53	\$6.82	\$7.12
DTE Energy Company	DTE	\$5.10	\$5.36	\$5.62	\$5.80	\$6.18	\$6.49	\$6.81	\$7.16	\$7.52	\$7.91	\$8.32	\$8.75	\$9.21	\$9.69	\$10.19	\$10.73	\$11.29	\$11.87
Empire District Electric Company	EDF	\$1.55	\$1.60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.43	\$2.55	\$2.69	\$2.83	\$2.98	\$3.14
Great Plains Energy Inc.	GXP	\$1.57	\$1.65	\$1.73	\$1.82	\$1.91	\$2.00	\$2.10	\$2.21	\$2.32	\$2.44	\$2.57	\$2.71	\$2.85	\$2.99	\$3.15	\$3.32	\$3.49	\$3.67
IdACORP, Inc.	IDA	\$3.85	\$3.89	\$3.93	\$3.97	\$4.01	\$4.05	\$4.12	\$4.21	\$4.35	\$4.51	\$4.72	\$4.96	\$5.22	\$5.49	\$5.78	\$6.08	\$6.40	\$6.74
NorthWestern Corporation	NWE	\$2.00	\$3.14	\$3.30	\$3.40	\$3.63	\$3.82	\$4.01	\$4.21	\$4.43	\$4.65	\$4.90	\$5.16	\$5.42	\$5.70	\$6.00	\$6.31	\$6.64	\$7.00
Otter Tail Corporation	OTTR	\$1.55	\$1.64	\$1.74	\$1.85	\$1.96	\$2.07	\$2.20	\$2.32	\$2.46	\$2.61	\$2.76	\$2.92	\$3.09	\$3.27	\$3.44	\$3.63	\$3.83	\$4.04
Pinnacle West Capital Corporation	PNW	\$3.53	\$3.72	\$3.87	\$4.07	\$4.26	\$4.46	\$4.66	\$4.84	\$5.04	\$5.25	\$5.48	\$5.74	\$6.04	\$6.36	\$6.69	\$7.04	\$7.41	\$7.81
PNM Resources, Inc.	PNM	\$1.45	\$1.57	\$1.71	\$1.85	\$2.01	\$2.18	\$2.35	\$2.53	\$2.70	\$2.87	\$3.04	\$3.20	\$3.38	\$3.54	\$3.72	\$3.92	\$4.12	\$4.32
Portland General Electric Company	POR	\$2.18	\$2.27	\$2.35	\$2.45	\$2.54	\$2.64	\$2.75	\$2.87	\$3.00	\$3.15	\$3.30	\$3.46	\$3.63	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60
SCANA Corporation	SCG	\$3.79	\$3.95	\$4.12	\$4.29	\$4.47	\$4.66	\$4.86	\$5.06	\$5.32	\$5.58	\$5.86	\$6.17	\$6.49	\$6.83	\$7.18	\$7.56	\$7.95	\$8.35
Weslar Energy, Inc.	WR	\$2.36	\$2.43	\$2.51	\$2.60	\$2.69	\$2.78	\$2.88	\$3.00	\$3.13	\$3.27	\$3.43	\$3.61	\$3.80	\$4.00	\$4.20	\$4.42	\$4.65	\$4.89
Xcel Energy Inc.	XEL	\$2.03	\$2.12	\$2.22	\$2.32	\$2.42	\$2.53	\$2.65	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37	\$3.53	\$3.74	\$3.95	\$4.14	\$4.35	\$4.56

Projected Annual Dividend Payout Ratio	Company	Ticker	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
			2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ALLETE, Inc.	ALE	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%	61.00%
Alliant Energy Corporation	LNT	61.00%	61.00%	62.00%	62.00%	62.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%
Ameren Corporation	AEE	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%
American Electric Power Company, Inc.	AEP	63.00%	63.75%	64.60%	65.25%	66.00%	66.25%	66.40%	66.65%	66.85%	67.00%	67.00%	67.00%	67.00%	67.00%	67.00%	67.00%	67.00%
Avista Corporation	AVA	69.00%	68.00%	67.00%	66.00%	65.00%	64.00%	63.00%	62.00%	61.00%	60.00%	59.00%	58.00%	57.00%	56.00%	55.00%	54.00%	53.00%
CMS Energy Corporation	CMS	61.00%	61.25%	61.50%	61.75%	62.00%	62.25%	62.50%	62.75%	63.00%	63.25%	63.50%	63.75%	64.00%	64.25%	64.50%	64.75%	65.00%
Dominion Resources, Inc.	D	70.00%	72.75%	72.00%	72.25%	72.00%	71.25%	70.40%	69.55%	68.70%	67.85%	67.00%	66.15%	65.30%	64.45%	63.60%	62.75%	61.90%
DTE Energy Company	DTE	64.00%	63.25%	62.50%	61.75%	61.00%	60.25%	59.50%	58.75%	58.00%	57.25%	56.50%	55.75%	55.00%	54.25%	53.50%	52.75%	52.00%
Empire District Electric Company	EDF	80.00%	76.75%	73.50%	70.25%	67.00%	63.75%	60.50%	57.25%	54.00%	50.75%	47.50%	44.25%	41.00%	37.75%	34.50%	31.25%	28.00%
Great Plains Energy Inc.	GXP	70.00%	67.75%	65.50%	63.25%	61.00%	58.75%	56.50%	54.25%	52.00%	49.75%	47.50%	45.25%	43.00%	40.75%	38.50%	36.25%	34.00%
IdACORP, Inc.	IDA	52.00%	53.60%	55.00%	56.50%	58.00%	59.50%	61.00%	62.50%	64.00%	65.50%	67.00%	68.50%	70.00%	71.50%	73.00%	74.50%	76.00%
NorthWestern Corporation	NWE	64.00%	62.75%	61.50%	60.25%	59.00%	57.75%	56.50%	55.25%	54.00%	52.75%	51.50%	50.25%	49.00%	47.75%	46.50%	45.25%	44.00%
Otter Tail Corporation	OTTR	70.00%	74.00%	69.00%	64.00%	60.00%	56.00%	52.00%	48.00%	44.00%	40.00%	36.00%	32.00%	28.00%	24.00%	20.00%	16.00%	12.00%
Pinnacle West Capital Corporation	PNW	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%	63.00%
PNM Resources, Inc.	PNM	51.00%	52.00%	53.00%	54.00%	55.00%	56.00%	57.00%	58.00%	59.00%	60.00%	61.00%	62.00%	63.00%	64.00%	65.00%	66.00%	67.00%
Portland General Electric Company	POR	54.00%	53.75%	53.50%	53.25%	53.00%	52.75%	52.50%	52.25%	52.00%	51.75%	51.50%	51.25%	51.00%	50.75%	50.50%	50.25%	50.00%
SCANA Corporation	SCG	57.00%	56.75%	56.50%	56.25%	56.00%	55.75%	55.50%	55.25%	55.00%	54.75%	54.50%	54.25%	54.00%	53.75%	53.50%	53.25%	53.00%
Weslar Energy, Inc.	WR	61.00%	60.50%	60.00%	59.50%	59.00%	58.50%	58.00%	57.50%	57.00%	56.50%	56.00%	55.50%	55.00%	54.50%	54.00%	53.50%	53.00%
Xcel Energy Inc.	XEL	62.00%	62.75%	63.50%	6													

Multi-Stage Growth Discounted Cash Flow Model
90 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]
Company	Ticker	Price	Zacks	First Call	Value Line	Low	Growth	2015	2016	2025	Profit	ROE	P/E Ratio	PEG Ratio
ALLETE, Inc.	ALE	\$49.04	NA	5.00%	6.00%	5.50%	5.22%	61.00%	61.00%	67.30%	\$6.00	0.77%	15.58	2.68
Alliant Energy Corporation	LNT	\$89.00	5.30%	5.75%	6.00%	5.30%	5.22%	61.00%	63.00%	67.30%	\$6.00	9.72%	15.74	3.01
Ameren Corporation	AEE	\$40.06	6.80%	6.25%	7.00%	6.25%	5.22%	60.00%	56.00%	67.30%	\$6.00	6.93%	15.04	2.88
American Electric Power Company, Inc.	AEP	\$65.87	4.70%	4.63%	6.00%	4.63%	5.22%	63.00%	65.00%	67.30%	\$6.00	9.63%	16.00	3.08
Avista Corporation	AVA	\$52.37	NA	5.00%	5.00%	5.00%	5.22%	59.00%	56.00%	67.30%	\$6.00	9.53%	16.03	3.15
CMS Energy Corporation	CMS	\$34.22	6.50%	6.76%	6.00%	6.00%	5.22%	61.00%	62.00%	67.30%	\$6.00	6.14%	16.07	3.45
Dominion Resources, Inc.	D	\$70.50	6.30%	5.38%	8.00%	5.38%	5.22%	73.00%	72.00%	67.30%	\$6.00	8.63%	20.78	3.98
DTE Energy Company	DTE	\$79.28	5.00%	4.94%	5.00%	4.94%	5.22%	64.00%	61.00%	67.30%	\$6.00	10.01%	14.79	2.83
Empire District Electric Company	EDE	\$22.41	5.00%	4.00%	3.00%	3.00%	5.22%	60.00%	67.00%	67.30%	\$6.00	0.04%	15.02	2.88
Great Plains Energy Inc.	GXP	\$25.99	6.10%	6.37%	5.00%	5.00%	5.22%	70.00%	61.00%	67.30%	\$6.00	9.77%	15.58	2.88
IDACORP, Inc.	IDA	\$61.84	4.00%	4.00%	1.00%	1.00%	5.22%	62.00%	58.00%	67.30%	\$6.00	8.71%	20.27	3.88
NorthWestern Corporation	NWE	\$52.74	5.00%	5.81%	6.50%	5.00%	5.22%	64.00%	59.00%	67.30%	\$6.00	9.43%	16.81	3.22
Otter Tail Corporation	OTTR	\$26.71	NA	6.00%	9.00%	6.00%	5.22%	79.00%	59.00%	67.30%	\$6.00	9.90%	16.14	2.80
Pinnacle West Capital Corporation	PNW	\$61.79	5.20%	5.37%	4.00%	4.00%	5.22%	63.00%	64.00%	67.30%	\$6.00	9.30%	17.36	3.33
PNM Resources, Inc.	PNM	\$26.34	8.50%	8.56%	9.00%	8.50%	5.22%	51.00%	55.00%	67.30%	\$6.00	10.16%	14.34	2.75
Portland General Electric Company	POR	\$35.76	4.10%	3.92%	6.00%	3.92%	5.22%	54.00%	53.00%	67.30%	\$6.00	0.34%	17.20	3.20
SCANA Corporation	SCG	\$54.30	4.20%	4.45%	4.50%	4.20%	5.22%	57.00%	56.00%	67.30%	\$6.00	10.07%	14.62	2.80
Wester Energy, Inc.	WR	\$37.47	3.40%	6.00%	3.40%	3.40%	5.22%	61.00%	56.00%	67.30%	\$6.00	6.27%	17.08	3.27
Xcel Energy Inc.	XEL	\$34.40	5.00%	4.68%	4.50%	4.50%	5.22%	62.00%	56.00%	67.30%	\$6.00	9.52%	16.47	3.15

Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030

ALLETE, Inc.	ALE	\$2.80	\$3.06	\$3.23	\$3.41	\$3.59	\$3.76	\$4.00	\$4.21	\$4.44	\$4.67	\$4.92	\$5.18	\$5.45	\$5.73	\$6.03	\$6.35	\$6.68
Alliant Energy Corporation	LNT	\$3.46	\$3.69	\$3.86	\$4.06	\$4.28	\$4.51	\$4.74	\$4.89	\$5.26	\$5.53	\$5.82	\$6.13	\$6.45	\$6.78	\$7.14	\$7.51	\$7.90
Ameren Corporation	AEE	\$2.40	\$2.55	\$2.71	\$2.88	\$3.05	\$3.25	\$3.45	\$3.65	\$3.88	\$4.08	\$4.29	\$4.52	\$4.76	\$5.00	\$5.26	\$5.54	\$5.83
American Electric Power Company, Inc.	AEP	\$3.54	\$3.69	\$3.86	\$4.03	\$4.20	\$4.38	\$4.58	\$4.80	\$4.82	\$5.07	\$5.33	\$5.60	\$5.89	\$6.20	\$6.53	\$6.87	\$7.23
Avista Corporation	AVA	\$1.84	\$1.88	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	\$2.85	\$3.01	\$3.17	\$3.34	\$3.51	\$3.69	\$3.89	\$4.09
CMS Energy Corporation	CMS	\$1.74	\$1.84	\$1.94	\$2.04	\$2.16	\$2.27	\$2.40	\$2.53	\$2.66	\$2.80	\$2.95	\$3.11	\$3.27	\$3.44	\$3.62	\$3.81	\$4.01
Dominion Resources, Inc.	D	\$3.05	\$3.21	\$3.39	\$3.57	\$3.76	\$3.96	\$4.18	\$4.40	\$4.63	\$4.88	\$5.13	\$5.40	\$5.68	\$5.98	\$6.29	\$6.61	\$6.96
DTE Energy Company	DTE	\$5.10	\$5.35	\$5.62	\$5.89	\$6.18	\$6.49	\$6.81	\$7.16	\$7.52	\$7.91	\$8.32	\$8.75	\$9.21	\$9.69	\$10.19	\$10.73	\$11.29
Empire District Electric Company	EDE	\$1.55	\$1.60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.43	\$2.56	\$2.69	\$2.83	\$2.96
Great Plains Energy Inc.	GXP	\$1.57	\$1.65	\$1.73	\$1.82	\$1.91	\$2.00	\$2.10	\$2.21	\$2.32	\$2.42	\$2.57	\$2.71	\$2.86	\$2.99	\$3.15	\$3.32	\$3.49
IDACORP, Inc.	IDA	\$2.65	\$3.80	\$3.03	\$3.07	\$4.01	\$4.05	\$4.12	\$4.21	\$4.35	\$4.51	\$4.72	\$4.98	\$5.22	\$5.49	\$5.78	\$6.08	\$6.40
NorthWestern Corporation	NWE	\$3.89	\$4.14	\$3.30	\$3.40	\$3.63	\$3.82	\$4.01	\$4.21	\$4.43	\$4.65	\$4.90	\$5.15	\$5.42	\$5.70	\$6.00	\$6.31	\$6.64
Otter Tail Corporation	OTTR	\$1.56	\$1.64	\$1.74	\$1.85	\$1.98	\$2.07	\$2.20	\$2.32	\$2.45	\$2.59	\$2.73	\$2.87	\$3.02	\$3.17	\$3.34	\$3.51	\$3.70
Pinnacle West Capital Corporation	PNW	\$3.58	\$3.72	\$3.87	\$4.03	\$4.19	\$4.36	\$4.54	\$4.74	\$4.96	\$5.20	\$5.46	\$5.74	\$6.04	\$6.36	\$6.69	\$7.04	\$7.41
PNM Resources, Inc.	PNM	\$1.45	\$1.57	\$1.71	\$1.85	\$2.01	\$2.18	\$2.36	\$2.63	\$2.70	\$2.87	\$3.04	\$3.20	\$3.36	\$3.54	\$3.72	\$3.92	\$4.12
Portland General Electric Company	POR	\$2.18	\$2.27	\$2.36	\$2.45	\$2.54	\$2.64	\$2.75	\$2.87	\$3.00	\$3.15	\$3.30	\$3.48	\$3.66	\$3.85	\$4.06	\$4.28	\$4.48
SCANA Corporation	SCG	\$3.79	\$3.95	\$4.12	\$4.29	\$4.47	\$4.66	\$4.86	\$5.08	\$5.30	\$5.55	\$5.80	\$6.07	\$6.35	\$6.64	\$6.95	\$7.26	\$7.59
Wester Energy, Inc.	WR	\$2.35	\$2.43	\$2.51	\$2.60	\$2.69	\$2.78	\$2.86	\$3.00	\$3.13	\$3.27	\$3.43	\$3.61	\$3.80	\$4.00	\$4.20	\$4.42	\$4.65
Xcel Energy Inc.	XEL	\$2.03	\$2.12	\$2.22	\$2.32	\$2.42	\$2.53	\$2.65	\$2.77	\$2.91	\$3.05	\$3.21	\$3.37	\$3.55	\$3.74	\$3.93	\$4.14	\$4.35

Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030

ALLETE, Inc.	ALE	61.00%	61.00%	61.00%	61.00%	61.00%	62.05%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Alliant Energy Corporation	LNT	61.00%	61.50%	62.00%	62.50%	63.00%	63.72%	64.43%	65.15%	65.87%	66.59%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Ameren Corporation	AEE	69.00%	65.75%	62.50%	62.25%	60.00%	57.88%	56.77%	61.65%	63.54%	65.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
American Electric Power Company, Inc.	AEP	69.00%	67.25%	64.50%	62.25%	60.00%	60.22%	60.43%	60.65%	60.87%	61.09%	61.30%	61.50%	61.70%	61.90%	62.10%	62.30%
Avista Corporation	AVA	69.00%	68.00%	67.00%	66.00%	65.00%	65.38%	65.77%	66.15%	66.54%	66.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
CMS Energy Corporation	CMS	61.00%	61.26%	61.50%	61.75%	62.00%	62.28%	62.57%	62.86%	63.15%	63.44%	63.73%	64.02%	64.30%	64.58%	64.86%	65.14%
Dominion Resources, Inc.	D	73.00%	72.75%	72.50%	72.25%	72.00%	71.22%	70.43%	69.65%	68.87%	68.09%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
DTE Energy Company	DTE	64.00%	63.25%	62.50%	61.75%	61.00%	60.25%	61.00%	61.75%	62.50%	63.25%	64.00%	64.75%	65.50%	66.25%	67.00%	67.75%
Empire District Electric Company	EDE	80.00%	76.75%	73.50%	70.25%	67.00%	67.00%	67.10%	67.15%	67.20%	67.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Great Plains Energy Inc.	GXP	70.00%	67.75%	65.50%	63.25%	61.00%	62.65%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
IDACORP, Inc.	IDA	52.00%	53.50%	55.00%	56.50%	58.00%	60.65%	61.10%	62.65%	64.20%	65.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
NorthWestern Corporation	NWE	64.00%	62.75%	61.50%	60.25%	59.00%	60.38%	61.77%	63.15%	64.54%	65.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Otter Tail Corporation	OTTR	76.00%	74.00%	72.00%	70.00%	68.00%	66.38%	64.77%	63.16%	64.44%	65.82%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Pinnacle West Capital Corporation	PNW	63.00%	63.25%	63.50%	63.75%	64.00%	64.25%	64.50%	64.75%	65.00%	65.25%	65.50%	65.75%	66.00%	66.25%	66.50%	66.75%
PNM Resources, Inc.	PNM	51.00%	52.00%	53.00%	54.00%	55.00%	57.00%	58.10%	59.15%	60.20%	61.25%	62.30%	63.35%	64.40%	65.45%	66.50%	67.55%
Portland General Electric Company	POR	64.00%	63.75%	63.50%	63.25%	63.00%	63.88%	64.77%	65.65%	66.54%	67.42%	68.30%	69.18%	70.06%	70.94%	71.82%	72.70%
SCANA Corporation	SCG	67.00%	67.75%	68.50%	69.25%	70.00%	72.88%	73.77%	74.65%	75.54%	76.42%	77.30%	78.18%	79.06%	79.94%	80.82%	81.70%
Wester Energy, Inc.	WR	61.00%	59.50%	58.00%	56.50%	55.00%	57.00%	59.10%	61.15%	63.20%	65.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Xcel Energy Inc.	XEL	62.00%	62.75%	63.50%	64.25%	65.00%	65.38%	65.77%	66.15%	66.54%	66.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%

Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value

ALLETE, Inc.	ALE	\$1.87	\$1.97	\$2.08	\$2.19	\$2.31	\$2.46	\$2.65	\$2.85	\$3.05	\$3.26	\$3.48	\$3.67	\$3.86
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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]				
Company	Ticker	Price	Zacks	First Call	Value Line	Low	Growth	2015	2019	2025	Proof	RDE	PE Ratio	PEG Ratio				
ALLETE, Inc.	ALE	\$50.09	NA	5.50%	6.50%	5.50%	5.22%	61.00%	61.00%	67.30%	60.00	9.87%	16.81	3.05				
Alliant Energy Corporation	LNT	\$90.23	5.20%	5.75%	6.00%	5.50%	5.22%	61.00%	61.00%	67.30%	60.00	9.93%	16.07	3.08				
Ameren Corporation	AEE	\$40.84	6.00%	6.25%	7.00%	6.25%	5.22%	60.00%	56.00%	67.30%	60.00	9.93%	15.04	2.88				
American Electric Power Company, Inc.	AEP	\$55.93	4.70%	4.63%	5.00%	4.63%	5.22%	83.00%	66.00%	67.30%	60.00	9.63%	10.08	3.06				
Avista Corporation	AVA	\$32.56	NA	5.00%	5.00%	5.00%	5.22%	66.00%	66.00%	67.30%	60.00	9.51%	10.53	3.17				
CMS Energy Corporation	CMS	\$34.14	6.50%	5.76%	5.50%	5.50%	5.22%	61.00%	62.00%	67.30%	60.00	9.15%	18.03	3.45				
Dominion Resources, Inc.	D	\$70.68	6.30%	5.36%	6.00%	5.36%	5.22%	73.00%	72.00%	67.30%	60.00	8.62%	20.83	3.99				
DTE Energy Company	DTE	\$79.39	5.50%	4.94%	5.03%	4.94%	5.22%	64.00%	61.00%	67.30%	60.00	10.00%	14.81	2.84				
Empire District Electric Company	ED	\$23.23	5.00%	4.00%	3.00%	3.00%	5.22%	60.00%	67.00%	67.30%	60.00	9.79%	15.60	2.90				
Great Plains Energy Inc.	GXP	\$26.08	6.10%	6.37%	5.00%	5.00%	5.22%	70.00%	61.00%	67.30%	60.00	9.75%	15.64	2.90				
IDACORP, Inc.	IDA	\$61.17	4.00%	4.00%	1.00%	1.00%	5.22%	52.00%	58.00%	67.30%	60.00	8.75%	20.05	3.84				
NorthWestern Corporation	NWE	\$62.96	5.00%	6.81%	6.50%	5.00%	5.22%	64.00%	56.00%	67.30%	60.00	9.45%	16.75	3.21				
Otter Tail Corporation	OTTR	\$28.37	NA	6.00%	9.00%	6.00%	5.22%	79.00%	56.00%	67.30%	60.00	9.92%	16.09	3.08				
Pinnacle West Capital Corporation	PNW	\$61.73	5.20%	5.37%	4.00%	4.00%	5.22%	63.00%	64.00%	67.30%	60.00	9.30%	17.38	3.32				
PNM Resources, Inc.	PNM	\$26.95	8.50%	8.55%	8.00%	8.50%	5.22%	51.00%	55.00%	67.30%	60.00	10.03%	14.65	2.70				
Portland General Electric Company	POR	\$35.89	4.10%	3.92%	0.00%	3.92%	5.22%	54.00%	53.00%	67.30%	60.00	9.34%	17.17	3.29				
SCANA Corporation	SCG	\$54.07	4.20%	4.45%	4.00%	4.20%	5.22%	57.00%	56.00%	67.30%	60.00	10.09%	14.56	2.79				
Westar Energy, Inc.	WR	\$37.40	3.90%	3.46%	0.00%	3.46%	5.22%	61.00%	55.00%	67.30%	60.00	9.37%	17.05	3.27				
Xcel Energy Inc.	XEL	\$34.26	5.00%	4.68%	4.50%	4.50%	5.22%	62.00%	65.00%	67.30%	60.00	9.54%	16.40	3.14				
											MEAN	9.54%						
											MIN	8.62%						
											MAX	10.93%						
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ALLETE, Inc.	ALE	\$2.00	\$3.06	\$3.23	\$3.41	\$3.59	\$3.78	\$4.00	\$4.21	\$4.44	\$4.67	\$4.92	\$5.18	\$5.45	\$5.73	\$6.03	\$6.35	\$6.68
Alliant Energy Corporation	LNT	\$3.48	\$3.66	\$3.80	\$4.06	\$4.28	\$4.51	\$4.74	\$4.96	\$5.26	\$5.53	\$5.82	\$6.13	\$6.45	\$6.78	\$7.14	\$7.51	\$7.90
Ameren Corporation	AEE	\$2.40	\$2.56	\$2.71	\$2.88	\$3.05	\$3.26	\$3.45	\$3.65	\$3.86	\$4.08	\$4.20	\$4.52	\$4.76	\$5.00	\$5.26	\$5.54	\$5.83
American Electric Power Company, Inc.	AEP	\$3.34	\$3.48	\$3.66	\$3.83	\$4.00	\$4.19	\$4.39	\$4.60	\$4.82	\$5.07	\$5.33	\$5.60	\$5.90	\$6.20	\$6.53	\$6.87	\$7.23
Avista Corporation	AVA	\$1.64	\$1.93	\$2.03	\$2.13	\$2.24	\$2.36	\$2.47	\$2.69	\$2.72	\$2.86	\$3.01	\$3.17	\$3.34	\$3.51	\$3.69	\$3.89	\$4.09
CMS Energy Corporation	CMS	\$1.74	\$1.84	\$1.94	\$2.04	\$2.16	\$2.27	\$2.40	\$2.55	\$2.68	\$2.80	\$2.95	\$3.11	\$3.27	\$3.44	\$3.62	\$3.81	\$4.00
Dominion Resources, Inc.	D	\$3.05	\$3.21	\$3.39	\$3.57	\$3.76	\$3.95	\$4.18	\$4.40	\$4.63	\$4.88	\$5.13	\$5.40	\$5.68	\$5.98	\$6.29	\$6.62	\$6.98
DTE Energy Company	DTE	\$4.10	\$5.95	\$5.62	\$5.89	\$6.18	\$6.49	\$6.81	\$7.16	\$7.52	\$7.91	\$8.32	\$8.75	\$9.21	\$9.69	\$10.19	\$10.73	\$11.29
Empire District Electric Company	ED	\$1.65	\$1.60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.43	\$2.56	\$2.69	\$2.83	\$2.98
Great Plains Energy Inc.	GXP	\$1.57	\$1.85	\$1.73	\$1.82	\$1.91	\$2.00	\$2.10	\$2.21	\$2.32	\$2.44	\$2.57	\$2.71	\$2.85	\$2.99	\$3.15	\$3.32	\$3.49
IDACORP, Inc.	IDA	\$3.80	\$3.89	\$3.93	\$3.97	\$4.01	\$4.05	\$4.12	\$4.21	\$4.36	\$4.51	\$4.72	\$4.86	\$5.02	\$5.48	\$5.78	\$6.06	\$6.40
NorthWestern Corporation	NWE	\$2.96	\$3.14	\$3.30	\$3.40	\$3.63	\$3.82	\$4.01	\$4.21	\$4.43	\$4.66	\$4.90	\$5.15	\$5.42	\$5.70	\$6.00	\$6.31	\$6.64
Otter Tail Corporation	OTTR	\$1.55	\$1.64	\$1.74	\$1.85	\$1.96	\$2.07	\$2.20	\$2.32	\$2.46	\$2.60	\$2.75	\$2.91	\$3.07	\$3.24	\$3.41	\$3.51	\$3.70
Pinnacle West Capital Corporation	PNW	\$3.59	\$3.72	\$3.87	\$4.03	\$4.19	\$4.36	\$4.54	\$4.74	\$4.96	\$5.20	\$5.46	\$5.74	\$6.04	\$6.36	\$6.69	\$7.04	\$7.41
PNM Resources, Inc.	PNM	\$1.45	\$1.57	\$1.71	\$1.85	\$2.01	\$2.18	\$2.35	\$2.53	\$2.70	\$2.87	\$3.04	\$3.20	\$3.36	\$3.54	\$3.72	\$3.92	\$4.12
Portland General Electric Company	POR	\$2.18	\$2.27	\$2.36	\$2.45	\$2.54	\$2.64	\$2.75	\$2.85	\$3.00	\$3.15	\$3.30	\$3.46	\$3.66	\$3.85	\$4.05	\$4.26	\$4.48
SCANA Corporation	SCG	\$3.79	\$3.95	\$4.12	\$4.29	\$4.47	\$4.66	\$4.85	\$5.08	\$5.32	\$5.58	\$5.86	\$6.17	\$6.49	\$6.83	\$7.18	\$7.56	\$7.95
Westar Energy, Inc.	WR	\$2.36	\$2.43	\$2.51	\$2.60	\$2.69	\$2.78	\$2.86	\$3.00	\$3.19	\$3.27	\$3.43	\$3.61	\$3.80	\$4.00	\$4.20	\$4.42	\$4.65
Xcel Energy Inc.	XEL	\$2.03	\$2.12	\$2.22	\$2.32	\$2.42	\$2.53	\$2.65	\$2.77	\$2.91	\$3.05	\$3.21	\$3.37	\$3.55	\$3.74	\$3.93	\$4.14	\$4.35
Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
ALLETE, Inc.	ALE	61.00%	61.00%	61.00%	61.00%	61.00%	62.00%	63.10%	64.16%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Alliant Energy Corporation	LNT	61.00%	61.80%	62.00%	62.50%	63.00%	63.72%	64.43%	65.15%	65.87%	66.50%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Ameren Corporation	AEE	69.00%	65.75%	62.50%	60.25%	60.00%	57.88%	56.77%	61.65%	63.54%	65.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
American Electric Power Company, Inc.	AEP	63.00%	63.75%	64.50%	65.25%	66.00%	66.22%	66.43%	66.65%	66.87%	67.09%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Avista Corporation	AVA	69.00%	69.00%	67.00%	66.00%	65.00%	65.38%	65.77%	66.15%	66.54%	66.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
CMS Energy Corporation	CMS	61.00%	61.25%	61.50%	61.75%	62.00%	62.88%	63.77%	64.65%	65.54%	66.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Dominion Resources, Inc.	D	73.00%	72.75%	72.50%	72.25%	72.00%	71.22%	70.43%	69.65%	68.87%	68.00%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
DTE Energy Company	DTE	64.00%	63.25%	62.50%	61.75%	61.00%	62.03%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Empire District Electric Company	ED	80.00%	76.75%	73.50%	70.25%	67.00%	67.05%	67.10%	67.15%	67.20%	67.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Great Plains Energy Inc.	GXP	70.00%	67.75%	65.50%	63.25%	61.00%	62.05%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
IDACORP, Inc.	IDA	52.00%	53.50%	55.00%	56.50%	58.00%	56.65%	61.10%	62.65%	64.20%	65.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
NorthWestern Corporation	NWE	64.00%	62.75%	61.50%	60.25%	59.00%	60.38%	61.77%	63.15%	64.54%	65.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Otter Tail Corporation	OTTR	70.00%	74.00%	60.00%	64.00%	60.00%	60.89%	61.77%	62.65%	63.54%	64.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Pinnacle West Capital Corporation	PNW	63.00%	63.25%	63.50%	63.75%	64.00%	64.55%	65.10%	65.65%	66.20%	66.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
PNM Resources, Inc.	PNM	51.00%	52.00%	53.00%	54.00%	55.00%	57.05%	59.10%	61.15%	63.20%	65.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Portland General Electric Company	POR	64.00%	63.75%	63.50%	63.25%	63.00%	65.88%	67.77%	69.65%	71.54%	73.42%	75.30%	77.18%	79.06%	80.94%	82.82%	84.70%	
SCANA Corporation	SCG	57.00%	56.75%	56.50%	56.25%	56.00%	57.88%	59.77%	61.65%	63.54%	65.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Westar Energy, Inc.	WR	61.00%	59.80%	58.60%	56.50%	55.00%	57.05%	60.10%	61.15%	62.20%	63.25%	64.30%	65.35%	66.40%	67.45%	68.50%	69.55%	
Xcel Energy Inc.	XEL	62.00%	62.75%	63.50%	64.25%	65.00%	65.38%	65.77%	66.15%	66.54%	66.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
ALLETE, Inc.	ALE	\$1.87	\$1.87	\$2.03	\$2.19	\$2.31	\$2.48	\$2.66	\$2.85	\$3.06	\$3.29	\$3.48	\$3.67	\$3.86	\$4.05	\$4.27	\$4.49	
Alliant Energy Corporation	LNT	\$2.24	\$2.37	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22	\$3.42	\$3.64	\$3.88	\$4.12						

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

Inputs	EPS Growth Rate Estimates													Terminal	Terminal
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		
Company	Ticker	Price	Zacks	First Call	Value Line	High	Growth	2015	2019	2025	Proof	ROE	P/E Ratio	PEG Ratio	
ALLETE, Inc.	ALE	\$60.58	NA	5.50%	6.50%	6.50%	5.22%	61.00%	61.00%	67.30%	60.00	9.82%	15.08	2.89	
Alliant Energy Corporation	LNT	\$69.00	6.30%	5.75%	6.00%	6.00%	5.22%	61.00%	63.00%	67.30%	60.00	9.82%	15.07	2.89	
Ameren Corporation	AEE	\$42.92	6.50%	6.25%	7.00%	7.00%	5.22%	69.00%	66.00%	67.30%	60.00	9.83%	15.03	2.88	
American Electric Power Company, Inc.	AEP	\$87.02	4.70%	4.83%	5.00%	5.00%	5.22%	63.00%	66.00%	67.30%	60.00	9.66%	16.01	3.07	
Avesta Corporation	AVS	\$33.45	NA	5.00%	5.00%	5.00%	5.22%	69.00%	65.00%	67.30%	60.00	9.38%	16.89	3.25	
CMS Energy Corporation	CMS	\$36.61	6.50%	6.75%	6.50%	6.75%	5.22%	61.00%	62.00%	67.30%	60.00	9.31%	17.54	3.32	
Dominion Resources, Inc.	D	\$71.10	6.30%	5.38%	6.00%	6.00%	5.22%	73.00%	72.00%	67.30%	60.00	9.23%	17.88	3.20	
DTE Energy Company	DTE	\$81.21	5.50%	4.84%	5.00%	5.00%	5.22%	64.00%	61.00%	67.30%	60.00	10.07%	14.62	2.80	
Empire District Electric Company	EDF	\$22.62	5.00%	4.00%	3.00%	5.00%	5.22%	80.00%	67.00%	67.30%	60.00	10.54%	13.30	2.55	
Great Plains Energy Inc.	GXP	\$27.11	6.10%	6.37%	5.00%	6.37%	5.22%	70.00%	61.00%	67.30%	60.00	9.97%	14.60	2.85	
IDACORP, Inc.	IDA	\$65.17	4.00%	4.00%	1.00%	4.00%	5.22%	62.00%	58.00%	67.30%	60.00	9.21%	17.75	3.40	
NorthWestern Corporation	NWE	\$54.44	5.00%	6.81%	6.50%	6.81%	5.22%	64.00%	59.00%	67.30%	60.00	9.80%	15.45	2.95	
Oter Tail Corporation	OTTR	\$27.08	NA	6.00%	6.00%	6.00%	5.22%	79.00%	66.00%	67.30%	60.00	10.78%	12.74	2.44	
Pinnacle West Capital Corporation	PNW	\$64.21	5.20%	5.37%	4.00%	5.37%	5.22%	63.00%	64.00%	67.30%	60.00	9.51%	16.50	3.15	
PNM Resources, Inc.	PNM	\$27.83	6.50%	6.50%	6.00%	6.00%	5.22%	61.00%	65.00%	67.30%	60.00	10.09%	14.55	2.76	
Portland General Electric Company	POR	\$37.31	4.10%	3.92%	6.00%	6.00%	5.22%	64.00%	63.00%	67.30%	60.00	9.73%	15.71	3.01	
SCANA Corporation	SCG	\$56.09	4.20%	4.45%	4.90%	4.90%	5.22%	67.00%	66.00%	67.30%	60.00	10.00%	14.81	2.84	
Weslar Energy, Inc.	WR	\$39.10	6.00%	6.00%	6.00%	6.00%	5.22%	61.00%	65.00%	67.30%	60.00	9.92%	15.08	2.89	
Xcel Energy Inc.	XEL	\$36.67	6.00%	4.85%	4.50%	5.00%	5.22%	62.00%	65.00%	67.30%	60.00	9.82%	16.48	3.16	

MEAN 9.81%
MAX 10.78%
MIN 9.21%

Projected Annual Earnings per Share																		
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ALLETE, Inc.	ALE	\$2.00	\$3.08	\$3.29	\$3.50	\$3.73	\$3.97	\$4.22	\$4.48	\$4.74	\$5.01	\$5.28	\$5.56	\$5.85	\$6.15	\$6.47	\$6.81	\$7.17
Alliant Energy Corporation	LNT	\$3.48	\$3.69	\$3.91	\$4.14	\$4.39	\$4.66	\$4.93	\$5.21	\$5.51	\$5.81	\$6.12	\$6.44	\$6.77	\$7.13	\$7.50	\$7.89	\$8.30
Ameren Corporation	AEE	\$2.40	\$2.57	\$2.76	\$2.94	\$3.15	\$3.37	\$3.59	\$3.82	\$4.06	\$4.29	\$4.53	\$4.78	\$5.05	\$5.37	\$5.70	\$6.05	\$6.42
American Electric Power Company, Inc.	AEP	\$3.34	\$3.51	\$3.68	\$3.87	\$4.06	\$4.26	\$4.46	\$4.70	\$4.95	\$5.20	\$5.47	\$5.75	\$6.05	\$6.37	\$6.70	\$7.05	\$7.42
Avesta Corporation	AVS	\$1.84	\$1.93	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	\$2.85	\$3.01	\$3.17	\$3.34	\$3.51	\$3.68	\$3.86	\$4.04
CMS Energy Corporation	CMS	\$1.74	\$1.85	\$1.96	\$2.07	\$2.18	\$2.29	\$2.41	\$2.52	\$2.63	\$2.74	\$2.86	\$3.00	\$3.13	\$3.27	\$3.40	\$3.54	\$3.68
Dominion Resources, Inc.	D	\$3.05	\$3.20	\$3.35	\$3.50	\$3.65	\$3.81	\$3.97	\$4.13	\$4.29	\$4.45	\$4.61	\$4.78	\$4.95	\$5.12	\$5.29	\$5.46	\$5.63
DTE Energy Company	DTE	\$0.10	\$0.38	\$0.66	\$0.95	\$1.23	\$1.51	\$1.79	\$2.07	\$2.35	\$2.63	\$2.91	\$3.19	\$3.47	\$3.75	\$4.03	\$4.31	\$4.59
Empire District Electric Company	EDF	\$1.59	\$1.69	\$1.79	\$1.89	\$1.99	\$2.09	\$2.19	\$2.29	\$2.39	\$2.49	\$2.59	\$2.69	\$2.79	\$2.89	\$2.99	\$3.09	\$3.19
Great Plains Energy Inc.	GXP	\$1.57	\$1.67	\$1.78	\$1.89	\$2.01	\$2.14	\$2.27	\$2.41	\$2.55	\$2.69	\$2.84	\$2.99	\$3.14	\$3.30	\$3.47	\$3.65	\$3.85
IDACORP, Inc.	IDA	\$3.85	\$4.00	\$4.16	\$4.33	\$4.50	\$4.68	\$4.86	\$5.10	\$5.33	\$5.59	\$5.87	\$6.17	\$6.50	\$6.84	\$7.19	\$7.57	\$7.96
NorthWestern Corporation	NWE	\$2.99	\$3.19	\$3.41	\$3.64	\$3.89	\$4.14	\$4.43	\$4.71	\$4.99	\$5.28	\$5.57	\$5.86	\$6.16	\$6.46	\$6.77	\$7.08	\$7.39
Oter Tail Corporation	OTTR	\$1.56	\$1.69	\$1.84	\$2.01	\$2.19	\$2.38	\$2.58	\$2.78	\$2.98	\$3.18	\$3.36	\$3.54	\$3.72	\$3.92	\$4.12	\$4.34	\$4.56
Pinnacle West Capital Corporation	PNW	\$3.98	\$3.77	\$3.57	\$3.37	\$3.18	\$2.99	\$2.80	\$2.61	\$2.42	\$2.23	\$2.04	\$1.85	\$1.66	\$1.47	\$1.28	\$1.09	\$0.90
PNM Resources, Inc.	PNM	\$1.45	\$1.56	\$1.72	\$1.88	\$2.05	\$2.23	\$2.42	\$2.60	\$2.79	\$2.97	\$3.14	\$3.31	\$3.48	\$3.66	\$3.85	\$4.04	\$4.27
Portland General Electric Company	POR	\$2.18	\$2.21	\$2.25	\$2.29	\$2.33	\$2.37	\$2.41	\$2.45	\$2.49	\$2.53	\$2.58	\$2.63	\$2.68	\$2.74	\$2.79	\$2.84	\$2.89
SCANA Corporation	SCG	\$3.70	\$3.66	\$3.64	\$3.63	\$3.62	\$3.61	\$3.60	\$3.59	\$3.58	\$3.57	\$3.56	\$3.55	\$3.54	\$3.53	\$3.52	\$3.51	\$3.50
Weslar Energy, Inc.	WR	\$2.36	\$2.49	\$2.64	\$2.80	\$2.97	\$3.14	\$3.32	\$3.52	\$3.72	\$3.92	\$4.13	\$4.35	\$4.57	\$4.81	\$5.05	\$5.30	\$5.51
Xcel Energy Inc.	XEL	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.73	\$2.89	\$3.01	\$3.15	\$3.32	\$3.50	\$3.68	\$3.87	\$4.07	\$4.28	\$4.51

Projected Annual Dividend Payout Ratio																	
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ALLETE, Inc.	ALE	61.00%	61.00%	61.00%	61.00%	61.00%	62.05%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Alliant Energy Corporation	LNT	61.00%	61.40%	62.00%	62.50%	63.00%	63.72%	64.43%	65.14%	65.87%	66.59%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Ameren Corporation	AEE	69.00%	65.75%	62.50%	59.25%	56.00%	57.88%	59.77%	61.65%	63.54%	65.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
American Electric Power Company, Inc.	AEP	62.00%	63.75%	64.50%	65.25%	66.00%	66.75%	67.50%	68.25%	69.00%	69.75%	70.50%	71.25%	72.00%	72.75%	73.50%	74.25%
Avesta Corporation	AVS	69.00%	66.00%	67.00%	68.00%	69.00%	69.38%	69.77%	70.15%	70.54%	70.92%	71.30%	71.68%	72.06%	72.44%	72.82%	73.20%
CMS Energy Corporation	CMS	61.00%	61.20%	61.50%	61.75%	62.00%	62.25%	62.50%	62.75%	63.00%	63.25%	63.50%	63.75%	64.00%	64.25%	64.50%	64.75%
Dominion Resources, Inc.	D	72.00%	72.75%	72.50%	72.25%	72.00%	71.22%	70.43%	69.64%	68.87%	68.09%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
DTE Energy Company	DTE	64.00%	63.25%	62.50%	61.75%	61.00%	60.25%	61.15%	62.05%	62.95%	63.85%	64.75%	65.65%	66.55%	67.45%	68.35%	69.25%
Empire District Electric Company	EDF	80.00%	76.75%	73.50%	70.25%	67.00%	63.75%	60.50%	57.25%	54.00%	50.75%	47.50%	44.25%	41.00%	37.75%	34.50%	31.25%
Great Plains Energy Inc.	GXP	70.00%	67.75%	65.50%	63.25%	61.00%	62.50%	64.00%	65.50%	67.00%	68.50%	70.00%	71.50%	73.00%	74.50%	76.00%	77.50%
IDACORP, Inc.	IDA	62.00%	63.80%	65.60%	67.40%	69.20%	71.00%	72.80%	74.60%	76.40%	78.20%	80.00%	81.80%	83.60%	85.40%	87.20%	89.00%
NorthWestern Corporation	NWE	64.00%	62.75%	61.50%	60.25%	59.00%	60.38%	61.77%	63.15%	64.54%	65.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Oter Tail Corporation	OTTR	79.00%	74.00%	69.00%	64.00%	60.00%	60.38%	61.77%	63.15%	64.54%	65.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
Pinnacle West Capital Corporation	PNW	69.00%	63.25%	63.50%	63.75%	64.00%	64.55%	65.10%	65.65%	66.20%	66.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
PNM Resources, Inc.	PNM	61.00%	62.00%	63.00%	64.00%	65.00%	67.00%	69.10%	71.15%	73.20%	75.25%	77.30%	79.35%	81.40%	83.45%	85.50%	87.55%
Portland General Electric Company	POR	64.00%	63.75%	63.50%	63.25%	63.00%	62.75%	62.50%	62.25%	62.00%	61.75%	61.50%	61.25%	61.00%	60.75%	60.50%	60.25%
SCANA Corporation	SCG	67.00%	66.75%	66.50%	66.25%	66.00%	65.75%	65.50%	65.25%	65.00%	64.75%	64.50%	64.25%	64.00%	63.75%	63.50%	63.25%
Weslar Energy, Inc.	WR	61.00%	66.50%	68.00%	69.50%	71.00%	72.50%	74.00%	75.50%	77.00%	78.50%	80.00%	81.50%	83.00%	84.50%	86.00%	87.50%
Xcel Energy Inc.	XEL	62.00%	62.75%	63.50%	64.25%	65.00%	65.75%	66.50%	67.25%	68.00%	68.75%	69.50%	70.25%	71.00%	71.75%	72.50%	73.25%

Projected Annual Cash Flows																		
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value
ALLETE, Inc.	ALE	\$1.88	\$2.01	\$2.14	\$2.28	\$2.42	\$2.62	\$2.83	\$3.04	\$3.27	\$3.50	\$3.74	\$3.94	\$4.14	\$4.36	\$4.59	\$4.82	\$105.07
Alliant Energy Corporation	LNT	\$2.25	\$2.40	\$2.57	\$2.75	\$2.93	\$3.14	\$3.36	\$3.59	\$3.83	\$4.07	\$4.33	\$4.59	\$4.86	\$5.13	\$5.40	\$5.68	\$125.11
Ameren Corporation	AEE	\$1.77	\$1.81	\$1.84	\$1.88	\$1.89	\$2.06	\$2.28	\$2.50	\$2.73	\$2.96	\$3.21	\$3.47	\$3.74	\$4.03	\$4		

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	EPS Growth Rate Estimates			Long-Term		Payout Ratio		Iterative Solution		Terminal	Terminal	
Company	Ticker	Zacks	First Call	Value Line	High	Growth	2015	2019	2025	Proof	ROE	PE Ratio	PEG Ratio	
ALLETE, Inc.	ALE	\$69.04	NA	5.0%	5.0%	5.0%	5.2%	61.00%	61.00%	67.30%	6.00	10.8%	14.62	2.80
Alliant Energy Corporation	LNT	\$59.00	5.30%	5.75%	6.00%	6.00%	5.2%	61.00%	63.00%	67.30%	6.00	9.8%	15.05	2.88
Amren Corporation	AEE	\$46.80	6.80%	6.25%	7.00%	7.00%	5.2%	69.00%	65.00%	67.30%	6.00	10.16%	14.26	2.76
American Electric Power Company, Inc.	AEP	\$55.67	4.70%	4.85%	5.00%	5.00%	5.2%	63.00%	65.00%	67.30%	6.00	9.74%	15.68	3.09
Avista Corporation	AVA	\$92.37	NA	5.00%	5.00%	5.00%	5.2%	69.00%	65.00%	67.30%	6.00	9.63%	16.43	3.15
CMS Energy Corporation	CMS	\$34.22	6.50%	6.76%	6.50%	6.76%	5.2%	61.00%	62.06%	67.30%	6.00	9.47%	16.89	3.19
Dominion Resources, Inc.	D	\$70.60	6.30%	5.38%	8.00%	8.00%	5.2%	73.00%	72.00%	67.30%	6.00	9.27%	17.50	3.35
DTE Energy Company	DTE	\$79.28	5.50%	4.94%	5.00%	5.00%	5.2%	64.00%	61.00%	67.30%	6.00	10.18%	14.27	2.73
Empire District Electric Company	EDF	\$22.41	5.00%	4.00%	3.00%	3.00%	5.2%	60.00%	67.00%	67.30%	6.00	10.80%	13.17	2.52
Great Plains Energy Inc.	GXP	\$26.99	6.10%	6.37%	5.00%	6.37%	5.2%	70.00%	61.00%	67.30%	6.00	10.18%	14.28	2.73
IDACORP, Inc.	IDA	\$61.84	4.00%	4.00%	1.00%	4.00%	5.2%	52.00%	58.00%	67.30%	6.00	9.40%	16.80	3.16
NorthWestern Corporation	NWE	\$62.74	5.00%	6.81%	6.81%	6.81%	5.2%	64.00%	60.00%	67.30%	6.00	9.95%	14.98	2.87
Other Tail Corporation	OTTR	\$26.71	NA	6.00%	9.00%	3.00%	5.2%	79.00%	69.00%	67.30%	6.00	10.86%	12.57	2.41
Pinnacle West Capital Corporation	PNW	\$61.79	5.20%	5.37%	4.00%	5.37%	5.2%	63.00%	64.00%	67.30%	6.00	9.88%	16.88	3.04
PNM Resources, Inc.	PNM	\$26.84	6.50%	5.66%	9.00%	3.00%	5.2%	61.00%	55.00%	67.30%	6.00	10.31%	13.81	2.86
Portland General Electric Company	POR	\$35.78	4.10%	3.92%	6.00%	6.00%	5.2%	64.00%	63.00%	67.30%	6.00	9.92%	15.07	2.89
SCANA Corporation	SCG	\$34.30	4.00%	4.45%	4.00%	4.00%	5.2%	67.00%	68.00%	67.30%	6.00	10.16%	14.24	2.75
Westar Energy, Inc.	WR	\$37.47	3.00%	3.40%	6.00%	6.00%	5.2%	61.00%	55.00%	67.30%	6.00	10.12%	14.40	2.77
Xcel Energy Inc.	XEL	\$34.40	5.00%	4.66%	4.50%	4.50%	5.2%	62.00%	65.00%	67.30%	6.00	9.66%	15.94	3.05

MEAN 9.96%
MAX 10.86%
MIN 9.27%

Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ALLETE, Inc.	ALE	\$3.90	\$3.99	\$3.20	\$3.90	\$3.79	\$3.97	\$4.22	\$4.48	\$4.74	\$5.01	\$5.28	\$5.55	\$5.82	\$6.10	\$6.37	\$6.65	\$6.93
Alliant Energy Corporation	LNT	\$3.46	\$3.68	\$3.91	\$4.14	\$4.38	\$4.62	\$4.85	\$5.21	\$5.51	\$5.81	\$6.12	\$6.44	\$6.77	\$7.13	\$7.50	\$7.89	\$8.30
Amren Corporation	AEE	\$2.40	\$2.57	\$2.75	\$2.94	\$3.15	\$3.37	\$3.60	\$3.82	\$4.06	\$4.29	\$4.53	\$4.76	\$5.01	\$5.27	\$5.55	\$5.84	\$6.15
American Electric Power Company, Inc.	AEP	\$3.34	\$3.51	\$3.68	\$3.87	\$4.06	\$4.26	\$4.46	\$4.70	\$4.95	\$5.20	\$5.47	\$5.75	\$6.06	\$6.37	\$6.70	\$7.05	\$7.42
Avista Corporation	AVA	\$1.84	\$1.83	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	\$2.86	\$3.01	\$3.17	\$3.34	\$3.51	\$3.69	\$3.89	\$4.09
CMS Energy Corporation	CMS	\$1.74	\$1.86	\$1.98	\$2.12	\$2.26	\$2.41	\$2.57	\$2.73	\$2.89	\$3.06	\$3.23	\$3.40	\$3.57	\$3.76	\$3.96	\$4.16	\$4.38
Dominion Resources, Inc.	D	\$3.08	\$3.28	\$3.66	\$3.64	\$4.15	\$4.46	\$4.82	\$5.16	\$5.60	\$5.84	\$6.17	\$6.48	\$6.82	\$7.19	\$7.58	\$7.98	\$8.38
DTE Energy Company	DTE	\$5.10	\$5.36	\$5.68	\$5.99	\$6.32	\$6.67	\$7.03	\$7.41	\$7.81	\$8.22	\$8.65	\$9.11	\$9.58	\$10.08	\$10.61	\$11.16	\$11.74
Empire District Electric Company	EDF	\$1.55	\$1.63	\$1.71	\$1.79	\$1.88	\$1.98	\$2.08	\$2.18	\$2.29	\$2.41	\$2.54	\$2.67	\$2.81	\$2.96	\$3.11	\$3.27	\$3.44
Great Plains Energy Inc.	GXP	\$1.67	\$1.67	\$1.78	\$1.89	\$2.01	\$2.14	\$2.27	\$2.41	\$2.55	\$2.69	\$2.83	\$2.98	\$3.14	\$3.30	\$3.47	\$3.65	\$3.85
IDACORP, Inc.	IDA	\$3.85	\$4.00	\$4.16	\$4.33	\$4.50	\$4.68	\$4.88	\$5.10	\$5.33	\$5.59	\$5.87	\$6.17	\$6.50	\$6.84	\$7.19	\$7.57	\$7.98
NorthWestern Corporation	NWE	\$2.09	\$3.10	\$3.41	\$3.64	\$3.80	\$4.16	\$4.43	\$4.71	\$4.99	\$5.28	\$5.57	\$5.86	\$6.16	\$6.48	\$6.82	\$7.18	\$7.55
Other Tail Corporation	OTTR	\$1.55	\$1.69	\$1.84	\$2.01	\$2.19	\$2.38	\$2.58	\$2.78	\$2.98	\$3.18	\$3.38	\$3.54	\$3.72	\$3.92	\$4.12	\$4.34	\$4.56
Pinnacle West Capital Corporation	PNW	\$3.88	\$3.77	\$3.97	\$4.18	\$4.41	\$4.66	\$4.90	\$5.16	\$5.42	\$5.69	\$5.97	\$6.25	\$6.54	\$6.84	\$7.14	\$7.46	\$7.80
PNM Resources, Inc.	PNM	\$1.45	\$1.77	\$1.82	\$1.88	\$2.05	\$2.23	\$2.42	\$2.60	\$2.79	\$2.97	\$3.14	\$3.31	\$3.48	\$3.66	\$3.85	\$4.06	\$4.27
Portland General Electric Company	POR	\$2.18	\$2.31	\$2.45	\$2.60	\$2.75	\$2.92	\$3.09	\$3.27	\$3.45	\$3.64	\$3.83	\$4.03	\$4.24	\$4.47	\$4.70	\$4.94	\$5.20
SCANA Corporation	SCG	\$3.79	\$3.96	\$4.14	\$4.33	\$4.52	\$4.72	\$4.94	\$5.18	\$5.43	\$5.70	\$5.99	\$6.30	\$6.63	\$6.98	\$7.34	\$7.72	\$8.13
Westar Energy, Inc.	WR	\$2.35	\$2.48	\$2.64	\$2.80	\$2.97	\$3.14	\$3.33	\$3.52	\$3.72	\$3.92	\$4.13	\$4.35	\$4.57	\$4.81	\$5.08	\$5.33	\$5.61
Xcel Energy Inc.	XEL	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	\$2.86	\$3.01	\$3.16	\$3.32	\$3.50	\$3.68	\$3.87	\$4.07	\$4.29	\$4.51

Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
ALLETE, Inc.	ALE	61.00%	61.00%	61.00%	61.00%	61.00%	62.05%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Alliant Energy Corporation	LNT	61.50%	62.00%	62.50%	63.00%	63.50%	64.00%	64.50%	65.00%	65.50%	66.00%	66.50%	67.00%	67.30%	67.30%	67.30%	67.30%	
Amren Corporation	AEE	69.00%	65.75%	62.50%	60.25%	60.00%	67.88%	66.77%	61.66%	63.54%	65.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
American Electric Power Company, Inc.	AEP	63.00%	63.75%	64.50%	65.25%	66.00%	66.22%	66.43%	66.65%	66.87%	67.09%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Avista Corporation	AVA	69.00%	68.00%	67.00%	66.00%	65.00%	65.00%	65.77%	66.15%	66.54%	66.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
CMS Energy Corporation	CMS	61.00%	61.25%	61.50%	61.75%	62.00%	62.88%	63.77%	64.65%	65.54%	66.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Dominion Resources, Inc.	D	73.00%	72.75%	72.50%	72.25%	72.00%	71.22%	70.43%	69.65%	68.87%	68.09%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
DTE Energy Company	DTE	64.00%	63.25%	62.50%	61.75%	61.00%	62.05%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Empire District Electric Company	EDF	60.00%	70.75%	73.50%	76.25%	67.00%	67.05%	67.10%	67.15%	67.20%	67.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Great Plains Energy Inc.	GXP	70.00%	67.75%	65.50%	63.25%	61.00%	62.05%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
IDACORP, Inc.	IDA	52.00%	53.50%	55.00%	56.50%	58.00%	59.55%	61.10%	62.65%	64.20%	65.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
NorthWestern Corporation	NWE	64.00%	62.75%	61.00%	60.25%	59.00%	60.38%	61.77%	63.15%	64.54%	65.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Other Tail Corporation	OTTR	79.00%	74.00%	69.00%	64.00%	59.00%	60.38%	61.77%	63.15%	64.54%	65.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Pinnacle West Capital Corporation	PNW	63.00%	63.25%	63.50%	63.75%	64.00%	64.55%	65.10%	65.65%	66.20%	66.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
PNM Resources, Inc.	PNM	51.00%	52.00%	53.00%	54.00%	55.00%	56.00%	57.00%	58.00%	59.00%	60.00%	61.00%	62.00%	63.00%	64.00%	65.00%	66.00%	67.00%
Portland General Electric Company	POR	54.00%	53.75%	53.50%	53.25%	53.00%	55.36%	67.77%	60.15%	62.54%	64.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
SCANA Corporation	SCG	67.00%	66.75%	66.50%	66.25%	66.00%	67.88%	66.77%	61.66%	63.54%	65.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
Westar Energy, Inc.	WR	61.00%	60.50%	60.00%	59.50%	59.00%	67.05%	66.10%	61.15%	62.20%	63.25%	64.30%	65.35%	66.40%	67.45%	68.50%	69.55%	70.60%
Xcel Energy Inc.	XEL	62.00%	62.75%	63.50%	64.25%	65.00%	65.36%	65.72%	66.15%	66.54%	66.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%

Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value
ALLETE, Inc.	ALE	\$1.88	\$2.01	\$2.14	\$2.28	\$2.42	\$2.62	\$2.83	\$3.04	\$3.27	\$3.50	\$3.74	\$3.94	\$4.14	\$4.36	\$4.59	\$4.82	\$104.80
Alliant Energy Corporation	LNT	\$2.25	\$2.42	\$2.57	\$2.73	\$2.89	\$3.14	\$3.38	\$3.63	\$3.87	\$4.12	\$4.36	\$4.60	\$4.85	\$5.08	\$5.31	\$5.56	\$124.98
Amren Corporation	AEE	\$1.81	\$1.81	\$1.84	\$1.86	\$1.89	\$2.08	\$2.28	\$2.50	\$2.73	\$2.96	\$3.21	\$3.47	\$3.75	\$4.03	\$4.34	\$4.64	\$86.21
American Electric Power Company, Inc.	AEP	\$2.21	\$2.35	\$2.49	\$2.65	\$2.81	\$2.96	\$3.13	\$3.30	\$3.48	\$3.67	\$3.87	\$4.08	\$4.29	\$4.51	\$4.75	\$5.00	\$116.35
Avista Corporation	AVA	\$1.33	\$1.38	\$1.43	\$1.48	\$1.53	\$1.61	\$1.70	\$1.80	\$1.91	\$2.02	\$2.13	\$2.25	\$2.36	\$2.49	\$2.62	\$2.75	\$67.18
CMS Energy Corporation	CMS	\$1.13	\$1.21	\$1.30	\$1.40	\$1.50	\$1.62	\$1.74	\$1.87	\$2.01	\$2.14	\$2.28	\$2.41	\$2.53	\$2.66	\$2.80	\$2.95	\$72.89
Dominion Resources, Inc.	D	\$2.40	\$2.56	\$2.79	\$3.00	\$3.23	\$3.45	\$3.68	\$3.93	\$4.20	\$4.47	\$4.74	\$5.00	\$5.26	\$5.53	\$5.80	\$6.07	\$146.80
DTE Energy Company	D																	

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

Inputs	Stock	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
		EPS Growth Rate Estimates	Long-Term	Payout Ratio	Iterative Solution	Terminal	Terminal							
Company	Ticker	Price	Zacks	First Call	Value Line	High	Growth	2015	2019	2025	Proof	ROE	P/E Ratio	PEG Ratio
ALLETE, Inc.	ALE	\$50.09	NA	5.30%	6.50%	6.50%	5.22%	61.00%	61.00%	67.30%	60.00	9.96%	14.63	2.86
Alliant Energy Corporation	LNT	\$60.23	5.30%	5.75%	6.00%	6.00%	5.22%	63.00%	63.00%	67.30%	60.00	9.83%	13.8	2.64
Ameren Corporation	AEE	\$40.94	6.80%	6.25%	7.00%	7.00%	5.22%	69.00%	69.00%	67.30%	60.00	10.18%	14.35	2.75
American Electric Power Company, Inc.	AEP	\$85.93	4.70%	4.83%	5.00%	5.00%	5.22%	63.00%	66.00%	67.30%	60.00	9.73%	15.89	3.01
Avista Corporation	AVA	\$32.56	NA	5.00%	5.00%	5.00%	5.22%	69.00%	65.00%	67.30%	60.00	9.51%	16.53	3.17
CMS Energy Corporation	CMS	\$94.14	6.80%	6.76%	5.50%	5.70%	5.22%	61.00%	62.00%	67.30%	60.00	9.48%	16.62	3.18
Dominion Resources, Inc.	D	\$70.88	6.30%	5.38%	6.60%	6.60%	6.22%	73.00%	72.00%	67.30%	60.00	9.26%	17.55	3.36
DTE Energy Company	DTE	\$79.99	5.60%	4.94%	5.00%	5.00%	5.22%	64.00%	61.00%	67.30%	60.00	10.18%	14.29	2.74
Empire District Electric Company	EDE	\$23.23	5.00%	4.00%	3.00%	3.00%	5.22%	80.00%	67.00%	67.30%	60.00	10.40%	13.88	2.62
Great Plains Energy Inc.	GXP	\$26.68	6.10%	6.37%	5.00%	5.37%	6.22%	70.00%	61.00%	67.30%	60.00	10.16%	14.33	2.74
IDACORP, Inc.	IDA	\$61.17	4.00%	4.00%	1.00%	4.00%	5.22%	52.00%	58.00%	67.30%	60.00	9.59%	16.42	3.14
NorthWestern Corporation	NWE	\$62.56	5.00%	6.81%	6.50%	6.81%	5.22%	64.00%	59.00%	67.30%	60.00	9.97%	14.93	2.86
Otter Tail Corporation	OTTR	\$28.37	NA	6.00%	9.00%	9.00%	5.22%	79.00%	69.00%	67.30%	60.00	10.53%	13.34	2.56
Pinnacle West Capital Corporation	PNW	\$61.73	5.20%	5.30%	4.00%	5.37%	6.22%	63.00%	64.00%	67.30%	60.00	9.69%	15.89	3.04
PNM Resources, Inc.	PNM	\$26.68	6.50%	8.56%	9.00%	9.00%	5.22%	61.00%	55.00%	67.30%	60.00	10.24%	14.12	2.70
Portland General Electric Company	PCR	\$35.60	4.10%	3.92%	6.00%	6.00%	5.22%	64.00%	63.00%	67.30%	60.00	9.93%	15.04	2.88
SCANA Corporation	SCG	\$54.07	4.20%	4.45%	4.50%	4.50%	5.22%	57.00%	58.00%	67.30%	60.00	10.18%	14.28	2.73
Weslar Energy, Inc.	WR	\$37.40	3.00%	3.40%	6.00%	6.00%	5.22%	61.00%	55.00%	67.30%	60.00	10.18%	14.44	2.70
Xcel Energy Inc.	XEL	\$34.26	5.00%	4.68%	4.50%	5.00%	5.22%	62.00%	65.00%	67.30%	60.00	9.68%	15.88	3.04

MEAN 0.92%
MAX 10.53%
MIN 8.26%

Projected Annual Earnings per Share	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
ALLETE, Inc.	ALE	\$2.90	\$3.09	\$3.29	\$3.50	\$3.73	\$3.97	\$4.22	\$4.48	\$4.74	\$5.01	\$5.28	\$5.56	\$5.85	\$6.15	\$6.47	\$6.81
Alliant Energy Corporation	LNT	\$3.46	\$3.69	\$3.91	\$4.14	\$4.39	\$4.66	\$4.93	\$5.21	\$5.51	\$5.81	\$6.12	\$6.44	\$6.77	\$7.13	\$7.50	\$7.89
Ameren Corporation	AEE	\$2.40	\$2.57	\$2.75	\$2.94	\$3.15	\$3.37	\$3.59	\$3.82	\$4.06	\$4.29	\$4.53	\$4.76	\$5.01	\$5.27	\$5.55	\$5.84
American Electric Power Company, Inc.	AEP	\$3.34	\$3.51	\$3.68	\$3.87	\$4.06	\$4.26	\$4.48	\$4.70	\$4.95	\$5.20	\$5.47	\$5.75	\$6.03	\$6.32	\$6.60	\$6.89
Avista Corporation	AVA	\$1.84	\$1.93	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	\$2.86	\$3.01	\$3.17	\$3.34	\$3.51	\$3.69	\$3.89
CMS Energy Corporation	CMS	\$1.74	\$1.86	\$1.98	\$2.12	\$2.26	\$2.41	\$2.57	\$2.73	\$2.89	\$3.06	\$3.23	\$3.40	\$3.57	\$3.76	\$3.95	\$4.16
Dominion Resources, Inc.	D	\$3.06	\$3.20	\$3.36	\$3.54	\$3.74	\$3.95	\$4.18	\$4.42	\$4.67	\$4.93	\$5.19	\$5.46	\$5.74	\$6.03	\$6.33	\$6.64
DTE Energy Company	DTE	\$5.10	\$5.38	\$5.68	\$5.99	\$6.32	\$6.67	\$7.03	\$7.41	\$7.81	\$8.22	\$8.65	\$9.11	\$9.58	\$10.08	\$10.61	\$11.16
Empire District Electric Company	EDE	\$1.95	\$1.63	\$1.71	\$1.79	\$1.88	\$1.98	\$2.08	\$2.18	\$2.29	\$2.41	\$2.54	\$2.67	\$2.81	\$2.96	\$3.11	\$3.27
Great Plains Energy Inc.	GXP	\$1.67	\$1.67	\$1.76	\$1.86	\$2.01	\$2.14	\$2.27	\$2.41	\$2.55	\$2.69	\$2.83	\$3.0	\$3.14	\$3.3	\$3.47	\$3.65
IDACORP, Inc.	IDA	\$3.85	\$4.00	\$4.16	\$4.33	\$4.50	\$4.68	\$4.85	\$5.03	\$5.21	\$5.39	\$5.57	\$5.75	\$5.93	\$6.11	\$6.29	\$6.47
NorthWestern Corporation	NWE	\$2.00	\$2.11	\$2.24	\$2.38	\$2.53	\$2.69	\$2.85	\$3.01	\$3.17	\$3.33	\$3.49	\$3.65	\$3.81	\$3.97	\$4.13	\$4.29
Otter Tail Corporation	OTTR	\$1.56	\$1.60	\$1.64	\$2.01	\$2.38	\$2.75	\$3.12	\$3.49	\$3.86	\$4.23	\$4.59	\$4.96	\$5.32	\$5.68	\$6.04	\$6.4
Pinnacle West Capital Corporation	PNW	\$3.58	\$3.77	\$3.97	\$4.10	\$4.41	\$4.65	\$4.90	\$5.16	\$5.43	\$5.72	\$6.02	\$6.33	\$6.64	\$7.01	\$7.38	\$7.76
PNM Resources, Inc.	PNM	\$1.45	\$1.58	\$1.72	\$1.88	\$2.05	\$2.23	\$2.42	\$2.60	\$2.79	\$2.97	\$3.14	\$3.31	\$3.48	\$3.66	\$3.85	\$4.04
Portland General Electric Company	POR	\$2.18	\$2.31	\$2.45	\$2.60	\$2.75	\$2.92	\$3.09	\$3.27	\$3.45	\$3.64	\$3.83	\$4.03	\$4.24	\$4.47	\$4.70	\$4.94
SCANA Corporation	SCG	\$3.70	\$3.96	\$4.14	\$4.33	\$4.52	\$4.72	\$4.94	\$5.18	\$5.43	\$5.70	\$5.99	\$6.30	\$6.63	\$6.98	\$7.34	\$7.72
Weslar Energy, Inc.	WR	\$2.36	\$2.49	\$2.64	\$2.80	\$2.97	\$3.14	\$3.33	\$3.52	\$3.72	\$3.92	\$4.13	\$4.35	\$4.57	\$4.81	\$5.06	\$5.33
Xcel Energy Inc.	XEL	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	\$2.86	\$3.01	\$3.16	\$3.32	\$3.50	\$3.68	\$3.87	\$4.07	\$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	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
ALLETE, Inc.	ALE	61.00%	61.00%	61.00%	61.00%	61.00%	62.05%	62.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%
Alliant Energy Corporation	LNT	61.00%	61.00%	62.00%	62.50%	63.00%	63.72%	64.45%	65.18%	65.87%	66.59%	67.30%	67.30%	67.30%	67.30%	67.30%
Ameren Corporation	AEE	69.00%	65.75%	62.60%	59.25%	56.00%	57.88%	59.77%	61.65%	63.54%	65.42%	67.30%	67.30%	67.30%	67.30%	67.30%
American Electric Power Company, Inc.	AEP	69.00%	63.75%	64.50%	65.25%	66.00%	66.22%	66.43%	66.65%	66.87%	67.09%	67.30%	67.30%	67.30%	67.30%	67.30%
Avista Corporation	AVA	69.00%	69.00%	67.00%	66.00%	65.00%	65.77%	66.18%	66.18%	66.18%	66.18%	66.18%	66.18%	66.18%	66.18%	66.18%
CMS Energy Corporation	CMS	61.00%	61.25%	61.50%	61.75%	62.00%	62.85%	63.77%	64.68%	65.54%	66.42%	67.30%	67.30%	67.30%	67.30%	67.30%
Dominion Resources, Inc.	D	73.00%	72.75%	72.50%	72.25%	72.00%	71.22%	70.49%	69.69%	68.87%	68.09%	67.30%	67.30%	67.30%	67.30%	67.30%
DTE Energy Company	DTE	64.00%	63.25%	62.50%	61.75%	61.00%	62.05%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%
Empire District Electric Company	EDE	80.00%	76.75%	73.50%	70.25%	67.00%	67.05%	67.10%	67.15%	67.20%	67.25%	67.30%	67.30%	67.30%	67.30%	67.30%
Great Plains Energy Inc.	GXP	70.00%	67.75%	65.50%	63.25%	61.00%	62.05%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%
IDACORP, Inc.	IDA	52.00%	53.50%	55.00%	56.50%	58.00%	58.5%	61.00%	62.58%	64.20%	65.75%	67.30%	67.30%	67.30%	67.30%	67.30%
NorthWestern Corporation	NWE	64.00%	62.75%	61.50%	60.25%	59.00%	60.38%	61.77%	63.15%	64.54%	65.92%	67.30%	67.30%	67.30%	67.30%	67.30%
Otter Tail Corporation	OTTR	73.00%	74.00%	75.00%	76.00%	77.00%	78.00%	79.00%	80.00%	81.00%	82.00%	83.00%	84.00%	85.00%	86.00%	87.00%
Pinnacle West Capital Corporation	PNW	63.00%	63.25%	63.50%	63.75%	64.00%	64.5%	65.0%	65.5%	66.0%	66.5%	67.0%	67.30%	67.30%	67.30%	67.30%
PNM Resources, Inc.	PNM	51.00%	52.00%	53.00%	54.00%	55.00%	57.05%	59.10%	61.15%	63.20%	65.25%	67.30%	67.30%	67.30%	67.30%	67.30%
Portland General Electric Company	POR	54.00%	53.75%	53.50%	53.25%	53.00%	53.38%	57.77%	60.15%	62.54%	64.92%	67.30%	67.30%	67.30%	67.30%	67.30%
SCANA Corporation	SCG	57.00%	56.75%	56.50%	56.25%	56.00%	57.88%	59.77%	61.65%	63.54%	65.42%	67.30%	67.30%	67.30%	67.30%	67.30%
Weslar Energy, Inc.	WR	61.00%	59.50%	58.00%	56.50%	55.00%	57.05%	59.10%	61.15%	63.20%	65.25%	67.30%	67.30%	67.30%	67.30%	67.30%
Xcel Energy Inc.	XEL	62.00%	62.75%	63.50%	64.25%	65.00%	65.77%	66.15%	66.54%	66.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%

Projected Annual Cash Flows	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value
ALLETE, Inc.	ALE	\$1.88	\$2.01	\$2.14	\$2.28	\$2.42	\$2.62	\$2.83	\$3.04	\$3.27	\$3.50	\$3.74	\$3.99	\$4.24	\$4.49	\$4.74	\$4.82
Alliant Energy Corporation	LNT	\$2.23	\$2.40	\$2.67	\$2.76	\$3.03	\$3.14	\$3.36	\$3.59	\$3.83	\$4.07	\$4.33	\$4.58	\$4.80	\$5.05	\$5.31	\$5.59
Ameren Corporation	AEE	\$1.77	\$1.81	\$1.84	\$1.86	\$1.88	\$2.08	\$2.28	\$2.50	\$2.73	\$2.96	\$3.21	\$3.37	\$3.55	\$3.74	\$3.93	\$4.14
American Electric Power Company, Inc.	AEP	\$2.21															

Multi-Stage DCF Notes:

- [1] Source: Bloomberg; based on 30-, 90-, and 180-day historical average
- [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 the IRR (internal rate of return) that sets Column [10] equal to \$0.00; result of Excel Solver function
- [12] Equals Column [53] / Column [30]
- [13] Equals Column [12] / (Column [6] 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 [6] - Column [5]) / (2025 - 2020 + 1)) x (2020 - 2019)))) x Column [16]
- [21] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2025 - 2020 + 1)) x (2021 - 2019)))) x Column [20]
- [22] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2025 - 2020 + 1)) x (2022 - 2019)))) x Column [21]
- [23] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2025 - 2020 + 1)) x (2023 - 2019)))) x Column [22]
- [24] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2025 - 2020 + 1)) x (2024 - 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 [6]
- [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 [8]
- [42] Equals Column [8]
- [43] Equals Column [8]
- [44] Equals Column [8]
- [45] Equals Column [8]
- [46] Equals Column [8]
- [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 (10/30/2015 - 12/31/2015) / 365 x Column [47]
- [67] Equals Column [47] x (1 + 5 x Column [5])
- [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	Current 30-Year Treasury (30-day average)	Implied Market Risk Premium
13.22%	2.90%	10.32%

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	12,513.79	0.06%	1.06%	5.90%	6.99%	0.0045%
ALCOA INC	AA	11,699.45	0.06%	1.34%	12.30%	13.73%	0.0083%
AMERICAN AIRLINES GROUP INC	AAL	29,133.65	0.15%	0.84%	18.37%	19.29%	0.0290%
ADVANCE AUTO PARTS INC	AAP	14,528.53	0.08%	0.12%	13.81%	13.94%	0.0105%
APPLE INC	AAPL	666,252.05	3.44%	1.82%	15.14%	17.10%	0.5889%
ABBVIE INC	ABBV	98,571.71	0.51%	3.39%	8.30%	11.83%	0.0603%
AMERISOURCEBERGEN CORP	ABC	20,865.67	0.11%	1.15%	13.09%	14.31%	0.0154%
ABBOTT LABORATORIES	ABT	66,771.78	0.35%	2.13%	12.14%	14.40%	0.0497%
ACE LTD	ACE	36,778.77	0.19%	2.34%	11.20%	13.67%	0.0260%
ACCENTURE PLC-CL A	ACN	70,441.12	0.36%	2.05%	10.37%	12.52%	0.0456%
ADOBE SYSTEMS INC	ADBE	44,223.55	0.23%	0.00%	18.87%	18.87%	0.0431%
ANALOG DEVICES INC	ADI	18,858.13	0.10%	2.61%	11.38%	14.14%	0.0138%
ARCHER-DANIELS-MIDLAND CO	ADM	27,804.18	0.14%	2.43%	3.65%	6.13%	0.0088%
AUTOMATIC DATA PROCESSING	ADP	40,474.13	0.21%	2.31%	10.40%	12.83%	0.0268%
ALLIANCE DATA SYSTEMS CORP	ADS	18,264.78	0.09%	0.00%	14.50%	14.50%	0.0137%
AUTODESK INC	ADSK	12,483.93	0.06%	0.00%	11.99%	11.99%	0.0077%
ADT CORP/THE	ADT	5,614.57	0.03%	2.52%	6.33%	8.93%	0.0026%
AMEREN CORPORATION	AEE	10,598.29	0.05%	3.83%	6.77%	10.73%	0.0059%
AMERICAN ELECTRIC POWER	AEP	27,804.81	0.14%	3.78%	5.34%	9.22%	0.0133%
AES CORP	AES	7,476.95	0.04%	3.65%	4.39%	8.13%	0.0031%
AETNA INC	AET	40,023.79	0.21%	0.87%	11.95%	12.88%	0.0266%
AFAC INC	AFL	27,456.75	0.14%	2.48%	9.05%	11.64%	0.0165%
ALLERGAN PLC	AGN	121,424.78	0.63%	0.00%	12.40%	12.40%	0.0779%
AMERICAN INTERNATIONAL GROUP	AIG	81,592.51	0.42%	1.26%	9.04%	10.35%	0.0437%
APARTMENT INVT & MGMT CO -A	AIV	6,124.67	0.03%	3.03%	7.21%	10.34%	0.0033%
ASSURANT INC	AIZ	5,447.71	0.03%	1.60%	8.62%	10.29%	0.0029%
AKAMAI TECHNOLOGIES INC	AKAM	10,862.16	0.06%	0.00%	15.40%	15.40%	0.0086%
ALLSTATE CORP	ALL	24,776.13	0.13%	1.93%	9.70%	11.73%	0.0150%
ALLEGION PLC	ALLE	6,250.58	0.03%	0.59%	14.85%	15.48%	0.0050%
ALTERA CORP	ALTR	15,915.16	0.08%	1.34%	11.93%	13.36%	0.0110%
ALEXION PHARMACEUTICALS INC	ALXN	39,803.22	0.21%	0.00%	21.73%	21.73%	0.0447%
APPLIED MATERIALS INC	AMAT	20,134.39	0.10%	2.41%	12.66%	15.22%	0.0158%
AMETEK INC	AME	13,275.43	0.07%	0.67%	9.41%	10.11%	0.0089%
AFFILIATED MANAGERS GROUP	AMG	9,785.24	0.05%	0.00%	13.08%	13.08%	0.0066%
AMGN INC	AMGN	119,940.04	0.62%	2.00%	9.68%	11.77%	0.0730%
AMERIPRISE FINANCIAL INC	AMP	20,559.59	0.11%	2.24%	11.65%	14.02%	0.0149%
AMERICAN TOWER CORP	AMT	43,301.58	0.22%	1.73%	14.10%	15.95%	0.0357%
AMAZON.COM INC	AMZN	293,398.14	1.52%	0.00%	50.72%	50.72%	0.7692%
AUTONATION INC	AN	6,990.38	0.04%	0.00%	13.29%	13.29%	0.0048%
ANTHEM INC	ANTM	36,315.87	0.19%	1.80%	9.61%	11.49%	0.0216%
AON PLC	AON	25,559.18	0.13%	1.24%	10.94%	12.25%	0.0162%
APACHE CORP	APA	17,814.55	0.09%	2.12%	-2.46%	-0.36%	-0.0003%
ANADARKO PETROLEUM CORP	APC	33,984.59	0.18%	1.62%	8.33%	10.02%	0.0176%
AIR PRODUCTS & CHEMICALS INC	APD	29,878.26	0.15%	2.35%	9.33%	11.79%	0.0182%
AMPHENOL CORP-CL A	APH	16,761.96	0.09%	0.98%	8.70%	9.71%	0.0084%
AIRGAS INC	ARG	7,178.73	0.04%	2.51%	9.08%	11.69%	0.0043%
ACTIVISION BLIZZARD INC	ATVI	25,340.75	0.13%	0.66%	9.48%	10.17%	0.0133%
AVALONBAY COMMUNITIES INC	AVB	23,235.29	0.12%	2.86%	7.65%	10.61%	0.0127%
AVAGO TECHNOLOGIES LTD	AVGO	33,983.73	0.18%	1.24%	20.78%	22.15%	0.0389%
VERY DENNISON CORP	AVY	5,940.71	0.03%	2.31%	7.30%	9.70%	0.0030%
AMERICAN EXPRESS CO	AXP	72,105.86	0.37%	1.54%	9.42%	11.03%	0.0411%
AUTOZONE INC	AZO	23,912.93	0.12%	0.00%	12.77%	12.77%	0.0158%
BOEING CO/THE	BA	99,204.48	0.51%	2.46%	11.28%	13.88%	0.0712%
BANK OF AMERICA CORP	BAC	174,721.41	0.90%	1.19%	20.95%	22.27%	0.2011%
BAXTER INTERNATIONAL INC	BAX	20,397.70	0.11%	3.41%	9.40%	12.97%	0.0137%
BED BATH & BEYOND INC	BBBY	9,951.75	0.05%	0.00%	7.12%	7.12%	0.0037%
BB&T CORP	BBT	28,982.57	0.15%	2.83%	11.30%	14.28%	0.0214%
BEST BUY CO INC	BBY	12,070.35	0.06%	3.54%	10.47%	14.20%	0.0089%
CR BARD INC	BCR	13,768.67	0.07%	0.49%	13.78%	14.31%	0.0102%
BECTON DICKINSON AND CO	BDX	29,965.45	0.15%	1.66%	11.20%	12.95%	0.0201%
FRANKLIN RESOURCES INC	BEN	25,019.22	0.13%	1.68%	6.57%	8.30%	0.0107%
BROWN-FORMAN CORP-CLASS B	BF/B	22,649.58	0.12%	1.27%	8.80%	10.12%	0.0118%
BAKER HUGHES INC	BHI	22,973.05	0.12%	1.29%	8.10%	9.44%	0.0112%
BIOGEN INC	BIIB	64,755.58	0.33%	0.00%	12.00%	12.00%	0.0402%
BANK OF NEW YORK MELLON CORP	BK	46,086.46	0.24%	1.64%	12.57%	14.30%	0.0341%
BLACKROCK INC	BLK	58,346.60	0.30%	2.47%	11.56%	14.17%	0.0427%
BALL CORP	BLL	9,338.05	0.05%	0.76%	6.10%	6.89%	0.0033%
BRISTOL-MYERS SQUIBB CO	BMJ	110,023.48	0.57%	2.25%	13.53%	15.93%	0.0906%
BROADCOM CORP-CL A	BRM	31,302.60	0.16%	1.09%	12.36%	13.51%	0.0219%
BERKSHIRE HATHAWAY INC-CL B	BRK/B	335,748.57	1.74%	0.00%	5.80%	5.80%	0.1007%
BOSTON SCIENTIFIC CORP	BSX	24,567.53	0.13%	0.00%	9.72%	9.72%	0.0123%
BORGWARNER INC	BWA	9,597.90	0.05%	1.11%	10.59%	11.76%	0.0058%
BAXALTA INC	BXLT	23,328.34	0.12%	0.36%	-5.50%	-5.15%	-0.0062%

BOSTON PROPERTIES INC	BXP	19,327.24	0.10%	2.07%	6.23%	8.37%	0.0084%
CITIGROUP INC	C	158,392.92	0.82%	0.30%	25.41%	25.75%	0.2109%
CA INC	CA	12,157.53	0.06%	3.62%	5.50%	9.22%	0.0058%
CONAGRA FOODS INC	CAG	17,554.55	0.09%	2.49%	8.50%	11.10%	0.0101%
CARDINAL HEALTH INC	CAH	27,030.67	0.14%	1.88%	11.97%	13.96%	0.0195%
CAMERON INTERNATIONAL CORP	CAM	12,984.58	0.07%	0.00%	-5.90%	-5.90%	-0.0040%
CATERPILLAR INC	CAT	42,497.25	0.22%	4.03%	9.00%	13.21%	0.0290%
CHUBB CORP	CB	29,368.56	0.15%	1.71%	9.75%	11.54%	0.0175%
CBRE GROUP INC - A	CBG	12,420.95	0.06%	0.00%	10.50%	10.50%	0.0067%
CBS CORP-CLASS B NON VOTING	CBS	22,571.27	0.12%	1.32%	14.87%	16.29%	0.0190%
COCA-COLA ENTERPRISES	CCE	11,651.73	0.06%	2.18%	6.04%	8.28%	0.0050%
CROWN CASTLE INTL CORP	CCI	28,523.30	0.15%	3.90%	22.80%	27.15%	0.0400%
CARNIVAL CORP	CCL	42,434.54	0.22%	1.99%	19.12%	21.29%	0.0467%
CELGENE CORP	CELG	97,007.18	0.50%	0.00%	25.53%	25.53%	0.1280%
CERNER CORP	CERN	22,874.97	0.12%	0.00%	16.98%	16.98%	0.0201%
CF INDUSTRIES HOLDINGS INC	CF	11,831.84	0.06%	2.33%	9.00%	11.44%	0.0070%
CHESAPEAKE ENERGY CORP	CHK	4,744.06	0.02%	2.52%	14.37%	17.07%	0.0042%
C.H. ROBINSON WORLDWIDE INC	CHRW	10,046.30	0.05%	2.22%	10.63%	12.97%	0.0067%
CIGNA CORP	CI	34,514.68	0.18%	0.03%	11.45%	11.48%	0.0205%
CINCINNATI FINANCIAL CORP	CINF	9,868.80	N/A	3.05%	N/A	N/A	N/A
COLGATE-PALMOLIVE CO	CL	59,510.78	0.31%	2.35%	7.90%	10.35%	0.0318%
CLOROX COMPANY	CLX	15,745.63	0.08%	2.58%	6.82%	9.48%	0.0077%
COMERICA INC	CMA	7,670.29	0.04%	1.91%	9.28%	11.28%	0.0045%
COMCAST CORP-CLASS A	CMCSA	153,903.40	0.80%	1.59%	12.68%	14.37%	0.1143%
CME GROUP INC	CME	31,908.11	0.16%	4.30%	12.61%	17.18%	0.0283%
CHIPOTLE MEXICAN GRILL INC	CMG	19,987.18	0.10%	0.00%	20.91%	20.91%	0.0216%
CUMMINS INC	CMI	18,385.58	0.10%	3.47%	7.35%	10.95%	0.0104%
CMS ENERGY CORP	CMS	10,023.12	0.05%	3.22%	6.53%	9.85%	0.0051%
CENTERPOINT ENERGY INC	CNP	7,981.35	0.04%	5.34%	5.00%	10.48%	0.0043%
CONSOL ENERGY INC	CNX	1,525.17	0.01%	2.34%	14.40%	16.91%	0.0013%
CAPITAL ONE FINANCIAL CORP	COF	42,797.64	0.22%	1.91%	6.17%	8.14%	0.0180%
CABOT OIL & GAS CORP	COG	8,985.22	0.05%	0.37%	41.83%	42.27%	0.0196%
COACH INC	COH	8,657.88	0.04%	4.33%	10.52%	15.08%	0.0067%
ROCKWELL COLLINS INC	COL	11,427.11	0.06%	1.53%	9.78%	11.38%	0.0067%
CONOCOPHILLIPS	COP	85,805.01	0.34%	5.52%	1.85%	7.42%	0.0252%
COSTCO WHOLESALE CORP	COST	89,162.74	0.36%	1.04%	9.87%	10.97%	0.0392%
CAMPBELL SOUP CO	CPB	15,733.61	0.08%	2.66%	4.50%	7.22%	0.0059%
COLUMBIA PIPELINE GROUP	CPGX	6,596.87	0.03%	1.74%	36.00%	38.05%	0.0130%
SALESFORCE.COM INC	CRM	51,288.60	0.27%	0.00%	28.06%	28.06%	0.0744%
COMPUTER SCIENCES CORP	CSC	9,211.50	0.05%	1.43%	9.30%	10.80%	0.0051%
CISCO SYSTEMS INC	CSCO	146,764.36	0.76%	2.99%	8.77%	11.89%	0.0902%
CSX CORP	CSX	26,313.76	0.14%	2.59%	8.59%	11.29%	0.0154%
CINTAS CORP	CTAS	10,049.95	0.05%	0.93%	12.00%	12.98%	0.0067%
CENTURYLINK INC	CTL	15,881.83	0.08%	7.66%	-1.29%	6.32%	0.0052%
COGNIZANT TECH SOLUTIONS-A	CTSH	41,515.04	0.21%	0.00%	15.49%	15.49%	0.0332%
CITRIX SYSTEMS INC	CTXS	13,193.58	0.07%	0.00%	14.38%	14.38%	0.0098%
CABLEVISION SYSTEMS-NY GRP-A	CVC	9,010.31	0.05%	1.80%	3.95%	5.78%	0.0027%
CVS HEALTH CORP	CVS	110,088.95	0.57%	1.42%	15.00%	16.53%	0.0941%
CHEVRON CORP	CVX	171,012.04	0.88%	4.72%	-3.87%	0.76%	0.0067%
DOMINION RESOURCES INC/VA	D	42,452.41	0.22%	3.63%	6.23%	9.97%	0.0219%
DELTA AIR LINES INC	DAL	39,984.32	0.21%	0.90%	21.88%	22.88%	0.0473%
DU PONT (E.I.) DE NEMOURS	DD	55,564.20	0.29%	2.69%	5.00%	7.75%	0.0223%
DEERE & CO	DE	25,596.97	0.13%	3.09%	4.92%	8.09%	0.0107%
DISCOVER FINANCIAL SERVICES	DFS	24,033.14	0.12%	1.93%	8.59%	10.61%	0.0132%
DOLLAR GENERAL CORP	DG	19,969.08	0.10%	1.30%	12.29%	13.67%	0.0141%
QUEST DIAGNOSTICS INC	DGX	9,740.61	0.05%	2.20%	10.46%	12.78%	0.0064%
DR HORTON INC	DHI	10,797.95	0.06%	0.83%	21.58%	22.50%	0.0126%
DANAHER CORP	DHR	63,943.97	0.33%	0.56%	12.90%	13.50%	0.0446%
WALT DISNEY CO/THE	DIS	191,976.96	0.99%	1.33%	11.90%	13.31%	0.1321%
DISCOVERY COMMUNICATIONS-A	DISCA	18,357.99	0.09%	0.00%	10.35%	10.35%	0.0098%
DELPHI AUTOMOTIVE PLC	DLPH	23,300.53	0.12%	1.26%	10.61%	11.94%	0.0144%
DOLLAR TREE INC	DLTR	15,371.66	0.08%	0.00%	19.67%	19.67%	0.0156%
DUN & BRADSTREET CORP	DNB	4,111.96	0.02%	1.62%	10.15%	11.86%	0.0025%
DIAMOND OFFSHORE DRILLING	DO	2,726.72	N/A	2.52%	N/A	N/A	N/A
DOVER CORP	DOV	9,984.44	0.05%	2.56%	12.00%	14.71%	0.0076%
DOW CHEMICAL CO/THE	DOW	59,865.62	0.31%	3.26%	6.53%	9.89%	0.0306%
DR PEPPER SNAPPLE GROUP INC	DPS	16,881.29	0.09%	2.10%	7.70%	9.88%	0.0086%
DARDEN RESTAURANTS INC	DRI	7,930.52	0.04%	3.63%	12.50%	16.35%	0.0067%
DTE ENERGY COMPANY	DTE	14,631.57	0.08%	3.47%	5.04%	8.60%	0.0065%
DUKE ENERGY CORP	DUK	49,194.98	0.25%	4.58%	4.54%	9.23%	0.0235%
DAVITA HEALTHCARE PARTNERS I	DVA	16,703.41	0.09%	0.00%	10.26%	10.26%	0.0089%
DEVON ENERGY CORP	DVN	17,233.23	0.09%	2.29%	6.24%	8.60%	0.0077%
ELECTRONIC ARTS INC	EA	22,467.53	0.12%	0.00%	14.33%	14.33%	0.0166%
EBAY INC	EBAY	33,498.24	0.17%	0.00%	8.79%	8.79%	0.0152%
ECOLAB INC	ECL	35,514.35	0.18%	1.08%	13.17%	14.32%	0.0263%
CONSOLIDATED EDISON INC	ED	19,256.33	0.10%	3.95%	2.95%	6.96%	0.0069%
EQUIFAX INC	EFX	12,625.95	0.07%	1.09%	14.00%	15.16%	0.0099%
EDISON INTERNATIONAL	EIX	19,718.09	0.10%	2.78%	3.42%	6.25%	0.0064%
ESTEE LAUDER COMPANIES-CL A	EL	29,824.34	0.15%	1.27%	10.41%	11.75%	0.0181%
EMC CORP/IMA	EMC	50,859.73	0.26%	1.79%	8.53%	10.40%	0.0273%
EASTMAN CHEMICAL CO	EMN	10,729.10	0.06%	2.22%	7.17%	9.47%	0.0053%
EMERSON ELECTRIC CO	EMR	31,036.73	0.16%	4.00%	4.71%	8.81%	0.0141%
ENDO INTERNATIONAL PLC	ENDP	13,581.63	0.07%	0.00%	9.87%	9.87%	0.0069%
EOG RESOURCES INC	EOG	47,146.37	0.24%	0.77%	-4.68%	-3.93%	-0.0096%
EQUINIX INC	EQIX	16,995.51	0.09%	2.47%	40.65%	43.62%	0.0383%
EQUITY RESIDENTIAL	EQR	28,150.84	0.15%	2.85%	8.04%	11.01%	0.0160%
EQT CORP	EQT	10,078.32	0.05%	0.19%	25.00%	25.21%	0.0131%
EVERSOURCE ENERGY	ES	16,156.80	0.08%	3.30%	6.67%	10.07%	0.0084%

EXPRESS SCRIPTS HOLDING CO	ESRX	58,416.72	0.30%	0.00%	16.06%	16.06%	0.0485%
ESSEX PROPERTY TRUST INC	ESS	14,492.68	0.07%	2.59%	7.08%	9.76%	0.0073%
ENSCO PLC-CL A	ESV	3,915.95	0.02%	3.61%	-4.30%	-0.76%	-0.0002%
E*TRADE FINANCIAL CORP	ETFC	8,276.84	0.04%	0.00%	16.36%	16.36%	0.0070%
EATON CORP PLC	ETN	25,875.15	0.13%	3.94%	8.51%	12.62%	0.0169%
ENERGY CORP	ETR	12,236.65	0.06%	4.87%	3.30%	8.25%	0.0052%
EDWARDS LIFSCIENCES CORP	EW	16,949.39	0.09%	0.00%	15.20%	15.20%	0.0133%
EXELON CORP	EXC	25,674.24	0.13%	4.45%	5.87%	10.45%	0.0139%
EXPEDITORS INTL WASH INC	EXPD	9,418.28	0.05%	1.43%	11.58%	13.10%	0.0064%
EXPEDIA INC	EXPE	17,697.07	0.09%	0.62%	18.03%	18.70%	0.0171%
FORD MOTOR CO	F	58,775.41	0.30%	3.87%	13.79%	17.93%	0.0545%
FASTENAL CO	FAST	11,344.46	0.06%	2.86%	14.35%	17.42%	0.0102%
FACEBOOK INC-A	FB	287,461.22	1.49%	0.00%	24.30%	24.30%	0.3610%
FREEMPORT-MCMORAN INC	FCX	13,372.21	0.07%	3.59%	-5.25%	-1.76%	-0.0012%
FEDEX CORP	FDX	44,065.31	0.23%	0.64%	13.90%	14.58%	0.0332%
FIRSTENERGY CORP	FE	13,198.90	0.07%	4.62%	2.12%	6.79%	0.0046%
F5 NETWORKS INC	FFIV	7,824.65	0.04%	0.00%	14.55%	14.55%	0.0059%
FIDELITY NATIONAL INFO SERV	FIS	20,533.00	0.11%	1.42%	12.62%	14.13%	0.0150%
FISERV INC	FISV	22,056.27	0.11%	0.00%	12.80%	12.80%	0.0146%
FIFTH THIRD BANCORP	FITB	15,416.97	0.08%	2.74%	4.58%	7.38%	0.0059%
FLIR SYSTEMS INC	FLIR	3,740.42	0.02%	1.65%	13.50%	15.28%	0.0030%
FLUOR CORP	FLR	6,770.49	0.03%	1.81%	4.43%	6.28%	0.0022%
FLOWSERVE CORP	FLS	6,067.09	0.03%	1.54%	6.94%	8.53%	0.0027%
FMC CORP	FMC	5,439.47	0.03%	1.58%	9.00%	10.65%	0.0030%
FOSSIL GROUP INC	FOSL	2,619.68	0.01%	0.00%	7.35%	7.35%	0.0010%
TWENTY-FIRST CENTURY FOX-A	FOXA	60,998.50	0.32%	1.05%	16.22%	17.35%	0.0547%
FIRST SOLAR INC	FSLR	5,758.52	0.03%	0.00%	-7.95%	-7.95%	-0.0024%
FMC TECHNOLOGIES INC	FTI	7,712.58	0.04%	0.00%	-1.20%	-1.20%	-0.0005%
FRONTIER COMMUNICATIONS CORP	FTR	6,004.58	0.03%	8.17%	3.00%	11.29%	0.0035%
AGL RESOURCES INC	GAS	7,505.49	0.04%	3.26%	6.50%	9.87%	0.0038%
GENERAL DYNAMICS CORP	GD	46,970.32	0.24%	1.84%	9.12%	11.04%	0.0268%
GENERAL ELECTRIC CO	GE	291,988.73	1.51%	3.21%	8.08%	11.41%	0.1722%
GENERAL GROWTH PROPERTIES	GGP	25,639.76	0.13%	2.37%	7.51%	9.97%	0.0132%
GILEAD SCIENCES INC	GILD	158,692.18	0.82%	1.19%	13.70%	14.97%	0.1228%
GENERAL MILLS INC	GIS	34,731.62	0.18%	3.04%	7.18%	10.33%	0.0185%
CORNING INC	GLW	22,003.51	0.11%	2.56%	5.55%	8.18%	0.0093%
GENERAL MOTORS CO	GM	54,326.14	0.28%	4.00%	11.69%	15.91%	0.0447%
KEURIG GREEN MOUNTAIN INC	GMCR	7,818.45	0.04%	2.25%	16.40%	18.85%	0.0076%
GAMESTOP CORP-CLASS A	GME	4,859.88	0.03%	3.13%	13.58%	16.91%	0.0042%
GENWORTH FINANCIAL INC-CL A	GNW	2,328.14	0.01%	0.00%	5.00%	5.00%	0.0006%
ALPHABET INC-CL C	GOOG	497,261.79	2.57%	0.00%	17.03%	17.03%	0.4377%
GENUINE PARTS CO	GPC	13,758.97	0.07%	2.67%	8.62%	11.41%	0.0081%
GAP INC/THE	GPS	11,071.61	0.06%	3.38%	9.04%	12.57%	0.0072%
GARMIN LTD	GRMN	6,751.43	0.03%	5.65%	8.80%	14.70%	0.0051%
GOLDMAN SACHS GROUP INC	GS	84,689.62	0.44%	1.37%	10.05%	11.48%	0.0503%
GOODYEAR TIRE & RUBBER CO	GT	8,830.94	0.05%	0.75%	7.00%	7.77%	0.0035%
WW GRAINGER INC	GWV	13,185.59	0.07%	2.18%	10.85%	13.15%	0.0090%
HALLIBURTON CO	HAL	32,846.12	0.17%	1.88%	10.12%	12.09%	0.0205%
HARMAN INTERNATIONAL	HAR	7,826.04	0.04%	1.21%	17.00%	18.32%	0.0074%
HASBRO INC	HAS	9,596.28	0.05%	2.39%	9.70%	12.21%	0.0061%
HUNTINGTON BANCSHARES INC	HBAN	8,739.35	0.05%	2.28%	7.69%	10.06%	0.0045%
HANESBRANDS INC	HBI	12,514.78	0.06%	1.25%	15.63%	16.98%	0.0110%
HCA HOLDINGS INC	HCA	28,043.46	0.14%	0.00%	12.17%	12.17%	0.0176%
HUDSON CITY BANCORP INC	HCBK	5,358.84	0.03%	1.19%	-3.00%	-1.83%	-0.0005%
WELLTOWER INC	HCN	22,956.16	0.12%	5.11%	4.49%	9.71%	0.0115%
HCP INC	HCP	17,208.22	0.09%	6.07%	2.89%	9.04%	0.0080%
HOME DEPOT INC	HD	158,766.53	0.82%	1.78%	13.97%	15.88%	0.1303%
HESS CORP	HES	16,135.52	0.08%	1.79%	-15.07%	-13.42%	-0.0112%
HARTFORD FINANCIAL SVCS GRP	HIG	18,948.55	0.10%	1.69%	9.25%	11.01%	0.0108%
HARLEY-DAVIDSON INC	HOG	10,185.06	0.05%	2.50%	10.13%	12.75%	0.0067%
HONEYWELL INTERNATIONAL INC	HON	79,597.01	0.41%	2.07%	9.85%	12.01%	0.0494%
STARWOOD HOTELS & RESORTS	HOT	13,497.59	0.07%	1.89%	9.26%	11.24%	0.0078%
HELMERICH & PAYNE	HP	6,063.18	0.03%	4.90%	5.35%	10.38%	0.0033%
HEWLETT-PACKARD CO	HPQ	50,630.88	0.26%	2.49%	4.14%	6.68%	0.0175%
H&R BLOCK INC	HRB	10,297.17	0.05%	2.14%	11.00%	13.26%	0.0071%
HORMEL FOODS CORP	HRL	17,868.12	0.09%	1.47%	8.00%	9.53%	0.0088%
HARRIS CORP	HRS	9,817.74	N/A	2.45%	N/A	N/A	N/A
HENRY SCHEIN INC	HSIC	12,652.15	0.07%	0.00%	11.15%	11.15%	0.0073%
HOST HOTELS & RESORTS INC	HST	13,025.41	0.07%	4.70%	5.00%	9.81%	0.0066%
HERSHEY CO/THE	HSY	19,227.40	0.10%	2.47%	8.54%	11.12%	0.0111%
HUMANA INC	HUM	26,475.61	0.14%	0.65%	10.57%	11.25%	0.0154%
INTL BUSINESS MACHINES CORP	IBM	135,893.03	0.70%	3.47%	6.48%	10.06%	0.0707%
INTERCONTINENTAL EXCHANGE INC	ICE	27,699.19	0.14%	1.14%	15.83%	17.07%	0.0244%
INTL FLAVORS & FRAGRANCES	IFF	9,352.75	0.05%	1.76%	9.20%	11.04%	0.0053%
INTEL CORP	INTC	159,785.34	0.83%	2.83%	8.60%	11.55%	0.0954%
INTUIT INC	INTU	27,017.98	0.14%	1.23%	17.94%	19.28%	0.0269%
INTERNATIONAL PAPER CO	IP	17,833.37	0.09%	3.87%	6.27%	10.26%	0.0095%
INTERPUBLIC GROUP OF COS INC	IPG	9,317.56	0.05%	2.03%	6.50%	8.59%	0.0041%
INGERSOLL-RAND PLC	IR	15,469.76	0.08%	1.96%	10.11%	12.17%	0.0097%
IRON MOUNTAIN INC	IRM	6,469.73	0.03%	6.22%	4.60%	10.97%	0.0037%
INTUITIVE SURGICAL INC	ISRG	18,555.56	0.10%	0.00%	15.01%	15.01%	0.0144%
ILLINOIS TOOL WORKS	ITW	33,419.43	0.17%	2.20%	9.23%	11.53%	0.0199%
INVESCO LTD	IVZ	14,059.51	0.07%	3.23%	9.87%	13.26%	0.0096%
HUNT (JB) TRANSPRT SVCS INC	JBHT	8,752.15	0.05%	1.09%	14.35%	15.52%	0.0070%
JOHNSON CONTROLS INC	JCI	29,550.86	0.15%	2.45%	10.18%	12.76%	0.0195%
JACOBS ENGINEERING GROUP INC	JEC	4,969.28	0.03%	0.00%	8.37%	8.37%	0.0021%
JOHNSON & JOHNSON	JNJ	279,544.31	1.45%	2.92%	6.01%	9.02%	0.1303%
JUNIPER NETWORKS INC	JNPR	12,067.16	0.06%	1.26%	11.12%	12.45%	0.0078%

JPMORGAN CHASE & CO	JPM	237,600.83	1.23%	2.67%	8.00%	10.78%	0.1324%
NORDSTROM INC	JWN	12,274.77	0.06%	2.25%	9.27%	11.63%	0.0074%
KELLOGG CO	K	24,934.54	0.13%	2.74%	6.30%	9.12%	0.0118%
KEYCORP	KEY	10,443.49	0.05%	2.34%	7.10%	9.53%	0.0051%
KRAFT HEINZ CO/THE	KHC	94,564.61	0.49%	2.83%	11.15%	14.14%	0.0691%
KIMCO REALTY CORP	KIM	11,059.64	0.06%	3.63%	5.13%	8.85%	0.0051%
KLA-TENCOR CORP	KLAC	10,467.07	0.05%	3.08%	13.47%	16.75%	0.0091%
KIMBERLY-CLARK CORP	KMB	43,454.06	0.22%	2.90%	8.15%	11.17%	0.0251%
KINDER MORGAN INC	KMI	61,031.93	0.32%	7.30%	6.13%	13.65%	0.0431%
CARMAX INC	KMX	11,957.48	0.06%	0.00%	15.19%	15.19%	0.0094%
COCA-COLA CO/THE	KO	184,179.52	0.95%	3.09%	5.79%	8.97%	0.0854%
MICHAEL KORS HOLDINGS LTD	KORS	7,473.83	0.04%	0.00%	7.78%	7.78%	0.0030%
KROGER CO	KR	36,795.82	0.19%	1.09%	10.18%	11.32%	0.0215%
KOHL'S CORP	KSS	8,970.24	0.05%	3.90%	7.90%	11.95%	0.0055%
KANSAS CITY SOUTHERN	KSU	9,032.13	0.05%	1.57%	10.60%	12.25%	0.0057%
LOEWS CORP	L	13,237.95	N/A	0.69%	N/A	N/A	N/A
L BRANDS INC	LB	27,870.55	0.14%	3.83%	11.83%	15.88%	0.0229%
LEGGETT & PLATT INC	LEG	6,161.42	N/A	2.78%	N/A	N/A	N/A
LENNAR CORP-A	LEN	10,261.85	N/A	0.32%	N/A	N/A	N/A
LABORATORY CRP OF AMER HLDGS	LH	12,409.01	0.06%	0.00%	10.26%	10.26%	0.0066%
L-3 COMMUNICATIONS HOLDINGS	LLL	10,153.98	0.05%	2.07%	6.79%	8.93%	0.0047%
LINEAR TECHNOLOGY CORP	LLTC	10,650.04	0.06%	2.71%	6.76%	9.56%	0.0053%
ELI LILLY & CO	LLY	90,385.80	0.47%	2.45%	11.97%	14.57%	0.0681%
LEGG MASON INC	LM	4,909.42	0.03%	1.82%	16.65%	18.62%	0.0047%
LOCKHEED MARTIN CORP	LMT	67,552.77	0.35%	2.80%	7.80%	10.71%	0.0374%
LINCOLN NATIONAL CORP	LNC	13,242.17	0.07%	1.54%	10.18%	11.80%	0.0081%
LOWE'S COS INC	LOW	68,309.92	0.35%	1.45%	16.67%	18.24%	0.0644%
LAM RESEARCH CORP	LRCX	12,139.42	0.06%	1.56%	5.48%	7.09%	0.0044%
LEUCADIA NATIONAL CORP	LUK	7,335.72	N/A	0.00%	N/A	N/A	N/A
SOUTHWEST AIRLINES CO	LUV	30,104.94	0.16%	0.65%	17.26%	17.97%	0.0280%
LEVEL 3 COMMUNICATIONS INC	LVL3	18,129.70	0.09%	0.00%	8.00%	8.00%	0.0075%
LYONDELLBASELL INDU-CL A	LYB	41,757.83	0.22%	3.28%	5.86%	9.24%	0.0199%
MACY'S INC	M	16,873.51	0.09%	2.72%	7.88%	10.70%	0.0093%
MASTERCARD INC-CLASS A	MA	111,142.88	0.57%	0.65%	16.50%	17.20%	0.0988%
MACERICH CO/THE	MAC	13,416.14	0.07%	3.45%	7.32%	10.89%	0.0076%
MARRIOTT INTERNATIONAL -CL A	MAR	19,742.36	0.10%	1.24%	14.74%	16.07%	0.0164%
MASCO CORP	MAS	9,757.69	0.05%	1.25%	14.79%	16.13%	0.0081%
MATTEL INC	MAT	8,341.32	0.04%	6.18%	9.43%	15.91%	0.0069%
MCDONALD'S CORP	MCD	105,718.20	0.55%	3.07%	7.77%	10.96%	0.0599%
MICROCHIP TECHNOLOGY INC	MCHP	10,193.59	0.05%	2.92%	6.30%	9.31%	0.0049%
MCKESSON CORP	MCK	41,143.51	0.21%	0.56%	13.55%	14.15%	0.0301%
MOODY'S CORP	MCO	19,260.85	0.10%	1.47%	12.00%	13.56%	0.0135%
MONDELEZ INTERNATIONAL INC-A	MDLZ	73,355.97	0.38%	1.36%	10.76%	12.19%	0.0462%
MEDTRONIC PLC	MDT	104,494.40	0.54%	2.02%	7.04%	9.13%	0.0493%
METLIFE INC	MET	56,268.47	0.29%	2.94%	7.25%	10.30%	0.0300%
MCGRAW HILL FINANCIAL INC	MHFI	25,244.40	0.13%	1.43%	11.83%	13.35%	0.0174%
MOHAWK INDUSTRIES INC	MHK	14,450.08	0.07%	0.00%	12.05%	12.05%	0.0090%
MEAD JOHNSON NUTRITION CO	MJN	16,164.91	0.08%	1.96%	8.80%	10.85%	0.0091%
MCCORMICK & CO-NON VTG SHRS	MKC	10,758.55	0.06%	1.89%	6.50%	8.45%	0.0047%
MARTIN MARIETTA MATERIALS	MLM	10,395.24	0.05%	1.05%	24.06%	25.24%	0.0136%
MARSH & MCLENNAN COS	MMC	29,076.67	0.15%	2.13%	11.99%	14.26%	0.0214%
3M CO	MMM	96,796.23	0.50%	2.61%	9.04%	11.77%	0.0589%
MALLINCKRODT PLC	MNK	7,705.88	0.04%	0.00%	14.05%	14.05%	0.0056%
MONSTER BEVERAGE CORP	MNST	27,835.63	0.14%	0.00%	16.38%	16.38%	0.0236%
ALTRIA GROUP INC	MO	118,562.29	0.61%	3.62%	7.63%	11.38%	0.0698%
MONSANTO CO	MON	41,001.62	0.21%	2.29%	11.42%	13.84%	0.0293%
MOSAIC CO/THE	MOS	11,972.97	0.06%	3.22%	6.00%	9.32%	0.0058%
MARATHON PETROLEUM CORP	MPC	27,772.92	0.14%	2.23%	2.52%	4.77%	0.0068%
MERCK & CO. INC.	MRK	153,957.27	0.80%	3.31%	6.70%	10.12%	0.0805%
MARATHON OIL CORP	MRO	12,446.66	0.06%	4.57%	-3.17%	1.33%	0.0009%
MORGAN STANLEY	MS	64,403.12	0.33%	1.67%	17.02%	18.63%	0.0627%
MICROSOFT CORP	MSFT	420,483.75	2.17%	2.57%	9.55%	12.24%	0.2661%
MOTOROLA SOLUTIONS INC	MSI	12,363.83	0.06%	2.00%	9.05%	11.14%	0.0071%
M & T BANK CORP	MTB	15,968.61	0.08%	2.34%	6.86%	9.28%	0.0077%
MICRON TECHNOLOGY INC	MU	17,980.08	0.09%	0.00%	2.22%	2.22%	0.0021%
MURPHY OIL CORP	MUR	4,911.34	0.03%	4.93%	13.00%	18.25%	0.0046%
MYLAN NV	MYL	21,679.11	0.11%	0.00%	11.16%	11.16%	0.0125%
NAVIENT CORP	NAVI	4,933.49	N/A	4.82%	N/A	N/A	N/A
NOBLE ENERGY INC	NBL	15,340.74	0.08%	2.00%	4.83%	6.88%	0.0055%
NASDAQ INC	NDAQ	9,779.36	0.05%	1.58%	7.50%	9.14%	0.0046%
NEXTERA ENERGY INC	NEE	47,270.96	0.24%	3.00%	7.00%	10.11%	0.0247%
NEWMONT MINING CORP	NEM	10,296.63	0.05%	0.49%	2.33%	2.82%	0.0015%
NETFLIX INC	NFLX	46,320.34	0.24%	0.00%	27.33%	27.33%	0.0654%
NEWFIELD EXPLORATION CO	NFX	6,550.51	0.03%	0.00%	4.90%	4.90%	0.0017%
NISOURCE INC	NI	6,090.18	0.03%	4.42%	-0.30%	4.11%	0.0013%
NIKE INC -CL B	NKE	111,662.95	0.58%	0.91%	12.71%	13.68%	0.0789%
NIELSEN HOLDINGS PLC	NLSN	17,296.39	0.09%	2.31%	12.33%	14.79%	0.0132%
NORTHROP GRUMMAN CORP	NOC	34,242.42	0.18%	1.63%	6.57%	8.25%	0.0146%
NATIONAL OILWELL VARCO INC	NOV	14,143.14	0.07%	4.89%	-2.70%	2.12%	0.0016%
NRG ENERGY INC	NRG	4,282.15	0.02%	4.54%	23.90%	28.98%	0.0064%
NORFOLK SOUTHERN CORP	NSC	23,894.54	0.12%	2.95%	9.30%	12.39%	0.0153%
NETAPP INC	NTAP	10,026.61	0.05%	2.09%	9.98%	12.18%	0.0063%
NORTHERN TRUST CORP	NTRS	16,275.60	0.08%	2.00%	13.54%	15.67%	0.0132%
NUCOR CORP	NUE	13,519.07	0.07%	3.52%	10.10%	13.80%	0.0096%
NVIDIA CORP	NVDA	15,291.43	0.08%	1.33%	9.25%	10.64%	0.0084%
NEWELL RUBBERMAID INC	NWL	11,362.75	0.06%	1.78%	9.33%	11.20%	0.0066%
NEWS CORP - CLASS A	NWSA	8,966.80	0.05%	1.17%	13.95%	15.20%	0.0070%
REALTY INCOME CORP	O	12,345.24	0.06%	4.61%	4.30%	9.00%	0.0057%

OWENS-ILLINOIS INC	OI	3,466.05	0.02%	0.00%	2.90%	2.90%	0.0005%
ONEOK INC	OKE	7,094.94	0.04%	7.18%	8.60%	16.09%	0.0059%
OMNICOM GROUP	OMC	18,149.76	0.09%	2.68%	5.33%	8.09%	0.0076%
ORACLE CORP	ORCL	165,638.16	0.86%	1.46%	7.72%	9.24%	0.0791%
O'REILLY AUTOMOTIVE INC	ORLY	27,461.12	0.14%	0.00%	17.70%	17.70%	0.0251%
OCCIDENTAL PETROLEUM CORP	OXY	56,928.87	0.29%	3.99%	8.00%	12.15%	0.0358%
PAYCHEX INC	PAYX	18,596.65	0.10%	3.23%	9.39%	12.77%	0.0123%
PEOPLE'S UNITED FINANCIAL	PBCT	4,944.39	N/A	4.20%	N/A	N/A	N/A
PITNEY BOWES INC	PBI	4,169.83	0.02%	3.63%	14.00%	17.89%	0.0039%
PACCAR INC	PCAR	18,689.09	0.10%	3.53%	9.16%	12.86%	0.0124%
P G & E CORP	PCG	26,190.24	0.14%	3.42%	4.26%	7.75%	0.0105%
PLUM CREEK TIMBER CO	PCL	7,118.47	0.04%	4.32%	22.82%	27.63%	0.0102%
PRICELINE GROUP INC/THE	PCLN	73,732.28	0.38%	0.00%	19.50%	19.50%	0.0743%
PRECISION CASTPARTS CORP	PCP	31,755.10	0.16%	0.05%	10.55%	10.60%	0.0174%
PATTERSON COS INC	PDCC	4,893.96	0.03%	1.96%	8.62%	10.66%	0.0027%
PUBLIC SERVICE ENTERPRISE GP	PEG	20,887.57	0.11%	3.77%	4.75%	8.61%	0.0093%
PEPSICO INC	PEP	148,875.58	0.77%	2.68%	6.04%	8.81%	0.0678%
PFIZER INC	PFE	208,579.70	1.08%	3.31%	4.24%	7.62%	0.0822%
PRINCIPAL FINANCIAL GROUP	PFG	14,684.40	0.08%	2.99%	10.17%	13.31%	0.0101%
PROCTER & GAMBLE CO/THE	PG	207,797.35	1.07%	3.54%	7.18%	10.84%	0.1164%
PROGRESSIVE CORP	PGR	19,411.94	0.10%	2.19%	8.58%	10.86%	0.0109%
PARKER HANNIFIN CORP	PH	14,257.18	0.07%	2.45%	8.69%	11.26%	0.0083%
PULTEGROUP INC	PHM	6,399.68	0.03%	1.81%	14.17%	16.10%	0.0053%
PERKINELMER INC	PKI	5,855.12	0.03%	0.54%	8.54%	9.11%	0.0028%
PROLOGIS INC	PLD	22,392.53	0.12%	3.55%	4.77%	8.41%	0.0097%
PHILIP MORRIS INTERNATIONAL	PM	136,957.74	0.71%	4.58%	5.90%	10.61%	0.0751%
PNC FINANCIAL SERVICES GROUP	PNC	46,357.52	0.24%	2.23%	7.00%	9.31%	0.0223%
PENTAIR PLC	PNR	10,079.78	0.05%	2.27%	14.93%	17.37%	0.0091%
PINNACLE WEST CAPITAL	PNW	7,040.07	0.04%	3.80%	5.45%	9.35%	0.0034%
PEPCO HOLDINGS INC	POM	6,753.83	0.03%	4.06%	5.53%	9.69%	0.0034%
PPG INDUSTRIES INC	PPG	28,074.01	0.15%	1.36%	7.03%	8.44%	0.0122%
PPL CORP	PPL	23,046.96	0.12%	4.37%	1.42%	5.82%	0.0069%
PERRIGO CO PLC	PRGO	23,089.35	0.12%	0.33%	12.73%	13.08%	0.0156%
PRUDENTIAL FINANCIAL INC	PRU	37,207.50	0.19%	2.90%	15.78%	18.90%	0.0364%
PUBLIC STORAGE	PSA	39,689.09	0.21%	2.86%	4.85%	7.78%	0.0160%
PHILLIPS 66	PSX	47,502.86	0.25%	2.44%	5.32%	7.82%	0.0192%
PVH CORP	PVH	7,507.30	0.04%	0.18%	9.76%	9.95%	0.0039%
QUANTA SERVICES INC	PWR	3,958.29	0.02%	0.00%	2.25%	2.25%	0.0005%
PRAXAIR INC	PX	31,824.13	0.16%	2.57%	9.00%	11.69%	0.0192%
PIONEER NATURAL RESOURCES CO	PXD	20,476.10	0.11%	0.06%	5.60%	5.66%	0.0060%
PAYPAL HOLDINGS INC	PYPL	43,993.06	0.23%	0.00%	15.71%	15.71%	0.0357%
QUALCOMM INC	QCOM	93,360.83	0.48%	2.93%	13.00%	16.12%	0.0778%
QORVO INC	QRVO	6,568.89	0.03%	0.00%	16.53%	16.53%	0.0056%
RYDER SYSTEM INC	R	3,834.85	0.02%	2.06%	10.93%	13.10%	0.0026%
REYNOLDS AMERICAN INC	RAI	69,054.18	0.36%	2.90%	6.48%	9.47%	0.0338%
ROYAL CARIBBEAN CRUISES LTD	RCL	21,636.55	0.11%	1.36%	19.70%	21.19%	0.0237%
REGENERON PHARMACEUTICALS	REGN	57,794.88	0.30%	0.00%	22.38%	22.38%	0.0669%
REGIONS FINANCIAL CORP	RF	12,387.88	0.06%	2.46%	3.60%	6.10%	0.0039%
ROBERT HALF INTL INC	RHI	7,082.76	0.04%	1.50%	13.07%	14.66%	0.0054%
RED HAT INC	RHT	14,461.57	0.07%	0.00%	18.58%	18.58%	0.0139%
TRANSOCEAN LTD	RIG	5,756.65	0.03%	6.97%	-25.40%	-19.31%	-0.0057%
RALPH LAUREN CORP	RL	9,487.21	0.05%	1.83%	13.57%	15.52%	0.0076%
ROCKWELL AUTOMATION INC	ROK	14,638.97	0.08%	2.39%	7.51%	9.99%	0.0076%
ROPER TECHNOLOGIES INC	ROP	18,759.09	0.10%	0.52%	11.77%	12.32%	0.0119%
ROSS STORES INC	ROST	20,640.31	0.11%	0.92%	10.75%	11.72%	0.0125%
RANGE RESOURCES CORP	RRC	5,155.61	0.03%	0.53%	0.27%	0.80%	0.0002%
REPUBLIC SERVICES INC	RSG	15,188.21	0.08%	2.63%	7.00%	9.72%	0.0076%
RAYTHEON COMPANY	RTN	35,348.91	0.18%	2.26%	7.41%	9.75%	0.0178%
STARBUCKS CORP	SBUX	92,866.39	0.48%	1.24%	18.11%	19.47%	0.0935%
SCANA CORP	SCG	8,463.54	0.04%	3.68%	6.00%	9.79%	0.0043%
SCHWAB (CHARLES) CORP	SCHW	40,152.84	0.21%	0.80%	20.35%	21.22%	0.0441%
SPECTRA ENERGY CORP	SE	19,180.84	0.10%	5.23%	3.95%	9.28%	0.0092%
SEALED AIR CORP	SEE	10,110.97	0.05%	1.06%	9.50%	10.61%	0.0055%
SHERWIN-WILLIAMS CO/THE	SHW	24,842.01	0.13%	1.00%	18.05%	19.14%	0.0246%
SIGMA-ALDRICH	SIAL	16,738.97	0.09%	0.67%	8.62%	9.31%	0.0081%
SIGNET JEWELERS LTD	SIG	12,013.62	0.06%	0.58%	12.50%	13.11%	0.0081%
JM SMUCKER CO/THE	SJM	14,047.48	0.07%	2.27%	9.38%	11.75%	0.0085%
SCHLUMBERGER LTD	SLB	98,567.87	0.51%	2.51%	12.60%	15.27%	0.0778%
SL GREEN REALTY CORP	SLG	11,951.80	0.06%	2.05%	5.72%	7.83%	0.0048%
SNAP-ON INC	SNA	9,633.89	0.05%	1.26%	3.30%	4.58%	0.0023%
SANDISK CORP	SNDK	15,741.80	0.08%	1.43%	6.90%	8.38%	0.0068%
SCRIPPS NETWORKS INTER-CL A	SNI	7,721.40	0.04%	1.53%	11.46%	13.08%	0.0052%
SOUTHERN CO/THE	SO	40,969.96	0.21%	4.79%	4.11%	9.00%	0.0191%
SIMON PROPERTY GROUP INC	SPG	62,335.28	0.32%	2.98%	7.75%	10.85%	0.0350%
STAPLES INC	SPLS	8,359.92	0.04%	3.70%	-0.35%	3.34%	0.0014%
STERICYCLE INC	SRCL	10,311.69	0.05%	0.90%	15.35%	15.35%	0.0082%
SEMPRA ENERGY	SRE	25,389.05	0.13%	2.74%	8.10%	10.95%	0.0144%
SUNTRUST BANKS INC	STI	21,343.24	0.11%	2.22%	5.86%	8.14%	0.0090%
ST JUDE MEDICAL INC	STJ	17,978.13	0.09%	1.80%	11.40%	13.30%	0.0124%
STATE STREET CORP	STT	28,159.80	0.15%	1.92%	8.36%	10.36%	0.0151%
SEAGATE TECHNOLOGY	STX	11,381.15	0.06%	6.22%	7.64%	14.09%	0.0083%
CONSTELLATION BRANDS INC-A	STZ	26,496.90	0.14%	0.91%	13.29%	14.26%	0.0195%
STANLEY BLACK & DECKER INC	SWK	15,867.99	0.08%	2.02%	10.67%	12.79%	0.0105%
SKYWORKS SOLUTIONS INC	SWKS	15,113.91	0.08%	0.81%	19.44%	20.33%	0.0159%
SOUTHWESTERN ENERGY CO	SWN	4,244.64	0.02%	0.00%	9.55%	9.55%	0.0021%
STRYKER CORP	SYK	35,907.44	0.19%	1.43%	12.00%	13.52%	0.0251%
SYMANTEC CORP	SYMC	14,093.96	0.07%	2.88%	8.35%	11.35%	0.0083%
SYSCO CORP	SYI	24,589.36	0.13%	3.03%	9.33%	12.50%	0.0159%

AT&T INC	T	206,120.01	1.07%	5.64%	4.28%	10.04%	0.1069%
MOLSON COORS BREWING CO -B	TAP	16,300.14	0.08%	1.85%	8.20%	10.12%	0.0085%
TERADATA CORP	TDC	3,980.38	0.02%	0.00%	10.25%	10.25%	0.0021%
TECO ENERGY INC	TE	6,351.18	0.03%	3.33%	5.33%	8.76%	0.0029%
TE CONNECTIVITY LTD	TEL	25,929.66	0.13%	2.07%	10.00%	12.17%	0.0163%
TEGNA INC	TGNA	6,123.80	0.03%	2.44%	4.08%	6.57%	0.0021%
TARGET CORP	TGT	48,502.25	0.25%	2.79%	9.85%	12.57%	0.0315%
TENET HEALTHCARE CORP	THC	3,123.33	0.02%	0.00%	16.55%	16.55%	0.0027%
TIFFANY & CO	TIF	10,630.38	0.05%	1.91%	10.07%	12.08%	0.0066%
TJX COMPANIES INC	TJX	49,357.20	0.26%	1.13%	11.28%	12.48%	0.0318%
TORCHMARK CORP	TMK	7,257.94	0.04%	0.93%	7.19%	8.14%	0.0031%
THERMO FISHER SCIENTIFIC INC	TMO	52,194.00	0.27%	0.46%	11.60%	12.09%	0.0326%
TRIPADVISOR INC	TRIP	12,072.39	0.06%	0.00%	19.05%	19.05%	0.0119%
T ROWE PRICE GROUP INC	TROW	18,987.83	0.10%	5.39%	10.44%	16.10%	0.0158%
TRAVELERS COS INC/THE	TRV	34,343.26	0.18%	2.12%	8.62%	10.82%	0.0192%
TRACTOR SUPPLY COMPANY	TSCO	12,548.32	0.06%	0.75%	15.49%	16.30%	0.0106%
TYSON FOODS INC-CL A	TSN	18,017.70	0.09%	0.88%	8.60%	9.52%	0.0089%
TESORO CORP	TSO	12,873.35	0.07%	1.71%	16.14%	17.99%	0.0120%
TOTAL SYSTEM SERVICES INC	TSS	9,648.18	0.05%	0.71%	11.00%	11.75%	0.0059%
TIME WARNER CABLE	TWC	53,637.62	0.28%	1.59%	5.57%	7.20%	0.0200%
TIME WARNER INC	TWX	61,445.90	0.32%	1.85%	15.14%	17.13%	0.0544%
TEXAS INSTRUMENTS INC	TXN	58,216.60	0.30%	2.46%	9.48%	12.05%	0.0363%
TEXTRON INC	TXT	11,540.68	0.06%	0.21%	9.26%	9.48%	0.0057%
TYCO INTERNATIONAL PLC	TYC	15,360.05	0.08%	2.16%	10.70%	12.98%	0.0103%
UNDER ARMOUR INC-CLASS A	UA	20,505.10	0.11%	0.00%	22.64%	22.64%	0.0240%
UNITED CONTINENTAL HOLDINGS	UAL	23,038.51	0.12%	0.00%	16.92%	16.92%	0.0201%
UNIVERSAL HEALTH SERVICES-B	UHS	12,089.78	0.06%	0.33%	10.70%	10.35%	0.0067%
UNITEDHEALTH GROUP INC	UNH	112,310.60	0.58%	1.59%	12.03%	13.72%	0.0797%
UNUM GROUP	UNM	8,435.45	0.04%	2.05%	9.00%	11.14%	0.0049%
UNION PACIFIC CORP	UNP	76,315.68	0.39%	2.52%	8.68%	11.31%	0.0446%
UNITED PARCEL SERVICE-CL B	UPS	92,325.34	0.48%	2.83%	11.54%	14.53%	0.0693%
URBAN OUTFITTERS INC	URBN	3,544.85	0.02%	0.00%	14.19%	14.19%	0.0026%
UNITED RENTALS INC	URI	6,949.13	0.04%	0.00%	12.64%	12.64%	0.0045%
US BANCORP	USB	74,279.15	0.38%	2.40%	5.75%	8.22%	0.0315%
UNITED TECHNOLOGIES CORP	UTX	87,291.73	0.45%	2.60%	8.30%	11.01%	0.0497%
VISA INC-CLASS A SHARES	V	188,744.56	0.98%	0.62%	18.08%	18.76%	0.1831%
VARIAN MEDICAL SYSTEMS INC	VAR	7,752.23	0.04%	0.00%	12.50%	12.50%	0.0050%
VF CORP	VFC	28,739.35	0.15%	1.95%	11.71%	13.77%	0.0205%
VIACOM INC-CLASS B	VIAB	19,716.38	0.10%	2.91%	9.25%	12.30%	0.0125%
VALERO ENERGY CORP	VLO	32,769.61	0.17%	2.52%	2.39%	4.95%	0.0084%
VULCAN MATERIALS CO	VMC	12,863.14	0.07%	0.42%	43.59%	44.10%	0.0293%
VORNADO REALTY TRUST	VNO	18,953.33	0.10%	2.58%	3.62%	6.24%	0.0061%
VERISK ANALYTICS INC	VRSK	12,132.76	0.06%	0.00%	12.00%	12.00%	0.0075%
VERISIGN INC	VRSN	8,987.48	0.05%	0.00%	10.40%	10.40%	0.0048%
VERTEX PHARMACEUTICALS INC	VRTX	30,650.77	0.16%	0.00%	30.00%	30.00%	0.0475%
VENTAS INC	VTR	17,887.83	0.09%	5.74%	2.79%	8.62%	0.0080%
VERIZON COMMUNICATIONS INC	VZ	190,748.77	0.99%	4.74%	7.35%	12.26%	0.1209%
WATERS CORP	WAT	10,514.15	0.05%	0.00%	9.59%	9.59%	0.0052%
WALGREENS BOOTS ALLIANCE INC	WBA	92,199.04	0.48%	1.70%	15.51%	17.35%	0.0827%
WESTERN DIGITAL CORP	WDC	15,395.53	0.08%	3.02%	5.00%	8.09%	0.0064%
WEC ENERGY GROUP INC	WEC	16,276.69	0.08%	3.44%	4.57%	8.08%	0.0068%
WELLS FARGO & CO	WFC	277,920.07	1.44%	2.73%	11.28%	14.17%	0.2035%
WHOLE FOODS MARKET INC	WFM	10,721.43	0.06%	1.75%	11.82%	13.66%	0.0076%
WHIRLPOOL CORP	WHR	12,522.06	0.06%	2.17%	16.65%	19.00%	0.0123%
WASTE MANAGEMENT INC	WM	24,003.59	0.12%	2.85%	7.63%	10.59%	0.0131%
WILLIAMS COS INC	WMB	29,570.72	0.15%	6.24%	3.75%	10.11%	0.0155%
WAL-MART STORES INC	WMT	183,508.11	0.95%	3.43%	2.93%	6.41%	0.0608%
WESTROCK CO	WRK	14,076.97	0.07%	2.44%	7.19%	9.71%	0.0071%
WESTERN UNION CO	WU	9,726.66	0.05%	3.22%	8.99%	12.36%	0.0062%
WEYERHAEUSER CO	WY	15,081.30	0.08%	4.16%	5.50%	9.77%	0.0076%
WYNDHAM WORLDWIDE CORP	WYN	9,445.22	0.05%	2.09%	9.00%	11.18%	0.0055%
WYNN RESORTS LTD	WYNN	7,102.50	0.04%	4.29%	9.27%	13.75%	0.0050%
CIMAREX ENERGY CO	XEC	11,151.52	0.06%	0.54%	-2.77%	-2.23%	-0.0013%
XCEL ENERGY INC	XEL	18,082.12	0.09%	3.55%	5.04%	8.68%	0.0081%
XL GROUP PLC	XL	11,512.13	0.06%	1.87%	9.50%	11.46%	0.0068%
XILINX INC	XLNX	12,237.15	0.06%	2.59%	8.12%	10.81%	0.0068%
EXXON MOBIL CORP	XOM	344,980.19	1.78%	3.49%	-2.31%	1.15%	0.0204%
DENTSPLY INTERNATIONAL INC	XRAY	8,510.88	0.04%	0.47%	9.62%	10.11%	0.0044%
XEROX CORP	XRX	9,506.46	0.05%	2.97%	8.55%	11.65%	0.0057%
XYLEM INC	XYL	6,530.72	0.03%	1.54%	11.30%	12.92%	0.0044%
YAHOO! INC	YHOO	33,532.34	0.17%	0.00%	10.25%	10.25%	0.0178%
YUM! BRANDS INC	YUM	30,579.34	0.16%	2.42%	11.45%	14.00%	0.0221%
ZIMMER BIOMET HOLDINGS INC	ZBH	21,265.90	0.11%	0.84%	11.07%	11.95%	0.0131%
ZIONS BANCORPORATION	ZION	5,873.98	0.03%	0.75%	8.10%	8.88%	0.0027%
ZOETIS INC	ZTS	21,459.57	0.11%	0.77%	12.50%	13.32%	0.0148%
		19,344,724					13.22%

[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] x (1 + (0.5 x [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	Current 30-Year Treasury (30- day average)	Implied Market Risk Premium
12.65%	2.90%	9.75%

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	11,981.88	0.07%	1.11%	-3.00%	-1.91%	-0.0013%
ALCOA INC	AA	11,908.12	0.07%	1.32%	20.00%	21.45%	0.0145%
AMERICAN AIRLINES GROUP INC	AAL	31,194.46	N/A	0.87%	N/A	N/A	N/A
ADVANCE AUTO PARTS INC	AAP	14,041.62	0.08%	0.13%	13.50%	13.64%	0.0109%
APPLE INC	AAPL	658,973.70	3.74%	1.89%	14.50%	16.53%	0.6176%
ABBVIE INC	ABBV	79,900.16	N/A	4.23%	N/A	N/A	N/A
AMERISOURCEBERGEN CORP	ABC	20,092.78	0.11%	1.25%	15.00%	16.34%	0.0186%
ABBOTT LABORATORIES	ABT	64,834.18	0.37%	2.21%	1.00%	3.22%	0.0118%
ACE LTD	ACE	37,274.23	0.21%	2.33%	8.00%	10.42%	0.0220%
ACCENTURE PLC-CL A	ACN	66,468.30	0.38%	2.07%	7.50%	9.65%	0.0364%
ADOBE SYSTEMS INC	ADBE	44,115.45	0.25%	0.00%	26.50%	26.50%	0.0663%
ANALOG DEVICES INC	ADI	19,886.93	0.11%	2.52%	13.50%	16.19%	0.0183%
ARCHER-DANIELS-MIDLAND CO	ADM	28,673.80	0.16%	2.40%	10.00%	12.52%	0.0204%
AUTOMATIC DATA PROCESSING	ADP	42,252.96	0.24%	2.35%	7.50%	9.94%	0.0238%
ALLIANCE DATA SYSTEMS CORP	ADS	18,176.51	0.10%	0.00%	14.50%	14.50%	0.0149%
AUTODESK INC	ADSK	11,895.80	0.07%	0.00%	13.50%	13.50%	0.0091%
ADT CORP/THE	ADT	5,730.66	0.03%	2.50%	9.50%	12.12%	0.0039%
AMEREN CORPORATION	AEE	10,795.70	0.06%	3.82%	7.00%	10.95%	0.0067%
AMERICAN ELECTRIC POWER	AEP	29,025.72	0.16%	3.79%	5.00%	8.88%	0.0146%
AES CORP	AES	7,535.98	0.04%	3.62%	8.00%	11.76%	0.0050%
AETNA INC	AET	36,031.30	0.20%	0.97%	11.00%	12.02%	0.0246%
AFLAC INC	AFL	26,792.99	0.15%	2.64%	4.50%	7.20%	0.0109%
ALLERGAN PLC	AGN	99,470.02	0.56%	0.00%	20.50%	20.50%	0.1156%
AMERICAN INTERNATIONAL GROUP	AIG	79,427.47	0.45%	1.84%	5.00%	6.89%	0.0310%
APARTMENT INVT & MGMT CO -A	AIV	-	N/A	2.98%	N/A	N/A	N/A
ASSURANT INC	AIZ	5,412.77	0.03%	2.48%	3.50%	6.02%	0.0018%
AKAMAI TECHNOLOGIES INC	AKAM	12,967.57	0.07%	0.00%	15.50%	15.50%	0.0114%
ALLSTATE CORP	ALL	24,743.10	0.14%	1.95%	7.50%	9.52%	0.0134%
ALLEGION PLC	ALLE	6,131.20	N/A	0.63%	N/A	N/A	N/A
ALTERA CORP	ALTR	15,970.26	0.09%	1.36%	4.00%	5.39%	0.0049%
ALEXION PHARMACEUTICALS INC	ALXN	37,690.60	0.21%	0.00%	25.50%	25.50%	0.0545%
APPLIED MATERIALS INC	AMAT	19,462.03	0.11%	2.47%	26.00%	28.79%	0.0318%
AMETEK INC	AME	13,471.53	0.08%	0.65%	7.50%	8.17%	0.0062%
AFFILIATED MANAGERS GROUP	AMG	9,601.75	0.05%	0.00%	13.00%	13.00%	0.0071%
AMGEN INC	AMGN	115,618.50	0.66%	2.09%	8.50%	10.68%	0.0700%
AMERIPRISE FINANCIAL INC	AMP	20,393.47	0.12%	2.35%	13.50%	16.01%	0.0185%
AMERICAN TOWER CORP	AMT	42,102.07	0.24%	1.97%	14.50%	16.61%	0.0397%
AMAZON.COM INC	AMZN	263,909.90	N/A	0.00%	N/A	N/A	N/A
AUTONATION INC	AN	6,989.98	0.04%	0.00%	11.50%	11.50%	0.0046%
ANTHEM INC	ANTM	36,466.17	0.21%	1.79%	9.50%	11.38%	0.0235%
AON PLC	AON	25,856.32	0.15%	1.30%	13.50%	14.89%	0.0218%
APACHE CORP	APA	17,376.11	0.10%	2.18%	45.50%	48.18%	0.0475%
ANADARKO PETROLEUM CORP	APC	37,084.88	0.21%	1.48%	17.50%	19.11%	0.0402%
AIR PRODUCTS & CHEMICALS INC	APD	29,630.97	0.17%	2.35%	11.50%	13.99%	0.0235%
AMPHENOL CORP-CL A	APH	16,092.72	0.09%	1.08%	9.50%	10.63%	0.0097%
AIRGAS INC	ARG	6,838.44	0.04%	2.75%	10.00%	12.89%	0.0050%
ACTIVISION BLIZZARD INC	ATVI	25,332.75	0.14%	0.75%	8.50%	9.28%	0.0133%
AVALONBAY COMMUNITIES INC	AVB	-	N/A	2.87%	N/A	N/A	N/A
AVAGO TECHNOLOGIES LTD	AVGO	34,456.97	0.20%	1.34%	15.50%	16.94%	0.0331%
AVERY DENNISON CORP	AVY	5,755.30	0.03%	2.36%	7.50%	9.95%	0.0032%
AMERICAN EXPRESS CO	AXP	72,645.00	0.41%	1.64%	6.00%	7.69%	0.0317%
AUTOZONE INC	AZO	23,791.31	0.13%	0.00%	13.00%	13.00%	0.0175%
BOEING CO/THE	BA	99,646.91	0.57%	2.61%	12.00%	14.77%	0.0834%
BANK OF AMERICA CORP	BAC	169,224.90	0.96%	1.30%	28.50%	29.99%	0.2878%
BAXTER INTERNATIONAL INC	BAX	19,038.35	0.11%	1.32%	-8.50%	-7.24%	-0.0078%
BED BATH & BEYOND INC	BBBY	9,762.32	0.06%	0.00%	5.50%	5.50%	0.0030%
BB&T CORP	BBT	27,080.08	0.15%	3.01%	8.00%	11.13%	0.0171%
BEST BUY CO INC	BBY	12,104.11	0.07%	2.62%	8.00%	10.72%	0.0074%
CR BARD INC	BCR	13,855.92	0.08%	0.52%	10.00%	10.55%	0.0083%
BECTON DICKINSON AND CO	BDX	29,109.67	0.17%	1.88%	11.50%	13.49%	0.0223%
FRANKLIN RESOURCES INC	BEN	24,457.26	0.14%	1.74%	7.50%	9.31%	0.0129%
BROWN-FORMAN CORP-CLASS B	BF/B	22,501.22	0.13%	1.21%	8.00%	9.26%	0.0118%
BAKER HUGHES INC	BHI	24,230.68	0.14%	1.22%	6.00%	7.26%	0.0100%
BIOGEN INC	BIIB	65,101.84	0.37%	0.00%	16.50%	16.50%	0.0609%
BANK OF NEW YORK MELLON CORP	BK	46,086.43	0.26%	1.63%	11.50%	13.22%	0.0346%
BLACKROCK INC	BLK	55,795.20	0.32%	2.60%	8.50%	11.21%	0.0355%
BALL CORP	BLL	9,448.19	0.05%	0.76%	9.50%	10.30%	0.0055%
BRISTOL-MYERS SQUIBB CO	BMJ	105,352.80	0.60%	2.34%	14.50%	17.01%	0.1016%
BROADCOM CORP-CL A	BRM	31,885.71	0.18%	1.07%	6.50%	7.60%	0.0138%
BERKSHIRE HATHAWAY INC-CL B	BRK/B	-	N/A	0.00%	N/A	N/A	N/A
BOSTON SCIENTIFIC CORP	BSX	22,038.20	0.12%	0.00%	15.00%	15.00%	0.0187%
BORGWARNER INC	BWA	9,564.03	0.05%	1.23%	9.50%	10.79%	0.0059%
BAXALTA INC	BXLT	N/A	N/A	0.00%	N/A	N/A	N/A

BOSTON PROPERTIES INC	BXP	-	N/A	2.22%	N/A	N/A	N/A
CITIGROUP INC	C	158,047.00	0.90%	0.38%	13.50%	13.91%	0.1246%
CA INC	CA	12,232.72	0.07%	3.57%	4.00%	7.64%	0.0053%
CONAGRA FOODS INC	CAG	18,351.10	0.10%	2.36%	6.00%	8.43%	0.0088%
CARDINAL HEALTH INC	CAH	25,735.25	0.15%	1.99%	12.50%	14.61%	0.0213%
CAMERON INTERNATIONAL CORP	CAM	13,023.66	0.07%	0.00%	3.50%	3.50%	0.0026%
CATERPILLAR INC	CAT	42,714.56	0.24%	4.35%	3.50%	7.93%	0.0192%
CHUBB CORP	CB	29,404.87	0.17%	1.76%	5.50%	7.31%	0.0122%
CBRE GROUP INC - A	CBG	11,712.92	0.07%	0.00%	10.50%	10.50%	0.0070%
CBS CORP-CLASS B NON VOTING	CBS	20,913.64	0.12%	1.39%	12.50%	13.98%	0.0166%
COCA-COLA ENTERPRISES	CCE	11,754.35	0.07%	2.30%	8.50%	10.90%	0.0073%
CROWN CASTLE INTL CORP	CCI	28,908.97	0.16%	3.95%	23.50%	27.91%	0.0458%
CARNIVAL CORP	CCL	40,751.64	0.23%	2.29%	14.00%	16.45%	0.0380%
CELGENE CORP	CELG	92,752.66	0.53%	0.00%	16.50%	16.50%	0.0868%
CERNER CORP	CERN	21,780.29	0.12%	0.00%	17.00%	17.00%	0.0210%
CF INDUSTRIES HOLDINGS INC	CF	12,533.96	0.07%	2.51%	7.00%	9.60%	0.0068%
CHESAPEAKE ENERGY CORP	CHK	5,174.99	0.03%	0.00%	7.00%	7.00%	0.0021%
C.H. ROBINSON WORLDWIDE INC	CHRW	10,554.22	0.06%	2.09%	7.00%	9.16%	0.0055%
CIGNA CORP	CI	33,318.42	0.19%	0.03%	14.50%	14.53%	0.0275%
CINCINNATI FINANCIAL CORP	CINF	9,639.92	0.05%	3.13%	7.50%	10.75%	0.0059%
COLGATE-PALMOLIVE CO	CL	61,784.99	0.35%	2.30%	11.00%	13.43%	0.0470%
CLOROX COMPANY	CLX	15,896.69	0.09%	2.52%	8.00%	10.62%	0.0096%
COMERICA INC	CMA	7,471.39	0.04%	2.01%	7.50%	9.59%	0.0041%
COMCAST CORP-CLASS A	CMCSA	153,782.80	0.87%	1.62%	9.50%	11.20%	0.0977%
CME GROUP INC	CME	31,084.04	0.18%	2.16%	10.00%	12.27%	0.0216%
CHIPOTLE MEXICAN GRILL INC	CMG	20,269.41	0.11%	0.00%	15.00%	15.00%	0.0172%
CUMMINS INC	CMI	19,859.23	0.11%	3.49%	10.50%	14.17%	0.0160%
CMS ENERGY CORP	CMS	10,284.94	0.06%	3.28%	5.50%	8.87%	0.0052%
CENTERPOINT ENERGY INC	CNP	8,230.86	N/A	5.33%	N/A	N/A	N/A
CONSOL ENERGY INC	CNX	2,273.98	0.01%	0.40%	6.00%	6.41%	0.0008%
CAPITAL ONE FINANCIAL CORP	COF	40,887.27	0.23%	2.14%	5.00%	7.19%	0.0167%
CABOT OIL & GAS CORP	COG	9,141.00	0.05%	0.36%	30.50%	30.91%	0.0160%
COACH INC	COH	8,324.42	0.05%	4.48%	1.50%	6.01%	0.0028%
ROCKWELL COLLINS INC	COL	11,487.69	0.07%	1.56%	7.50%	9.12%	0.0059%
CONOCOPHILLIPS	COP	67,322.14	0.38%	5.42%	1.50%	6.96%	0.0266%
COSTCO WHOLESALE CORP	COST	69,546.30	0.39%	1.01%	10.50%	11.56%	0.0456%
CAMPBELL SOUP CO	CPB	15,943.30	0.09%	2.43%	4.00%	6.48%	0.0059%
COLUMBIA PIPELINE GROUP	CPGX	N/A	N/A	0.00%	N/A	N/A	N/A
SALESFORCE.COM INC	CRM	51,064.20	N/A	0.00%	N/A	N/A	N/A
COMPUTER SCIENCES CORP	CSC	9,097.69	0.05%	1.40%	10.00%	11.47%	0.0059%
CISCO SYSTEMS INC	CSCO	147,747.90	0.84%	2.90%	6.50%	9.49%	0.0796%
CSX CORP	CSX	27,425.18	0.16%	2.56%	9.50%	12.18%	0.0189%
CINTAS CORP	CTAS	10,162.64	0.06%	1.14%	8.00%	9.19%	0.0053%
CENTURYLINK INC	CTL	15,713.30	0.09%	7.74%	16.50%	24.88%	0.0222%
COGNIZANT TECH SOLUTIONS-A	CTSH	41,708.08	0.24%	0.00%	17.00%	17.00%	0.0402%
CITRIX SYSTEMS INC	CTXS	12,904.24	0.07%	0.00%	13.00%	13.00%	0.0095%
CABLEVISION SYSTEMS-NY GRP-A	CVC	9,017.77	0.05%	1.84%	13.00%	14.96%	0.0077%
CVS HEALTH CORP	CVS	116,596.20	0.66%	1.34%	12.50%	13.92%	0.0921%
CHEVRON CORP	CVX	172,404.50	0.98%	4.67%	2.50%	7.23%	0.0707%
DOMINION RESOURCES INC/A	D	44,270.98	0.25%	3.89%	8.00%	11.84%	0.0297%
DELTA AIR LINES INC	DAL	40,038.28	0.23%	1.06%	16.00%	17.14%	0.0389%
DU PONT (E.I.) DE NEMOURS	DD	53,557.13	0.30%	2.64%	6.00%	8.72%	0.0265%
DEERE & CO	DE	26,039.97	0.15%	3.03%	-1.00%	2.01%	0.0030%
DISCOVER FINANCIAL SERVICES	DFS	24,440.90	0.14%	2.00%	3.50%	5.54%	0.0077%
DOLLAR GENERAL CORP	DG	19,727.42	0.11%	1.45%	14.00%	15.55%	0.0174%
QUEST DIAGNOSTICS INC	DGX	8,969.76	0.05%	2.44%	9.00%	11.55%	0.0059%
DR HORTON INC	DHI	11,350.48	0.06%	0.81%	18.00%	18.88%	0.0122%
DANAHER CORP	DHR	64,234.20	0.36%	0.58%	13.00%	13.62%	0.0496%
WALT DISNEY CO/THE	DIS	181,200.00	1.03%	1.17%	12.50%	13.74%	0.1412%
DISCOVERY COMMUNICATIONS-A	DISCA	12,667.18	0.07%	0.00%	17.50%	17.50%	0.0126%
DELPHI AUTOMOTIVE PLC	DLPH	24,173.35	0.14%	1.18%	15.50%	16.77%	0.0230%
DOLLAR TREE INC	DLTR	15,208.56	0.09%	0.00%	17.50%	17.50%	0.0151%
DUN & BRADSTREET CORP	DNB	4,014.10	0.02%	1.66%	5.00%	6.70%	0.0015%
DIAMOND OFFSHORE DRILLING	DO	2,806.25	0.02%	2.44%	0.50%	2.95%	0.0005%
DOVER CORP	DOV	9,917.76	0.06%	2.63%	4.00%	6.68%	0.0038%
DOW CHEMICAL CO/THE	DOW	57,812.40	0.33%	3.71%	12.50%	16.44%	0.0539%
DR PEPPER SNAPPLE GROUP INC	DPS	17,106.88	0.10%	2.21%	9.00%	11.31%	0.0110%
DARDEN RESTAURANTS INC	DRI	8,212.36	0.05%	3.43%	11.50%	15.13%	0.0070%
DTE ENERGY COMPANY	DTE	15,232.04	0.09%	3.44%	5.00%	8.53%	0.0074%
DUKE ENERGY CORP	DUK	51,641.28	0.29%	4.44%	5.00%	9.55%	0.0280%
DAVITA HEALTHCARE PARTNERS I	DVA	16,155.64	0.09%	0.00%	11.50%	11.50%	0.0105%
DEVON ENERGY CORP	DVN	18,392.25	0.10%	2.15%	6.00%	8.21%	0.0086%
ELECTRONIC ARTS INC	EA	23,181.94	0.13%	0.00%	15.50%	15.50%	0.0204%
EBAY INC	EBAY	33,592.44	0.19%	0.00%	5.50%	5.50%	0.0105%
ECOLAB INC	ECL	35,573.34	0.20%	1.10%	10.00%	11.16%	0.0225%
CONSOLIDATED EDISON INC	ED	19,850.86	0.11%	3.92%	3.00%	6.98%	0.0079%
EQUIFAX INC	EFX	12,208.88	0.07%	1.12%	7.50%	8.66%	0.0060%
EDISON INTERNATIONAL	EIX	21,532.85	0.12%	2.78%	3.50%	6.33%	0.0077%
ESTEE LAUDER COMPANIES-CL A	EL	32,006.74	0.18%	1.14%	9.00%	10.19%	0.0185%
EMC CORP/MA	EMC	49,619.43	0.26%	1.78%	5.50%	7.33%	0.0206%
EASTMAN CHEMICAL CO	EMN	10,613.12	0.06%	2.24%	9.50%	11.85%	0.0071%
EMERSON ELECTRIC CO	EMR	31,693.00	0.18%	3.94%	4.00%	8.02%	0.0144%
ENDO INTERNATIONAL PLC	ENDP	10,715.05	N/A	0.00%	N/A	N/A	N/A
EOG RESOURCES INC	EOG	47,116.64	0.27%	0.84%	2.00%	2.85%	0.0076%
EQUINIX INC	EQIX	16,780.97	0.10%	2.29%	25.50%	28.08%	0.0267%
EQUITY RESIDENTIAL	EQR	-	N/A	2.94%	N/A	N/A	N/A
EGT CORP	EQT	10,412.24	0.06%	0.18%	16.00%	16.19%	0.0096%
EVERSOURCE ENERGY	ES	16,714.38	0.09%	3.32%	8.50%	11.96%	0.0113%

EXPRESS SCRIPTS HOLDING CO	ESRX	55,876.20	0.32%	0.00%	17.50%	17.50%	0.0555%
ESSEX PROPERTY TRUST INC	ESS	-	N/A	2.69%	N/A	N/A	N/A
ENSCO PLC-CL A	ESV	3,915.81	0.02%	3.61%	-2.00%	1.57%	0.0003%
E*TRADE FINANCIAL CORP	ETFC	7,852.63	0.04%	0.00%	32.50%	32.50%	0.0145%
EATON CORP PLC	ETN	25,408.62	0.14%	4.05%	7.00%	11.19%	0.0161%
ENERGY CORP	ETR	12,577.52	0.07%	4.74%	-0.50%	4.23%	0.0030%
EDWARDS LIFESCIENCES CORP	EW	15,957.49	0.09%	0.00%	16.00%	16.00%	0.0145%
EXELON CORP	EXC	26,718.74	0.15%	4.00%	4.50%	8.59%	0.0130%
EXPEDITORS INTL WASH INC	EXPD	9,650.64	0.05%	1.41%	10.50%	11.98%	0.0068%
EXPEDIA INC	EXPE	16,472.88	0.09%	0.75%	18.50%	19.32%	0.0180%
FORD MOTOR CO	F	61,818.90	0.35%	3.85%	10.00%	14.04%	0.0492%
FASTENAL CO	FAST	11,157.47	0.06%	2.91%	8.50%	11.53%	0.0073%
FACEBOOK INC-A	FB	279,076.00	1.58%	0.00%	32.50%	32.50%	0.5144%
FREEMPORT-MCMORAN INC	FCX	12,500.80	0.07%	1.66%	7.50%	9.22%	0.0065%
FEDEX CORP	FDX	45,101.57	0.26%	0.63%	15.00%	15.68%	0.0401%
FIRSTENERGY CORP	FE	13,733.95	0.08%	4.49%	7.00%	11.65%	0.0091%
F5 NETWORKS INC	FFIV	8,558.70	0.05%	0.00%	11.50%	11.50%	0.0056%
FIDELITY NATIONAL INFO SERV	FIS	19,872.51	0.11%	1.47%	12.50%	14.06%	0.0158%
FISERV INC	FISV	22,228.75	0.13%	0.00%	10.50%	10.50%	0.0132%
FIFTH THIRD BANCORP	FITB	15,156.11	0.09%	2.94%	4.00%	7.00%	0.0060%
FLIR SYSTEMS INC	FLIR	3,884.04	0.02%	1.70%	10.50%	12.29%	0.0027%
FLUOR CORP	FLR	6,593.16	0.04%	1.85%	7.50%	9.42%	0.0035%
FLOWSERVE CORP	FLS	5,698.85	0.03%	1.68%	10.00%	11.76%	0.0038%
FMC CORP	FMC	4,991.86	0.03%	1.85%	8.00%	9.92%	0.0028%
FOSSIL GROUP INC	FOSL	2,633.79	0.01%	0.00%	6.00%	6.00%	0.0009%
TWENTY-FIRST CENTURY FOX-A	FOXA	61,291.73	0.35%	1.01%	13.50%	14.58%	0.0507%
FIRST SOLAR INC	FSLR	5,033.45	0.03%	0.00%	7.50%	7.50%	0.0021%
FMC TECHNOLOGIES INC	FTI	7,519.06	0.04%	0.00%	5.50%	5.50%	0.0023%
FRONTIER COMMUNICATIONS CORP	FTR	6,332.00	0.04%	7.75%	26.00%	34.76%	0.0125%
AGL RESOURCES INC	GAS	7,448.62	0.04%	3.29%	6.50%	9.90%	0.0042%
GENERAL DYNAMICS CORP	GD	48,026.03	0.27%	1.87%	9.00%	10.95%	0.0298%
GENERAL ELECTRIC CO	GE	298,652.40	1.69%	3.11%	8.50%	11.74%	0.1989%
GENERAL GROWTH PROPERTIES	GGP	-	N/A	2.66%	N/A	N/A	N/A
GILEAD SCIENCES INC	GILD	158,494.80	0.90%	1.60%	22.50%	24.28%	0.2182%
GENERAL MILLS INC	GIS	35,490.62	0.20%	2.97%	6.00%	9.06%	0.0182%
CORNING INC	GLW	21,665.60	0.12%	2.73%	6.00%	8.81%	0.0108%
GENERAL MOTORS CO	GM	56,672.00	0.32%	4.07%	11.50%	15.80%	0.0508%
KEURIG GREEN MOUNTAIN INC	GMCR	8,326.38	0.05%	2.13%	9.50%	11.73%	0.0055%
GAMESTOP CORP-CLASS A	GME	4,975.18	0.03%	3.07%	11.00%	14.24%	0.0040%
GENWORTH FINANCIAL INC-CL A	GNW	2,400.51	0.01%	0.00%	21.00%	21.00%	0.0029%
ALPHABET INC-CL C	GOOG	446,795.60	2.53%	0.00%	13.50%	13.50%	0.3421%
GENUINE PARTS CO	GPC	13,401.97	0.08%	2.79%	7.50%	10.39%	0.0079%
GAP INC/THE	GPS	11,197.10	0.06%	3.44%	6.50%	10.05%	0.0064%
GARMIN LTD	GRMN	6,694.22	0.04%	5.93%	3.50%	9.53%	0.0036%
GOLDMAN SACHS GROUP INC	GS	82,877.34	0.47%	1.42%	7.00%	8.47%	0.0398%
GOODYEAR TIRE & RUBBER CO	GT	8,774.29	0.05%	0.86%	10.50%	11.41%	0.0057%
WW GRAINGER INC	GWW	13,816.49	0.08%	2.24%	9.00%	11.34%	0.0069%
HALLIBURTON CO	HAL	33,912.34	0.19%	1.81%	8.00%	9.88%	0.0190%
HARMAN INTERNATIONAL	HAR	7,477.28	0.04%	1.33%	20.00%	21.46%	0.0091%
HASBRO INC	HAS	9,588.24	0.05%	2.40%	10.00%	12.52%	0.0068%
HUNTINGTON BANCSHARES INC	HBAN	8,729.32	0.05%	2.58%	9.00%	11.70%	0.0058%
HANESBRANDS INC	HBI	11,353.85	0.06%	1.42%	16.00%	17.53%	0.0113%
HCA HOLDINGS INC	HCA	27,512.28	0.16%	0.00%	14.00%	14.00%	0.0218%
HUDSON CITY BANCORP INC	HCBK	4,935.62	0.03%	1.62%	11.00%	12.71%	0.0036%
WELLTOWER INC	HCN	-	N/A	4.91%	N/A	N/A	N/A
HCP INC	HCP	-	0.00%	5.68%	89.00%	97.21%	0.0000%
HOME DEPOT INC	HD	159,678.20	0.91%	1.97%	12.00%	14.09%	0.1276%
HESS CORP	HES	17,379.26	0.10%	1.64%	-10.00%	-8.44%	-0.0083%
HARTFORD FINANCIAL SVCS GRP	HIG	20,309.26	0.12%	1.72%	13.00%	14.83%	0.0171%
HARLEY-DAVIDSON INC	HOG	9,990.04	0.06%	2.58%	10.50%	13.22%	0.0075%
HONEYWELL INTERNATIONAL INC	HON	79,057.48	0.45%	2.02%	8.50%	10.61%	0.0476%
STARWOOD HOTELS & RESORTS	HOT	11,940.50	0.07%	2.14%	6.50%	8.71%	0.0059%
HELMERICH & PAYNE	HP	6,105.17	0.03%	4.85%	1.00%	5.87%	0.0020%
HEWLETT-PACKARD CO	HPQ	51,814.77	N/A	2.43%	N/A	N/A	N/A
H&R BLOCK INC	HRB	9,813.51	0.06%	2.39%	8.00%	10.49%	0.0058%
HORMEL FOODS CORP	HRL	18,103.41	0.10%	1.59%	12.00%	13.69%	0.0141%
HARRIS CORP	HRS	9,399.30	0.05%	2.67%	7.00%	9.76%	0.0052%
HENRY SCHEIN INC	HSIC	12,409.23	0.07%	0.00%	8.50%	8.50%	0.0060%
HOST HOTELS & RESORTS INC	HST	-	N/A	4.67%	N/A	N/A	N/A
HERSHEY CO/THE	HSY	21,042.34	0.12%	2.43%	8.00%	10.53%	0.0126%
HUMANA INC	HUM	24,459.89	0.14%	0.70%	10.50%	11.24%	0.0156%
INTL BUSINESS MACHINES CORP	IBM	141,140.30	0.80%	3.61%	2.00%	5.65%	0.0452%
INTERCONTINENTAL EXCHANGE INC	ICE	27,277.14	0.15%	1.22%	13.00%	14.30%	0.0221%
INTL FLAVORS & FRAGRANCES	IFF	9,180.85	0.05%	1.97%	6.50%	8.53%	0.0044%
INTEL CORP	INTC	163,503.20	0.93%	2.79%	10.00%	12.93%	0.1199%
INTUIT INC	INTU	26,700.23	0.15%	1.24%	12.00%	13.31%	0.0202%
INTERNATIONAL PAPER CO	IP	17,832.68	0.10%	4.12%	15.50%	19.94%	0.0202%
INTERPUBLIC GROUP OF COS INC	IPG	9,102.89	0.05%	2.25%	12.50%	14.89%	0.0077%
INGERSOLL-RAND PLC	IR	14,769.25	0.08%	2.08%	10.00%	12.18%	0.0102%
IRON MOUNTAIN INC	IRM	6,593.76	0.04%	6.07%	6.50%	12.77%	0.0048%
INTUITIVE SURGICAL INC	ISRG	18,358.66	0.10%	0.00%	7.00%	7.00%	0.0073%
ILLINOIS TOOL WORKS	ITW	32,775.86	0.19%	2.46%	11.00%	13.60%	0.0253%
INVESCO LTD	IVZ	14,139.15	0.08%	3.28%	14.50%	18.02%	0.0144%
HUNT (JB) TRANSPRT SVCS INC	JBHT	8,948.93	0.05%	1.09%	12.00%	13.16%	0.0067%
JOHNSON CONTROLS INC	JCI	29,505.05	0.17%	2.31%	10.50%	12.93%	0.0216%
JACOBS ENGINEERING GROUP INC	JEC	4,863.88	0.03%	0.00%	7.00%	7.00%	0.0019%
JOHNSON & JOHNSON	JNJ	275,596.10	1.56%	3.01%	6.50%	9.61%	0.1502%
JUNIPER NETWORKS INC	JNPR	11,436.77	0.06%	1.45%	16.00%	17.57%	0.0114%

JPMORGAN CHASE & CO	JPM	233,651.00	1.33%	2.85%	8.50%	11.47%	0.1520%
NORDSTROM INC	JWN	12,893.58	0.07%	2.29%	7.00%	9.37%	0.0069%
KELLOGG CO	K	25,419.53	0.14%	2.78%	4.50%	7.34%	0.0106%
KEYCORP	KEY	11,135.63	0.06%	2.35%	8.50%	10.95%	0.0069%
KRAFT HEINZ CO/THE	KHC	31,812.92	N/A	2.87%	N/A	N/A	N/A
KIMCO REALTY CORP	KIM	-	N/A	3.64%	N/A	N/A	N/A
KLA-TENCOR CORP	KLAC	10,378.87	0.06%	3.21%	8.50%	11.85%	0.0070%
KIMBERLY-CLARK CORP	KMB	44,007.44	0.25%	2.91%	7.00%	10.01%	0.0250%
KINDER MORGAN INC	KMI	65,098.86	0.37%	6.86%	15.00%	22.37%	0.0826%
CARMAX INC	KMX	11,935.12	0.07%	0.00%	13.50%	13.50%	0.0091%
COCA-COLA CO/THE	KO	188,050.80	1.07%	3.24%	5.00%	8.32%	0.0887%
MICHAEL KORS HOLDINGS LTD	KORS	7,605.60	0.04%	0.00%	11.50%	11.50%	0.0050%
KROGER CO	KR	36,949.85	0.21%	1.18%	10.50%	11.74%	0.0246%
KOHL'S CORP	KSS	8,902.32	0.05%	4.16%	6.50%	10.80%	0.0055%
KANSAS CITY SOUTHERN	KSU	9,402.07	0.05%	1.53%	13.00%	14.63%	0.0078%
LOEWS CORP	L	13,378.44	0.08%	0.68%	15.00%	15.73%	0.0119%
L BRANDS INC	LB	28,157.16	0.16%	2.07%	9.00%	11.16%	0.0178%
LEGGITT & PLATT INC	LEG	6,062.89	0.03%	2.89%	11.50%	14.56%	0.0050%
LENNAR CORP-A	LEN	10,891.01	0.06%	0.31%	18.00%	18.34%	0.0113%
LABORATORY CRP OF AMER HLDGS	LH	11,038.61	0.06%	0.00%	9.00%	9.00%	0.0056%
L-3 COMMUNICATIONS HOLDINGS	LLL	9,212.24	0.05%	2.28%	6.00%	8.35%	0.0044%
LINEAR TECHNOLOGY CORP	LLTC	10,997.71	0.06%	2.61%	6.50%	9.19%	0.0057%
ELI LILLY & CO	LLY	81,729.66	0.46%	2.60%	8.00%	10.70%	0.0496%
LEGG MASON INC	LM	4,973.25	0.03%	1.77%	13.00%	14.89%	0.0042%
LOCKHEED MARTIN CORP	LMT	67,233.72	0.38%	3.05%	9.00%	12.19%	0.0465%
LINCOLN NATIONAL CORP	LNC	12,894.68	0.07%	1.79%	8.00%	9.86%	0.0072%
LOWE'S COS INC	LOW	68,133.76	0.39%	1.57%	15.00%	16.69%	0.0645%
LAM RESEARCH CORP	LRCX	11,507.60	0.07%	1.65%	23.00%	24.84%	0.0162%
LEUCADIA NATIONAL CORP	LUK	N/A	N/A	0.00%	N/A	N/A	N/A
SOUTHWEST AIRLINES CO	LUV	29,064.37	0.16%	0.68%	24.50%	25.26%	0.0416%
LEVEL 3 COMMUNICATIONS INC	LVL3	17,224.87	N/A	0.00%	N/A	N/A	N/A
LYONDELLBASELL INDU-CL A	LYB	44,239.33	0.25%	3.30%	10.50%	13.97%	0.0351%
MACY'S INC	M	16,509.38	0.09%	2.89%	7.00%	9.99%	0.0094%
MASTERCARD INC-CLASS A	MA	111,156.40	0.63%	0.65%	13.50%	14.19%	0.0895%
MACERICH CO/THE	MAC	-	N/A	3.24%	N/A	N/A	N/A
MARRIOTT INTERNATIONAL -CL A	MAR	20,547.35	0.12%	1.30%	16.00%	17.40%	0.0203%
MASCO CORP	MAS	9,366.67	0.05%	1.38%	18.00%	19.50%	0.0104%
MATTEL INC	MAT	8,292.32	0.05%	6.21%	4.00%	10.33%	0.0049%
MCDONALD'S CORP	MCD	104,418.50	0.59%	3.20%	4.50%	7.77%	0.0460%
MICROCHIP TECHNOLOGY INC	MCHP	9,889.61	0.06%	2.95%	9.50%	12.59%	0.0071%
MCKESSON CORP	MCK	42,167.20	0.24%	0.62%	14.00%	14.66%	0.0351%
MOODY'S CORP	MCO	19,833.71	0.11%	1.37%	11.00%	12.45%	0.0140%
MONDELEZ INTERNATIONAL INC-A	MDLZ	75,641.52	0.43%	1.49%	11.00%	12.57%	0.0539%
MEDTRONIC PLC	MDT	103,292.80	0.59%	2.11%	6.50%	8.68%	0.0508%
METLIFE INC	MET	55,480.34	0.31%	3.20%	6.00%	9.30%	0.0292%
MCGRAW HILL FINANCIAL INC	MHFI	25,386.10	N/A	1.42%	N/A	N/A	N/A
MOHAWK INDUSTRIES INC	MHK	14,506.36	0.08%	0.00%	15.00%	15.00%	0.0123%
MEAD JOHNSON NUTRITION CO	MJN	16,071.90	0.09%	2.15%	9.00%	11.25%	0.0103%
MCCORMICK & CO-NON VTG SHRS	MKC	10,954.34	0.06%	2.01%	8.50%	10.60%	0.0066%
MARTIN MARIETTA MATERIALS	MLM	10,209.43	0.06%	1.05%	26.50%	27.69%	0.0160%
MARSH & MCLENNAN COS	MMC	29,205.00	0.17%	2.26%	10.50%	12.88%	0.0213%
3M CO	MMM	97,460.22	0.55%	2.63%	8.50%	11.24%	0.0621%
MALLINCKRODT PLC	MNK	6,873.49	N/A	0.00%	N/A	N/A	N/A
MONSTER BEVERAGE CORP	MNST	29,276.30	0.17%	0.00%	16.50%	16.50%	0.0274%
ALTRIA GROUP INC	MO	120,466.80	0.66%	3.68%	9.50%	13.35%	0.0912%
MONSANTO CO	MON	42,771.89	0.24%	0.24%	9.50%	11.98%	0.0291%
MOSAIC CO/THE	MOS	12,546.92	0.07%	3.21%	6.50%	9.81%	0.0070%
MARATHON PETROLEUM CORP	MPC	25,588.05	0.15%	2.69%	9.00%	11.81%	0.0171%
MERCK & CO. INC.	MRK	146,873.90	0.83%	3.46%	4.00%	7.53%	0.0627%
MARATHON OIL CORP	MRO	12,510.96	0.07%	4.55%	-0.50%	4.04%	0.0029%
MORGAN STANLEY	MS	63,265.44	0.36%	1.86%	24.50%	26.59%	0.0954%
MICROSOFT CORP	MSFT	385,536.80	2.19%	3.00%	5.50%	8.58%	0.1877%
MOTOROLA SOLUTIONS INC	MSI	14,573.64	0.08%	1.93%	4.50%	6.47%	0.0054%
M & T BANK CORP	MTB	15,812.04	0.09%	2.36%	5.00%	7.42%	0.0067%
MICRON TECHNOLOGY INC	MU	17,990.72	0.10%	0.00%	21.00%	21.00%	0.0214%
MURPHY OIL CORP	MUR	4,845.67	0.03%	4.99%	-4.00%	0.89%	0.0002%
MYLAN NV	MYL	19,243.11	0.11%	0.00%	21.00%	21.00%	0.0229%
NAVIENT CORP	NAVI	4,847.45	N/A	5.09%	N/A	N/A	N/A
NOBLE ENERGY INC	NBL	14,117.76	0.08%	1.97%	4.50%	6.51%	0.0052%
NASDAQ INC	NDAQ	9,982.34	0.06%	1.69%	9.00%	10.77%	0.0061%
NEXTERA ENERGY INC	NEE	47,791.70	0.27%	3.22%	7.00%	10.33%	0.0280%
NEWMONT MINING CORP	NEM	10,067.90	0.06%	0.53%	-5.50%	-4.98%	-0.0028%
NETFLIX INC	NFLX	41,593.40	0.24%	0.00%	23.00%	23.00%	0.0543%
NEWFIELD EXPLORATION CO	NFX	6,312.24	0.04%	0.00%	9.50%	9.50%	0.0034%
NISOURCE INC	NJ	6,273.94	0.04%	3.14%	-1.50%	1.62%	0.0006%
NIKE INC -CL B	NKE	113,078.10	0.64%	0.85%	15.50%	16.42%	0.1053%
NIELSEN HOLDINGS PLC	NLSN	17,396.45	0.10%	2.36%	11.00%	13.49%	0.0133%
NORTHROP GRUMMAN CORP	NOC	33,814.39	0.19%	1.78%	6.50%	8.34%	0.0160%
NATIONAL OILWELL VARCO INC	NOV	15,067.41	0.09%	4.72%	-5.50%	-0.91%	-0.0008%
NRG ENERGY INC	NRG	4,933.37	0.03%	3.89%	28.00%	32.43%	0.0091%
NORFOLK SOUTHERN CORP	NSC	24,267.60	0.14%	2.93%	8.00%	11.05%	0.0152%
NETAPP INC	NTAP	10,210.86	0.06%	2.09%	5.50%	7.65%	0.0044%
NORTHERN TRUST CORP	NTRS	15,857.22	0.09%	2.12%	9.50%	11.72%	0.0105%
NUCOR CORP	NUE	13,614.92	0.08%	3.50%	22.50%	26.39%	0.0204%
NVIDIA CORP	NVDA	15,307.60	0.09%	1.37%	9.00%	10.43%	0.0091%
NEWELL RUBBERMAID INC	NWL	11,491.30	0.07%	1.77%	14.00%	15.69%	0.0104%
NEWS CORP - CLASS A	NWSA	8,542.90	N/A	1.36%	N/A	N/A	N/A
REALTY INCOME CORP	O	-	N/A	4.56%	N/A	N/A	N/A

OWENS-ILLINOIS INC	OI	3,831.08	0.02%	0.00%	5.50%	5.50%	0.0012%
ONEOK INC	OKE	7,665.24	0.04%	6.95%	9.50%	16.78%	0.0073%
OMNICOM GROUP	OMC	18,011.66	0.10%	2.89%	9.00%	12.02%	0.0123%
ORACLE CORP	ORCL	161,816.80	0.92%	1.59%	7.00%	8.65%	0.0793%
O'REILLY AUTOMOTIVE INC	ORLY	25,593.15	0.15%	0.00%	13.00%	13.00%	0.0188%
OCCIDENTAL PETROLEUM CORP	OXY	56,792.11	0.32%	4.12%	-4.00%	0.04%	0.0001%
PAYCHEX INC	PAYX	18,603.81	0.11%	3.31%	9.50%	12.97%	0.0137%
PEOPLE'S UNITED FINANCIAL	PBCT	4,879.08	0.03%	4.15%	11.00%	15.38%	0.0043%
PITNEY BOWES INC	PBI	4,233.16	0.02%	3.58%	4.00%	7.65%	0.0018%
PACCAR INC	PCAR	19,139.76	0.11%	3.71%	11.00%	14.91%	0.0162%
P G & E CORP	PCG	26,245.84	0.15%	3.34%	10.50%	14.02%	0.0209%
PLUM CREEK TIMBER CO	PCL	7,232.12	0.04%	4.26%	9.50%	13.96%	0.0057%
PRICELINE GROUP INC/THE	PCLN	69,256.76	0.39%	0.00%	15.00%	15.00%	0.0589%
PRECISION CASTPARTS CORP	PCP	31,720.56	0.18%	0.05%	8.00%	8.05%	0.0145%
PATTERSON COS INC	PDCO	4,544.23	0.03%	2.01%	10.50%	12.62%	0.0033%
PUBLIC SERVICE ENTERPRISE GP	PEG	22,063.56	0.13%	3.67%	3.50%	7.23%	0.0091%
PEPSICO INC	PEP	151,733.80	0.86%	2.80%	9.00%	11.93%	0.1026%
PFIZER INC	PFE	205,557.70	1.17%	3.36%	8.00%	11.49%	0.1340%
PRINCIPAL FINANCIAL GROUP	PFG	14,667.22	0.08%	3.05%	8.00%	11.17%	0.0093%
PROCTER & GAMBLE CO/THE	PG	203,180.30	1.15%	3.54%	7.50%	11.17%	0.1287%
PROGRESSIVE CORP	PGR	19,365.05	0.11%	2.09%	11.50%	13.71%	0.0151%
PARKER HANNIFIN CORP	PH	13,948.38	0.08%	2.50%	8.50%	11.11%	0.0088%
PULTEGROUP INC	PHM	6,443.51	0.04%	1.76%	14.00%	15.88%	0.0058%
PERKINELMER INC	PKI	5,553.26	0.03%	0.57%	7.50%	8.09%	0.0025%
PROLOGIS INC	PLD	-	N/A	3.70%	N/A	N/A	N/A
PHILIP MORRIS INTERNATIONAL	PM	138,728.70	0.79%	4.56%	3.00%	7.63%	0.0600%
PNC FINANCIAL SERVICES GROUP	PNC	46,171.68	0.26%	2.28%	4.50%	6.83%	0.0179%
PENTAIR PLC	PNR	10,034.68	0.06%	2.30%	15.50%	17.98%	0.0102%
PINNACLE WEST CAPITAL	PNW	7,384.45	0.04%	3.75%	4.00%	7.83%	0.0033%
PEPCO HOLDINGS INC	POM	6,713.52	0.04%	4.08%	10.50%	14.79%	0.0056%
PPG INDUSTRIES INC	PPG	28,052.11	0.16%	1.39%	12.50%	13.98%	0.0222%
PPL CORP	PPL	23,265.81	0.13%	4.37%	0.50%	4.88%	0.0064%
PERRIGO CO PLC	PRGO	21,605.58	0.12%	0.34%	12.50%	12.86%	0.0158%
PRUDENTIAL FINANCIAL INC	PRU	36,784.66	0.21%	2.85%	5.00%	7.92%	0.0165%
PUBLIC STORAGE	PSA	-	N/A	3.00%	N/A	N/A	N/A
PHILLIPS 66	PSX	44,416.01	0.25%	2.85%	5.00%	7.92%	0.0200%
PVH CORP	PVH	7,927.27	0.04%	0.16%	8.50%	8.67%	0.0039%
QUANTA SERVICES INC	PWR	3,979.92	0.02%	0.00%	12.00%	12.00%	0.0027%
PRAXAIR INC	PX	31,586.29	0.18%	2.76%	8.00%	10.87%	0.0195%
PIONEER NATURAL RESOURCES CO	PXD	20,396.61	0.12%	0.06%	15.50%	15.58%	0.0180%
PAYPAL HOLDINGS INC	PYPL	N/A	N/A	0.00%	N/A	N/A	N/A
QUALCOMM INC	QCOM	95,358.54	0.54%	3.18%	5.00%	8.26%	0.0447%
QORVO INC	QRVO	N/A	N/A	0.00%	N/A	N/A	N/A
RYDER SYSTEM INC	R	3,809.30	0.02%	2.30%	11.50%	13.93%	0.0030%
REYNOLDS AMERICAN INC	RAI	69,854.45	0.40%	2.95%	13.50%	16.66%	0.0660%
ROYAL CARIBBEAN CRUISES LTD	RCL	20,826.80	0.12%	1.58%	19.00%	20.73%	0.0245%
REGENERON PHARMACEUTICALS	REGN	54,026.46	0.31%	0.00%	22.50%	22.50%	0.0689%
REGIONS FINANCIAL CORP	RF	12,258.51	0.07%	2.71%	7.50%	10.31%	0.0072%
ROBERT HALF INTL INC	RHI	6,624.95	0.04%	1.66%	12.50%	14.26%	0.0054%
RED HAT INC	RHT	14,070.19	0.08%	0.00%	15.50%	15.50%	0.0124%
TRANSOCEAN LTD	RIG	5,773.14	0.03%	0.00%	-11.50%	-11.50%	-0.0038%
RALPH LAUREN CORP	RL	9,999.48	0.06%	1.84%	7.00%	8.90%	0.0050%
ROCKWELL AUTOMATION INC	ROK	14,355.94	0.08%	2.43%	8.50%	11.03%	0.0090%
ROPER TECHNOLOGIES INC	ROP	17,666.71	0.10%	0.57%	8.00%	8.59%	0.0086%
ROSS STORES INC	ROST	20,827.99	0.12%	1.02%	9.00%	10.07%	0.0119%
RANGE RESOURCES CORP	RRC	5,365.17	0.03%	0.50%	19.00%	19.55%	0.0059%
REPUBLIC SERVICES INC	RSG	15,236.47	0.09%	2.75%	8.00%	10.86%	0.0094%
RAYTHEON COMPANY	RTN	35,606.21	0.20%	2.29%	8.50%	10.89%	0.0220%
STARBUCKS CORP	SBUX	91,669.29	0.52%	1.17%	17.50%	18.77%	0.0976%
SCANA CORP	SCG	8,368.22	0.05%	3.79%	4.50%	8.38%	0.0040%
SCHWAB (CHARLES) CORP	SCHW	38,728.52	0.22%	0.82%	14.50%	15.38%	0.0338%
SPECTRA ENERGY CORP	SE	19,133.85	0.11%	5.19%	5.50%	10.83%	0.0118%
SEALED AIR CORP	SEE	10,749.50	0.06%	1.01%	19.50%	20.61%	0.0126%
SHERWIN-WILLIAMS CO/THE	SHW	22,781.76	0.13%	1.24%	13.00%	14.32%	0.0185%
SIGMA-ALDRICH	SIAL	16,744.86	0.09%	0.66%	9.00%	9.69%	0.0092%
SIGNET JEWELERS LTD	SIG	11,762.92	0.07%	0.62%	14.50%	15.18%	0.0101%
JM SMUCKER CO/THE	SJM	14,152.90	0.08%	2.28%	7.50%	9.87%	0.0079%
SCHLUMBERGER LTD	SLB	99,034.03	0.56%	2.56%	11.00%	13.70%	0.0769%
SL GREEN REALTY CORP	SLG	-	N/A	2.11%	N/A	N/A	N/A
SNAP-ON INC	SNA	9,535.28	0.05%	1.29%	9.50%	10.85%	0.0059%
SANDISK CORP	SNDK	15,760.13	0.09%	1.56%	4.50%	6.10%	0.0054%
SCRIPPS NETWORKS INTER-CL A	SNI	7,283.00	0.04%	1.62%	9.00%	10.69%	0.0044%
SOUTHERN CO/THE	SO	42,241.71	0.24%	4.75%	4.50%	9.36%	0.0224%
SIMON PROPERTY GROUP INC	SPG	-	N/A	3.08%	N/A	N/A	N/A
STAPLES INC	SPLS	8,140.63	0.05%	3.79%	-1.00%	2.77%	0.0013%
STERICYCLE INC	SRCL	12,642.02	0.07%	0.00%	10.00%	10.00%	0.0072%
SEMPRA ENERGY	SRE	25,433.55	0.14%	2.85%	8.50%	11.47%	0.0165%
SUNTRUST BANKS INC	STI	21,065.75	0.12%	2.62%	9.00%	11.74%	0.0140%
ST JUDE MEDICAL INC	STJ	17,402.02	0.10%	1.94%	8.00%	10.02%	0.0099%
STATE STREET CORP	STT	28,245.12	0.16%	2.02%	8.00%	10.10%	0.0162%
SEAGATE TECHNOLOGY	STX	12,378.06	0.07%	6.42%	5.50%	12.10%	0.0085%
CONSTELLATION BRANDS INC-A	STZ	27,038.94	0.15%	0.96%	16.50%	17.54%	0.0269%
STANLEY BLACK & DECKER INC	SWK	16,162.01	0.09%	2.09%	10.00%	12.19%	0.0112%
SKYWORKS SOLUTIONS INC	SWKS	15,602.79	0.09%	1.27%	28.50%	29.95%	0.0265%
SOUTHWESTERN ENERGY CO	SWN	4,458.94	0.03%	0.00%	3.00%	3.00%	0.0008%
STRYKER CORP	SYK	37,102.26	0.21%	1.40%	17.00%	18.52%	0.0390%
SYMANTEC CORP	SYM	14,117.76	0.08%	2.91%	4.00%	6.97%	0.0056%
SYSCO CORP	SY	24,788.96	0.14%	2.88%	12.00%	15.05%	0.0212%

AT&T INC	T	176,364.90	1.00%	5.62%	5.50%	11.27%	0.1128%
MOLSON COORS BREWING CO -B	TAP	16,354.60	0.09%	1.86%	8.50%	10.44%	0.0097%
TERADATA CORP	TDC	3,986.04	0.02%	0.00%	3.50%	3.50%	0.0008%
TECO ENERGY INC	TE	6,368.86	0.04%	3.40%	5.50%	8.99%	0.0032%
TE CONNECTIVITY LTD	TEL	25,606.12	0.15%	2.08%	8.50%	10.67%	0.0155%
TEGNA INC	TGNA	5,833.89	0.03%	2.17%	-0.50%	1.66%	0.0006%
TARGET CORP	TGT	48,613.69	0.28%	2.91%	9.50%	12.55%	0.0346%
TENET HEALTHCARE CORP	THC	2,804.66	0.02%	0.00%	30.00%	30.00%	0.0048%
TIFFANY & CO	TIF	10,218.97	0.06%	2.07%	12.50%	14.70%	0.0085%
TJX COMPANIES INC	TJX	49,835.94	0.28%	1.14%	10.00%	11.20%	0.0316%
TORCHMARK CORP	TMK	7,312.88	0.04%	0.93%	8.00%	8.97%	0.0037%
THERMO FISHER SCIENTIFIC INC	TMO	49,412.39	0.28%	0.48%	14.50%	15.01%	0.0421%
TRIPADVISOR INC	TRIP	12,039.16	0.07%	0.00%	21.00%	21.00%	0.0143%
T ROWE PRICE GROUP INC	TROW	19,114.03	0.11%	2.88%	9.50%	12.52%	0.0136%
TRAVELERS COS INC/THE	TRV	34,953.98	0.20%	2.17%	4.50%	6.72%	0.0133%
TRACTOR SUPPLY COMPANY	TSCO	12,363.34	0.07%	0.97%	15.50%	16.55%	0.0116%
TYSON FOODS INC-CL A	TSN	19,160.51	0.11%	0.98%	12.50%	13.54%	0.0147%
TESORO CORP	TSO	12,711.56	0.07%	1.97%	12.50%	14.59%	0.0105%
TOTAL SYSTEM SERVICES INC	TSS	9,255.81	0.05%	0.80%	10.00%	10.84%	0.0057%
TIME WARNER CABLE	TWC	51,742.41	0.29%	1.64%	6.00%	7.69%	0.0226%
TIME WARNER INC	TWX	59,257.01	0.34%	1.93%	12.00%	14.05%	0.0472%
TEXAS INSTRUMENTS INC	TXN	60,070.92	0.34%	2.82%	11.50%	14.27%	0.0486%
TEXTRON INC	TXT	10,824.32	0.06%	0.20%	17.00%	17.22%	0.0106%
TYCO INTERNATIONAL PLC	TYC	15,656.20	0.09%	2.21%	12.50%	14.85%	0.0132%
UNDER ARMOUR INC-CLASS A	UA	20,231.16	0.11%	0.00%	26.00%	26.00%	0.0288%
UNITED CONTINENTAL HOLDINGS	UAL	21,233.87	0.12%	0.00%	24.50%	24.50%	0.0295%
UNIVERSAL HEALTH SERVICES-B	UHS	11,063.84	0.06%	0.36%	12.00%	12.38%	0.0078%
UNITEDHEALTH GROUP INC	UNH	108,347.10	0.61%	1.76%	12.50%	14.37%	0.0883%
UNUM GROUP	UNM	8,198.51	0.05%	2.23%	11.00%	13.35%	0.0062%
UNION PACIFIC CORP	UNP	84,348.45	0.48%	2.27%	12.00%	14.41%	0.0689%
UNITED PARCEL SERVICE-CL B	UPS	95,467.70	0.54%	2.74%	10.50%	13.38%	0.0725%
URBAN OUTFITTERS INC	URBN	3,507.28	0.02%	0.00%	15.00%	15.00%	0.0030%
UNITED RENTALS INC	URI	7,047.70	0.04%	0.00%	16.00%	16.00%	0.0064%
US BANCORP	USB	73,931.27	0.42%	2.46%	5.50%	8.03%	0.0337%
UNITED TECHNOLOGIES CORP	UTX	88,872.67	0.50%	2.57%	7.50%	10.17%	0.0512%
VISA INC-CLASS A SHARES	V	169,270.30	0.98%	0.73%	13.50%	14.28%	0.1371%
VARIAN MEDICAL SYSTEMS INC	VAR	7,552.88	0.04%	0.00%	6.50%	6.50%	0.0028%
VF CORP	VFC	31,130.14	0.18%	1.75%	12.00%	13.86%	0.0245%
VIACOM INC-CLASS B	VIAB	19,755.74	0.11%	3.22%	11.00%	14.40%	0.0161%
VALERO ENERGY CORP	VLO	30,163.34	0.17%	2.65%	10.00%	12.78%	0.0219%
VULCAN MATERIALS CO	VMC	12,408.74	0.07%	0.43%	47.50%	48.03%	0.0338%
VORNADO REALTY TRUST	VNO	18,889.19	0.11%	2.52%	6.50%	9.10%	0.0098%
VERISK ANALYTICS INC	VRSK	13,467.82	0.08%	0.00%	12.50%	12.50%	0.0095%
VERISIGN INC	VRSN	8,598.85	0.05%	0.00%	11.00%	11.00%	0.0054%
VERTEX PHARMACEUTICALS INC	VRTX	26,752.90	N/A	0.00%	N/A	N/A	N/A
VENTAS INC	VTR	-	N/A	5.24%	N/A	N/A	N/A
VERIZON COMMUNICATIONS INC	VZ	186,726.40	1.06%	4.93%	5.50%	10.57%	0.1119%
WATERS CORP	WAT	10,132.79	0.06%	0.00%	8.50%	8.50%	0.0049%
WALGREENS BOOTS ALLIANCE INC	WBA	96,781.13	0.55%	1.63%	15.00%	16.75%	0.0919%
WESTERN DIGITAL CORP	WDC	16,090.80	0.09%	2.86%	2.50%	5.40%	0.0049%
WEC ENERGY GROUP INC	WEC	16,961.70	0.10%	3.56%	6.00%	9.67%	0.0093%
WELLS FARGO & CO	WFC	278,151.40	1.58%	2.83%	5.50%	8.41%	0.1326%
WHOLE FOODS MARKET INC	WFM	11,665.26	0.07%	1.78%	10.50%	12.37%	0.0082%
WHIRLPOOL CORP	WHR	12,465.18	0.07%	2.25%	13.50%	15.90%	0.0112%
WASTE MANAGEMENT INC	WM	24,175.82	0.14%	2.93%	7.00%	10.03%	0.0138%
WILLIAMS COS INC	WMB	29,817.69	0.17%	6.43%	16.00%	22.94%	0.0388%
WAL-MART STORES INC	WMT	189,363.50	1.07%	3.33%	1.50%	4.85%	0.0521%
WESTROCK CO	WRK	-	N/A	2.86%	N/A	N/A	N/A
WESTERN UNION CO	WU	10,067.89	0.06%	3.15%	6.00%	9.24%	0.0053%
WEYERHAEUSER CO	WY	15,428.77	0.09%	4.13%	12.50%	16.89%	0.0148%
WYNDHAM WORLDWIDE CORP	WYN	9,144.08	0.05%	2.17%	8.50%	10.76%	0.0056%
WYNN RESORTS LTD	WYNN	6,391.10	0.04%	3.17%	6.50%	9.77%	0.0035%
CIMAREX ENERGY CO	XEC	11,128.81	0.06%	0.54%	7.00%	7.56%	0.0048%
XCEL ENERGY INC	XEL	18,828.46	0.11%	3.61%	4.50%	8.19%	0.0087%
XL GROUP PLC	XL	9,926.62	0.06%	2.06%	9.00%	11.15%	0.0063%
XILINX INC	XLNX	12,240.91	0.07%	2.60%	7.00%	9.69%	0.0067%
EXXON MOBIL CORP	XOM	345,605.50	1.96%	3.52%	3.50%	7.08%	0.1388%
DENTSPLY INTERNATIONAL INC	XRAY	8,197.87	0.05%	0.50%	8.50%	9.02%	0.0042%
XEROX CORP	XRX	10,997.89	0.06%	2.92%	3.00%	5.96%	0.0037%
XYLEM INC	XYL	6,465.03	0.04%	1.57%	9.50%	11.14%	0.0041%
YAHOO! INC	YHOO	29,765.05	0.17%	0.00%	3.50%	3.50%	0.0059%
YUM! BRANDS INC	YUM	31,325.08	0.18%	2.53%	9.50%	12.15%	0.0216%
ZIMMER BIOMET HOLDINGS INC	ZBH	19,189.49	0.11%	1.00%	13.50%	14.57%	0.0159%
ZIONS BANCORPORATION	ZION	5,686.38	0.03%	0.93%	12.50%	13.49%	0.0043%
ZOETIS INC	ZTS	20,373.03	N/A	0.81%	N/A	N/A	N/A
		17,632,978					12.65%

[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] x (1 + (0.5 x [7]))) + [7]

[9] Equals Col. [6] x Col. [8]

Bloomberg and Value Line Beta Coefficients

Company	Ticker	[1]	[2]
		Bloomberg	Value Line
ALLETE, Inc.	ALE	0.599	0.80
Alliant Energy Corporation	LNT	0.692	0.80
Ameren Corporation	AEE	0.668	0.75
American Electric Power Company, Inc.	AEP	0.605	0.70
Avista Corporation	AVA	0.609	0.80
CMS Energy Corporation	CMS	0.588	0.70
Dominion Resources, Inc.	D	0.685	0.70
DTE Energy Company	DTE	0.638	0.75
Empire District Electric Company	EDE	0.587	0.70
Great Plains Energy Inc.	GXP	0.662	0.85
IDACORP, Inc.	IDA	0.718	0.80
NorthWestern Corporation	NWE	0.646	0.70
Otter Tail Corporation	OTTR	0.760	0.85
Pinnacle West Capital Corporation	PNW	0.632	0.75
PNM Resources, Inc.	PNM	0.689	0.85
Portland General Electric Company	POR	0.665	0.80
SCANA Corporation	SCG	0.643	0.75
Westar Energy, Inc.	WR	0.658	0.75
Xcel Energy Inc.	XEL	0.552	0.65
Mean		0.647	0.76

Notes:

[1] Source: Bloomberg Professional

[2] Source: Value Line

Capital Asset Pricing Model Results
Bloomberg and Value Line Derived Market Risk Premium

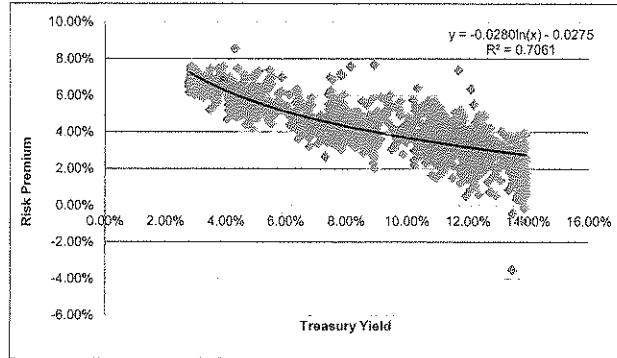
[1]	[2]	[3]	[4]	[5]	[6]
Risk-Free Rate	Average Beta Coefficient	Ex-Ante Market Risk Premium		CAPM Result	
		Bloomberg Market DCF Derived	Value Line Market DCF Derived	Bloomberg Market DCF Derived	Value Line Market DCF Derived
PROXY GROUP BLOOMBERG BETA COEFFICIENT					
Current 30-Year Treasury (30-day average) [7]	0.647	10.32%	9.75%	9.58%	9.21%
Near-Term Projected 30-Year Treasury [8]	0.647	10.32%	9.75%	10.16%	9.79%
Mean				9.87%	9.50%
PROXY GROUP VALUE LINE AVERAGE BETA COEFFICIENT					
Current 30-Year Treasury (30-day average) [7]	0.761	10.32%	9.75%	10.75%	10.31%
Near-Term Projected 30-Year Treasury [8]	0.761	10.32%	9.75%	11.33%	10.90%
Mean				11.04%	10.61%

Notes:

- [1] See Notes [7] and [8]
- [2] Source: Exhibit RBH-4
- [3] Source: Exhibit RBH-3
- [4] Source: Exhibit RBH-3
- [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. 34, No. 10, October 1, 2015, at 2.

Bond Yield Plus Risk Premium

[1]	[2]	[3]	[4]	[5]
Constant	Slope	30-Year Treasury Yield	Risk Premium	Return on Equity
-2.75%	-2.80%			
		Current 30-Year Treasury	2.90%	7.15%
		Near-Term Projected 30-Year Treasury	3.48%	6.64%
		Long-Term Projected 30-Year Treasury	4.90%	5.68%
				10.05%
				10.12%
				10.58%



Notes:

- [1] Constant of regression equation
- [2] Slope of regression equation
- [3] Source: Current = Bloomberg Professional,
Near Term Projected = Blue Chip Financial Forecasts, Vol. 34, No. 10, October 1, 2015, at 2,
Long Term Projected = Blue Chip Financial Forecasts, Vol. 34, 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
- [8] Source: Bloomberg Professional, equals 200-trading day average (i.e. lag period)
- [9] Equals [7] - [8]

Bond Yield Plus Risk Premium			
[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
1/1/1980	14.50%	9.36%	5.14%
1/7/1980	14.39%	9.38%	5.01%
1/9/1980	15.00%	9.40%	5.60%
1/14/1980	15.17%	9.42%	5.75%
1/17/1980	13.93%	9.44%	4.49%
1/23/1980	15.50%	9.47%	6.03%
1/30/1980	13.86%	9.52%	4.34%
1/31/1980	12.61%	9.53%	3.08%
2/6/1980	13.71%	9.58%	4.13%
2/13/1980	12.80%	9.63%	3.17%
2/14/1980	13.00%	9.65%	3.35%
2/19/1980	13.50%	9.68%	3.82%
2/27/1980	13.75%	9.78%	3.97%
2/29/1980	13.75%	9.81%	3.94%
2/29/1980	14.00%	9.81%	4.19%
2/29/1980	14.77%	9.81%	4.96%
3/7/1980	12.70%	9.89%	2.81%
3/14/1980	13.50%	9.97%	3.53%
3/26/1980	14.16%	10.10%	4.06%
3/27/1980	14.24%	10.12%	4.12%
3/28/1980	14.50%	10.13%	4.37%
4/11/1980	12.75%	10.27%	2.48%
4/14/1980	13.85%	10.29%	3.56%
4/16/1980	15.50%	10.31%	5.19%
4/22/1980	13.90%	10.35%	3.55%
4/22/1980	13.25%	10.35%	2.90%
4/24/1980	16.80%	10.38%	6.43%
4/29/1980	15.50%	10.41%	5.09%
5/6/1980	13.70%	10.45%	3.25%
5/7/1980	15.00%	10.45%	4.55%
5/8/1980	13.75%	10.46%	3.29%
5/9/1980	14.35%	10.47%	3.88%
5/13/1980	13.60%	10.48%	3.12%
5/15/1980	13.25%	10.49%	2.76%
5/19/1980	13.75%	10.51%	3.24%
5/27/1980	14.60%	10.54%	4.06%
5/27/1980	13.62%	10.54%	3.08%
5/29/1980	16.00%	10.56%	5.44%
5/30/1980	13.80%	10.56%	3.24%
6/2/1980	15.63%	10.57%	5.06%
6/9/1980	15.90%	10.60%	5.30%
6/10/1980	13.78%	10.60%	3.18%
6/12/1980	14.25%	10.61%	3.64%
6/19/1980	13.40%	10.62%	2.78%
6/30/1980	13.00%	10.65%	2.36%
6/30/1980	13.40%	10.65%	2.75%
7/9/1980	14.75%	10.67%	4.08%
7/10/1980	15.00%	10.68%	4.32%
7/15/1980	15.80%	10.70%	5.10%
7/18/1980	13.80%	10.71%	3.09%
7/22/1980	14.10%	10.72%	3.38%
7/24/1980	15.00%	10.73%	4.27%
7/25/1980	13.48%	10.73%	2.75%
7/31/1980	14.58%	10.75%	3.83%
8/8/1980	14.00%	10.78%	3.22%
8/8/1980	13.50%	10.78%	2.72%
8/8/1980	15.45%	10.78%	4.67%
8/11/1980	14.85%	10.78%	4.07%
8/14/1980	14.00%	10.79%	3.21%
8/14/1980	16.25%	10.79%	5.48%
8/25/1980	13.75%	10.82%	2.93%
8/27/1980	13.80%	10.83%	2.97%
8/29/1980	12.50%	10.84%	1.66%
9/15/1980	15.80%	10.88%	4.92%
9/15/1980	13.93%	10.88%	3.05%
9/15/1980	13.50%	10.88%	2.62%
9/24/1980	12.50%	10.93%	1.57%
9/24/1980	15.00%	10.93%	4.07%
9/26/1980	13.75%	10.94%	2.81%
9/30/1980	14.20%	10.96%	3.24%
9/30/1980	14.10%	10.96%	3.14%
10/1/1980	13.90%	10.97%	2.93%
10/3/1980	15.50%	10.98%	4.52%
10/7/1980	12.50%	10.99%	1.51%
10/9/1980	14.50%	11.00%	3.50%
10/9/1980	14.50%	11.00%	3.50%
10/9/1980	13.25%	11.00%	2.25%
10/16/1980	16.10%	11.02%	5.08%
10/17/1980	14.50%	11.03%	3.47%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
10/31/1980	14.25%	11.11%	3.14%
10/31/1980	13.75%	11.11%	2.64%
11/4/1980	15.00%	11.12%	3.88%
11/5/1980	14.00%	11.12%	2.88%
11/5/1980	13.75%	11.12%	2.63%
11/8/1980	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%
12/8/1980	15.10%	11.22%	3.88%
12/8/1980	14.15%	11.22%	2.93%
12/9/1980	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%
1/2/1981	15.25%	11.22%	4.03%
1/7/1981	14.30%	11.21%	3.09%
1/19/1981	15.25%	11.20%	4.05%
1/23/1981	14.40%	11.20%	3.20%
1/23/1981	13.10%	11.20%	1.90%
1/26/1981	15.25%	11.20%	4.05%
1/27/1981	15.00%	11.21%	3.79%
1/31/1981	13.47%	11.22%	2.25%
2/3/1981	15.25%	11.23%	4.02%
2/5/1981	15.75%	11.25%	4.50%
2/11/1981	15.60%	11.28%	4.32%
2/20/1981	15.25%	11.33%	3.92%
3/1/1981	15.40%	11.49%	3.91%
3/12/1981	14.51%	11.50%	3.01%
3/12/1981	16.00%	11.50%	4.50%
3/13/1981	13.02%	11.52%	1.50%
3/18/1981	16.19%	11.55%	4.64%
3/19/1981	13.75%	11.56%	2.19%
3/23/1981	14.30%	11.58%	2.72%
3/25/1981	15.30%	11.60%	3.70%
4/1/1981	14.53%	11.68%	2.85%
4/3/1981	19.10%	11.71%	7.39%
4/9/1981	15.00%	11.78%	3.22%
4/9/1981	15.30%	11.78%	3.52%
4/9/1981	17.00%	11.78%	5.22%
4/9/1981	16.50%	11.78%	4.72%
4/10/1981	13.75%	11.80%	1.95%
4/13/1981	13.57%	11.82%	1.75%
4/15/1981	15.30%	11.85%	3.45%
4/16/1981	13.50%	11.87%	1.63%
4/17/1981	14.10%	11.87%	2.23%
4/21/1981	16.80%	11.90%	4.90%
4/21/1981	14.00%	11.90%	2.10%
4/24/1981	16.00%	11.95%	4.05%
4/27/1981	13.61%	11.97%	1.64%
4/27/1981	12.50%	11.97%	0.53%
4/29/1981	13.65%	12.00%	1.65%
4/30/1981	13.50%	12.02%	1.48%
5/4/1981	16.22%	12.05%	4.17%
5/5/1981	14.40%	12.07%	2.33%
5/7/1981	16.25%	12.11%	4.14%
5/7/1981	16.27%	12.11%	4.16%
5/8/1981	13.00%	12.13%	0.87%
5/8/1981	16.00%	12.13%	3.87%
5/12/1981	13.50%	12.16%	1.34%
5/15/1981	15.75%	12.22%	3.53%
5/18/1981	14.88%	12.23%	2.65%
5/20/1981	16.00%	12.26%	3.74%
5/21/1981	14.00%	12.27%	1.73%
5/26/1981	14.90%	12.30%	2.60%
5/27/1981	15.00%	12.31%	2.69%
5/29/1981	15.50%	12.34%	3.16%
6/1/1981	16.50%	12.35%	4.15%
6/3/1981	14.67%	12.37%	2.30%
6/5/1981	13.00%	12.39%	0.61%
6/10/1981	16.75%	12.42%	4.33%
6/17/1981	14.40%	12.46%	1.94%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
6/18/1981	16.33%	12.47%	3.86%
6/25/1981	14.75%	12.51%	2.24%
6/26/1981	16.00%	12.52%	3.48%
6/30/1981	15.25%	12.54%	2.71%
7/1/1981	15.50%	12.56%	2.94%
7/1/1981	17.50%	12.56%	4.94%
7/10/1981	16.00%	12.62%	3.38%
7/14/1981	16.90%	12.64%	4.26%
7/15/1981	16.00%	12.65%	3.35%
7/17/1981	15.00%	12.67%	2.33%
7/20/1981	15.00%	12.68%	2.32%
7/21/1981	14.00%	12.69%	1.31%
7/28/1981	13.48%	12.74%	0.74%
7/31/1981	13.50%	12.78%	0.72%
7/31/1981	16.00%	12.78%	3.22%
7/31/1981	15.00%	12.78%	2.22%
8/5/1981	15.71%	12.83%	2.88%
8/10/1981	14.50%	12.87%	1.63%
8/11/1981	15.00%	12.88%	2.12%
8/20/1981	16.50%	12.95%	3.55%
8/20/1981	13.50%	12.95%	0.55%
8/24/1981	15.00%	12.97%	2.03%
8/28/1981	15.00%	13.01%	1.99%
9/3/1981	14.50%	13.05%	1.45%
9/10/1981	14.50%	13.11%	1.39%
9/11/1981	16.00%	13.12%	2.88%
9/16/1981	16.00%	13.15%	2.85%
9/17/1981	16.50%	13.16%	3.34%
9/23/1981	15.85%	13.20%	2.65%
9/28/1981	15.50%	13.23%	2.27%
10/9/1981	15.75%	13.33%	2.42%
10/15/1981	16.25%	13.37%	2.88%
10/16/1981	16.50%	13.38%	3.12%
10/16/1981	15.50%	13.38%	2.12%
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	16.50%	13.51%	2.99%
10/29/1981	14.75%	13.51%	1.24%
11/3/1981	15.17%	13.53%	1.64%
11/5/1981	16.60%	13.55%	3.05%
11/6/1981	15.17%	13.56%	1.61%
11/24/1981	15.50%	13.61%	1.89%
11/25/1981	16.10%	13.61%	2.49%
11/25/1981	16.10%	13.61%	2.49%
11/25/1981	15.25%	13.61%	1.64%
11/25/1981	15.35%	13.61%	1.74%
12/1/1981	16.50%	13.61%	2.89%
12/1/1981	15.70%	13.61%	2.09%
12/1/1981	16.49%	13.61%	2.88%
12/1/1981	16.00%	13.61%	2.39%
12/4/1981	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	16.00%	13.67%	2.33%
12/30/1981	16.25%	13.67%	2.58%
12/30/1981	14.25%	13.67%	0.58%
12/31/1981	16.15%	13.67%	2.48%
1/4/1982	15.50%	13.67%	1.83%
1/11/1982	14.50%	13.72%	0.78%
1/11/1982	17.00%	13.72%	3.28%
1/13/1982	14.75%	13.74%	1.01%
1/14/1982	15.75%	13.75%	2.00%
1/15/1982	15.00%	13.76%	1.24%
1/15/1982	16.50%	13.76%	2.74%
1/22/1982	16.25%	13.79%	2.46%
1/27/1982	16.84%	13.81%	3.03%
1/28/1982	13.00%	13.81%	-0.81%
1/29/1982	15.50%	13.82%	1.68%
2/1/1982	15.85%	13.82%	2.03%
2/3/1982	16.44%	13.84%	2.60%
2/8/1982	15.50%	13.86%	1.64%
2/11/1982	16.00%	13.88%	2.12%
2/11/1982	16.20%	13.88%	2.32%
2/17/1982	15.00%	13.89%	1.11%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
2/19/1982	15.17%	13.89%	1.28%
2/26/1982	15.25%	13.89%	1.36%
3/1/1982	15.03%	13.89%	1.14%
3/1/1982	16.00%	13.89%	2.11%
3/3/1982	15.00%	13.88%	1.12%
3/8/1982	17.10%	13.88%	3.22%
3/12/1982	16.25%	13.88%	2.37%
3/17/1982	17.30%	13.88%	3.42%
3/22/1982	15.10%	13.89%	1.21%
3/27/1982	15.40%	13.89%	1.51%
3/30/1982	15.50%	13.90%	1.60%
3/31/1982	17.00%	13.91%	3.09%
4/1/1982	16.50%	13.91%	2.59%
4/1/1982	14.70%	13.91%	0.79%
4/2/1982	15.50%	13.91%	1.59%
4/5/1982	15.50%	13.92%	1.58%
4/8/1982	16.40%	13.93%	2.47%
4/13/1982	14.50%	13.94%	0.56%
4/23/1982	15.75%	13.94%	1.81%
4/27/1982	15.00%	13.94%	1.06%
4/28/1982	15.75%	13.94%	1.81%
4/30/1982	15.50%	13.94%	1.56%
4/30/1982	14.70%	13.94%	0.76%
5/3/1982	16.60%	13.94%	2.66%
5/4/1982	16.00%	13.94%	2.06%
5/14/1982	15.50%	13.92%	1.58%
5/18/1982	15.42%	13.92%	1.50%
5/19/1982	14.69%	13.92%	0.77%
5/20/1982	15.10%	13.91%	1.19%
5/20/1982	15.50%	13.91%	1.59%
5/20/1982	16.30%	13.91%	2.39%
5/20/1982	15.00%	13.91%	1.09%
5/21/1982	17.75%	13.91%	3.84%
5/27/1982	15.00%	13.89%	1.11%
5/28/1982	15.50%	13.89%	1.61%
5/28/1982	17.00%	13.89%	3.11%
6/1/1982	13.75%	13.89%	-0.14%
6/1/1982	16.60%	13.89%	2.71%
6/9/1982	17.86%	13.88%	3.98%
6/14/1982	15.75%	13.88%	1.87%
6/15/1982	14.85%	13.88%	0.97%
6/18/1982	15.50%	13.87%	1.63%
6/21/1982	14.90%	13.87%	1.03%
6/23/1982	16.00%	13.86%	2.14%
6/23/1982	16.17%	13.86%	2.31%
6/24/1982	14.85%	13.86%	0.99%
6/25/1982	14.70%	13.86%	0.84%
7/1/1982	16.00%	13.84%	2.16%
7/2/1982	15.62%	13.84%	1.78%
7/2/1982	17.00%	13.84%	3.16%
7/13/1982	14.00%	13.82%	0.18%
7/13/1982	16.80%	13.82%	2.98%
7/14/1982	15.76%	13.82%	1.94%
7/14/1982	16.02%	13.82%	2.20%
7/19/1982	16.50%	13.80%	2.70%
7/22/1982	17.00%	13.77%	3.23%
7/22/1982	14.50%	13.77%	0.73%
7/27/1982	16.75%	13.75%	3.00%
7/29/1982	16.50%	13.74%	2.76%
8/1/1982	17.50%	13.68%	3.82%
8/18/1982	17.07%	13.63%	3.44%
8/20/1982	15.73%	13.60%	2.13%
8/25/1982	16.00%	13.57%	2.43%
8/26/1982	15.50%	13.56%	1.94%
8/30/1982	15.00%	13.55%	1.45%
9/3/1982	16.20%	13.53%	2.67%
9/8/1982	15.00%	13.52%	1.48%
9/15/1982	13.08%	13.50%	-0.42%
9/15/1982	16.25%	13.50%	2.75%
9/16/1982	16.00%	13.50%	2.50%
9/17/1982	15.25%	13.50%	1.75%
9/23/1982	17.17%	13.47%	3.70%
9/24/1982	14.50%	13.46%	1.04%
9/27/1982	15.25%	13.46%	1.79%
10/1/1982	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%
11/1/1982	15.50%	13.15%	2.35%
11/3/1982	17.20%	13.13%	4.07%
11/4/1982	16.25%	13.11%	3.14%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
11/5/1982	16.20%	13.09%	3.11%
11/9/1982	16.00%	13.05%	2.95%
11/23/1982	15.85%	12.89%	2.96%
11/23/1982	15.50%	12.89%	2.61%
11/30/1982	16.50%	12.81%	3.69%
12/1/1982	17.04%	12.79%	4.25%
12/6/1982	15.00%	12.73%	2.27%
12/6/1982	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	16.40%	12.63%	3.77%
12/14/1982	15.30%	12.63%	2.67%
12/20/1982	16.00%	12.57%	3.43%
12/21/1982	15.85%	12.56%	3.29%
12/21/1982	14.75%	12.56%	2.19%
12/22/1982	16.75%	12.54%	4.21%
12/22/1982	16.58%	12.54%	4.04%
12/22/1982	16.25%	12.54%	3.71%
12/29/1982	14.90%	12.48%	2.42%
12/29/1982	16.25%	12.48%	3.77%
12/30/1982	16.35%	12.47%	3.88%
12/30/1982	16.00%	12.47%	3.53%
12/30/1982	16.77%	12.47%	4.30%
1/5/1983	17.33%	12.40%	4.93%
1/11/1983	15.90%	12.34%	3.56%
1/12/1983	15.50%	12.33%	3.17%
1/12/1983	14.63%	12.33%	2.30%
1/20/1983	17.75%	12.24%	5.51%
1/21/1983	15.00%	12.22%	2.78%
1/24/1983	14.50%	12.21%	2.29%
1/24/1983	15.50%	12.21%	3.29%
1/25/1983	15.85%	12.19%	3.66%
1/27/1983	16.14%	12.17%	3.97%
2/1/1983	18.50%	12.13%	6.37%
2/4/1983	14.00%	12.10%	1.90%
2/10/1983	15.00%	12.06%	2.94%
2/21/1983	15.50%	11.98%	3.52%
2/22/1983	15.50%	11.97%	3.53%
2/23/1983	15.10%	11.96%	3.14%
2/23/1983	16.00%	11.96%	4.04%
3/2/1983	15.25%	11.89%	3.36%
3/9/1983	15.20%	11.82%	3.38%
3/15/1983	13.00%	11.77%	1.23%
3/18/1983	15.25%	11.73%	3.52%
3/23/1983	15.40%	11.69%	3.71%
3/24/1983	15.00%	11.67%	3.33%
3/29/1983	15.50%	11.63%	3.87%
3/30/1983	16.71%	11.61%	5.10%
3/31/1983	15.00%	11.59%	3.41%
4/4/1983	15.20%	11.58%	3.62%
4/8/1983	15.50%	11.51%	3.99%
4/11/1983	14.81%	11.49%	3.32%
4/19/1983	14.50%	11.38%	3.12%
4/20/1983	16.00%	11.36%	4.64%
4/29/1983	16.00%	11.24%	4.76%
5/1/1983	14.50%	11.24%	3.26%
5/9/1983	15.50%	11.15%	4.35%
5/11/1983	16.46%	11.12%	5.34%
5/12/1983	14.14%	11.11%	3.03%
5/18/1983	15.00%	11.05%	3.95%
5/23/1983	14.90%	11.01%	3.89%
5/23/1983	15.50%	11.01%	4.49%
5/25/1983	15.50%	10.98%	4.52%
5/27/1983	15.00%	10.96%	4.04%
5/31/1983	15.50%	10.95%	4.55%
5/31/1983	14.00%	10.95%	3.05%
6/2/1983	14.50%	10.93%	3.57%
6/17/1983	15.03%	10.84%	4.19%
7/1/1983	14.80%	10.78%	4.02%
7/1/1983	14.90%	10.78%	4.12%
7/8/1983	16.25%	10.76%	5.49%
7/13/1983	13.20%	10.75%	2.45%
7/19/1983	15.10%	10.74%	4.36%
7/19/1983	15.00%	10.74%	4.26%
7/25/1983	16.25%	10.73%	5.52%
7/28/1983	15.90%	10.74%	5.16%
8/3/1983	16.50%	10.75%	5.75%
8/3/1983	16.34%	10.75%	5.59%
8/19/1983	15.00%	10.80%	4.20%
8/22/1983	16.40%	10.80%	5.60%
8/22/1983	15.50%	10.80%	4.70%
8/31/1983	14.75%	10.84%	3.91%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
9/7/1983	15.00%	10.86%	4.14%
9/14/1983	15.78%	10.89%	4.89%
9/16/1983	15.00%	10.90%	4.10%
9/19/1983	14.50%	10.91%	3.59%
9/20/1983	16.50%	10.91%	5.59%
9/28/1983	14.50%	10.94%	3.56%
9/29/1983	15.50%	10.95%	4.55%
9/30/1983	16.15%	10.95%	5.20%
9/30/1983	15.25%	10.95%	4.30%
10/4/1983	14.80%	10.96%	3.84%
10/7/1983	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	16.50%	11.01%	5.49%
10/19/1983	16.25%	11.01%	5.24%
10/26/1983	15.00%	11.04%	3.96%
10/27/1983	15.20%	11.04%	4.16%
11/1/1983	16.00%	11.06%	4.94%
11/9/1983	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%
12/5/1983	15.25%	11.15%	4.10%
12/6/1983	15.07%	11.15%	3.92%
12/8/1983	15.90%	11.16%	4.74%
12/9/1983	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	16.00%	11.22%	4.78%
12/20/1983	14.69%	11.22%	3.47%
12/20/1983	16.25%	11.22%	5.03%
12/22/1983	15.75%	11.23%	4.52%
12/22/1983	14.75%	11.23%	3.52%
1/3/1984	14.75%	11.27%	3.48%
1/10/1984	15.90%	11.30%	4.60%
1/12/1984	15.60%	11.31%	4.29%
1/18/1984	13.75%	11.33%	2.42%
1/19/1984	15.90%	11.33%	4.57%
1/30/1984	16.10%	11.37%	4.73%
1/31/1984	15.25%	11.37%	3.88%
2/1/1984	14.80%	11.38%	3.42%
2/6/1984	14.75%	11.40%	3.35%
2/6/1984	13.75%	11.40%	2.35%
2/9/1984	15.25%	11.42%	3.83%
2/15/1984	15.70%	11.44%	4.26%
2/20/1984	15.00%	11.46%	3.54%
2/20/1984	15.00%	11.46%	3.54%
2/22/1984	14.75%	11.47%	3.28%
2/28/1984	14.50%	11.51%	2.99%
3/2/1984	14.25%	11.54%	2.71%
3/20/1984	16.00%	11.64%	4.36%
3/23/1984	15.50%	11.67%	3.83%
3/26/1984	14.71%	11.68%	3.03%
4/2/1984	15.50%	11.71%	3.79%
4/6/1984	14.74%	11.75%	2.99%
4/11/1984	15.72%	11.78%	3.94%
4/17/1984	15.00%	11.81%	3.19%
4/18/1984	16.20%	11.82%	4.38%
4/25/1984	14.64%	11.85%	2.79%
4/30/1984	14.40%	11.87%	2.53%
5/16/1984	14.69%	11.98%	2.71%
5/16/1984	15.00%	11.98%	3.02%
5/22/1984	14.40%	12.02%	2.38%
5/29/1984	15.10%	12.06%	3.04%
6/13/1984	15.25%	12.15%	3.10%
6/15/1984	15.60%	12.17%	3.43%
6/22/1984	16.25%	12.21%	4.04%
6/29/1984	15.25%	12.26%	2.99%
7/2/1984	13.35%	12.27%	1.08%
7/10/1984	16.00%	12.31%	3.69%
7/12/1984	16.50%	12.32%	4.18%
7/13/1984	16.25%	12.33%	3.92%
7/17/1984	14.14%	12.35%	1.79%
7/18/1984	15.50%	12.36%	3.14%
7/18/1984	15.30%	12.36%	2.94%
7/19/1984	14.30%	12.37%	1.93%
7/24/1984	16.79%	12.39%	4.40%
7/31/1984	16.00%	12.43%	3.57%
8/3/1984	14.25%	12.44%	1.81%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
8/17/1984	14.30%	12.49%	1.81%
8/20/1984	15.00%	12.49%	2.51%
8/27/1984	16.30%	12.51%	3.79%
8/31/1984	15.55%	12.52%	3.03%
9/6/1984	16.00%	12.53%	3.47%
9/10/1984	14.75%	12.54%	2.21%
9/13/1984	15.00%	12.55%	2.45%
9/17/1984	17.38%	12.56%	4.82%
9/26/1984	14.50%	12.57%	1.93%
9/28/1984	16.25%	12.57%	3.68%
9/28/1984	15.00%	12.57%	2.43%
10/9/1984	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%
11/7/1984	15.60%	12.58%	3.02%
11/9/1984	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%
12/3/1984	15.80%	12.56%	3.24%
12/4/1984	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%
1/3/1985	14.75%	12.49%	2.26%
1/10/1985	15.75%	12.47%	3.28%
1/11/1985	16.30%	12.46%	3.84%
1/23/1985	15.80%	12.43%	3.37%
1/24/1985	15.82%	12.43%	3.39%
1/25/1985	16.75%	12.42%	4.33%
1/30/1985	14.90%	12.40%	2.50%
1/31/1985	14.75%	12.39%	2.36%
2/8/1985	14.47%	12.35%	2.12%
3/1/1985	13.84%	12.31%	1.53%
3/8/1985	16.85%	12.28%	4.57%
3/14/1985	15.50%	12.25%	3.25%
3/15/1985	15.62%	12.25%	3.37%
3/29/1985	15.62%	12.17%	3.45%
4/3/1985	14.60%	12.14%	2.46%
4/9/1985	15.50%	12.11%	3.39%
4/16/1985	15.70%	12.06%	3.64%
4/22/1985	14.00%	12.02%	1.98%
4/26/1985	15.50%	11.98%	3.52%
4/29/1985	15.00%	11.97%	3.03%
5/2/1985	14.68%	11.94%	2.74%
5/8/1985	15.62%	11.89%	3.73%
5/10/1985	16.50%	11.87%	4.63%
5/29/1985	14.61%	11.73%	2.88%
5/31/1985	16.00%	11.71%	4.29%
6/14/1985	15.50%	11.61%	3.89%
7/9/1985	15.00%	11.45%	3.55%
7/16/1985	14.50%	11.39%	3.11%
7/26/1985	14.50%	11.33%	3.17%
8/2/1985	14.80%	11.29%	3.51%
8/7/1985	15.00%	11.27%	3.73%
8/28/1985	14.25%	11.15%	3.10%
8/28/1985	15.50%	11.15%	4.35%
8/29/1985	14.50%	11.15%	3.35%
9/9/1985	14.90%	11.11%	3.79%
9/9/1985	14.60%	11.11%	3.49%
9/17/1985	14.90%	11.08%	3.82%
9/23/1985	15.00%	11.06%	3.94%
9/27/1985	15.80%	11.05%	4.75%
9/27/1985	15.50%	11.05%	4.45%
10/2/1985	14.75%	11.03%	3.72%
10/2/1985	14.00%	11.03%	2.97%
10/3/1985	15.25%	11.03%	4.22%
10/24/1985	15.40%	10.96%	4.44%
10/24/1985	15.85%	10.96%	4.89%
10/24/1985	15.82%	10.96%	4.86%
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%
11/4/1985	14.50%	10.92%	3.58%
11/7/1985	15.50%	10.90%	4.60%
11/8/1985	14.30%	10.89%	3.41%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
12/12/1985	14.75%	10.73%	4.02%
12/18/1985	15.00%	10.69%	4.31%
12/20/1985	15.00%	10.67%	4.33%
12/20/1985	14.50%	10.67%	3.83%
12/20/1985	14.50%	10.67%	3.83%
1/24/1986	15.40%	10.41%	4.99%
1/31/1986	15.00%	10.35%	4.65%
2/5/1986	15.00%	10.32%	4.68%
2/5/1986	15.75%	10.32%	5.43%
2/10/1986	13.30%	10.29%	3.01%
2/11/1986	12.50%	10.28%	2.22%
2/14/1986	14.40%	10.24%	4.16%
2/18/1986	16.00%	10.23%	5.77%
2/24/1986	14.50%	10.18%	4.32%
2/26/1986	14.00%	10.15%	3.85%
3/5/1986	14.90%	10.08%	4.82%
3/11/1986	14.50%	10.02%	4.48%
3/12/1986	13.50%	10.00%	3.50%
3/27/1986	14.10%	9.86%	4.24%
3/31/1986	13.50%	9.84%	3.66%
4/1/1986	14.00%	9.83%	4.17%
4/2/1986	15.50%	9.81%	5.69%
4/4/1986	15.00%	9.78%	5.22%
4/14/1986	13.40%	9.69%	3.71%
4/23/1986	15.00%	9.57%	5.43%
5/16/1986	14.50%	9.32%	5.18%
5/16/1986	14.50%	9.32%	5.18%
5/29/1986	13.90%	9.19%	4.71%
5/30/1986	15.10%	9.18%	5.92%
6/2/1986	12.81%	9.17%	3.64%
6/11/1986	14.00%	9.07%	4.93%
6/24/1986	16.63%	8.94%	7.69%
6/26/1986	12.00%	8.91%	3.09%
6/26/1986	14.75%	8.91%	5.84%
6/30/1986	13.00%	8.87%	4.13%
7/10/1986	14.34%	8.75%	5.59%
7/11/1986	12.75%	8.73%	4.02%
7/14/1986	12.60%	8.71%	3.89%
7/17/1986	12.40%	8.66%	3.74%
7/25/1986	14.25%	8.57%	5.68%
8/6/1986	13.50%	8.44%	5.06%
8/14/1986	13.50%	8.35%	5.15%
9/16/1986	12.75%	8.06%	4.69%
9/19/1986	13.25%	8.03%	5.22%
10/1/1986	14.00%	7.95%	6.05%
10/3/1986	13.40%	7.93%	5.47%
10/31/1986	13.50%	7.77%	5.73%
11/5/1986	13.00%	7.75%	5.25%
12/3/1986	12.90%	7.58%	5.32%
12/4/1986	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%
1/2/1987	13.00%	7.49%	5.51%
1/12/1987	12.40%	7.47%	4.93%
1/27/1987	12.71%	7.46%	5.25%
3/2/1987	12.47%	7.47%	5.00%
3/3/1987	13.60%	7.47%	6.13%
3/4/1987	12.38%	7.47%	4.91%
3/10/1987	13.50%	7.47%	6.03%
3/13/1987	13.00%	7.47%	5.53%
3/31/1987	13.00%	7.46%	5.54%
4/6/1987	13.00%	7.47%	5.53%
4/14/1987	12.50%	7.49%	5.01%
4/16/1987	14.50%	7.50%	7.00%
4/27/1987	12.00%	7.54%	4.46%
5/5/1987	12.85%	7.58%	5.27%
5/12/1987	12.65%	7.82%	5.03%
5/28/1987	13.50%	7.70%	5.80%
6/15/1987	13.20%	7.78%	5.42%
6/29/1987	15.00%	7.83%	7.17%
6/30/1987	12.50%	7.84%	4.66%
7/8/1987	12.00%	7.86%	4.14%
7/10/1987	12.90%	7.86%	5.04%
7/15/1987	13.50%	7.88%	5.62%
7/16/1987	15.00%	7.88%	7.12%
7/16/1987	13.50%	7.88%	5.62%
7/27/1987	13.00%	7.92%	5.08%
7/27/1987	13.40%	7.92%	5.48%
7/27/1987	13.50%	7.92%	5.58%
7/31/1987	12.98%	7.95%	5.03%
8/26/1987	12.63%	8.06%	4.57%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
8/26/1987	12.75%	8.06%	4.69%
8/27/1987	13.25%	8.06%	5.19%
9/9/1987	13.00%	8.14%	4.86%
9/30/1987	13.00%	8.31%	4.69%
9/30/1987	12.75%	8.31%	4.44%
10/2/1987	11.50%	8.33%	3.17%
10/15/1987	13.00%	8.43%	4.57%
11/2/1987	13.00%	8.55%	4.45%
11/19/1987	13.00%	8.64%	4.36%
11/30/1987	12.00%	8.68%	3.32%
12/3/1987	14.20%	8.70%	5.50%
12/15/1987	13.25%	8.77%	4.48%
12/16/1987	13.72%	8.78%	4.94%
12/16/1987	13.50%	8.78%	4.72%
12/17/1987	11.75%	8.79%	2.96%
12/18/1987	13.50%	8.80%	4.70%
12/21/1987	12.01%	8.81%	3.20%
12/22/1987	12.75%	8.81%	3.94%
12/22/1987	12.00%	8.81%	3.19%
12/22/1987	12.00%	8.81%	3.19%
12/22/1987	13.00%	8.81%	4.19%
1/20/1988	13.80%	8.94%	4.86%
1/26/1988	13.90%	8.95%	4.95%
1/29/1988	13.20%	8.96%	4.24%
2/4/1988	12.60%	8.96%	3.64%
3/1/1988	11.56%	8.94%	2.62%
3/23/1988	12.87%	8.92%	3.95%
3/24/1988	11.24%	8.92%	2.32%
3/30/1988	12.72%	8.92%	3.80%
4/1/1988	12.50%	8.92%	3.58%
4/7/1988	13.25%	8.93%	4.32%
4/25/1988	10.96%	8.96%	2.00%
5/3/1988	12.91%	8.97%	3.94%
5/11/1988	13.50%	8.99%	4.51%
5/16/1988	13.00%	8.99%	4.01%
6/30/1988	12.75%	9.00%	3.75%
7/1/1988	12.75%	8.99%	3.76%
7/20/1988	13.40%	8.96%	4.44%
8/5/1988	12.75%	8.92%	3.83%
8/23/1988	11.70%	8.93%	2.77%
8/29/1988	12.75%	8.94%	3.81%
8/30/1988	13.50%	8.94%	4.56%
9/8/1988	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	13.00%	9.02%	3.98%
12/20/1988	12.25%	9.02%	3.23%
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%
1/27/1989	13.00%	9.05%	3.95%
1/31/1989	13.00%	9.05%	3.95%
2/17/1989	13.00%	9.05%	3.95%
2/20/1989	12.40%	9.05%	3.35%
3/1/1989	12.76%	9.05%	3.71%
3/8/1989	13.00%	9.05%	3.95%
3/30/1989	14.00%	9.05%	4.95%
4/5/1989	14.20%	9.05%	5.15%
4/18/1989	13.00%	9.05%	3.95%
5/5/1989	12.40%	9.05%	3.35%
6/2/1989	13.20%	9.00%	4.20%
6/8/1989	13.50%	8.98%	4.52%
6/27/1989	13.25%	8.91%	4.34%
6/30/1989	13.00%	8.90%	4.10%
8/14/1989	12.50%	8.77%	3.73%
9/28/1989	12.25%	8.63%	3.62%
10/24/1989	12.50%	8.54%	3.96%
11/9/1989	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	13.00%	8.29%	4.71%
12/27/1989	12.50%	8.29%	4.21%
1/10/1990	12.80%	8.24%	4.56%
1/11/1990	12.90%	8.24%	4.66%
1/17/1990	12.80%	8.22%	4.58%
1/26/1990	12.00%	8.20%	3.80%
2/9/1990	12.10%	8.17%	3.93%
2/24/1990	12.86%	8.15%	4.71%
3/30/1990	12.90%	8.16%	4.74%
4/4/1990	15.76%	8.17%	7.59%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
4/12/1990	12.52%	8.18%	4.34%
4/19/1990	12.75%	8.20%	4.55%
5/21/1990	12.10%	8.28%	3.82%
5/29/1990	12.40%	8.30%	4.10%
5/31/1990	12.00%	8.30%	3.70%
6/4/1990	12.90%	8.30%	4.60%
6/6/1990	12.25%	8.31%	3.94%
6/15/1990	13.20%	8.32%	4.88%
6/20/1990	12.92%	8.32%	4.60%
6/27/1990	12.90%	8.33%	4.57%
6/29/1990	12.50%	8.33%	4.17%
7/6/1990	12.35%	8.34%	4.01%
7/6/1990	12.10%	8.34%	3.76%
8/10/1990	12.55%	8.41%	4.14%
8/16/1990	13.21%	8.43%	4.78%
8/22/1990	13.10%	8.45%	4.65%
8/24/1990	13.00%	8.46%	4.54%
9/26/1990	11.45%	8.59%	2.86%
10/2/1990	13.00%	8.61%	4.39%
10/5/1990	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%
1/2/1991	13.10%	8.65%	4.45%
1/4/1991	12.50%	8.65%	3.85%
1/15/1991	12.75%	8.64%	4.11%
1/25/1991	11.70%	8.63%	3.07%
2/4/1991	12.50%	8.60%	3.90%
2/7/1991	12.50%	8.59%	3.91%
2/12/1991	13.00%	8.58%	4.43%
2/14/1991	12.72%	8.57%	4.15%
2/22/1991	12.80%	8.55%	4.25%
3/6/1991	13.10%	8.53%	4.57%
3/8/1991	13.00%	8.52%	4.48%
3/8/1991	12.30%	8.52%	3.76%
4/22/1991	13.00%	8.49%	4.51%
5/7/1991	13.50%	8.47%	5.03%
5/13/1991	13.25%	8.47%	4.78%
5/30/1991	12.75%	8.44%	4.31%
6/12/1991	12.00%	8.41%	3.59%
6/25/1991	11.70%	8.39%	3.31%
6/28/1991	12.50%	8.38%	4.12%
7/1/1991	12.00%	8.38%	3.62%
7/3/1991	12.50%	8.37%	4.13%
7/19/1991	12.10%	8.34%	3.76%
8/1/1991	12.90%	8.32%	4.58%
8/16/1991	13.20%	8.29%	4.91%
9/27/1991	12.50%	8.23%	4.27%
9/30/1991	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%
11/1/1991	12.00%	8.19%	3.81%
11/5/1991	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	12.50%	8.18%	4.32%
11/26/1991	11.60%	8.18%	3.42%
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%
1/9/1992	12.80%	8.09%	4.71%
1/16/1992	12.75%	8.07%	4.68%
1/21/1992	12.00%	8.06%	3.94%
1/22/1992	13.00%	8.06%	4.94%
1/27/1992	12.65%	8.05%	4.60%
1/31/1992	12.00%	8.04%	3.96%
2/1/1992	12.40%	8.03%	4.37%
2/25/1992	12.50%	8.01%	4.49%
3/16/1992	11.43%	7.98%	3.45%
3/18/1992	12.28%	7.98%	4.30%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
4/2/1992	12.10%	7.95%	4.15%
4/9/1992	11.45%	7.94%	3.51%
4/10/1992	11.50%	7.93%	3.57%
4/14/1992	11.50%	7.93%	3.57%
5/5/1992	11.50%	7.89%	3.61%
5/12/1992	12.46%	7.88%	4.58%
5/12/1992	11.87%	7.88%	3.99%
6/1/1992	12.30%	7.87%	4.43%
6/12/1992	10.90%	7.86%	3.04%
6/26/1992	12.35%	7.85%	4.50%
6/29/1992	11.00%	7.85%	3.15%
6/30/1992	13.00%	7.85%	5.15%
7/13/1992	13.50%	7.84%	5.66%
7/13/1992	11.90%	7.84%	4.06%
7/22/1992	11.20%	7.83%	3.37%
8/3/1992	12.00%	7.81%	4.19%
8/6/1992	12.50%	7.80%	4.70%
9/22/1992	12.00%	7.71%	4.29%
9/28/1992	11.40%	7.71%	3.69%
9/30/1992	11.75%	7.70%	4.05%
10/2/1992	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%
11/3/1992	12.00%	7.71%	4.29%
12/3/1992	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%
12/22/1992	12.40%	7.65%	4.75%
12/22/1992	12.30%	7.65%	4.65%
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%
1/12/1993	12.00%	7.61%	4.39%
1/21/1993	11.25%	7.59%	3.66%
2/2/1993	11.40%	7.56%	3.84%
2/15/1993	12.30%	7.52%	4.78%
2/24/1993	11.90%	7.49%	4.41%
2/26/1993	11.80%	7.48%	4.32%
2/26/1993	12.20%	7.48%	4.72%
4/23/1993	11.75%	7.29%	4.46%
5/11/1993	11.75%	7.25%	4.50%
5/14/1993	11.50%	7.24%	4.26%
5/25/1993	11.50%	7.23%	4.27%
5/28/1993	11.00%	7.22%	3.78%
6/3/1993	12.00%	7.21%	4.79%
6/16/1993	11.50%	7.19%	4.31%
6/18/1993	12.10%	7.18%	4.92%
6/25/1993	11.67%	7.17%	4.50%
7/21/1993	11.38%	7.10%	4.28%
7/23/1993	10.46%	7.09%	3.37%
8/24/1993	11.50%	6.96%	4.54%
9/21/1993	10.50%	6.81%	3.69%
9/29/1993	11.47%	6.77%	4.70%
9/30/1993	11.60%	6.76%	4.84%
11/2/1993	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%
1/4/1994	10.07%	6.44%	3.63%
1/13/1994	11.00%	6.42%	4.58%
1/21/1994	11.00%	6.40%	4.60%
1/28/1994	11.35%	6.39%	4.96%
2/3/1994	11.40%	6.38%	5.02%
2/17/1994	10.60%	6.36%	4.24%
2/25/1994	11.25%	6.35%	4.90%
2/25/1994	12.00%	6.35%	5.65%
3/1/1994	11.00%	6.35%	4.65%
3/4/1994	11.00%	6.35%	4.65%
4/25/1994	11.00%	6.41%	4.59%
5/10/1994	11.75%	6.45%	5.30%
5/13/1994	10.50%	6.46%	4.04%
6/3/1994	11.00%	6.54%	4.46%
6/27/1994	11.40%	6.65%	4.75%
8/5/1994	12.75%	6.88%	5.87%
10/31/1994	10.00%	7.33%	2.67%
11/9/1994	10.85%	7.39%	3.46%
11/9/1994	10.85%	7.39%	3.46%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
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%
12/8/1994	11.70%	7.54%	4.16%
12/8/1994	11.50%	7.54%	3.96%
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%
1/9/1995	12.28%	7.64%	4.64%
1/31/1995	11.00%	7.69%	3.31%
2/10/1995	12.60%	7.70%	4.90%
2/17/1995	11.90%	7.70%	4.20%
3/9/1995	11.50%	7.71%	3.79%
3/20/1995	12.00%	7.72%	4.28%
3/23/1995	12.81%	7.72%	5.09%
3/29/1995	11.60%	7.72%	3.88%
4/6/1995	11.10%	7.71%	3.39%
4/7/1995	11.00%	7.71%	3.29%
4/19/1995	11.00%	7.70%	3.30%
5/12/1995	11.63%	7.68%	3.95%
5/25/1995	11.20%	7.65%	3.55%
6/9/1995	11.25%	7.60%	3.65%
6/21/1995	12.25%	7.56%	4.69%
6/30/1995	11.10%	7.52%	3.58%
9/11/1995	11.30%	7.20%	4.10%
9/27/1995	11.50%	7.12%	4.38%
9/27/1995	11.75%	7.12%	4.63%
9/27/1995	11.30%	7.12%	4.18%
9/29/1995	11.00%	7.11%	3.89%
11/9/1995	12.36%	6.90%	5.46%
11/9/1995	11.38%	6.90%	4.48%
11/17/1995	11.00%	6.86%	4.14%
12/4/1995	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%
2/5/1996	12.25%	6.48%	5.77%
3/29/1996	10.67%	6.42%	4.25%
4/8/1996	11.00%	6.42%	4.58%
4/11/1996	12.59%	6.43%	6.16%
4/11/1996	12.59%	6.43%	6.16%
4/24/1996	11.25%	6.43%	4.82%
4/30/1996	11.00%	6.43%	4.57%
5/13/1996	11.00%	6.44%	4.56%
5/23/1996	11.25%	6.43%	4.82%
6/25/1996	11.25%	6.48%	4.77%
6/27/1996	11.20%	6.48%	4.72%
8/12/1996	10.40%	6.57%	3.83%
9/27/1996	11.00%	6.71%	4.29%
10/16/1996	12.25%	6.76%	5.49%
11/5/1996	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%
1/3/1997	10.70%	6.83%	3.87%
2/13/1997	11.80%	6.82%	4.98%
2/20/1997	11.80%	6.82%	4.98%
3/31/1997	10.02%	6.80%	3.22%
4/2/1997	11.65%	6.80%	4.85%
4/28/1997	11.50%	6.81%	4.69%
4/29/1997	11.70%	6.81%	4.89%
7/17/1997	12.00%	6.77%	5.23%
12/12/1997	11.00%	6.60%	4.40%
12/23/1997	11.12%	6.57%	4.55%
2/2/1998	12.75%	6.39%	6.36%
3/2/1998	11.25%	6.29%	4.96%
3/6/1998	10.75%	6.27%	4.48%
3/20/1998	10.50%	6.22%	4.28%
4/30/1998	12.20%	6.12%	6.08%
7/10/1998	11.40%	5.94%	5.46%
9/15/1998	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%
2/5/1999	10.30%	5.38%	4.92%
3/4/1999	10.50%	5.34%	5.16%
4/6/1999	10.94%	5.32%	5.62%
7/29/1999	10.75%	5.52%	5.23%
9/23/1999	10.75%	5.70%	5.05%
11/17/1999	11.10%	5.90%	5.20%
1/7/2000	11.50%	6.05%	5.45%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
1/7/2000	11.50%	6.05%	5.45%
2/17/2000	10.60%	6.17%	4.43%
3/28/2000	11.25%	6.20%	5.05%
5/24/2000	11.00%	6.18%	4.82%
7/18/2000	12.20%	6.16%	6.04%
9/29/2000	11.16%	6.03%	5.13%
11/28/2000	12.90%	5.89%	7.01%
11/30/2000	12.10%	5.88%	6.22%
1/23/2001	11.25%	5.79%	5.46%
2/8/2001	11.50%	5.77%	5.73%
5/8/2001	10.75%	5.62%	5.13%
6/26/2001	11.00%	5.62%	5.38%
7/25/2001	11.02%	5.60%	5.42%
7/25/2001	11.02%	5.60%	5.42%
7/31/2001	11.00%	5.59%	5.41%
8/31/2001	10.50%	5.56%	4.94%
9/7/2001	10.75%	5.55%	5.20%
9/10/2001	11.00%	5.55%	5.45%
9/20/2001	10.00%	5.55%	4.45%
10/24/2001	10.30%	5.54%	4.76%
11/28/2001	10.60%	5.49%	5.11%
12/3/2001	12.88%	5.49%	7.39%
12/20/2001	12.50%	5.50%	7.00%
1/22/2002	10.00%	5.50%	4.50%
3/27/2002	10.10%	5.45%	4.65%
4/22/2002	11.80%	5.45%	6.35%
5/28/2002	10.17%	5.46%	4.71%
6/10/2002	12.00%	5.47%	6.53%
6/18/2002	11.16%	5.48%	5.68%
6/20/2002	11.00%	5.48%	5.52%
6/20/2002	12.30%	5.48%	6.82%
7/15/2002	11.00%	5.48%	5.52%
9/12/2002	12.30%	5.45%	6.85%
9/26/2002	10.45%	5.41%	5.04%
12/4/2002	11.55%	5.29%	6.26%
12/13/2002	11.75%	5.27%	6.48%
12/20/2002	11.40%	5.25%	6.15%
1/8/2003	11.10%	5.19%	5.91%
1/31/2003	12.45%	5.13%	7.32%
2/28/2003	12.30%	5.05%	7.25%
3/6/2003	10.75%	5.03%	5.72%
3/7/2003	9.96%	5.02%	4.94%
3/20/2003	12.00%	4.98%	7.02%
4/3/2003	12.00%	4.96%	7.04%
4/15/2003	11.15%	4.94%	6.21%
6/25/2003	10.75%	4.79%	5.96%
6/26/2003	10.75%	4.79%	5.96%
7/9/2003	9.75%	4.79%	4.96%
7/16/2003	9.75%	4.79%	4.96%
7/25/2003	9.50%	4.80%	4.70%
8/26/2003	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%
1/13/2004	12.00%	4.95%	7.05%
3/2/2004	10.75%	4.99%	5.76%
3/26/2004	10.25%	5.02%	5.23%
4/5/2004	11.25%	5.03%	6.22%
5/18/2004	10.50%	5.07%	5.43%
5/25/2004	10.25%	5.08%	5.17%
5/27/2004	10.25%	5.08%	5.17%
6/2/2004	11.22%	5.08%	6.14%
6/30/2004	10.50%	5.10%	5.40%
6/30/2004	10.50%	5.10%	5.40%
7/16/2004	11.60%	5.11%	6.49%
8/25/2004	10.25%	5.10%	5.15%
9/9/2004	10.40%	5.10%	5.30%
11/9/2004	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%
1/6/2005	10.70%	5.08%	5.62%
2/18/2005	10.30%	4.98%	5.32%
2/25/2005	10.50%	4.96%	5.54%
3/10/2005	11.00%	4.93%	6.07%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
3/24/2005	10.30%	4.90%	5.40%
4/4/2005	10.00%	4.88%	5.12%
4/7/2005	10.25%	4.87%	5.38%
5/18/2005	10.25%	4.78%	5.47%
5/25/2005	10.75%	4.76%	5.99%
5/26/2005	9.75%	4.76%	4.99%
6/1/2005	9.75%	4.75%	5.00%
7/19/2005	11.50%	4.64%	6.86%
8/5/2005	11.75%	4.62%	7.13%
8/15/2005	10.13%	4.61%	5.52%
9/28/2005	10.00%	4.54%	5.46%
10/4/2005	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%
12/21/2005	10.40%	4.54%	5.86%
12/22/2005	11.15%	4.54%	6.61%
12/22/2005	11.00%	4.54%	6.46%
12/28/2005	10.00%	4.54%	5.46%
12/28/2005	10.00%	4.54%	5.46%
1/5/2006	11.00%	4.53%	6.47%
1/27/2006	9.75%	4.52%	5.23%
3/3/2006	10.39%	4.53%	5.86%
4/17/2006	10.20%	4.61%	5.59%
4/26/2006	10.80%	4.64%	5.96%
5/17/2006	11.60%	4.69%	6.91%
6/6/2006	10.00%	4.74%	5.26%
6/27/2006	10.75%	4.80%	5.95%
7/6/2006	10.20%	4.83%	5.37%
7/24/2006	9.60%	4.86%	4.74%
7/26/2006	10.50%	4.86%	5.64%
7/28/2006	10.05%	4.86%	5.19%
8/23/2006	9.55%	4.89%	4.66%
9/1/2006	10.54%	4.90%	5.64%
9/14/2006	10.00%	4.91%	5.09%
10/6/2006	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%
12/1/2006	10.50%	4.95%	5.55%
12/1/2006	10.25%	4.95%	5.30%
12/7/2006	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%
1/5/2007	10.00%	4.95%	5.05%
1/11/2007	10.10%	4.95%	5.15%
1/11/2007	10.10%	4.95%	5.15%
1/11/2007	10.90%	4.95%	5.95%
1/12/2007	10.10%	4.95%	5.15%
1/13/2007	10.40%	4.95%	5.45%
1/19/2007	10.80%	4.94%	5.86%
3/21/2007	11.35%	4.87%	6.48%
3/22/2007	9.75%	4.86%	4.89%
5/15/2007	10.00%	4.81%	5.19%
5/17/2007	10.25%	4.81%	5.44%
5/17/2007	10.25%	4.81%	5.44%
5/22/2007	10.20%	4.80%	5.40%
5/22/2007	10.50%	4.80%	5.70%
5/23/2007	10.70%	4.80%	5.90%
5/25/2007	9.67%	4.80%	4.87%
6/15/2007	9.90%	4.82%	5.08%
6/21/2007	10.20%	4.83%	5.37%
6/22/2007	10.50%	4.83%	5.67%
6/28/2007	10.75%	4.84%	5.91%
7/12/2007	9.67%	4.86%	4.81%
7/19/2007	10.00%	4.87%	5.13%
7/19/2007	10.00%	4.87%	5.13%
8/15/2007	10.40%	4.88%	5.52%
10/9/2007	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%
12/6/2007	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%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
1/8/2008	10.75%	4.83%	5.92%
1/17/2008	10.75%	4.81%	5.94%
1/28/2008	9.40%	4.80%	4.60%
1/30/2008	10.00%	4.79%	5.21%
1/31/2008	10.71%	4.79%	5.92%
2/29/2008	10.25%	4.75%	5.50%
3/12/2008	10.25%	4.73%	5.52%
3/25/2008	9.10%	4.68%	4.42%
4/22/2008	10.25%	4.60%	5.65%
4/24/2008	10.10%	4.60%	5.50%
5/1/2008	10.70%	4.59%	6.11%
5/19/2008	11.00%	4.56%	6.44%
5/27/2008	10.00%	4.55%	5.45%
6/10/2008	10.70%	4.54%	6.16%
6/27/2008	11.04%	4.54%	6.50%
6/27/2008	10.50%	4.54%	5.96%
7/10/2008	10.43%	4.52%	5.91%
7/16/2008	9.40%	4.52%	4.88%
7/30/2008	10.80%	4.51%	6.29%
7/31/2008	10.70%	4.51%	6.19%
8/11/2008	10.25%	4.51%	5.74%
8/26/2008	10.18%	4.50%	5.68%
9/10/2008	10.30%	4.50%	5.80%
9/24/2008	10.65%	4.48%	6.17%
9/24/2008	10.65%	4.48%	6.17%
9/24/2008	10.65%	4.48%	6.17%
9/30/2008	10.20%	4.48%	5.72%
10/8/2008	10.15%	4.46%	5.69%
11/13/2008	10.55%	4.45%	6.10%
11/17/2008	10.20%	4.44%	5.76%
12/1/2008	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%
1/14/2009	10.50%	4.15%	6.35%
1/21/2009	10.50%	4.12%	6.38%
1/21/2009	10.50%	4.12%	6.38%
1/21/2009	10.50%	4.12%	6.38%
1/27/2009	10.76%	4.09%	6.67%
1/30/2009	10.50%	4.08%	6.42%
2/4/2009	8.75%	4.06%	4.69%
3/4/2009	10.50%	3.96%	6.54%
3/12/2009	11.50%	3.93%	7.57%
4/2/2009	11.10%	3.85%	7.25%
4/21/2009	10.61%	3.80%	6.81%
4/24/2009	10.00%	3.79%	6.21%
4/30/2009	11.25%	3.78%	7.47%
5/4/2009	10.74%	3.77%	6.97%
5/20/2009	10.25%	3.74%	6.51%
5/28/2009	10.50%	3.74%	6.76%
6/22/2009	10.00%	3.76%	6.24%
6/24/2009	10.80%	3.77%	7.03%
7/8/2009	10.63%	3.77%	6.86%
7/17/2009	10.50%	3.78%	6.72%
8/31/2009	10.25%	3.82%	6.43%
10/14/2009	10.70%	4.01%	6.69%
10/23/2009	10.88%	4.06%	6.82%
11/2/2009	10.70%	4.09%	6.61%
11/3/2009	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%
12/3/2009	10.50%	4.18%	6.32%
12/7/2009	10.70%	4.18%	6.52%
12/16/2009	11.00%	4.21%	6.79%
12/16/2009	10.90%	4.21%	6.69%
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%
1/4/2010	10.80%	4.28%	6.52%
1/11/2010	11.00%	4.30%	6.70%
1/26/2010	10.13%	4.35%	5.78%
1/27/2010	10.40%	4.35%	6.05%
1/27/2010	10.40%	4.35%	6.05%
1/27/2010	10.70%	4.35%	6.35%
2/9/2010	9.80%	4.38%	5.42%
2/18/2010	10.60%	4.40%	6.20%
2/24/2010	10.18%	4.41%	5.77%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
3/2/2010	9.63%	4.41%	5.22%
3/4/2010	10.50%	4.41%	6.09%
3/5/2010	10.50%	4.41%	6.09%
3/11/2010	11.90%	4.42%	7.48%
3/17/2010	10.00%	4.41%	5.59%
3/25/2010	10.15%	4.42%	5.73%
4/2/2010	10.10%	4.43%	5.67%
4/27/2010	10.00%	4.46%	5.54%
4/29/2010	9.90%	4.46%	5.44%
4/29/2010	10.06%	4.46%	5.60%
4/29/2010	10.26%	4.46%	5.80%
5/12/2010	10.30%	4.45%	5.85%
5/12/2010	10.30%	4.45%	5.85%
5/28/2010	10.20%	4.44%	5.76%
5/28/2010	10.10%	4.44%	5.66%
6/7/2010	10.30%	4.44%	5.86%
6/16/2010	10.00%	4.44%	5.56%
6/28/2010	10.50%	4.43%	6.07%
6/28/2010	9.67%	4.43%	5.24%
6/30/2010	9.40%	4.43%	4.97%
7/1/2010	10.25%	4.43%	5.82%
7/15/2010	10.70%	4.43%	6.27%
7/15/2010	10.53%	4.43%	6.10%
7/30/2010	10.70%	4.41%	6.29%
8/4/2010	10.50%	4.41%	6.09%
8/6/2010	9.83%	4.41%	5.42%
8/25/2010	9.90%	4.37%	5.53%
9/3/2010	10.60%	4.35%	6.25%
9/14/2010	10.70%	4.33%	6.37%
9/16/2010	10.00%	4.33%	5.67%
9/16/2010	10.00%	4.33%	5.67%
9/30/2010	9.75%	4.28%	5.46%
10/14/2010	10.35%	4.24%	6.11%
10/28/2010	10.70%	4.21%	6.49%
11/2/2010	10.38%	4.20%	6.18%
11/4/2010	10.70%	4.20%	6.50%
11/19/2010	10.20%	4.18%	6.02%
11/22/2010	10.00%	4.18%	5.82%
12/1/2010	10.13%	4.16%	5.97%
12/6/2010	9.86%	4.15%	5.71%
12/9/2010	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%
1/5/2011	10.15%	4.13%	6.02%
1/12/2011	10.30%	4.12%	6.18%
1/13/2011	10.30%	4.12%	6.18%
1/18/2011	10.00%	4.12%	5.88%
1/20/2011	9.30%	4.12%	5.18%
1/20/2011	10.13%	4.12%	6.01%
1/31/2011	9.60%	4.12%	5.48%
2/3/2011	10.00%	4.12%	5.88%
2/25/2011	10.00%	4.14%	5.86%
3/25/2011	9.80%	4.18%	5.62%
3/30/2011	10.00%	4.18%	5.82%
4/12/2011	10.00%	4.21%	5.79%
4/25/2011	10.74%	4.23%	6.51%
4/26/2011	9.67%	4.23%	5.44%
4/27/2011	10.40%	4.24%	6.16%
5/4/2011	10.00%	4.24%	5.76%
5/4/2011	10.00%	4.24%	5.76%
5/24/2011	10.50%	4.27%	6.23%
6/8/2011	10.75%	4.30%	6.45%
6/16/2011	9.20%	4.32%	4.88%
6/17/2011	9.95%	4.32%	5.63%
7/13/2011	10.20%	4.36%	5.84%
8/1/2011	9.20%	4.39%	4.81%
8/8/2011	10.00%	4.38%	5.62%
8/11/2011	10.00%	4.38%	5.62%
8/12/2011	10.35%	4.37%	5.98%
8/19/2011	10.25%	4.36%	5.89%
9/2/2011	12.88%	4.32%	8.56%
9/22/2011	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%

Date of Electric Rate Case	Return on Equity	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%
1/25/2012	10.50%	3.57%	6.93%
1/27/2012	10.50%	3.56%	6.94%
2/15/2012	10.20%	3.47%	6.73%
2/23/2012	9.90%	3.44%	6.46%
2/27/2012	10.25%	3.43%	6.82%
2/29/2012	10.40%	3.41%	6.99%
3/29/2012	10.37%	3.32%	7.05%
4/4/2012	10.00%	3.30%	6.70%
4/26/2012	10.00%	3.21%	6.79%
5/2/2012	10.00%	3.18%	6.82%
5/7/2012	9.80%	3.17%	6.63%
5/15/2012	10.00%	3.14%	6.86%
5/29/2012	10.05%	3.11%	6.94%
6/7/2012	10.30%	3.08%	7.22%
6/14/2012	9.40%	3.06%	6.34%
6/15/2012	10.40%	3.06%	7.34%
6/18/2012	9.60%	3.06%	6.54%
6/19/2012	9.25%	3.05%	6.20%
6/26/2012	10.10%	3.04%	7.06%
6/29/2012	10.00%	3.04%	6.96%
7/9/2012	10.20%	3.03%	7.17%
7/16/2012	9.80%	3.02%	6.78%
7/20/2012	9.81%	3.01%	6.80%
7/20/2012	9.31%	3.01%	6.30%
9/13/2012	9.80%	2.94%	6.86%
9/19/2012	10.05%	2.94%	7.11%
9/19/2012	9.80%	2.94%	6.86%
9/26/2012	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%
11/9/2012	10.30%	2.92%	7.38%
11/28/2012	10.40%	2.90%	7.50%
11/29/2012	9.88%	2.89%	6.99%
11/29/2012	9.75%	2.89%	6.86%
12/5/2012	9.71%	2.89%	6.82%
12/5/2012	10.40%	2.89%	7.51%
12/12/2012	9.80%	2.88%	6.92%
12/13/2012	10.50%	2.88%	7.62%
12/13/2012	9.50%	2.88%	6.62%
12/14/2012	10.40%	2.88%	7.52%
12/19/2012	9.71%	2.87%	6.84%
12/19/2012	10.25%	2.87%	7.38%
12/20/2012	10.40%	2.87%	7.53%
12/20/2012	10.30%	2.87%	7.43%
12/20/2012	10.45%	2.87%	7.58%
12/20/2012	10.25%	2.87%	7.38%
12/20/2012	10.25%	2.87%	7.38%
12/20/2012	9.80%	2.87%	6.93%
12/20/2012	9.50%	2.87%	6.63%
12/21/2012	10.20%	2.87%	7.33%
12/26/2012	9.80%	2.86%	6.94%
1/9/2013	9.70%	2.85%	6.85%
1/9/2013	9.70%	2.85%	6.85%
1/9/2013	9.70%	2.85%	6.85%
1/16/2013	9.60%	2.84%	6.76%
1/16/2013	9.60%	2.84%	6.76%
2/13/2013	10.20%	2.84%	7.36%
2/22/2013	9.75%	2.85%	6.90%
2/27/2013	10.00%	2.86%	7.14%
3/14/2013	9.30%	2.88%	6.42%
3/27/2013	9.80%	2.90%	6.90%
5/1/2013	9.84%	2.94%	6.90%
5/15/2013	10.30%	2.96%	7.34%
5/30/2013	10.20%	2.98%	7.22%
5/31/2013	9.00%	2.98%	6.02%
6/11/2013	10.00%	3.00%	7.00%
6/21/2013	9.75%	3.02%	6.73%
6/25/2013	9.80%	3.03%	6.77%
7/12/2013	9.36%	3.07%	6.29%
8/8/2013	9.83%	3.14%	6.69%
8/14/2013	9.15%	3.16%	5.99%
9/11/2013	10.25%	3.26%	6.99%
9/11/2013	10.20%	3.26%	6.94%
9/24/2013	10.20%	3.31%	6.89%

Date of Electric Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
10/3/2013	9.65%	3.33%	6.32%
11/6/2013	10.20%	3.41%	6.79%
11/21/2013	10.00%	3.44%	6.56%
11/26/2013	10.00%	3.45%	6.55%
12/3/2013	10.25%	3.47%	6.78%
12/4/2013	9.50%	3.47%	6.03%
12/5/2013	10.20%	3.48%	6.72%
12/9/2013	8.72%	3.48%	5.24%
12/9/2013	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%
2/20/2014	9.20%	3.68%	5.52%
2/26/2014	9.75%	3.69%	6.08%
3/17/2014	9.65%	3.72%	5.83%
3/26/2014	9.40%	3.73%	5.67%
3/26/2014	9.96%	3.73%	6.23%
4/2/2014	9.70%	3.73%	5.97%
5/16/2014	9.80%	3.70%	6.10%
5/30/2014	9.70%	3.68%	6.02%
6/6/2014	10.40%	3.67%	6.73%
6/30/2014	9.55%	3.64%	5.91%
7/2/2014	9.62%	3.64%	5.98%
7/10/2014	9.95%	3.63%	6.32%
7/23/2014	9.75%	3.61%	6.14%
7/29/2014	9.45%	3.60%	5.85%
7/31/2014	9.90%	3.60%	6.30%
8/20/2014	9.75%	3.57%	6.18%
8/25/2014	9.60%	3.56%	6.04%
8/29/2014	9.80%	3.54%	6.26%
9/11/2014	9.60%	3.51%	6.09%
9/15/2014	10.25%	3.51%	6.74%
10/9/2014	9.80%	3.45%	6.35%
11/6/2014	9.56%	3.37%	6.19%
11/6/2014	10.20%	3.37%	6.83%
11/14/2014	10.20%	3.35%	6.85%
11/26/2014	9.70%	3.33%	6.37%
11/26/2014	10.20%	3.33%	6.87%
12/4/2014	9.68%	3.31%	6.37%
12/10/2014	9.25%	3.29%	5.96%
12/10/2014	9.25%	3.29%	5.96%
12/11/2014	10.07%	3.29%	6.78%
12/12/2014	10.20%	3.28%	6.92%
12/17/2014	9.17%	3.27%	5.90%
12/18/2014	9.83%	3.26%	6.57%
1/23/2015	9.50%	3.14%	6.36%
2/24/2015	9.83%	3.04%	6.79%
3/18/2015	9.75%	2.98%	6.77%
3/25/2015	9.50%	2.96%	6.54%
3/26/2015	9.72%	2.95%	6.77%
4/23/2015	10.20%	2.87%	7.33%
4/29/2015	9.53%	2.86%	6.67%
5/1/2015	9.60%	2.85%	6.75%
5/26/2015	9.75%	2.83%	6.92%
6/17/2015	9.00%	2.82%	6.18%
6/17/2015	9.00%	2.82%	6.18%
9/2/2015	9.50%	2.79%	6.71%
9/10/2015	9.30%	2.79%	6.51%
10/15/2015	9.00%	2.81%	6.19%

of Cases: 1,457
Average: 4.48%

Change in Net Plant and Asset Turnover
Proxy Goup - Annual Average

Year	Average Revenue/Net Plant	Average Change in Net Plant	Cumulative Change in Net Plant
2003	59.91%	11.21%	11.21%
2004	62.13%	6.70%	18.67%
2005	68.15%	3.41%	22.71%
2006	66.46%	6.92%	31.20%
2007	64.99%	6.44%	39.66%
2008	58.62%	13.82%	58.96%
2009	49.63%	7.56%	70.99%
2010	49.40%	5.74%	80.81%
2011	47.80%	4.96%	89.77%
2012	42.69%	5.49%	100.19%
2013	42.00%	5.95%	112.09%
2014	40.29%	10.12%	133.56%
2015	36.55%	7.28%	150.57%
3-5 Year Projection	37.76%	19.25%	198.81%

Change in Net Plant and Asset Turnover
Value Line Universe - Individual Company Results

Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Change in Revenue/Net Plant
ALE	2002	NA	NA			
ALE	2003	NA	NA			
ALE	2004	\$ 751.40	\$ 883.10	85.09%		
ALE	2005	737.40	860.40	85.70%	-2.57%	0.73%
ALE	2006	767.10	921.60	83.24%	7.11%	-2.88%
ALE	2007	841.70	1,104.50	76.21%	19.85%	-8.44%
ALE	2008	801.00	1,387.30	57.74%	25.60%	-24.23%
ALE	2009	759.10	1,622.70	46.78%	16.97%	-18.98%
ALE	2010	907.00	1,805.60	50.23%	11.27%	7.38%
ALE	2011	928.20	1,982.70	46.81%	9.81%	-6.80%
ALE	2012	961.20	2,347.60	40.94%	18.40%	-12.54%
ALE	2013	1,018.40	2,576.50	39.53%	9.75%	-3.46%
ALE	2014	1,136.80	3,286.40	34.59%	27.55%	-12.49%
ALE	2015	1,360.00	3,675.00	37.01%	11.82%	6.98%
ALE	2018-2020	1,700.00	4,075.00	41.72%	10.88%	12.73%
LNT	2002	\$ 2,608.80	\$ 3,729.20	69.96%		
LNT	2003	3,128.20	4,432.60	70.57%	18.86%	0.88%
LNT	2004	2,958.70	5,284.60	55.99%	19.22%	-20.67%
LNT	2005	3,279.60	4,866.20	67.40%	-7.92%	20.38%
LNT	2006	3,359.40	4,944.90	67.94%	1.62%	0.80%
LNT	2007	3,437.60	4,679.90	73.45%	-5.36%	8.12%
LNT	2008	3,681.70	5,353.50	68.77%	14.39%	-6.38%
LNT	2009	3,432.80	6,203.00	55.34%	15.87%	-19.53%
LNT	2010	3,416.10	6,730.60	50.75%	8.51%	-8.29%
LNT	2011	3,665.30	7,037.10	52.09%	4.55%	2.62%
LNT	2012	3,094.50	7,838.00	39.48%	11.38%	-24.20%
LNT	2013	3,276.80	7,147.30	45.85%	-8.81%	16.12%
LNT	2014	3,350.30	6,442.00	52.01%	-9.87%	13.44%
LNT	2015	3,400.00	8,000.00	42.50%	24.19%	-18.28%
LNT	2018-2020	4,000.00	9,000.00	44.44%	12.50%	4.58%
AEE	2002	\$ 3,841.00	\$ 8,914.00	43.09%		
AEE	2003	4,593.00	10,917.00	42.07%	22.47%	-2.36%
AEE	2004	5,160.00	13,297.00	38.81%	21.80%	-7.76%
AEE	2005	6,780.00	13,572.00	49.96%	2.07%	28.73%
AEE	2006	6,880.00	14,286.00	48.16%	5.26%	-3.60%
AEE	2007	7,546.00	15,069.00	50.08%	5.48%	3.98%
AEE	2008	7,839.00	16,567.00	47.32%	9.94%	-5.51%
AEE	2009	7,090.00	17,610.00	40.26%	6.30%	-14.91%
AEE	2010	7,638.00	17,853.00	42.78%	1.38%	6.26%

Change in Net Plant and Asset Turnover
Value Line Universe - Individual Company Results

Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Change in Revenue/Net Plant
AEE	2011	7,531.00	18,127.00	41.55%	1.53%	-2.89%
AEE	2012	6,828.00	16,096.00	42.42%	-11.20%	2.11%
AEE	2013	5,838.00	16,205.00	36.03%	0.68%	-15.07%
AEE	2014	6,053.00	17,424.00	34.74%	7.52%	-3.57%
AEE	2015	6,000.00	18,525.00	32.39%	6.32%	-6.77%
AEE	2018-2020	7,150.00	21,500.00	33.26%	16.06%	2.68%
AEP	2002	\$ 14,555.00	\$ 21,684.00	67.12%		
AEP	2003	14,545.00	22,029.00	66.03%	1.59%	-1.63%
AEP	2004	14,057.00	22,801.00	61.65%	3.50%	-6.63%
AEP	2005	12,111.00	24,284.00	49.87%	6.50%	-19.11%
AEP	2006	12,622.00	26,781.00	47.13%	10.28%	-5.50%
AEP	2007	13,380.00	29,870.00	44.79%	11.53%	-4.96%
AEP	2008	14,440.00	32,987.00	43.77%	10.44%	-2.28%
AEP	2009	13,489.00	34,344.00	39.28%	4.11%	-10.28%
AEP	2010	14,427.00	35,674.00	40.44%	3.87%	2.97%
AEP	2011	15,116.00	36,971.00	40.89%	3.64%	1.10%
AEP	2012	14,945.00	38,763.00	38.55%	4.85%	-5.70%
AEP	2013	15,357.00	40,997.00	37.46%	5.76%	-2.84%
AEP	2014	17,020.00	44,117.00	38.58%	7.61%	2.99%
AEP	2015	17,000.00	46,850.00	36.29%	6.19%	-5.94%
AEP	2018-2020	19,800.00	54,100.00	36.60%	15.47%	0.86%
AVA	2002	\$ 980.40	\$ 1,563.70	62.70%		
AVA	2003	1,123.40	1,944.60	57.77%	24.36%	-7.86%
AVA	2004	1,151.60	1,956.10	58.87%	0.59%	1.91%
AVA	2005	1,359.60	2,126.40	63.94%	8.71%	8.61%
AVA	2006	1,506.30	2,215.00	68.00%	4.17%	6.36%
AVA	2007	1,417.80	2,351.30	60.30%	6.15%	-11.33%
AVA	2008	1,676.80	2,492.20	67.28%	5.99%	11.58%
AVA	2009	1,512.60	2,607.00	58.02%	4.61%	-13.76%
AVA	2010	1,558.70	2,714.20	57.43%	4.11%	-1.02%
AVA	2011	1,619.80	2,860.80	56.62%	5.40%	-1.41%
AVA	2012	1,547.00	3,023.70	51.16%	5.69%	-9.64%
AVA	2013	1,618.50	3,202.40	50.54%	5.91%	-1.22%
AVA	2014	1,472.60	3,620.00	40.68%	13.04%	-19.51%
AVA	2015	1,525.00	3,860.00	39.51%	6.63%	-2.88%
AVA	2018-2020	1,875.00	4,625.00	40.54%	27.76%	-0.34%
CMS	2002	\$ 8,687.00	\$ 5,234.00	165.97%		
CMS	2003	5,513.00	6,944.00	79.39%	32.67%	-52.17%
CMS	2004	5,472.00	8,636.00	63.36%	24.37%	-20.19%
CMS	2005	6,288.00	7,845.00	80.15%	-9.16%	26.50%
CMS	2006	6,810.00	7,976.00	85.38%	1.67%	6.52%
CMS	2007	6,519.00	8,728.00	74.69%	9.43%	-12.52%
CMS	2008	6,821.00	9,190.00	74.22%	5.29%	-0.63%
CMS	2009	6,205.00	9,682.00	64.09%	5.35%	-13.65%
CMS	2010	6,432.00	10,069.00	63.88%	4.00%	-0.33%
CMS	2011	6,503.00	10,633.00	61.16%	5.60%	-4.26%
CMS	2012	6,312.00	11,551.00	54.64%	8.63%	-10.65%
CMS	2013	6,566.00	12,246.00	53.62%	6.02%	-1.88%
CMS	2014	7,179.00	13,412.00	53.53%	9.52%	-0.17%
CMS	2015	6,400.00	14,300.00	44.76%	6.62%	-16.39%
CMS	2018-2020	7,400.00	16,900.00	43.79%	18.18%	-2.16%
D	2002	\$ 10,218.00	\$ 20,257.00	50.44%		
D	2003	12,078.00	25,850.00	46.72%	27.61%	-7.37%
D	2004	13,972.00	26,716.00	52.30%	3.35%	11.93%
D	2005	18,041.00	28,940.00	62.34%	8.32%	19.20%
D	2006	16,482.00	29,382.00	56.10%	1.53%	-10.02%
D	2007	15,674.00	21,352.00	73.41%	-27.33%	30.86%
D	2008	16,290.00	23,274.00	69.99%	9.00%	-4.65%
D	2009	15,131.00	25,592.00	59.12%	9.96%	-15.53%
D	2010	15,197.00	26,713.00	56.89%	4.38%	-3.78%
D	2011	14,379.00	29,670.00	48.46%	11.07%	-14.81%
D	2012	13,093.00	30,773.00	42.55%	3.72%	-12.21%
D	2013	13,120.00	32,628.00	40.21%	6.03%	-5.49%
D	2014	12,436.00	36,270.00	34.29%	11.16%	-14.73%
D	2015	12,250.00	40,425.00	30.30%	11.46%	-11.62%
D	2018-2020	13,500.00	51,700.00	26.11%	27.89%	-13.83%
DTE	2002	\$ 6,749.00	\$ 9,813.00	68.78%		

Change in Net Plant and Asset Turnover
Value Line Universe - Individual Company Results

Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Change in Revenue/Net Plant
DTE	2003	7,041.00	10,324.00	68.20%	5.21%	-0.84%
DTE	2004	7,114.00	10,491.00	67.81%	1.62%	-0.57%
DTE	2005	9,022.00	10,830.00	83.31%	3.23%	22.85%
DTE	2006	9,022.00	11,451.00	78.79%	5.73%	-5.42%
DTE	2007	8,861.00	11,408.00	77.67%	-0.38%	-1.41%
DTE	2008	9,329.00	12,231.00	76.27%	7.21%	-1.80%
DTE	2009	8,014.00	12,431.00	64.47%	1.64%	-15.48%
DTE	2010	8,557.00	12,992.00	65.86%	4.51%	2.17%
DTE	2011	8,897.00	13,746.00	64.72%	5.80%	-1.73%
DTE	2012	8,791.00	14,684.00	59.87%	6.82%	-7.50%
DTE	2013	9,661.00	15,800.00	61.15%	7.60%	2.13%
DTE	2014	12,301.00	16,820.00	73.13%	6.46%	19.61%
DTE	2015	10,400.00	18,050.00	57.62%	7.31%	-21.22%
DTE	2018-2020	12,700.00	22,500.00	56.44%	24.65%	-2.04%
EDE	2002	\$ 305.90	\$ 794.10	38.52%		
EDE	2003	325.50	833.90	39.03%	5.01%	1.33%
EDE	2004	325.50	857.00	37.98%	2.77%	-2.70%
EDE	2005	386.20	896.00	43.10%	4.55%	13.48%
EDE	2006	413.50	1,031.00	40.11%	15.07%	-6.95%
EDE	2007	490.20	1,178.90	41.58%	14.35%	3.68%
EDE	2008	518.20	1,342.80	38.59%	13.90%	-7.19%
EDE	2009	497.20	1,459.00	34.08%	8.65%	-11.69%
EDE	2010	541.30	1,519.10	35.63%	4.12%	4.56%
EDE	2011	576.90	1,563.70	36.89%	2.94%	3.54%
EDE	2012	557.10	1,657.60	33.61%	6.00%	-8.90%
EDE	2013	594.30	1,751.90	33.92%	5.69%	0.94%
EDE	2014	652.30	1,910.30	34.15%	9.04%	0.66%
EDE	2015	600.00	2,000.00	30.00%	4.70%	-12.14%
EDE	2018-2020	765.00	2,125.00	36.00%	6.25%	20.00%
GXP	2002	\$ 1,861.90	\$ 2,604.10	71.50%		
GXP	2003	2,149.50	2,700.90	79.58%	3.72%	11.31%
GXP	2004	2,464.00	2,734.50	90.11%	1.24%	13.22%
GXP	2005	2,604.90	2,765.60	94.19%	1.14%	4.53%
GXP	2006	2,675.30	3,066.20	87.25%	10.87%	-7.37%
GXP	2007	3,267.10	3,444.50	94.85%	12.34%	8.71%
GXP	2008	1,670.10	6,081.30	27.46%	76.55%	-71.05%
GXP	2009	1,965.00	6,651.10	29.54%	9.37%	7.58%
GXP	2010	2,255.50	6,892.30	32.72%	3.63%	10.77%
GXP	2011	2,318.00	7,053.50	32.86%	2.34%	0.42%
GXP	2012	2,309.90	7,402.10	31.21%	4.94%	-5.04%
GXP	2013	2,446.30	7,746.40	31.58%	4.65%	1.20%
GXP	2014	2,568.20	8,279.60	31.02%	6.88%	-1.78%
GXP	2015	2,500.00	8,695.00	28.75%	5.02%	-7.31%
GXP	2018-2020	3,050.00	9,025.00	33.80%	3.80%	17.54%
IDA	2002	\$ 928.80	\$ 1,906.50	48.72%		
IDA	2003	782.70	2,088.30	37.48%	9.54%	-23.07%
IDA	2004	844.50	2,209.50	38.22%	5.80%	1.98%
IDA	2005	859.50	2,314.30	37.14%	4.74%	-2.83%
IDA	2006	926.30	2,419.10	38.29%	4.53%	3.10%
IDA	2007	879.40	2,616.60	33.61%	8.16%	-12.23%
IDA	2008	960.40	2,758.20	34.82%	5.41%	3.60%
IDA	2009	1,049.80	2,917.00	35.99%	5.76%	3.36%
IDA	2010	1,036.00	3,161.40	32.77%	8.38%	-8.94%
IDA	2011	1,026.80	3,406.60	30.14%	7.76%	-8.02%
IDA	2012	1,080.70	3,536.00	30.56%	3.80%	1.40%
IDA	2013	1,246.20	3,665.00	34.00%	3.65%	11.26%
IDA	2014	1,282.50	3,833.50	33.46%	4.60%	-1.61%
IDA	2015	1,280.00	4,095.00	31.26%	6.82%	-6.57%
IDA	2018-2020	1,405.00	4,975.00	28.24%	29.78%	-15.58%
NWE	2002	NA	NA			
NWE	2003	NA	NA			
NWE	2004	\$ 1,039.00	\$ 1,379.10	75.34%		
NWE	2005	1,165.80	1,409.20	82.73%	2.18%	9.81%
NWE	2006	1,132.70	1,491.90	75.92%	5.87%	-8.23%
NWE	2007	1,200.10	1,770.90	67.77%	18.70%	-10.74%
NWE	2008	1,260.80	1,839.70	68.53%	3.89%	1.13%
NWE	2009	1,141.90	1,964.10	58.14%	6.76%	-15.17%

Change in Net Plant and Asset Turnover
Value Line Universe - Individual Company Results

Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Change in Revenue/Net Plant
NWE	2010	1,110.70	2,118.00	52.44%	7.84%	-9.80%
NWE	2011	1,117.30	2,213.30	50.48%	4.50%	-3.74%
NWE	2012	1,070.30	2,435.60	43.94%	10.04%	-12.95%
NWE	2013	1,154.50	2,690.10	42.92%	10.45%	-2.34%
NWE	2014	1,204.90	3,758.00	32.06%	39.70%	-25.29%
NWE	2015	1,200.00	4,060.00	29.56%	8.04%	-7.81%
NWE	2018-2020	1,475.00	4,525.00	32.60%	20.41%	1.67%
OTTR	2002	\$ 710.10	\$ 587.90	120.79%		
OTTR	2003	753.20	633.30	118.93%	7.72%	-1.53%
OTTR	2004	882.30	682.10	129.35%	7.71%	8.76%
OTTR	2005	1,046.40	697.10	150.11%	2.20%	16.05%
OTTR	2006	1,105.00	718.60	153.77%	3.08%	2.44%
OTTR	2007	1,238.90	854.00	145.07%	18.84%	-5.66%
OTTR	2008	1,311.20	1,037.60	126.37%	21.50%	-12.89%
OTTR	2009	1,039.50	1,098.60	94.62%	5.88%	-25.12%
OTTR	2010	1,119.10	1,108.70	100.94%	0.92%	6.68%
OTTR	2011	1,077.90	1,077.50	100.04%	-2.81%	-0.89%
OTTR	2012	859.20	1,049.50	81.87%	-2.60%	-18.16%
OTTR	2013	893.30	1,167.00	76.55%	11.20%	-6.50%
OTTR	2014	799.30	1,268.50	63.01%	8.70%	-17.68%
OTTR	2015	805.00	1,350.00	59.63%	6.42%	-5.37%
OTTR	2018-2020	1,225.00	1,750.00	70.00%	29.63%	17.39%
PNW	2002	\$ 2,637.30	\$ 6,479.40	40.70%		
PNW	2003	2,817.90	7,480.10	37.67%	15.44%	-7.45%
PNW	2004	2,899.70	7,535.50	38.48%	0.74%	2.15%
PNW	2005	2,988.00	7,577.10	39.43%	0.55%	2.48%
PNW	2006	3,401.70	7,881.90	43.16%	4.02%	9.44%
PNW	2007	3,523.60	8,436.40	41.77%	7.04%	-3.22%
PNW	2008	3,367.10	8,916.70	37.76%	5.69%	-9.59%
PNW	2009	3,297.10	9,257.80	35.61%	3.83%	-5.69%
PNW	2010	3,263.60	9,578.80	34.07%	3.47%	-4.33%
PNW	2011	3,241.40	9,962.30	32.54%	4.00%	-4.50%
PNW	2012	3,301.80	10,396.00	31.76%	4.35%	-2.39%
PNW	2013	3,454.60	10,889.00	31.73%	4.74%	-0.11%
PNW	2014	3,491.60	11,194.00	31.19%	2.80%	-1.68%
PNW	2015	3,500.00	11,750.00	29.79%	4.97%	-4.50%
PNW	2018-2020	4,300.00	14,175.00	30.34%	26.63%	-2.75%
PNM	2002	\$ 1,169.00	\$ 1,867.30	62.60%		
PNM	2003	1,455.70	2,194.40	66.34%	17.52%	5.96%
PNM	2004	1,604.80	2,324.60	69.04%	5.93%	4.07%
PNM	2005	2,076.80	2,984.10	69.60%	28.37%	0.81%
PNM	2006	2,471.70	3,761.90	65.70%	26.06%	-5.59%
PNM	2007	1,914.00	2,935.40	65.20%	-21.97%	-0.76%
PNM	2008	1,959.50	3,192.00	61.39%	8.74%	-5.85%
PNM	2009	1,647.70	3,332.40	49.44%	4.40%	-19.45%
PNM	2010	1,673.50	3,444.40	48.59%	3.36%	-1.74%
PNM	2011	1,700.60	3,627.10	46.89%	5.30%	-3.50%
PNM	2012	1,342.40	3,746.50	35.83%	3.29%	-23.58%
PNM	2013	1,387.90	3,933.90	35.28%	5.00%	-1.54%
PNM	2014	1,435.90	4,270.00	33.63%	8.54%	-4.68%
PNM	2015	1,460.00	4,335.00	33.68%	1.52%	0.15%
PNM	2018-2020	1,625.00	5,270.00	30.83%	23.42%	-8.30%
POR	2002	NA	NA			
POR	2003	NA	NA			
POR	2004	1,454.00	2,275.00	63.91%		
POR	2005	1,446.00	2,436.00	59.36%	7.08%	-7.12%
POR	2006	1,520.00	2,718.00	55.92%	11.58%	-5.79%
POR	2007	1,743.00	3,066.00	56.85%	12.80%	1.66%
POR	2008	1,745.00	3,301.00	52.86%	7.66%	-7.01%
POR	2009	1,804.00	3,858.00	46.76%	16.87%	-11.54%
POR	2010	1,783.00	4,133.00	43.14%	7.13%	-7.74%
POR	2011	1,813.00	4,285.00	42.31%	3.68%	-1.92%
POR	2012	1,805.00	4,392.00	41.10%	2.50%	-2.87%
POR	2013	1,810.00	4,880.00	37.09%	11.11%	-9.75%
POR	2014	1,900.00	5,679.00	33.46%	16.37%	-9.80%
POR	2015	1,875.00	6,000.00	31.25%	5.65%	-6.60%
POR	2018-2020	2,175.00	6,000.00	36.25%	5.65%	8.35%

Change in Net Plant and Asset Turnover
Value Line Universe - Individual Company Results

Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Change in Revenue/Net Plant
SCG	2002	\$ 2,954.00	\$ 5,474.00	53.96%		
SCG	2003	3,416.00	6,417.00	53.23%	17.23%	-1.35%
SCG	2004	3,885.00	6,762.00	57.45%	5.38%	7.93%
SCG	2005	4,777.00	6,734.00	70.94%	-0.41%	23.47%
SCG	2006	4,563.00	7,007.00	65.12%	4.05%	-8.20%
SCG	2007	4,621.00	7,538.00	61.30%	7.58%	-5.86%
SCG	2008	5,319.00	8,305.00	64.05%	10.18%	4.47%
SCG	2009	4,237.00	9,009.00	47.03%	8.48%	-26.57%
SCG	2010	4,601.00	9,662.00	47.62%	7.25%	1.25%
SCG	2011	4,409.00	10,047.00	43.88%	3.98%	-7.85%
SCG	2012	4,176.00	10,896.00	38.33%	8.45%	-12.66%
SCG	2013	4,495.00	11,643.00	38.61%	6.86%	0.73%
SCG	2014	4,951.00	12,232.00	40.48%	5.06%	4.84%
SCG	2015	4,500.00	13,050.00	34.48%	6.69%	-14.81%
SCG	2018-2020	5,450.00	17,675.00	30.83%	35.44%	-10.58%
WR	2002	\$ 1,771.10	\$ 3,995.40	44.33%		
WR	2003	1,461.10	3,909.50	37.37%	-2.15%	-15.69%
WR	2004	1,464.50	3,911.00	37.45%	0.04%	0.19%
WR	2005	1,583.30	3,947.70	40.11%	0.94%	7.11%
WR	2006	1,605.70	4,071.60	39.44%	3.14%	-1.67%
WR	2007	1,726.80	4,803.70	35.95%	17.98%	-8.85%
WR	2008	1,839.00	5,533.50	33.23%	15.19%	-7.55%
WR	2009	1,858.20	5,771.70	32.20%	4.30%	-3.13%
WR	2010	2,056.20	6,309.50	32.59%	9.32%	1.22%
WR	2011	2,171.00	6,745.40	32.18%	6.91%	-1.24%
WR	2012	2,261.50	7,335.70	30.83%	8.75%	-4.21%
WR	2013	2,370.70	7,848.50	30.21%	6.99%	-2.02%
WR	2014	2,601.70	8,441.50	30.82%	7.56%	2.03%
WR	2015	2,580.00	8,500.00	30.35%	0.69%	-1.52%
WR	2018-2020	2,800.00	9,000.00	31.11%	5.88%	2.50%
XEL	2002	\$ 9,524.40	\$ 18,816.00	50.62%		
XEL	2003	7,937.50	13,667.00	58.08%	-27.37%	14.74%
XEL	2004	8,345.30	14,096.00	59.20%	3.14%	1.94%
XEL	2005	9,625.50	14,696.00	65.50%	4.26%	10.63%
XEL	2006	9,840.30	15,548.00	63.29%	5.80%	-3.38%
XEL	2007	10,034.00	16,676.00	60.17%	7.25%	-4.92%
XEL	2008	11,203.00	17,689.00	63.33%	6.07%	5.26%
XEL	2009	9,644.30	18,508.00	52.11%	4.63%	-17.72%
XEL	2010	10,311.00	20,663.00	49.90%	11.64%	-4.24%
XEL	2011	10,655.00	22,353.00	47.67%	8.18%	-4.48%
XEL	2012	10,128.00	23,809.00	42.54%	6.51%	-10.76%
XEL	2013	10,915.00	26,122.00	41.78%	9.71%	-1.77%
XEL	2014	11,686.00	28,757.00	40.64%	10.09%	-2.75%
XEL	2015	10,900.00	30,850.00	35.33%	7.28%	-13.05%
XEL	2018-2020	12,500.00	36,100.00	34.63%	25.53%	-14.79%

Source: Value Line

Change in Net Plant and Asset Turnover
Regression Analysis

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.526242975
R Square	0.276931669
Adjusted R Square	0.274129079
Standard Error	0.095092812
Observations	260

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.893528419	0.893528419	98.81275056	6.37383E-20
Residual	258	2.333001872	0.009042643		
Total	259	3.22653029			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0.01799822	0.007801925	2.306894781	0.021853146	0.002634659	0.033361781
Change in Net Plant	-0.620137858	0.062385226	-9.940460279	6.37383E-20	-0.742986931	-0.497288785

Flotation Cost Adjustment

Two most recent open market common stock issuances per company, if available

Company	[1] Date	[2] Shares Issued	[3] Offering Price	[4] Underwriting Discount	[5] Offering Expense	[6] Net Proceeds Per Share	[7] Total Flotation Costs	[8] Gross Equity Issue Before Costs	[9] Net Proceeds	Flotation Cost Percentage
OG E Energy Corp.	8/21/2003	5,324,074	\$21.60	\$0.7900	\$325,000	\$20.75	\$4,531,018	\$114,999,998	\$110,468,980	3.940%
ALLETE, Inc.	2/27/2014	3,220,000	\$49.75	\$1.7413	\$450,000	\$47.87	\$6,056,825	\$160,195,000	\$154,138,175	3.781%
ALLETE, Inc.	5/25/2001	7,475,000	\$23.68	\$0.9472	\$350,000	\$22.69	\$7,430,320	\$177,008,000	\$169,577,680	4.198%
Alliant Energy Corporation	7/1/2003	17,250,000	\$19.25	\$0.7700	\$370,000	\$18.46	\$13,652,500	\$332,062,500	\$318,410,000	4.111%
Alliant Energy Corporation	11/8/2001	9,775,000	\$28.00	\$1.0500	\$425,000	\$26.91	\$10,688,750	\$273,700,000	\$263,011,250	3.905%
Ameren Corp.	9/9/2009	21,850,000	\$25.25	\$0.7575	\$450,000	\$24.47	\$17,001,375	\$551,712,500	\$534,711,125	3.082%
Ameren Corp.	6/30/2004	10,925,000	\$42.00	\$1.2600	\$400,000	\$40.70	\$14,165,500	\$458,850,000	\$444,684,500	3.087%
American Electric Power Company, Inc.	4/1/2009	69,000,000	\$24.50	\$0.7350	\$400,000	\$23.76	\$51,115,000	\$1,690,500,000	\$1,639,385,000	3.024%
American Electric Power Company, Inc.	2/27/2003	57,500,000	\$20.95	\$0.6285	\$550,000	\$20.31	\$36,688,750	\$1,204,625,000	\$1,167,936,250	3.046%
Avista Corporation	12/11/2006	3,162,500	\$25.05	\$0.4800	\$300,000	\$24.48	\$1,818,000	\$79,220,625	\$77,402,625	2.295%
CMS Energy Corporation	3/30/2005	23,000,000	\$12.25	\$0.4288	\$325,000	\$11.81	\$10,187,400	\$281,750,000	\$271,562,600	3.616%
CMS Energy Corporation	10/7/2004	32,775,000	\$9.10	\$0.3185	\$325,000	\$8.77	\$10,763,838	\$298,252,500	\$287,488,663	3.609%
Dominion Resources, Inc.	5/20/2015	2,800,000	\$71.99	\$0.0300	\$200,000	\$71.89	\$284,000	\$201,572,000	\$201,288,000	0.141%
Dominion Resources, Inc.	9/7/2004	11,000,000	\$65.20	\$0.0800	\$200,000	\$65.10	\$1,080,000	\$717,200,000	\$716,120,000	0.151%
DTE Energy Company	6/19/2002	6,325,000	\$43.25	\$1.4056	\$250,000	\$41.80	\$3,140,420	\$273,556,250	\$264,415,830	3.341%
Empire District Electric Company	12/6/2007	3,450,000	\$23.00	\$0.9775	\$250,000	\$21.95	\$3,622,375	\$79,350,000	\$75,727,625	4.565%
Empire District Electric Company	6/15/2006	3,795,000	\$20.25	\$0.8600	\$250,000	\$19.32	\$3,513,700	\$76,848,750	\$73,335,050	4.572%
Great Plains Energy Inc.	5/12/2009	11,500,000	\$14.00	\$0.4900	\$500,000	\$13.47	\$6,135,000	\$161,000,000	\$154,865,000	3.811%
Great Plains Energy Inc.	5/17/2006	7,002,450	\$27.50	\$0.8938	\$500,000	\$26.53	\$6,758,790	\$192,567,375	\$185,808,585	3.510%
IDACORP, Inc.	12/9/2004	4,025,000	\$30.00	\$1.2000	\$300,000	\$28.73	\$5,130,000	\$120,750,000	\$115,620,000	4.248%
NorthWestern Corporation	9/29/2015	1,100,000	\$51.81	\$1.3300	\$1,000,000	\$49.57	\$2,463,000	\$56,991,000	\$54,528,000	4.322%
NorthWestern Corporation	11/5/2014	7,766,990	\$51.50	\$1.8025	\$1,000,000	\$49.57	\$14,999,999	\$399,999,985	\$384,999,986	3.750%
Offer Tail Corporation	9/18/2008	5,175,000	\$30.00	\$1.0875	\$400,000	\$28.84	\$6,027,813	\$155,250,000	\$149,222,188	3.883%
Offer Tail Corporation	12/7/2004	3,335,000	\$25.45	\$0.9500	\$300,000	\$24.41	\$3,468,250	\$84,875,750	\$81,407,500	4.086%
Pinnacle West Capital Corporation	4/8/2010	6,800,000	\$38.00	\$1.3300	\$190,000	\$36.64	\$9,367,000	\$282,200,000	\$252,833,000	3.572%
Pinnacle West Capital Corporation	4/27/2005	6,095,000	\$42.00	\$1.3650	\$250,000	\$40.59	\$8,569,675	\$255,990,000	\$247,420,325	3.348%
PNM Resources, Inc.	12/6/2006	5,750,000	\$30.79	\$1.0780	\$250,000	\$29.67	\$6,448,500	\$177,042,500	\$170,594,000	3.642%
PNM Resources, Inc.	3/23/2005	3,910,000	\$26.76	\$0.8697	\$200,000	\$25.84	\$3,600,527	\$104,631,600	\$101,031,073	3.441%
Portland General Electric Company	6/11/2013	12,765,000	\$29.50	\$0.9588	\$600,000	\$28.49	\$12,838,444	\$376,567,500	\$363,729,056	3.409%
Portland General Electric Company	3/5/2009	12,477,500	\$14.10	\$0.4935	\$375,000	\$13.58	\$6,532,646	\$175,932,750	\$169,400,104	3.713%
SCANA Corporation	5/11/2010	8,222,500	\$37.00	\$1.2950	\$350,000	\$35.66	\$10,998,138	\$304,232,500	\$293,234,363	3.615%
SCANA Corporation	12/31/2008	2,875,000	\$35.50	\$0.5325	\$350,000	\$34.85	\$1,880,938	\$102,062,500	\$100,181,563	1.843%
Westar Energy, Inc.	9/24/2013	9,200,000	\$31.15	\$1.0903	\$250,000	\$30.03	\$10,280,300	\$286,580,000	\$276,299,700	3.587%
Westar Energy, Inc.	11/4/2010	8,625,000	\$25.54	\$0.8939	\$250,000	\$24.62	\$7,959,888	\$220,282,500	\$212,322,613	3.613%
Xcel Energy Inc.	8/3/2010	21,850,000	\$21.50	\$0.6450	\$600,000	\$20.83	\$14,693,250	\$469,775,000	\$455,081,750	3.128%
Xcel Energy Inc.	9/9/2008	17,250,000	\$20.25	\$0.1500	\$600,000	\$20.07	\$3,187,500	\$349,312,500	\$346,125,000	0.913%
Mean							\$9,529,884	\$311,873,516		3.056%

WEIGHTED AVERAGE FLOTATION COSTS: [10]

Constant Growth Discounted Cash Flow Model Adjusted for Flotation Costs - 30 Day Average Stock Price

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	DCF k(e)	Adjusted DCF k(e)	Flotation
					Current	Flot. Costs							
ALLETE, Inc.	ALE	\$2.02	\$50.58	3.99%	4.11%	4.24%	NA	5.50%	6.50%	6.00%	10.11%	10.24%	
Alliant Energy Corporation	LNT	\$2.20	\$59.06	3.72%	3.83%	3.95%	5.30%	5.75%	6.00%	5.68%	9.51%	9.63%	
Ameren Corporation	AEE	\$1.70	\$42.92	3.96%	4.09%	4.22%	6.80%	6.25%	7.00%	6.68%	10.78%	10.91%	
American Electric Power Company, Inc.	AEP	\$2.24	\$57.02	3.93%	4.02%	4.15%	4.70%	4.63%	5.00%	4.78%	8.80%	8.93%	
Avista Corporation	AVA	\$1.32	\$33.45	3.95%	4.05%	4.17%	NA	5.00%	5.00%	5.00%	9.05%	9.17%	
CMS Energy Corporation	CMS	\$1.16	\$35.61	3.26%	3.36%	3.46%	6.50%	6.76%	5.50%	6.25%	9.61%	9.72%	
Dominion Resources, Inc.	D	\$2.59	\$71.19	3.64%	3.76%	3.88%	6.30%	5.38%	8.00%	6.56%	10.32%	10.44%	
DTE Energy Company	DTE	\$2.92	\$81.21	3.60%	3.69%	3.80%	5.50%	4.94%	5.00%	5.15%	8.63%	8.95%	
Empire District Electric Company	EDE	\$1.04	\$22.62	4.60%	4.69%	4.84%	5.00%	4.00%	3.00%	4.00%	8.69%	8.84%	
Great Plains Energy Inc.	GXP	\$0.98	\$27.11	3.61%	3.72%	3.84%	6.10%	6.37%	5.00%	5.82%	9.54%	9.66%	
IDACORP, Inc.	IDA	\$2.04	\$66.17	3.08%	3.13%	3.23%	4.00%	4.00%	1.00%	3.00%	6.13%	6.23%	
NorthWestern Corporation	NWE	\$1.92	\$54.44	3.53%	3.63%	3.75%	5.00%	6.81%	6.50%	6.10%	9.74%	9.85%	
Otter Tail Corporation	OTTR	\$1.23	\$27.08	4.54%	4.71%	4.86%	NA	6.00%	9.00%	7.50%	12.21%	12.36%	
Pinnacle West Capital Corporation	PNW	\$2.50	\$64.21	3.89%	3.99%	4.11%	5.20%	5.37%	4.00%	4.86%	8.84%	8.97%	
PNM Resources, Inc.	PNM	\$0.80	\$27.83	2.87%	3.00%	3.09%	8.50%	8.56%	9.00%	8.69%	11.69%	11.78%	
Portland General Electric Company	POR	\$1.20	\$37.31	3.22%	3.29%	3.38%	4.10%	3.92%	6.00%	4.67%	7.96%	8.07%	
SCANA Corporation	SCG	\$2.18	\$56.09	3.89%	3.97%	4.10%	4.20%	4.45%	4.50%	4.38%	8.36%	8.48%	
Westar Energy, Inc.	WR	\$1.44	\$39.10	3.68%	3.76%	3.88%	3.90%	3.40%	6.00%	4.43%	8.20%	8.32%	
Xcel Energy Inc.	XEL	\$1.28	\$35.57	3.60%	3.68%	3.80%	5.00%	4.68%	4.50%	4.73%	8.41%	8.53%	

PROXY GROUP MEAN

9.30%

9.42%

DCF Result Adjusted For Flotation Costs: 9.42%
 DCF Result Unadjusted For Flotation Costs: 9.30%
 Difference (Flotation Cost Adjustment): 0.12% [22]

Notes:

The proxy group DCF result is adjusted for flotation costs by dividing each company's expected dividend yield by (1 - flotation cost). The flotation cost adjustment is derived as the difference between the unadjusted DCF result and the DCF result adjusted for flotation costs.

- [1] Source: SEC Form 424B
- [2] Source: SEC Form 424B
- [3] Source: SEC Form 424B
- [4] Source: SEC Form 424B
- [5] Equals [8] / [1]
- [6] Equals [4] + ([1] x [3])
- [7] Equals [1] x [2]
- [8] Equals [7] - [6]
- [9] Equals [6] / [7]
- [10] Equals average [6] / average [7]
- [11] Source: Bloomberg Professional
- [12] Source: Bloomberg Professional
- [13] Equals [11] / [12]
- [14] Equals [3] x (1 + 0.5 x [19])
- [15] Equals [4] / (1 - 0.0306)
- [16] Source: Zacks
- [17] Source: Yahoo! Finance
- [18] Source: Value Line
- [19] Equals Average([16], [17], [18])
- [20] Equals [14] + [19]
- [21] Equals [15] + [19]
- [22] Equals average [21] - average [20]

Summary of Adjustment Clauses & Alternative Regulation/Incentive Plans

Company	Parent	State	Adjustment Clauses				Alternative Regulation / Incentive Plans								
			Fuel/ Purchased Power	Decoupling (FP) [1]	New Capital Investment [2]	Energy Efficiency [3]	Renewables & Environmental RPS [4]	Other [6]	Formula- Based Rates	Price Freeze/ Cap	Earnings Sharing	Formula- Based ROE	Service Quality/ Performance	Merger Savings	
Ameren Illinois Company	AEE	Illinois	✓			✓					✓				
Union Electric Company	AEE	Missouri	✓	P		✓					✓				
Southwestern Electric Power Company	AEP	Arkansas	✓	P	✓	✓					✓				
Indiana Michigan Power Company	AEP	Indiana	✓	P	✓	✓					✓				
Kentucky Power Company	AEP	Kentucky	✓	P	✓	✓					✓				
Southwestern Electric Power Company	AEP	Louisiana	✓	P	✓	✓					✓				
Indiana Michigan Power Company	AEP	Michigan	✓	P	✓	✓					✓				
Ohio Power Company	AEP	Ohio	✓	P	✓	✓					✓				
Public Service Company of Oklahoma	AEP	Oklahoma	✓	P	✓	✓					✓				
Kingsport Power Company	AEP	Tennessee	✓	P	✓	✓					✓				
AEP Texas Central Company	AEP	Texas	✓	P	✓	✓					✓				
AEP Texas North Company	AEP	Texas	✓	P	✓	✓					✓				
Southwestern Electric Power Company	AEP	Texas	✓	P	✓	✓					✓				
Appalachian Power Company	AEP	Virginia	✓	P	✓	✓					✓				
Appalachian Power Company	AEP	West Virginia	✓	P	✓	✓					✓				
Wisconsin Power Company	AEP	Wisconsin	✓	P	✓	✓					✓				
ALLETE (Minnesota Power)	ALE	Minnesota	✓	P	✓	✓					✓				
Superior Water, Light and Power Company	ALE	Wisconsin	✓	P	✓	✓					✓				
Alaska Electric Light and Power Company	AVA	Alaska	✓	P	✓	✓					✓				
Avista Corporation	AVA	Idaho	✓	P	✓	✓					✓				
Avista Corporation	AVA	Washington	✓	P	✓	✓					✓				
Consumers Energy Company	CMS	Michigan	✓	F	✓	✓					✓				
Virginia Electric and Power Company	D	Virginia	✓	P	✓	✓					✓				
Virginia Electric and Power Company	D	North Carolina	✓	P	✓	✓					✓				
DTE Electric Company	DTE	Michigan	✓	P	✓	✓					✓				
Empire District Electric Company	EDE	California	✓	P	✓	✓					✓				
Empire District Electric Company	EDE	Missouri	✓	P	✓	✓					✓				
Empire District Electric Company	EDE	Missouri	✓	P	✓	✓					✓				
Kansas City Power & Light Company	GXP	Kansas	✓	P	✓	✓					✓				
Kansas City Power & Light Company	GXP	Missouri	✓	P	✓	✓					✓				
KCP&L Greater Missouri Operations Company	GXP	Missouri	✓	P	✓	✓					✓				
Idaho Power Co.	IDA	Idaho	✓	P	✓	✓					✓				
Idaho Power Co.	IDA	Oregon	✓	P	✓	✓					✓				
Interstate Power and Light Company	LNT	Iowa	✓	P	✓	✓					✓				
Wisconsin Power and Light Company	LNT	Wisconsin	✓	P	✓	✓					✓				
NorthWestern Energy	NWE	Montana	✓	P	✓	✓					✓				
NorthWestern Energy	NWE	South Dakota	✓	P	✓	✓					✓				
Other Tail Power Company	OTTR	Minnesota	✓	P	✓	✓					✓				
Other Tail Power Company	OTTR	North Dakota	✓	P	✓	✓					✓				
Public Service Company of New Mexico	PNM	New Mexico	✓	P	✓	✓					✓				
Texas-New Mexico Power Company	PNM	Texas	✓	P	✓	✓					✓				
Arizona Public Service Company	PNW	Arizona	✓	P	✓	✓					✓				
Portland General Electric Company	POR	Oregon	✓	P	✓	✓					✓				
South Carolina Electric & Gas Co.	SCG	South Carolina	✓	P	✓	✓					✓				
Kansas Gas and Electric Company	WR	Kansas	✓	P	✓	✓					✓				
Western Energy (RPL)	WR	Kansas	✓	P	✓	✓					✓				
Public Service Company of Colorado	XEL	Colorado	✓	P	✓	✓					✓				
Northern States Power Company - MN	XEL	Minnesota	✓	P	✓	✓					✓				
Southwestern Public Service Company	XEL	New Mexico	✓	P	✓	✓					✓				
Northern States Power Company - MN	XEL	North Dakota	✓	P	✓	✓					✓				
Northern States Power Company - MN	XEL	South Dakota	✓	P	✓	✓					✓				
Southwestern Public Service Company	XEL	Texas	✓	P	✓	✓					✓				
Northern States Power Company - WI	XEL	Wisconsin	✓	P	✓	✓					✓				
Oklahoma Gas & Electric	XEL	Oklahoma	✓	P	✓	✓					✓				

Notes:

A mechanism may cover one or more cost categories; therefore, designations may not indicate separate mechanisms for each category.

[1] Full or partial decoupling (such as Straight-Fixed Variable rate design, weather normalization clauses, and recovery of lost revenues as a result of Energy Efficiency programs).

[2] Includes recovery of costs related to targeted new generation projects, infrastructure replacement, system integrity/hardening, AMI smart metering, and other capital expenditures.

[3] Utility-sponsored conservation, energy efficiency, load control, or other demand side management programs.

[4] Recovers costs associated with renewable energy projects, Distributed Energy Resources, REC purchases, net metering, RPS expense, and renewable PPAs.

[5] EPA upgrade costs, emissions control & allowance costs, decommissioning, and other costs to comply with state and federal environmental mandates.

[6] Pension expenses, bad debt costs, storm costs, vegetation management, RTO Expense, capacity costs, transmission costs, government & franchise fees and taxes, economic development, and low income programs.

Sources: Company SEC Form 10-Ks; Regulatory Research Associates, Alternative Regulation/Incentive Plans: A State-by-State Overview, November 19, 2013; Regulatory Research Associates, Adjustment Clauses: A State-by-State Overview, October 2, 2015.

Proxy Group Capital Structure

Company	Ticker	% Common Equity							
		2015Q2	2015Q1	2014Q4	2014Q3	2014Q2	2014Q1	2013Q4	2013Q3
ALLETE, Inc.	ALE	58.93%	58.70%	56.98%	56.18%	55.83%	56.79%	56.37%	58.08%
Alliant Energy Corporation	LNT	51.18%	50.32%	50.11%	54.23%	52.94%	52.81%	52.36%	53.56%
Ameren Corporation	AEE	52.44%	52.88%	52.82%	54.54%	53.83%	56.09%	54.78%	55.37%
American Electric Power Company, Inc.	AEP	49.63%	52.23%	52.11%	52.27%	52.31%	52.34%	52.36%	53.51%
Avista Corporation	AVA	54.98%	54.81%	51.39%	52.62%	51.19%	49.76%	49.15%	48.07%
CMS Energy Corporation	CMS	51.15%	51.35%	50.21%	49.99%	53.44%	52.63%	51.35%	51.19%
Dominion Resources, Inc.	D	51.68%	53.24%	52.94%	53.47%	53.18%	53.17%	54.95%	54.71%
DTE Energy Company	DTE	49.81%	48.42%	50.39%	49.32%	50.30%	50.54%	50.25%	47.48%
Duke Energy Corporation	DUK	57.52%	58.32%	57.62%	56.60%	56.03%	55.25%	56.09%	55.83%
Empire District Electric Company	EDE	51.38%	51.47%	51.28%	53.31%	52.82%	52.73%	52.30%	52.37%
Great Plains Energy Inc.	GXP	53.19%	53.21%	53.30%	53.42%	52.67%	52.56%	52.49%	52.51%
IDACORP, Inc.	IDA	51.61%	49.38%	52.94%	52.92%	52.03%	51.72%	51.61%	50.51%
NorthWestern Corporation	NWE	46.97%	47.54%	47.06%	47.78%	47.45%	48.19%	47.15%	48.77%
Otter Tail Corporation	OTTR	52.32%	51.13%	49.80%	49.32%	47.60%	47.20%	53.72%	52.37%
Pinnacle West Capital Corporation	PNW	55.72%	55.86%	57.54%	58.43%	57.32%	55.67%	57.39%	57.62%
PNM Resources, Inc.	PNM	45.63%	46.11%	45.86%	47.43%	47.14%	46.70%	48.39%	49.79%
Portland General Electric Company	POR	49.57%	44.11%	43.31%	44.86%	46.64%	49.21%	48.70%	50.43%
SCANA Corporation	SCG	52.08%	53.72%	53.46%	53.47%	52.85%	54.36%	53.90%	53.68%
Westar Energy, Inc.	WR	67.60%	66.54%	65.73%	65.95%	66.62%	63.45%	63.22%	61.28%
Xcel Energy Inc.	XEL	53.88%	54.97%	54.62%	54.54%	53.41%	54.88%	54.92%	54.29%
Mean		52.86%	52.72%	52.47%	53.03%	52.78%	52.80%	53.07%	53.07%

Operating Company Capital Structure

Operating Company	Parent	% Common Equity							
		2015Q2	2015Q1	2014Q4	2014Q3	2014Q2	2014Q1	2013Q4	2013Q3
ALLETE (Minnesota Power)	ALE	57.67%	57.56%	55.24%	53.98%	53.01%	55.16%	55.93%	54.90%
Superior Water, Light and Power Company	ALE	60.19%	59.83%	58.72%	58.39%	58.65%	58.42%	56.81%	61.25%
Interstate Power and Light Company	LNT	51.72%	50.09%	49.90%	54.01%	52.05%	51.88%	51.35%	54.01%
Wisconsin Power and Light Company	LNT	50.65%	50.54%	50.32%	54.45%	53.82%	53.74%	53.37%	53.12%
Ameren Illinois Company	AEE	54.67%	54.39%	53.90%	56.91%	56.19%	59.29%	56.48%	58.71%
Union Electric Company	AEE	50.21%	51.37%	51.74%	52.17%	51.48%	52.89%	53.08%	52.03%
AEP Texas Central Company	AEP	47.46%	45.01%	42.39%	43.93%	43.18%	47.56%	46.75%	46.62%
AEP Texas North Company	AEP	48.87%	47.15%	46.96%	47.06%	46.79%	46.82%	46.68%	46.03%
Appalachian Power Company	AEP	46.50%	46.52%	45.83%	46.29%	46.00%	44.13%	43.52%	47.39%
Indiana Michigan Power Company	AEP	52.08%	51.94%	51.36%	51.45%	51.39%	51.63%	50.80%	48.27%
Kentucky Power Company	AEP	43.87%	44.19%	44.74%	46.25%	48.23%	50.30%	52.83%	46.02%
Kingsport Power Company	AEP	60.44%	60.77%	61.00%	60.55%	60.91%	58.88%	60.85%	60.73%
Ohio Power Company	AEP	50.33%	49.30%	48.96%	46.03%	44.79%	42.54%	39.71%	57.01%
Public Service Company of Oklahoma	AEP	45.29%	44.66%	49.69%	49.43%	48.30%	47.51%	48.51%	50.46%
Southwestern Electric Power Company	AEP	47.62%	46.25%	50.46%	50.60%	51.26%	51.18%	51.21%	50.22%
Wheeling Power Company	AEP	53.82%	86.56%	79.75%	81.14%	82.27%	82.89%	82.79%	82.32%
Alaska Electric Light and Power Company	AVA	58.07%	57.83%	NA	NA	NA	NA	NA	NA
Avista Corporation	AVA	51.90%	51.78%	51.39%	52.62%	51.19%	49.76%	49.15%	48.07%
Consumers Energy Company	CMS	51.15%	51.35%	50.21%	49.99%	53.44%	52.63%	51.35%	51.19%
Virginia Electric and Power Company	D	51.68%	53.24%	52.94%	53.47%	53.18%	53.17%	54.95%	54.71%
DTE Electric Company	DTE	49.81%	48.42%	50.39%	49.32%	50.30%	50.54%	50.25%	47.48%
Duke Energy Carolinas, LLC	DUK	57.36%	57.01%	57.84%	56.60%	55.90%	55.56%	55.18%	53.80%
Duke Energy Florida, LLC	DUK	53.55%	52.74%	53.90%	50.98%	49.96%	49.22%	50.47%	50.61%
Duke Energy Indiana, Inc.	DUK	52.70%	50.98%	50.28%	49.88%	50.69%	51.57%	50.85%	50.31%
Duke Energy Kentucky, Inc.	DUK	58.11%	57.68%	56.58%	54.78%	54.36%	54.16%	53.23%	52.56%
Duke Energy Ohio, Inc.	DUK	69.31%	79.18%	76.64%	76.40%	74.55%	70.11%	74.27%	74.25%
Duke Energy Progress, LLC	DUK	54.07%	52.33%	50.48%	50.99%	50.75%	50.85%	52.54%	53.43%
Empire District Electric Company	EDE	51.38%	51.47%	51.28%	53.31%	52.82%	52.73%	52.30%	52.37%
Kansas City Power & Light Company	GXP	50.18%	49.84%	49.53%	49.54%	48.67%	48.46%	48.46%	48.57%
KCP&L Greater Missouri Operations Company	GXP	56.20%	56.57%	57.07%	57.30%	56.68%	56.66%	56.52%	56.46%
Idaho Power Co.	IDA	51.61%	49.38%	52.94%	52.92%	52.03%	51.72%	51.61%	50.51%
NorthWestern Corporation	NWE	46.97%	47.54%	47.06%	47.78%	47.45%	48.19%	47.15%	48.77%
Otter Tail Power Company	OTTR	52.32%	51.13%	49.80%	49.32%	47.60%	47.20%	53.72%	52.37%
Arizona Public Service Company	PNW	55.72%	55.86%	57.54%	58.43%	57.32%	55.67%	57.39%	57.62%
Public Service Company of New Mexico	PNM	45.63%	46.11%	45.86%	47.43%	47.14%	46.70%	48.39%	49.79%
Texas-New Mexico Power Company	PNM	NA	NA	NA	NA	NA	NA	NA	NA
Portland General Electric Company	POR	49.57%	44.11%	43.31%	44.86%	46.64%	49.21%	48.70%	50.43%
South Carolina Electric & Gas Co.	SCG	52.08%	53.72%	53.46%	53.47%	52.85%	54.36%	53.90%	53.68%
Kansas Gas and Electric Company	WR	72.43%	72.15%	71.99%	72.65%	77.67%	69.73%	69.54%	65.91%
Westar Energy (KPL)	WR	62.76%	60.94%	59.48%	59.26%	55.58%	57.17%	56.90%	56.66%
Northern States Power Company - MN	XEL	53.34%	53.03%	52.89%	52.84%	52.49%	54.32%	53.54%	52.54%
Northern States Power Company - WI	XEL	52.53%	56.36%	55.18%	55.01%	52.92%	57.06%	56.42%	55.77%
Public Service Company of Colorado	XEL	55.55%	56.94%	56.79%	56.51%	56.12%	54.21%	56.53%	56.38%
Southwestern Public Service Company	XEL	54.08%	53.54%	53.62%	53.81%	52.10%	53.92%	53.20%	52.48%
Mean		53.29%	53.89%	53.56%	53.86%	53.54%	53.56%	53.74%	53.95%

Source: SNL Financial

Proxy Group Capital Structure

Average	Company	Ticker	% Long-Term Debt						
			2015Q2	2015Q1	2014Q4	2014Q3	2014Q2	2014Q1	2013Q4
57.23%	ALLETE, Inc.	ALE	41.07%	41.30%	43.02%	43.82%	44.17%	43.21%	43.63%
52.19%	Alliant Energy Corporation	LNT	48.82%	49.68%	49.89%	45.77%	47.06%	47.19%	47.64%
54.09%	Ameren Corporation	AEE	47.56%	47.12%	47.18%	45.46%	46.17%	43.91%	45.22%
52.10%	American Electric Power Company, Inc.	AEP	50.37%	47.77%	47.89%	47.73%	47.69%	47.66%	47.64%
51.50%	Avista Corporation	AVA	45.02%	45.19%	48.61%	47.38%	48.81%	50.24%	50.85%
51.41%	CMS Energy Corporation	CMS	48.85%	48.65%	49.79%	50.01%	46.56%	47.37%	48.65%
53.42%	Dominion Resources, Inc.	D	48.32%	46.76%	47.06%	46.53%	46.82%	46.83%	45.05%
49.56%	DTE Energy Company	DTE	50.19%	51.58%	49.61%	50.68%	49.70%	49.46%	49.75%
56.66%	Duke Energy Corporation	DUK	42.48%	41.68%	42.38%	43.40%	43.97%	44.75%	43.91%
52.21%	Empire District Electric Company	EDE	48.62%	48.53%	48.72%	46.69%	47.18%	47.27%	47.70%
52.92%	Great Plains Energy Inc.	GXP	46.81%	46.79%	46.70%	46.58%	47.33%	47.44%	47.51%
51.59%	IDACORP, Inc.	IDA	48.39%	50.62%	47.06%	47.08%	47.97%	48.28%	48.39%
47.61%	NorthWestern Corporation	NWE	53.03%	52.46%	52.94%	52.22%	52.55%	51.81%	52.85%
50.43%	Otter Tail Corporation	OTTR	47.68%	48.87%	50.20%	50.68%	52.40%	52.80%	46.28%
56.94%	Pinnacle West Capital Corporation	PNW	44.28%	44.14%	42.46%	41.57%	42.68%	44.33%	42.61%
47.13%	PNM Resources, Inc.	PNM	54.37%	53.89%	54.14%	52.57%	52.86%	53.30%	51.61%
47.11%	Portland General Electric Company	POR	50.43%	55.89%	56.69%	55.14%	53.36%	50.79%	51.30%
53.44%	SCANA Corporation	SCG	47.92%	46.28%	46.54%	46.53%	47.15%	45.64%	46.10%
65.05%	Westar Energy, Inc.	WR	32.40%	33.46%	34.27%	34.05%	33.38%	36.55%	36.78%
54.44%	Xcel Energy Inc.	XEL	46.12%	45.03%	45.38%	45.46%	46.59%	45.12%	45.08%
52.85%	Mean		47.14%	47.28%	47.53%	46.97%	47.22%	47.20%	46.93%

Operating Company Capital Structure

Average	Operating Company	Parent	% Long-Term Debt						
			2015Q2	2015Q1	2014Q4	2014Q3	2014Q2	2014Q1	2013Q4
55.43%	ALLETE (Minnesota Power)	ALE	42.33%	42.44%	44.76%	46.02%	46.99%	44.84%	44.07%
59.03%	Superior Water, Light and Power Company	ALE	39.81%	40.17%	41.28%	41.61%	41.35%	41.58%	43.19%
51.88%	Interstate Power and Light Company	LNT	48.28%	49.91%	50.10%	45.99%	47.95%	48.12%	48.65%
52.50%	Wisconsin Power and Light Company	LNT	49.35%	49.46%	49.68%	45.55%	46.18%	46.26%	46.63%
56.32%	Ameren Illinois Company	AEE	45.33%	45.61%	46.10%	43.09%	43.81%	40.71%	43.52%
51.87%	Union Electric Company	AEE	49.79%	48.63%	48.26%	47.83%	48.52%	47.11%	46.92%
45.36%	AEP Texas Central Company	AEP	52.54%	54.99%	57.61%	56.07%	56.82%	52.44%	53.25%
47.04%	AEP Texas North Company	AEP	51.13%	52.85%	53.04%	52.94%	53.21%	53.18%	53.32%
45.77%	Appalachian Power Company	AEP	53.50%	53.48%	54.17%	53.71%	54.00%	55.87%	56.48%
51.11%	Indiana Michigan Power Company	AEP	47.92%	48.06%	48.64%	48.55%	48.61%	48.37%	49.20%
47.06%	Kentucky Power Company	AEP	56.13%	55.81%	55.26%	53.75%	51.77%	49.70%	47.17%
60.52%	Kingsport Power Company	AEP	39.56%	39.23%	39.00%	39.45%	39.09%	41.12%	39.15%
47.33%	Ohio Power Company	AEP	49.67%	50.70%	51.04%	53.97%	55.21%	57.46%	60.29%
47.98%	Public Service Company of Oklahoma	AEP	54.71%	55.34%	50.31%	50.57%	51.70%	52.49%	51.49%
49.85%	Southwestern Electric Power Company	AEP	52.38%	53.75%	49.54%	49.40%	48.74%	48.82%	48.79%
78.94%	Wheeling Power Company	AEP	46.18%	13.44%	20.25%	18.86%	17.73%	17.11%	17.21%
NA	Alaska Electric Light and Power Company	AVA	41.93%	42.17%	NA	NA	NA	NA	NA
50.73%	Avista Corporation	AVA	48.10%	48.22%	48.61%	47.38%	48.81%	50.24%	50.85%
51.41%	Consumers Energy Company	CMS	48.85%	48.65%	49.79%	50.01%	46.56%	47.37%	48.65%
53.42%	Virginia Electric and Power Company	D	48.32%	46.76%	47.06%	46.53%	46.82%	46.83%	45.05%
49.56%	DTE Electric Company	DTE	50.19%	51.58%	49.61%	50.68%	49.70%	49.46%	49.75%
56.16%	Duke Energy Carolinas, LLC	DUK	42.64%	42.99%	42.16%	43.40%	44.10%	44.44%	44.82%
51.43%	Duke Energy Florida, LLC	DUK	46.45%	47.26%	46.10%	49.02%	50.04%	50.78%	49.53%
50.91%	Duke Energy Indiana, Inc.	DUK	47.30%	49.02%	49.72%	50.12%	49.31%	48.43%	49.15%
55.18%	Duke Energy Kentucky, Inc.	DUK	41.89%	42.32%	43.42%	45.22%	45.64%	45.84%	46.77%
74.34%	Duke Energy Ohio, Inc.	DUK	30.69%	20.82%	23.36%	23.60%	25.45%	29.89%	25.73%
51.93%	Duke Energy Progress, LLC	DUK	45.93%	47.67%	49.52%	49.01%	49.25%	49.15%	47.46%
52.21%	Empire District Electric Company	EDE	48.62%	48.53%	48.72%	46.69%	47.18%	47.27%	47.70%
49.16%	Kansas City Power & Light Company	GXP	49.82%	50.16%	50.47%	50.46%	51.33%	51.54%	51.54%
56.68%	KCP&L Greater Missouri Operations Company	GXP	43.80%	43.43%	42.93%	42.70%	43.32%	43.34%	43.48%
51.59%	Idaho Power Co.	IDA	48.39%	50.62%	47.06%	47.08%	47.97%	48.28%	48.39%
47.61%	NorthWestern Corporation	NWE	53.03%	52.46%	52.94%	52.22%	52.55%	51.81%	52.85%
50.43%	Otter Tail Power Company	OTTR	47.68%	48.87%	50.20%	50.68%	52.40%	52.80%	46.28%
56.94%	Arizona Public Service Company	PNW	44.28%	44.14%	42.46%	41.57%	42.68%	44.33%	42.61%
47.13%	Public Service Company of New Mexico	PNM	54.37%	53.89%	54.14%	52.57%	52.86%	53.30%	51.61%
NA	Texas-New Mexico Power Company	PNM	NA	NA	NA	NA	NA	NA	NA
47.11%	Portland General Electric Company	POR	50.43%	55.89%	56.69%	55.14%	53.36%	50.79%	51.30%
53.44%	South Carolina Electric & Gas Co.	SCG	47.92%	46.28%	46.54%	46.53%	47.15%	45.64%	46.10%
71.51%	Kansas Gas and Electric Company	WR	27.57%	27.85%	28.01%	27.35%	22.33%	30.27%	30.46%
58.59%	Westar Energy (KPL)	WR	37.24%	39.06%	40.52%	40.74%	44.42%	42.83%	43.10%
53.13%	Northern States Power Company - MN	XEL	46.66%	46.97%	47.11%	47.16%	47.51%	45.68%	46.46%
55.16%	Northern States Power Company - WI	XEL	47.47%	43.64%	44.82%	44.99%	47.08%	42.94%	43.58%
56.13%	Public Service Company of Colorado	XEL	44.45%	43.06%	43.21%	43.49%	43.88%	45.79%	43.47%
53.34%	Southwestern Public Service Company	XEL	45.92%	46.46%	46.38%	46.19%	47.90%	46.08%	46.80%
53.65%	Mean		46.71%	46.11%	46.44%	46.14%	46.46%	46.44%	46.26%

2013Q3	Average
41.92%	42.77%
46.44%	47.81%
44.63%	45.91%
46.49%	47.90%
51.93%	48.50%
48.81%	48.59%
45.29%	46.58%
52.52%	50.44%
44.17%	43.34%
47.63%	47.79%
47.49%	47.08%
49.49%	48.41%
51.23%	52.39%
47.63%	49.57%
42.38%	43.06%
50.21%	52.87%
49.57%	52.89%
46.32%	46.56%
38.72%	34.95%
45.71%	45.56%
46.93%	47.15%

2013Q3	Average
45.10%	44.57%
38.75%	40.97%
45.99%	48.12%
46.88%	47.50%
41.29%	43.68%
47.97%	48.13%
53.38%	54.64%
53.97%	52.96%
52.61%	54.23%
51.73%	48.89%
53.98%	52.94%
39.27%	39.48%
42.99%	52.67%
49.54%	52.02%
49.78%	50.15%
17.68%	21.06%
NA	NA
51.93%	49.27%
48.81%	48.59%
45.29%	46.58%
52.52%	50.44%
46.20%	43.84%
49.39%	48.57%
49.69%	49.09%
47.44%	44.82%
25.75%	25.66%
46.57%	48.07%
47.63%	47.79%
51.43%	50.84%
43.54%	43.32%
49.49%	48.41%
51.23%	52.39%
47.63%	49.57%
42.38%	43.06%
50.21%	52.87%
NA	NA
49.57%	52.89%
46.32%	46.56%
34.09%	28.49%
43.34%	41.41%
47.46%	46.87%
44.23%	44.84%
43.62%	43.87%
47.52%	46.66%
46.05%	46.35%