

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE APPLICATION)
OF PUBLIC SERVICE COMPANY OF NEW)
MEXICO FOR REVISION OF ITS RETAIL)
ELECTRIC RATES PURSUANT TO ADVICE) Case No. 14-00332-UT
NOTICE NO. 507)
)
)
PUBLIC SERVICE COMPANY OF NEW)
MEXICO,)
)
)
Applicant)
_____)

DIRECT TESTIMONY AND EXHIBITS

OF

ROBERT B. HEVERT

DECEMBER 11, 2014

NMPRC CASE NO. 14-00332-UT
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WITNESS FOR
PUBLIC SERVICE COMPANY OF NEW MEXICO

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AFFIDAVIT

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I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is Robert B. Hevert and my business address is Sussex Economic Advisors, LLC, 161 Worcester Road, Suite 503, Framingham, MA 01701.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?

A. I am employed by Sussex Economic Advisors, LLC. ("Sussex") as Managing Partner.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS DOCKET?

A. I am submitting this testimony on behalf of Public Service Company of New Mexico ("PNM").

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

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

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1 **Q. PLEASE DESCRIBE YOUR EXPERIENCE IN THE ENERGY AND**
2 **UTILITY INDUSTRIES.**

3 **A.** I have worked in regulated industries for over twenty-five years, having served as
4 an executive and manager with consulting firms, a financial officer of a publicly-
5 traded natural gas utility (at the time, Bay State Gas Company), and an analyst at
6 a telecommunications utility. In my role as a consultant, I have advised numerous
7 energy and utility clients on a wide range of financial and economic issues,
8 including corporate and asset-based transactions, asset and enterprise valuation,
9 transaction due diligence, and strategic matters. As an expert witness, I have
10 provided testimony in approximately 100 proceedings regarding various financial
11 and regulatory matters before numerous state utility regulatory agencies and the
12 Federal Energy Regulatory Commission. A summary of my professional and
13 educational background, including a list of my testimony in prior proceedings, is
14 included in PNM Exhibit RBH-1 attached to my Direct Testimony.

15

16 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

17 **A.** The purpose of my Direct Testimony is to present evidence and provide a
18 recommendation regarding PNM's return on common equity ("ROE"), and to provide
19 an assessment of the capital structure to be used for ratemaking purposes, as proposed in
20 the Direct Testimony of PNM Witness Eden. My analyses and recommendations are
21 supported by the data presented in PNM Exhibit RBH-3 through PNM Exhibit RBH-15.

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II. SUMMARY OF KEY CONCLUSIONS

1
2 **Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE APPROPRIATE**
3 **COST OF EQUITY AND OVERALL RATE OF RETURN FOR PNM?**

4 **A.** Based on the analyses discussed throughout the balance of my testimony, I
5 recommend that the New Mexico Public Regulation Commission (the
6 “Commission”) authorize PNM the opportunity to earn an ROE of 10.50 percent.
7 As described in greater detail later in my testimony, that recommendation is based
8 on the use of several well-accepted methodologies and reflects the results of
9 several analyses undertaken to estimate the effect of PNM’s financial profile on
10 its Cost of Equity.¹ In light of those analyses, including the market’s expectations
11 of increasing interest rates during the period in which the rates set in this
12 proceeding will be in effect, I believe that my 10.50 percent recommendation is a
13 reasonable, if not conservative estimate of the Company’s Cost of Equity. Lastly,
14 I conclude that PNM’s recommended capital structure, which includes 49.60
15 percent common equity, 0.40 percent preferred equity, and 50.00 percent long-
16 term debt, is reasonable and appropriate.

17

¹ Throughout my testimony I interchangeably use the terms “ROE” and “Cost of Equity”.

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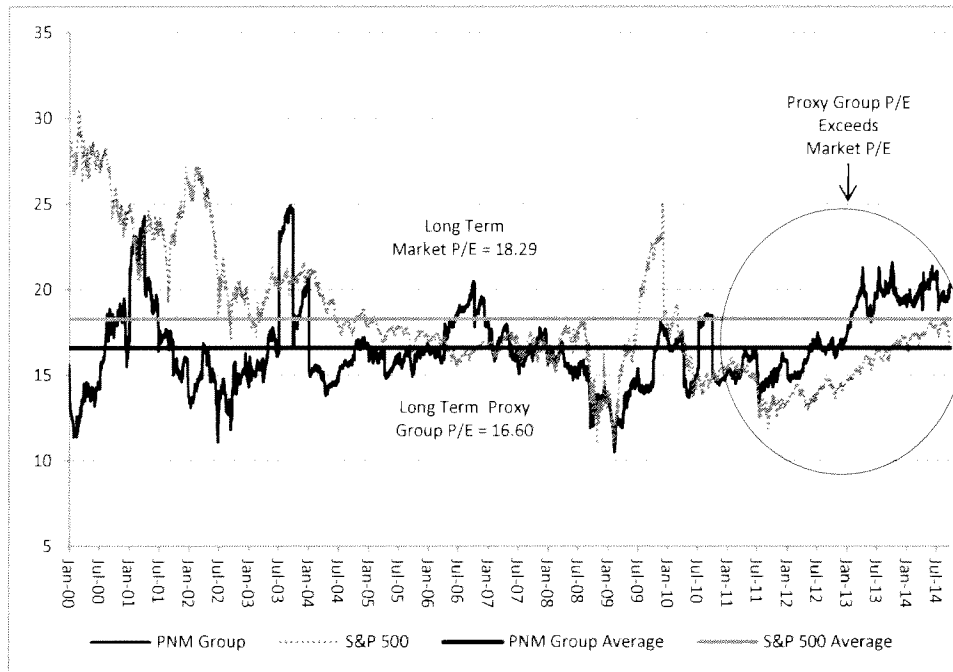
1 **Q. PLEASE PROVIDE A BRIEF OVERVIEW OF THE ANALYSES THAT**
2 **LED TO YOUR CONCLUSIONS.**

3 **A.** As discussed in more detail in Section VIII, in light of recent market conditions,
4 and given the fact that equity analysts and investors tend to use multiple
5 methodologies to develop their return requirements, it is extremely important to
6 consider the results of several analytical approaches. I therefore applied several
7 widely accepted methods to develop my ROE recommendation: the Constant
8 Growth Discounted Cash Flow (“DCF”) model; the Multi-Stage DCF model; the
9 Capital Asset Pricing Model (“CAPM”); and the Bond Yield Plus Risk Premium
10 approach.

11
12 I recognize that in prior orders, the Commission has expressed a preference for
13 the DCF approach, and has provided guidance as to certain aspects of the
14 implementation of that model. Although I have followed that guidance and have
15 included the Constant Growth DCF model in my analyses, I also have found the
16 period over which my analyses were performed included market data that were
17 highly unusual and inconsistent with that model’s fundamental assumptions. In
18 particular, in 2013 and 2014 the proxy group’s average Price/Earnings (“P/E”)
19 ratio significantly exceeded its long-term average. Of equal, if not greater
20 concern, is that during the same period the proxy group P/E multiple actually
21 exceeded the overall market P/E ratio.

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Chart 1: Proxy Group vs. S&P Price/Earnings Ratio²



1 As discussed later in my testimony, it is highly improbable that utility companies
2 would trade at a premium to the market in perpetuity, yet that is what the Constant
3 Growth Discounted Cash Flow model results assume. As a consequence, the
4 mean Constant Growth DCF results are well below any reasonable estimate of the
5 Company's Cost of Equity. To put the model's results in perspective, from
6 January 1, 2013 through October 17, 2014, the average authorized ROE for
7 vertically integrated electric utilities³ was 9.92 percent, more than 70 basis points
8 above the mean Constant Growth DCF estimate.⁴ From that perspective, it

² Proxy Group P/E ratio calculated as an index.

³ That is, electric utilities that provide generation and distribution functions.

⁴ Based on 360 day averaging period, full year growth adjustment to the dividend yield, and including an estimate of Sustainable Growth. See, PNM Exhibit RBH-4 and PNM Exhibit RBH-12.

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1 appears that regulatory commissions have not relied entirely on the Constant
2 Growth DCF approach; that perspective also is consistent with the *Hope* and
3 *Bluefield* findings that it is the reasonableness of the result, rather than the method
4 employed, that controls in arriving at ROE determinations. In light of that data, I
5 believe that it is appropriate to consider the additional methods noted above,
6 giving less weight to the Constant Growth DCF model results. To the extent any
7 weight is given to the DCF estimates, the full range of results, in particular the
8 mean high estimates, should be considered.

9
10 In assessing my analytical results, I also considered several specific risks and
11 trends, including: (1) the effect of PNM's substantial capital expenditure plans;
12 (2) PNM's small size relative to its peers; and (3) the effect, if any, of the
13 Company's proposed Revenue Decoupling Mechanism. Although my ROE
14 recommendation does not include an explicit adjustment for those factors, I did
15 consider them, together with other aspects of PNM's risk profile, when
16 determining where the Company's ROE falls within the range of reasonable
17 estimates.

18
19 **Q. HOW IS THE REMAINDER OF YOUR DIRECT TESTIMONY**
20 **ORGANIZED?**

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

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- 1 • Section III – Provides a summary of issues regarding Cost of Equity
2 estimation in regulatory proceedings and discusses the regulatory
3 guidelines pertinent to the development of the cost of capital;
- 4 • Section IV – Explains my selection of the proxy group used to develop my
5 analytical results;
- 6 • Section V – Explains my analyses and the analytical bases for my ROE
7 recommendation;
- 8 • Section VI – Provides a discussion of specific business risks and other
9 considerations that have a direct bearing on the Company’s Cost of
10 Equity;
- 11 • Section VII – Discusses the effect, if any, of the Company’s proposed
12 Revenue Decoupling Mechanism;
- 13 • Section VIII – Highlights the current capital market conditions and their
14 effect on the Company’s Cost of Equity;
- 15 • Section IX – Provides my analyses of the Company’s capital structure;
16 and
- 17 • Section X – Summarizes my conclusions and recommendations.
18

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**III. SUMMARY OF ISSUES SURROUNDING COST OF EQUITY
ESTIMATION IN REGULATORY PROCEEDINGS**

Q. BEFORE ADDRESSING YOUR SPECIFIC ANALYSES IN THIS PROCEEDING, PLEASE PROVIDE AN OVERVIEW OF THE ISSUES SURROUNDING THE COST OF EQUITY IN REGULATORY PROCEEDINGS, GENERALLY.

A. In very general terms, the Cost of Equity is the return that investors require to make an equity investment in a firm. That is, investors will only provide funds to a firm if the return that they *expect* is equal to, or greater than, the return that they *require* to accept the risk of providing funds to the firm. From the firm's perspective, that required return, whether it is provided to debt or equity investors, has a cost. Individually, we speak of the "Cost of Debt" and the "Cost of Equity;" together, they are referred to as the "Cost of Capital."

The Cost of Capital (including the costs of both debt and equity) is based on the economic principle of "opportunity costs." Investing in any asset, whether debt or equity securities, implies a forgone opportunity to invest in alternative assets. For any investment to be sensible, its expected return must be at least equal to the return expected on alternative, comparable investment opportunities. Because investments with like risks should offer similar returns, the opportunity cost of an investment should equal the return available on an investment of comparable risk.

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

Whereas the Cost of Debt can be directly observed, the Cost of Equity must be estimated or inferred based on market data and various financial models. As discussed throughout my Direct Testimony, each of those models are subject to certain reasoned assumptions, which may be more or less applicable under differing market conditions. In addition, because the Cost of Equity is premised on opportunity costs, the models typically are applied to a group of “comparable”, or “proxy”, companies. The choice of models (including their inputs), the selection of proxy companies, and the interpretation of the model results all require the application of reasoned judgment. That judgment should consider data

⁵ The observed interest rate may be adjusted to reflect issuance or other directly observable costs.

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1 and information that is not necessarily included in the models themselves. In the
2 end, the estimated Cost of Equity should reflect the return that investors require in
3 light of the subject company's risks, and the returns available on comparable
4 investments.

5
6 **Q. PLEASE DESCRIBE THE GUIDING PRINCIPLES TO BE USED IN**
7 **ESTABLISHING THE COST OF CAPITAL FOR A REGULATED**
8 **UTILITY.**

9 **A.** The United States Supreme Court (the "Court") established the guiding principles
10 for establishing a fair return for capital in two cases: (1) *Bluefield Water Works*
11 *and Improvement Co. v. Public Service Comm'n of West Virginia*, 262 U.S. 679
12 (1923) ("*Bluefield*"); and (2) *Federal Power Comm'n v. Hope Natural Gas Co.*,
13 320 U.S. 591 (1944) ("*Hope*"). Among the standards established by the Court in
14 those cases are: (1) consistency with other businesses having similar or
15 comparable risks; and (2) adequacy of the return to support credit quality and
16 access to capital, while maintaining financial soundness. (Please refer to PNM
17 Exhibit RBH-2.) It also is important to note that in *Hope*, the Court found that
18 under the statutory standard of "just and reasonable" it is the result reached, as
19 opposed to the method employed, which is controlling.⁶ Consequently, it is

⁶ The Commission likewise has stated that it is the "end result rather than the methodology that matters." See, Final Order Partially Adopting Recommended Decision, Case No. 07-00319-UT, para. 30.

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1 appropriate to consider a variety of approaches and data sources when arriving at
2 a recommended ROE.

3
4 Based on those widely recognized standards, the consequence of the
5 Commission's order in this case should be to provide PNM with the opportunity
6 to earn a return on equity that is:

- 7 • Adequate to attract capital on favorable terms, thereby enabling PNM to
8 provide safe, reliable service;
- 9 • Sufficient to ensure the financial soundness of PNM's operations; and
- 10 • Commensurate with returns on investments in enterprises having
11 comparable risks.

12 The allowed ROE therefore should enable PNM to finance capital expenditures
13 on favorable terms and optimize its financial flexibility over the period during
14 which rates are expected to remain in effect.

15
16 **Q. DOES NEW MEXICO PRECEDENT PROVIDE SIMILAR GUIDANCE?**

17 **A.** Yes. The New Mexico Supreme Court has long followed the *Hope* and *Bluefield*
18 principle that utility investors are entitled to a fair and reasonable return:

19 From the investor or company point of view it is important that
20 there be enough revenue not only for operating expenses but also
21 for the capital costs of the business. These include service on the
22 debt and dividends on the stock. By that standard, the return to
23 the equity owner should be commensurate with returns on
24 investments in other enterprises having corresponding risks. That

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1 return, moreover, should be sufficient to assure confidence in the
2 financial integrity of the enterprise, so as to maintain its credit and
3 to attract capital.⁷

4 **Q. WHY IS IT IMPORTANT FOR A UTILITY TO BE ALLOWED THE**
5 **OPPORTUNITY TO EARN A RETURN THAT IS ADEQUATE TO**
6 **ATTRACT CAPITAL ON FAVORABLE TERMS?**

7 **A.** There is a long history of precedent regarding the allowed return on equity, the
8 role of capital structure, and the resulting cost of capital in establishing just and
9 reasonable rates for utility services. Among the themes common to many federal
10 and state cases is the principle that a utility's cost of capital (including its capital
11 structure and allowed return on common equity) must be reflective of other
12 enterprises having comparable risks acting independently in the financial markets.
13 As noted elsewhere in my testimony, a return that is adequate to attract capital on
14 favorable terms enables the utility to provide safe and reliable service at lower
15 cost while maintaining an appropriate level of financial integrity. To the extent
16 PNM is provided the opportunity to earn its market-based cost of capital, neither
17 customers nor shareholders should be disadvantaged.

18

⁷ State v. Mountain States Tel. & Tel. Co., 54 N.M. 315, 336, 224 P.2d 155, 169 (1950); see also PNM Gas Servs. v. New Mexico Public Util. Comm'n, 129 N.M. 1, 15, 1 P.3d 383, 397 (2000) (quoting Hope and citing to Mountain States to support the proposition that utilities must be allowed to recover costs and achieve a fair return); Mountain States Tel. & Tel. Co. v. New Mexico State Corp. Comm'n, 102 N.M. 409, 410-11, 696 P.2d 1002, 1003-04 (1985) (relying on the Bluefield principle that a utility return "should be reasonably sufficient to assure confidence in the public utility company's financial soundness, adequate to support and maintain its credit, and enable it to raise funds necessary to discharge its public duties").

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1 While the “capital attraction” and “financial integrity” standards are important
2 principles in normal economic conditions, the practical implications of those
3 standards are even more pronounced in the current financial environment. As
4 discussed in more detail in Section IV, those conditions have intensified the
5 importance of maintaining a strong financial profile. Consequently, the
6 Commission’s order in this proceeding will have a significant effect on PNM’s
7 ability to attract capital and maintain its financial integrity.

8
9 **Q. HOW DOES THE REGULATORY ENVIRONMENT IN WHICH A**
10 **UTILITY OPERATES AFFECT ITS ACCESS TO AND COST OF**
11 **CAPITAL?**

12 **A.** The regulatory environment can affect both the access to, and cost of capital in
13 several ways. First, there is little question that rating agencies consider the
14 regulatory environment, including the extent to which the presiding regulatory
15 commission is supportive of issues addressing credit quality, to be an important
16 determinant of the subject company’s credit profile. As noted by Moody’s,“
17 “[a]n over-arching consideration for regulated utilities is the regulatory
18 environment in which they operate.”⁸ Moody’s further noted that:

19 A utility operating in a regulatory framework that is characterized
20 by legislation that is credit supportive of utilities and eliminates
21 doubt by prescribing many of the procedures that the regulators
22 will use in determining fair rates (which legislation may show
23 evidence of being responsive to the needs of the utility in general

⁸ Moody’s Investors Service, Rating Methodology: Regulated Electric and Gas Utilities, December 23, 2013, at 3.

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1 or specific ways), a long history of transparent rate-setting, and a
2 judiciary that has provided ample precedent by impartially
3 adjudicating disagreements in a manner that addresses ambiguities
4 in the laws and rules will receive higher scores in the Legislative
5 and Judicial Underpinnings sub-factor. A utility operating in a
6 regulatory framework that, by statute or practice, allows the
7 regulator to arbitrarily prevent the utility from recovering its costs
8 or earning a reasonable return on prudently incurred investments,
9 or where regulatory decisions may be reversed by politicians
10 seeking to enhance their populist appeal will receive a much lower
11 score.⁹

12 In fact, fully 50.00 percent of Moody’s credit rating determinations (for regulated
13 utilities) is made based on regulatory factors. Moody’s notes that its assessment
14 of the subject company’s regulatory framework reflects 25.00 percent the rating,
15 while the remaining 25.00 percent is determined by the utility’s “ability to recover
16 costs and earn returns.”¹⁰

17
18 Similarly, in arriving at its rating determinations Standard & Poor’s (“S&P”)
19 includes an assessment of “capital support during construction to alleviate funding
20 and cash flow pressure during periods of heavy investments”.¹¹ Moody’s agrees
21 that timely cost recovery is an important determinant of credit quality:
22 mechanisms that provide “full and highly timely recovery of all operating costs

⁹ *Ibid.*, at 10.

¹⁰ Moody’s Investors Service, Rating Methodology: Regulated Electric and Gas Utilities, December 23, 2013, at 6.

¹¹ Standard and Poor’s, Utilities: Key Credit Factors For The Regulated Utilities Industry, November 19, 2013, at 6.

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1 and essentially contemporaneous return on all incremental capital investments”
2 allow for stronger credit ratings.¹²

3
4 It also is important to note that regulatory decisions regarding the ROE and
5 capital structure have direct consequences for the subject utility’s internal cash
6 flow generation (sometimes referred to as “Funds Flow from Operations,” or
7 “FFO”). Since credit ratings are intended to reflect the ability to meet financial
8 obligations as they come due, the ability to generate the cash flows required to
9 meet those obligations (and to provide an additional amount for unexpected
10 events) is of critical importance to debt investors. Two of the most important
11 metrics used to assess that ability are the ratios of FFO to debt and FFO to interest
12 expense, both of which are directly affected by regulatory decisions regarding the
13 appropriate rate of return, and capital structure.

14
15 **Q. HOW IS THE COST OF EQUITY ESTIMATED IN REGULATORY**
16 **PROCEEDINGS?**

17 **A.** As noted earlier, and as discussed in more detail below, the Cost of Equity is
18 estimated by the use of various financial models. By their very nature, those
19 models produce a range of results from which the ROE is estimated. That
20 estimate must be based on a comprehensive review of relevant data and

¹² Moody’s Investors Service, Rating Methodology: Regulated Electric and Gas Utilities, December 23, 2013, at 17.

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1 information, and does not necessarily lend itself to a strict mathematical solution.
2 The key consideration in determining the ROE is to ensure that the overall
3 analysis reasonably reflects investors' view of the financial markets in general
4 and the subject company (in the context of the proxy companies) in particular.
5 Both practitioners and academics, however, recognize that financial models are
6 tools to be used in the ROE estimation process, and that strict adherence to any
7 single approach, or to the specific results of any single approach, can lead to
8 flawed or misleading conclusions. That position is consistent with the *Hope* and
9 *Bluefield* principle that it is the analytical result, as opposed to the methodology,
10 that is controlling in arriving at ROE determinations. Thus, a reasonable ROE
11 estimate appropriately considers alternative methodologies and the reasonableness
12 of their individual and collective results in the context of observable, relevant
13 market information.

14
15 **Q. WHAT ARE YOUR CONCLUSIONS REGARDING REGULATORY**
16 **GUIDELINES AND CAPITAL MARKET EXPECTATIONS?**

17 **A.** The ratemaking process is premised on the principle that, in order for investors
18 and companies to commit the capital needed to provide safe and reliable utility
19 services, utilities must have the opportunity to recover the return of invested
20 capital and the market-required return on that capital. Regulatory commissions
21 recognize that because utility operations are capital intensive, regulatory decisions

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1 should enable the subject company to attract capital at favorable terms; doing so
2 balances the long-term interests of investors and ratepayers. The financial
3 community carefully monitors the current and expected financial condition of
4 utility companies, as well as the regulatory process to which they are subject. In
5 that respect, the regulatory environment is one of the most important factors
6 considered in both debt and equity investors' assessments of risk.

7
8 Therefore, it is important for the ROE authorized in this proceeding to take into
9 consideration the capital market conditions with which PNM must contend, as
10 well as investors' expectations and requirements for both risks and returns.
11 Lastly, in light of recent capital market conditions and PNM's capital investment
12 plans, it is especially important that PNM be afforded the opportunity to maintain
13 an adequate financial profile, and earn a reasonable return on its capital
14 investments.

IV. PROXY GROUP SELECTION

15
16 **Q. AS A PRELIMINARY MATTER, WHY IS IT NECESSARY TO SELECT A**
17 **GROUP OF PROXY COMPANIES TO DETERMINE THE COST OF**
18 **EQUITY FOR THE COMPANY?**

19 **A.** Since the Cost of Equity is a market-based concept, and PNM is not a publicly traded
20 entity, it is necessary to establish a group of comparable, publicly traded companies to

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1 serve as its “proxy.”¹³ Even if the Company were publicly traded, short-term events
2 could bias its market value during a given period of time. A significant benefit of using
3 a proxy group is that it moderates the effects of anomalous, temporary events associated
4 with any one company.

5
6 **Q. DOES THE SELECTION OF A PROXY GROUP SUGGEST THAT**
7 **ANALYTICAL RESULTS WILL BE TIGHTLY CLUSTERED AROUND**
8 **AVERAGE (I.E., MEAN) RESULTS?**

9 **A.** No. For example, the Constant Growth DCF approach defines the Cost of Equity
10 as the sum of the expected dividend yield and projected long-term growth.
11 Despite the care taken to ensure risk comparability, market expectations with
12 respect to future risks and growth opportunities will vary from company to
13 company. Therefore, even within a group of similarly-situated companies, it is
14 common for analytical results to reflect a seemingly wide range. Consequently, at
15 issue is how to estimate the Cost of Equity from within that range. Such a
16 determination necessarily must consider a wide range of both quantitative and
17 qualitative information.

¹³ PNM’s parent company PNM Resources is listed on the New York Stock Exchange and is publically traded.

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1 **Q. PLEASE PROVIDE A SUMMARY PROFILE OF PNM.**

2 **A.** PNM, which is a wholly owned subsidiary of PNM Resources, Inc., provides
3 electric service to approximately 508,000 customers in New Mexico.¹⁴ PNM’s
4 electric revenue accounted for approximately 78.66 percent of PNM Resources’
5 total revenue in 2013. PNM’s current long-term issuer credit rating issued by
6 Standard and Poor’s (“S&P”) is BBB (outlook: positive); Moody’s Investor
7 Services (“Moody’s”) rates PNM Baa2 (outlook: positive).¹⁵

8
9 **Q. HOW DID YOU SELECT THE COMPANIES INCLUDED IN YOUR**
10 **PROXY GROUP?**

11 **A.** As a preliminary matter, I am aware of the Commission’s position, in Case No.
12 07-00319-UT, regarding the use of several screening criteria for the purpose of
13 establishing a proxy group. Keeping in mind that my objective is to select a
14 proxy group that is highly representative of the risks and prospects faced by PNM
15 while observing the Commission’s guidance with respect to certain screening
16 criteria, I selected my proxy group on the following basis:

- 17 • I began with the Value Line’s universe of 47 Electric Utilities;
- 18 • I excluded companies that do not consistently pay quarterly cash
- 19 dividends;

¹⁴ See, PNM Resources Inc., SEC Form 10-K, For the Fiscal Year December 31, 2013, at A-35.

¹⁵ Source: SNL Financial.

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- 1 • I excluded companies that were not covered by at least two utility industry
2 equity analysts;
- 3 • I excluded companies that do not have investment grade senior unsecured
4 bond and/or corporate credit ratings from S&P;
- 5 • I excluded any companies whose regulated operating income over the
6 three most recently reported fiscal years comprised less than 60.00 percent
7 of the respective totals for that company;
- 8 • I excluded any companies whose regulated electric operating income over
9 the three most recently reported fiscal years represented less than 90.00
10 percent of total regulated operating income; and
- 11 • I eliminated companies that are currently known to be party to a merger,
12 or other significant transaction.

13

14 **Q. DID YOU INCLUDE PNM RESOURCES IN YOUR PROXY GROUP?**

15 **A.** No. In order to avoid the circular logic that would otherwise occur, it has been
16 my consistent practice to exclude the subject company (or its parent) from the
17 proxy group.

18

19 **Q. WHAT COMPANIES MET YOUR SCREENING CRITERIA?**

20 **A.** The criteria discussed above resulted in a proxy group of the following fifteen
21 companies:

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Table RBH-1: Proxy Group Screening Results

Company	Ticker
American Electric Power Company, Inc.	AEP
Cleco Corporation ¹⁶	CNL
Duke Energy Corporation	DUK
Edison International	EIX
Empire District Electric Company	EDE
Great Plains Energy, Inc.	GXP
Hawaiian Electric Industries, Inc.	HE
IDACORP, Inc.	IDA
NextEra Energy, Inc.	NEE
Northeast Utilities	NU
Otter Tail Corporation	OTTR
Pinnacle West Capital Corporation	PNW
Portland General Electric Company	POR
Southern Company	SO
Westar Energy, Inc.	WR

1 **Q. PLEASE ELABORATE ON YOUR 60.00 PERCENT THRESHOLD FOR**
2 **THE PORTION OF CONSOLIDATED NET INCOME DERIVED FROM**
3 **UTILITY OPERATIONS.**

4 **A.** The purpose of that criterion is to identify companies for which regulated
5 activities represent a substantial portion of their aggregate economic value. In

¹⁶ The acquisition of Cleco Corporation (“Cleco”) by a group of North American long-term infrastructure investors (led by Macquarie Infrastructure and Real Assets and British Columbia Investment Management Corporation, together with John Hancock Financial and other infrastructure investors) was announced on October 20, 2014, subsequent to the period used in the various analyses discussed in more detail below. (See, Cleco Corporation SEC Form 8-K, dated October 20, 2014.) As such, I have retained Cleco in the proxy group; I may exclude Cleco from updated analyses to be filed in this proceeding.

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1 that regard, the 60.00 percent threshold is consistent with observations provided
2 by Moody's:

3 Since regulated utilities are a relatively low risk business
4 compared to other corporate sectors, in most cases diversified
5 non-utility operations increase the business risk profile of a utility.
6 Reflecting this tendency, we note that assigned ratings are
7 typically lower than grid-indicated ratings for such companies.¹⁷

8 From the perspective of Moody's, therefore, the distinction between regulated and
9 non-regulated operating is an important consideration. In light of that concern, I
10 believe the 60.00 percent threshold used in my screening criteria reasonably
11 balances the need to exclude companies with significant unregulated operations
12 with the desire to have a sufficiently large proxy group.

13
14 **Q. PLEASE ALSO ELABORATE ON YOUR REQUIREMENT THAT 90.00**
15 **PERCENT OF REGULATED OPERATING INCOME BE DERIVED**
16 **FROM REGULATED ELECTRIC OPERATIONS.**

17 **A.** As discussed throughout my Direct Testimony, one of the guiding principles in
18 determining the ROE for a regulated utility is to ensure that the authorized return
19 is commensurate with returns available on investments of comparable risk. Since
20 many of the companies in the Value Line electric utility universe have some
21 regulated natural gas distribution operations, it is important to eliminate those for

¹⁷ Moody's Investors Service, Rating Methodology: Regulated Electric and Gas Utilities, December 23, 2013, at 29.

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1 which the natural gas utility represents a substantial portion of their financial
2 results. At issue, then is what constitutes “substantial”.

3
4 As shown on PNM Exhibit RBH-3, the median percentage of regulated electric
5 operating income derived from combined regulated operations for the Value Line
6 electric universe is 90.76 percent; the mean percentage is 86.54 percent.
7 Importantly, the mean result (*i.e.*, 86.54 percent) is within one standard deviation
8 of my 90.00 percent threshold. In my view, given the substantial differences in
9 operating, financial and regulatory risks between natural gas distribution utilities
10 and electric utilities, it is reasonable to rely on the median percentages in setting
11 the threshold for this screening criterion. As such, I have maintained my
12 convention of requiring 90.00 percent of net income to be derived from regulated
13 electric operations.¹⁸

14
15 **Q. DID YOU CONDUCT ANY ADDITIONAL REVIEW OF THE**
16 **POTENTIAL PROXY GROUP COMPANIES?**

17 **A.** Yes, I did. My initial set of screening criteria produced a group of fifteen
18 potential proxy group companies. I examined the operating profile of each of the
19 fifteen companies that met my initial screens to be certain that none displayed

¹⁸ I recognize that in Case No. 07-00319-UT, the Commission expressed its concern with the 90.00 percent threshold as applied in that proceeding, but acknowledged the importance of eliminating companies that do not derive “at least a majority” of their regulated net income from electric operations. *See*, Final Order Partially Adopting Recommended Decision, Case No. 07-00319-UT, August 26, 2008, para. 31.

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1 characteristics that were inconsistent with my intent to produce a proxy group that
2 is fundamentally similar to the Company. As a result, I excluded Edison
3 International (“EIX”) based on recent financial information. EIX recorded a loss
4 of \$1.7 billion in 2012 as a result of placing Edison Mission Energy, the
5 subsidiary that owns and operates unregulated electric generating assets
6 (including Homer City), into Chapter 11 bankruptcy, and the divestiture of its
7 Homer City assets.¹⁹ As part of the Chapter 11 bankruptcy proceeding, EIX
8 entered into a purchase agreement on October 18, 2013 with NRG Energy for
9 Edison Mission Energy’s assets including the assumption of certain related
10 liabilities.²⁰

11
12 In addition, EIX recorded a \$1.05 billion loss resulting from an after-tax earnings
13 charge (recorded in the fourth quarter of 2011) relating to the impairment of its
14 Homer City, Fisk, Crawford, and Waukegan power plants, wind-related charges,
15 and other expenses.²¹ Given the significant nature of those results, it is difficult to
16 assess the degree to which regulated electric utility operations would be expected
17 to contribute to the company’s consolidated financial performance in the future.
18 Consequently, I have excluded EIX from my final proxy group.

¹⁹ See, Edison International, SEC Form 10-K at 35 (Dec. 31, 2013).

²⁰ See, NRG Energy, Inc., SEC Form 8-K at 2 (Oct. 18, 2013).

²¹ See, Edison International, SEC Form 10-K at 35-36 (Dec. 31, 2013).

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1 **Q. BASED ON THE CRITERIA AND ISSUES DISCUSSED ABOVE, WHAT**
2 **IS THE COMPOSITION OF YOUR PROXY GROUP?**

3 **A.** The final proxy group is presented in Table RBH-2.
4

Table RBH-2: Final Proxy Group

Company	Ticker
American Electric Power Company, Inc.	AEP
Cleco Corporation	CNL
Duke Energy Corporation	DUK
Empire District Electric Company	EDE
Great Plains Energy, Inc.	GXP
Hawaiian Electric Industries, Inc.	HE
IDACORP, Inc.	IDA
NextEra Energy, Inc.	NEE
Northeast Utilities	NU
Otter Tail Corporation	OTTR
Pinnacle West Capital Corporation	PNW
Portland General Electric Company	POR
Southern Company	SO
Westar Energy, Inc.	WR

5 **Q. DO YOU BELIEVE THAT A TOTAL OF 14 COMPANIES**
6 **CONSTITUTES A SUFFICIENTLY LARGE PROXY GROUP?**

7 **A.** Yes, I do. The analyses performed in estimating the ROE are more likely to be
8 representative of the subject utility's Cost of Equity to the extent that the chosen
9 proxy companies are fundamentally comparable to the subject utility. Because all
10 analysts use some form of screening process to arrive at a proxy group, the group,

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1 by definition, is not randomly drawn from a larger population. Consequently,
2 there is no reason to place more reliance on the quantitative results of a larger
3 proxy group simply by virtue of the resulting larger number of observations.

4
5 Moreover, because I am using market-based data, my analytical results will not
6 necessarily be tightly clustered around a central point. Results that may be
7 somewhat dispersed, however, do not suggest that the screening approach is
8 inappropriate or the results less meaningful. Further, including companies whose
9 fundamental comparability is tenuous at best, simply for the purpose of expanding
10 the number of observations does not add relevant information to the analysis. In
11 that regard, the Commission has noted that the determination of the appropriate
12 ROE is not formula-based, but rather requires the application of reasoned
13 judgment.²² Consequently, the use of a larger proxy group for the purpose of
14 enhancing statistical measures of central tendency, at the cost of reduced
15 comparability, provides no further analytical benefit.

²² New Mexico Public Regulation Commission, Final Order Partially Adopting Recommended Decision, Case No. 06-00210-UT, at 7.

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1 **V. DETERMINATION OF THE APPROPRIATE COST OF EQUITY**

2 **Q. PLEASE BRIEFLY DISCUSS THE ROE IN THE CONTEXT OF THE**
3 **REGULATED RATE OF RETURN.**

4 **A.** Regulated utilities primarily use common stock and long-term debt to finance
5 their capital investments. The Weighted Average Cost of Capital weights the
6 costs of the individual sources of capital by their respective book values. While
7 the Cost of Debt can be directly observed, the Cost of Equity is market-based and,
8 therefore, must be estimated based on observable market information.

9 **Q. HOW IS THE REQUIRED ROE DETERMINED?**

10 **A.** By their very nature, quantitative models produce a range of results from which
11 the market required ROE must be estimated. As discussed throughout my
12 testimony, that estimation must be based on a comprehensive review of relevant
13 data and information, and does not necessarily lend itself to a strict mathematical
14 solution. Consequently, the key consideration in determining the ROE is to
15 ensure that the overall analysis reasonably reflects investors' view of the financial
16 markets in general, and the subject company (in the context of the proxy
17 companies) in particular.

18
19 Because the Cost of Equity is not directly observable, it must be estimated based
20 on both quantitative and qualitative information. Although a number of empirical
21 models have been developed for that purpose, all are subject to limiting

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1 assumptions or other constraints. Consequently, many finance texts recommend
2 using multiple approaches to estimate the Cost of Equity.²³ When faced with the
3 task of estimating the Cost of Equity, analysts and investors are inclined to gather
4 and evaluate as much relevant data as reasonably can be analyzed and, therefore,
5 rely on multiple analytical approaches.

6
7 As a practical matter, no individual model is more reliable than all others under
8 all market conditions. Therefore, it is both prudent and appropriate to use
9 multiple methodologies in order to mitigate the effects of assumptions and inputs
10 associated with any single approach. As such, I have considered the results of the
11 Constant Growth and Multi-Stage forms of the DCF model, the Capital Asset
12 Pricing Model, and the Bond Yield Plus Risk Premium approach.

13 *A. Constant Growth Discounted Cash Flow Model*

14 **Q. ARE DCF MODELS WIDELY USED TO DETERMINE THE ROE FOR**
15 **REGULATED UTILITIES?**

16 **A.** Yes, DCF models are widely used in regulatory proceedings, although neither the
17 DCF model nor any other method can be applied without considerable judgment
18 in the selection of data and the interpretation of results. In its simplest form, the

²³ See, e.g., Eugene Brigham, Louis Gapenski, *Financial Management: Theory and Practice*, 7th Ed., 1994, at 341; see also Tom Copeland, Tim Koller and Jack Murrin, *Valuation: Measuring and Managing the Value of Companies*, 3rd ed., 2000, at 214.

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1 DCF model expresses the Cost of Equity as the sum of the expected dividend
2 yield and long-term growth rate.

3
4 **Q. PLEASE MORE FULLY DESCRIBE THE CONSTANT GROWTH DCF**
5 **APPROACH.**

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

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

11 where P represents the current stock price, $D_1 \dots D_\infty$ represent expected future
12 dividends, and k is the discount rate, or required ROE. Equation [1] is a standard
13 present value calculation that can be simplified and rearranged into the familiar
14 form:

$$k = \frac{D_0 (1+g)}{P} + g \quad \text{Equation [2]}$$

16 Equation [2] often is referred to as the "Constant Growth DCF" model, in which
17 the first term is the expected dividend yield and the second term is the expected
18 long-term annual growth rate.

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1 **Q. WHAT ASSUMPTIONS ARE INHERENT IN THE CONSTANT**
2 **GROWTH DCF MODEL?**

3 **A.** The Constant Growth DCF model assumes: (1) a constant average annual growth
4 rate for earnings and dividends; (2) a stable dividend payout ratio; (3) a constant
5 Price to Earnings multiple; and (4) a discount rate greater than the expected
6 growth rate.

7
8 **Q. WHAT MARKET DATA DID YOU USE TO CALCULATE THE**
9 **DIVIDEND YIELD IN YOUR CONSTANT GROWTH DCF MODEL?**

10 **A.** The dividend yield is based on the proxy companies' current annualized dividend,
11 and average closing stock prices over the 30, 90, 180, and 360-trading day periods
12 as of October 17, 2014.

13
14 **Q. WHY DID YOU USE FOUR AVERAGING PERIODS TO CALCULATE**
15 **AN AVERAGE STOCK PRICE?**

16 **A.** My practice has been to include 30, 90, 180-trading day average stock prices to
17 ensure that the model's results are not skewed by anomalous events that may
18 affect stock prices on any given trading day. However, I also am aware that in the
19 Recommended Decision in Case No. 07-00319-UT, the Hearing Examiner chose
20 to rely exclusively on a 360-trading day averaging period to arrive at his ROE

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1 result, a position that the Commission affirmed in its final order in that case.²⁴

2 As such, I have included the 360-trading day averaging period in my DCF
3 analyses. As discussed later in my testimony, however, it is important to reflect
4 the current and expected capital market environment and its effect on the PNM's
5 Cost of Equity.

6
7 **Q. HAVE YOU ALSO CONSIDERED THE "SUSTAINABLE GROWTH"**
8 **METHOD?**

9 **A.** Yes, I have. The Sustainable Growth model (also referred to as the "Retention
10 Growth" model) is premised on the theory that a firm's growth is a function of its
11 expected earnings and the extent to which those earnings are retained and
12 reinvested in the enterprise. In its simplest form, the model represents long-term
13 growth as the product of the retention ratio (*i.e.*, the percentage of earnings not
14 paid out as dividends, referred to below as ("b")) and the expected return on book
15 equity (referred to below as "r"). Thus, the simple "b x r" form of the model
16 projects growth as a function of internally generated funds. That form of the
17 model is limiting, however, in that it does not provide for growth funded from
18 external equity.

19

²⁴ See, also, Recommended Decision of the Hearing Examiner, Case No. 12-00350-UT, January 23, 2014, at 64.

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

7
$$\left(\frac{m}{b} - 1\right) \times \text{Growth rate in Common Shares} \quad \text{Equation [3]}$$

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

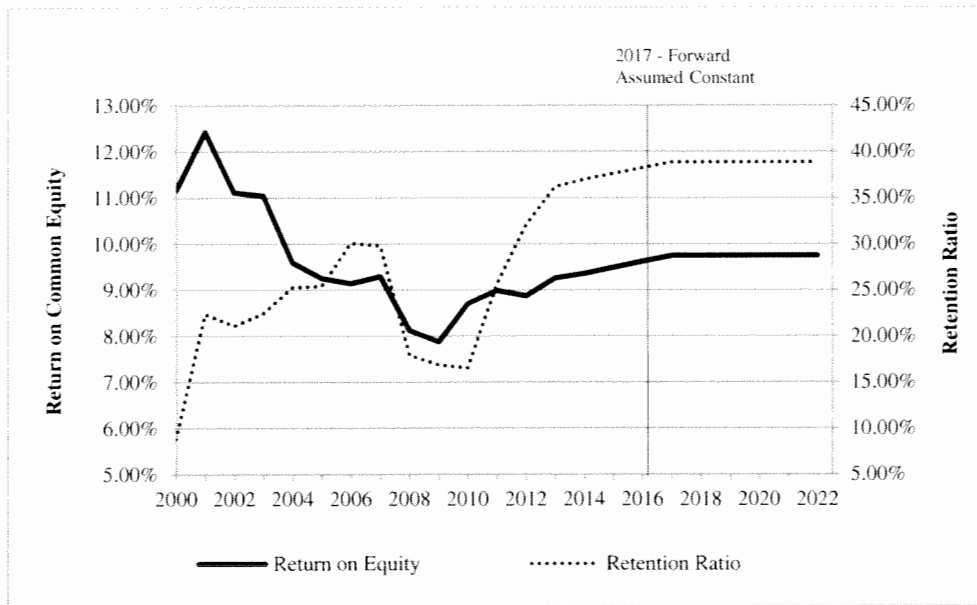
9 In this form, the “sv” term reflects an element of growth as the product of (a) the
10 growth in shares outstanding, and (b) that portion of the market-to-book ratio that
11 exceeds unity. As shown in PNM Exhibit RBH-5, all of the components of the
12 Sustainable Growth model are derived from data provided by Value Line.

13
14 **Q. HAVE THE RETURN ON EQUITY AND RETENTION RATIO**
15 **COMPONENTS OF THE SUSTAINABLE GROWTH MODEL BEEN**
16 **STABLE OVER TIME?**

17 **A.** No, they have not. Chart 2 (below) demonstrates the historical fluctuation in the
18 average Return on Equity, and Retention Ratio for the proxy group. As Chart 2
19 indicates, historical experience suggests that neither of those two parameters has
20 remained constant.

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Chart 2: Return on Equity and Retention Ratio Over Time



1 **Q. ARE THERE OTHER REASONS WHY THE SUSTAINABLE GROWTH**
2 **CALCULATION MAY NOT REFLECT EXPECTED LONG-TERM**
3 **GROWTH RATES?**

4 **A.** Yes, there are. The underlying premise of that model is that future earnings will
5 increase as the retention ratio increases. There are practical reasons, however,
6 why that may not be the case. Management decisions to conserve cash for capital
7 investments, to manage the dividend payout for the purpose of minimizing future
8 dividend reductions or to signal future earnings prospects, can and do influence
9 dividend payout (and therefore earnings retention) decisions in the near-term.

10

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1 **Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE**
2 **APPLICABILITY OF THE SUSTAINABLE GROWTH MODEL IN THIS**
3 **PROCEEDING?**

4 **A.** As discussed above, changes in the underlying components of the model indicate
5 that Sustainable Growth estimates have been unstable and as such, I do not
6 believe it is an appropriate measure of expected growth at this time. I recognize,
7 however, that the Commission has included Sustainable Growth as a measure of
8 expected growth in the DCF approach in prior proceedings. In light of the
9 Commission's prior decisions, I have produced two sets of DCF analyses, one
10 including Sustainable Growth rates and another excluding those estimates.

11

12 **Q. IS IT IMPORTANT TO SELECT APPROPRIATE MEASURES OF**
13 **LONG-TERM GROWTH IN APPLYING THE DCF MODEL?**

14 **A.** Yes. In its Constant Growth form, the DCF model (*i.e.*, as presented in Equation
15 [2] above) assumes a single growth estimate in perpetuity. Accordingly, in order
16 to reduce the long-term growth rate to a single measure, one must assume a fixed
17 payout ratio, and the same constant growth rate for earnings per share ("EPS"),
18 dividends per share, and book value per share. Since dividend growth can only be
19 sustained by earnings growth, the model should incorporate a variety of measures
20 of long-term earnings growth. That can be accomplished by averaging those
21 measures of long-term growth that tend to be least influenced by capital allocation

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1 decisions that companies may make in response to near-term changes in the
2 business environment. Because such decisions may directly affect near-term
3 dividend payout ratios, estimates of earnings growth are more indicative of long-
4 term investor expectations than are dividend growth estimates. For the purposes
5 of the Constant Growth DCF model, therefore, growth in EPS represents the
6 appropriate measure of long-term growth.

7
8 **Q. DID YOU MAKE ANY ADJUSTMENTS TO THE DIVIDEND YIELD TO**
9 **ACCOUNT FOR PERIODIC GROWTH IN DIVIDENDS?**

10 **A.** Yes, I did. Since utility companies tend to increase their quarterly dividends at
11 different times throughout the year, it is reasonable to assume that dividend
12 increases will be evenly distributed over calendar quarters. Given that
13 assumption, it is appropriate to calculate the expected dividend yield by applying
14 one-half of the long-term growth rate to the current dividend yield.

15
16 **Q. ARE YOU AWARE THAT IN PRIOR CASES, THE COMMISSION HAS**
17 **USED A FULL YEAR GROWTH RATE TO CALCULATE THE**
18 **EXPECTED DIVIDEND YIELD?**

19 **A.** Yes, I am. It is my understanding that in Case Nos. 06-00210-UT, 07-00319-UT,
20 07-00077-UT, and more recently in Case No. 12-00350-UT²⁵ the Commission

²⁵ New Mexico Public Regulation Commission, Final Order Partially Adopting Recommended Decision, Case No. 07-00319-UT, para. 35, at 13. See also, Final Order Partially Adopting Recommended

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1 adopted the use of the full year growth rate in calculating the expected dividend
2 yield component of the DCF model. As noted above, however, my practice has
3 been to use the one-half year adjustment. For the purposes of this proceeding,
4 therefore, I have presented my results using both the one-half and full year growth
5 rate adjustments.

6
7 **Q. PLEASE SUMMARIZE THE FINDINGS OF ACADEMIC RESEARCH**
8 **ON THE APPROPRIATE MEASURE FOR ESTIMATING EQUITY**
9 **RETURNS USING THE DCF MODEL.**

10 **A.** The relationship between various growth rates and stock valuation metrics has
11 been the subject of much academic research.²⁶ As noted over 40 years ago by
12 Charles Phillips in The Economics of Regulation:

13 For many years, it was thought that investors bought utility
14 stocks largely on the basis of dividends. More recently,
15 however, studies indicate that the market is valuing utility
16 stocks with reference to total per share earnings, so that the
17 earnings-price ratio has assumed increased emphasis in rate
18 cases.²⁷

19 Phillips' conclusion continues to hold true. Subsequent academic research has
20 clearly and consistently indicated that measures of earnings and cash flow are

Decision, Case No. 07-00077-UT, para. 26, at 10. See also the PNM Gas Recommended Decision, New Mexico Public Regulation Commission Case No. 06-00210-UT, at 22-23. This recommendation was adopted by the New Mexico Public Regulation Commission in its Final Order Partially Adopting the Recommended Decision, June 29, 2007, para. 19, at 9. See also Final Order Partially Adopting Recommended Decision, Case No. 12-00350-UT, para. 8, at 3-4.

²⁶ See Harris, Robert, Using Analysts' Growth Forecasts to Estimate Shareholder Required Rate of Return, Financial Management (Spring 1986).

²⁷ Charles F. Phillips, Jr., The Economics of Regulation, at 285 (Rev. ed. 1969).

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1 strongly related to returns, and that analysts' forecasts of growth are superior to
2 other measures of growth in predicting stock prices.²⁸ For example, Vander
3 Weide and Carleton state that, "[our] results ... are consistent with the hypothesis
4 that investors use analysts' forecasts, rather than historically oriented growth
5 calculations, in making stock buy-and-sell decisions."²⁹ Other research
6 specifically notes the importance of analysts' growth estimates in determining the
7 Cost of Equity, and in the valuation of equity securities. Dr. Robert Harris noted
8 that "a growing body of knowledge shows that analysts' earnings forecast are
9 indeed reflected in stock prices." Citing Cragg and Malkiel, Dr. Harris notes that
10 those authors "found that the evaluations of companies that analysts make are the
11 sorts of ones on which market valuation is based."³⁰ Similarly, Brigham, Shome
12 and Vinson noted that "evidence in the current literature indicates that (i)
13 analysts' forecasts are superior to forecasts based solely on time series data; and
14 (ii) investors do rely on analysts' forecasts."³¹

²⁸ See, e.g., Christofi, Christofi, Lori and Moliver, Evaluating Common Stocks Using Value Line's Projected Cash Flows and Implied Growth Rate, *Journal of Investing* (Spring 1999); Harris and Marston, Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts, *Financial Management*, 21 (Summer 1992); and Vander Weide and Carleton, Investor Growth Expectations: Analysts vs. History, *The Journal of Portfolio Management* (Spring 1988).

²⁹ Vander Weide and Carleton, Investor Growth Expectations: Analysts vs. History, *The Journal of Portfolio Management* (Spring 1988).

³⁰ Robert S. Harris, Using Analysts' Growth Forecasts to Estimate Shareholder Required Rate of Return, *Financial Management* (Spring 1986).

³¹ 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).

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1 To that point, the research of Carleton and Vander Weide demonstrates that
2 earnings growth projections have a statistically significant relationship to stock
3 valuation levels, while dividend growth rates do not.³² Those findings suggest
4 that investors form their investment decisions based on expectations of growth in
5 earnings, not dividends. Consequently, earnings growth, not dividend growth, is
6 the appropriate estimate for the purpose of the Constant Growth DCF model.

7
8 **Q. PLEASE SUMMARIZE YOUR INPUTS TO THE CONSTANT GROWTH**
9 **DCF MODEL.**

10 **A.** I applied the DCF model to the proxy group of integrated electric utility
11 companies using the following inputs for the price and dividend terms:

- 12 • The average daily closing prices for the 30-, 90-, 180-, and 360-trading
13 days ended October 17, 2014, for the term P_0 ; and
- 14 • The annualized dividend per share as of October 17, 2014, for the term D_0 .

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

- 16 • The Zacks consensus long-term earnings growth estimates;
- 17 • The First Call consensus long-term earnings growth estimates; and
- 18 • The Value Line long-term earnings growth estimates.³³

³² See, Vander Weide and Carleton, Investor Growth Expectations: Analysts vs. History, The Journal of Portfolio Management (Spring 1988).

³³ See, PNM Exhibit RBH-4.

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1 **Q. HOW DID YOU CALCULATE THE DCF RESULTS?**

2 **A.** For each proxy company, I calculated the mean, mean high, and mean low results.
3 For the mean result, I combined the average of the EPS growth rate estimates
4 reported by Value Line, Zacks, and First Call with the subject company's
5 dividend yield for each proxy company and then calculated the average result for
6 those estimates. I calculated the high DCF result by combining the maximum
7 EPS growth rate estimate as reported by Value Line, Zacks, and First Call with
8 the subject company's dividend yield. The mean high result simply is the average
9 of those estimates. I used the same approach to calculate the low DCF result,
10 using instead the minimum of the Value Line, Zacks, and First Call estimate for
11 each proxy company, and calculating the average result for those estimates.

12
13 **Q. WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF
14 ANALYSIS?**

15 **A.** My Constant Growth DCF results are summarized in Table RBH-3, below (*see*
16 also PNM Exhibit RBH-4).

17

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Table RBH-3: Constant Growth DCF Results³⁴

<i>Half-Year Dividend Growth</i>	<i>Mean Low</i>	<i>Mean</i>	<i>Mean High</i>
30-Day Average	8.18%	9.22%	10.14%
90-Day Average	8.16%	9.20%	10.12%
180-Day Average	8.20%	9.24%	10.16%
360-Day Average	8.33%	9.37%	10.29%
<i>Full-Year Dividend Growth</i>	<i>Mean Low</i>	<i>Mean</i>	<i>Mean High</i>
30-Day Average	8.26%	9.32%	10.26%
90-Day Average	8.24%	9.30%	10.24%
180-Day Average	8.28%	9.34%	10.28%
360-Day Average	8.41%	9.47%	10.41%
<i>Half-Year, with Sustainable Growth</i>	<i>Mean Low</i>	<i>Mean</i>	<i>Mean High</i>
30-Day Average	7.65%	8.96%	10.24%
90-Day Average	7.63%	8.94%	10.22%
180-Day Average	7.67%	8.98%	10.26%
360-Day Average	7.80%	9.11%	10.39%
<i>Full-Year, with Sustainable Growth</i>	<i>Mean Low</i>	<i>Mean</i>	<i>Mean High</i>
30-Day Average	7.72%	9.05%	10.36%
90-Day Average	7.70%	9.03%	10.34%
180-Day Average	7.74%	9.07%	10.38%
360-Day Average	7.87%	9.20%	10.51%

1 *B. Multi-Stage DCF Model*

2 **Q. WHAT OTHER FORMS OF THE DCF MODEL HAVE YOU USED?**

3 **A.** In order to address certain limiting assumptions underlying the Constant Growth
4 form of the DCF model, I also considered the Multi-Stage (three-stage) DCF

³⁴ See, PNM Exhibit RBH-4.

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1 Model. The Multi-Stage model, which is an extension of the Constant Growth
2 form, enables the analyst to specify growth rates over three distinct stages. As
3 with the Constant Growth form of the DCF model, the Multi-Stage form defines
4 the Cost of Equity as the discount rate that sets the current price equal to the
5 discounted value of future cash flows. Unlike the Constant Growth form,
6 however, the Multi-Stage model must be solved in an iterative fashion.

7
8 **Q. PLEASE GENERALLY DESCRIBE THE STRUCTURE OF YOUR**
9 **MULTI-STAGE DCF MODEL.**

10 **A.** The Multi-Stage DCF model sets the subject company's stock price equal to the
11 present value of future cash flows received over three "stages." In the first two
12 stages, "cash flows" are defined as projected dividends. In the third stage, "cash
13 flows" equal both dividends and the expected price at which the stock will be sold
14 at the end of the period (*i.e.*, the "terminal price"). I calculated the terminal price
15 based on the Gordon model,³⁵ which defines the price as the expected dividend
16 divided by the difference between the Cost of Equity (*i.e.*, the discount rate) and
17 the long-term expected growth rate. In essence, the terminal price is defined by
18 the present value of the remaining "cash flows" in perpetuity. In each of the three
19 stages, the dividend is the product of the projected earnings per share and the
20 expected dividend payout ratio. A summary description of the model is provided
21 in Table RBH-4 (below).

³⁵ See, Morningstar, Inc., 2013 Ibbotson Stocks, Bonds, Bills and Inflation Valuation Yearbook, at 48-50.

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Table RBH-4: 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-, 180- and 360-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 YOUR THREE-STAGE**
2 **DCF MODEL?**

3 **A.** The principal benefits relate to the flexibility provided by the model's
4 formulation. Since the model provides the ability to specify near, intermediate
5 and long-term growth rates, for example, it avoids the sometimes limiting
6 assumption that the subject company will grow at the same, constant rate in
7 perpetuity. In addition, by calculating the dividend as the product of earnings per
8 share and the dividend payout ratio, the model enables analysts to reflect
9 assumptions regarding the timing and extent of changes in the payout ratio to
10 reflect, for example, increases or decreases in expected capital spending, or
11 transition from current payout levels to long-term expected levels. In that regard,

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1 because the model relies on multiple sources of earnings growth rate assumptions,
2 it is not limited to a single source, such as Value Line, for all inputs, and mitigates
3 the potential bias associated with relying on a single source of growth estimates.³⁶

4
5 The model also enables the analyst to assess the reasonableness of the inputs and
6 results by reference to certain market-based metrics. For example, the stock price
7 estimate can be divided by the expected earnings per share in the final year to
8 calculate an average Price to Earnings (“P/E”) ratio. Similarly, the terminal P/E
9 ratio can be divided by the terminal growth rate to develop a Price to Earnings
10 Growth (“PEG”) ratio. To the extent that either the projected P/E or PEG ratios
11 are inconsistent with either historical or expected levels, it may indicate incorrect
12 or inconsistent assumptions within the balance of the model.

13
14 **Q. PLEASE SUMMARIZE YOUR INPUTS TO THE MULTI-STAGE DCF**
15 **MODEL.**

16 **A.** I applied the Multi-Stage model to the proxy group described earlier in my Direct
17 Testimony. My assumptions with respect to the various model inputs are
18 described in Table RBH-5 (below).

³⁶ See Harris and Marston, Estimating Shareholder Risk Premia Using Analysts’ Growth Forecasts, Financial Management 21 (Summer 1992).

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Table RBH-5: Multi-Stage DCF Model Assumptions

Stage	Initial	First	Transition	Terminal
Stock Price	30-, 90-, 180- and 360-day average stock price as of October 17, 2014			
Earnings Growth	2013 actual EPS escalated by Period 1 growth rate	EPS growth as average of (1) Value Line; (2) Zacks; and (3) First Call	Transition to Long-term growth	Long-term growth
Payout Ratio	Value Line company-specific	Value Line company-specific	Transition to long-term industry payout ratio	Long-term expected payout ratio
Terminal Value				Expected dividend in final year divided by solved Cost of Equity less long-term growth rate

1 **Q. HOW DID YOU CALCULATE THE TERMINAL GROWTH RATE?**

2 **A.** Although it is generally has been my practice to rely on expected Gross Domestic
3 Product (“GDP”) growth as the long-term growth rate, I recognize that in prior
4 proceedings the Commission has expressed some concern with that approach.³⁷
5 For this proceeding I therefore developed the terminal growth rate by averaging a

³⁷ See, for example Recommended Decision of the Hearing Examiner, Case No. 12-00350-UT, January 23, 2014, at 103-104.

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1 range of estimates of expected long-term growth, including: (1) the proxy group
2 average of analysts' long-term earnings growth projections; (2) the long-term
3 growth rate implied by recently authorized ROEs; (3) the long-term growth rate
4 implied by the assumption that the average price-to-earnings ratio would back to
5 revert its long-term average;³⁸ and (4) an estimate of GDP growth.

6
7 The first growth rate estimate simply relies on the Zacks, First Call and Value
8 Line growth rates used in the Constant Growth DCF analyses. As shown in PNM
9 Exhibit RBH-4, the mean of the proxy group's analysts' long-term earnings
10 growth projections is 5.25 percent.

11
12 The second growth rate estimate was derived from recently authorized returns for
13 vertically integrated electric utilities from January 1, 2013 through October 17,
14 2014. In the context of the Constant Growth DCF model, returns include income
15 from dividends (*i.e.*, the dividend yield) and expected growth (*i.e.*, capital
16 appreciation). Assuming the SNL electric universe's average dividend yield since
17 the beginning of 2013 of 3.71 percent, the average reported authorized ROE of
18 9.92 percent provided in PNM Exhibit RBH-12 implies an expected long-term
19 growth rate of 5.99 percent (assuming the Commission's full-year growth rate
20 adjustment to the dividend yield portion of the Constant Growth DCF model).³⁹

³⁸ Average from January 2000, through October 17, 2014.

³⁹ Average dividend yield calculated on a weighted index basis. $.0992 = (.0371 \times 1.0599) + .0599$.

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1 The third growth rate estimate was determined by calculating (through an iterative
2 process) the long-term growth rate that would imply a proxy group average
3 terminal stage P/E ratio approximately equal to the proxy group’s historical
4 average P/E ratio of 16.60 since January 1, 2000. As discussed in more detail in
5 Section VIII below, that assumption implies a contraction in current P/E ratios.
6 Using 30-day average stock prices and mean analyst growth estimates in the
7 multi-stage DCF model, the resulting long-term growth rate is 5.68 percent.⁴⁰

8
9 The fourth growth rate estimate, 5.53 percent, is based on the historical average
10 real GDP growth rate of 3.27 percent,⁴¹ together with the expected inflation rate of
11 2.20 percent.⁴² The historical average real GDP growth rate is the compound
12 growth rate in chain-weighted GDP from 1929 through 2013; the expected
13 inflation rate is the compound annual forward rate beginning ten years from now
14 (*i.e.*, 2024, which is the beginning of the terminal period) and is based on the 30-
15 day average projected inflation based on the difference between yields on long-
16 term nominal Treasury Securities, and long-term Treasury Inflation Protected
17 Securities.⁴³

⁴⁰ The terminal P/E ratio is calculated as the terminal stock price (based on the Gordon Model, as discussed above) divided by the terminal year’s projected earnings per share. A terminal growth rate of 5.68 percent results in an average terminal P/E ratio of 16.60.

⁴¹ See, Bureau of Economic Analysis, “Current-Dollar and ‘Real’ Gross Domestic Product,” August 28, 2014 update.

⁴² See, Board of Governors of the Federal Reserve System, “Table H.15 Selected Interest Rates.”

⁴³ That difference is often referred to as the “TIPS spread.”

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1 I have used the average of those four estimates, 5.61 percent, as the terminal rate
2 of my Multi-Stage DCF analyses.

3
4 **Q. IS IT REASONABLE TO CONSIDER EXPECTED LONG-TERM GDP**
5 **GROWTH WHEN ESTIMATING THE TERMINAL GROWTH STAGE**
6 **OF THE DCF MODEL?**

7 **A.** Yes, I believe so. The use of expected long-term GDP growth in the terminal
8 period is consistent with practice and financial literature.⁴⁴ Morningstar, a well-
9 known source commonly relied upon by investors, describes an approach to
10 calculating the long-term growth estimate that is similar to that which is included
11 in my model.⁴⁵ As with my approach, Morningstar's method combines the
12 historical average real GDP growth rate with a measure of inflation calculated
13 using the TIPS spread.⁴⁶ In fact, Morningstar's long-term growth estimate of real
14 GDP growth (3.22 percent) is only five basis points different than the 3.27 percent
15 growth rate assumed in my analyses.

16
17 In essence, the real GDP growth rate projection is based on the assumption that
18 absent specific knowledge to the contrary, it is reasonable to assume that over

⁴⁴ Dr. Roger Morin, for example, writes "[i]t is useful to remember that eventually all company growth rates, especially utility services growth rates, converge to a level consistent with the growth rate of the aggregate economy." *See*, Roger A. Morin, *New Regulatory Finance*, Public Utilities Report, Inc., 2006, at 308.

⁴⁵ *See*, Ibbotson SBBI 2013 Valuation Yearbook, Morningstar, Inc., at 50-52.

⁴⁶ $\text{Implied Expected Nominal GDP} = ((1 + \text{Historical Real GDP Growth}) \times (1 + \text{Implied Forward Inflation})) - 1$, or 5.48 percent = $((1 + 3.27 \text{ percent}) \times (1 + 2.26 \text{ percent})) - 1$.

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1 time real GDP growth will revert to its long-term mean. Moreover, since
2 estimating the Cost of Equity is a market-based exercise, it is important to reflect
3 the sentiments and expectations of investors to the extent possible. In that
4 important respect, the TIPS spread represents the collective views of investors
5 regarding long-term inflation expectations. Equally important, by using forward
6 yields we are able to infer the level of long-term inflation expected by investors as
7 of the terminal period of the Multi-Stage model (that is, ten years in the future).

8
9 Nonetheless, in light of the Commission's concerns I have given long-term GDP
10 growth only one quarter weight in developing my long-term growth estimate.

11
12 **Q. WHAT WERE YOUR SPECIFIC ASSUMPTIONS WITH RESPECT TO**
13 **THE PAYOUT RATIO?**

14 **A.** As noted in Table RBH-5, for the first two periods, I relied on the first year and
15 long-term projected payout ratios reported by Value Line⁴⁷ for each of the proxy
16 companies. I then assumed that by the end of the second period (*i.e.*, the end of
17 year 10), the payout ratio will converge to the historical industry average ratio of
18 67.23 percent.⁴⁸

⁴⁷ As reported in the Value Line Investment Survey company reports as "All Div'ds to Net Prof."

⁴⁸ Source: Bloomberg Professional

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1 **Q. WHAT ARE THE RESULTS OF YOUR MULTI-STAGE DCF**
2 **ANALYSIS?**

3 **A.** Table RBH-6 (*see* also PNM Exhibit RBH-6) presents the Multi-Stage DCF
4 analysis results. Using the Gordon model to calculate the terminal stock price, the
5 Multi-Stage DCF analysis produces a range of results from 9.50 percent to 10.40
6 percent.

Table RBH-6: Multi-Stage DCF Model Results⁴⁹

<i>Without Sustainable Growth</i>	<i>Mean Low</i>	<i>Mean</i>	<i>Mean High</i>
30-Day Average	9.66%	9.93%	10.20%
90-Day Average	9.63%	9.90%	10.17%
180-Day Average	9.68%	9.94%	10.21%
360-Day Average	9.82%	10.09%	10.37%
<i>With Sustainable Growth</i>	<i>Mean Low</i>	<i>Mean</i>	<i>Mean High</i>
30-Day Average	9.52%	9.86%	10.23%
90-Day Average	9.50%	9.83%	10.20%
180-Day Average	9.54%	9.87%	10.24%
360-Day Average	9.67%	10.02%	10.40%

7 **Q. DID YOU UNDERTAKE ANY ADDITIONAL ANALYSES TO SUPPORT**
8 **YOUR RECOMMENDATION?**

9 **A.** Yes. As noted earlier, I also applied the CAPM and Risk Premium approaches.
10

⁴⁹ *See*, PNM Exhibit RBH-6. Please note that because the implied terminal Price/Earnings ratio is somewhat below the level reflected in Chart 1, these results may be somewhat conservative.

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1 where σ_j is the standard deviation of returns for company “j,” σ_m is the standard
2 deviation of returns for the broad market (as measured, for example, by the S&P
3 500 Index), and $\rho_{j,m}$ is the correlation of returns in between company j and the
4 broad market.

5
6 The Beta coefficient therefore represents both relative volatility (*i.e.*, the standard
7 deviation) of returns, and the correlation in returns between the subject company
8 and the overall market. Intuitively, higher Beta coefficients indicate that the
9 subject company’s returns have been relatively volatile, and have moved in
10 tandem with the overall market. Consequently, if a company has a Beta
11 coefficient of 1.00, it is as risky as the market and does not provide any
12 diversification benefit.

13
14 **Q. WHAT ASSUMPTIONS DID YOU INCLUDE IN YOUR CAPM**
15 **ANALYSIS?**

16 **A.** Since utility equity is a long duration investment, I used two different measures of
17 the risk-free rate: (1) the current 30-day average yield on 30-year Treasury bonds
18 (*i.e.*, 3.18 percent); and (2) the projected 30-year Treasury yield (*i.e.*, 3.88
19 percent).

20

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1 **Q. WHY HAVE YOU RELIED UPON THE 30-YEAR TREASURY YIELD**
2 **FOR YOUR CAPM ANALYSIS?**

3 **A.** In determining the security most relevant to the application of the CAPM, it is
4 important to select the term (or maturity) that best matches the life of the
5 underlying investment. Electric utilities typically are long-duration investments
6 and, as such, the 30-year Treasury yield is more suitable for the purpose of
7 calculating the Cost of Equity.

8
9 **Q. PLEASE DESCRIBE YOUR *EX-ANTE* APPROACH TO ESTIMATING**
10 **THE MARKET RISK PREMIUM.**

11 **A.** The approach is based on the market required return, less the current 30-year
12 Treasury yield. To estimate the market required return, I calculated the market
13 capitalization weighted average ROE based on the Constant Growth DCF model.
14 To do so, I relied on data from two sources: (1) Bloomberg; and (2) Value Line.⁵¹
15 With respect to Bloomberg-derived growth estimates, I calculated the expected
16 dividend yield (using the same one-half growth rate assumption described earlier),
17 and combined that amount with the projected earnings growth rate to arrive at the
18 market capitalization weighted average DCF result. I performed that calculation
19 for each of the S&P 500 companies for which Bloomberg provided consensus
20 growth rates. I then subtracted the current 30-year Treasury yield from that
21 amount to arrive at the market DCF-derived *ex-ante* market risk premium

⁵¹ See, PNM Exhibit RBH-7.

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1 estimate. In the case of Value Line, I performed the same calculation, again using
2 all companies for which five-year earnings growth rates were available. The
3 results of those calculations are provided in PNM Exhibit RBH-7.

4
5 **Q. HOW DID YOU APPLY YOUR EXPECTED MARKET RISK PREMIUM
6 AND RISK-FREE RATE ESTIMATES?**

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

10
11 **Q. WHAT BETA COEFFICIENT DID YOU USE IN YOUR CAPM MODEL?**

12 **A.** As shown in PNM Exhibit RBH-8, I considered the Beta coefficients reported by
13 two sources: Bloomberg and Value Line. While both of those services adjust
14 their calculated (or “raw”) Beta coefficients to reflect the tendency of the Beta
15 coefficient to regress to the market mean of 1.00, Value Line calculates the Beta
16 coefficient over a five-year period, while Bloomberg’s calculation is based on two
17 years of data.

18
19 **Q. WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?**

20 **A.** As shown in Table RBH-7 the CAPM analyses suggest an ROE range of 10.31
21 percent to 11.63 percent (*see* also PNM Exhibit RBH-9).

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Table RBH-7: Summary of CAPM Results⁵²

	<i>Bloomberg Derived Market Risk Premium</i>	<i>Value Line Derived Market Risk Premium</i>
<i>Average Bloomberg Beta Coefficient</i>		
Current 30-Year Treasury (3.18%)	10.93%	10.59%
Near Term Projected 30-Year Treasury (3.88%)	11.63%	11.30%
<i>Average Value Line Beta Coefficient</i>		
Current 30-Year Treasury (3.18%)	10.64%	10.31%
Near Term Projected 30-Year Treasury (3.88%)	11.34%	11.02%

D. Bond Yield Plus Risk Premium Approach

Q. PLEASE GENERALLY DESCRIBE THE BOND YIELD PLUS RISK PREMIUM APPROACH.

A. This approach is based on the basic financial tenet that equity investors bear the residual risk associated with ownership and therefore require a premium over the return they would have earned as a bondholder. That is, since returns to equity holders are more risky than returns to bondholders, equity investors must be compensated for bearing that additional risk. Risk premium approaches, therefore, estimate the Cost of Equity as the sum of the equity risk premium and the yield on a particular class of bonds. As noted in my discussion of the CAPM, since the equity risk premium is not directly observable, it typically is estimated using a variety of approaches, some of which incorporate *ex-ante*, or forward-looking

⁵² See, PNM Exhibit RBH-9.

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1 estimates of the Cost of Equity, and others that consider historical, or *ex-post*,
2 estimates. An alternative approach is to use actual authorized returns for electric
3 utilities to estimate the Equity Risk Premium.

4
5 **Q. PLEASE EXPLAIN HOW YOU PERFORMED YOUR BOND YIELD**
6 **PLUS RISK PREMIUM ANALYSIS.**

7 **A.** As suggested above, I first defined the Risk Premium as the difference between
8 the authorized ROE and the then-prevailing level of long-term (*i.e.*, 30-year)
9 Treasury yield. I then gathered data for over 1,430 electric utility rate
10 proceedings between January, 1980 and October 17, 2014. In addition to the
11 authorized ROE, I also calculated the average period between the filing of the
12 case and the date of the final order (the “lag period”). In order to reflect the
13 prevailing level of interest rates during the pendency of the proceedings, I
14 calculated the average 30-year Treasury yield over the average lag period
15 (approximately 201 days).

16
17 Because the data cover a number of economic cycles, the analysis also may be
18 used to assess the stability of the Equity Risk Premium. Prior research, for
19 example, has shown that the Equity Risk Premium is inversely related to the level
20 of interest rates. That analysis is particularly relevant given the relatively low, but
21 increasing level of current Treasury yields.

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1 **Q. HOW DID YOU ANALYZE THE RELATIONSHIP BETWEEN**
2 **INTEREST RATES AND THE EQUITY RISK PREMIUM?**

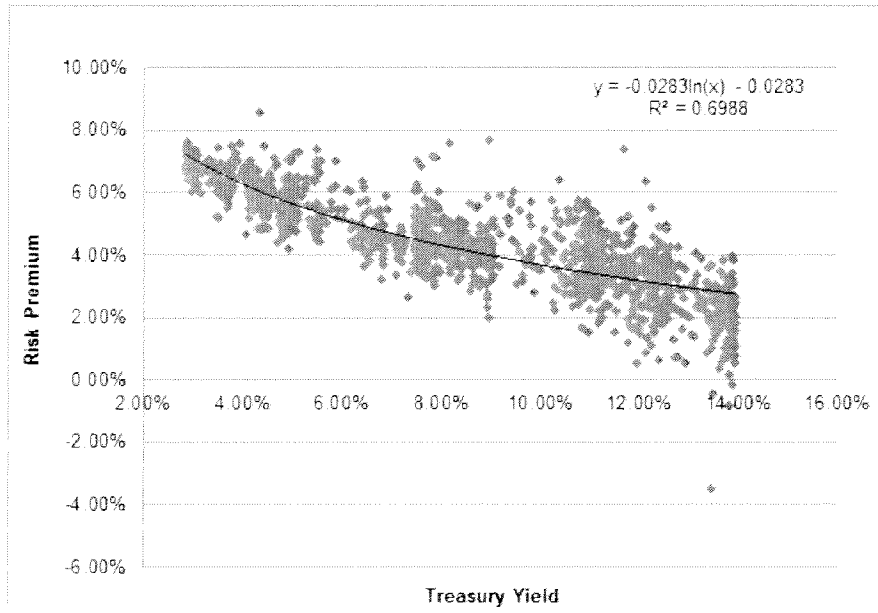
3 **A.** The basic method used was regression analysis, in which the observed Equity
4 Risk Premium is the dependent variable, and the average 30-year Treasury yield
5 is the independent variable. Relative to the long-term historical average, the
6 analytical period includes interest rates and authorized ROEs that are quite high
7 during one period (*i.e.*, the 1980s) and that are quite low during another (*i.e.*, the
8 post-Lehman bankruptcy period). To account for that variability, I used the semi-
9 log regression, in which the Equity Risk Premium is expressed as a function of
10 the natural log of the 30-year Treasury yield:

11
$$RP = \alpha + \beta(LN(T_{30}))$$
 Equation [5]

12 As shown in Chart 3 (below), the semi-log form is useful when measuring an
13 absolute change in the dependent variable (in this case, the Risk Premium)
14 relative to a proportional change in the independent variable (the 30-year
15 Treasury yield).

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Chart 3: Equity Risk Premium



1 As Chart 3 demonstrates, over time there has been a statistically significant,
2 negative relationship between the 30-year Treasury yield and the Equity Risk
3 Premium. Consequently, simply applying the long-term average Equity Risk
4 Premium of 4.44 percent would significantly understate the Cost of Equity and
5 produce results well below any reasonable estimate. Based on the regression
6 coefficients in Chart 3, however, the implied ROE is between 10.11 percent and
7 10.86 percent (*see* Table RBH-8 and PNM Exhibit RBH-10).
8

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Table RBH-8: Summary of Bond Yield Plus Risk Premium Results⁵³

	<i>Return on Equity</i>
Current 30-Year Treasury (3.18%)	10.11%
Near Term Projected 30-Year Treasury (3.88%)	10.25%
Long Term Projected 30-Year Treasury (5.45%)	10.86%

VI. BUSINESS RISKS AND OTHER CONSIDERATIONS

1

2 **Q. DO THE MEAN DCF, CAPM, AND RISK PREMIUM RESULTS FOR**
3 **THE PROXY GROUP PROVIDE AN APPROPRIATE ESTIMATE OF**
4 **THE COST OF EQUITY FOR PNM?**

5 **A.** No, there are several additional factors that must be considered to develop a
6 meaningful and usable recommendation. These factors are associated with the
7 business risks faced by PNM.

8

9 **Q. WHAT ARE THE PRIMARY BUSINESS RISKS THAT PNM**
10 **CURRENTLY FACES?**

11 **A.** The principal business risks facing PNM are: (1) the effect of PNM's substantial
12 capital expenditure plan; and (2) PNM's small size relative to its peers.

⁵³ See, PNM Exhibit RBH-10.

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1 *A. Planned Capital Expenditures*

2 **Q. PLEASE BRIEFLY SUMMARIZE THE COMPANY'S CAPITAL**
3 **INVESTMENT PLANS.**

4 **A.** In its October 2014 investor presentation, the Company lists \$1.33 billion in
5 planned capital expenditures over the 2015 to 2018 timeframe; those amounts
6 relate to investments in the Company's generation, transmission and distribution,
7 and renewable generation assets.⁵⁴ Mr. Olson's testimony describes the
8 Company's capital expenditure plans for generation resources in more detail.⁵⁵
9 Because the Company will continue to make substantial investments in its utility
10 operations, it will require efficient access to capital markets during the period that
11 rates established in this proceeding will be in effect.

12
13 **Q. DO CREDIT RATING AGENCIES RECOGNIZE RISK ASSOCIATED**
14 **WITH INCREASED CAPITAL EXPENDITURES?**

15 **A.** Yes, they do. From a credit perspective, the additional pressure on cash flows
16 associated with high levels of capital expenditures exerts corresponding pressure
17 on credit metrics and, therefore, credit ratings. S&P has noted that:

18 The real challenge for the industry is the combination of slow
19 growth and huge investment needs. We believe that for the
20 remainder of 2012 and beyond, state regulation will continue to be
21 the single most influential factor for the sector's credit quality. Cost
22 increases, construction projects, environmental compliance, and

⁵⁴ See. PNM Resources, October 2014 Investor Presentation, at 7.

⁵⁵ I note that Mr. Olson's testimony covers planned capital expenditures through 2016.

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1 other public policy directives, together with lackluster growth, will
2 necessitate continued reliance on rate relief requests.⁵⁶

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

9
10 **Q. HAVE YOU ALSO CONSIDERED THE RELATIONSHIP BETWEEN**
11 **CAPITAL EXPENDITURES AND THE EARNED RETURN ON**
12 **COMMON EQUITY?**

13 **A.** Yes, I have. The "DuPont" formula decomposes the Return on Common Equity
14 into three components: (1) the Profit Margin (net income/revenues); (2) Asset
15 Turnover (revenues/net plant); and (3) the Equity Multiplier (net plant/equity).⁵⁷
16 As PNM Exhibit RBH-13 demonstrates, based on the proxy companies, the Asset
17 Turnover rate declined from 2003 through 2013 (the historical period covered by
18 Value Line) and is expected to remain at its current level through Value Line's
19 2017 – 2019 projection period. Over that same period, according to Value Line

⁵⁶ S&P Ratings Direct, Industry Economic and Ratings Outlook: U.S. Regulated Utilities Will Likely Stay On A Stable Trajectory For The Rest Of 2012 And Into 2013, at 6 (July 17, 2012).

⁵⁷ The DuPont formula is commonly used by financial analysts to monitor specific operational and financial drivers of a company's earned ROE. The formula expands the calculation of the ROE into the product of three financial metrics: Profit Margin, Asset Turnover and the Equity Multiplier. That is, $ROE = (\text{earnings} / \text{revenue}) \times (\text{revenue} / \text{assets}) \times (\text{assets} / \text{equity})$. See, e.g., Eugene Brigham, Michael Ehrhardt, Financial Management: Theory and Practice, 12th Ed., 2008, at 140-141.

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1 data, average Net Plant is expected to experience a cumulative increase of
2 approximately 183.05 percent. Since, as noted above, the utility industry is going
3 through a period of increased capital investment, the lag between the addition of
4 net plant and revenue generated by those investments dilute the Asset Turnover
5 ratio, at least in the near term.

6
7 In order to gain an additional perspective on the relationship between plant
8 additions and Asset Turnover, I performed a regression analysis in which the
9 annual change in the Asset Turnover rate was the dependent variable, and the
10 annual change in Net Plant was the independent variable. As shown in PNM
11 Exhibit RBH-13, that analysis indicates a statistically significant negative
12 relationship between the two variables, such that as annual net plant increases, the
13 Asset Turnover ratio decreases. This, in turn, suggests that an increase in capital
14 expenditures also negatively affects the Return on Common Equity, causing
15 greater financial stress to the utility. To the extent investors value a company
16 based on earnings and cash flow, this additional financial strain is a key concern.

17 **Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE EFFECT OF**
18 **THE COMPANY'S CAPITAL SPENDING PLANS ON ITS RISK**
19 **PROFILE?**

20 **A.** It is clear that PNM's capital expenditure program is significant. The financial
21 community recognizes the additional risks associated with substantial capital

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1 expenditures and the financing, regulatory and operating risks associated with
2 those plans. The Company must have access to the capital markets on a timely
3 basis and at reasonable cost rates in order to fund those investments. In my view,
4 the Company's capital investment plan remains an important consideration in
5 establishing its ROE and overall rate of return.

6
7 *B. Small Size*

8 **Q. PLEASE EXPLAIN THE RISK ASSOCIATED WITH SMALL SIZE.**

9 **A.** Both the financial and academic communities have long accepted the proposition
10 that the Cost of Equity for small firms is subject to a "size effect".⁵⁸ While
11 empirical evidence of the size effect often is based on studies of industries beyond
12 regulated utilities, utility analysts also have noted the risks associated with small
13 market capitalizations. Specifically, Ibbotson Associates noted:

14 For small utilities, investors face additional obstacles, such as
15 smaller customer base, limited financial resources, and a lack of
16 diversification across customers, energy sources, and geography.
17 These obstacles imply a higher investor return.⁵⁹

18 Small size, therefore, leads to two categories of increased risk for investors:
19 (1) liquidity risk (*i.e.*, the risk of not being able to sell one's shares in a timely
20 manner due to the relatively thin market for the securities); and (2) fundamental
21 business risks.

⁵⁸ See, Mario Levis, The record on small companies: A review of the evidence, *Journal of Asset Management* 2, March 2002, at 368-397, for a review of literature relating to the size effect.

⁵⁹ Michael Annin, *Equity and the Small-Stock Effect*, *Public Utilities Fortnightly*, October 15, 1995.

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Q. HOW DOES PNM COMPARE IN SIZE TO THE PROXY COMPANIES?

A. PNM is somewhat smaller than the average for the proxy group companies both in terms of numbers of customers and annual revenues. PNM Exhibit RBH-14 estimates the implied market capitalization for PNM (*i.e.*, the implied market capitalization if PNM were a stand-alone, publicly traded entity). That is, since PNM is a wholly owned subsidiary of PNM Resources, an estimated stand-alone market capitalization for PNM must be calculated. This is done by applying the median market to book ratio for the proxy group of 1.48 to the product of PNM’s proposed rate base and equity ratio.⁶⁰ The implied market capitalization based on that calculation is \$1.749 billion, which is below twelve of the fourteen members of the proxy group and well below the proxy group median of \$4.17 billion.

Q. HOW DOES THE SMALLER SIZE OF PNM AFFECT ITS BUSINESS RISKS RELATIVE TO THE PROXY GROUP OF COMPANIES?

A. In general, smaller companies are less able to withstand adverse events that affect their revenues and expenses. The effect of weather variability, the loss of large customers to bypass opportunities, or the destruction of demand as a result of general macroeconomic conditions or fuel price volatility will have a proportionately greater impact on the earnings and cash flow volatility of smaller utilities. Similarly, capital expenditures for non-revenue producing investments

⁶⁰ See, Direct Testimony of Company Witnesses Henry Monroy and Lisa Eden.

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1 such as system maintenance and replacements will put proportionately greater
2 pressure on customer costs, potentially leading to customer attrition or demand
3 reduction. Taken together, these risks affect the return required by investors for
4 smaller companies.

5
6 **Q. HAVE YOU CONSIDERED THE SMALLER SIZE OF PNM IN YOUR
7 RECOMMENDED RETURN ON EQUITY FOR THIS COMPANY?**

8 **A.** Yes. While I have quantified the small size effect, rather than proposing a
9 specific premium, I have considered the small size of PNM in my assessment of
10 business risks in order to determine where, within a reasonable range of returns,
11 PNM's required ROE appropriately falls.

12
13 **Q. HOW DID YOU ESTIMATE THE SIZE PREMIUM FOR PNM?**

14 **A.** In its *2014 Ibbotson SBBI Market Report*, Morningstar Inc. ("Morningstar")
15 calculates the size premium for deciles of market capitalizations relative to the
16 S&P 500 Index. As shown on PNM Exhibit RBH-14, based on recent market
17 data, the average market capitalization of the proxy group is approximately
18 \$14.44 billion, and the median market capitalization of the proxy group is \$4.17
19 billion, which correspond to the second and fourth deciles, respectively, of
20 Morningstar's market capitalization data. Based on the Morningstar analysis, the
21 proxy group has a size premium of 0.80 percent to 1.19 percent. The implied

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1 market capitalization for PNM is approximately \$ 1.749 billion, which falls
2 within the sixth decile and corresponds to a size premium of 1.75 percent (or 175
3 basis points). The difference between those size premia is as much as 95 basis
4 points (1.75 percent – 0.80 percent). However, rather than propose a specific
5 adjustment, I considered the effect of small size in determining where the
6 Company’s ROE falls within the range of results.

7
8 **Q. ARE THERE OTHER FACTORS THAT OFFSET THE EFFECT OF**
9 **SMALLER SIZE ON PNM?**

10 **A.** No, I do not believe so. I considered that possibility, but concluded that in light
11 of the risks discussed earlier, PNM does not have advantages on balance over the
12 proxy group that would offset the added risk of smaller size.

13 **VII. REVENUE STABILIZATION AND COST RECOVERY**
14 **MECHANISMS**

15 **Q. PLEASE BRIEFLY DESCRIBE THE COMPANY’S BILL**
16 **STABILIZATION TARIFF.**

17 **A.** PNM’s proposal is a revenue-per-customer mechanism that reflects the difference
18 between monthly allowed revenue and revenue actually billed under volumetric
19 rates.⁶¹ As Company Witness Hansen explains, monthly allowed revenue would
20 reflect changes in customer counts, by customer category. Mr. Hansen further

⁶¹ The proposed Bill Stabilization Tariff is more fully described in the Direct Testimony and Exhibits of Company Witness Daniel G. Hansen.

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1 explains that the cumulative difference between allowed and billed revenue (that
2 is, the cumulative deferral), whether positive or negative, would be incorporated
3 into customer rates for the following year. Although the Company's proposal
4 places a limit on the amount revenues can be increased under the proposed
5 mechanism, there is no corresponding limit on the amount that revenues can be
6 decreased.

7
8 **Q. HOW COMMON ARE REVENUE STABILIZATION MECHANISMS**
9 **SUCH AS THE COMPANY'S BILL STABILIZATION TARIFF**
10 **PROPOSAL?**

11 **A.** There is little question that revenue stabilization structures have become
12 increasingly common. In that regard, Mr. Hansen reports 27 electric utilities that
13 have various forms of revenue decoupling mechanisms in place (or to be in place
14 pending approval).⁶² As discussed below, the implementation of revenue
15 stabilization mechanisms has become an increasingly visible issue to investors.

16
17 The increasing application of such mechanisms generally reflects increasing
18 interest in energy efficiency (which leads to flat or declining volume) generally.
19 In large measure, revenue stabilization mechanisms also reflect the effect of high
20 degree of operating leverage that is typical of electric utilities such as PNM. In
21 essence, operating leverage reflects the proportion of a company's fixed costs to

⁶² Direct Testimony and Exhibits of Daniel G. Hansen.

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1 its operating margin (that is, revenue less variable expenses), and measures the
2 sensitivity of earnings to a given change in revenue. As a capital-intensive
3 enterprise, PNM (like other utilities) has a relatively high proportion of fixed
4 costs to variable costs and as such, a given change in revenue would produce a
5 comparatively large change in earnings. Revenue stabilization mechanisms
6 therefore address the very probable decline in revenue and earnings resulting from
7 energy efficiency initiatives.

8
9 **Q. ARE REVENUE STABILIZATION AND COST RECOVERY**
10 **MECHANISMS COMMON AMONG THE PROXY COMPANIES?**

11 **A.** Yes, they are. I reviewed the mechanisms disclosed in annual SEC Form 10-K
12 filings for each of the proxy companies, and found a substantial number of
13 mechanisms in place. Those mechanisms include full decoupling, recovery of
14 lost revenue associated with energy efficiency and conservation efforts, recovery
15 of construction costs associated with significant new capital asset additions,
16 recovery of significant capital expenditures required to comply with
17 environmental mandates, fuel and purchased power adjustment clauses and
18 various other company-specific mechanisms. A number of companies also noted
19 that they have requested recovery mechanisms that are pending approval, or that
20 they plan to pursue additional cost recovery mechanisms in the future.

21

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1 **Q. WOULD THE PROPOSED BILL STABILIZATION TARIFF REDUCE**
2 **PNM'S COST OF EQUITY?**

3 **A.** No, it would not. The principal analytical issue is whether the Company would be
4 so less risky than its peers as a direct result of the proposed decoupling structure
5 that investors would specifically and measurably reduce their return requirements.
6 The fact that the proposed decoupling structure may stabilize the Company's
7 revenues would not affect its Cost of Equity unless it can be demonstrated that (1)
8 PNM would be materially less risky than the proxy group by virtue of the
9 decoupling mechanism; and (2) investors are likely to react to the incremental
10 effect of the mechanism.⁶³ Because revenue stabilization mechanisms are
11 common among the proxy companies, there is no reason to assume that PNM
12 would be materially less risky, and that its Cost of Equity would be lower than its
13 peers' as a result of the proposed decoupling mechanism.

14
15 **Q. HAVE YOU CONSIDERED PROCEEDINGS IN OTHER**
16 **JURISDICTIONS IN WHICH REVENUE STABILIZATION**
17 **MECHANISMS WERE APPROVED?**

18 **A.** Yes, I have. In the vast majority of cases, utility commissions have not made
19 explicit adjustments to the ROE in connection with such mechanisms. In fact,
20 only one of the 24 rate proceedings in which decoupling mechanisms were

⁶³ As discussed in more detail below, the effect of revenue decoupling also can be considered in the context of non-diversifiable risk.

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1 authorized in the past two years included a specific adjustment to the
2 ROE. Undefined adjustments to the ROE were made in three jurisdictions (IN,
3 CT, and MA); no adjustments were made in the remaining twenty proceedings. It
4 also is interesting to note that the Maryland Public Service Commission has
5 previously made specific adjustments to the ROE in connection with revenue
6 stabilization structures but no longer does so.

7
8 Those findings, that the implementation of revenue stabilization structures does
9 not reduce the Cost of Equity, are consistent with the results of a study performed
10 by the Brattle Group (“Brattle”). In reviewing its results, Brattle concluded that
11 its empirical analyses “do not support the hypothesis that utilities with decoupling
12 have a lower cost of capital than utilities without decoupling.”⁶⁴

13
14 **Q. ARE COST RECOVERY MECHANISMS SUCH AS FUEL ADJUSTMENT**
15 **CLAUSES ALSO COMMON AMONG UTILITIES?**

16 **A.** Yes, they are. As a general proposition, fuel costs are exogenous, variable, and
17 financially significant and, therefore, lend themselves to recovery via adjustment
18 clauses. As observed by Regulatory Research Associates:

19 Virtually all electric and gas utilities are permitted to adjust rates,
20 outside of a base rate case, for variations in fuel/purchased power
21 expenses, with the exceptions being Kansas City Power & Light

⁶⁴ See, The Brattle Group, *The Impact of Revenue Decoupling on the Cost of Capital for Electric Utilities: An Empirical Investigation*, March 20, 2014, at 3.

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1 (electric) in Missouri (subject to certain limitations) and
2 PacifiCorp (electric) in Washington.⁶⁵

3 Although PNM has a fuel adjustment clause, it lags behind many other states and
4 utilities in the number of authorized revenue stabilization mechanisms. For
5 example, seventeen jurisdictions, including the District of Columbia, have
6 authorized an expense tracker for pension and other post-employment benefits.
7 Similarly, 35 jurisdictions have authorized capital expense recovery mechanisms.
8 In that regard, Value Line specifically has noted recovery mechanisms for capital
9 expenditures, tracking mechanisms for certain kinds of expenses, and decoupling
10 mechanisms as methods to reduce regulatory lag and provide utilities the
11 opportunity to earn their authorized returns.⁶⁶ In fact, Value Line believes that the
12 use of such mechanisms “is likely to increase as utilities request similar
13 mechanisms in additional states.”⁶⁷ Similarly, S&P has noted that it has “seen
14 many state commissions approve alternative ratemaking techniques to traditional
15 base rate case applications, which help utilities sustain cash flow measures,
16 earning power, and ultimately, credit quality.”⁶⁸

⁶⁵ Regulatory Research Associates, *Adjustment Clauses: A State-By State Overview*, July 1, 2014, at 1-2.

⁶⁶ *See*, Paul E. Debbas, CFA, *What Electric Utilities Are Doing about Regulatory Lag*, Value Line, May 23, 2012.

⁶⁷ *Ibid.*

⁶⁸ S&P RatingsDirect, *Industry Economic and Ratings Outlook: U.S. Regulated Utilities Expected To Continue On Stable Trajectory In 2013*, January 25, 2013.

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1 **Q. HAVE YOU ALSO CONSIDERED THE EFFECT OF THE COMPANY'S**
2 **FUTURE TEST YEAR ON ITS COST OF EQUITY?**

3 **A.** Yes, I have. As noted above, Value Line has observed that many regulatory
4 commissions have put in place structures to address the negative consequences of
5 regulatory lag; those structures include "recovery mechanisms for capital
6 expenditures." PNM Exhibit RBH-15 demonstrates that a substantial majority of
7 the proxy companies also have structures in place to address rate base additions.
8 Moreover, a number of the proxy companies operate in jurisdictions that provide
9 for future or partially forecast test years, or that permit Construction Work In
10 Progress ("CWIP") to be included in rate base.⁶⁹ The combination of those
11 structures (that is, the use of forecast test years, capital addition adjustment
12 mechanisms, allowing CWIP in rate base)

13
14 **Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE EFFECT OF**
15 **REVENUE STABILIZATION AND COST RECOVERY MECHANISMS**
16 **ON PNM'S COST OF EQUITY?**

17 **A.** As noted above, decoupling mechanisms and fuel adjustment clauses have
18 become increasingly common for electric utility companies. Consequently,
19 PNM's proposed decoupling structure and cost recovery mechanisms would not
20 fundamentally alter its risk profile relative to its peers. Moreover, there is little
21 question that regulatory commissions continue to recognize that revenue

⁶⁹ Source: Regulatory Research Associates.

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1 stabilization and cost recovery mechanisms are increasingly common and,
2 therefore, already are reflected in current market valuations. On balance, both
3 quantitative and qualitative data suggest that it would inappropriate to reduce
4 PNM's ROE in connection with its proposed revenue stabilization and cost
5 recovery structures.

VIII. CAPITAL MARKET ENVIRONMENT

8 **Q. DO ECONOMIC CONDITIONS INFLUENCE THE REQUIRED COST OF**
9 **CAPITAL AND REQUIRED RETURN ON COMMON EQUITY?**

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

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1 **Q. DO YOU HAVE ANY GENERAL OBSERVATIONS REGARDING THE**
2 **RELATIONSHIP BETWEEN CURRENT CAPITAL MARKET**
3 **CONDITIONS AND THE COMPANY'S COST OF EQUITY?**

4 **A.** Yes, I do. Much has been reported about the Federal Reserve's Quantitative
5 Easing policy and its effect on interest rates. The issue as to how those policies
6 and the continuing level of interest rates affect utility stock prices is less clear. As
7 discussed below, for example, while federal policy has affected interest rates, it
8 also has been correlated with lower levels of market volatility. Generally
9 speaking, when volatility is low, investors are willing to take on more risk, and
10 allocate capital to less defensive stocks. In essence, they are more willing to take
11 on additional risk in expectation of realizing higher returns. Recently, however,
12 the market appears to be providing conflicting signals. During certain periods of
13 the past year, low volatility and low interest rates have resulted in defensive
14 stocks such as electric utilities somewhat outperforming other sectors.

15
16 A relevant question, then, is how investors will react when the Federal Reserve
17 completes its market intervention. A viable outcome is that investors will
18 perceive greater chances for economic growth, which will increase the growth
19 rates included in the Constant Growth DCF model. At the same time, higher
20 growth and the absence of federal market intervention could provide the
21 opportunity for interest rates to increase, thereby increasing the dividend yield

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1 portion of the DCF model. In that case, both terms of the Constant Growth DCF
2 model would increase, producing increased ROE estimates.

3
4 At this time, however, market data is somewhat disjointed. As a consequence, it
5 is difficult to rely on a single model to estimate the Company's Cost of Equity. A
6 more reasoned approach is to understand the relationships among Federal Reserve
7 policies, interest rates and risk, and assess how those factors may affect different
8 models. For the reasons discussed below, the current market is one in which it is
9 very important to consider a broad range of data and models when determining
10 the Cost of Equity.

11 **Q. PLEASE SUMMARIZE THE EFFECT OF RECENT FEDERAL**
12 **RESERVE POLICIES ON INTEREST RATES AND THE COST OF**
13 **CAPITAL.**

14 **A.** Beginning in 2008, the Federal Reserve proceeded on a steady path of initiatives
15 intended to lower long-term Treasury yields.⁷⁰ The Federal Reserve policy
16 actions “were designed to put downward pressure on longer-term interest rates by
17 having the Federal Reserve take onto its balance sheet some of the duration and
18 prepayment risks that would otherwise have been borne by private investors.”⁷¹
19 Under that policy, “Securities Held Outright” on the Federal Reserve’s balance
20 sheet increased from approximately \$489 billion at the beginning of October 2008

⁷⁰ See. Federal Reserve Press Release (June 19, 2013).

⁷¹ Federal Reserve Bank of New York, Domestic Open Market Operations During 2012, at 29 (Apr. 2013).

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1 to \$4.20 trillion by October 17, 2014.⁷² To put that increase in context, the
2 securities held by the Federal Reserve represented approximately 3.29 percent of
3 Gross Domestic Product (“GDP”) at the end of September 2008, and increased to
4 approximately 24.24 percent of GDP in October 2014.⁷³

5
6 **Q. IS THE FEDERAL RESERVE EXPECTED TO MAINTAIN THESE**
7 **POLICIES?**

8 **A.** The Federal Reserve began “tapering” its asset purchases in December 2013 and
9 although the future pace of such reductions was never on a “preset course,” the
10 program was completed in October 2014.⁷⁴ On September 17, 2014 the Federal
11 Reserve issued a statement regarding “Policy Normalization Principles and
12 Plans,” in which it discussed the conditions under which, and methods by which it
13 may reduce its holdings of securities and increase certain short term interest
14 rates.⁷⁵ Although the Federal Reserve discussed its policy goals, no specific
15 timelines were identified. As such, uncertainties remain in the market today and
16 going forward. The uncertainty surrounding the timing of the Federal Reserve’s
17 future policy decisions, including short term interest rates, represents a risk to
18 investors that, in my view, should be reflected in the Company’s authorized ROE.

⁷² Federal Reserve Schedule H.4.1, “Securities held outright” include U.S. Treasury securities, Federal agency debt securities, and mortgage-backed securities.

⁷³ Federal Reserve Schedule H.4.1; Bureau of Economic Analysis, GDP data as of the second calendar quarter of 2014.

⁷⁴ Federal Reserve Board of Governors Press Release dated October 29, 2014.

⁷⁵ Federal Reserve Press Release, Policy Normalization Principles and Plans, (Sep. 17, 2014).

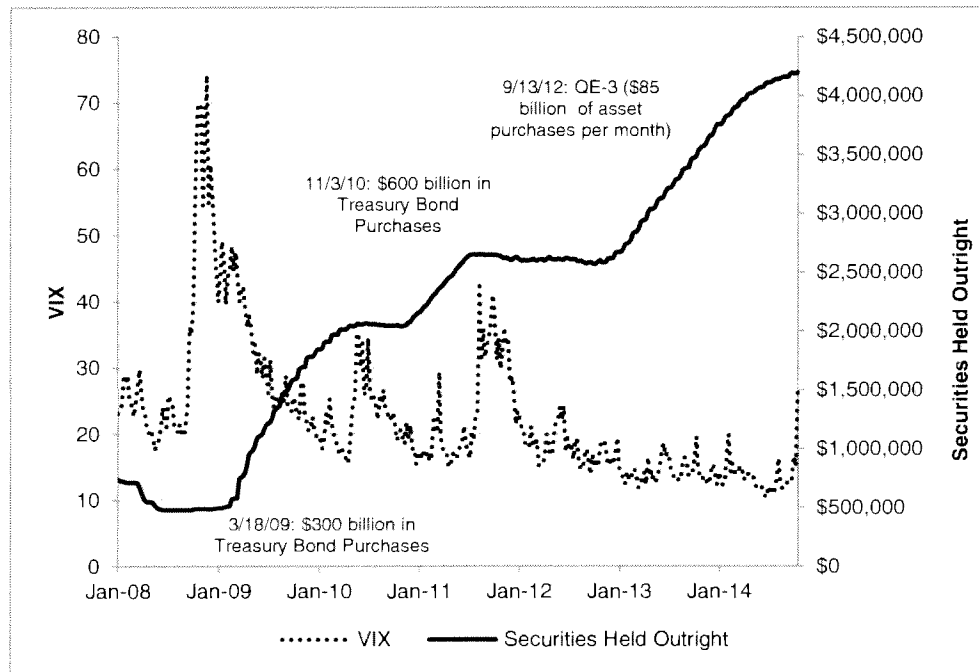
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Just as market intervention by the Federal Reserve has reduced interest rates, it also has had the effect of reducing market volatility. As shown in PNM Chart 4 (below), each time the Federal Reserve began to purchase bonds (as evidenced by the increase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

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Chart 4: VIX and Federal Reserve Asset Purchases⁷⁶



1 The important analytical issue is whether we can infer that risk aversion among
2 investors is at a historically low level, implying a Cost of Equity that is well
3 below recently authorized returns. Given the negative correlation between the
4 expansion of the Federal Reserve’s balance sheet and the VIX, it is difficult to
5 conclude that fundamental risk aversion and investor return requirements have
6 fallen.

7
8 It also is interesting to note that from January 2000 through August 2012 (that is,
9 immediately prior to the Federal Reserve’s third round of Quantitative Easing) the

⁷⁶ Sources: Federal Reserve Schedule H.4.1, and Federal Reserve Bank of St. Louis “Federal Reserve Economic Data (FRED)”.

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1 SNL Electric Company index and the proxy group's P/E multiples traded at 13.00
2 percent and 10.00 percent discounts to the market, respectively.⁷⁷ That
3 relationship significantly changed after September 2012, such that the premium
4 averaged nearly 20.00 percent. That is, although utility stocks historically have
5 traded at a 10.00 percent to 13.00 percent discount to the overall market, since the
6 Federal Reserve began its third round of Quantitative Easing, the proxy group
7 average P/E ratio traded at a 20.00 percent premium to the market. There also is
8 little question that the recent increase in utility valuation levels has been related to
9 Federal monetary policy: From January 2003 through August 2012 the correlation
10 between the Federal Reserve's balance sheet and the proxy group P/E ratio was
11 negative 14.00 percent; from September 2012 through September 2014, it was
12 positive 74.00 percent.

13
14 An important analytical question, then, is whether it is reasonable to expect those
15 high valuation levels will persist. Here, we have a situation in which Federal
16 monetary policy, a policy that has recently been completed, had been correlated
17 with proxy company P/E ratios that have expanded to the degree that they
18 recently have exceeded the market P/E ratio. Because it is unlikely that utility
19 P/E ratios would exceed the market in perpetuity, and given that the Constant
20 Growth DCF model assumes that P/E ratios will remain forever constant, I do not

⁷⁷ P/E Ratio calculated as an index.

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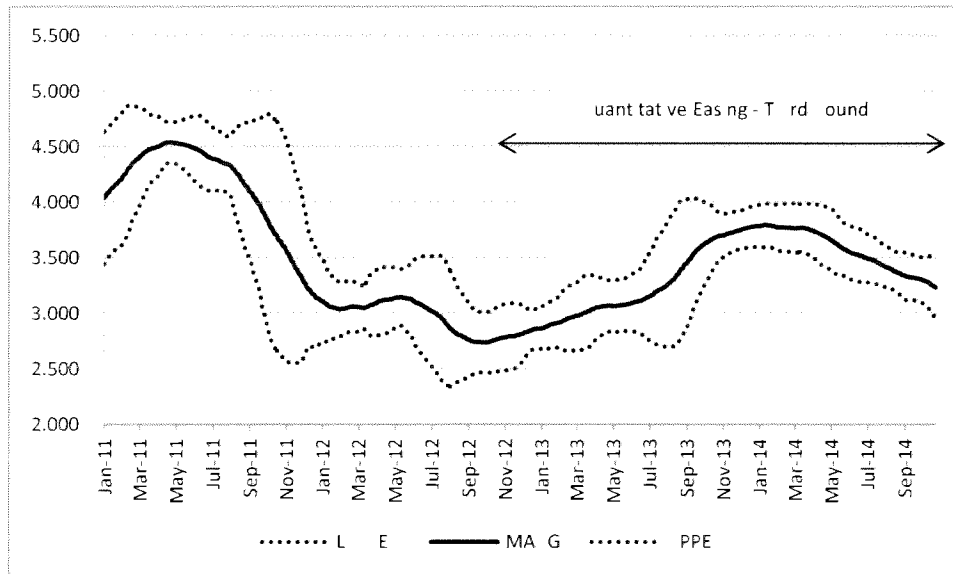
1 believe that it would be appropriate to give that model's results undue weight in
2 determining the Company's Cost of Equity.

3

4 **Q. DOES YOUR RECOMMENDATION ALSO CONSIDER THE CURRENT**
5 **INTEREST RATE ENVIRONMENT?**

6 **A.** Yes, it does. First, it is important to note that August 2011 (the month during
7 which the Company received its existing 10.00 percent ROE authorization) was a
8 period of rather rapidly declining interest rates; that decline continued into June
9 2012 (*see* Chart 5, below).

Chart 5: 30-Year Treasury Yields Over Time⁷⁸



⁷⁸ 90-day Moving Average

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1 It also is important to keep in mind that although the Federal Reserve’s third
2 round of Quantitative Easing was in place from September 2012 through October
3 2014, interest rates rose during much of that time. Nonetheless, because they
4 reflect the effect of the Federal Reserve’s Quantitative Easing policy, it would be
5 inappropriate to compare current interest rates with those that prevailed in August
6 2011; it may well be the case that absent Federal market intervention, interest
7 rates would have been higher, still.

8
9 In any event, as the Cost of Equity is forward-looking, the salient issue is whether
10 investors see the likelihood of increased interest rates during the period in which
11 the rates set in this proceeding will be in effect. That appears to be the case: as
12 noted earlier, the 50 economists surveyed by Blue Chip Financial Forecast see the
13 30-year Treasury yield increasing to 4.70 percent by 2016.⁷⁹ The proposition that
14 interest rates are likely to increase is supported by the fact that investors currently
15 are willing to pay about twice the premium for the option to sell long-term
16 Government bonds in January 2016 (with an exercise price equal to the current
17 price) than they are will to pay for the option to buy those bonds.⁸⁰ Because the
18 price of bonds moves inversely to interest rates,⁸¹ those option prices indicate that
19 investors expect interest rates to increase by January 2016.

⁷⁹ See, Blue Chip Financial Forecast, Vol. 33 No. 6, June 1, 2014, at 14.

⁸⁰ Source: <http://www.nasdaq.com/symbol/tlt/option-chain?dateindex=7>

⁸¹ That is, as interest rates move up (down), bond prices move down (up).

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1 Given that: (1) interest rates were declining when the Company received its
2 currently authorized return of 10.00 percent; (2) it is unclear what the level of
3 interest rates would have been during 2014 absent Quantitative Easing; and (3)
4 economists and market data indicated expectations for increasing interest rates
5 into 2016, I believe that my 10.50 percent ROE recommendation properly reflects
6 the prevailing and expected interest rate environment.

7
8 **Q. WHAT CONCLUSIONS DO YOU DRAW FROM YOUR ANALYSES OF**
9 **CAPITAL MARKET CONDITIONS?**

10 **A.** From an analytical perspective, it is important that the inputs and assumptions
11 used to arrive at an ROE recommendation, including assessments of capital
12 market conditions, are consistent with the recommendation itself. While I
13 appreciate that all analyses require an element of judgment, the application of that
14 judgment must be made in the context of the quantitative and qualitative
15 information available to the analyst and the capital market environment in which
16 the analyses were undertaken. For example, because the utility sector (including
17 the proxy companies) recently has traded at a Price to Earnings multiple well in
18 excess of its historical average – and in excess of the market - a reasonable
19 question becomes whether those multiples will remain constant in perpetuity, as
20 the Constant Growth DCF assumes will be the case. Given the inconsistency of

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1 market data with that assumption, the Constant Growth DCF estimates should be
2 viewed with caution.

3
4 Similarly, the direction of change in long-term Treasury yields and the effect of
5 Federal market intervention frustrate comparisons of current interest rates to those
6 that prevailed when the Company received its existing ROE authorization. As
7 such, it would be inappropriate to draw inferences or develop conclusions
8 regarding the current Cost of Equity by comparing interest rates in October 2014
9 to those observed in August 2011. Looking forward, however, market data and
10 economists' projections suggest that interest rates are expected to increase from
11 late 2014 through 2016. My 10.50 percent ROE recommendation considers and
12 properly reflects those factors.

13
14 **IX. CAPITAL STRUCTURE**

15 **Q. WHAT IS PNM'S RECOMMENDED CAPITAL STRUCTURE?**

16 **A.** As described in more detail in Company Witness Eden's, testimony, PNM's
17 recommended capital structure consists of 50.00 percent long-term debt, 0.40
18 percent preferred equity, and 49.60 percent common equity.

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1 **Q. DOES PNM HAVE A SEPARATE CAPITAL STRUCTURE THAT IS**
2 **RECOGNIZED BY INVESTORS?**

3 **A.** Yes. PNM is a separate corporate entity that has its own capital structure and
4 issues its own debt. PNM's capital structure is reflected in registrations of its debt
5 with the Securities Exchange Commission. It therefore is clear that PNM
6 maintains a capital structure that is reported separately from its parent, PNM
7 Resources, and that is recognized by the investing community. In addition (and
8 as discussed in more detail below), PNM's proposed capital structure is consistent
9 with those in place at the utility operating companies held within the proxy
10 groups. As such, I conclude that the Company's proposed capital structure is
11 appropriate to use in determining its overall rate of return.

12

13 **Q. PLEASE DISCUSS YOUR ANALYSIS OF THE CAPITAL STRUCTURES**
14 **OF THE PROXY GROUP COMPANIES.**

15 **A.** I reviewed the last eight quarters of long-term debt, preferred equity and common
16 equity ratios of the operating utilities owned by each of my proxy companies. As
17 shown in PNM Exhibit RBH-11, PNM's projected equity ratio of 49.60 percent is
18 well within the range of equity ratios for that group, and is below the mean equity
19 ratio of approximately 53.63 percent. Similarly, although some of the proxy group
20 companies employ slightly higher amounts of preferred equity and slightly less
21 long-term debt than PNM proposes, PNM's projected long-term debt ratio of 50.00

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1 percent and preferred equity ratio of 0.40 percent are well within the range of
2 respective ratios for the proxy group companies. It is my view, therefore, that the
3 capital structure proposed by Ms. Eden is consistent with the proxy companies and
4 reasonable for the purposes of determining PNM's rate of return.

X. CONCLUSIONS

7 **Q. PLEASE SUMMARIZE YOUR CALCULATED COST OF EQUITY,
8 TAKING INTO CONSIDERATION THE ISSUES DISCUSSED ABOVE.**

9 **A.** As discussed throughout my testimony, it is important to consider a variety of
10 empirical and qualitative information in reviewing analytical results and arriving
11 at ROE recommendations. Here, we have a situation in which the proxy
12 companies have traded at Price/Earnings ratios well in excess of their historical
13 average and for a time, in excess of the market. Because that condition is unlikely
14 to persist, it violates a principal assumption of the Constant Growth DCF model,
15 *i.e.*, that the P/E ratio will not change, ever. As a practical matter, the Constant
16 Growth DCF results are well below a highly observable and relevant benchmark:
17 the returns authorized for vertically integrated electric utilities. A more balanced
18 approach therefore would be to consider multiple methods, including the Multi-
19 Stage DCF model, the CAPM approach, and the Bond Yield Plus Risk Premium
20 model. Those results, along with the Constant Growth DCF model results, are
21 summarized below in Tables RBH-9A through RBH-9C.

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1 Reviewing those results, and taking into consideration the Company's capital
2 investment needs, its relatively small size, and the 2016 forecast test year used in
3 this proceeding indicates that the Company's Cost of Equity falls within a range
4 of 10.25 percent to 10.75 percent. Because several data points suggest that
5 interest rates are likely to increase through 2015 and into 2016, it would be
6 reasonable to set the Company's ROE at the upper end of that range. In that
7 regard, I believe my 10.50 percent ROE recommendation is a reasonable, if not
8 somewhat conservative estimate of the Company's Cost of Equity.

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Table RBH-9A. Summary of Constant Growth DCF Results

<i>Half-Year Dividend Growth</i>	<i>Mean Low</i>	<i>Mean</i>	<i>Mean High</i>
30-Day Average	8.18%	9.22%	10.14%
90-Day Average	8.16%	9.20%	10.12%
180-Day Average	8.20%	9.24%	10.16%
360-Day Average	8.33%	9.37%	10.29%
<i>Full-Year Dividend Growth</i>	<i>Mean Low</i>	<i>Mean</i>	<i>Mean High</i>
30-Day Average	8.26%	9.32%	10.26%
90-Day Average	8.24%	9.30%	10.24%
180-Day Average	8.28%	9.34%	10.28%
360-Day Average	8.41%	9.47%	10.41%
<i>Half-Year, with Sustainable Growth</i>	<i>Mean Low</i>	<i>Mean</i>	<i>Mean High</i>
30-Day Average	7.65%	8.96%	10.24%
90-Day Average	7.63%	8.94%	10.22%
180-Day Average	7.67%	8.98%	10.26%
360-Day Average	7.80%	9.11%	10.39%
<i>Full-Year, with Sustainable Growth</i>	<i>Mean Low</i>	<i>Mean</i>	<i>Mean High</i>
30-Day Average	7.72%	9.05%	10.36%
90-Day Average	7.70%	9.03%	10.34%
180-Day Average	7.74%	9.07%	10.38%
360-Day Average	7.87%	9.20%	10.51%

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Table RBH-9B: Summary of Multi-Stage DCF Results

<i>Without Sustainable Growth</i>	<i>Mean Low</i>	<i>Mean</i>	<i>Mean High</i>
30-Day Average	9.66%	9.93%	10.20%
90-Day Average	9.63%	9.90%	10.17%
180-Day Average	9.68%	9.94%	10.21%
360-Day Average	9.82%	10.09%	10.37%
<i>With Sustainable Growth</i>	<i>Mean Low</i>	<i>Mean</i>	<i>Mean High</i>
30-Day Average	9.52%	9.86%	10.23%
90-Day Average	9.50%	9.83%	10.20%
180-Day Average	9.54%	9.87%	10.24%
360-Day Average	9.67%	10.02%	10.40%

Table RBH-9C: Summary of Risk Premium and Other Analytical Results

CAPM Results	<i>Bloomberg Derived Market Risk Premium</i>	<i>Value Line Derived Market Risk Premium</i>	
<i>Average Bloomberg Beta Coefficient</i>			
Current 30-Year Treasury (3.18%)	10.93%	10.59%	
Near Term Projected 30-Year Treasury (3.88%)	11.63%	11.30%	
<i>Average Value Line Beta Coefficient</i>			
Current 30-Year Treasury (3.18%)	10.64%	10.31%	
Near Term Projected 30-Year Treasury (3.88%)	11.34%	11.02%	
	<i>Low</i>	<i>Mid</i>	<i>High</i>
Bond Yield Plus Risk Premium	10.11%	10.25%	10.86%

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1 **Q.** **DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

2 **A.** Yes.

GCG#518971

Résumé and Testimony Listing of Robert B. Hevert

PNM Exhibit RBH-1

Is contained in the following 16 pages.

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
Alaska Regulatory Commission				
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				
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.	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)
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)

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
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 (electric)
District of Columbia Public Service Commission				
Potomac Electric Power Company	03/13	Potomac Electric Power Company	Formal Case No. FC-1103-2013-E	Return on Equity
Potomac Electric Power Company	07/11	Potomac Electric Power Company	Formal Case No. FC1087	Return on Equity
Federal Energy Regulatory Commission				
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Florida Gas Transmission Company, LLC	10/09	Florida Gas Transmission Company, LLC	Docket No. RP10-21-000	Return on Equity
Maritimes & Northeast Pipeline, LLC	07/09	Maritimes & Northeast Pipeline, LLC	Docket No. RP09-809-000	Return on Equity
Saltville Gas Storage Company, L.L.C.	02/08	Saltville Gas Storage Company, L.L.C.	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
Transwestern Pipeline Company, LLC	09/06	Transwestern Pipeline Company, LLC	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				
Hawaiian Electric Company, Inc.	06/14	Hawaiian Electric Light Company, Inc.	Docket No. 2013-0373	Return on Equity
Hawaii Electric Light Company, Inc.	08/12	Hawaiian Electric Light Company, Inc.	Docket No. 2012-0099	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Illinois Commerce Commission				
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				
Northern Indiana Public Service Company	05/09	Northern Indiana Public Service Company	Cause No. 43894	
Maine Public Utilities Commission				
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Massachusetts Department of Public Utilities				
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 (electric)
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	Divestiture of Shelf Registration
Bay State Gas Company	01/91	Bay State Gas Company	DPU 91-25	Divestiture of Shelf Registration

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Minnesota Public Utilities Commission				
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 Mississippi Gas	07/09	CenterPoint Energy Resources, Corp. d/b/a CenterPoint Energy Mississippi Gas	Docket No. 09-UN-334	Return on Equity (gas)
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)

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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	09/10	Ameren Missouri d/b/a AmerenUE	Case No. ER-2011-0028	Return on Equity (electric)
Union Electric Company	06/10	Union Electric Company d/b/a AmerenUE	Case No. GR-2010-0363	Return on Equity (gas)
Montana Public Service Commission				
Northwestern Corporation d/b/a Northwestern Energy	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
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
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				
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)

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
New York State Public Service Commission				
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)
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. D-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)

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
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				
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)
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 Company	03/10	South Carolina Electric & Gas Company	Docket No. 2009-489-E	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
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 d/b/a Xcel Energy	06/09	Northern States Power Company d/b/a Xcel Energy	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				
Sharyland Utilities, L.P.	05/13	Sharyland Utilities, L.P.	Docket No. 41474	Return on Equity
Wind Energy Transmission Texas, LLC	08/12	Wind Energy Transmission Texas, LLC	Docket No. 40606	Return on Equity
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
Southwestern Public Service Company	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)

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Texas Railroad Commission				
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 10174	Return on Equity
Atmos Energy Corporation – Mid-Texas Division	06/12	Atmos Energy Corporation – Mid-Texas Division	GUD 10170	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
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
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	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
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

Hope and Bluefield Decisions

PNM Exhibit RBH-2a & 2b

Is contained in the following 40 pages.

64 S.Ct. 281
51 P.U.R.(NS) 193, 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed. 333
(Cite as: 51 P.U.R.(NS) 193, 64 S.Ct. 281)

Page 1

▶

Supreme Court of the United States
FEDERAL POWER COMMISSION et al.

v.
HOPE NATURAL GAS CO.
CITY OF CLEVELAND

v.
SAME.
Nos. 34 and 35.

Argued Oct. 20, 21, 1943.
Decided Jan. 3, 1944.

Separate proceedings before the Federal Power Commission by such Commission, by the City of Cleveland and the City of Akron, and by Pennsylvania Public Utility Commission wherein the State of West Virginia and its Public Service Commission were permitted to intervene concerning rates charged by Hope Natural Gas Company which were consolidated for hearing. An order fixing rates was reversed and remanded with directions by the Circuit Court of Appeals, 134 F.2d 287, and Federal Power Commission, City of Akron and Pennsylvania Public Utility Commission in one case and the City of Cleveland in another bring certiorari.

Reversed.

Mr. Justice REED, Mr. Justice FRANKFURTER and Mr. Justice JACKSON, dissenting.

On Writs of Certiorari to the United States Circuit Court of Appeals for the Fourth Circuit.

West Headnotes

[1] Public Utilities 317A 🔑120

317A Public Utilities
317AII Regulation
317Ak119 Regulation of Charges
317Ak120 k. Nature and Extent in General.
Most Cited Cases
(Formerly 317Ak7.1, 317Ak7)

Rate-making is only one species of price-fixing which, like other applications of the police power, may reduce the value of the property regulated, but that does not render the regulation invalid.

[2] Public Utilities 317A 🔑123

317A Public Utilities
317AII Regulation
317Ak119 Regulation of Charges
317Ak123 k. Reasonableness of Charges in General. Most Cited Cases
(Formerly 317Ak7.4, 317Ak7)

Rates cannot be made to depend upon fair value, which is the end product of the process of rate-making and not the starting point, when the value of the going enterprise depends on earnings under whatever rates may be anticipated.

[3] Gas 190 🔑14.3(2)

190 Gas
190k14 Charges
190k14.3 Administrative Regulation
190k14.3(2) k. Federal Power Commission.
Most Cited Cases
(Formerly 190k14(1))

The rate-making function of the Federal Power Commission under the Natural Gas Act involves the making of pragmatic adjustments, and the Commission is not bound to the use of any single formula or combination of formulae in determining rates. Natural Gas Act, § § 4(a), 5(a), 6, 15 U.S.C.A. § § 717c(a), 717d(a), 717e.

[4] Gas 190 🔑14.5(6)

190 Gas
190k14 Charges
190k14.5 Judicial Review and Enforcement of Regulations
190k14.5(6) k. Scope of Review and Trial De Novo. Most Cited Cases
(Formerly 190k14(1))

When order of Federal Power Commission fixing natural gas rates is challenged in the courts, the question is whether order viewed in its entirety meets the requirements of the Natural Gas Act. Natural Gas Act, § § 4(a), 5(a), 6, 19(b), 15 U.S.C.A. § § 717c(a), 717d(a), 717e, 717r(b).

[5] Gas 190 🔑14.4(1)

190 Gas
190k14 Charges
190k14.4 Reasonableness of Charges

(Cite as: 51 P.U.R.(NS) 193, 64 S.Ct. 281)

190k14.4(1) k. In General. Most Cited Cases

(Formerly 190k14(1))

Under the statutory standard that natural gas rates shall be "just and reasonable" it is the result reached and not the method employed that is controlling. Natural Gas Act § § 4(a), 5(a), 15 U.S.C.A. § § 717c(a), 717d(a).

[6] Gas 190  14.5(6)

190 Gas


190k14 Charges

190k14.5 Judicial Review and Enforcement of Regulations

190k14.5(6) k. Scope of Review and Trial De Novo. Most Cited Cases

(Formerly 190k14(1))

If the total effect of natural gas rates fixed by Federal Power Commission cannot be said to be unjust and unreasonable, judicial inquiry under the Natural Gas Act is at an end. Natural Gas Act, § § 4(a), 5(a), 6, 19(b), 15 U.S.C.A. § § 717c(a), 717d(a), 717e, 717r(b).

[7] Gas 190  14.5(7)

190 Gas


190k14 Charges

190k14.5 Judicial Review and Enforcement of Regulations

190k14.5(7) k. Presumptions. Most Cited Cases

(Formerly 190k14(1))

An order of the Federal Power Commission fixing rates for natural gas is the product of expert judgment, which carries a presumption of validity, and one who would upset the rate must make a convincing showing that it is invalid because it is unjust and unreasonable in its consequences. Natural Gas Act, § § 4(a), 5(a), 6, 19(b), 15 U.S.C.A. § § 717c(a), 717d(a), 717e, 717r(b).

[8] Gas 190  14.4(1)

190 Gas

190k14 Charges


190k14.4 Reasonableness of Charges

190k14.4(1) k. In General. Most Cited Cases

(Formerly 190k14(1))

The fixing of just and reasonable rates for natural gas by the Federal Power Commission involves a balancing of the investor and the consumer interests.

Natural Gas Act, § § 4(a), 5(a), 15 U.S.C.A. § § 717c(a), 717d(a).

[9] Gas 190  14.4(9)

190 Gas

190k14 Charges

190k14.4 Reasonableness of Charges

190k14.4(9) k. Depreciation and Depletion.

Most Cited Cases

(Formerly 190k14(1))

As respects rates for natural gas, from the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business, which includes service on the debt and dividends on stock, and by such standard the return to the equity owner should be commensurate with the terms on investments in other enterprises having corresponding risks, and such returns should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and to attract capital. Natural Gas Act, § § 4(a), 5(a), 15 U.S.C.A. § § 717c(a), 717d(a).

[10] Gas 190  14.4(9)

190 Gas

190k14 Charges

190k14.4 Reasonableness of Charges

190k14.4(9) k. Depreciation and Depletion.

Most Cited Cases

(Formerly 190k14(1))

The fixing by the Federal Power Commission of a rate of return that permitted a natural gas company to earn \$2,191,314 annually was supported by substantial evidence. Natural Gas Act, § § 4(a), 5(a), 6, 19(b), 15 U.S.C.A. § § 717c(a), 717d(a), 717e, 717r(b).

[11] Gas 190  14.4(9)

190 Gas

190k14 Charges

190k14.4 Reasonableness of Charges

190k14.4(9) k. Depreciation and Depletion.

Most Cited Cases

(Formerly 190k14(1))

Rates which enable a natural gas company to operate successfully, to maintain its financial integrity, to attract capital and to compensate its investors for the risks assumed cannot be condemned as invalid, even though they might produce only a meager return on the so-called "fair value" rate base. Natural Gas Act,

(Cite as: 51 P.U.R.(NS) 193, 64 S.Ct. 281)

§ § 4(a), 5(a), 6, 19(b), 15 U.S.C.A. § § 717c(a), 717d(a), 717e, 717r(b).

[12] Gas 190  14.4(4)

190 Gas

190k14 Charges

190k14.4 Reasonableness of Charges

190k14.4(4) k. Method of Valuation. Most

Cited Cases

(Formerly 190k14(1))

A return of only 3 27/100 per cent. on alleged rate base computed on reproduction cost new to natural gas company earning an annual average return of about 9 per cent. on average investment and satisfied with existing gas rates suggests an inflation of the base on which the rate had been computed, and justified Federal Power Commission in rejecting reproduction cost as the measure of the rate base. Natural Gas Act, § § 4(a), 5(a), 15 U.S.C.A. § § 717c(a), 717d(a).

[13] Gas 190  14.4(9)

190 Gas

190k14 Charges

190k14.4 Reasonableness of Charges

190k14.4(9) k. Depreciation and Depletion.

Most Cited Cases

(Formerly 190k14(1))

There is no constitutional requirement that owner who engages in a wasting-asset business of limited life shall receive at the end more than he has put into it, and such rule is applicable to a natural gas company since the ultimate exhaustion of its supply of gas is inevitable. Natural Gas Act, § § 4(a), 5(a), 6, 19(b), 15 U.S.C.A. § § 717c(a), 717d(a), 717e, 717r(b).

[14] Gas 190  14.4(9)

190 Gas

190k14 Charges

190k14.4 Reasonableness of Charges

190k14.4(9) k. Depreciation and Depletion.

Most Cited Cases

(Formerly 190k14(1))

In fixing natural gas rate the basing of annual depreciation on cost is proper since by such procedure the utility is made whole and the integrity of its investment is maintained, and no more is required. Natural Gas Act, § § 4(a), 5(a), 6, 19(b), 15 U.S.C.A. § § 717c(a), 717d(a), 717e, 717r(b).

[15] Gas 190  14.3(4)

190 Gas

190k14 Charges


190k14.3 Administrative Regulation

190k14.3(4) k. Findings and Orders. Most

Cited Cases

(Formerly 190k14(1))

There are no constitutional requirements more exacting than the standards of the Natural Gas Act which are that gas rates shall be just and reasonable, and a rate order which conforms with the act is valid. Natural Gas Act, § § 4(a), 5(a), 6, 19(b), 15 U.S.C.A. § § 717c(a), 717d(a), 717e, 717r(b).

[16] Commerce 83  62.2

83 Commerce


83II Application to Particular Subjects and Methods of Regulation

83II(B) Conduct of Business in General

83k62.2 k. Gas. Most Cited Cases

(Formerly 83k13)

The purpose of the Natural Gas Act was to provide through the exercise of the national power over interstate commerce an agency for regulating the wholesale distribution to public service companies of natural gas moving in interstate commerce not subject to certain types of state regulation, and the act was not intended to take any authority from state commissions or to usurp state regulatory authority. Natural Gas Act, § 1 et seq., 15 U.S.C.A. § 717 et seq.

[17] Mines and Minerals 260  92.5(3)

260 Mines and Minerals

260III Operation of Mines, Quarries, and Wells

260III(A) Statutory and Official Regulations

260k92.5 Federal Law and Regulations

260k92.5(3) k. Oil and Gas. Most Cited

Cases

(Formerly 260k92.7, 260k92)

Under the Natural Gas Act, the Federal Power Commission has no authority over the production or gathering of natural gas. Natural Gas Act, § 1(b), 15 U.S.C.A. § 717(b).

[18] Gas 190  14.1(1)

190 Gas

190k14 Charges

190k14.1 In General

190k14.1(1) k. In General; Amount and

(Cite as: 51 P.U.R.(NS) 193, 64 S.Ct. 281)

Regulation. Most Cited Cases

(Formerly 190k14(1))

The primary aim of the Natural Gas Act was to protect consumers against exploitation at the hands of natural gas companies and holding companies owning a majority of the pipe-line mileage which moved gas in interstate commerce and against which state commissions, independent producers and communities were growing quite helpless. Natural Gas Act, §§ 4, 6-10, 14, 15 U.S.C.A. §§ 717c, 717e-717i, 717m.

[19] Gas 190  14.1(1)

190 Gas

190k14 Charges

190k14.1 In General

190k14.1(1) k. In General; Amount and

Regulation. Most Cited Cases

(Formerly 190k14(1))

Apart from the express exemptions contained in § 7 of the Natural Gas Act considerations of conservation are material where abandonment or extensions of facilities or service by natural gas companies are involved, but exploitation of consumers by private operators through maintenance of high rates cannot be continued because of the indirect benefits derived therefrom by a state containing natural gas deposits. Natural Gas Act, §§ 4, 5, and § 7 as amended 15 U.S.C.A. §§ 717c, 717d, 717f.

[20] Commerce 83  62.2

83 Commerce

83II Application to Particular Subjects and Methods of Regulation

83II(B) Conduct of Business in General

83k62.2 k. Gas. Most Cited Cases

(Formerly 83k13)

A limitation on the net earnings of a natural gas company from its interstate business is not a limitation on the power of the producing state, either to safeguard its tax revenues from such industry, or to protect the interests of those who sell their gas to the interstate operator, particularly where the return allowed the company by the Federal Power Commission was a net return after all such charges. Natural Gas Act, §§ 4, 5, and § 7, as amended, 15 U.S.C.A. §§ 717c, 717d, 717f.

[21] Gas 190  14.4(1)

190 Gas

190k14 Charges


190k14.4 Reasonableness of Charges

190k14.4(1) k. In General. Most Cited

Cases

(Formerly 190k14(1))

The Natural Gas Act granting Federal Power Commission power to fix “just and reasonable rates” does not include the power to fix rates which will disallow or discourage resales for industrial use. Natural Gas Act, §§ 4(a), 5(a), 15 U.S.C.A. §§ 717c(a), 717d(a).

[22] Gas 190  14.4(1)

190 Gas

190k14 Charges

190k14.4 Reasonableness of Charges

190k14.4(1) k. In General. Most Cited

Cases

(Formerly 190k14(1))

The wasting-asset nature of the natural gas industry does not require the maintenance of the level of rates so that natural gas companies can make a greater profit on each unit of gas sold. Natural Gas Act, §§ 4(a), 5(a), 15 U.S.C.A. §§ 717c(a), 717d(a).

[23] Federal Courts 170B  452

170B Federal Courts

170BVII Supreme Court

170BVII(B) Review of Decisions of Courts of


Appeals

170Bk452 k. Certiorari in General. Most

Cited Cases

(Formerly 106k383(1))

Where the Federal Power Commission made no findings as to any discrimination or unreasonable differences in rates, and its failure was not challenged in the petition to review, and had not been raised or argued by any party, the problem of discrimination was not open to review by the Supreme Court on certiorari. Natural Gas Act, § 4(b), 15 U.S.C.A. § 717c(b).

[24] Constitutional Law 92  74

92 Constitutional Law

92III Distribution of Governmental Powers and Functions

92III(B) Judicial Powers and Functions

92k71 Encroachment on Executive

92k74 k. Powers, Duties, and Acts Under

Legislative Authority. Most Cited Cases

(Formerly 15Ak226)

Congress has entrusted the administration of the

(Cite as: 51 P.U.R.(NS) 193, 64 S.Ct. 281)

Natural Gas Act to the Federal Power Commission and not to the courts, and apart from the requirements of judicial review, it is not for the Supreme Court to advise the Commission how to discharge its functions. Natural Gas Act, § 1 et seq., 19(b), 15 U.S.C.A. § § 717 et seq., 717r(b).

[25] Gas 190  14.5(3)

190 Gas

190k14 Charges

190k14.5 Judicial Review and Enforcement of Regulations

190k14.5(3) k. Decisions Reviewable. Most Cited Cases

(Formerly 190k14(1))

Under the Natural Gas Act, where order sought to be reviewed does not of itself adversely affect complainant but only affects his rights adversely on the contingency of future administrative action, the order is not reviewable, and resort to the courts in such situation is either premature or wholly beyond the province of such courts. Natural Gas Act, § 19(b), 15 U.S.C.A. § 717r(b).

[26] Gas 190  14.5(4)

190 Gas

190k14 Charges

190k14.5 Judicial Review and Enforcement of Regulations

190k14.5(4) k. Persons Entitled to Relief; Parties. Most Cited Cases

(Formerly 190k14(1))

Findings of the Federal Power Commission on lawfulness of past natural gas rates, which the Commission was without power to enforce, were not reviewable under the Natural Gas Act giving any "party aggrieved" by an order of the Commission the right of review. Natural Gas Act, § 19(b), 15 U.S.C.A. § 717r(b).

****283 *592** Mr. Francis M. Shea, Asst. Atty. Gen., for petitioners Federal Power Com'n and others.

***593** Mr. Spencer W. Reeder, of Cleveland, Ohio, for petitioner City of Cleveland.

Mr. William B. Cockley, of Cleveland, Ohio, for respondent.

Mr. M. M. Neeley, of Charleston, W. Va., for State of West Virginia, as amicus curiae by special leave of Court.

Mr. Justice DOUGLAS delivered the opinion of the

Court.

The primary issue in these cases concerns the validity under the Natural Gas Act of 1938, 52 Stat. 821, 15 U.S.C. s 717 et seq., 15 U.S.C.A. s 717 et seq., of a rate order issued by the Federal Power Commission reducing the rates chargeable by Hope Natural Gas Co., 44 P.U.R.,N.S., 1. On a petition for review of the order made pursuant to s 19(b) of the Act, the ***594** Circuit Court of Appeals set it aside, one judge dissenting. 4 Cir., 134 F.2d 287. The cases ****284** are here on petitions for writs of certiorari which we granted because of the public importance of the questions presented. City of Cleveland v. Hope Natural Gas Co., 319 U.S. 735, 63 S.Ct. 1165.

Hope is a West Virginia corporation organized in 1898. It is a wholly owned subsidiary of Standard Oil Co. (N.J.). Since the date of its organization, it has been in the business of producing, purchasing and marketing natural gas in that state. ^{FN1} It sells some of that gas to local consumers in West Virginia. But the great bulk of it goes to five customer companies which receive it at the West Virginia line and distribute it in Ohio and in Pennsylvania. ^{FN2} In July, 1938, the cities of Cleveland and Akron filed complaints with the Commission charging that the rates collected by Hope from East Ohio Gas Co. (an affiliate of Hope which distributes gas in Ohio) were excessive and unreasonable. Later in 1938 the Commission on its own motion instituted an investigation to determine the reasonableness of all of Hope's interstate rates. In March ***595** 1939 the Public Utility Commission of Pennsylvania filed a complaint with the Commission charging that the rates collected by Hope from Peoples Natural Gas Co. (an affiliate of Hope distributing gas in Pennsylvania) and two non-affiliated companies were unreasonable. The City of Cleveland asked that the challenged rates be declared unlawful and that just and reasonable rates be determined from June 30, 1939 to the date of the Commission's order. The latter finding was requested in aid of state regulation and to afford the Public Utilities Commission of Ohio a proper basis for disposition of a fund collected by East Ohio under bond from Ohio consumers since June 30, 1939. The cases were consolidated and hearings were held.

^{FN1} Hope produces about one-third of its annual gas requirements and purchases the rest under some 300 contracts.

^{FN2} These five companies are the East Ohio Gas Co., the Peoples Natural Gas Co., the

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River Gas Co., the Fayette County Gas Co., and the Manufacturers Light & Heat Co. The first three of these companies are, like Hope, subsidiaries of Standard Oil Co.

(N.J.). East Ohio and River distribute gas in Ohio, the other three in Pennsylvania. Hope's approximate sales in m.c.f. for 1940 may be classified as follows:

Local West Virginia.

sales.	11,000,000
East Ohio.	40,000,000
Peoples.	10,000,000
River.	400,000
Fayette.	860,000
Manufacturers.	2,000,000

Local West Virginia

Hope's natural gas is processed by Hope Construction & Refining Co., an affiliate, for the extraction of gasoline and butane. Domestic Coke Corp., another affiliate, sells coke-oven gas to Hope for boiler fuel.

On May 26, 1942, the Commission entered its order and made its findings. Its order required Hope to decrease its future interstate rates so as to reflect a reduction, on an annual basis of not less than \$3,609,857 in operating revenues. And it established 'just and reasonable' average rates per m.c.f. for each of the five customer companies. ^{FN3} In response to the prayer of the City of Cleveland the Commission also made findings as to the lawfulness of past rates, although concededly it had no authority under the Act to fix past rates or to award reparations. 44 P.U.R.,U.S., at page 34. It found that the rates collected by Hope from East Ohio were unjust, unreasonable, excessive and therefore unlawful, by \$830,892 during 1939, \$3,219,551 during 1940, and \$2,815,789 on an annual basis since 1940. It further found that just, reasonable, and lawful rates for gas sold by Hope to East Ohio for resale for ultimate public consumption were those required *596 to produce \$11,528,608 for 1939, \$11,507,185 for 1940 and \$11,910,947 annually since 1940.

^{FN3} These required minimum reductions of 7¢ per m.c.f. from the 36.5¢ and 35.5¢ rates previously charged East Ohio and Peoples, respectively, and 3¢ per m.c.f. from the 31.5¢ rate previously charged Fayette and Manufacturers.

The Commission established an interstate rate base of \$33,712,526 which, it found, represented the 'actual legitimate cost' of the company's interstate property less depletion and depreciation and plus unoperated acreage, working capital and future net capital additions. The Commission, beginning with book cost, made **285

certain adjustments not necessary to relate here and found the 'actual legitimate cost' of the plant in interstate service to be \$51,957,416, as of December 31, 1940. It deducted accrued depletion and depreciation, which it found to be \$22,328,016 on an 'economic-service-life' basis. And it added \$1,392,021 for future net capital additions, \$566,105 for useful unoperated acreage, and \$2,125,000 for working capital. It used 1940 as a test year to estimate future revenues and expenses. It allowed over \$16,000,000 as annual operating expenses-about \$1,300,000 for taxes, \$1,460,000 for depletion and depreciation, \$600,000 for exploration and development costs, \$8,500,000 for gas purchased. The Commission allowed a net increase of \$421,160 over 1940 operating expenses, which amount was to take care of future increase in wages, in West Virginia property taxes, and in exploration and development costs. The total amount of deductions allowed from interstate revenues was \$13,495,584.

Hope introduced evidence from which it estimated reproduction cost of the property at \$97,000,000. It also presented a so-called trended 'original cost' estimate which exceeded \$105,000,000. The latter was designed 'to indicate what the original cost of the property would have been if 1938 material and labor prices had prevailed throughout the whole period of the piece-meal construction of the company's property since 1898.' 44 P.U.R.,N.S., at pages 8, 9. Hope estimated by the 'percent condition' method accrued depreciation at about 35% of *597 reproduction cost new. On that basis Hope contended for a rate base of \$66,000,000. The Commission refused to place any reliance on reproduction cost new, saying that it was 'not predicated upon facts' and was 'too conjectural and illusory to be given any weight in these proceedings.' Id., 44 P.U.R.,U.S., at page 8. It likewise refused to give any 'probative value' to trended 'original cost' since it was 'not founded in fact' but was 'basically erroneous' and produced 'irrational results.' Id., 44 P.U.R., N.S., at page 9. In determining the amount of accrued depletion and depreciation the Commission, following Lindheimer v. Illinois Bell

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Telephone Co., 292 U.S. 151, 167-169, 54 S.Ct. 658, 664-666, 78 L.Ed. 1182; Federal Power Commission v. Natural Gas Pipeline Co., 315 U.S. 575, 592, 593, 62 S.Ct. 736, 745, 746, 86 L.Ed. 1037, based its computation on 'actual legitimate cost'. It found that Hope during the years when its business was not under regulation did not observe 'sound depreciation and depletion practices' but 'actually accumulated an excessive reserve' ^{FN4} of about \$46,000,000. *Id.*, 44 P.U.R.,N.S., at page 18. One member of the Commission thought that the entire amount of the reserve should be deducted from 'actual legitimate cost' in determining the rate base. ^{FN5} The majority of the *598 Commission concluded, however, that where, as here, a business is brought under regulation for the first time and where incorrect depreciation and depletion practices have prevailed, the deduction of the reserve requirement (actual existing depreciation and depletion) rather than the excessive reserve should be made so as to **286 lay 'a sound basis for future regulation and control of rates.' *Id.*, 44 P.U.R.,N.S., at page 18. As we have pointed out, it determined accrued depletion and depreciation to be \$22,328,016; and it allowed approximately \$1,460,000 as the annual operating expense for depletion and depreciation. ^{FN6}

^{FN4} The book reserve for interstate plant amounted at the end of 1938 to about \$18,000,000 more than the amount determined by the Commission as the proper reserve requirement. The Commission also noted that 'twice in the past the company has transferred amounts aggregating \$7,500,000 from the depreciation and depletion reserve to surplus. When these latter adjustments are taken into account, the excess becomes \$25,500,000, which has been exacted from the ratepayers over and above the amount required to cover the consumption of property in the service rendered and thus to keep the investment unimpaired.' 44 P.U.R.,N.S., at page 22.

^{FN5} That contention was based on the fact that 'every single dollar in the depreciation and depletion reserves' was taken 'from gross operating revenues whose only source was the amounts charged customers in the past for natural gas. It is, therefore, a fact that the depreciation and depletion reserves have been contributed by the customers and do not represent any investment by Hope.' *Id.*, 44 P.U.R.,N.S., at page 40. And see Railroad Commission v. Cumberland Tel. & T. Co., 212 U.S. 414, 424, 425, 29 S.Ct. 357, 361, 362, 53 L.Ed. 577; 2 Bonbright, Valuation of Property

(1937), p. 1139.

^{FN6} The Commission noted that the case was 'free from the usual complexities involved in the estimate of gas reserves because the geologists for the company and the Commission presented estimates of the remaining recoverable gas reserves which were about one per cent apart.' 44 P.U.R.,N.S., at pages 19, 20.

The Commission utilized the 'straight-line-basis' for determining the depreciation and depletion reserve requirements. It used estimates of the average service lives of the property by classes based in part on an inspection of the physical condition of the property. And studies were made of Hope's retirement experience and maintenance policies over the years. The average service lives of the various classes of property were converted into depreciation rates and then applied to the cost of the property to ascertain the portion of the cost which had expired in rendering the service.

The record in the present case shows that Hope is on the lookout for new sources of supply of natural gas and is contemplating an extension of its pipe line into Louisiana for that purpose. The Commission recognized in fixing the rates of depreciation that much material may be used again when various present sources of gas supply are exhausted, thus giving that property more than scrap value at the end of its present use.

Hope's estimate of original cost was about \$69,735,000-approximately \$17,000,000 more than the amount found by the Commission. The item of \$17,000,000 was made up largely of expenditures which prior to December 31, 1938, were charged to operating expenses. Chief among those expenditures was some \$12,600,000 expended *599 in well-drilling prior to 1923. Most of that sum was expended by Hope for labor, use of drilling-rigs, hauling, and similar costs of well-drilling. Prior to 1923 Hope followed the general practice of the natural gas industry and charged the cost of drilling wells to operating expenses. Hope continued that practice until the Public Service Commission of West Virginia in 1923 required it to capitalize such expenditures, as does the Commission under its present Uniform System of Accounts. ^{FN7} The Commission refused to add such items to the rate base stating that 'No greater injustice to consumers could be done than to allow items as operating expenses and at a later date include them in the rate base, thereby placing multiple charges upon the consumers.' *Id.*, 44 P.U.R.,N.S., at page 12. For the same reason the Commission excluded from the rate base about \$1,600,000 of expenditures on properties which Hope acquired from other utilities, the latter having charged those payments to operating expenses. The Commission disallowed certain other overhead items amounting to

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over \$3,000,000 which also had been previously charged to operating expenses. And it refused to add some \$632,000 as interest during construction since no interest was in fact paid.

FN7 See Uniform System of Accounts prescribed for Natural Gas Companies effective January 1, 1940, Account No. 332.1.

Hope contended that it should be allowed a return of not less than 8%. The Commission found that an 8% return would be unreasonable but that 6 1/2% was a fair rate of return. That rate of return, applied to the rate base of \$33,712,526, would produce \$2,191,314 annually, as compared with the present income of not less than \$5,801,171.

The Circuit Court of Appeals set aside the order of the Commission for the following reasons. (1) It held that the rate base should reflect the 'present fair value' of the *600 property, that the Commission in determining the 'value' should have considered reproduction cost and trended original cost, and that 'actual legitimate cost' (prudent investment) was not the proper measure of 'fair value' where price levels had changed since the investment. (2) It concluded that the well-drilling costs and overhead items in the amount of some \$17,000,000 should have been included in the rate base. (3) It held that accrued depletion and depreciation and the annual allowance for that expense should be computed on the basis of 'present fair value' of the property not on the basis of 'actual legitimate cost'.

****287** The Circuit Court of Appeals also held that the Commission had no power to make findings as to past rates in aid of state regulation. But it concluded that those findings were proper as a step in the process of fixing future rates. Viewed in that light, however, the findings were deemed to be invalidated by the same errors which vitiated the findings on which the rate order was based.

Order Reducing Rates. Congress has provided in s 4(a) of the Natural Gas Act that all natural gas rates subject to the jurisdiction of the Commission 'shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful.' Sec. 5(a) gives the Commission the power, after hearing, to determine the 'just and reasonable rate' to be thereafter observed and to fix the rate by order. Sec. 5(a) also empowers the Commission to order a 'decrease where existing rates are unjust * * * unlawful, or are not the lowest reasonable rates.' And Congress has provided in s 19(b) that on review of these rate orders the 'finding of the Commission as to the facts, if supported by substantial

evidence, shall be conclusive.' Congress, however, has provided no formula by which the 'just and reasonable' rate is to be determined. It has not filled in the *601 details of the general prescription FN8 of s 4(a) and s 5(a). It has not expressed in a specific rule the fixed principle of 'just and reasonable'.

FN8. Sec. 6 of the Act comes the closest to supplying any definite criteria for rate making. It provides in subsection (a) that, 'The Commission may investigate the ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property.' Subsection (b) provides that every natural-gas company on request shall file with the Commission a statement of the 'original cost' of its property and shall keep the Commission informed regarding the 'cost' of all additions, etc.

[1] [2] When we sustained the constitutionality of the Natural Gas Act in the Natural Gas Pipeline Co. case, we stated that the 'authority of Congress to regulate the prices of commodities in interstate commerce is at least as great under the Fifth Amendment as is that of the states under the Fourteenth to regulate the prices of commodities in intrastate commerce.' 315 U.S. at page 582, 62 S.Ct. at page 741, 86 L.Ed. 1037. Rate-making is indeed but one species of price-fixing. Munn v. Illinois, 94 U.S. 113, 134, 24 L.Ed. 77. The fixing of prices, like other applications of the police power, may reduce the value of the property which is being regulated. But the fact that the value is reduced does not mean that the regulation is invalid. Block v. Hirsh, 256 U.S. 135, 155-157, 41 S.Ct. 458, 459, 460, 65 L.Ed. 865, 16 A.L.R. 165; Nebbia v. New York, 291 U.S. 502, 523-539, 54 S.Ct. 505, 509-517, 78 L.Ed. 940, 89 A.L.R. 1469, and cases cited. It does, however, indicate that 'fair value' is the end product of the process of rate-making not the starting point as the Circuit Court of Appeals held. The heart of the matter is that rates cannot be made to depend upon 'fair value' when the value of the going enterprise depends on earnings under whatever rates may be anticipated. FN9

FN9 We recently stated that the meaning of the word 'value' is to be gathered 'from the purpose for which a valuation is being made. Thus the question in a valuation for rate making is how much a utility will be allowed to earn. The basic

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question in a valuation for reorganization purposes is how much the enterprise in all probability can earn.' Institutional Investors v. Chicago, M., St. P. & P.R. Co., 318 U.S. 523, 540, 63 S.Ct. 727, 738.

602** [3] [4] [5] [6] [7] We held in Federal Power Commission v. Natural Gas Pipeline Co., supra, that the Commission was not bound to the use of any single formula or combination of formulae in determining rates. Its rate-making function, moreover, involves the making of 'pragmatic adjustments.' Id., 315 U.S. at page 586, 62 S.Ct. at page 743, 86 L.Ed. 1037. And when the Commission's order is challenged in the courts, the question is whether that order 'viewed in its entirety' meets the requirements of the Act. Id., 315 U.S. at page 586, 62 S.Ct. at page 743, 86 L.Ed. 1037. Under the statutory standard of 'just and reasonable' it is the result reached not the method employed which is controlling. Cf. *288** Los Angeles Gas & Electric Corp. v. Railroad Commission, 289 U.S. 287, 304, 305, 314, 53 S.Ct. 637, 643, 644, 647, 77 L.Ed. 1180; West Ohio Gas Co. v. Public Utilities Commission (No. 1), 294 U.S. 63, 70, 55 S.Ct. 316, 320, 79 L.Ed. 761; West v. Chesapeake & Potomac Tel. Co., 295 U.S. 662, 692, 693, 55 S.Ct. 894, 906, 907, 79 L.Ed. 1640 (dissenting opinion). It is not theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry under the Act is at an end. The fact that the method employed to reach that result may contain infirmities is not then important. Moreover, the Commission's order does not become suspect by reason of the fact that it is challenged. It is the product of expert judgment which carries a presumption of validity. And he who would upset the rate order under the Act carries the heavy burden of making a convincing showing that it is invalid because it is unjust and unreasonable in its consequences. Cf. Railroad Commission v. Cumberland Tel. & T. Co., 212 U.S. 414, 29 S.Ct. 357, 53 L.Ed. 577; Lindheimer v. Illinois Bell Tel. Co., supra, 292 U.S. at pages 164, 169, 54 S.Ct. at pages 663, 665, 78 L.Ed. 1182; Railroad Commission v. Pacific Gas & E. Co., 302 U.S. 388, 401, 58 S.Ct. 334, 341, 82 L.Ed. 319.

***603** [8] [9] The rate-making process under the Act, i.e., the fixing of 'just and reasonable' rates, involves a balancing of the investor and the consumer interests. Thus we stated in the Natural Gas Pipeline Co. case that 'regulation does not insure that the business shall produce net revenues.' 315 U.S. at page 590, 62 S.Ct. at page 745, 86 L.Ed. 1037. But such considerations aside, the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it

is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. Cf. Chicago & Grand Trunk R. Co. v. Wellman, 143 U.S. 339, 345, 346, 12 S.Ct. 400, 402, 36 L.Ed. 176. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital. See State of Missouri ex rel. South-western Bell Tel. Co. v. Public Service Commission, 262 U.S. 276, 291, 43 S.Ct. 544, 547, 67 L.Ed. 981, 31 A.L.R. 807 (Mr. Justice Brandeis concurring). The conditions under which more or less might be allowed are not important here. Nor is it important to this case to determine the various permissible ways in which any rate base on which the return is computed might be arrived at. For we are of the view that the end result in this case cannot be condemned under the Act as unjust and unreasonable from the investor or company viewpoint.

We have already noted that Hope is a wholly owned subsidiary of the Standard Oil Co. (N.J.). It has no securities outstanding except stock. All of that stock has been owned by Standard since 1908. The par amount presently outstanding is approximately \$28,000,000 as compared with the rate base of \$33,712,526 established by ***604** the Commission. Of the total outstanding stock \$11,000,000 was issued in stock dividends. The balance, or about \$17,000,000, was issued for cash or other assets. During the four decades of its operations Hope has paid over \$97,000,000 in cash dividends. It had, moreover, accumulated by 1940 an earned surplus of about \$8,000,000. It had thus earned the total investment in the company nearly seven times. Down to 1940 it earned over 20% per year on the average annual amount of its capital stock issued for cash or other assets. On an average invested capital of some \$23,000,000 Hope's average earnings have been about 12% a year. And during this period it had accumulated in addition reserves for depletion and depreciation of about \$46,000,000. Furthermore, during 1939, 1940 and 1941, Hope paid dividends of 10% on its stock. And in the year 1942, during about half of which the lower rates were in effect, it paid dividends of 7 1/2%. From 1939-1942 its earned surplus increased from \$5,250,000 to about \$13,700,000, i.e., to almost half the par value of its outstanding stock.

As we have noted, the Commission fixed a rate of return which permits Hope to earn \$2,191,314 annually. In determining that amount it stressed the importance of maintaining the financial integrity of the ****289** company. It considered the financial history of Hope and a vast

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array of data bearing on the natural gas industry, related businesses, and general economic conditions. It noted that the yields on better issues of bonds of natural gas companies sold in the last few years were 'close to 3 per cent', 44 P.U.R.,N.S., at page 33. It stated that the company was a 'seasoned enterprise whose risks have been minimized' by adequate provisions for depletion and depreciation (past and present) with 'concurrent high profits', by 'protected established markets, through affiliated distribution companies, in populous and industrialized areas', and by a supply of gas locally to meet all requirements,*605 'except on certain peak days in the winter, which it is feasible to supplement in the future with gas from other sources.' Id., 44 P.U.R.,N.S., at page 33. The Commission concluded, 'The company's efficient management, established markets, financial record, affiliations, and its prospective business place it in a strong position to attract capital upon favorable terms when it is required.' Id., 44 P.U.R.,N.S., at page 33.

[10] [11] [12] In view of these various considerations we cannot say that an annual return of \$2,191,314 is not 'just and reasonable' within the meaning of the Act. Rates which enable the company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risks assumed certainly cannot be condemned as invalid, even though they might produce only a meager return on the so-called 'fair value' rate base. In that connection it will be recalled that Hope contended for a rate base of \$66,000,000 computed on reproduction cost new. The Commission points out that if that rate base were accepted, Hope's average rate of return for the four-year period from 1937-1940 would amount to 3.27%. During that period Hope earned an annual average return of about 9% on the average investment. It asked for no rate increases. Its properties were well maintained and operated. As the Commission says such a modest rate of 3.27% suggests an 'inflation of the base on which the rate has been computed.' Dayton Power & Light Co. v. Public Utilities Commission, 292 U.S. 290, 312, 54 S.Ct. 647, 657, 78 L.Ed. 1267. Cf. Lindheimer v. Illinois Bell Tel. Co., supra, 292 U.S. at page 164, 54 S.Ct. at page 663, 78 L.Ed. 1182. The incongruity between the actual operations and the return computed on the basis of reproduction cost suggests that the Commission was wholly justified in rejecting the latter as the measure of the rate base.

In view of this disposition of the controversy we need not stop to inquire whether the failure of the Commission to add the \$17,000,000 of well-drilling and other costs to *606 the rate base was consistent with the prudent investment theory as developed and applied in particular cases.

[13] [14] [15] Only a word need be added respecting depletion and depreciation. We held in the Natural Gas Pipeline Co. case that there was no constitutional requirement 'that the owner who embarks in a wasting-asset business of limited life shall receive at the end more than he has put into it.' 315 U.S. at page 593, 62 S.Ct. at page 746, 86 L.Ed. 1037. The Circuit Court of Appeals did not think that that rule was applicable here because Hope was a utility required to continue its service to the public and not scheduled to end its business on a day certain as was stipulated to be true of the Natural Gas Pipeline Co. But that distinction is quite immaterial. The ultimate exhaustion of the supply is inevitable in the case of all natural gas companies. Moreover, this Court recognized in Lindheimer v. Illinois Bell Tel. Co., supra, the propriety of basing annual depreciation on cost.^{FN10} By such a procedure the **290 utility is made whole and the integrity of its investment maintained.^{FN11} No more is required.^{FN12} We cannot approve the contrary holding *607 of United Railways & Electric Co. v. West, 280 U.S. 234, 253, 254, 50 S.Ct. 123, 126, 127, 74 L.Ed. 390. Since there are no constitutional requirements more exacting than the standards of the Act, a rate order which conforms to the latter does not run afoul of the former.

^{FN10} Chief Justice Hughes said in that case (292 U.S. at pages 168, 169, 54 S.Ct. at page 665, 78 L.Ed. 1182): 'If the predictions of service life were entirely accurate and retirements were made when and as these predictions were precisely fulfilled, the depreciation reserve would represent the consumption of capital, on a cost basis, according to the method which spreads that loss over the respective service periods. But if the amounts charged to operating expenses and credited to the account for depreciation reserve are excessive, to that extent subscribers for the telephone service are required to provide, in effect, capital contributions, not to make good losses incurred by the utility in the service rendered and thus to keep its investment unimpaired, but to secure additional plant and equipment upon which the utility expects a return.'

^{FN11} See Mr. Justice Brandeis (dissenting) in United Railways & Electric Co. v. West, 280 U.S. 234, 259-288, 50 S.Ct. 123, 128-138, 74 L.Ed. 390, for an extended analysis of the problem.

^{FN12} It should be noted that the Act provides no specific rule governing depletion and depreciation. Sec. 9(a) merely states that the

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Commission 'may from time to time ascertain and determine, and by order fix, the proper and adequate rates of depreciation and amortization of the several classes of property of each natural-gas company used or useful in the production, transportation, or sale of natural gas.'

The Position of West Virginia. The State of West Virginia, as well as its Public Service Commission, intervened in the proceedings before the Commission and participated in the hearings before it. They have also filed a brief amicus curiae here and have participated in the argument at the bar. Their contention is that the result achieved by the rate order 'brings consequences which are unjust to West Virginia and its citizens' and which 'unfairly depress the value of gas, gas lands and gas leaseholds, unduly restrict development of their natural resources, and arbitrarily transfer their properties to the residents of other states without just compensation therefor.'

West Virginia points out that the Hope Natural Gas Co. holds a large number of leases on both producing and unoperated properties. The owner or grantor receives from the operator or grantee delay rentals as compensation for postponed drilling. When a producing well is successfully brought in, the gas lease customarily continues indefinitely for the life of the field. In that case the operator pays a stipulated gas-well rental or in some cases a gas royalty equivalent to one-eighth of the gas marketed.^{FN13} Both the owner and operator have valuable property interests in the gas which are separately taxable under West Virginia law. The contention is that the reversionary interests in the leaseholds should be represented in the rate proceedings since it is their gas which is being sold in interstate *608 commerce. It is argued, moreover, that the owners of the reversionary interests should have the benefit of the 'discovery value' of the gas leaseholds, not the interstate consumers. Furthermore, West Virginia contends that the Commission in fixing a rate for natural gas produced in that State should consider the effect of the rate order on the economy of West Virginia. It is pointed out that gas is a wasting asset with a rapidly diminishing supply. As a result West Virginia's gas deposits are becoming increasingly valuable. Nevertheless the rate fixed by the Commission reduces that value. And that reduction, it is said, has severe repercussions on the economy of the State. It is argued in the first place that as a result of this rate reduction Hope's West Virginia property taxes may be decreased in view of the relevance which earnings have under West Virginia law in the assessment of property for tax purposes.^{FN14} Secondly, it is pointed out that West Virginia has a production tax^{FN15} on the 'value' of the gas exported from the State. And we are told that

for purposes of that tax 'value' becomes under West Virginia law 'practically the substantial equivalent of market value.' Thus West Virginia argues that undervaluation of Hope's gas leaseholds will cost the State many thousands of dollars in taxes. The effect, it is urged, is to impair West Virginia's tax structure for the benefit of Ohio and Pennsylvania consumers. West Virginia emphasizes, moreover, its deep interest in the conservation of its natural resources including its natural gas. It says that a reduction of the value of these leasehold values will jeopardize these conservation policies in three respects: (1) **291 exploratory development of new fields will be discouraged; (2) abandonment of lowyield high-cost marginal wells will be hastened; and (3) secondary recovery of oil will be hampered. *609 Furthermore, West Virginia contends that the reduced valuation will harm one of the great industries of the State and that harm to that industry must inevitably affect the welfare of the citizens of the State. It is also pointed out that West Virginia has a large interest in coal and oil as well as in gas and that these forms of fuel are competitive. When the price of gas is materially cheapened, consumers turn to that fuel in preference to the others. As a result this lowering of the price of natural gas will have the effect of depreciating the price of West Virginia coal and oil.

^{FN13} See Simonton, *The Nature of the Interest of the Grantee Under an Oil and Gas Lease* (1918), 25 W.Va.L.Quar. 295.

^{FN14} *West Penn Power Co. v. Board of Review*, 112 W.Va. 442, 164 S.E. 862.

^{FN15} W.Va.Rev.Code of 1943, ch. 11. Art. 13, ss 2a, 3a.

West Virginia insists that in neglecting this aspect of the problem the Commission failed to perform the function which Congress entrusted to it and that the case should be remanded to the Commission for a modification of its order.^{FN16}

^{FN16} West Virginia suggests as a possible solution (1) that a 'going concern value' of the company's tangible assets be included in the rate base and (2) that the fair market value of gas delivered to customers be added to the outlay for operating expenses and taxes.

We have considered these contentions at length in view of the earnestness with which they have been urged upon us. We have searched the legislative history of the Natural

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Gas Act for any indication that Congress entrusted to the Commission the various considerations which West Virginia has advanced here. And our conclusion is that Congress did not.

[16] [17] We pointed out in Illinois Natural Gas Co. v. Central Illinois Public Service Co., 314 U.S. 498, 506, 62 S.Ct. 384, 387, 86 L.Ed. 371, that the purpose of the Natural Gas Act was to provide, 'through the exercise of the national power over interstate commerce, an agency for regulating the wholesale distribution to public service companies of natural gas moving interstate, which this Court had declared to be interstate commerce not subject to certain types of state regulation.' As stated in the House Report the 'basic purpose' of this legislation was 'to occupy' the field in which such cases as *610 State of Missouri v. Kansas Natural Gas Co., 265 U.S. 298, 44 S.Ct. 544, 68 L.Ed. 1027, and Public Utilities Commission v. Attleboro Steam & Electric Co., 273 U.S. 83, 47 S.Ct. 294, 71 L.Ed. 549, had held the States might not act. H.Rep. No. 709, 75th Cong., 1st Sess., p. 2. In accomplishing that purpose the bill was designed to take 'no authority from State commissions' and was 'so drawn as to complement and in no manner usurp State regulatory authority.' Id., p. 2. And the Federal Power Commission was given no authority over the 'production or gathering of natural gas.' s 1(b).

[18] The primary aim of this legislation was to protect consumers against exploitation at the hands of natural gas companies. Due to the hiatus in regulation which resulted from the Kansas Natural Gas Co. case and related decisions state commissions found it difficult or impossible to discover what it cost interstate pipe-line companies to deliver gas within the consuming states; and thus they were thwarted in local regulation. H.Rep., No. 709, supra, p. 3. Moreover, the investigations of the Federal Trade Commission had disclosed that the majority of the pipe-line mileage in the country used to transport natural gas, together with an increasing percentage of the natural gas supply for pipe-line transportation, had been acquired by a handful of holding companies. ^{FN17} State commissions, independent producers, and communities having or seeking the service were growing quite helpless against these combinations. ^{FN18} These were the types of problems with which those participating in the hearings were pre-occupied. ^{FN19} Congress addressed itself to those specific evils.

^{FN17} S.Doc. 92, Pt. 84-A, ch. XII, Final Report, Federal Trade Commission to the Senate pursuant to S.Res.No. 83, 70th Cong., 1st Sess.

^{FN18} S.Doc. 92, Pt. 84-A, chs. XII, XIII, op.

cit., supra, note 17.

^{FN19} See Hearings on H.R. 11662, Subcommittee of House Committee on Interstate & Foreign Commerce, 74th Cong., 2d Sess.; Hearings on H.R. 4008, House Committee on Interstate & Foreign Commerce, 75th Cong., 1st Sess.

*611 The Federal Power Commission was given**292 broad powers of regulation. The fixing of 'just and reasonable' rates (s 4) with the powers attendant thereto ^{FN20} was the heart of the new regulatory system. Moreover, the Commission was given certain authority by s 7(a), on a finding that the action was necessary or desirable 'in the public interest,' to require natural gas companies to extend or improve their transportation facilities and to sell gas to any authorized local distributor. By s 7(b) it was given control over the abandonment of facilities or of service. And by s 7(c), as originally enacted, no natural gas company could undertake the construction or extension of any facilities for the transportation of natural gas to a market in which natural gas was already being served by another company, or sell any natural gas in such a market, without obtaining a certificate of public convenience and necessity from the Commission. In passing on such applications for certificates of convenience and necessity the Commission was told by s 7(c), as originally enacted, that it was 'the intention of Congress that natural gas shall be sold in interstate commerce for resale for ultimate public consumption for domestic, commercial, industrial, or any other use at the lowest possible reasonable rate consistent with the maintenance of adequate service in the public interest.' The latter provision was deleted from s 7(c) when that subsection was amended by the Act of February 7, 1942, 56 Stat. 83. By that amendment limited grandfather rights were granted companies desiring to extend their facilities and services over the routes or within the area which they were already serving. Moreover, s 7(c) was broadened so as to require certificates*612 of public convenience and necessity not only where the extensions were being made to markets in which natural gas was already being sold by another company but in other situations as well.

^{FN20} The power to investigate and ascertain the 'actual legitimate cost' of property (s 6), the requirement as to books and records (s 8), control over rates of depreciation (s 9), the requirements for periodic and special reports (s 10), the broad powers of investigation (s 14) are among the chief powers supporting the rate making function.

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[19] These provisions were plainly designed to protect the consumer interests against exploitation at the hands of private natural gas companies. When it comes to cases of abandonment or of extensions of facilities or service, we may assume that, apart from the express exemptions ^{FN21} contained in s 7, considerations of conservation are material to the issuance of certificates of public convenience and necessity. But the Commission was not asked here for a certificate of public convenience and necessity under s 7 for any proposed construction or extension. It was faced with a determination of the amount which a private operator should be allowed to earn from the sale of natural gas across state lines through an established distribution system. Secs. 4 and 5, not s 7, provide the standards for that determination. We cannot find in the words of the Act or in its history the slightest intimation or suggestion that the exploitation of consumers by private operators through the maintenance of high rates should be allowed to continue provided the producing states obtain indirect benefits from it. That apparently was the Commission's view of the matter, for the same arguments advanced here were presented to the Commission and not adopted by it.

^{FN21} Apart from the grandfather clause contained in s 7(c), there is the provision of s 7(f) that a natural gas company may enlarge or extend its facilities with the 'service area' determined by the Commission without any further authorization.

We do not mean to suggest that Congress was unmindful of the interests of the producing states in their natural gas supplies when it drafted the Natural Gas Act. As we have said, the Act does not intrude on the domain traditionally reserved for control by state commissions; and the Federal Power Commission was given no authority over*613 'the production or gathering of natural gas.' s 1(b). In addition, Congress recognized the legitimate interests of the States in the conservation of natural gas. By s 11 Congress instructed the Commission to make reports on compacts between two or more States dealing with the conservation, production and transportation of natural gas. ^{FN22} The Commission was also **293 directed to recommend further legislation appropriate or necessary to carry out any proposed compact and 'to aid in the conservation of natural-gas resources within the United States and in the orderly, equitable, and economic production, transportation, and distribution of natural gas.' s 11(a). Thus Congress was quite aware of the interests of the producing states in their natural gas supplies. ^{FN23} But it left the protection of *614 those interests to measures other than the maintenance of high

rates to private companies. If the Commission is to be compelled to let the stockholders of natural gas companies have a feast so that the producing states may receive crumbs from that table, the present Act must be redesigned. Such a project raises questions of policy which go beyond our province.

^{FN22} See P.L. 117, approved July 7, 1943, 57 Stat. 383 containing an 'Interstate Compact to Conserve Oil and Gas' between Oklahoma, Texas, New Mexico, Illinois, Colorado, and Kansas.

^{FN23} As we have pointed out, s 7(c) was amended by the Act of February 7, 1942, 56 Stat. 83, so as to require certificates of public convenience and necessity not only where the extensions were being made to markets in which natural gas was already being sold by another company but to other situations as well. Considerations of conservation entered into the proposal to give the Act that broader scope. H.Rep.No. 1290, 77th Cong. 1st Sess., pp. 2, 3. And see Annual Report, Federal Power Commission (1940) pp. 79, 80; Baum, The Federal Power Commission and State Utility Regulation (1942), p. 261.

The bill amending s 7(c) originally contained a subsection (h) reading as follows: 'Nothing contained in this section shall be construed to affect the authority of a State within which natural gas is produced to authorize or require the construction or extension of facilities for the transportation and sale of such gas within such State: Provided, however, That the Commission, after a hearing upon complaint or upon its own motion, may by order forbid any intrastate construction or extension by any natural-gas company which it shall find will prevent such company from rendering adequate service to its customers in interstate or foreign commerce in territory already being served.' See Hearings on H.R. 5249, House Committee on Interstate & Foreign Commerce, 77th Cong., 1st Sess., pp. 7, 11, 21, 29, 32, 33. In explanation of its deletion the House Committee Report stated, pp. 4, 5: 'The increasingly important problems raised by the desire of several States to regulate the use of the natural gas produced therein in the interest of consumers within such States, as against the Federal power to regulate interstate commerce in the interest of both interstate and intrastate consumers, are deemed by the committee to warrant further intensive study and probably a more retailed and comprehensive plan for the handling thereof than that which would have been provided by the stricken subsection.'

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[20] It is hardly necessary to add that a limitation on the net earnings of a natural gas company from its interstate business is not a limitation on the power of the producing state either to safeguard its tax revenues from that industry ^{FN24} or to protect the interests of those who sell their gas to the interstate operator. ^{FN25} The return which ****294** the Commission ***615** allowed was the net return after all such charges.

^{FN24} We have noted that in the annual operating expenses of some \$16,000,000 the Commission included West Virginia and federal taxes. And in the net increase of \$421,160 over 1940 operating expenses allowed by the Commission was some \$80,000 for increased West Virginia property taxes. The adequacy of these amounts has not been challenged here.

^{FN25} The Commission included in the aggregate annual operating expenses which it allowed some \$8,500,000 for gas purchased. It also allowed about \$1,400,000 for natural gas production and about \$600,000 for exploration and development.

It is suggested, however, that the Commission in ascertaining the cost of Hope's natural gas production plant proceeded contrary to s 1(b) which provides that the Act shall not apply to 'the production or gathering of natural gas'. But such valuation, like the provisions for operating expenses, is essential to the rate-making function as customarily performed in this country. Cf. Smith, *The Control of Power Rates in the United States and England* (1932), 159 *The Annals* 101. Indeed s 14(b) of the Act gives the Commission the power to 'determine the propriety and reasonableness of the inclusion in operating expenses, capital, or surplus of all delay rentals or other forms of rental or compensation for unoperated lands and leases.'

It is suggested that the Commission has failed to perform its duty under the Act in that it has not allowed a return for gas production that will be enough to induce private enterprise to perform completely and efficiently its functions for the public. The Commission, however, was not oblivious of those matters. It considered them. It allowed, for example, delay rentals and exploration and development costs in operating expenses. ^{FN26} No serious attempt has been made here to show that they are inadequate. We certainly cannot say that they are, unless we are to substitute our opinions for the expert judgment of the administrators to whom Congress entrusted the decision. Moreover, if in light of experience they turn out to be inadequate for development of new sources of supply, the doors of the Commission are open for

increased allowances. This is not an order for all time. The Act contains machinery for obtaining rate adjustments. s 4.

^{FN26} See note 25, supra.

[21] [22] But it is said that the Commission placed too low a rate on gas for industrial purposes as compared with gas for domestic purposes and that industrial uses should be discouraged. It should be noted in the first place that the rates which the Commission has fixed are Hope's interstate wholesale rates to distributors not interstate rates to industrial users ^{FN27} and domestic consumers. We hardly ***616** can assume, in view of the history of the Act and its provisions, that the resales intrastate by the customer companies which distribute the gas to ultimate consumers in Ohio and Pennsylvania are subject to the rate-making powers of the Commission. ^{FN28} But in any event those rates are not in issue here. Moreover, we fail to find in the power to fix 'just and reasonable' rates the power to fix rates which will disallow or discourage resales for industrial use. The Committee Report stated that the Act provided 'for regulation along recognized and more or less standardized lines' and that there was 'nothing novel in its provisions'. H.Rep.No.709, supra, p. 3. Yet if we are now to tell the Commission to fix the rates so as to discourage particular uses, we would indeed be injecting into a rate case a 'novel' doctrine which has no express statutory sanction. The same would be true if we were to hold that the wasting-asset nature of the industry required the maintenance of the level of rates so that natural gas companies could make a greater profit on each unit of gas sold. Such theories of rate-making for this industry may or may not be desirable. The difficulty is that s 4(a) and s 5(a) contain only the conventional standards of rate-making for natural gas companies. ^{FN29} The ***617** Act of February 7, 1942, by broadening s 7 gave the Commission some additional authority to deal with the conservation aspects of the problem. ^{FN30} But s 4(a) and s 5(a) were not changed. If the standard ****295** of 'just and reasonable' is to sanction the maintenance of high rates by a natural gas company because they restrict the use of natural gas for certain purposes, the Act must be further amended.

^{FN27} The Commission has expressed doubts over its power to fix rates on 'direct sales to industries' from interstate pipelines as distinguished from 'sales for resale to the industrial customers of distributing companies.' Annual Report, Federal Power Commission (1940), p. 11.

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FN28. Sec. 1(b) of the Act provides: 'The provisions of this Act shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas.' And see s 2(6), defining a 'natural-gas company', and H.Rep.No. 709, supra, pp. 2, 3.

FN29 The wasting-asset characteristic of the industry was recognized prior to the Act as requiring the inclusion of a depletion allowance among operating expenses. See Columbus Gas & Fuel Co. v. Public Utilities Commission, 292 U.S. 398, 404, 405, 54 S.Ct. 763, 766, 767, 78 L.Ed. 1327, 91 A.L.R. 1403. But no such theory of rate-making for natural gas companies as is now suggested emerged from the cases arising during the earlier period of regulation.

FN30 The Commission has been alert to the problems of conservation in its administration of the Act. It has indeed suggested that it might be wise to restrict the use of natural gas 'by functions rather than by areas.' Annual Report (1940) p. 79.

The Commission stated in that connection that natural gas was particularly adapted to certain industrial uses. But it added that the general use of such gas 'under boilers for the production of steam' is 'under most circumstances of very questionable social economy.' Ibid.

[23] [24] It is finally suggested that the rates charged by Hope are discriminatory as against domestic users and in favor of industrial users. That charge is apparently based on s 4(b) of the Act which forbids natural gas companies from maintaining 'any unreasonable difference in rates, charges, service, facilities, or in any other respect, either as between localities or as between classes of service.' The power of the Commission to eliminate any such unreasonable differences or discriminations is plain. s 5(a). The Commission, however, made no findings under s 4(b). Its failure in that regard was not challenged in the petition to review. And it has not been raised or argued here by any party. Hence the problem of discrimination has no proper place in the present decision. It will be time enough to pass on that issue when it is presented to us. Congress has entrusted the administration of the Act

to the Commission not to the courts. Apart from the requirements of judicial review it is not *618 for us to advise the Commission how to discharge its functions.

Findings as to the Lawfulness of Past Rates. As we have noted, the Commission made certain findings as to the lawfulness of past rates which Hope had charged its interstate customers. Those findings were made on the complaint of the City of Cleveland and in aid of state regulation. It is conceded that under the Act the Commission has no power to make reparation orders. And its power to fix rates admittedly is limited to those 'to be thereafter observed and in force.' s 5(a). But the Commission maintains that it has the power to make findings as to the lawfulness of past rates even though it has no power to fix those rates. ^{FN31} However that may be, we do not think that these findings were reviewable under s 19(b) of the Act. That section gives any party 'aggrieved by an order' of the Commission a review 'of such order' in the circuit court of appeals for the circuit where the natural gas company is located or has its principal place of business or in the United States Court of Appeals for the District of Columbia. We do not think that the findings in question fall within that category.

FN31 The argument is that s 4(a) makes 'unlawful' the charging of any rate that is not just and reasonable. And s 14(a) gives the Commission power to investigate any matter 'which it may find necessary or proper in order to determine whether any person has violated' any provision of the Act. Moreover, s 5(b) gives the Commission power to investigate and determine the cost of production or transportation of natural gas in cases where it has 'no authority to establish a rate governing the transportation or sale of such natural gas.' And s 17(c) directs the Commission to 'make available to the several State commissions such information and reports as may be of assistance in State regulation of natural-gas companies.' For a discussion of these points by the Commission see 44 P.U.R.,N.S., at pages 34, 35.

[25] [26] The Court recently summarized the various types of administrative action or determination reviewable as orders under the Urgent Deficiencies Act of October 22, *619 1913, 28 U.S.C. ss 45, 47a, 28 U.S.C.A. ss 45, 47a, and kindred statutory provisions. Rochester Tel. Corp. v. United States, 307 U.S. 125, 59 S.Ct. 754, 83 L.Ed. 1147. It was there pointed out that where 'the order sought to be reviewed does not of itself adversely affect complainant but only affects his rights adversely on the contingency of future administrative action', it is not

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reviewable. Id., 307 U.S. at page 130, 59 S.Ct. at page 757, 83 L.Ed. 1147. The Court said, 'In view of traditional conceptions of federal judicial power, resort to the courts in these situations is either premature or wholly beyond their province.' **296Id., 307 U.S. at page 130, 59 S.Ct. at page 757, 83 L.Ed. 1147. And see United States v. Los Angeles S.L.R. Co., 273 U.S. 299, 309, 310, 47 S.Ct. 413, 414, 415, 71 L.Ed. 651; Shannahan v. United States, 303 U.S. 596, 58 S.Ct. 732, 82 L.Ed. 1039. These considerations are apposite here. The Commission has no authority to enforce these findings. They are 'the exercise solely of the function of investigation.' United States v. Los Angeles & S.L.R. Co., supra, 273 U.S. at page 310, 47 S.Ct. at page 414, 71 L.Ed. 651. They are only a preliminary, interim step towards possible future action-action not by the Commission but by wholly independent agencies. The outcome of those proceedings may turn on factors other than these findings. These findings may never result in the respondent feeling the pinch of administrative action.

Reversed.

Mr. Justice ROBERTS took no part in the consideration or decision of this case.

Opinion of Mr. Justice BLACK and Mr. Justice MURPHY.

We agree with the Court's opinion and would add nothing to what has been said but for what is patently a wholly gratuitous assertion as to Constitutional law in the dissent of Mr. Justice FRANKFURTER. We refer to the statement that 'Congressional acquiescence to date in the doctrine of Chicago, etc., R. Co. v. Minnesota, supra (134 U.S. 418, 10 S.Ct. 462, 702, 33 L.Ed. 970), may fairly be claimed.' That was the case in which a majority of this Court was finally induced to expand the meaning *620 of 'due process' so as to give courts power to block efforts of the state and national governments to regulate economic affairs. The present case does not afford a proper occasion to discuss the soundness of that doctrine because, as stated in Mr. Justice FRANKFURTER'S dissent, 'That issue is not here in controversy.' The salutary practice whereby courts do not discuss issues in the abstract applies with peculiar force to Constitutional questions. Since, however, the dissent adverts to a highly controversial due process doctrine and implies its acceptance by Congress, we feel compelled to say that we do not understand that Congress voluntarily has acquiesced in a Constitutional principle of government that courts, rather than legislative bodies, possess final authority over regulation of economic affairs. Even this Court has not always fully embraced that principle, and we wish to repeat that we have never acquiesced in it, and do not now. See Federal Power Commission v. Natural Gas Pipeline Co., 315 U.S. 575, 599-601, 62 S.Ct. 736,

749, 750, 86 L.Ed. 1037.

Mr. Justice REED, dissenting.

This case involves the problem of rate making under the Natural Gas Act. Added importance arises from the obvious fact that the principles stated are generally applicable to all federal agencies which are entrusted with the determination of rates for utilities. Because my views differ somewhat from those of my brethren, it may be of some value to set them out in a summary form.

The Congress may fix utility rates in situations subject to federal control without regard to any standard except the constitutional standards of due process and for taking private property for public use without just compensation. Wilson v. New, 243 U.S. 332, 350, 37 S.Ct. 298, 302, 61 L.Ed. 755, L.R.A.1917E, 938, Ann.Cas.1918A, 1024. A Commission, however, does not have this freedom of action. Its powers are limited not only by the constitutional standards but also by the standards of the delegation. Here the standard added by the Natural Gas Act is that the rate be 'just *621 and reasonable.' ^{FN1} Section 6 ^{FN2} **297 throws additional light on the meaning of these words.

^{FN1} Natural Gas Act, s 4(a), 52 Stat. 821, 822, 15 U.S.C. s 717c(a), 15 U.S.C.A. s 717c(a).

^{FN2} 52 Stat. 821, 824, 15 U.S.C. s 717e, 15 U.S.C.A. s 717e:

'(a) The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property.

'(b) Every natural-gas company upon request shall file with the Commission an inventory of all or any part of its property and a statement of the original cost thereof, and shall keep the Commission informed regarding the cost of all additions, betterments, extensions, and new construction.'

When the phrase was used by Congress to describe allowable rates, it had relation to something ascertainable. The rates were not left to the whim of the Commission. The rates fixed would produce an annual return and that annual return was to be compared with a theoretical just and reasonable return, all risks considered, on the fair value of the property used and useful in the public service at the time of the determination.

Such an abstract test is not precise. The agency charged

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with its determination has a wide range before it could properly be said by a court that the agency had disregarded statutory standards or had confiscated the property of the utility for public use. Cf. Chicago, M. & St. P.R. Co. v. Minnesota, 134 U.S. 418, 461-466, 10 S.Ct. 462, 702, 703-705, 33 L.Ed. 970, dissent. This is as Congress intends. Rates are left to an experienced agency particularly competent by training to appraise the amount required.

The decision as to a reasonable return had not been a source of great difficulty, for borrowers and lenders reached such agreements daily in a multitude of situations; and although the determination of fair value had been troublesome, its essentials had been worked out in fairness to investor and consumer by the time of the enactment*622 of this Act. Cf. Los Angeles G. & E. Corp. v. Railroad Comm., 289 U.S. 287, 304 et seq., 53 S.Ct. 637, 643 et seq., 77 L.Ed. 1180. The results were well known to Congress and had that body desired to depart from the traditional concepts of fair value and earnings, it would have stated its intention plainly. Helvering v. Griffiths, 318 U.S. 371, 63 S.Ct. 636.

It was already clear that when rates are in dispute, 'earnings produced by rates do not afford a standard for decision.' 289 U.S. at page 305, 53 S.Ct. at page 644, 77 L.Ed. 1180. Historical cost, prudent investment and reproduction cost ^{FN3} were all relevant factors in determining fair value. Indeed, disregarding the pioneer investor's risk, if prudent investment and reproduction cost were not distorted by changes in price levels or technology, each of them would produce the same result. The realization from the risk of an investment in a speculative field, such as natural gas utilities, should be reflected in the present fair value. ^{FN4} The amount of evidence to be admitted on any point was of course in the agency's reasonable discretion, and it was free to give its own weight to these or other factors and to determine from all the evidence its own judgment as to the necessary rates.

^{FN3} 'Reproduction cost' has been variously defined, but for rate making purposes the most useful sense seems to be, the minimum amount necessary to create at the time of the inquiry a modern plant capable of rendering equivalent service. See I Bonbright, Valuation of Property (1937) 152. Reproduction cost as the cost of building a replica of an obsolescent plant is not of real significance.

'Prudent investment' is not defined by the Court. It may mean the sum originally put in the enterprise, either with or without additional amounts from excess earnings

reinvested in the business.

^{FN4} It is of no more than bookkeeping significance whether the Commission allows a rate of return commensurate with the risk of the original investment or the lower rate based on current risk and a capitalization reflecting the established earning power of a successful company and the probable cost of duplicating its services. Cf. American T. & T. Co. v. United States, 299 U.S. 232, 57 S.Ct. 170, 81 L.Ed. 142. But the latter is the traditional method.

*623 I agree with the Court in not imposing a rule of prudent investment alone in determining the rate base. This leaves the Commission free, as I understand it, to use any available evidence for its finding of fair value, including both prudent investment and the cost of installing at the present time an efficient system for furnishing the needed utility service.

My disagreement with the Court arises primarily from its view that it makes no **298 difference how the Commission reached the rate fixed so long as the result is fair and reasonable. For me the statutory command to the Commission is more explicit. Entirely aside from the constitutional problem of whether the Congress could validly delegate its rate making power to the Commission, in toto and without standards, it did legislate in the light of the relation of fair and reasonable to fair value and reasonable return. The Commission must therefore make its findings in observance of that relationship.

The Federal Power Commission did not, as I construe their action, disregard its statutory duty. They heard the evidence relating to historical and reproduction cost and to the reasonable rate of return and they appraised its weight. The evidence of reproduction cost was rejected as unpersuasive, but from the other evidence they found a rate base, which is to me a determination of fair value. On that base the earnings allowed seem fair and reasonable. So far as the Commission went in appraising the property employed in the service, I find nothing in the result which indicates confiscation, unfairness or unreasonableness. Good administration of rate making agencies under this method would avoid undue delay and render revaluations unnecessary except after violent fluctuations of price levels. Rate making under this method has been subjected to criticism. But until Congress changes the standards for the agencies, these rate making bodies should continue the conventional theory of rate *624 making. It will probably be simpler to improve present methods than to devise new ones.

But a major error, I think was committed in the disregard

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by the Commission of the investment in exploratory operations and other recognized capital costs. These were not considered by the Commission because they were charged to operating expenses by the company at a time when it was unregulated. Congress did not direct the Commission in rate making to deduct from the rate base capital investment which had been recovered during the unregulated period through excess earnings. In my view this part of the investment should no more have been disregarded in the rate base than any other capital investment which previously had been recovered and paid out in dividends or placed to surplus. Even if prudent investment throughout the life of the property is accepted as the formula for figuring the rate base, it seems to me illogical to throw out the admittedly prudent cost of part of the property because the earnings in the unregulated period had been sufficient to return the prudent cost to the investors over and above a reasonable return. What would the answer be under the theory of the Commission and the Court, if the only prudent investment in this utility had been the seventeen million capital charges which are now disallowed?

For the reasons heretofore stated, I should affirm the action of the Circuit Court of Appeals in returning the proceeding to the Commission for further consideration and should direct the Commission to accept the disallowed capital investment in determining the fair value for rate making purposes.

Mr. Justice FRANKFURTER, dissenting.

My brother JACKSON has analyzed with particularity the economic and social aspects of natural gas as well as *625 the difficulties which led to the enactment of the Natural Gas Act, especially those arising out of the abortive attempts of States to regulate natural gas utilities. The Natural Gas Act of 1938 should receive application in the light of this analysis, and Mr. Justice JACKSON has, I believe, drawn relevant inferences regarding the duty of the Federal Power Commission in fixing natural gas rates. His exposition seems to me unanswered, and I shall say only a few words to emphasize my basic agreement with him.

For our society the needs that are met by public utilities are as truly public services as the traditional governmental functions of police and justice. They are not less so when these services are rendered by private enterprise under governmental regulation. Who ultimately determines the ways of regulation, is the decisive aspect in the public supervision of privately-owned utilities. Foreshadowed nearly sixty years ago, Railroad Commission Cases (Stone v. Farmers' Loan & Trust Co.), 116 U.S. 307, 331, 6 S.Ct. 334, 344, 388, 1191, 29 L.Ed. 636, it was decided more than fifty **299 years ago that the final say under

the Constitution lies with the judiciary and not the legislature. Chicago, etc., R. Co. v. Minnesota, 134 U.S. 418, 10 S.Ct. 462, 702, 33 L.Ed. 970.

While legal issues touching the proper distribution of governmental powers under the Constitution may always be raised, Congressional acquiescence to date in the doctrine of Chicago, etc., R. Co. v. Minnesota, supra, may fairly be claimed. But in any event that issue is not here in controversy. As pointed out in the opinions of my brethren, Congress has given only limited authority to the Federal Power Commission and made the exercise of that authority subject to judicial review. The Commission is authorized to fix rates chargeable for natural gas. But the rates that it can fix must be 'just and reasonable'. s 5 of the Natural Gas Act, 15 U.S.C. s 717d, 15 U.S.C.A. s 717d. Instead of making the Commission's rate determinations final, Congress*626 specifically provided for court review of such orders. To be sure, 'the finding of the Commission as to the facts, if supported by substantial evidence' was made 'conclusive', s 19 of the Act, 15 U.S.C. s 717r; 15 U.S.C.A. s 717r. But obedience of the requirement of Congress that rates be 'just and reasonable' is not an issue of fact of which the Commission's own determination is conclusive. Otherwise, there would be nothing for a court to review except questions of compliance with the procedural provisions of the Natural Gas Act. Congress might have seen fit so to cast its legislation. But it has not done so. It has committed to the administration of the Federal Power Commission the duty of applying standards of fair dealing and of reasonableness relevant to the purposes expressed by the Natural Gas Act. The requirement that rates must be 'just and reasonable' means just and reasonable in relation to appropriate standards. Otherwise Congress would have directed the Commission to fix such rates as in the judgment of the Commission are just and reasonable; it would not have also provided that such determinations by the Commission are subject to court review.

To what sources then are the Commission and the courts to go for ascertaining the standards relevant to the regulation of natural gas rates? It is at this point that Mr. Justice JACKSON'S analysis seems to me pertinent. There appear to be two alternatives. Either the fixing of natural gas rates must be left to the unguided discretion of the Commission so long as the rates it fixes do not reveal a glaringly had prophecy of the ability of a regulated utility to continue its service in the future. Or the Commission's rate orders must be founded on due consideration of all the elements of the public interest which the production and distribution of natural gas involve just because it is natural gas. These elements are reflected in the Natural Gas Act, if that Act be applied as

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an entirety. See, for *627 instance, ss 4(a)(b)(c)(d), 6, and 11, 15 U.S.C. ss 717c(a)(b)(c)(d), 717e, and 717j, 15 U.S.C.A. ss 717c(a-d), 717e, 717j. Of course the statute is not concerned with abstract theories of ratemaking. But its very foundation is the 'public interest', and the public interest is a texture of multiple strands. It includes more than contemporary investors and contemporary consumers. The needs to be served are not restricted to immediacy, and social as well as economic costs must be counted.

It will not do to say that it must all be left to the skill of experts. Expertise is a rational process and a rational process implies expressed reasons for judgment. It will little advance the public interest to substitute for the hodge-podge of the rule in Smyth v. Ames, 169 U.S. 466, 18 S.Ct. 418, 42 L.Ed. 819, an encouragement of conscious obscurity or confusion in reaching a result, on the assumption that so long as the result appears harmless its basis is irrelevant. That may be an appropriate attitude when state action is challenged as unconstitutional. Cf. Driscoll v. Edison Light & Power Co., 307 U.S. 104, 59 S.Ct. 715, 83 L.Ed. 1134. But it is not to be assumed that it was the design of Congress to make the accommodation of the conflicting interests exposed in Mr. Justice JACKSON'S opinion the occasion for a blind clash of forces or a partial assessment of relevant factors, either before the Commission or here.

The objection to the Commission's action is not that the rates it granted were too low but that the range of its vision was too narrow. And since the issues before the Commission involved no less than the **300 total public interest, the proceedings before it should not be judged by narrow conceptions of common law pleading. And so I conclude that the case should be returned to the Commission. In order to enable this Court to discharge its duty of reviewing the Commission's order, the Commission should set forth with explicitness the criteria by which it is guided *628 in determining that rates are 'just and reasonable', and it should determine the public interest that is in its keeping in the perspective of the considerations set forth by Mr. Justice JACKSON.

By Mr. Justice JACKSON.

Certainly the theory of the court below that ties rate-making to the fair-value-reproduction-cost formula should be overruled as in conflict with Federal Power Commission v. Natural Gas Pipeline Co.^{FN1} But the case should, I think, be the occasion for reconsideration of our rate-making doctrine as applied to natural gas and should be returned to the Commission for further consideration in the light thereof.

FN1 315 U.S. 575, 62 S.Ct. 736, 86 L.Ed. 1037.

The Commission appears to have understood the effect of the two opinions in the Pipeline case to be at least authority and perhaps direction to fix natural gas rates by exclusive application of the 'prudent investment' rate base theory. This has no warrant in the opinion of the Chief Justice for the Court, however, which released the Commission from subservience to 'any single formula or combination of formulas' provided its order, 'viewed in its entirety, produces no arbitrary result.' 315 U.S. at page 586, 62 S.Ct. at page 743, 86 L.Ed. 1037. The minority opinion I understood to advocate the 'prudent investment' theory as a sufficient guide in a natural gas case. The view was expressed in the court below that since this opinion was not expressly controverted it must have been approved.^{FN2} I disclaim this imputed*629 approval with some particularity, because I attach importance at the very beginning of federal regulation of the natural gas industry to approaching it as the performance of economic functions, not as the performance of legalistic rituals.

FN2 Judge Dobie, dissenting below, pointed out that the majority opinion in the Pipeline case 'contains no express discussion of the Prudent Investment Theory' and that the concurring opinion contained a clear one, and said, 'It is difficult for me to believe that the majority of the Supreme Court, believing otherwise, would leave such a statement unchallenged.' (134 F.2d 287, 312.) The fact that two other Justices had as matter of record in our books long opposed the reproduction cost theory of rate bases and had commented favorably on the prudent investment theory may have influenced that conclusion. See opinion of Mr. Justice Frankfurter in Driscoll v. Edison Light & Power Co., 307 U.S. 104, 122, 59 S.Ct. 715, 724, 83 L.Ed. 1134, and my brief as Solicitor General in that case. It should be noted, however, that these statements were made, not in a natural gas case, but in an electric power case—a very important distinction, as I shall try to make plain.

I.

Solutions of these cases must consider eccentricities of the industry which gives rise to them and also to the Act of Congress by which they are governed.

The heart of this problem is the elusive, exhaustible, and irreplaceable nature of natural gas itself. Given sufficient money, we can produce any desired amount of railroad,

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bus, or steamship transportation, or communications facilities, or capacity for generation of electric energy, or for the manufacture of gas of a kind. In the service of such utilities one customer has little concern with the amount taken by another, one's waste will not deprive another, a volume of service and be created equal to demand, and today's demands will not exhaust or lessen capacity to serve tomorrow. But the wealth of Midas and the wit of man cannot produce or reproduce a natural gas field. We cannot even reproduce the gas, for our manufactured product has only about half the heating value per unit of nature's own. ^{FN3}

^{FN3} Natural gas from the Appalachian field averages about 1050 to 1150 B.T.U. content, while by-product manufactured gas is about 530 to 540. Moody's Manual of Public Utilities (1943) 1350; Youngberg, Natural Gas (1930) 7.

****301** Natural gas in some quantity is produced in twenty-four states. It is consumed in only thirty-five states, and is ***630** available only to about 7,600,000 consumers. ^{FN4} Its availability has been more localized than that of any other utility service because it has depended more on the caprice of nature.

^{FN4} Sen.Rep. No. 1162, 75th Cong., 1st Sess., 2.

The supply of the Hope Company is drawn from that old and rich and vanishing field that flanks the Appalachian mountains. Its center of production is Pennsylvania and West Virginia, with a fringe of lesser production in New York, Ohio, Kentucky, Tennessee, and the north end of Alabama. Oil was discovered in commercial quantities at a depth of only 69 1/2 feet near Titusville, Pennsylvania, in 1859. Its value then was about \$16 per barrel. ^{FN5} The oil branch of the petroleum industry went forward at once, and with unprecedented speed. The area productive of oil and gas was roughed out by the drilling of over 19,000 'wildcat' wells, estimated to have cost over \$222,000,000. Of these, over 18,000 or 94.9 per cent, were 'dry holes.' About five per cent, or 990 wells, made discoveries of commercial importance, 767 of them resulting chiefly in oil and 223 in gas only. ^{FN6} Prospecting for many years was a search for oil, and to strike gas was a misfortune. Waste during this period and even later is appalling. Gas was regarded as having no commercial value until about 1882, in which year the total yield was valued only at about \$75,000. ^{FN7} Since then, contrary to oil, which has become cheaper gas in this field has pretty steadily advanced in price.

^{FN5} Arnold and Kemnitzer, Petroleum in the United States and Possessions (1931) 78.

^{FN6} Id. at 62-63.

^{FN7} Id. at 61.

While for many years natural gas had been distributed on a small scale for lighting, ^{FN8} its acceptance was slow, ***631** facilities for its utilization were primitive, and not until 1885 did it take on the appearance of a substantial industry. ^{FN9} Soon monopoly of production or markets developed. ^{FN10} To get gas from the mountain country, where it was largely found, to centers of population, where it was in demand, required very large investment. By ownership of such facilities a few corporate systems, each including several companies, controlled access to markets. Their purchases became the dominating factor in giving a market value to gas produced by many small operators. Hope is the market for over 300 such operators. By 1928 natural gas in the Appalachian field commanded an average price of 21.1 cents per m.c.f. at points of production and was bringing 45.7 cents at points of consumption. ^{FN11} The companies which controlled markets, however, did not rely on gas purchases alone. They acquired and held in fee or leasehold great acreage in territory proved by 'wildcat' drilling. These large marketing system companies as well as many small independent owners and operators have carried on the commercial development of proved territory. The development risks appear from the estimate that up to 1928, 312,318 proved area wells had been sunk in the Appalachian field of which 48,962, or 15.7 per cent, failed to produce oil or gas in commercial quantity. ^{FN12}

^{FN8} At Fredonia, New York, in 1821, natural gas was conveyed from a shallow well to some thirty people. The lighthouse at Barcelona Harbor, near what is now Westfield, New York, was at about that time and for many years afterward lighted by gas that issued from a crevice. Report on Utility Corporations by Federal Trade Commission, Sen.Doc. 92, Pt. 84-A, 70th Cong., 1st Sess., 8-9.

^{FN9} In that year Pennsylvania enacted 'An Act to provide for the incorporation and regulation of natural gas companies.' Penn.Laws 1885, No. 32, 15 P.S. s 1981 et seq.

^{FN10} See Steptoe and Hoffheimer's Memorandum for Governor Cornwell of West Virginia (1917) 25 West Virginia Law Quarterly 257; see also Report on Utility Corporations by

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Federal Trade Commission, Sen.Doc. No. 92, Pt. 84-A, 70th Cong., 1st Sess.

FN11 Arnold and Kemnitzer, Petroleum in the United States and Possessions (1931) 73.

FN12. Id. at 63.

*632 With the source of supply thus tapped to serve centers of large demand, like Pittsburgh, Buffalo, Cleveland, Youngstown, Akron, and other industrial communities, the distribution of natural gas fast became big business. Its advantages as a **302 fuel and its price commended it, and the business yielded a handsome return. All was merry and the goose hung high for consumers and gas companies alike until about the time of the first World War. Almost unnoticed by the consuming public, the whole Appalachian field passed its peak of production and started to decline. Pennsylvania, which to 1928 had given off about 38 per cent of the natural gas from this field, had its peak in 1905; Ohio, which had produced 14 per cent, had its peak in 1915; and West Virginia, greatest producer of all, with 45 per cent to its credit, reached its peak in 1917. FN13

FN13. Id. at 64.

Western New York and Eastern Ohio, on the fringe of the field, had some production but relied heavily on imports from Pennsylvania and West Virginia. Pennsylvania, a producing and exporting state, was a heavy consumer and supplemented her production with imports from West Virginia. West Virginia was a consuming state, but the lion's share of her production was exported. Thus the interest of the states in the North Appalachian supply was in conflict.

Competition among localities to share in the failing supply and the helplessness of state and local authorities in the presence of state lines and corporate complexities is a part of the background of federal intervention in the industry. FN14 West Virginia took the boldest measure. It legislated a priority in its entire production in favor of its own inhabitants. That was frustrated by an injunction*633 from this Court. FN15 Throughout the region clashes in the courts and conflicting decisions evidenced public anxiety and confusion. It was held that the New York Public Service Commission did not have power to classify consumers and restrict their use of gas. FN16 That Commission held that a company could not abandon a part of its territory and still serve the rest. FN17 Some courts admonished the companies to take action to protect consumers. FN18 Several courts held that companies, regardless of failing supply, must continue to

take on customers, but such compulsory additions were finally held to be within the Public Service Commission's discretion. FN19 There were attempts to throw up franchises and quit the service, and municipalities resorted to the courts with conflicting results. FN20 Public service commissions of consuming states were handicapped, for they had no control of the supply. FN21

FN14 See Report on Utility Corporations by Federal Trade Commission, Sen.Doc. No. 92, Pt. 84-A, 70th Cong., 1st Sess.

FN15 Commonwealth of Pennsylvania v. West Virginia, 262 U.S. 553, 43 S.Ct. 658, 67 L.Ed. 1117, 32 A.L.R. 300. For conditions there which provoked this legislation, see 25 West Virginia Law Quarterly 257.

FN16 People ex rel. Pavilion Natural Gas Co. v. Public Service Commission, 188 App.Div. 36, 176 N.Y.S. 163.

FN17 Village of Falconer v. Pennsylvania Gas Company, 17 State Department Reports, N.Y., 407.

FN18 See, for example, Public Service Commission v. Iroquois Natural Gas Co., 108 Misc. 696, 178 N.Y.S. 24; Park Abbott Realty Co. v. Iroquois Natural Gas Co., 102 Misc. 266, 168 N.Y.S. 673; Public Service Commission v. Iroquois Natural Gas Co., 189 App.Div. 545, 179 N.Y.S. 230.

FN19 People ex rel. Pennsylvania Gas Co. v. Public Service Commission, 196 App.Div. 514, 189 N.Y.S. 478.

FN20 East Ohio Gas Co. v. Akron, 81 Ohio St. 33, 90 N.E. 40, 26 L.R.A., N.S., 92, 18 Ann.Cas. 332; Village of New-comerstown v. Consolidated Gas Co., 100 Ohio St. 494, 127 N.E. 414; Gress v. Village of Ft. Laramie, 100 Ohio St. 35, 125 N.E. 112, 8 A.L.R. 242; City of Jamestown v. Pennsylvania Gas Co., D.C., 263 F. 437; Id., D.C., 264 F. 1009. See, also, United Fuel Gas Co. v. Railroad Commission, 278 U.S. 300, 308, 49 S.Ct. 150, 152, 73 L.Ed. 390.

FN21 The New York Public Service Commission said: 'While the transportation of natural gas through pipe lines from one state to another state is interstate commerce * * *, Congress has not taken over the regulation of

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that particular industry. Indeed, it has expressly excepted it from the operation of the Interstate Commerce Commissions Law (Interstate Commerce Commissions Law, section 1). It is quite clear, therefore, that this Commission can not require a Pennsylvania corporation producing gas in Pennsylvania to transport it and deliver it in the State of New York, and that the Interstate Commerce Commission is likewise powerless. If there exists such a power, and it seems that there does, it is a power vested in Congress and by it not yet exercised. There is no available source of supply for the Crystal City Company at present except through purchasing from the Porter Gas Company. It is possible that this Commission might fix a price at which the Potter Gas Company should sell if it sold at all, but as the Commission can not require it to supply gas in the State of New York, the exercise of such a power to fix the price, if such power exists, would merely say, sell at this price or keep out of the State.' Lane v. Crystal City Gas Co., 8 New York Public Service Comm.Reports, Second District, 210, 212.

****303 *634** Shortages during World War I occasioned the first intervention in the natural gas industry by the Federal Government. Under Proclamation of President Wilson the United States Fuel Administrator took control, stopped extensions, classified consumers and established a priority for domestic over industrial use. ^{FN22} After the war federal control was abandoned. Some cities once served with natural gas became dependent upon mixed gas of reduced heating value and relatively higher price. ^{FN23}

^{FN22} Proclamation by the President of September 16, 1918; Rules and Regulations of H. A. Garfield, Fuel Administrator, September 24, 1918.

^{FN23} For example, the Iroquois Gas Corporation which formerly served Buffalo, New York, with natural gas ranging from 1050 to 1150 b.t.u. per cu. ft., now mixes a by-product gas of between 530 and 540 b.t.u. in proportions to provide a mixed gas of about 900 b.t.u. per cu. ft. For space heating or water heating its charges range from 65 cents for the first m.c.f. per month to 55 cents for all above 25 m.c.f. per month. Moody's Manual of Public Utilities (1943) 1350.

Utilization of natural gas of highest social as well as economic return is domestic use for cooking and water

***635** heating, followed closely by use for space heating in homes. This is the true public utility aspect of the enterprise, and its preservation should be the first concern of regulation. Gas does the family cooking cheaper than any other fuel. ^{FN24} But its advantages do not end with dollars and cents cost. It is delivered without interruption at the meter as needed and is paid for after it is used. No money is tied up in a supply, and no space is used for storage. It requires no handling, creates no dust, and leaves no ash. It responds to thermostatic control. It ignites easily and immediately develops its maximum heating capacity. These incidental advantages make domestic life more liveable.

^{FN24} The United States Fuel Administration made the following cooking value comparisons, based on tests made in the Department of Home Economics of Ohio State University:

Natural gas at 1.12 per M. is equivalent to coal at \$6.50 per ton.

Natural gas at 2.00 per M. is equivalent to gasoline at 27¢ per gal.

Natural gas at 2.20 per M. is equivalent to electricity at 3¢ per k.w.h.

Natural gas at 2.40 per M. is equivalent to coal oil at 15¢ per gal.

Use and Conservation of Natural Gas, issued by U.S. Fuel Administration (1918) 5.

Industrial use is induced less by these qualities than by low cost in competition with other fuels. Of the gas exported from West Virginia by the Hope Company a very substantial part is used by industries. This wholesale use speeds exhaustion of supply and displaces other fuels. Coal miners and the coal industry, a large part of whose costs are wages, have complained of unfair competition from low-priced industrial gas produced with relatively little labor cost. ^{FN25}

^{FN25} See Brief on Behalf of Legislation Imposing an Excise Tax on Natural Gas, submitted to N.R.A. by the United Mine Workers of America and the National Coal Association.

Gas rate structures generally have favored industrial users. In 1932, in Ohio, the average yield on gas for domestic consumption was 62.1 cents per m.c.f. and on industrial, ***636** 38.7. In Pennsylvania, the figures were 62.9 against 31.7. West Virginia showed the least spread, domestic consumers paying 36.6 cents; and industrial, 27.7. ^{FN26} Although this spread is less than ****304** in other parts of the United States, ^{FN27} it can hardly be said to be

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self-justifying. It certainly is a very great factor in hastening decline of the natural gas supply.

FN26 Brief of National Gas Association and

State.	Industrial	Domestic
Illinois.	29.2	1.678
Louisiana.	10.4	59.7
Oklahoma.	11.2	41.5
Texas.	13.1	59.7
Alabama.	17.8	1.227
Georgia.	22.9	1.043

About the time of World War I there were occasional and short-lived efforts by some hard-pressed companies to reverse this discrimination and adopt graduated rates, giving a low rate to quantities adequate for domestic use and graduating it upward to discourage industrial use. FN28 *637 These rates met opposition from industrial sources, of course, and since diminished revenues from industrial sources tended to increase the domestic price, they met little popular or commission favor. The fact is that neither the gas companies nor the consumers nor local regulatory bodies can be depended upon to conserve gas. Unless federal regulation will take account of conservation, its efforts seem, as in this case, actually to constitute a new threat to the life of the Appalachian supply.

FN28 In Corning, New York, rates were initiated by the Crystal City Gas Company as follows: 70¢ for the first 5,000 cu. ft. per month; 80¢ from 5,000 to 12,000; \$1 for all over 12,000. The Public Service Commission rejected these rates and fixed a flat rate of 58¢ per m.c.f. Lane v. Crystal City Gas Co., 8 New York Public Service Comm. Reports, Second District, 210.

The Pennsylvania Gas Company (National Fuel Gas Company group) also attempted a sliding scale rate for New York consumers, net per month as follows: First 5,000 feet, 35¢ ; second 5,000 feet, 45¢ ; third 5,000 feet, 50¢ ; all above 15,000, 55¢ . This was eventually abandoned, however. The company's present scale in Pennsylvania appears to be reversed to the following net monthly rate; first 3 m.c.f., 75¢ ; next 4 m.c.f., 60¢ ; next 8 m.c.f., 55¢ ; over 15 m.c.f., 50¢ . Moody's Manual of Public Utilities (1943) 1350. In New York it now serves a mixed gas.

For a study of effect of sliding scale rates in reducing consumption see 11 Proceedings of Natural Gas Association of America (1919) 287.

United Mine Workers, supra, note 26, pp. 35, 36, compiled from Bureau of Mines Reports.

FN27 From the source quoted in the preceding note the spread elsewhere is shown to be:

II.

Congress in 1938 decided upon federal regulation of the industry. It did so after an exhaustive investigation of all aspects including failing supply and competition for the use of natural gas intensified by growing scarcity. FN29 Pipelines from the Appalachian area to markets were in the control of a handful of holding company systems. FN30 This created a highly concentrated control of the producers' market and of the consumers' supplies. While holding companies dominated both production and distribution they segregated those activities in separate *638 subsidiaries, FN31 the effect of which, if not the purpose, was to isolate **305 some end of the business from the reach of any one state commission. The cost of natural gas to consumers moved steadily upwards over the years, out of proportion to prices of oil, which, except for the element of competition, is produced under somewhat comparable conditions. The public came to feel that the companies were exploiting the growing scarcity of local gas. The problems of this region had much to do with creating the demand for federal regulation.

FN29 See Report on Utility Corporations by Federal Trade Commission, Sen. Doc. 92, Pt. 84-A, 70th Cong., 1st Sess.

FN30 Four holding company systems control over 55 per cent of all natural gas transmission lines in the United States. They are Columbia Gas and Electric Corporation, Cities Service Co., Electric Bond and Share Co., and Standard Oil Co. of New Jersey. Columbia alone controls nearly 25 per cent, and fifteen companies account for over 80 per cent of the total. Report on Utility Corporations by Federal Trade Commission, Sen. Doc. 92, Pt. 84-A, 70th Cong., 1st Sess., 28.

In 1915, so it was reported to the Governor of West

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Virginia, 87 per cent of the total gas production of that state was under control of eight companies. Steptoe and Hoffheimer, Legislative Regulation of Natural Gas Supply in West Virginia, 17 West Virginia Law Quarterly 257, 260. Of these, three were subsidiaries of the Columbia system and others were subsidiaries of larger systems. In view of inter-system sales and interlocking interests it may be doubted whether there is much real competition among these companies.

FN31 This pattern with its effects on local regulatory efforts will be observed in our decisions. See United Fuel Gas Co. v. Railroad Commission, 278 U.S. 300, 49 S.Ct. 150, 73 L.Ed. 390; United Fuel Gas Co. v. Public Service Commission, 278 U.S. 322, 49 S.Ct. 157, 73 L.Ed. 402; Dayton Power & Light v. Public Utilities Commission, 292 U.S. 290, 54 S.Ct. 647, 78 L.Ed. 1267; Columbus Gas & Fuel Co. v. Public Utilities Commission, 292 U.S. 398, 54 S.Ct. 763, 78 L.Ed. 1327, 91 A.L.R. 1403, and the present case.

The Natural Gas Act declared the natural gas business to be 'affected with a public interest,' and its regulation 'necessary in the public interest.' FN32 Originally, and at the time this proceeding was commenced and tried, it also declared 'the intention of Congress that natural gas shall be sold in interstate commerce for resale for ultimate public consumption for domestic, commercial, industrial, or any other use at the lowest possible reasonable rate consistent with the maintenance of adequate service in the public interest.' FN33 While this was later dropped, there is nothing to indicate that it was not and is not still an accurate statement of purpose of the Act. Extension or improvement of facilities may be ordered when 'necessary or desirable in the public interest,' abandonment of facilities may be ordered when the supply is 'depleted to the extent that the continuance of service is unwarranted, or that the present or future public convenience or necessity *639 permit' abandonment and certain extensions can only be made on finding of 'the present or future public convenience and necessity.' FN34 The Commission is required to take account of the ultimate use of the gas. Thus it is given power to suspend new schedules as to rates, charges, and classification of services except where the schedules are for the sale of gas 'for resale for industrial use only,' FN35 which gives the companies greater freedom to increase rates on industrial gas than on domestic gas. More particularly, the Act expressly forbids any undue preference or advantage to any person or 'any unreasonable difference in rates * * * either as between localities or as between classes of service.' FN36 And the power of the Commission expressly includes that to determine the 'just and reasonable rate,

charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force.' FN37

FN32 15 U.S.C. s 717(a), 15 U.S.C.A. s 717(a). (Italics supplied throughout this paragraph.)

FN33 s 7(c), 52 Stat. 825, 15 U.S.C.A. s 717f(c).

FN34 15 U.S.C. s 717f, 15 U.S.C.A. s 717f.

FN35 Id., s 717c(e).

FN36 Id., s 717c(b).

FN37 Id., s 717d(a).

In view of the Court's opinion that the Commission in administering the Act may ignore discrimination, it is interesting that in reporting this Bill both the Senate and the House Committees on Interstate Commerce pointed out that in 1934, on a nationwide average the price of natural gas per m.c.f. was 74.6 cents for domestic use, 49.6 cents for commercial use, and 16.9 for industrial use. FN38 I am not ready to think that supporters of a bill called attention to the striking fact that householders were being charged five times as much for their gas as industrial users only as a situation which the Bill would do nothing to remedy. On the other hand the Act gave to the Commission what the Court aptly describes as 'broad powers of regulation.'

FN38 Sen. Rep. No. 1162, 75th Cong., 1st Sess. 2.

*640 III.

This proceeding was initiated by the Cities of Cleveland and Akron. They alleged that the price charged by Hope for natural gas 'for resale to domestic, commercial and small industrial consumers in Cleveland and elsewhere is excessive, unjust, unreasonable, greatly in excess of the price charged by Hope to nonaffiliated companies at wholesale for resale to domestic, commercial and small industrial consumers, and greatly in excess of the price charged by Hope to East Ohio for resale to certain favored industrial consumers in Ohio, and therefore is further unduly discriminatory between consumers and between classes of service' (italics supplied). The company answered admitting differences in prices to affiliated and nonaffiliated companies and justifying them by differences in conditions of delivery.**306 As to the allegation that the contract price is 'greatly in excess of the price charged by Hope to East Ohio for resale to

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certain favored industrial consumers in Ohio,' Hope did not deny a price differential, but alleged that industrial gas was not sold to 'favored consumers' but was sold under contract and schedules filed with and approved by the Public Utilities Commission of Ohio, and that certain conditions of delivery made it not 'unduly discriminatory.'

The record shows that in 1940 Hope delivered for industrial consumption 36,523,792 m.c.f. and for domestic and commercial consumption, 50,343,652 m.c.f. I find no separate figure for domestic consumption. It served 43,767 domestic consumers directly, 511,521 through the East Ohio Gas Company, and 154,043 through the Peoples Natural Gas Company, both affiliates owned by the same parent. Its special contracts for industrial consumption, so far as appear, are confined to about a dozen big industries.

***641** Hope is responsible for discrimination as exists in favor of these few industrial consumers. It controls both the resale price and use of industrial gas by virtue of the very interstate sales contracts over which the Commission is exercising its jurisdiction.

Hope's contract with East Ohio Company is an example. Hope agrees to deliver, and the Ohio Company to take, '(a) all natural gas requisite for the supply of the domestic consumers of the Ohio Company; (b) such amounts of natural gas as may be requisite to fulfill contracts made with the consent and approval of the Hope Company by the Ohio Company, or companies which it supplies with natural gas, for the sale of gas upon special terms and conditions for manufacturing purposes.' The Ohio company is required to read domestic customers' meters once a month and meters of industrial customers daily and to furnish all meter readings to Hope. The Hope Company is to have access to meters of all consumers and to all of the Ohio Company's accounts. The domestic consumers of the Ohio Company are to be fully supplied in preference to consumers purchasing for manufacturing purposes and 'Hope Company can be required to supply gas to be used for manufacturing purposes only where the same is sold under special contracts which have first been submitted to and approved in writing by the Hope Company and which expressly provide that natural gas will be supplied thereunder only in so far as the same is not necessary to meet the requirements of domestic consumers supplied through pipe lines of the Ohio Company.' This basic contract was supplemented from time to time, chiefly as to price. The last amendment was in a letter from Hope to East Ohio in 1937. It contained a special discount on industrial gas and a schedule of special industrial contracts, Hope reserving the right to make eliminations therefrom and agreeing that others might be added from time to ***642** time with its approval

in writing. It said, 'It is believed that the price concessions contained in this letter, while not based on our costs, are under certain conditions, to our mutual advantage in maintaining and building up the volumes of gas sold by us (italics supplied).'

FN39 The list of East Ohio Gas Company's special industrial contracts thus expressly under Hope's control and their demands are as follows:

****307** The Commission took no note of the charges of discrimination and made no disposition of the issue tendered on this point. It ordered a flat reduction in the price per m.c.f. of all gas delivered by Hope in interstate commerce. It made no limitation, condition, or provision as to what classes of consumers should get the benefit of the reduction. While the cities have accepted and are defending the reduction, it is my view that the discrimination of which they have complained is perpetuated and increased by the order of the Commission and that it violates the Act in so doing.

The Commission's opinion aptly characterizes its entire objective by saying that 'bona fide investment figures now become all-important in the regulation of rates.' It should be noted that the all-importance of this theory is not the result of any instruction from Congress. When the Bill to regulate gas was first before Congress it contained ***643** the following: 'In determining just and reasonable rates the Commission shall fix such rate as will allow a fair return upon the actual legitimate prudent cost of the property used and useful for the service in question.' H.R. 5423, 74th Cong., 1st Sess. Title III, s 312(c). Congress rejected this language. See H.R. 5423, s 213 (211(c)), and H.R. Rep. No. 1318, 74th Cong., 1st Sess. 30.

The Commission contends nevertheless that the 'all important' formula for finding a rate base is that of prudent investment. But it excluded from the investment base an amount actually and admittedly invested of some \$17,000,000. It did so because it says that the Company recouped these expenditures from customers before the days of regulation from earnings above a fair return. But it would not apply all of such 'excess earnings' to reduce the rate base as one of the Commissioners suggested. The reason for applying excess earnings to reduce the investment base roughly from \$69,000,000 to \$52,000,000 but refusing to apply them to reduce it from that to some \$18,000,000 is not found in a difference in the character of the earnings or in their reinvestment. The reason assigned is a difference in bookkeeping treatment many years before the Company was subject to regulation. The \$17,000,000, reinvested chiefly in well

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drilling, was treated on the books as expense. (The Commission now requires that drilling costs be carried to capital account.) The allowed rate base thus actually was determined by the Company's bookkeeping, not its investment. This attributes a significance to formal classification in account keeping that seems inconsistent with rational rate regulation. ^{FN40} Of *644 course, the **308 Commission would not and should not allow a rate base to be inflated by bookkeeping which had improperly capitalized expenses. I have doubts about resting public regulation upon any rule that is to be used or not depending on which side it favors.

^{FN40} To make a fetish of mere accounting is to shield from examination the deeper causes, forces, movements, and conditions which should govern rates. Even as a recording of current transactions, bookkeeping is hardly an exact science. As a representation of the condition and trend of a business, it uses symbols of certainty to express values that actually are in constant flux. It may be said that in commercial or investment banking or any business extending credit success depends on knowing what not to believe in accounting. Few concerns go into bankruptcy or reorganization whose books do not show them solvent and often even profitable. If one cannot rely on accountancy accurately to disclose past or current conditions of a business, the fallacy of using it as a sole guide to future price policy ought to be apparent. However, our quest for certitude is so ardent that we pay an irrational reverence to a technique which uses symbols of certainty, even though experience again and again warns us that they are delusive. Few writers have ventured to challenge this American idolatry, but see Hamilton, Cost as a standard for Price, 4 Law and Contemporary Problems 321, 323-25. He observes that 'As the apostle would put it, accountancy is all things to all men. * * * Its purpose determines the character of a system of accounts.' He analyzes the hypothetical character of accounting and says 'It was no eternal mold for pecuniary verities handed down from on high. It was-like logic or algebra, or the device of analogy in the law-an ingenious contrivance of the human mind to serve a limited and practical purpose.' 'Accountancy is far from being a pecuniary expression of all that is industrial reality. It is an instrument, highly selective in its application, in the service of the institution of money making.' As to capital account he observes 'In an enterprise in lusty competition with others of its

kind, survival is the thing and the system of accounts has its focus in solvency. * * * Accordingly depreciation, obsolescence, and other factors which carry no immediate threat are matters of lesser concern and the capital account is likely to be regarded as a secondary phenomenon. * * * But in an enterprise, such as a public utility, where continued survival seems assured, solvency is likely to be taken for granted. * * * A persistent and ingenious attention is likely to be directed not so much to securing the upkeep of the physical property as to making it certain that capitalization fails in not one whit to give full recognition to every item that should go into the account.'

*645 The Company on the other hand, has not put its gas fields into its calculations on the present-value basis, although that, it contends, is the only lawful rule for finding a rate base. To do so would result in a rate higher than it has charged or proposes as a matter of good business to charge.

The case before us demonstrates the lack of rational relationship between conventional rate-base formulas and natural gas production and the extremities to which regulating bodies are brought by the effort to rationalize them. The Commission and the Company each stands on a different theory, and neither ventures to carry its theory to logical conclusion as applied to gas fields.

IV.

This order is under judicial review not because we interpose constitutional theories between a State and the business it seeks to regulate, but because Congress put upon the federal courts a duty toward administration of a new federal regulatory Act. If we are to hold that a given rate is reasonable just because the Commission has said it was reasonable, review becomes a costly, time-consuming pageant of no practical value to anyone. If on the other hand we are to bring judgment of our own to the task, we should for the guidance of the regulators and the regulated reveal something of the philosophy, be it legal or economic or social, which guides us. We need not be slaves to a formula but unless we can point out a rational way of reaching our conclusions they can only be accepted as resting on intuition or predilection. I must admit that I possess no instinct jby which to know the 'reasonable' from the 'unreasonable' in prices and must seek some conscious design for decision.

The Court sustains this order as reasonable, but what makes it so or what could possibly make it otherwise,

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*646 I cannot learn. It holds that: 'it is the result reached not the method employed which is controlling'; 'the fact that the method employed to reach that result may contain infirmities is not then important' and it is not 'important to this case to determine the various permissible ways in which any rate base on which the return is computed might be arrived at.' The Court does lean somewhat on considerations of capitalization and dividend history and requirements for dividends on outstanding stock. But I can give no real weight to that for it is generally and I think deservedly in discredit as any guide in rate cases.
FN41

FN41 See 2 Bonbright, Valuation of Property (1937) 1112.

Our books already contain so much talk of methods of rationalizing rates that we must appear ambiguous if we announce results without our working methods. We are confronted with regulation of a unique type of enterprise which I think requires considered rejection of much conventional utility doctrine and adoption of concepts of 'just and reasonable' rates and practices and of the 'public interest' that will take account of the peculiarities of the business.

The Court rejects the suggestions of this opinion. It says that the Committees in reporting the bill which became the Act said it provided 'for regulation along recognized and more or less standardized lines' and that there was 'nothing novel in its provisions.' So saying it sustains a rate calculated on a novel variation of a rate base theory which itself had at the time of enactment of the legislation been recognized only in dissenting opinions. Our difference seems to be between unconscious innovation,
FN42 and the purposeful **309 and deliberate innovation I *647 would make to meet the necessities of regulating the industry before us.

FN42 Bonbright says, '* * * the vice of traditional law lies, not in its adoption of excessively rigid concepts of value and rules of valuation, but rather in its tendency to permit shifts in meaning that are inept, or else that are ill-defined because the judges that make them will not openly admit that they are doing so.' Id., 1170.

Hope's business has two components of quite divergent character. One, while not a conventional common-carrier undertaking, is essentially a transportation enterprise consisting of conveying gas from where it is produced to point of delivery to the buyer. This is a relatively routine

operation not differing substantially from many other utility operations. The service is produced by an investment in compression and transmission facilities. Its risks are those of investing in a tested means of conveying a discovered supply of gas to a known market. A rate base calculated on the prudent investment formula would seem a reasonably satisfactory measure for fixing a return from that branch of the business whose service is roughly proportionate to the capital invested. But it has other consequences which must not be overlooked. It gives marketability and hence 'value' to gas owned by the company and gives the pipeline company a large power over the marketability and hence 'value' of the production of others.

The other part of the business-to reduce to possession an adequate supply of natural gas-is of opposite character, being more erratic and irregular and unpredictable in relation to investment than any phase of any other utility business. A thousand feet of gas captured and severed from real estate for delivery to consumers is recognized under our law as property of much the same nature as a ton of coal, a barrel of oil, or a yard of sand. The value to be allowed for it is the real battleground between the investor and consumer. It is from this part of the business that the chief difference between the parties as to a proper rate base arises.

It is necessary to a 'reasonable' price for gas that it be anchored to a rate base of any kind? Why did courts in the first place begin valuing 'rate bases' in order to 'value' something else? The method came into vogue *648 in fixing rates for transportation service which the public obtained from common carriers. The public received none of the carriers' physical property but did make some use of it. The carriage was often a monopoly so there were no open market criteria as to reasonableness. The 'value' or 'cost' of what was put to use in the service by the carrier was not a remote or irrelevant consideration in making such rates. Moreover the difficulty of appraising an intangible service was thought to be simplified if it could be related to physical property which was visible and measurable and the items of which might have market value. The court hoped to reason from the known to the unknown. But gas fields turn this method topsy turvy. Gas itself is tangible, possessible, and does have a market and a price in the field. The value of the rate base is more elusive than that of gas. It consists of intangibles-leaseholds and freeholds-operated and unoperated-of little use in themselves except as rights to reach and capture gas. Their value lies almost wholly in predictions of discovery, and of price of gas when captured, and bears little relation to cost of tools and supplies and labor to develop it. Gas is what Hope sells and it can be directly priced more reasonably and easily and accurately than the

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components of a rate base can be valued. Hence the reason for resort to a roundabout way of rate base price fixing does not exist in the case of gas in the field.

But if found, and by whatever method found, a rate base is little help in determining reasonableness of the price of gas. Appraisal of present value of these intangible rights to pursue fugitive gas depends on the value assigned to the gas when captured. The 'present fair value' rate base, generally in ill repute, ^{FN43} is not even **310 urged by the gas company for valuing its fields.

FN43 'The attempt to regulate rates by reference to a periodic or occasional reappraisal of the properties has now been tested long enough to confirm the worst fears of its critics. Unless its place is taken by some more promising scheme of rate control, the days of private ownership under government regulation may be numbered.' 2 Bonbright, Valuation of Property (1937) 1190.

*649 The prudent investment theory has relative merits in fixing rates for a utility which creates its service merely by its investment. The amount and quality of service rendered by the usual utility will, at least roughly, be measured by the amount of capital it puts into the enterprise. But it has no rational application where there is no such relationship between investment and capacity to serve. There is no such relationship between investment and amount of gas produced. Let us assume that Doe and Roe each produces in West Virginia for delivery to Cleveland the same quantity of natural gas per day. Doe, however, through luck or foresight or whatever it takes, gets his gas from investing \$50,000 in leases and drilling. Roe drilled poorer territory, got smaller wells, and has invested \$250,000. Does anybody imagine that Roe can get or ought to get for his gas five times as much as Doe because he has spent five times as much? The service one renders to society in the gas business is measured by what he gets out of the ground, not by what he puts into it, and there is little more relation between the investment and the results than in a game of poker.

Two-thirds of the gas Hope handles it buys from about 340 independent producers. It is obvious that the principle of rate-making applied to Hope's own gas cannot be applied, and has not been applied, to the bulk of the gas Hope delivers. It is not probable that the investment of any two of these producers will bear the same ratio to their investments. The gas, however, all goes to the same use, has the same utilization value and the same ultimate price.

To regulate such an enterprise by indiscriminately

transplanting any body of rate doctrine conceived and *650 adapted to the ordinary utility business can serve the 'public interest' as the Natural Gas Act requires, if at all, only by accident. Mr. Justice Brandeis, the pioneer juristic advocate of the prudent investment theory for man-made utilities, never, so far as I am able to discover, proposed its application to a natural gas case. On the other hand, dissenting in Commonwealth of Pennsylvania v. West Virginia, he reviewed the problems of gas supply and said, 'In no other field of public service regulation is the controlling body confronted with factors so baffling as in the natural gas industry, and in none is continuous supervision and control required in so high a degree.' 262 U.S. 553, 621, 43 S.Ct. 658, 674, 67 L.Ed. 1117, 32 A.L.R. 300. If natural gas rates are intelligently to be regulated we must fit our legal principles to the economy of the industry and not try to fit the industry to our books.

As our decisions stand the Commission was justified in believing that it was required to proceed by the rate base method even as to gas in the field. For this reason the Court may not merely wash its hands of the method and rationale of rate making. The fact is that this Court, with no discussion of its fitness, simply transferred the rate base method to the natural gas industry. It happened in Newark Natural Gas & Fuel Co. v. City of Newark, Ohio, 1917, 242 U.S. 405, 37 S.Ct. 156, 157, 61 L.Ed. 393, Ann.Cas.1917B, 1025, in which the company wanted 25 cents per m.c.f., and under the Fourteenth Amendment challenged the reduction to 18 cents by ordinance. This Court sustained the reduction because the court below 'gave careful consideration to the questions of the value of the property * * * at the time of the inquiry,' and whether the rate 'would be sufficient to provide a fair return on the value of the property.' The Court said this method was 'based upon principles thoroughly established by repeated decisions of this court,' citing many cases, not one of which involved natural gas or a comparable wasting natural resource. Then came issues as to state power to *651 regulate as affected by the commerce clause. Public Utilities Commission v. Landon, 1919, 249 U.S. 236, 39 S.Ct. 268, 63 L.Ed. 577; Pennsylvania Gas Co. v. Public Service Commission, 1920, 252 U.S. 23, 40 S.Ct. 279, 64 L.Ed. 434. These questions settled, the Court again was called upon in natural gas cases to consider state rate-making claimed to be invalid under the Fourteenth Amendment. United Fuel Gas Co. v. Railroad Commission of Kentucky, 1929, 278 U.S. 300, 49 S.Ct. 150, 73 L.Ed. 390; United Fuel Gas Company v. Public Service Commission of West Virginia, 1929, 278 U.S. 322, 49 S.Ct. 157, 73 L.Ed. 402. Then, as now, the differences were 'due **311 chiefly to the difference in value ascribed by each to the gas rights and leaseholds.' 278 U.S. 300, 311, 49 S.Ct. 150, 153, 73 L.Ed. 390. No one seems to have questioned that the rate

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base method must be pursued and the controversy was at what rate base must be used. Later the 'value' of gas in the field was questioned in determining the amount a regulated company should be allowed to pay an affiliate therefor—a state determination also reviewed under the Fourteenth Amendment. Dayton Power & Light Co. v. Public Utilities Commission of Ohio, 1934, 292 U.S. 290, 54 S.Ct. 647, 78 L.Ed. 1267; Columbus Gas & Fuel Co. v. Public Utilities Commission of Ohio, 1934, 292 U.S. 398, 54 S.Ct. 763, 78 L.Ed. 1327, 91 A.L.R. 1403. In both cases, one of which sustained, and one of which struck down a fixed rate the Court assumed the rate base method, as the legal way of testing reasonableness of natural gas prices fixed by public authority, without examining its real relevancy to the inquiry.

Under the weight of such precedents we cannot expect the Commission to initiate economically intelligent methods of fixing gas prices. But the Court now faces a new plan of federal regulation based on the power to fix the price at which gas shall be allowed to move in interstate commerce. I should now consider whether these rules devised under the Fourteenth Amendment are the exclusive tests of a just and reasonable rate under the federal statute, inviting reargument directed to that point *652 if necessary. As I see it now I would be prepared to hold that these rules do not apply to a natural gas case arising under the Natural Gas Act.

Such a holding would leave the Commission to fix the price of gas in the field as one would fix maximum prices of oil or milk or coal, or any other commodity. Such a price is not calculated to produce a fair return on the synthetic value of a rate base of any individual producer, and would not undertake to assure a fair return to any producer. The emphasis would shift from the producer to the product, which would be regulated with an eye to average or typical producing conditions in the field.

Such a price fixing process on economic lines would offer little temptation to the judiciary to become back seat drivers of the price fixing machine. The unfortunate effect of judicial intervention in this field is to divert the attention of those engaged in the process from what is economically wise to what is legally permissible. It is probable that price reductions would reach economically unwise and self-defeating limits before they would reach constitutional ones. Any constitutional problems growing out of price fixing are quite different than those that have heretofore been considered to inhere in rate making. A producer would have difficulty showing the invalidity of such a fixed price so long as he voluntarily continued to sell his product in interstate commerce. Should he withdraw and other authority be invoked to compel him to part with his property, a different problem would be

presented.

Allowance in a rate to compensate for gas removed from gas lands, whether fixed as of point of production or as of point of delivery, probably best can be measured by a functional test applied to the whole industry. For good or ill we depend upon private enterprise to exploit these natural resources for public consumption. The function which an allowance for gas in the field should perform *653 for society in such circumstances is to be enough and no more than enough to induce private enterprise completely and efficiently to utilize gas resources, to acquire for public service any available gas or gas rights and to deliver gas at a rate and for uses which will be in the future as well as in the present public interest.

The Court fears that 'if we are now to tell the Commission to fix the rates so as to discourage particular uses, we would indeed be injecting into a rate case a 'novel' doctrine * * *'. With due deference I suggest that there is nothing novel in the idea that any change in price of a service or commodity reacts to encourage or discourage its use. The question is not whether such consequences will or will not follow; the question is whether effects must be suffered blindly or may be intelligently selected, whether price control shall have targets at which it deliberately aims or shall be handled like a gun in the hands of one who does not know it is loaded.

We should recognize 'price' for what it is—a tool, a means, an expedient. In public**312 hands it has much the same economic effects as in private hands. Hope knew that a concession in industrial price would tend to build up its volume of sales. It used price as an expedient to that end. The Commission makes another cut in that same price but the Court thinks we should ignore the effect that it will have on exhaustion of supply. The fact is that in natural gas regulation price must be used to reconcile the private property right society has permitted to vest in an important natural resource with the claims of society upon it—price must draw a balance between wealth and welfare.

To carry this into techniques of inquiry is the task of the Commissioner rather than of the judge, and it certainly is no task to be solved by mere bookkeeping but requires the best economic talent available. There would doubtless be inquiry into the price gas is bringing in the *654 field, how far that price is established by arms' length bargaining and how far it may be influenced by agreements in restraint of trade or monopolistic influences. What must Hope really pay to get and to replace gas it delivers under this order? If it should get more or less than that for its own, how much and why? How far are such prices influenced by pipe line access to

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markets and if the consumers pay returns on the pipe lines how far should the increment they cause go to gas producers? East Ohio is itself a producer in Ohio. ^{FN44} What do Ohio authorities require Ohio consumers to pay for gas in the field? Perhaps these are reasons why the Federal Government should put West Virginia gas at lower or at higher rates. If so what are they? Should East Ohio be required to exploit its half million acres of unoperated reserve in Ohio before West Virginia resources shall be supplied on a devalued basis of which that State complains and for which she threatens measures of self keep? What is gas worth in terms of other fuels it displaces?

^{FN44} East Ohio itself owns natural gas rights in 550,600 acres, 518,526 of which are reserved and 32,074 operated, by 375 wells. Moody's Manual of Public Utilities (1943) 5.

A price cannot be fixed without considering its effect on the production of gas. Is it an incentive to continue to exploit vast unoperated reserves? Is it conducive to deep drilling tests the result of which we may know only after trial? Will it induce bringing gas from afar to supplement or even to substitute for Appalachian gas? ^{FN45} Can it be had from distant fields as cheap or cheaper? If so, that competitive potentiality is certainly a relevant consideration. Wise regulation must also consider, as a private buyer would, what alternatives the producer has *655 if the price is not acceptable. Hope has intrastate business and domestic and industrial customers. What can it do by way of diverting its supply to intrastate sales? What can it do by way of disposing of its operated or reserve acreage to industrial concerns or other buyers? What can West Virginia do by way of conservation laws, severance or other taxation, if the regulated rate offends? It must be borne in mind that while West Virginia was prohibited from giving her own inhabitants a priority that discriminated against interstate commerce, we have never yet held that a good faith conservation act, applicable to her own, as well as to others, is not valid. In considering alternatives, it must be noted that federal regulation is very incomplete, expressly excluding regulation of 'production or gathering of natural gas,' and that the only present way to get the gas seems to be to call it forth by price inducements. It is plain that there is a downward economic limit on a safe and wise price.

^{FN45} Hope has asked a certificate of convenience and necessity to lay 1140 miles of 22-inch pipeline from Hugoton gas fields in southwest Kansas to West Virginia to carry 285 million cu. ft. of natural gas per day. The cost

was estimated at \$51,000,000. Moody's Manual of Public Utilities (1943) 1760.

But there is nothing in the law which compels a commission to fix a price at that 'value' which a company might give to its product by taking advantage of scarcity, or monopoly of supply. The very purpose of fixing maximum prices is to take away from the seller his opportunity to get all that otherwise the market would award him for his goods. This is a constitutional use of the power to fix maximum prices, **313 Block v. Hirsh, 256 U.S. 135, 41 S.Ct. 458, 65 L.Ed. 865, 16 A.L.R. 165; Marcus Brown Holding Co. v. Feldman, 256 U.S. 170, 41 S.Ct. 465, 65 L.Ed. 877; International Harvester Co. v. Kentucky, 234 U.S. 216, 34 S.Ct. 853, 58 L.Ed. 1284; Highland v. Russell Car & Snow Plow Co., 279 U.S. 253, 49 S.Ct. 314, 73 L.Ed. 688, just as the fixing of minimum prices of goods in interstate commerce is constitutional although it takes away from the buyer the advantage in bargaining which market conditions would give him. United States v. Darby, 312 U.S. 100, 657, 61 S.Ct. 451, 85 L.Ed. 609, 132 A.L.R. 1430; Mulford v. Smith, 307 U.S. 38, 59 S.Ct. 648, 83 L.Ed. 1092; United States v. Rock Royal Co-operative, Inc., 307 U.S. 533, 59 S.Ct. 993, 83 L.Ed. 1446; Sunshine Anthracite Coal Co. v. Adkins, 310 U.S. 381, 60 S.Ct. 907, 84 L.Ed. 1263. The Commission has power to fix *656 a price that will be both maximum and minimum and it has the incidental right, and I think the duty, to choose the economic consequences it will promote or retard in production and also more importantly in consumption, to which I now turn.

If we assume that the reduction in company revenues is warranted we then come to the question of translating the allowed return into rates for consumers or classes of consumers. Here the Commission fixed a single rate for all gas delivered irrespective of its use despite the fact that Hope has established what amounts to two rates—a high one for domestic use and a lower one for industrial contracts. ^{FN46} The Commission can fix two prices for interstate gas as readily as one—a price for resale to domestic users and another for resale to industrial users. This is the pattern Hope itself has established in the very contracts over which the Commission is expressly given jurisdiction. Certainly the Act is broad enough to permit two prices to be fixed instead of one, if the concept of the 'public interest' is not unduly narrowed.

^{FN46} I find little information as to the rates for industries in the record and none at all in such usual sources as Moody's Manual.

The Commission's concept of the public interest in natural

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gas cases which is carried today into the Court's opinion was first announced in the opinion of the minority in the Pipeline case. It enumerated only two 'phases of the public interest: (1) the investor interest; (2) the consumer interest,' which it emphasized to the exclusion of all others. 315 U.S. 575, 606, 62 S.Ct. 736, 753, 86 L.Ed. 1037. This will do well enough in dealing with railroads or utilities supplying manufactured gas, electric, power, a communications service or transportation, where utilization of facilities does not impair their future usefulness. Limitation of supply, however, brings into a natural gas case another phase of the public interest that to my mind overrides both the owner *657 and the consumer of that interest. Both producers and industrial consumers have served their immediate private interests at the expense of the long-range public interest. The public interest, of course, requires stopping unjust enrichment of the owner. But it also requires stopping unjust impoverishment of future generations. The public interest in the use by Hope's half million domestic consumers is quite a different one from the public interest in use by a baker's dozen of industries.

Prudent price fixing it seems to me must at the very threshold determine whether any part of an allowed return shall be permitted to be realized from sales of gas for resale for industrial use. Such use does tend to level out daily and seasonal peaks of domestic demand and to some extent permits a lower charge for domestic service. But is that a wise way of making gas cheaper when, in comparison with any substitute, gas is already a cheap fuel? The interstate sales contracts provide that at times when demand is so great that there is not enough gas to go around domestic users shall first be served. Should the operation of this preference await the day of actual shortage? Since the propriety of a preference seems conceded, should it not operate to prevent the coming of a shortage as well as to mitigate its effects? Should industrial use jeopardize tomorrow's service to householders any more than today's? If, however, it is decided to cheapen domestic use by resort to industrial sales, should they be limited to the few uses **314 for which gas has special values or extend also to those who use it only because it is cheaper than competitive fuels? FN47 And how much cheaper should industrial*658 gas sell than domestic gas, and how much advantage should it have over competitive fuels? If industrial gas is to contribute at all to lowering domestic rates, should it not be made to contribute the very maximum of which it is capable, that is, should not its price be the highest at which the desired volume of sales can be realized?

FN47 The Federal Power Commission has touched upon the problem of conservation in

connection with an application for a certificate permitting construction of a 1500-mile pipeline from southern Texas to New York City and says: 'The Natural Gas Act as presently drafted does not enable the Commission to treat fully the serious implications of such a problem. The question should be raised as to whether the proposed use of natural gas would not result in displacing a less valuable fuel and create hardships in the industry already supplying the market, while at the same time rapidly depleting the country's natural-gas reserves. Although, for a period of perhaps 20 years, the natural gas could be so priced as to appear to offer an apparent saving in fuel costs, this would mean simply that social costs which must eventually be paid had been ignored.

'Careful study of the entire problem may lead to the conclusion that use of natural gas should be restricted by functions rather than by areas. Thus, it is especially adapted to space and water heating in urban homes and other buildings and to the various industrial heat processes which require concentration of heat, flexibility of control, and uniformity of results. Industrial uses to which it appears particularly adapted include the treating and annealing of metals, the operation of kilns in the ceramic, cement, and lime industries, the manufacture of glass in its various forms, and use as a raw material in the chemical industry. General use of natural gas under boilers for the production of steam is, however, under most circumstances of very questionable social economy.' Twentieth Annual Report of the Federal Power Commission (1940) 79.

If I were to answer I should say that the household rate should be the lowest that can be fixed under commercial conditions that will conserve the supply for that use. The lowest probable rate for that purpose is not likely to speed exhaustion much, for it still will be high enough to induce economy, and use for that purpose has more nearly reached the saturation point. On the other hand the demand for industrial gas at present rates already appears to be increasing. To lower further the industrial rate is merely further to subsidize industrial consumption and speed depletion. The impact of the flat reduction *659 of rates ordered here admittedly will be to increase the industrial advantages of gas over competing fuels and to increase its use. I think this is not, and there is no finding by the Commission that it is, in the public interest.

There is no justification in this record for the present discrimination against domestic users of gas in favor of industrial users. It is one of the evils against which the Natural Gas Act was aimed by Congress and one of the evils complained of here by Cleveland and Akron. If

64 S.Ct. 281

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Hope's revenues should be cut by some \$3,600,000 the whole reduction is owing to domestic users. If it be considered wise to raise part of Hope's revenues by industrial purpose sales, the utmost possible revenue should be raised from the least consumption of gas. If competitive relationships to other fuels will permit, the industrial price should be substantially advanced, not for the benefit of the Company, but the increased revenues from the advance should be applied to reduce domestic rates. For in my opinion the 'public interest' requires that the great volume of gas now being put to uneconomic industrial use should either be saved for its more important future domestic use or the present domestic user should have the full benefit of its exchange value in reducing his present rates.

Of course the Commission's power directly to regulate does not extend to the fixing of rates at which the local company shall sell to consumers. Nor is such power required to accomplish the purpose. As already pointed out, the very contract the Commission is altering classifies the gas according to the purposes for which it is to be resold and provides differentials between the two classifications. It would only be necessary for the Commission to order **315 that all gas supplied under paragraph (a) of Hope's contract with the East Ohio Company shall be *660 at a stated price fixed to give to domestic service the entire reduction herein and any further reductions that may prove possible by increasing industrial rates. It might further provide that gas delivered under paragraph (b) of the contract for industrial purposes to those industrial customers Hope has approved in writing shall be at such other figure as might be found consistent with the public interest as herein defined. It is too late in the day to contend that the authority of a regulatory commission does not extend to a consideration of public interests which it may not directly regulate and a conditioning of its orders for their protection. Interstate Commerce Commission v. Railway Labor Executives Ass'n, 315 U.S. 373, 62 S.Ct. 717, 86 L.Ed. 904; United States v. Lowden, 308 U.S. 225, 60 S.Ct. 248, 84 L.Ed. 208.

Whether the Commission will assert its apparently broad statutory authorization over prices and discriminations is, of course, its own affair, not ours. It is entitled to its own notion of the 'public interest' and its judgment of policy must prevail. However, where there is ground for thinking that views of this Court may have constrained the Commission to accept the rate-base method of decision and a particular single formula as 'all important' for a rate base, it is appropriate to make clear the reasons why I, at least, would not be so understood. The Commission is free to face up realistically to the nature and peculiarity of the resources in its control, to foster

their duration in fixing price, and to consider future interests in addition to those of investors and present consumers. If we return this case it may accept or decline the proffered freedom. This problem presents the Commission an unprecedented opportunity if it will boldly make sound economic considerations, instead of legal and accounting theories, the foundation of federal policy. I would return the case to the Commission and thereby be clearly quit of what now may appear to be some responsibility for perpetrating a shortsighted pattern of natural gas regulation.

U.S. 1944.

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43 S.Ct. 675

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(Cite as: P.U.R. 1923D 11, 43 S.Ct. 675)

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Supreme Court of the United States
BLUEFIELD WATERWORKS & IMPROVEMENT
CO.
v.
PUBLIC SERVICE COMMISSION OF WEST
VIRGINIA et al.
No. 256.

Argued January 22, 1923.
Decided June 11, 1923.

In Error to the Supreme Court of Appeals of West Virginia.

Proceedings by the Bluefield Waterworks & Improvement Company against the Public Service Commission of the State of West Virginia and others to suspend and set aside an order of the Commission fixing rates. From a judgment of the Supreme Court of West Virginia, dismissing the petition, and denying the relief (89 W. Va. 736, 110 S. E. 205), the Waterworks Company bring error. Reversed.

West Headnotes

Constitutional Law 92 298(1.5)

92 Constitutional Law

92XII Due Process of Law

92k298 Regulation of Charges and Prices

92k298(1.5) k. Public Utilities in

General. Most Cited Cases

Rates which are not sufficient to yield a reasonable return on the value of the property used in public service at the time it is being so used to render the service are unjust, unreasonable, and confiscatory, and their enforcement deprives the public utility company of its property, in violation of the Fourteenth Amendment of the Constitution.

Constitutional Law 92 298(3)

92 Constitutional Law

92XII Due Process of Law

92k298 Regulation of Charges and Prices

92k298(3) k. Water and Irrigation

Companies. Most Cited Cases

Under the due process clause of the Fourteenth Amendment of the Constitution, U.S.C.A., a

waterworks company is entitled to the independent judgment of the court as to both law and facts, where the question is whether the rates fixed by a public service commission are confiscatory.

Waters and Water Courses 405 203(10)

405 Waters and Water Courses

405IX Public Water Supply

405IX(A) Domestic and Municipal

Purposes

405k203 Water Rents and Other

Charges

405k203(10) k. Reasonableness

of Charges. Most Cited Cases

It was error for a state public service commission, in arriving at the value of the property used in public service, for the purpose of fixing the rates, to fail to give proper weight to the greatly increased cost of construction since the war.

Waters and Water Courses 405 203(10)

405 Waters and Water Courses

405IX Public Water Supply

405IX(A) Domestic and Municipal

Purposes

405k203 Water Rents and Other

Charges

405k203(10) k. Reasonableness

of Charges. Most Cited Cases

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties, but it has no constitutional right to such profits as are realized or anticipated in highly profitable enterprises or speculative ventures.

Waters and Water Courses 405 203(10)

405 Waters and Water Courses

405IX Public Water Supply

405IX(A) Domestic and Municipal

Purposes

405k203 Water Rents and Other


Charges

405k203(10) k. Reasonableness

(Cite as: P.U.R. 1923D 11, 43 S.Ct. 675)

of Charges. Most Cited Cases

Since the investors take into account the result of past operations as well as present rates in determining whether they will invest, a waterworks company which had been earning a low rate of returns through a long period up to the time of the inquiry is entitled to return of more than 6 per cent. on the value of its property used in the public service, in order to justly compensate it for the use of its property.

Federal Courts 170B  504.1

170B Federal Courts

170BVII Supreme Court

170BVII(E) Review of Decisions of State Courts

170Bk504 Nature of Decisions or Questions Involved

170Bk504.1 k. In General. Most Cited Cases

(Formerly 106k394(6))

A proceeding in a state court attacking an order of a public service commission fixing rates, on the ground that the rates were confiscatory and the order void under the federal Constitution, is one where there is drawn in question the validity of authority exercised under the state, on the ground of repugnancy to the federal Constitution, and therefore is reviewable by writ of error.

****675 *680** Messrs. Alfred G. Fox and Jos. M. Sanders, both of Bluefield, W. Va., for plaintiff in error.

Mr. Russell S. Ritz, of Bluefield, W. Va., for defendants in error.

***683** Mr. Justice BUTLER delivered the opinion of the Court.

Plaintiff in error is a corporation furnishing water to the city of Bluefield, W. Va., ****676** and its inhabitants. September 27, 1920, the Public Service Commission of the state, being authorized by statute to fix just and reasonable rates, made its order prescribing rates. In accordance with the laws of the state (section 16, c. 15-O, Code of West Virginia [sec. 651]), the company instituted proceedings in the Supreme Court of Appeals to suspend and set aside the order. The petition alleges that the order is repugnant to the Fourteenth Amendment, and deprives the company of its property without just

compensation and without due process of law, and denies it equal protection of the laws. A final judgment was entered, denying the company relief and dismissing its petition. The case is here on writ of error.

[1] 1. The city moves to dismiss the writ of error for the reason, as it asserts, that there was not drawn in question the validity of a statute or an authority exercised under the state, on the ground of repugnancy to the federal Constitution.

The validity of the order prescribing the rates was directly challenged on constitutional grounds, and it was held valid by the highest court of the state. The prescribing of rates is a legislative act. The commission is an instrumentality of the state, exercising delegated powers. Its order is of the same force as would be a like enactment by the Legislature. If, as alleged, the prescribed rates are confiscatory, the order is void. Plaintiff in error is entitled to bring the case here on writ of error and to have that question decided by this court. The motion to dismiss will be denied. See ***684** Oklahoma Natural Gas Co. v. Russell, 261 U. S. 290, 43 Sup. Ct. 353, 67 L. Ed. 659, decided March 5, 1923, and cases cited; also Ohio Valley Co. v. Ben Avon Borough, 253 U. S. 287, 40 Sup. Ct. 527, 64 L. Ed. 908.

2. The commission fixed \$460,000 as the amount on which the company is entitled to a return. It found that under existing rates, assuming some increase of business, gross earnings for 1921 would be \$80,000 and operating expenses \$53,000 leaving \$27,000, the equivalent of 5.87 per cent., or 3.87 per cent. after deducting 2 per cent. allowed for depreciation. It held existing rates insufficient to the extent of 10,000. Its order allowed the company to add 16 per cent. to all bills, excepting those for public and private fire protection. The total of the bills so to be increased amounted to \$64,000; that is, 80 per cent. of the revenue was authorized to be increased 16 per cent., equal to an increase of 12.8 per cent. on the total, amounting to \$10,240.

As to value: The company claims that the value of the property is greatly in excess of \$460,000. Reference to the evidence is necessary. There was submitted to the commission evidence of value which it summarized substantially as follows:

a. Estimate by company's engineer

(Cite as: P.U.R. 1923D 11, 43 S.Ct. 675)

	on. basis of reproduction new, less. depreciation, at prewar prices.	\$ 624,548 00
b.	Estimate by company's engineer on. basis of reproduction new, less. depreciation, at 1920 prices.	1,194,663 00
c.	Testimony of company's engineer. fixing present fair value for rate. making purposes.	900,000 00
d.	Estimate by commissioner's engineer on. basis of reproduction new, less. depreciation at 1915 prices, plus. additions since December 31, 1915, at. actual cost, excluding Bluefield. Valley waterworks, water rights, and going value.	397,964 38
e.	Report of commission's statistician. showing investment cost less. depreciation.	365,445 13
f.	Commission's valuation, as fixed in. case No. 368 (\$360,000), plus gross. additions to capital since made. (\$92,520.53).	452,520 53

*685 It was shown that the prices prevailing in 1920 were nearly double those in 1915 and pre-war time. The company did not claim value as high as its estimate of cost of construction in 1920. Its valuation engineer testified that in his opinion the value of the property was \$900,000—a figure between the cost of construction in 1920, less depreciation, and the cost of construction in 1915 and before the war, less depreciation.

The commission's application of the evidence may be stated briefly as follows:

As to 'a,' supra: The commission deducted \$204,000 from the estimate (details printed in the margin), ^{FN1} leaving approximately \$421,000, which it contrasted with the estimate of its own engineer, \$397,964.38 (see 'd,' supra). It found that there should be included \$25,000 for the Bluefield Valley waterworks plant in Virginia, 10 per cent. for going value, and \$10,000 for working capital. If these be added to \$421,000, there results \$500,600. This may be compared with the commission's final figure, \$460,000.

FN1

Difference in depreciation allowed.	\$ 49,000
Preliminary organization and development. cost.	14,500
Bluefield Valley waterworks plant.	25,000
Water rights.	50,000
Excess overhead costs.	39,000
Paving over mains.	28,500
	\$204,000

(Cite as: P.U.R. 1923D 11, 43 S.Ct. 675)

*686 As to 'b' and 'c,' supra: These were given no weight by the commission in arriving at its final figure, \$460,000. It said:

'Applicant's plant was originally constructed more than twenty years ago, and has been added to from time to time as the progress and development of the community required. For this reason, it would be unfair to its consumers to use as a basis for present fair value the abnormal prices prevailing during the recent war period; but, when, as in this case, a part of the plant has been constructed or added to during that period, in fairness to the applicant, consideration must be given to the cost of such expenditures made to meet the demands of the public.'

**677 As to 'd,' supra: The commission, taking \$400,000 (round figures), added \$25,000 for Bluefield Valley waterworks plant in Virginia, 10 per cent. for going value, and \$10,000 for working capital, making \$477,500. This may be compared with its final figure, \$460,000.

As to 'e,' supra: The commission, on the report of its statistician, found gross investment to be \$500,402.53. Its engineer, applying the straight line method, found 19 per cent. depreciation. It applied 81 per cent. to gross investment and added 10 per cent. for going value and \$10,000 for working capital, producing \$455,500. ^{FN2} This may be compared with its final figure, \$460,000.

^{FN2} As to 'e': \$365,445.13 represents investment cost less depreciation. The gross investment was found to be \$500,402.53, indicating a deduction on account of depreciation of \$134,957.40, about 27 per cent., as against 19 per cent. found by the commission's engineer.

As to 'f,' supra: It is necessary briefly to explain how this figure, \$452,520.53, was arrived at. Case No. 368 was a proceeding initiated by the application of the company for higher rates, April 24, 1915. The commission made a valuation as of January 1, 1915. There were presented two estimates of reproduction cost less depreciation, one by a valuation engineer engaged by the company, *687 and the other by a valuation engineer engaged by the city, both 'using the same method.' An inventory made by the company's engineer was accepted as correct by the city and by the commission. The method 'was that generally employed by courts and commissions in arriving at the value of public utility properties under this method.' and in both estimates 'five year average unit prices' were applied. The estimate of the company's engineer was \$540,000 and of the city's engineer, \$392,000. The principal differences as given by the commission are shown in the margin. ^{FN3} The commission disregarded both estimates and arrived at \$360,000. It held that the best basis of valuation was the net investment, i. e., the total cost of the property less depreciation. It said:

^{FN3}

		Company Engineer.	City Engineer.
1.	Preliminary costs.	\$14,455	\$1,000
2.	Water rights.	50,000	Nothing
3.	Cutting pavements over mains.	27,744	233
4.	Pipe lines from gravity springs.	22,072	15,442
5.	Laying cast iron street mains.	19,252	15,212
6.	Reproducing Ada springs.	18,558	13,027
7.	Superintendence and engineering.	20,515	13,621
8.	General contingent cost.	16,415	5,448
		\$189,011	\$63,983

since its organization, of \$407,882, and that there has been charged off for depreciation from year to year the total sum of \$83,445, leaving a net investment of

'The books of the company show a total gross investment,

(Cite as: P.U.R. 1923D 11, 43 S.Ct. 675)

\$324,427. * * * From an examination of the books * * * it appears that the records of the company have been remarkably well kept and preserved. It therefore seems that, when a plant is developed under these conditions, the net investment, which, of course, means the total gross investment less depreciation, is the very best basis of valuation for rate making purposes and that the other methods above referred to should *688 be used only when it is impossible to arrive at the true investment. Therefore, after making due allowance for capital necessary for the conduct of the business and considering the plant as a going concern, it is the opinion of the commission that the fair value for the purpose of determining reasonable and just rates in this case of the property of the applicant company, used by it in the public service of supplying water to the city of Bluefield and its citizens, is the sum of \$360,000, which sum is hereby fixed and determined by the commission to be the fair present value for the said purpose of determining the reasonable and just rates in this case.'

In its report in No. 368, the commission did not indicate the amounts respectively allowed for going value or working capital. If 10 per cent. be added for the former, and \$10,000 for the latter (as fixed by the commission in the present case), there is produced \$366,870, to be compared with \$360,000, found by the commission in its valuation as of January 1, 1915. To this it added \$92,520.53, expended since, producing \$452,520.53. This may be compared with its final figure, \$460,000.

The state Supreme Court of Appeals holds that the valuing of the property of a public utility corporation and prescribing rates are purely legislative acts, not subject to judicial review, except in so far as may be necessary to determine whether such rates are void on constitutional or other grounds, and that findings of fact by the commission based on evidence to support them will not be reviewed by the court. City of Bluefield v. Waterworks, 81 W. Va. 201, 204, 94 S. E. 121; Coal & Coke Co. v. Public Service Commission, 84 W. Va. 662, 678, 100 S. E. 557, 7 A. L. R. 108; Charleston v. Public Service Commission, 86 W. Va. 536, 103 S. E. 673.

In this case (89 W. Va. 736, 738, 110 S. E. 205, 206) it said:

'From the written opinion of the commission we find that it ascertained the value of the petitioner's property for rate making [then quoting the commission] 'after *689 maturely and carefully considering the various methods presented for the ascertainment of fair value and giving such weight as seems proper to every element involved and all the facts and circumstances disclosed by the record.'

[2] [3] The record clearly shows that the commission, in arriving at its final figure, did not accord proper, if any, weight to the greatly enhanced costs of construction in 1920 over those prevailing about 1915 and before the war, as established by uncontradicted **678 evidence; and the company's detailed estimated cost of reproduction new, less depreciation, at 1920 prices, appears to have been wholly disregarded. This was erroneous. Missouri ex rel. Southwestern Bell Telephone Co. v. Public Service Commission of Missouri, 262 U. S. 276, 43 Sup. Ct. 544, 67 L. Ed. 981, decided May 21, 1923. Plaintiff in error is entitled under the due process clause of the Fourteenth Amendment to the independent judgment of the court as to both law and facts. Ohio Valley Co. v. Ben Avon Borough, 253 U. S. 287, 289, 40 Sup. Ct. 527, 64 L. Ed. 908, and cases cited.

We quote further from the court's opinion (89 W. Va. 739, 740, 110 S. E. 206):

'In our opinion the commission was justified by the law and by the facts in finding as a basis for rate making the sum of \$460,000.00. * * * In our case of Coal & Coke Ry. Co. v. Conley, 67 W. Va. 129, it is said: 'It seems to be generally held that, in the absence of peculiar and extraordinary conditions, such as a more costly plant than the public service of the community requires, or the erection of a plant at an actual, though extravagant, cost, or the purchase of one at an exorbitant or inflated price, the actual amount of money invested is to be taken as the basis, and upon this a return must be allowed equivalent to that which is ordinarily received in the locality in which the business is done, upon capital invested in similar enterprises. In addition to this, consideration must be given to the nature of the investment, a higher rate *690 being regarded as justified by the risk incident to a hazardous investment.'

'That the original cost considered in connection with the history and growth of the utility and the value of the services rendered constitute the principal elements to be considered in connection with rate making, seems to be supported by nearly all the authorities.'

[4] The question in the case is whether the rates prescribed in the commission's order are confiscatory and therefore beyond legislative power. Rates which are not sufficient to yield a reasonable return on the value of the property used at the time it is being used to render the service are unjust, unreasonable and confiscatory, and their enforcement deprives the public utility company of its property in violation of the Fourteenth Amendment. This is so well settled by numerous decisions of this court that citation of the cases is scarcely necessary:

(Cite as: P.U.R. 1923D 11, 43 S.Ct. 675)

'What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience.' Smyth v. Ames (1898) 169 U. S. 467, 547, 18 Sup. Ct. 418, 434 (42 L. Ed. 819).

'There must be a fair return upon the reasonable value of the property at the time it is being used for the public. * * * And we concur with the court below in holding that the value of the property is to be determined as of the time when the inquiry is made regarding the rates. If the property, which legally enters into the consideration of the question of rates, has increased in value since it was acquired, the company is entitled to the benefit of such increase.' Willcox v. Consolidated Gas Co. (1909) 212 U. S. 19, 41, 52, 29 Sup. Ct. 192, 200 (53 L. Ed. 382, 15 Ann. Cas. 1034, 48 L. R. A. [N. S.] 1134).

'The ascertainment of that value is not controlled by artificial rules. It is not a matter of formulas, but there must be a reasonable judgment having its basis in a proper consideration of all relevant facts.' Minnesota Rate Cases (1913) 230 U. S. 352, 434, 33 Sup. Ct. 729, 754 (57 L. Ed. 1511, 48 L. R. A. [N. S.] 1151, Ann. Cas. 1916A, 18).

*691 'And in order to ascertain that value, the original cost of construction, the amount expended in permanent improvements, the amount and market value of its bonds and stock, the present as compared with the original cost of construction, the probable earning capacity of the property under particular rates prescribed by statute, and the sum required to meet operating expenses, are all matters for consideration, and are to be given such weight as may be just and right in each case. We do not say that there may not be other matters to be regarded in estimating the value of the property.' Smyth v. Ames, 169 U. S., 546, 547, 18 Sup. Ct. 434, 42 L. Ed. 819.

* * * The making of a just return for the use of the property involves the recognition of its fair value if it be more than its cost. The property is held in private ownership and it is that property, and not the original cost of it, of which the owner may not be deprived without due process of law.'

Minnesota Rate Cases, 230 U. S. 454, 33 Sup. Ct. 762, 57 L. Ed. 1511, 48 L. R. A. (N. S.) 1151, Ann. Cas. 1916A, 18.

In Missouri ex rel. Southwestern Bell Telephone Co., v. Public Service Commission of Missouri, supra, applying the principles of the cases above cited and others, this court said:

'Obviously, the commission undertook to value the property without according any weight to the greatly enhanced costs of material, labor, supplies, etc., over those prevailing in 1913, 1914, and 1916. As matter of common knowledge, these increases were large. Competent witnesses estimated them as 45 to 50 per

centum. * * * It is impossible to ascertain what will amount to a fair return upon properties devoted to public service, without giving consideration to the cost of labor, supplies, etc., at the time the investigation is made. An honest and intelligent forecast of probable future values, made upon a view of all the relevant circumstances, is essential. If the highly important element of present costs is wholly disregarded, such a forecast becomes impossible. Estimates for to-morrow cannot ignore prices of to-day.'

[5] *692 It is clear that the court also failed to give proper consideration to the higher cost of construction in 1920 over that in 1915 and before the war, and failed to give weight to cost of reproduction less depreciation on the basis of 1920 prices, or to the testimony of the company's valuation engineer, based on present and past costs of construction, that the property in his opinion, was worth \$900,000. The final figure, \$460,000, was arrived *693 at substantially on the basis of actual cost, less depreciation, plus 10 per cent. for going value and \$10,000 for working capital. This resulted in a valuation considerably and materially less than would have been reached by a fair and just consideration of all the facts. The valuation cannot be sustained. Other objections to the valuation need not be considered.

3. Rate of return: The state commission found that the company's net annual income should be approximately \$37,000, in order to enable it to earn 8 per cent. for return and depreciation upon the value of its property as fixed by it. Deducting 2 per cent. for depreciation, there remains 6 per cent. on \$460,000, amounting to \$27,600 for return. This was approved by the state court.

[6] The company contends that the rate of return is too low and confiscatory. What annual rate will constitute just compensation depends upon many circumstances, and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding, risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in *693 highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A

(Cite as: P.U.R. 1923D 11, 43 S.Ct. 675)

rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.

In 1909, this court, in Willecox v. Consolidated Gas Co., 212 U. S. 19, 48-50, 29 Sup. Ct. 192, 53 L. Ed. 382, 15 Ann. Cas. 1034, 48 L. R. A. (N. S.) 1134, held that the question whether a rate yields such a return as not to be confiscatory depends upon circumstances, locality and risk, and that no proper rate can be established for all cases; and that, under the circumstances of that case, 6 per cent. was a fair return on the value of the property employed in supplying gas to the city of New York, and that a rate yielding that return was not confiscatory. In that case the investment was held to be safe, returns certain and risk reduced almost to a minimum-as nearly a safe and secure investment as could be imagined in regard to any private manufacturing enterprise.

In 1912, in Cedar Rapids Gas Co. v. Cedar Rapids, 223 U. S. 655, 670, 32 Sup. Ct. 389, 56 L. Ed. 594, this court declined to reverse the state court where the value of the plant considerably exceeded its cost, and the estimated return was over 6 per cent.

In 1915, in Des Moines Gas Co. v. Des Moines, 238 U. S. 153, 172, 35 Sup. Ct. 811, 59 L. Ed. 1244, this court declined to reverse the United States District Court in refusing an injunction upon the conclusion reached that a return of 6 per cent. per annum upon the value would not be confiscatory.

In 1919, this court in Lincoln Gas Co. v. Lincoln, 250 U. S. 256, 268, 39 Sup. Ct. 454, 458 (63 L. Ed. 968), declined on the facts of that case to approve a finding that no rate yielding as much as 6 per cent. *694 on the invested capital could be regarded as confiscatory. Speaking for the court, Mr. Justice Pitney said: 'It is a matter of common knowledge that, owing principally to the World War, the costs of labor and supplies of every kind have greatly advanced since the ordinance was adopted, and largely since this cause was last heard in the court below. And it is equally well known that annual returns upon capital and enterprise the world over have materially increased, so that what would have been a proper rate of return for capital invested in gas plants and similar public utilities a few years ago furnishes no safe criterion for the present or for the future.'

In 1921, in Brush Electric Co. v. Galveston, the United States District Court held 8 per cent. a fair rate of return. ^{FN4}

^{FN4} This case was affirmed by this court June 4, 1923, 262 U. S. 443, 43 Sup. Ct. 606, 67 L. Ed. 1076.

In January, 1923, in City of Minneapolis v. Rand, the Circuit Court of Appeals of the Eighth Circuit (285 Fed. 818, 830) sustained, as against the attack of the city on the ground that it was excessive, 7 1/2 per cent., found by a special master and approved by the District Court as a fair and reasonable return on the capital investment-the value of the property.

[7] Investors take into account the result of past operations, especially in recent years, when determining the terms upon which they will invest in such an undertaking. Low, uncertain, or irregular income makes for low prices for the securities of the utility and higher rates of interest to be demanded by investors. The fact that the company may not insist as a matter of constitutional right that past losses be made up by rates to be applied in the present and future tends to weaken credit, and the fact that the utility is protected against being compelled to serve for confiscatory rates tends to support it. In *695 this case the record shows that the rate of return has been low through a long period up to the time of the inquiry by the commission here involved. For example, the average rate of return on the total cost of the property from 1895 to 1915, inclusive, was less than 5 per cent.; from 1911 to 1915, inclusive, about 4.4 per cent., without allowance for depreciation. In 1919 the net operating income was approximately \$24,700, leaving \$15,500, approximately, or 3.4 per cent. on \$460,000 fixed by the commission, after deducting 2 per cent. for depreciation. In 1920, the net operating income was approximately \$25,465, leaving \$16,265 for return, after allowing for depreciation. Under the facts and circumstances indicated by the record, we think that a rate of return of 6 per cent. upon the value of the property is substantially too low to constitute just compensation for the use of the property employed to render the service.

The judgment of the Supreme Court of Appeals of West Virginia is reversed.

Mr. Justice BRANDEIS concurs in the judgment of reversal, for the reasons stated by him in Missouri ex rel. Southwestern Bell Telephone Co. v. Public Service Commission of Missouri, supra. U.S. 1923 Bluefield Waterworks & Imp. Co. v. Public Service Commission of W. Va.

P.U.R. 1923D 11, 262 U.S. 679, 43 S.Ct. 675, 67 L.Ed. 1176

43 S.Ct. 675

P.U.R. 1923D 11, 262 U.S. 679, 43 S.Ct. 675, 67 L.Ed. 1176
(Cite as: **P.U.R. 1923D 11, 43 S.Ct. 675**)

END OF DOCUMENT

Value Line Electric Utilities Revenue and Income Percentages

PNM Exhibit RBH-3

Is contained in the following page.

VALUE LINE ELECTRIC UNIVERSE
REGULATED ELECTRIC REVENUE AND REGULATED ELECTRIC OPERATING INCOME

Company	Ticker	Regulated Electric	Regulated
		Revenue / Total	Electric Income / Total Regulated
		Regulated	Income
ALLETE, Inc.	ALE	87.78%	87.78%
Alliant Energy Corporation	LNT	83.84%	88.74%
Ameren Corporation	AEE	83.52%	88.16%
American Electric Power Company, Inc.	AEP	100.00%	100.00%
Avista Corporation	AVA	71.12%	77.63%
Black Hills Corporation	BKH	55.25%	62.99%
CenterPoint Energy, Inc.	CNP	44.56%	60.28%
Cleco Corporation	CNL	100.00%	100.00%
CMS Energy Corporation	CMS	65.21%	72.68%
Consolidated Edison, Inc.	ED	78.86%	79.38%
Dominion Resources	D	68.51%	65.10%
DTE Energy Company	DTE	77.24%	76.30%
Duke Energy Corporation	DUK	96.91%	97.03%
Edison International	EIX	100.00%	100.00%
El Paso Electric Company	EE	100.00%	100.00%
Empire District Electric Company	EDE	92.03%	93.83%
Entergy Corporation	ETR	98.59%	98.99%
Exelon Corporation	EXC	90.80%	90.82%
FirstEnergy Corp.	FE	92.76%	74.66%
Great Plains Energy Inc.	GXP	100.00%	100.00%
Hawaiian Electric Industries, Inc.	HE	100.00%	100.00%
IDACORP, Inc.	IDA	100.00%	100.00%
Integrus Energy Group, Inc.	TEG	40.67%	47.68%
ITC Holdings Corp.	ITC	100.00%	100.00%
MGE Energy, Inc.	MGEE	69.18%	78.17%
NextEra Energy, Inc.	NEE	100.00%	100.00%
Northeast Utilities	NU	89.67%	92.04%
NorthWestern Corporation	NWE	73.96%	82.65%
OGE Energy Corp.	OGE	100.00%	100.00%
Otter Tail Corporation	OTTR	100.00%	100.00%
Pepco Holdings, Inc.	POM	95.56%	96.63%
PG&E Corporation	PCG	78.54%	90.09%
Pinnacle West Capital Corporation	PNW	100.00%	100.00%
PNM Resources, Inc.	PNM	100.00%	100.00%
Portland General Electric Company	POR	100.00%	100.00%
PPL Corporation	PPL	93.94%	94.92%
Public Service Enterprise Group Incorporated	PEG	69.05%	74.64%
SCANA Corporation	SCG	74.19%	82.18%
Sempra Energy	SRE	43.06%	50.57%
Southern Company	SO	100.00%	100.00%
TECO Energy, Inc.	TE	82.71%	85.25%
UIL Holdings Corporation	UIL	51.05%	60.57%
UNS Energy Corporation	UNS	90.69%	90.76%
Vectren Corporation	VVC	43.89%	55.36%
Westar Energy, Inc.	WR	100.00%	100.00%
Wisconsin Energy Corporation	WEC	74.92%	82.84%
Xcel Energy Inc.	XEL	83.63%	88.52%
	Mean	83.87%	86.54%
	Median	90.69%	90.76%
	Standard Deviation	18.18%	15.08%

Sources: SNL Financial; Company SEC Form 10-K data 2011-2013

Constant Growth DCF Analysis

PNM Exhibit RBH-4

Is contained in the following 16 pages.

Constant Growth Discounted Cash Flow Model
30 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$53.16	3.76%	3.85%	4.80%	4.79%	4.50%	4.70%	8.35%	8.55%	8.65%
Cleco Corporation	CNL	\$1.60	\$51.50	3.11%	3.20%	7.00%	7.00%	3.50%	5.83%	6.66%	9.03%	10.22%
Duke Energy Corporation	DUK	\$3.18	\$75.19	4.23%	4.33%	4.70%	4.70%	5.00%	4.80%	9.03%	9.13%	9.34%
Empire District Electric Company	EDE	\$1.02	\$24.87	4.10%	4.17%	3.00%	3.00%	4.00%	3.33%	7.16%	7.50%	8.18%
Great Plains Energy Inc.	GXP	\$0.92	\$24.78	3.71%	3.81%	5.00%	5.00%	6.00%	5.33%	8.81%	9.15%	9.82%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$26.27	4.72%	4.81%	4.00%	4.00%	4.00%	4.00%	8.81%	8.81%	8.81%
IDACORP, Inc.	IDA	\$1.88	\$55.14	3.41%	3.46%	4.00%	4.00%	1.00%	3.00%	4.43%	6.46%	7.48%
NextEra Energy, Inc.	NEE	\$2.90	\$94.25	3.08%	3.17%	6.60%	6.48%	6.00%	6.36%	9.17%	9.53%	9.78%
Northeast Utilities	NU	\$1.57	\$45.59	3.44%	3.56%	6.50%	6.31%	8.00%	6.94%	9.86%	10.50%	11.58%
Otter Tail Corporation	OTTR	\$1.21	\$27.60	4.38%	4.62%	NA	6.00%	15.50%	10.75%	10.52%	15.37%	20.22%
Pinnacle West Capital Corporation	PNW	\$2.27	\$56.25	4.04%	4.11%	3.70%	3.75%	4.00%	3.82%	7.81%	7.93%	8.12%
Portland General Electric Company	POR	\$1.12	\$33.09	3.39%	3.50%	7.80%	7.80%	5.00%	6.87%	8.47%	10.37%	11.32%
Southern Company	SO	\$2.10	\$44.32	4.74%	4.82%	3.50%	3.35%	3.50%	3.45%	8.17%	8.27%	8.32%
Westar Energy, Inc.	WR	\$1.40	\$34.92	4.01%	4.10%	3.80%	3.20%	6.00%	4.33%	7.27%	8.43%	10.13%
PROXY GROUP MEAN				3.87%	3.97%	4.95%	4.96%	5.43%	5.25%	8.18%	9.22%	10.14%
PROXY GROUP MEDIAN				3.89%	3.97%	4.70%	4.75%	4.75%	4.75%	8.41%	8.92%	9.56%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 30-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [8])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Equals Average([5], [6], [7])

[9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])

[10] Equals [4] + [8]

[11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model
90 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$53.18	3.76%	3.85%	4.80%	4.79%	4.50%	4.70%	8.35%	8.55%	8.65%
Cleco Corporation	CNL	\$1.60	\$54.45	2.94%	3.02%	7.00%	7.00%	3.50%	5.83%	6.49%	8.86%	10.04%
Duke Energy Corporation	DUK	\$3.18	\$73.42	4.33%	4.44%	4.70%	4.70%	5.00%	4.80%	9.13%	9.24%	9.44%
Empire District Electric Company	EDE	\$1.02	\$25.05	4.07%	4.14%	3.00%	3.00%	4.00%	3.33%	7.13%	7.47%	8.15%
Great Plains Energy Inc.	GXP	\$0.92	\$25.37	3.63%	3.72%	5.00%	5.00%	6.00%	5.33%	8.72%	9.06%	9.74%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$25.13	4.93%	5.03%	4.00%	4.00%	4.00%	4.00%	9.03%	9.03%	9.03%
IDACORP, Inc.	IDA	\$1.88	\$55.29	3.40%	3.45%	4.00%	4.00%	1.00%	3.00%	4.42%	6.45%	7.47%
NextEra Energy, Inc.	NEE	\$2.90	\$96.59	3.00%	3.10%	6.60%	6.48%	6.00%	6.36%	9.09%	9.46%	9.70%
Northeast Utilities	NU	\$1.57	\$45.36	3.46%	3.58%	6.50%	6.31%	8.00%	6.94%	9.88%	10.52%	11.60%
Otter Tail Corporation	OTTR	\$1.21	\$28.37	4.26%	4.49%	NA	6.00%	15.50%	10.75%	10.39%	15.24%	20.10%
Pinnacle West Capital Corporation	PNW	\$2.27	\$55.83	4.07%	4.14%	3.70%	3.75%	4.00%	3.82%	7.84%	7.96%	8.15%
Portland General Electric Company	POR	\$1.12	\$33.27	3.37%	3.48%	7.80%	7.80%	5.00%	6.87%	8.45%	10.35%	11.30%
Southern Company	SO	\$2.10	\$44.17	4.75%	4.84%	3.50%	3.35%	3.50%	3.45%	8.18%	8.29%	8.34%
Westar Energy, Inc.	WR	\$1.40	\$36.13	3.88%	3.96%	3.80%	3.20%	6.00%	4.33%	7.14%	8.29%	9.99%
PROXY GROUP MEAN				3.85%	3.95%	4.95%	4.96%	5.43%	5.25%	8.16%	9.20%	10.12%
PROXY GROUP MEDIAN				3.82%	3.90%	4.70%	4.75%	4.75%	4.75%	8.40%	8.95%	9.57%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 90-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [8])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Equals Average([5], [6], [7])

[9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])

[10] Equals [4] + [8]

[11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model
180 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$52.12	3.84%	3.93%	4.80%	4.79%	4.50%	4.70%	8.42%	8.62%	8.73%
Cleco Corporation	CNL	\$1.60	\$52.35	3.06%	3.15%	7.00%	7.00%	3.50%	5.83%	6.61%	8.98%	10.16%
Duke Energy Corporation	DUK	\$3.18	\$72.31	4.40%	4.50%	4.70%	4.70%	5.00%	4.80%	9.20%	9.30%	9.51%
Empire District Electric Company	EDE	\$1.02	\$24.44	4.17%	4.24%	3.00%	3.00%	4.00%	3.33%	7.24%	7.58%	8.26%
Great Plains Energy Inc.	GXP	\$0.92	\$25.70	3.58%	3.68%	5.00%	5.00%	6.00%	5.33%	8.67%	9.01%	9.69%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$24.90	4.98%	5.08%	4.00%	4.00%	4.00%	4.00%	9.08%	9.08%	9.08%
IDACORP, Inc.	IDA	\$1.88	\$54.99	3.42%	3.47%	4.00%	4.00%	1.00%	3.00%	4.44%	6.47%	7.49%
NextEra Energy, Inc.	NEE	\$2.90	\$95.68	3.03%	3.13%	6.60%	6.48%	6.00%	6.36%	9.12%	9.49%	9.73%
Northeast Utilities	NU	\$1.57	\$45.22	3.47%	3.59%	6.50%	6.31%	8.00%	6.94%	9.89%	10.53%	11.61%
Otter Tail Corporation	OTTR	\$1.21	\$28.93	4.18%	4.41%	NA	6.00%	15.50%	10.75%	10.31%	15.16%	20.01%
Pinnacle West Capital Corporation	PNW	\$2.27	\$55.29	4.11%	4.18%	3.70%	3.75%	4.00%	3.82%	7.88%	8.00%	8.19%
Portland General Electric Company	POR	\$1.12	\$32.71	3.42%	3.54%	7.80%	7.80%	5.00%	6.87%	8.51%	10.41%	11.36%
Southern Company	SO	\$2.10	\$43.77	4.80%	4.88%	3.50%	3.35%	3.50%	3.45%	8.23%	8.33%	8.38%
Westar Energy, Inc.	WR	\$1.40	\$35.52	3.94%	4.03%	3.80%	3.20%	6.00%	4.33%	7.20%	8.36%	10.06%
PROXY GROUP MEAN				3.89%	3.99%	4.95%	4.96%	5.43%	5.25%	8.20%	9.24%	10.16%
PROXY GROUP MEDIAN				3.89%	3.98%	4.70%	4.75%	4.75%	4.75%	8.47%	8.99%	9.60%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 180-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [8])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Equals Average([5], [6], [7])

[9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])

[10] Equals [4] + [8]

[11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model
360 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$48.88	4.09%	4.19%	4.80%	4.79%	4.50%	4.70%	8.68%	8.88%	8.99%
Cleco Corporation	CNL	\$1.60	\$49.33	3.24%	3.34%	7.00%	7.00%	3.50%	5.83%	6.80%	9.17%	10.36%
Duke Energy Corporation	DUK	\$3.18	\$70.56	4.51%	4.62%	4.70%	4.70%	5.00%	4.80%	9.31%	9.42%	9.62%
Empire District Electric Company	EDE	\$1.02	\$23.42	4.36%	4.43%	3.00%	3.00%	4.00%	3.33%	7.42%	7.76%	8.44%
Great Plains Energy Inc.	GXP	\$0.92	\$24.53	3.75%	3.85%	5.00%	5.00%	6.00%	5.33%	8.84%	9.18%	9.86%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$25.35	4.89%	4.99%	4.00%	4.00%	4.00%	4.00%	8.99%	8.99%	8.99%
IDACORP, Inc.	IDA	\$1.88	\$52.60	3.57%	3.63%	4.00%	4.00%	1.00%	3.00%	4.59%	6.63%	7.65%
NextEra Energy, Inc.	NEE	\$2.90	\$89.37	3.24%	3.35%	6.60%	6.48%	6.00%	6.36%	9.34%	9.71%	9.95%
Northeast Utilities	NU	\$1.57	\$43.70	3.59%	3.72%	6.50%	6.31%	8.00%	6.94%	10.02%	10.65%	11.74%
Otter Tail Corporation	OTTR	\$1.21	\$28.84	4.20%	4.42%	NA	6.00%	15.50%	10.75%	10.32%	15.17%	20.02%
Pinnacle West Capital Corporation	PNW	\$2.27	\$55.29	4.11%	4.18%	3.70%	3.75%	4.00%	3.82%	7.88%	8.00%	8.19%
Portland General Electric Company	POR	\$1.12	\$31.27	3.58%	3.70%	7.80%	7.80%	5.00%	6.87%	8.67%	10.57%	11.52%
Southern Company	SO	\$2.10	\$43.11	4.87%	4.96%	3.50%	3.35%	3.50%	3.45%	8.30%	8.41%	8.46%
Westar Energy, Inc.	WR	\$1.40	\$33.70	4.15%	4.24%	3.80%	3.20%	6.00%	4.33%	7.42%	8.58%	10.28%
PROXY GROUP MEAN				4.01%	4.12%	4.95%	4.96%	5.43%	5.25%	8.33%	9.37%	10.29%
PROXY GROUP MEDIAN				4.10%	4.19%	4.70%	4.75%	4.75%	4.75%	8.68%	9.08%	9.74%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 360-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [8])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Equals Average([5], [6], [7])

[9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])

[10] Equals [4] + [8]

[11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model
30 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$53.16	3.76%	3.85%	4.80%	4.79%	4.50%	3.89%	4.50%	7.73%	8.34%	8.65%
Cleco Corporation	CNL	\$1.60	\$51.50	3.11%	3.19%	7.00%	7.00%	3.50%	3.78%	5.32%	6.66%	8.51%	10.22%
Duke Energy Corporation	DUK	\$3.18	\$75.19	4.23%	4.32%	4.70%	4.70%	5.00%	2.88%	4.32%	7.17%	8.64%	9.34%
Empire District Electric Company	EDE	\$1.02	\$24.87	4.10%	4.17%	3.00%	3.00%	4.00%	3.70%	3.43%	7.16%	7.60%	8.18%
Great Plains Energy Inc.	GXP	\$0.92	\$24.78	3.71%	3.80%	5.00%	5.00%	6.00%	3.11%	4.78%	6.88%	8.58%	9.82%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$26.27	4.72%	4.82%	4.00%	4.00%	4.00%	4.22%	4.06%	8.81%	8.87%	9.04%
IDACORP, Inc.	IDA	\$1.88	\$55.14	3.41%	3.47%	4.00%	4.00%	1.00%	3.97%	3.24%	4.43%	6.71%	7.48%
NextEra Energy, Inc.	NEE	\$2.90	\$94.25	3.08%	3.17%	6.60%	6.48%	6.00%	5.91%	6.25%	9.07%	9.42%	9.78%
Northeast Utilities	NU	\$1.57	\$45.59	3.44%	3.55%	6.50%	6.31%	8.00%	4.43%	6.31%	7.95%	9.86%	11.58%
Otter Tail Corporation	OTTR	\$1.21	\$27.60	4.38%	4.59%	NA	6.00%	15.50%	6.99%	9.50%	10.52%	14.09%	20.22%
Pinnacle West Capital Corporation	PNW	\$2.27	\$56.25	4.04%	4.11%	3.70%	3.75%	4.00%	3.98%	3.86%	7.81%	7.97%	8.12%
Portland General Electric Company	POR	\$1.12	\$33.09	3.39%	3.49%	7.80%	7.80%	5.00%	3.98%	6.15%	7.43%	9.63%	11.32%
Southern Company	SO	\$2.10	\$44.32	4.74%	4.83%	3.50%	3.35%	3.50%	4.63%	3.75%	8.17%	8.57%	9.48%
Westar Energy, Inc.	WR	\$1.40	\$34.92	4.01%	4.10%	3.80%	3.20%	6.00%	4.95%	4.49%	7.27%	8.59%	10.13%
PROXY GROUP MEAN				3.87%	3.96%	4.95%	4.96%	5.43%	4.32%	4.99%	7.65%	8.96%	10.24%
PROXY GROUP MEDIAN				3.89%	3.97%	4.70%	4.75%	4.75%	3.98%	4.49%	7.58%	8.58%	9.63%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 30-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [9])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Source: PNM Exhibit RBH-5

[9] Equals Average([5], [6], [7], [8])

[10] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])

[11] Equals [4] + [9]

[12] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])

Constant Growth Discounted Cash Flow Model
90 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$53.18	3.76%	3.85%	4.80%	4.79%	4.50%	3.89%	4.50%	7.73%	8.34%	8.65%
Cleco Corporation	CNL	\$1.60	\$54.45	2.94%	3.02%	7.00%	7.00%	3.50%	3.78%	5.32%	6.49%	8.34%	10.04%
Duke Energy Corporation	DUK	\$3.18	\$73.42	4.33%	4.43%	4.70%	4.70%	5.00%	2.88%	4.32%	7.27%	8.74%	9.44%
Empire District Electric Company	EDE	\$1.02	\$25.05	4.07%	4.14%	3.00%	3.00%	4.00%	3.70%	3.43%	7.13%	7.57%	8.15%
Great Plains Energy Inc.	GXP	\$0.92	\$25.37	3.63%	3.71%	5.00%	5.00%	6.00%	3.11%	4.78%	6.79%	8.49%	9.74%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$25.13	4.93%	5.03%	4.00%	4.00%	4.00%	4.22%	4.06%	9.03%	9.09%	9.26%
IDACORP, Inc.	IDA	\$1.88	\$55.29	3.40%	3.46%	4.00%	4.00%	1.00%	3.97%	3.24%	4.42%	6.70%	7.47%
NextEra Energy, Inc.	NEE	\$2.90	\$96.59	3.00%	3.10%	6.60%	6.48%	6.00%	5.91%	6.25%	9.00%	9.34%	9.70%
Northeast Utilities	NU	\$1.57	\$45.36	3.46%	3.57%	6.50%	6.31%	8.00%	4.43%	6.31%	7.97%	9.88%	11.60%
Otter Tail Corporation	OTTR	\$1.21	\$28.37	4.26%	4.47%	NA	6.00%	15.50%	6.99%	9.50%	10.39%	13.97%	20.10%
Pinnacle West Capital Corporation	PNW	\$2.27	\$55.83	4.07%	4.14%	3.70%	3.75%	4.00%	3.98%	3.86%	7.84%	8.00%	8.15%
Portland General Electric Company	POR	\$1.12	\$33.27	3.37%	3.47%	7.80%	7.80%	5.00%	3.98%	6.15%	7.41%	9.62%	11.30%
Southern Company	SO	\$2.10	\$44.17	4.75%	4.84%	3.50%	3.35%	3.50%	4.63%	3.75%	8.18%	8.59%	9.50%
Westar Energy, Inc.	WR	\$1.40	\$36.13	3.88%	3.96%	3.80%	3.20%	6.00%	4.95%	4.49%	7.14%	8.45%	9.99%
PROXY GROUP MEAN				3.85%	3.94%	4.95%	4.96%	5.43%	4.32%	4.99%	7.63%	8.94%	10.22%
PROXY GROUP MEDIAN				3.82%	3.90%	4.70%	4.75%	4.75%	3.98%	4.49%	7.57%	8.54%	9.60%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 90-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [9])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Source: PNM Exhibit RBH-5

[9] Equals Average([5], [6], [7], [8])

[10] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])

[11] Equals [4] + [9]

[12] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])

Constant Growth Discounted Cash Flow Model
180 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$52.12	3.84%	3.92%	4.80%	4.79%	4.50%	3.89%	4.50%	7.81%	8.42%	8.73%
Cleco Corporation	CNL	\$1.60	\$52.35	3.06%	3.14%	7.00%	7.00%	3.50%	3.78%	5.32%	6.61%	8.46%	10.16%
Duke Energy Corporation	DUK	\$3.18	\$72.31	4.40%	4.49%	4.70%	4.70%	5.00%	2.88%	4.32%	7.34%	8.81%	9.51%
Empire District Electric Company	EDE	\$1.02	\$24.44	4.17%	4.24%	3.00%	3.00%	4.00%	3.70%	3.43%	7.24%	7.67%	8.26%
Great Plains Energy Inc.	GXP	\$0.92	\$25.70	3.58%	3.67%	5.00%	5.00%	6.00%	3.11%	4.78%	6.75%	8.44%	9.69%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$24.90	4.98%	5.08%	4.00%	4.00%	4.00%	4.22%	4.06%	9.08%	9.14%	9.31%
IDACORP, Inc.	IDA	\$1.88	\$54.99	3.42%	3.47%	4.00%	4.00%	1.00%	3.97%	3.24%	4.44%	6.72%	7.49%
NextEra Energy, Inc.	NEE	\$2.90	\$95.68	3.03%	3.13%	6.60%	6.48%	6.00%	5.91%	6.25%	9.03%	9.37%	9.73%
Northeast Utilities	NU	\$1.57	\$45.22	3.47%	3.58%	6.50%	6.31%	8.00%	4.43%	6.31%	7.98%	9.89%	11.61%
Otter Tail Corporation	OTTR	\$1.21	\$28.93	4.18%	4.38%	NA	6.00%	15.50%	6.99%	9.50%	10.31%	13.88%	20.01%
Pinnacle West Capital Corporation	PNW	\$2.27	\$55.29	4.11%	4.19%	3.70%	3.75%	4.00%	3.98%	3.86%	7.88%	8.04%	8.19%
Portland General Electric Company	POR	\$1.12	\$32.71	3.42%	3.53%	7.80%	7.80%	5.00%	3.98%	6.15%	7.47%	9.67%	11.36%
Southern Company	SO	\$2.10	\$43.77	4.80%	4.89%	3.50%	3.35%	3.50%	4.63%	3.75%	8.23%	8.63%	9.54%
Westar Energy, Inc.	WR	\$1.40	\$35.52	3.94%	4.03%	3.80%	3.20%	6.00%	4.95%	4.49%	7.20%	8.52%	10.06%
PROXY GROUP MEAN				3.89%	3.98%	4.95%	4.96%	5.43%	4.32%	4.99%	7.67%	8.98%	10.26%
PROXY GROUP MEDIAN				3.89%	3.98%	4.70%	4.75%	4.75%	3.98%	4.49%	7.64%	8.57%	9.61%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 180-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [9])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Source: PNM Exhibit RBH-5

[9] Equals Average([5], [6], [7], [8])

[10] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])

[11] Equals [4] + [9]

[12] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])

Constant Growth Discounted Cash Flow Model
360 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$48.88	4.09%	4.18%	4.80%	4.79%	4.50%	3.89%	4.50%	8.07%	8.68%	8.99%
Cleco Corporation	CNL	\$1.60	\$49.33	3.24%	3.33%	7.00%	7.00%	3.50%	3.78%	5.32%	6.80%	8.65%	10.36%
Duke Energy Corporation	DUK	\$3.18	\$70.56	4.51%	4.60%	4.70%	4.70%	5.00%	2.88%	4.32%	7.45%	8.92%	9.62%
Empire District Electric Company	EDE	\$1.02	\$23.42	4.36%	4.43%	3.00%	3.00%	4.00%	3.70%	3.43%	7.42%	7.86%	8.44%
Great Plains Energy Inc.	GXP	\$0.92	\$24.53	3.75%	3.84%	5.00%	5.00%	6.00%	3.11%	4.78%	6.92%	8.62%	9.86%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$25.35	4.89%	4.99%	4.00%	4.00%	4.00%	4.22%	4.06%	8.99%	9.05%	9.22%
IDACORP, Inc.	IDA	\$1.88	\$52.60	3.57%	3.63%	4.00%	4.00%	1.00%	3.97%	3.24%	4.59%	6.87%	7.65%
NextEra Energy, Inc.	NEE	\$2.90	\$89.37	3.24%	3.35%	6.60%	6.48%	6.00%	5.91%	6.25%	9.25%	9.59%	9.95%
Northeast Utilities	NU	\$1.57	\$43.70	3.59%	3.71%	6.50%	6.31%	8.00%	4.43%	6.31%	8.10%	10.02%	11.74%
Otter Tail Corporation	OTTR	\$1.21	\$28.84	4.20%	4.39%	NA	6.00%	15.50%	6.99%	9.50%	10.32%	13.89%	20.02%
Pinnacle West Capital Corporation	PNW	\$2.27	\$55.29	4.11%	4.18%	3.70%	3.75%	4.00%	3.98%	3.86%	7.88%	8.04%	8.19%
Portland General Electric Company	POR	\$1.12	\$31.27	3.58%	3.69%	7.80%	7.80%	5.00%	3.98%	6.15%	7.63%	9.84%	11.52%
Southern Company	SO	\$2.10	\$43.11	4.87%	4.96%	3.50%	3.35%	3.50%	4.63%	3.75%	8.30%	8.71%	9.62%
Westar Energy, Inc.	WR	\$1.40	\$33.70	4.15%	4.25%	3.80%	3.20%	6.00%	4.95%	4.49%	7.42%	8.73%	10.28%
PROXY GROUP MEAN				4.01%	4.11%	4.95%	4.96%	5.43%	4.32%	4.99%	7.80%	9.11%	10.39%
PROXY GROUP MEDIAN				4.10%	4.18%	4.70%	4.75%	4.75%	3.98%	4.49%	7.76%	8.72%	9.74%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 360-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [9])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Source: PNM Exhibit RBH-5

[9] Equals Average([5], [6], [7], [8])

[10] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])

[11] Equals [4] + [9]

[12] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])

Constant Growth Discounted Cash Flow Model
30 Day Average Stock Price - Full Year Growth

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$53.16	3.76%	3.94%	4.80%	4.79%	4.50%	4.70%	8.43%	8.64%	8.74%
Cleco Corporation	CNL	\$1.60	\$51.50	3.11%	3.29%	7.00%	7.00%	3.50%	5.83%	6.72%	9.12%	10.32%
Duke Energy Corporation	DUK	\$3.18	\$75.19	4.23%	4.43%	4.70%	4.70%	5.00%	4.80%	9.13%	9.23%	9.44%
Empire District Electric Company	EDE	\$1.02	\$24.87	4.10%	4.24%	3.00%	3.00%	4.00%	3.33%	7.22%	7.57%	8.27%
Great Plains Energy Inc.	GXP	\$0.92	\$24.78	3.71%	3.91%	5.00%	5.00%	6.00%	5.33%	8.90%	9.24%	9.94%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$26.27	4.72%	4.91%	4.00%	4.00%	4.00%	4.00%	8.91%	8.91%	8.91%
IDACORP, Inc.	IDA	\$1.88	\$55.14	3.41%	3.51%	4.00%	4.00%	1.00%	3.00%	4.44%	6.51%	7.55%
NextEra Energy, Inc.	NEE	\$2.90	\$94.25	3.08%	3.27%	6.60%	6.48%	6.00%	6.36%	9.26%	9.63%	9.88%
Northeast Utilities	NU	\$1.57	\$45.59	3.44%	3.68%	6.50%	6.31%	8.00%	6.94%	9.97%	10.62%	11.72%
Otter Tail Corporation	OTTR	\$1.21	\$27.60	4.38%	4.86%	NA	6.00%	15.50%	10.75%	10.65%	15.61%	20.56%
Pinnacle West Capital Corporation	PNW	\$2.27	\$56.25	4.04%	4.19%	3.70%	3.75%	4.00%	3.82%	7.89%	8.01%	8.20%
Portland General Electric Company	POR	\$1.12	\$33.09	3.39%	3.62%	7.80%	7.80%	5.00%	6.87%	8.55%	10.48%	11.45%
Southern Company	SO	\$2.10	\$44.32	4.74%	4.90%	3.50%	3.35%	3.50%	3.45%	8.25%	8.35%	8.40%
Westar Energy, Inc.	WR	\$1.40	\$34.92	4.01%	4.18%	3.80%	3.20%	6.00%	4.33%	7.34%	8.52%	10.25%
PROXY GROUP MEAN				3.87%	4.07%	4.95%	4.96%	5.43%	5.25%	8.26%	9.32%	10.26%
PROXY GROUP MEDIAN				3.89%	4.06%	4.70%	4.75%	4.75%	4.75%	8.49%	9.02%	9.66%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 30-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 1 x [8])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Equals Average([5], [6], [7])

[9] Equals [3] x (1 + 1 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])

[10] Equals [4] + [8]

[11] Equals [3] x (1 + 1 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model
90 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$53.18	3.76%	3.94%	4.80%	4.79%	4.50%	4.70%	8.43%	8.63%	8.74%
Cleco Corporation	CNL	\$1.60	\$54.45	2.94%	3.11%	7.00%	7.00%	3.50%	5.83%	6.54%	8.94%	10.14%
Duke Energy Corporation	DUK	\$3.18	\$73.42	4.33%	4.54%	4.70%	4.70%	5.00%	4.80%	9.24%	9.34%	9.55%
Empire District Electric Company	EDE	\$1.02	\$25.05	4.07%	4.21%	3.00%	3.00%	4.00%	3.33%	7.19%	7.54%	8.23%
Great Plains Energy Inc.	GXP	\$0.92	\$25.37	3.63%	3.82%	5.00%	5.00%	6.00%	5.33%	8.81%	9.15%	9.84%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$25.13	4.93%	5.13%	4.00%	4.00%	4.00%	4.00%	9.13%	9.13%	9.13%
IDACORP, Inc.	IDA	\$1.88	\$55.29	3.40%	3.50%	4.00%	4.00%	1.00%	3.00%	4.43%	6.50%	7.54%
NextEra Energy, Inc.	NEE	\$2.90	\$96.59	3.00%	3.19%	6.60%	6.48%	6.00%	6.36%	9.18%	9.55%	9.80%
Northeast Utilities	NU	\$1.57	\$45.36	3.46%	3.70%	6.50%	6.31%	8.00%	6.94%	9.99%	10.64%	11.74%
Otter Tail Corporation	OTTR	\$1.21	\$28.37	4.26%	4.72%	NA	6.00%	15.50%	10.75%	10.52%	15.47%	20.43%
Pinnacle West Capital Corporation	PNW	\$2.27	\$55.83	4.07%	4.22%	3.70%	3.75%	4.00%	3.82%	7.92%	8.04%	8.23%
Portland General Electric Company	POR	\$1.12	\$33.27	3.37%	3.60%	7.80%	7.80%	5.00%	6.87%	8.54%	10.46%	11.43%
Southern Company	SO	\$2.10	\$44.17	4.75%	4.92%	3.50%	3.35%	3.50%	3.45%	8.26%	8.37%	8.42%
Westar Energy, Inc.	WR	\$1.40	\$36.13	3.88%	4.04%	3.80%	3.20%	6.00%	4.33%	7.20%	8.38%	10.11%
PROXY GROUP MEAN				3.85%	4.05%	4.95%	4.96%	5.43%	5.25%	8.24%	9.30%	10.24%
PROXY GROUP MEDIAN				3.82%	3.99%	4.70%	4.75%	4.75%	4.75%	8.48%	9.04%	9.67%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 90-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 1 x [8])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Equals Average([5], [6], [7])

[9] Equals [3] x (1 + 1 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])

[10] Equals [4] + [8]

[11] Equals [3] x (1 + 1 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model
180 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$52.12	3.84%	4.02%	4.80%	4.79%	4.50%	4.70%	8.51%	8.71%	8.82%
Cleco Corporation	CNL	\$1.60	\$52.35	3.06%	3.23%	7.00%	7.00%	3.50%	5.83%	6.66%	9.07%	10.27%
Duke Energy Corporation	DUK	\$3.18	\$72.31	4.40%	4.61%	4.70%	4.70%	5.00%	4.80%	9.30%	9.41%	9.62%
Empire District Electric Company	EDE	\$1.02	\$24.44	4.17%	4.31%	3.00%	3.00%	4.00%	3.33%	7.30%	7.65%	8.34%
Great Plains Energy Inc.	GXP	\$0.92	\$25.70	3.58%	3.77%	5.00%	5.00%	6.00%	5.33%	8.76%	9.10%	9.79%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$24.90	4.98%	5.18%	4.00%	4.00%	4.00%	4.00%	9.18%	9.18%	9.18%
IDACORP, Inc.	IDA	\$1.88	\$54.99	3.42%	3.52%	4.00%	4.00%	1.00%	3.00%	4.45%	6.52%	7.56%
NextEra Energy, Inc.	NEE	\$2.90	\$95.68	3.03%	3.22%	6.60%	6.48%	6.00%	6.36%	9.21%	9.58%	9.83%
Northeast Utilities	NU	\$1.57	\$45.22	3.47%	3.71%	6.50%	6.31%	8.00%	6.94%	10.00%	10.65%	11.75%
Otter Tail Corporation	OTTR	\$1.21	\$28.93	4.18%	4.63%	NA	6.00%	15.50%	10.75%	10.43%	15.38%	20.33%
Pinnacle West Capital Corporation	PNW	\$2.27	\$55.29	4.11%	4.26%	3.70%	3.75%	4.00%	3.82%	7.96%	8.08%	8.27%
Portland General Electric Company	POR	\$1.12	\$32.71	3.42%	3.66%	7.80%	7.80%	5.00%	6.87%	8.60%	10.53%	11.49%
Southern Company	SO	\$2.10	\$43.77	4.80%	4.96%	3.50%	3.35%	3.50%	3.45%	8.31%	8.41%	8.47%
Westar Energy, Inc.	WR	\$1.40	\$35.52	3.94%	4.11%	3.80%	3.20%	6.00%	4.33%	7.27%	8.45%	10.18%
PROXY GROUP MEAN				3.89%	4.09%	4.95%	4.96%	5.43%	5.25%	8.28%	9.34%	10.28%
PROXY GROUP MEDIAN				3.89%	4.06%	4.70%	4.75%	4.75%	4.75%	8.55%	9.09%	9.71%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 180-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 1 x [8])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Equals Average([5], [6], [7])

[9] Equals [3] x (1 + 1 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])

[10] Equals [4] + [8]

[11] Equals [3] x (1 + 1 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model
360 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$48.88	4.09%	4.28%	4.80%	4.79%	4.50%	4.70%	8.78%	8.98%	9.09%
Cleco Corporation	CNL	\$1.60	\$49.33	3.24%	3.43%	7.00%	7.00%	3.50%	5.83%	6.86%	9.27%	10.47%
Duke Energy Corporation	DUK	\$3.18	\$70.56	4.51%	4.72%	4.70%	4.70%	5.00%	4.80%	9.42%	9.52%	9.73%
Empire District Electric Company	EDE	\$1.02	\$23.42	4.36%	4.50%	3.00%	3.00%	4.00%	3.33%	7.49%	7.83%	8.53%
Great Plains Energy Inc.	GXP	\$0.92	\$24.53	3.75%	3.95%	5.00%	5.00%	6.00%	5.33%	8.94%	9.28%	9.98%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$25.35	4.89%	5.09%	4.00%	4.00%	4.00%	4.00%	9.09%	9.09%	9.09%
IDACORP, Inc.	IDA	\$1.88	\$52.60	3.57%	3.68%	4.00%	4.00%	1.00%	3.00%	4.61%	6.68%	7.72%
NextEra Energy, Inc.	NEE	\$2.90	\$89.37	3.24%	3.45%	6.60%	6.48%	6.00%	6.36%	9.44%	9.81%	10.06%
Northeast Utilities	NU	\$1.57	\$43.70	3.59%	3.84%	6.50%	6.31%	8.00%	6.94%	10.13%	10.78%	11.88%
Otter Tail Corporation	OTTR	\$1.21	\$28.84	4.20%	4.65%	NA	6.00%	15.50%	10.75%	10.45%	15.40%	20.35%
Pinnacle West Capital Corporation	PNW	\$2.27	\$55.29	4.11%	4.26%	3.70%	3.75%	4.00%	3.82%	7.96%	8.08%	8.27%
Portland General Electric Company	POR	\$1.12	\$31.27	3.58%	3.83%	7.80%	7.80%	5.00%	6.87%	8.76%	10.69%	11.66%
Southern Company	SO	\$2.10	\$43.11	4.87%	5.04%	3.50%	3.35%	3.50%	3.45%	8.38%	8.49%	8.54%
Westar Energy, Inc.	WR	\$1.40	\$33.70	4.15%	4.33%	3.80%	3.20%	6.00%	4.33%	7.49%	8.67%	10.40%
PROXY GROUP MEAN				4.01%	4.22%	4.95%	4.96%	5.43%	5.25%	8.41%	9.47%	10.41%
PROXY GROUP MEDIAN				4.10%	4.27%	4.70%	4.75%	4.75%	4.75%	8.77%	9.18%	9.85%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 360-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 1 x [8])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Equals Average([5], [6], [7])

[9] Equals [3] x (1 + 1 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])

[10] Equals [4] + [8]

[11] Equals [3] x (1 + 1 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model

30 Day Average Stock Price - Full Year Growth

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$53.16	3.76%	3.93%	4.80%	4.79%	4.50%	3.89%	4.50%	7.80%	8.43%	8.74%
Cleco Corporation	CNL	\$1.60	\$51.50	3.11%	3.27%	7.00%	7.00%	3.50%	3.78%	5.32%	6.72%	8.59%	10.32%
Duke Energy Corporation	DUK	\$3.18	\$75.19	4.23%	4.41%	4.70%	4.70%	5.00%	2.88%	4.32%	7.23%	8.73%	9.44%
Empire District Electric Company	EDE	\$1.02	\$24.87	4.10%	4.24%	3.00%	3.00%	4.00%	3.70%	3.43%	7.22%	7.67%	8.27%
Great Plains Energy Inc.	GXP	\$0.92	\$24.78	3.71%	3.89%	5.00%	5.00%	6.00%	3.11%	4.78%	6.94%	8.67%	9.94%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$26.27	4.72%	4.91%	4.00%	4.00%	4.00%	4.22%	4.06%	8.91%	8.97%	9.14%
IDACORP, Inc.	IDA	\$1.88	\$55.14	3.41%	3.52%	4.00%	4.00%	1.00%	3.97%	3.24%	4.44%	6.76%	7.55%
NextEra Energy, Inc.	NEE	\$2.90	\$94.25	3.08%	3.27%	6.60%	6.48%	6.00%	5.91%	6.25%	9.16%	9.52%	9.88%
Northeast Utilities	NU	\$1.57	\$45.59	3.44%	3.66%	6.50%	6.31%	8.00%	4.43%	6.31%	8.03%	9.97%	11.72%
Otter Tail Corporation	OTTR	\$1.21	\$27.60	4.38%	4.80%	NA	6.00%	15.50%	6.99%	9.50%	10.65%	14.30%	20.56%
Pinnacle West Capital Corporation	PNW	\$2.27	\$56.25	4.04%	4.19%	3.70%	3.75%	4.00%	3.98%	3.86%	7.89%	8.05%	8.20%
Portland General Electric Company	POR	\$1.12	\$33.09	3.39%	3.59%	7.80%	7.80%	5.00%	3.98%	6.15%	7.50%	9.74%	11.45%
Southern Company	SO	\$2.10	\$44.32	4.74%	4.92%	3.50%	3.35%	3.50%	4.63%	3.75%	8.25%	8.66%	9.59%
Westar Energy, Inc.	WR	\$1.40	\$34.92	4.01%	4.19%	3.80%	3.20%	6.00%	4.95%	4.49%	7.34%	8.68%	10.25%
PROXY GROUP MEAN				3.87%	4.06%	4.95%	4.96%	5.43%	4.32%	4.99%	7.72%	9.05%	10.36%
PROXY GROUP MEDIAN				3.89%	4.06%	4.70%	4.75%	4.75%	3.98%	4.49%	7.65%	8.67%	9.73%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 30-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 1 x [9])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Source: PNM Exhibit RBH-5

[9] Equals Average([5], [6], [7], [8])

[10] Equals [3] x (1 + 1 x Minimum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])

[11] Equals [4] + [9]

[12] Equals [3] x (1 + 1 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])

Constant Growth Discounted Cash Flow Model
90 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$53.18	3.76%	3.93%	4.80%	4.79%	4.50%	3.89%	4.50%	7.80%	8.43%	8.74%
Cleco Corporation	CNL	\$1.60	\$54.45	2.94%	3.09%	7.00%	7.00%	3.50%	3.78%	5.32%	6.54%	8.41%	10.14%
Duke Energy Corporation	DUK	\$3.18	\$73.42	4.33%	4.52%	4.70%	4.70%	5.00%	2.88%	4.32%	7.33%	8.84%	9.55%
Empire District Electric Company	EDE	\$1.02	\$25.05	4.07%	4.21%	3.00%	3.00%	4.00%	3.70%	3.43%	7.19%	7.64%	8.23%
Great Plains Energy Inc.	GXP	\$0.92	\$25.37	3.63%	3.80%	5.00%	5.00%	6.00%	3.11%	4.78%	6.85%	8.58%	9.84%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$25.13	4.93%	5.14%	4.00%	4.00%	4.00%	4.22%	4.06%	9.13%	9.19%	9.37%
IDACORP, Inc.	IDA	\$1.88	\$55.29	3.40%	3.51%	4.00%	4.00%	1.00%	3.97%	3.24%	4.43%	6.75%	7.54%
NextEra Energy, Inc.	NEE	\$2.90	\$96.59	3.00%	3.19%	6.60%	6.48%	6.00%	5.91%	6.25%	9.08%	9.44%	9.80%
Northeast Utilities	NU	\$1.57	\$45.36	3.46%	3.68%	6.50%	6.31%	8.00%	4.43%	6.31%	8.04%	9.99%	11.74%
Otter Tail Corporation	OTTR	\$1.21	\$28.37	4.26%	4.67%	NA	6.00%	15.50%	6.99%	9.50%	10.52%	14.17%	20.43%
Pinnacle West Capital Corporation	PNW	\$2.27	\$55.83	4.07%	4.22%	3.70%	3.75%	4.00%	3.98%	3.86%	7.92%	8.08%	8.23%
Portland General Electric Company	POR	\$1.12	\$33.27	3.37%	3.57%	7.80%	7.80%	5.00%	3.98%	6.15%	7.48%	9.72%	11.43%
Southern Company	SO	\$2.10	\$44.17	4.75%	4.93%	3.50%	3.35%	3.50%	4.63%	3.75%	8.26%	8.68%	9.61%
Westar Energy, Inc.	WR	\$1.40	\$36.13	3.88%	4.05%	3.80%	3.20%	6.00%	4.95%	4.49%	7.20%	8.54%	10.11%
PROXY GROUP MEAN				3.85%	4.04%	4.95%	4.96%	5.43%	4.32%	4.99%	7.70%	9.03%	10.34%
PROXY GROUP MEDIAN				3.82%	3.99%	4.70%	4.75%	4.75%	3.98%	4.49%	7.64%	8.63%	9.70%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 90-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 1 x [9])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Source: PNM Exhibit RBH-5

[9] Equals Average([5], [6], [7], [8])

[10] Equals [3] x (1 + 1 x Minimum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])

[11] Equals [4] + [9]

[12] Equals [3] x (1 + 1 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])

Constant Growth Discounted Cash Flow Model
180 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$52.12	3.84%	4.01%	4.80%	4.79%	4.50%	3.89%	4.50%	7.88%	8.51%	8.82%
Cleco Corporation	CNL	\$1.60	\$52.35	3.06%	3.22%	7.00%	7.00%	3.50%	3.78%	5.32%	6.66%	8.54%	10.27%
Duke Energy Corporation	DUK	\$3.18	\$72.31	4.40%	4.59%	4.70%	4.70%	5.00%	2.88%	4.32%	7.40%	8.91%	9.62%
Empire District Electric Company	EDE	\$1.02	\$24.44	4.17%	4.32%	3.00%	3.00%	4.00%	3.70%	3.43%	7.30%	7.74%	8.34%
Great Plains Energy Inc.	GXP	\$0.92	\$25.70	3.58%	3.75%	5.00%	5.00%	6.00%	3.11%	4.78%	6.80%	8.53%	9.79%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$24.90	4.98%	5.18%	4.00%	4.00%	4.00%	4.22%	4.06%	9.18%	9.24%	9.41%
IDACORP, Inc.	IDA	\$1.88	\$54.99	3.42%	3.53%	4.00%	4.00%	1.00%	3.97%	3.24%	4.45%	6.77%	7.56%
NextEra Energy, Inc.	NEE	\$2.90	\$95.68	3.03%	3.22%	6.60%	6.48%	6.00%	5.91%	6.25%	9.11%	9.47%	9.83%
Northeast Utilities	NU	\$1.57	\$45.22	3.47%	3.69%	6.50%	6.31%	8.00%	4.43%	6.31%	8.05%	10.00%	11.75%
Otter Tail Corporation	OTTR	\$1.21	\$28.93	4.18%	4.58%	NA	6.00%	15.50%	6.99%	9.50%	10.43%	14.08%	20.33%
Pinnacle West Capital Corporation	PNW	\$2.27	\$55.29	4.11%	4.26%	3.70%	3.75%	4.00%	3.98%	3.86%	7.96%	8.12%	8.27%
Portland General Electric Company	POR	\$1.12	\$32.71	3.42%	3.63%	7.80%	7.80%	5.00%	3.98%	6.15%	7.54%	9.78%	11.49%
Southern Company	SO	\$2.10	\$43.77	4.80%	4.98%	3.50%	3.35%	3.50%	4.63%	3.75%	8.31%	8.72%	9.65%
Westar Energy, Inc.	WR	\$1.40	\$35.52	3.94%	4.12%	3.80%	3.20%	6.00%	4.95%	4.49%	7.27%	8.61%	10.18%
PROXY GROUP MEAN				3.89%	4.08%	4.95%	4.96%	5.43%	4.32%	4.99%	7.74%	9.07%	10.38%
PROXY GROUP MEDIAN				3.89%	4.06%	4.70%	4.75%	4.75%	3.98%	4.49%	7.71%	8.66%	9.72%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 180-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 1 x [9])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Source: PNM Exhibit RBH-5

[9] Equals Average([5], [6], [7], [8])

[10] Equals [3] x (1 + 1 x Minimum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])

[11] Equals [4] + [9]

[12] Equals [3] x (1 + 1 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])

Constant Growth Discounted Cash Flow Model
360 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$2.00	\$48.88	4.09%	4.28%	4.80%	4.79%	4.50%	3.89%	4.50%	8.15%	8.77%	9.09%
Cleco Corporation	CNL	\$1.60	\$49.33	3.24%	3.42%	7.00%	7.00%	3.50%	3.78%	5.32%	6.86%	8.74%	10.47%
Duke Energy Corporation	DUK	\$3.18	\$70.56	4.51%	4.70%	4.70%	4.70%	5.00%	2.88%	4.32%	7.51%	9.02%	9.73%
Empire District Electric Company	EDE	\$1.02	\$23.42	4.36%	4.50%	3.00%	3.00%	4.00%	3.70%	3.43%	7.49%	7.93%	8.53%
Great Plains Energy Inc.	GXP	\$0.92	\$24.53	3.75%	3.93%	5.00%	5.00%	6.00%	3.11%	4.78%	6.98%	8.71%	9.98%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$25.35	4.89%	5.09%	4.00%	4.00%	4.00%	4.22%	4.06%	9.09%	9.15%	9.32%
IDACORP, Inc.	IDA	\$1.88	\$52.60	3.57%	3.69%	4.00%	4.00%	1.00%	3.97%	3.24%	4.61%	6.93%	7.72%
NextEra Energy, Inc.	NEE	\$2.90	\$89.37	3.24%	3.45%	6.60%	6.48%	6.00%	5.91%	6.25%	9.34%	9.69%	10.06%
Northeast Utilities	NU	\$1.57	\$43.70	3.59%	3.82%	6.50%	6.31%	8.00%	4.43%	6.31%	8.18%	10.13%	11.88%
Otter Tail Corporation	OTTR	\$1.21	\$28.84	4.20%	4.59%	NA	6.00%	15.50%	6.99%	9.50%	10.45%	14.09%	20.35%
Pinnacle West Capital Corporation	PNW	\$2.27	\$55.29	4.11%	4.26%	3.70%	3.75%	4.00%	3.98%	3.86%	7.96%	8.12%	8.27%
Portland General Electric Company	POR	\$1.12	\$31.27	3.58%	3.80%	7.80%	7.80%	5.00%	3.98%	6.15%	7.70%	9.95%	11.66%
Southern Company	SO	\$2.10	\$43.11	4.87%	5.05%	3.50%	3.35%	3.50%	4.63%	3.75%	8.38%	8.80%	9.73%
Westar Energy, Inc.	WR	\$1.40	\$33.70	4.15%	4.34%	3.80%	3.20%	6.00%	4.95%	4.49%	7.49%	8.83%	10.40%
PROXY GROUP MEAN				4.01%	4.21%	4.95%	4.96%	5.43%	4.32%	4.99%	7.87%	9.20%	10.51%
PROXY GROUP MEDIAN				4.10%	4.27%	4.70%	4.75%	4.75%	3.98%	4.49%	7.83%	8.81%	9.85%

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Bloomberg Professional Service, equals 360-trading day average as of October 17, 2014

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 1 x [9])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Source: PNM Exhibit RBH-5

[9] Equals Average([5], [6], [7], [8])

[10] Equals [3] x (1 + 1 x Minimum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])

[11] Equals [4] + [9]

[12] Equals [3] x (1 + 1 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])

Retention Growth Calculation

PNM Exhibit RBH-5

Is contained in the following page.

Retention Growth Estimate

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	
Company	Ticker	Projected Earnings per share 2017-19	Projected Dividend share 2017-19	Retention Ratio (B)	Projected Book Value per Share 2017-19	Return on Book Value (R)	B x R	Projected Common Shares Outstanding 2015	Projected Common Shares Outstanding 2017-19	Common Shares Growth Rate	2014 High Price	2014 Low Price	2014 price midpoint	Projected Book Value per Share 2014	Market/Book Ratio	"S"	"V"	S x V	BR + SV
American Electric Power Company, Inc.	AEP	4.00	2.50	37.50%	40.50	9.88%	3.70%	492.00	498.00	0.40%	\$ 55.90	\$ 45.80	\$ 50.85	34.45	1.48	0.59%	32.25%	0.19%	3.89%
Cleco Corporation	CNL	3.25	2.05	36.92%	31.75	10.24%	3.78%	60.50	60.50	0.00%	\$ 59.20	\$ 45.50	\$ 52.35	27.35	1.91	0.00%	47.76%	0.00%	3.78%
Duke Energy Corporation	DUK	5.25	3.40	35.24%	65.00	8.08%	2.85%	708.00	711.00	0.14%	\$ 75.10	\$ 67.10	\$ 71.10	58.50	1.22	0.17%	17.72%	0.03%	2.88%
Empire District Electric Company	EDE	1.75	1.15	34.29%	20.25	8.64%	2.96%	44.00	47.00	2.20%	\$ 26.00	\$ 22.00	\$ 24.00	17.95	1.34	2.94%	25.21%	0.74%	3.70%
Great Plains Energy Inc.	GXP	2.00	1.20	40.00%	26.00	7.69%	3.08%	155.00	156.50	0.32%	\$ 27.50	\$ 23.80	\$ 25.65	23.20	1.11	0.35%	9.55%	0.03%	3.11%
Hawaiian Electric Industries, Inc.	HE	2.00	1.30	35.00%	20.25	9.88%	3.46%	105.00	111.00	1.85%	\$ 26.80	\$ 23.00	\$ 24.90	17.60	1.41	2.62%	29.32%	0.77%	4.22%
IDACORP, Inc.	IDA	3.65	2.00	45.21%	44.55	8.19%	3.70%	50.20	51.20	0.65%	\$ 58.80	\$ 50.20	\$ 54.50	38.65	1.41	0.92%	29.08%	0.27%	3.97%
NextEra Energy, Inc.	NEE	6.75	3.90	42.22%	57.25	11.79%	4.98%	458.00	470.00	0.86%	\$ 102.50	\$ 84.00	\$ 93.25	44.80	2.08	1.78%	51.96%	0.93%	5.91%
Northeast Utilities	NU	3.50	2.00	42.86%	36.50	9.59%	4.11%	317.50	325.00	0.77%	\$ 47.60	\$ 41.30	\$ 44.45	31.45	1.41	1.09%	29.25%	0.32%	4.43%
Otter Tail Corporation	OTTR	2.30	1.30	43.48%	18.15	12.67%	5.51%	38.00	40.00	1.71%	\$ 31.70	\$ 27.00	\$ 29.35	15.70	1.87	3.19%	46.51%	1.48%	6.99%
Pinnacle West Capital Corporation	PNW	4.25	2.75	35.29%	45.75	9.29%	3.28%	111.25	117.50	1.82%	\$ 58.10	\$ 51.20	\$ 54.65	39.45	1.39	2.52%	27.81%	0.70%	3.98%
Portland General Electric Company	POR	2.50	1.40	44.00%	28.25	8.85%	3.89%	89.25	90.00	0.28%	\$ 34.70	\$ 29.00	\$ 31.85	24.25	1.31	0.36%	23.86%	0.09%	3.98%
Southern Company	SO	3.25	2.36	27.38%	26.25	12.38%	3.39%	904.00	940.00	1.30%	\$ 46.80	\$ 40.30	\$ 43.55	22.25	1.96	2.54%	48.91%	1.24%	4.63%
Westar Energy, Inc.	WR	2.90	1.60	44.83%	29.65	9.78%	4.36%	130.00	135.00	1.25%	\$ 38.20	\$ 31.70	\$ 34.95	24.10	1.45	1.82%	31.04%	0.56%	4.95%
			Average:	38.87%															

Notes:

- [1] Source: Value Line
[2] Source: Value Line
[3] Equals 1 - [2] / [1]
[4] Source: Value Line
[5] Equals [1] / [4]
[6] Equals [3] x [5]
[7] Source: Value Line
[8] Source: Value Line
[9] Equals ([6] / [7]) ^ 0.33 - 1
[10] Source: Value Line
[11] Source: Value Line
[12] Equals Average ([10], [11])
[13] Source: Value Line
[14] Equals [12] / [13]
[15] Equals [9] x [14]
[16] Equals 1 - (1 / [14])
[17] Equals [15] x [16]
[18] Equals [6] + [17]

Multi-Stage DCF Analysis

PNM Exhibit RBH-6

Is contained in the following 26 pages.

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

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]							
Company	Ticker	Stock Price	EPS Growth Rate Estimates			Long-Term Average	Payout Ratio			Iterative Solution Proof	IRR	Terminal P/E Ratio	Terminal PEG Ratio	DCF Result							
			Zacks	First Call	Line		Value	2014	2018					2024	Mean	Max	Min				
American Electric Power Company, Inc.	AEP	\$53.16	4.80%	4.79%	4.50%	4.70%	5.61%	61.00%	63.00%	67.23%	\$0.00	9.91%	16.51	2.94							
Cleco Corporation	CNL	\$51.50	7.00%	7.00%	3.50%	5.83%	5.61%	58.00%	62.00%	67.23%	\$0.00	9.57%	17.94	3.20							
Duke Energy Corporation	DUK	\$75.19	4.70%	4.70%	5.00%	4.80%	5.61%	71.00%	64.00%	67.23%	\$0.00	9.49%	18.31	3.26							
Empire District Electric Company	EDE	\$24.87	3.00%	3.00%	4.00%	3.33%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.54%	18.06	3.22							
Great Plains Energy Inc.	GXP	\$24.78	5.00%	5.00%	6.00%	5.33%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.48%	14.59	2.60							
Hawaiian Electric Industries, Inc.	HE	\$26.27	4.00%	4.00%	4.00%	4.00%	5.61%	77.00%	66.00%	67.23%	\$0.00	9.96%	16.31	2.91							
IDACORP, Inc.	IDA	\$55.14	4.00%	4.00%	1.00%	3.00%	5.61%	47.00%	55.00%	67.23%	\$0.00	9.70%	17.37	3.10							
NextEra Energy, Inc.	NEE	\$94.25	6.60%	6.48%	6.00%	6.36%	5.61%	61.00%	57.00%	67.23%	\$0.00	9.65%	17.58	3.13							
Northeast Utilities	NU	\$45.59	6.50%	6.31%	8.00%	6.94%	5.61%	60.00%	58.00%	67.23%	\$0.00	10.08%	15.90	2.83							
Otter Tail Corporation	OTTR	\$27.60	NA	6.00%	15.50%	10.75%	5.61%	70.00%	59.00%	67.23%	\$0.00	10.81%	13.64	2.43							
Pinnacle West Capital Corporation	PNW	\$56.25	3.70%	3.75%	4.00%	3.82%	5.61%	62.00%	63.00%	67.23%	\$0.00	10.04%	16.04	2.86							
Portland General Electric Company	POR	\$33.09	7.80%	7.80%	5.00%	6.87%	5.61%	52.00%	57.00%	67.23%	\$0.00	9.92%	16.48	2.94							
Southern Company	SO	\$44.32	3.50%	3.35%	3.50%	3.45%	5.61%	74.00%	72.00%	67.23%	\$0.00	9.81%	16.92	3.02							
Westar Energy, Inc.	WR	\$34.92	3.80%	3.20%	6.00%	4.33%	5.61%	58.00%	55.00%	67.23%	\$0.00	10.06%	15.96	2.84							
													Mean	9.93%	16.54	2.95					
													Max	10.81%	18.31	3.26					
													Min	9.49%	13.64	2.43					
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]			
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029			
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.65	\$3.82	\$4.00	\$4.19	\$4.40	\$4.63	\$4.88	\$5.14	\$5.43	\$5.74	\$6.06	\$6.40	\$6.76	\$7.14			
Cleco Corporation	CNL	\$2.65	\$2.80	\$2.97	\$3.14	\$3.32	\$3.52	\$3.72	\$3.94	\$4.16	\$4.40	\$4.65	\$4.91	\$5.18	\$5.47	\$5.78	\$6.11	\$6.45			
Duke Energy Corporation	DUK	\$3.98	\$4.17	\$4.37	\$4.58	\$4.80	\$5.03	\$5.28	\$5.55	\$5.84	\$6.15	\$6.48	\$6.85	\$7.23	\$7.64	\$8.07	\$8.52	\$9.00			
Empire District Electric Company	EDE	\$1.48	\$1.53	\$1.58	\$1.63	\$1.69	\$1.74	\$1.81	\$1.88	\$1.97	\$2.06	\$2.17	\$2.29	\$2.42	\$2.56	\$2.70	\$2.85	\$3.01			
Great Plains Energy Inc.	GXP	\$1.62	\$1.71	\$1.80	\$1.89	\$1.99	\$2.10	\$2.21	\$2.33	\$2.46	\$2.60	\$2.74	\$2.90	\$3.06	\$3.23	\$3.41	\$3.60	\$3.80			
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27	\$3.46			
IDACORP, Inc.	IDA	\$3.64	\$3.75	\$3.86	\$3.98	\$4.10	\$4.22	\$4.36	\$4.53	\$4.73	\$4.95	\$5.21	\$5.50	\$5.81	\$6.14	\$6.48	\$6.84	\$7.23			
NextEra Energy, Inc.	NEE	\$4.83	\$5.14	\$5.46	\$5.81	\$6.18	\$6.57	\$6.98	\$7.41	\$7.85	\$8.31	\$8.79	\$9.29	\$9.81	\$10.36	\$10.94	\$11.55	\$12.20			
Northeast Utilities	NU	\$2.49	\$2.66	\$2.85	\$3.04	\$3.26	\$3.48	\$3.72	\$3.96	\$4.21	\$4.46	\$4.72	\$4.98	\$5.26	\$5.56	\$5.87	\$6.20	\$6.55			
Otter Tail Corporation	OTTR	\$1.37	\$1.52	\$1.68	\$1.86	\$2.06	\$2.28	\$2.51	\$2.74	\$2.96	\$3.18	\$3.38	\$3.57	\$3.77	\$3.98	\$4.21	\$4.44	\$4.69			
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.94	\$4.10	\$4.25	\$4.41	\$4.60	\$4.80	\$5.02	\$5.28	\$5.56	\$5.87	\$6.20	\$6.55	\$6.91	\$7.30	\$7.71			
Portland General Electric Company	POR	\$1.77	\$1.89	\$2.02	\$2.16	\$2.31	\$2.47	\$2.63	\$2.80	\$2.98	\$3.16	\$3.34	\$3.53	\$3.72	\$3.93	\$4.15	\$4.39	\$4.63			
Southern Company	SO	\$2.70	\$2.79	\$2.89	\$2.99	\$3.09	\$3.20	\$3.32	\$3.46	\$3.62	\$3.79	\$3.99	\$4.22	\$4.45	\$4.70	\$4.97	\$5.24	\$5.54			
Westar Energy, Inc.	WR	\$2.27	\$2.37	\$2.47	\$2.58	\$2.69	\$2.81	\$2.93	\$3.07	\$3.23	\$3.39	\$3.58	\$3.78	\$3.99	\$4.21	\$4.45	\$4.70	\$4.96			
Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]				
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029				
American Electric Power Company, Inc.	AEP	61.00%	61.500%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%				
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%				
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%				
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%				
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%				
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%				
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%				
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%				
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%				
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%				
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%				
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%				
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%				
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%				
Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]			
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value			
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.67	\$2.83	\$3.00	\$3.19	\$3.40	\$3.62	\$3.86	\$4.07	\$4.30	\$4.54	\$4.80	\$117.82			
Cleco Corporation	CNL	\$1.63	\$1.75	\$1.88	\$2.03	\$2.18	\$2.34	\$2.50	\$2.67	\$2.86	\$3.05	\$3.26	\$3.48	\$3.68	\$3.89	\$4.10	\$4.33	\$115.70			
Duke Energy Corporation	DUK	\$2.96	\$3.03	\$3.09	\$3.16	\$3.22	\$3.40	\$3.60	\$3.82	\$4.05	\$4.30	\$4.57	\$4.86	\$5.14	\$5.42	\$5.73	\$6.05	\$164.78			
Empire District Electric Company	EDE	\$1.01	\$1.03	\$1.05	\$1.08	\$1.10	\$1.15	\$1.21	\$1.27	\$1.35	\$1.43	\$1.53	\$1.63	\$1.72	\$1.81	\$1.92	\$2.02	\$54.36			
Great Plains Energy Inc.	GXP	\$0.99	\$1.06	\$1.14	\$1.22	\$1.30	\$1.39	\$1.48	\$1.58	\$1.69	\$1.80	\$1.93	\$2.06	\$2.17	\$2.29	\$2.42	\$2.56	\$55.50			
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$56.38			
IDACORP, Inc.	IDA	\$1.76	\$1.89	\$2.03	\$2.17	\$2.32	\$2.48	\$2.65	\$2.85	\$3.07	\$3.32	\$3.60	\$3.91	\$4.13	\$4.36	\$4.60	\$4.86	\$125.52			
NextEra Energy, Inc.	NEE	\$3.13	\$3.28	\$3.43	\$3.58	\$3.75	\$4.08	\$4.44	\$4.82	\$5.23	\$5.65	\$6.11	\$6.59	\$7.06	\$7.55	\$8.07	\$8.60	\$214.46			
Northeast Utilities	NU	\$1.60	\$1.69	\$1.80	\$1.90	\$2.02	\$2.20	\$2.40	\$2.61	\$2.82	\$3.05	\$3.29	\$3.54	\$3.74	\$3.95	\$4.17	\$4.40	\$104.10			
Otter Tail Corporation	OTTR	\$1.06	\$1.13	\$1.20	\$1.27	\$1.35	\$1.51	\$1.68	\$1.85	\$2.02	\$2.19	\$2.36	\$2.54	\$2.68	\$2.83	\$2.99	\$3.16	\$64.00			
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.56	\$2.67	\$2.78	\$2.92	\$3.08	\$3.26	\$3.45	\$3.67	\$3.91	\$4.17	\$4.40	\$4.65	\$4.91	\$5.18	\$123.68			
Portland General Electric Company	POR	\$0.98	\$1.08	\$1.18	\$1.29	\$1.41	\$1.54	\$1.68	\$1.83	\$1.98	\$2.15	\$2.32	\$2.50	\$2.64	\$2.79	\$2.95	\$3.11	\$76.33			
Southern Company	SO	\$2.07	\$2.12	\$2.18	\$2.24	\$2.30	\$2.37	\$2.44	\$2.53	\$2.63	\$2.74	\$2.86	\$2.99	\$3.16	\$3.34	\$3.53	\$3.72	\$93.71			
Westar Energy, Inc.	WR	\$1.37	\$1.41	\$1.46	\$1.50	\$1.54	\$1.66	\$1.80	\$1.94	\$2.10	\$2.28	\$2.47	\$2.68	\$2.83	\$2.99	\$3.16	\$3.34	\$79.19			
Projected Annual Data Investor Cash Flows		[64]	[65]																		

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

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]						
		Stock	EPS Growth Rate Estimates			Long-Term	Payout Ratio			Iterative Solution		Terminal	Terminal							
			Value	Line	High	Growth	2014	2018	2024	Proof	IRR	Ratio	PEG	Ratio						
Company	Ticker	Price	Zacks	First Call	Line	High	Growth	2014	2018	2024	Proof	IRR	Ratio	PEG	Ratio					
American Electric Power Company, Inc.	AEP	\$53.16	4.80%	4.79%	4.50%	4.80%	5.61%	61.00%	63.00%	67.23%	(\$0.00)	9.94%	16.40	2.92						
Cleco Corporation	CNL	\$51.50	7.00%	7.00%	3.50%	7.00%	5.61%	58.00%	62.00%	67.23%	(\$0.00)	9.87%	16.65	2.97						
Duke Energy Corporation	DUK	\$75.19	4.70%	4.79%	5.00%	5.00%	5.61%	71.00%	64.00%	67.23%	(\$0.00)	9.54%	18.08	3.22						
Empire District Electric Company	EDE	\$24.87	3.00%	3.00%	4.00%	4.00%	5.61%	66.00%	63.00%	67.23%	(\$0.00)	9.72%	17.28	3.08						
Great Plains Energy Inc.	GXP	\$24.78	5.00%	5.00%	6.00%	6.00%	5.61%	58.00%	62.00%	67.23%	(\$0.00)	10.69%	13.99	2.49						
Hawaiian Electric Industries, Inc.	HE	\$26.27	4.00%	4.00%	4.00%	4.00%	5.61%	77.00%	66.00%	67.23%	(\$0.00)	9.96%	16.31	2.91						
IDACORP, Inc.	IDA	\$55.14	4.00%	4.00%	1.00%	4.00%	5.61%	47.00%	55.00%	67.23%	(\$0.00)	9.97%	16.28	2.90						
NextEra Energy, Inc.	NEE	\$94.25	6.60%	6.48%	6.00%	6.00%	5.61%	61.00%	57.00%	67.23%	(\$0.00)	9.71%	17.32	3.09						
Northeast Utilities	NU	\$45.59	6.50%	6.31%	8.00%	8.00%	5.61%	60.00%	58.00%	67.23%	(\$0.00)	10.38%	14.88	2.65						
Otter Tail Corporation	OTTR	\$27.60	NA	6.00%	15.50%	15.50%	5.61%	70.00%	59.00%	67.23%	\$0.00	12.43%	10.41	1.86						
Pinnacle West Capital Corporation	PNW	\$56.25	3.70%	3.75%	4.00%	4.00%	5.61%	62.00%	63.00%	67.23%	(\$0.00)	10.09%	15.85	2.83						
Portland General Electric Company	POR	\$33.09	7.80%	7.80%	5.00%	7.80%	5.61%	52.00%	57.00%	67.23%	(\$0.00)	10.18%	15.55	2.77						
Southern Company	SO	\$44.32	3.50%	3.35%	3.50%	3.50%	5.61%	74.00%	72.00%	67.23%	(\$0.00)	9.82%	16.86	3.01						
Westar Energy, Inc.	WR	\$34.92	3.80%	3.20%	6.00%	6.00%	5.61%	58.00%	55.00%	67.23%	(\$0.00)	10.55%	14.36	2.56						
DCF Result																				
Mean													10.20%	15.73	2.80					
Max													12.43%	18.08	3.22					
Min													9.54%	10.41	1.86					
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]		
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.65	\$3.84	\$4.02	\$4.22	\$4.43	\$4.66	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45	\$6.81	\$7.19		
Cleco Corporation	CNL	\$2.65	\$2.84	\$3.03	\$3.25	\$3.47	\$3.72	\$3.97	\$4.23	\$4.49	\$4.77	\$5.05	\$5.33	\$5.63	\$5.94	\$6.28	\$6.63	\$7.00		
Duke Energy Corporation	DUK	\$3.98	\$4.18	\$4.39	\$4.61	\$4.84	\$5.08	\$5.34	\$5.62	\$5.91	\$6.23	\$6.58	\$6.95	\$7.34	\$7.75	\$8.18	\$8.64	\$9.13		
Empire District Electric Company	EDE	\$1.48	\$1.54	\$1.60	\$1.66	\$1.73	\$1.80	\$1.88	\$1.96	\$2.06	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$2.83	\$2.99	\$3.16		
Great Plains Energy Inc.	GXP	\$1.62	\$1.72	\$1.82	\$1.93	\$2.05	\$2.17	\$2.30	\$2.43	\$2.57	\$2.72	\$2.87	\$3.04	\$3.21	\$3.39	\$3.58	\$3.78	\$3.99		
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27	\$3.46		
IDACORP, Inc.	IDA	\$3.64	\$3.79	\$3.94	\$4.09	\$4.26	\$4.43	\$4.62	\$4.83	\$5.06	\$5.32	\$5.60	\$5.91	\$6.25	\$6.60	\$6.97	\$7.36	\$7.77		
NextEra Energy, Inc.	NEE	\$4.83	\$5.15	\$5.49	\$5.85	\$6.24	\$6.65	\$7.08	\$7.52	\$7.98	\$8.45	\$8.94	\$9.44	\$9.97	\$10.53	\$11.12	\$11.75	\$12.41		
Northeast Utilities	NU	\$2.49	\$2.69	\$2.90	\$3.14	\$3.39	\$3.66	\$3.94	\$4.22	\$4.51	\$4.80	\$5.08	\$5.37	\$5.67	\$5.99	\$6.33	\$6.68	\$7.05		
Otter Tail Corporation	OTTR	\$1.37	\$1.58	\$1.83	\$2.11	\$2.44	\$2.82	\$3.21	\$3.60	\$3.98	\$4.33	\$4.65	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45		
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.64	\$4.85	\$5.09	\$5.34	\$5.63	\$5.95	\$6.28	\$6.63	\$7.00	\$7.40	\$7.81		
Portland General Electric Company	POR	\$1.77	\$1.91	\$2.06	\$2.22	\$2.39	\$2.58	\$2.77	\$2.96	\$3.16	\$3.36	\$3.56	\$3.76	\$3.98	\$4.20	\$4.43	\$4.68	\$4.95		
Southern Company	SO	\$2.70	\$2.79	\$2.89	\$2.99	\$3.10	\$3.21	\$3.33	\$3.47	\$3.63	\$3.81	\$4.01	\$4.23	\$4.47	\$4.72	\$4.98	\$5.26	\$5.56		
Westar Energy, Inc.	WR	\$2.27	\$2.41	\$2.55	\$2.70	\$2.87	\$3.04	\$3.22	\$3.41	\$3.60	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$5.01	\$5.29	\$5.59		
Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]			
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029			
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%			
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%			
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%			
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%			
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%			
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%			
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%			
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%			
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%			
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%			
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%			
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%			
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%			
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%			
Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]		
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value		
American Electric Power Company, Inc.	AEP	\$2.03	\$2.15	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.02	\$3.21	\$3.42	\$3.65	\$3.89	\$4.10	\$4.33	\$4.58	\$4.83	\$117.90		
Cleco Corporation	CNL	\$1.64	\$1.79	\$1.95	\$2.12	\$2.30	\$2.49	\$2.68	\$2.89	\$3.10	\$3.32	\$3.54	\$3.78	\$4.00	\$4.22	\$4.46	\$4.71	\$116.60		
Duke Energy Corporation	DUK	\$2.97	\$3.04	\$3.11	\$3.18	\$3.25	\$3.34	\$3.43	\$3.53	\$3.63	\$3.74	\$3.84	\$3.93	\$4.03	\$4.13	\$4.23	\$4.33	\$164.97		
Empire District Electric Company	EDE	\$1.02	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.71	\$1.80	\$1.90	\$2.01	\$2.12	\$54.57		
Great Plains Energy Inc.	GXP	\$1.00	\$1.07	\$1.16	\$1.25	\$1.34	\$1.44	\$1.54	\$1.65	\$1.77	\$1.89	\$2.02	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$55.78		
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$56.38		
IDACORP, Inc.	IDA	\$1.78	\$1.93	\$2.09	\$2.26	\$2.44	\$2.62	\$2.82	\$3.05	\$3.30	\$3.57	\$3.87	\$4.20	\$4.43	\$4.68	\$4.95	\$5.22	\$126.45		
NextEra Energy, Inc.	NEE	\$3.14	\$3.29	\$3.45	\$3.62	\$3.79	\$4.14	\$4.51	\$4.90	\$5.31	\$5.75	\$6.21	\$6.70	\$7.08	\$7.48	\$7.90	\$8.34	\$214.82		
Northeast Utilities	NU	\$1.61	\$1.73	\$1.85	\$1.98	\$2.12	\$2.34	\$2.56	\$2.79	\$3.03	\$3.28	\$3.54	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$104.97		
Otter Tail Corporation	OTTR	\$1.11	\$1.23	\$1.36	\$1.51	\$1.66	\$1.93	\$2.21	\$2.49	\$2.76	\$3.01	\$3.24	\$3.48	\$3.68	\$3.89	\$4.10	\$4.33	\$67.10		
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.57	\$2.69	\$2.81	\$2.95	\$3.12	\$3.30	\$3.50	\$3.72	\$3.96	\$4.22	\$4.46	\$4.71	\$4.97	\$5.25	\$123.83		
Portland General Electric Company	POR	\$0.99	\$1.10	\$1.21	\$1.33	\$1.47	\$1.62	\$1.78	\$1.94	\$2.11	\$2.29	\$2.48	\$2.67	\$2.82	\$2.98	\$3.15	\$3.32	\$76.89		
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.31	\$2.38	\$2.45	\$2.54	\$2.64	\$2.75	\$2.87	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$93.74		
Westar Energy, Inc.	WR	\$1.40	\$1.46	\$1.53	\$															

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

Inputs	Company	Ticker	Stock Price	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
				EPS Growth Rate Estimates				Long-Term Growth	Payout Ratio			Iterative Solution	Terminal P/E Ratio	Terminal PEG Ratio		
				Zacks	First Call	Line	Value		2014	2018	2024					
American Electric Power Company, Inc.	AEP	\$53.16	4.80%	4.79%	4.50%	4.50%	5.61%	61.00%	63.00%	67.23%	(\$0.00)	9.86%	16.72	2.98		
Cleco Corporation	CNL	\$51.50	7.00%	7.00%	3.50%	3.50%	5.61%	58.00%	62.00%	67.23%	(\$0.00)	9.00%	20.92	3.73		
Duke Energy Corporation	DUK	\$75.19	4.70%	4.70%	5.00%	4.70%	5.61%	71.00%	64.00%	67.23%	(\$0.00)	9.46%	18.44	3.29		
Empire District Electric Company	EDE	\$24.87	3.00%	3.00%	4.00%	3.00%	5.61%	66.00%	63.00%	67.23%	(\$0.00)	9.46%	18.46	3.29		
Great Plains Energy Inc.	GXP	\$24.78	5.00%	5.00%	6.00%	5.00%	5.61%	58.00%	62.00%	67.23%	(\$0.00)	10.37%	14.90	2.66		
Hawaiian Electric Industries, Inc.	HE	\$26.27	4.00%	4.00%	4.00%	4.00%	5.61%	77.00%	66.00%	67.23%	(\$0.00)	9.96%	16.31	2.91		
IDACORP, Inc.	IDA	\$55.14	4.00%	4.00%	1.00%	1.00%	5.61%	47.00%	55.00%	67.23%	(\$0.00)	9.19%	19.84	3.54		
NextEra Energy, Inc.	NEE	\$94.25	6.60%	6.48%	6.00%	6.00%	5.61%	61.00%	57.00%	67.23%	(\$0.00)	9.56%	17.99	3.21		
Northeast Utilities	NU	\$45.59	6.50%	6.31%	8.00%	6.31%	5.61%	60.00%	58.00%	67.23%	(\$0.00)	9.90%	16.54	2.95		
Otter Tail Corporation	OTTR	\$27.60	NA	6.00%	15.50%	6.00%	5.61%	70.00%	59.00%	67.23%	(\$0.00)	9.49%	18.31	3.26		
Pinnacle West Capital Corporation	PNW	\$56.25	3.70%	3.75%	4.00%	3.70%	5.61%	62.00%	63.00%	67.23%	(\$0.00)	10.00%	16.17	2.88		
Portland General Electric Company	POR	\$33.09	7.80%	7.80%	5.00%	5.00%	5.61%	52.00%	57.00%	67.23%	(\$0.00)	9.44%	18.56	3.31		
Southern Company	SO	\$44.32	3.50%	3.35%	3.50%	3.35%	5.61%	74.00%	72.00%	67.23%	(\$0.00)	9.78%	17.03	3.04		
Westar Energy, Inc.	WR	\$34.92	3.80%	3.20%	6.00%	3.20%	5.61%	58.00%	55.00%	67.23%	(\$0.00)	9.74%	17.17	3.06		

OCF Result																		
	Mean	9.66%	17.67	3.15														
	Max	10.37%	20.92	3.73														
	Min	9.00%	14.90	2.66														
Projected Annual Earnings per Share	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.32	\$3.47	\$3.63	\$3.79	\$3.96	\$4.15	\$4.35	\$4.57	\$4.81	\$5.07	\$5.36	\$5.66	\$5.97	\$6.31	\$6.66	\$7.04
Cleco Corporation	CNL	\$2.65	\$2.74	\$2.84	\$2.94	\$3.04	\$3.15	\$3.27	\$3.41	\$3.56	\$3.74	\$3.93	\$4.15	\$4.39	\$4.63	\$4.89	\$5.17	\$5.46
Duke Energy Corporation	DUK	\$3.98	\$4.17	\$4.36	\$4.57	\$4.78	\$5.01	\$5.25	\$5.51	\$5.80	\$6.10	\$6.44	\$6.80	\$7.18	\$7.58	\$8.01	\$8.46	\$8.93
Empire District Electric Company	EDE	\$1.48	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.84	\$1.92	\$2.01	\$2.12	\$2.24	\$2.36	\$2.49	\$2.63	\$2.78	\$2.94
Great Plains Energy Inc.	GXP	\$1.62	\$1.70	\$1.79	\$1.88	\$1.97	\$2.07	\$2.17	\$2.29	\$2.41	\$2.54	\$2.68	\$2.83	\$2.99	\$3.15	\$3.33	\$3.52	\$3.71
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27	\$3.46
IDACORP, Inc.	IDA	\$3.64	\$3.68	\$3.71	\$3.75	\$3.79	\$3.83	\$3.89	\$3.99	\$4.12	\$4.29	\$4.50	\$4.75	\$5.02	\$5.30	\$5.60	\$5.91	\$6.24
NextEra Energy, Inc.	NEE	\$4.83	\$5.12	\$5.43	\$5.75	\$6.10	\$6.48	\$6.85	\$7.25	\$7.67	\$8.11	\$8.57	\$9.05	\$9.56	\$10.10	\$10.66	\$11.26	\$11.89
Northeast Utilities	NU	\$2.49	\$2.65	\$2.81	\$2.99	\$3.18	\$3.38	\$3.59	\$3.81	\$4.04	\$4.27	\$4.52	\$4.77	\$5.04	\$5.32	\$5.62	\$5.93	\$6.27
Otter Tail Corporation	OTTR	\$1.37	\$1.45	\$1.54	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.18	\$2.30	\$2.43	\$2.57	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.94	\$4.08	\$4.23	\$4.39	\$4.57	\$4.76	\$4.99	\$5.23	\$5.51	\$5.82	\$6.15	\$6.49	\$6.85	\$7.24	\$7.65
Portland General Electric Company	POR	\$1.77	\$1.86	\$1.95	\$2.05	\$2.15	\$2.26	\$2.37	\$2.50	\$2.63	\$2.77	\$2.93	\$3.09	\$3.26	\$3.45	\$3.64	\$3.84	\$4.06
Southern Company	SO	\$2.70	\$2.79	\$2.88	\$2.98	\$3.08	\$3.18	\$3.30	\$3.44	\$3.59	\$3.77	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$5.21	\$5.50
Westar Energy, Inc.	WR	\$2.27	\$2.34	\$2.42	\$2.49	\$2.57	\$2.66	\$2.75	\$2.86	\$2.99	\$3.13	\$3.30	\$3.48	\$3.68	\$3.88	\$4.10	\$4.33	\$4.57

Projected Annual Dividend Payout Ratio																	
	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows																		
	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.35	\$3.57	\$3.80	\$4.02	\$4.24	\$4.48	\$4.73	\$117.67
Cleco Corporation	CNL	\$1.59	\$1.67	\$1.76	\$1.85	\$1.95	\$2.05	\$2.16	\$2.29	\$2.43	\$2.58	\$2.76	\$2.95	\$3.11	\$3.29	\$3.47	\$3.67	\$114.15
Duke Energy Corporation	DUK	\$2.96	\$3.02	\$3.08	\$3.14	\$3.20	\$3.38	\$3.58	\$3.79	\$4.02	\$4.27	\$4.54	\$4.83	\$5.10	\$5.38	\$5.69	\$6.01	\$164.69
Empire District Electric Company	EDE	\$1.01	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.25	\$1.32	\$1.40	\$1.49	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98	\$54.26
Great Plains Energy Inc.	GXP	\$0.99	\$1.05	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.55	\$1.65	\$1.76	\$1.88	\$2.01	\$2.12	\$2.24	\$2.36	\$2.50	\$56.36
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$56.38
IDACORP, Inc.	IDA	\$1.73	\$1.82	\$1.91	\$2.01	\$2.10	\$2.21	\$2.34	\$2.48	\$2.66	\$2.87	\$3.11	\$3.37	\$3.66	\$3.97	\$4.20	\$4.46	\$123.86
NextEra Energy, Inc.	NEE	\$3.12	\$3.26	\$3.39	\$3.54	\$3.68	\$4.00	\$4.34	\$4.71	\$5.10	\$5.51	\$5.95	\$6.43	\$6.95	\$7.51	\$8.10	\$8.71	\$213.93
Northeast Utilities	NU	\$1.59	\$1.67	\$1.77	\$1.86	\$1.96	\$2.13	\$2.31	\$2.50	\$2.70	\$2.92	\$3.14	\$3.39	\$3.68	\$3.98	\$4.21	\$4.46	\$103.62
Otter Tail Corporation	OTTR	\$1.02	\$1.04	\$1.05	\$1.07	\$1.08	\$1.17	\$1.26	\$1.36	\$1.47	\$1.58	\$1.70	\$1.82	\$1.93	\$2.03	\$2.15	\$2.27	\$61.77
Pinnacle West Capital Corporation	PNW	\$2.35	\$2.45	\$2.55	\$2.65	\$2.77	\$2.90	\$3.06	\$3.23	\$3.42	\$3.64	\$3.88	\$4.13	\$4.36	\$4.61	\$4.87	\$5.14	\$123.59
Portland General Electric Company	POR	\$0.97	\$1.04	\$1.12	\$1.20	\$1.29	\$1.39	\$1.50	\$1.61	\$1.74	\$1.88	\$2.03	\$2.19	\$2.32	\$2.45	\$2.58	\$2.73	\$75.32
Southern Company	SO	\$2.06	\$2.12	\$2.18	\$2.23	\$2.29	\$2.36	\$2.43	\$2.51	\$2.61	\$2.72	\$2.84	\$2.97	\$3.14	\$3.31	\$3.50	\$3.70	\$93.67
Westar Energy, Inc.	WR	\$1.35	\$1.38	\$1.41	\$1.44	\$1.46	\$1.56	\$1.67	\$1.80	\$1.94	\$2.10	\$2.28	\$2.47	\$2.61	\$2.76	\$2.91	\$3.07	\$78.54

Multi-Stage Growth Discounted Cash Flow Model
90 Day Average Stock Price
Average 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	Line	Average	Long-Term	Payout Ratio	2013	2017	2024	Proof	IRR	P/E Ratio
American Electric Power Company, Inc.	AEP	\$53.18	4.80%	4.79%	4.50%	4.70%	5.61%	61.00%	63.00%	67.23%	(\$0.00)	9.91%	16.52	2.94
Cleco Corporation	CNL	\$54.45	7.00%	7.00%	3.50%	5.83%	5.61%	58.00%	62.00%	67.23%	(\$0.00)	9.35%	18.97	3.38
Duke Energy Corporation	DUK	\$73.42	4.70%	4.70%	5.00%	4.80%	5.61%	71.00%	64.00%	67.23%	(\$0.00)	9.58%	17.88	3.19
Empire District Electric Company	EDE	\$25.05	3.00%	3.00%	4.00%	3.33%	5.61%	66.00%	63.00%	67.23%	(\$0.00)	9.51%	18.19	3.24
Great Plains Energy Inc.	GXP	\$25.37	5.00%	5.00%	6.00%	5.33%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.36%	14.94	2.66
Hawaiian Electric Industries, Inc.	HE	\$25.13	4.00%	4.00%	4.00%	4.00%	5.61%	77.00%	66.00%	67.23%	(\$0.00)	10.17%	15.57	2.78
IDACORP, Inc.	IDA	\$55.29	4.00%	4.00%	1.00%	3.00%	5.61%	47.00%	55.00%	67.23%	(\$0.00)	9.69%	17.41	3.10
NextEra Energy, Inc.	NEE	\$96.59	6.60%	6.48%	6.00%	6.36%	5.61%	61.00%	57.00%	67.23%	(\$0.00)	9.55%	18.01	3.21
Northeast Utilities	NU	\$45.36	6.50%	6.31%	8.00%	6.94%	5.61%	60.00%	58.00%	67.23%	(\$0.00)	10.10%	15.82	2.82
Otter Tail Corporation	OTTR	\$28.37	NA	8.00%	15.50%	10.75%	5.61%	70.00%	59.00%	67.23%	(\$0.00)	10.68%	14.02	2.50
Pinnacle West Capital Corporation	PNW	\$55.83	3.70%	3.75%	4.00%	3.82%	5.61%	62.00%	63.00%	67.23%	(\$0.00)	10.07%	15.92	2.84
Portland General Electric Company	POR	\$33.27	7.80%	7.80%	5.00%	6.87%	5.61%	52.00%	57.00%	67.23%	\$0.00	9.90%	16.56	2.95
Southern Company	SO	\$44.17	3.50%	3.35%	3.50%	3.45%	5.61%	74.00%	72.00%	67.23%	\$0.00	9.82%	16.86	3.00
Westar Energy, Inc.	WR	\$36.13	3.80%	3.29%	6.00%	4.33%	5.61%	58.00%	55.00%	67.23%	\$0.00	9.91%	16.50	2.94

DCF Result			
Mean	9.90%	16.65	2.97
Max	10.68%	18.97	3.38
Min	9.35%	14.02	2.50

Projected Annual Earnings per Share	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.65	\$3.82	\$4.00	\$4.19	\$4.40	\$4.63	\$4.88	\$5.14	\$5.43	\$5.74	\$6.06	\$6.40	\$6.76
Cleco Corporation	CNL	\$2.65	\$2.80	\$2.97	\$3.14	\$3.32	\$3.52	\$3.72	\$3.94	\$4.16	\$4.40	\$4.65	\$4.91	\$5.18	\$5.47	\$5.78	\$6.11
Duke Energy Corporation	DUK	\$3.98	\$4.17	\$4.37	\$4.58	\$4.80	\$5.03	\$5.28	\$5.55	\$5.84	\$6.15	\$6.48	\$6.85	\$7.23	\$7.64	\$8.07	\$8.52
Empire District Electric Company	EDE	\$1.48	\$1.53	\$1.58	\$1.63	\$1.69	\$1.74	\$1.81	\$1.88	\$1.97	\$2.06	\$2.17	\$2.29	\$2.42	\$2.56	\$2.70	\$2.85
Great Plains Energy Inc.	GXP	\$1.62	\$1.71	\$1.80	\$1.89	\$1.99	\$2.10	\$2.21	\$2.33	\$2.46	\$2.60	\$2.74	\$2.90	\$3.06	\$3.23	\$3.41	\$3.60
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27
IDACORP, Inc.	IDA	\$3.64	\$3.75	\$3.86	\$3.98	\$4.10	\$4.22	\$4.36	\$4.53	\$4.73	\$4.95	\$5.21	\$5.50	\$5.81	\$6.14	\$6.48	\$6.84
NextEra Energy, Inc.	NEE	\$4.93	\$5.14	\$5.46	\$5.81	\$6.18	\$6.57	\$7.01	\$7.55	\$8.11	\$8.79	\$9.28	\$9.81	\$10.36	\$10.94	\$11.55	\$12.20
Northeast Utilities	NU	\$2.49	\$2.66	\$2.85	\$3.04	\$3.25	\$3.48	\$3.72	\$3.96	\$4.21	\$4.46	\$4.72	\$4.98	\$5.26	\$5.56	\$5.87	\$6.20
Otter Tail Corporation	OTTR	\$1.37	\$1.52	\$1.68	\$1.86	\$2.06	\$2.28	\$2.51	\$2.74	\$2.96	\$3.18	\$3.38	\$3.57	\$3.77	\$3.98	\$4.21	\$4.44
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.94	\$4.10	\$4.25	\$4.41	\$4.60	\$4.80	\$5.02	\$5.28	\$5.56	\$5.87	\$6.20	\$6.55	\$6.91	\$7.30
Portland General Electric Company	POR	\$1.77	\$1.89	\$2.02	\$2.16	\$2.31	\$2.47	\$2.63	\$2.80	\$2.98	\$3.16	\$3.34	\$3.53	\$3.72	\$3.93	\$4.15	\$4.39
Southern Company	SO	\$2.70	\$2.79	\$2.89	\$2.99	\$3.09	\$3.20	\$3.32	\$3.46	\$3.62	\$3.79	\$3.99	\$4.22	\$4.45	\$4.70	\$4.97	\$5.24
Westar Energy, Inc.	WR	\$2.27	\$2.37	\$2.47	\$2.58	\$2.69	\$2.81	\$2.93	\$3.07	\$3.23	\$3.39	\$3.58	\$3.78	\$3.99	\$4.21	\$4.45	\$4.70

Projected Annual Dividend Payout Ratio	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.83%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	Terminal Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.67	\$2.83	\$3.00	\$3.19	\$3.40	\$3.62	\$3.86	\$4.07	\$4.30	\$4.54	\$4.80	\$117.86
Cleco Corporation	CNL	\$1.63	\$1.75	\$1.88	\$2.03	\$2.18	\$2.34	\$2.50	\$2.67	\$2.86	\$3.05	\$3.26	\$3.48	\$3.68	\$3.89	\$4.10	\$4.33	\$122.31
Duke Energy Corporation	DUK	\$2.96	\$3.03	\$3.09	\$3.16	\$3.22	\$3.40	\$3.60	\$3.82	\$4.05	\$4.30	\$4.57	\$4.86	\$5.14	\$5.42	\$5.73	\$6.05	\$160.83
Empire District Electric Company	EDE	\$1.01	\$1.03	\$1.05	\$1.08	\$1.10	\$1.15	\$1.21	\$1.27	\$1.35	\$1.43	\$1.53	\$1.63	\$1.72	\$1.81	\$1.92	\$2.02	\$54.76
Great Plains Energy Inc.	GXP	\$0.99	\$1.06	\$1.14	\$1.22	\$1.30	\$1.39	\$1.48	\$1.58	\$1.69	\$1.80	\$1.93	\$2.06	\$2.17	\$2.29	\$2.42	\$2.56	\$66.83
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$53.83
IDACORP, Inc.	IDA	\$1.76	\$1.89	\$2.03	\$2.17	\$2.32	\$2.48	\$2.65	\$2.85	\$3.07	\$3.32	\$3.60	\$3.91	\$4.13	\$4.36	\$4.60	\$4.86	\$125.87
NextEra Energy, Inc.	NEE	\$3.13	\$3.28	\$3.43	\$3.58	\$3.75	\$4.08	\$4.44	\$4.82	\$5.23	\$5.65	\$6.11	\$6.59	\$6.96	\$7.35	\$7.77	\$8.20	\$219.70
Northeast Utilities	NU	\$1.60	\$1.69	\$1.80	\$1.90	\$2.02	\$2.20	\$2.40	\$2.61	\$2.82	\$3.05	\$3.29	\$3.54	\$3.74	\$3.95	\$4.17	\$4.40	\$103.61
Otter Tail Corporation	OTTR	\$1.06	\$1.13	\$1.20	\$1.27	\$1.35	\$1.51	\$1.68	\$1.85	\$2.02	\$2.19	\$2.36	\$2.54	\$2.68	\$2.83	\$2.99	\$3.15	\$65.75
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.56	\$2.67	\$2.78	\$2.92	\$3.08	\$3.26	\$3.45	\$3.67	\$3.91	\$4.17	\$4.40	\$4.65	\$4.91	\$5.18	\$122.75
Portland General Electric Company	POR	\$0.98	\$1.08	\$1.18	\$1.29	\$1.41	\$1.54	\$1.68	\$1.83	\$1.98	\$2.15	\$2.32	\$2.50	\$2.64	\$2.79	\$2.95	\$3.11	\$76.74
Southern Company	SO	\$2.07	\$2.12	\$2.18	\$2.24	\$2.30	\$2.37	\$2.44	\$2.53	\$2.63	\$2.74	\$2.86	\$2.99	\$3.16	\$3.34	\$3.53	\$3.72	\$93.37
Westar Energy, Inc.	WR	\$1.37	\$1.41	\$1.46	\$1.50	\$1.54	\$1.66	\$1.80	\$1.94	\$2.10	\$2.28	\$2.47	\$2.68	\$2.83	\$2.99	\$3.16	\$3.34	\$81.90

Projected Annual Data Investor Cash Flows	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]	
American Electric Power Company, Inc.	AEP	(\$53.18)	\$0.00	\$0.42	\$2.08	\$2.26	\$2.39	\$2.52	\$2.67	\$2.83	\$3.00	\$3.19	\$3.40	\$3.62	\$3.86	\$4.07	\$4.30	\$4.54	\$122.66
Cleco Corporation	CNL	(\$54.45)	\$0.00	\$0.33	\$1.67	\$1.88	\$2.03	\$2.18	\$2.34	\$2.50	\$2.67	\$2.86	\$3.05	\$3.26	\$3.48	\$3.68	\$3.89	\$4.10	\$126.64
Duke Energy Corporation	DUK	(\$73.42)	\$0.00	\$0.61	\$3.03	\$3.09	\$3.16	\$3.22	\$3.40	\$3.60	\$3.82	\$4.05	\$4.30	\$4.57	\$4.86	\$5.14	\$5.42	\$5.73	\$166.86
Empire District Electric Company	EDE	(\$25.05)	\$0.00	\$0.21	\$1.03	\$1.													

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

Inputs	[1] Stock	[2] Price	[3] EPS Growth Rate Estimates		[4] Value		[5] High	[6] Long-Term	[7] Payout Ratio			[8] Iterative Solution	[9] IRR	[10] P/E Ratio	[11] Terminal	[12] Terminal	[13] Terminal
			Zacks	First Call	Line	Growth			2013	2017	2024						
American Electric Power Company, Inc.	AEP	\$53.18	4.80%	4.79%	4.50%	4.80%	5.61%	61.00%	63.00%	67.23%	(\$0.00)	9.94%	16.41	2.92			
Cleco Corporation	CNL	\$54.45	7.00%	7.00%	3.50%	7.00%	5.61%	58.00%	62.00%	67.23%	(\$0.00)	9.64%	17.60	3.14			
Duke Energy Corporation	DUK	\$73.42	4.70%	4.70%	5.00%	5.00%	5.61%	71.00%	64.00%	67.23%	(\$0.00)	9.63%	17.64	3.14			
Empire District Electric Company	EDE	\$25.05	3.00%	3.00%	4.00%	4.00%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.69%	17.40	3.10			
Great Plains Energy Inc.	GXP	\$25.37	5.00%	5.00%	6.00%	6.00%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.57%	14.32	2.55			
Hawaiian Electric Industries, Inc.	HE	\$25.13	4.00%	4.00%	4.00%	4.00%	5.61%	77.00%	66.00%	67.23%	(\$0.00)	10.17%	15.57	2.78			
IDACORP, Inc.	IDA	\$55.29	4.00%	4.00%	1.00%	4.00%	5.61%	47.00%	55.00%	67.23%	\$0.00	9.96%	16.32	2.91			
NextEra Energy, Inc.	NEE	\$96.59	6.60%	6.48%	6.00%	6.60%	5.61%	61.00%	57.00%	67.23%	(\$0.00)	9.61%	17.74	3.16			
Northeast Utilities	NU	\$45.36	6.50%	6.31%	8.00%	8.00%	5.61%	60.00%	58.00%	67.23%	(\$0.00)	10.40%	14.81	2.64			
Otter Tail Corporation	OTTR	\$28.37	NA	6.00%	15.50%	15.50%	5.61%	70.00%	59.00%	67.23%	(\$0.00)	12.26%	10.68	1.90			
Pinnacle West Capital Corporation	PNW	\$55.83	3.70%	3.75%	4.00%	4.00%	5.61%	62.00%	63.00%	67.23%	(\$0.00)	10.12%	15.73	2.80			
Portland General Electric Company	POR	\$33.27	7.80%	7.80%	5.00%	7.80%	5.61%	52.00%	57.00%	67.23%	(\$0.00)	10.15%	15.63	2.79			
Southern Company	SO	\$44.17	3.50%	3.35%	3.50%	3.50%	5.61%	74.00%	72.00%	67.23%	\$0.00	9.84%	16.80	2.99			
Westar Energy, Inc.	WR	\$36.13	3.80%	3.20%	6.00%	6.00%	5.61%	58.00%	55.00%	67.23%	(\$0.00)	10.39%	14.85	2.65			

DCF Result			
Mean	10.17%	15.82	2.82
Max	12.26%	17.74	3.16
Min	9.61%	10.68	1.90

Projected Annual Earnings per Share	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.66	\$3.84	\$4.02	\$4.22	\$4.43	\$4.66	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45	\$6.81	\$7.19
Cleco Corporation	CNL	\$2.65	\$2.84	\$3.03	\$3.25	\$3.47	\$3.72	\$3.97	\$4.23	\$4.49	\$4.77	\$5.05	\$5.33	\$5.63	\$5.94	\$6.28	\$6.63	\$7.00
Duke Energy Corporation	DUK	\$3.98	\$4.18	\$4.39	\$4.61	\$4.84	\$5.08	\$5.34	\$5.62	\$5.91	\$6.23	\$6.58	\$6.95	\$7.34	\$7.75	\$8.18	\$8.64	\$9.13
Empire District Electric Company	EDE	\$1.48	\$1.54	\$1.60	\$1.66	\$1.73	\$1.80	\$1.88	\$1.96	\$2.06	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$2.83	\$2.99	\$3.16
Great Plains Energy Inc.	GXP	\$1.62	\$1.72	\$1.82	\$1.93	\$2.05	\$2.17	\$2.30	\$2.43	\$2.57	\$2.72	\$2.87	\$3.04	\$3.21	\$3.39	\$3.58	\$3.78	\$3.99
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27	\$3.46
IDACORP, Inc.	IDA	\$3.64	\$3.79	\$3.94	\$4.09	\$4.26	\$4.43	\$4.62	\$4.83	\$5.06	\$5.32	\$5.60	\$5.91	\$6.25	\$6.60	\$6.97	\$7.36	\$7.77
NextEra Energy, Inc.	NEE	\$4.83	\$5.15	\$5.49	\$5.85	\$6.24	\$6.65	\$7.08	\$7.52	\$7.98	\$8.45	\$8.94	\$9.44	\$9.97	\$10.53	\$11.12	\$11.75	\$12.41
Northeast Utilities	NU	\$2.49	\$2.69	\$2.90	\$3.14	\$3.39	\$3.66	\$3.94	\$4.22	\$4.51	\$4.80	\$5.08	\$5.37	\$5.67	\$5.99	\$6.33	\$6.68	\$7.05
Otter Tail Corporation	OTTR	\$1.37	\$1.58	\$1.83	\$2.11	\$2.44	\$2.82	\$3.21	\$3.60	\$3.98	\$4.33	\$4.65	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.64	\$4.85	\$5.09	\$5.34	\$5.63	\$5.95	\$6.28	\$6.63	\$7.00	\$7.40	\$7.81
Portland General Electric Company	POR	\$1.77	\$1.91	\$2.06	\$2.22	\$2.39	\$2.58	\$2.77	\$2.96	\$3.16	\$3.36	\$3.56	\$3.76	\$3.98	\$4.20	\$4.43	\$4.68	\$4.95
Southern Company	SO	\$2.70	\$2.79	\$2.89	\$2.99	\$3.10	\$3.21	\$3.33	\$3.47	\$3.63	\$3.81	\$4.01	\$4.23	\$4.47	\$4.72	\$4.98	\$5.26	\$5.56
Westar Energy, Inc.	WR	\$2.27	\$2.41	\$2.55	\$2.70	\$2.87	\$3.04	\$3.22	\$3.41	\$3.60	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$5.01	\$5.29	\$5.59

Projected Annual Dividend Payout Ratio	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	Terminal
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.15	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.02	\$3.21	\$3.42	\$3.65	\$3.89	\$4.10	\$4.33	\$4.58	\$4.83	\$117.94
Cleco Corporation	CNL	\$1.64	\$1.79	\$1.95	\$2.12	\$2.30	\$2.49	\$2.68	\$2.89	\$3.10	\$3.32	\$3.54	\$3.78	\$4.00	\$4.22	\$4.46	\$4.71	\$123.21
Duke Energy Corporation	DUK	\$2.97	\$3.04	\$3.11	\$3.18	\$3.25	\$3.34	\$3.65	\$3.87	\$4.11	\$4.36	\$4.64	\$4.93	\$5.21	\$5.50	\$5.81	\$6.14	\$161.01
Empire District Electric Company	EDE	\$1.02	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.71	\$1.80	\$1.90	\$2.01	\$2.12	\$54.98
Great Plains Energy Inc.	GXP	\$1.00	\$1.07	\$1.16	\$1.25	\$1.34	\$1.44	\$1.54	\$1.65	\$1.77	\$1.89	\$2.02	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$57.11
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$53.83
IDACORP, Inc.	IDA	\$1.78	\$1.93	\$2.09	\$2.26	\$2.44	\$2.62	\$2.82	\$3.05	\$3.30	\$3.57	\$3.87	\$4.20	\$4.43	\$4.68	\$4.95	\$5.22	\$126.80
NextEra Energy, Inc.	NEE	\$3.14	\$3.29	\$3.45	\$3.62	\$3.79	\$4.14	\$4.51	\$4.90	\$5.31	\$5.75	\$6.21	\$6.70	\$7.08	\$7.48	\$7.90	\$8.34	\$220.06
Northeast Utilities	NU	\$1.61	\$1.73	\$1.85	\$1.98	\$2.12	\$2.34	\$2.56	\$2.79	\$3.03	\$3.28	\$3.54	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$104.47
Otter Tail Corporation	OTTR	\$1.11	\$1.23	\$1.36	\$1.51	\$1.66	\$1.93	\$2.21	\$2.49	\$2.76	\$3.01	\$3.24	\$3.48	\$3.68	\$3.89	\$4.10	\$4.33	\$68.86
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.57	\$2.69	\$2.81	\$2.95	\$3.12	\$3.30	\$3.50	\$3.72	\$3.96	\$4.22	\$4.46	\$4.71	\$4.97	\$5.25	\$122.90
Portland General Electric Company	POR	\$0.99	\$1.10	\$1.21	\$1.33	\$1.47	\$1.62	\$1.78	\$1.94	\$2.11	\$2.29	\$2.48	\$2.67	\$2.82	\$2.98	\$3.15	\$3.32	\$77.30
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.31	\$2.38	\$2.45	\$2.54	\$2.64	\$2.75	\$2.87	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$93.

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

Inputs	Stock	EPS Growth Rate Estimates				Long-Term Growth	Payout Ratio				Iterative Solution	Terminal P/E Ratio	Terminal PEG Ratio						
		Zacks	First Call	Value Line	Low		2013	2017	2024	Proof									
Company	Ticker	Price																	
American Electric Power Company, Inc.	AEP	\$53.18	4.80%	4.79%	4.50%	4.50%	5.61%	61.00%	63.00%	67.23%	(\$0.00)	9.85%	16.73	2.98					
Cleco Corporation	CNL	\$54.45	7.00%	7.00%	3.50%	3.50%	5.61%	58.00%	62.00%	67.23%	(\$0.00)	8.82%	22.13	3.94					
Duke Energy Corporation	DUK	\$73.42	4.70%	4.70%	5.00%	4.70%	5.61%	71.00%	64.00%	67.23%	(\$0.00)	9.56%	17.99	3.21					
Empire District Electric Company	EDE	\$25.05	3.00%	3.00%	4.00%	3.00%	5.61%	66.00%	63.00%	67.23%	(\$0.00)	9.43%	18.60	3.32					
Great Plains Energy Inc.	GXP	\$25.37	5.00%	5.00%	6.00%	5.00%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.26%	15.26	2.72					
Hawaiian Electric Industries, Inc.	HE	\$25.13	4.00%	4.00%	4.00%	4.00%	5.61%	77.00%	66.00%	67.23%	(\$0.00)	10.17%	15.57	2.78					
IDACORP, Inc.	IDA	\$55.29	4.00%	4.00%	1.00%	1.00%	5.61%	47.00%	55.00%	67.23%	(\$0.00)	9.18%	19.89	3.55					
NextEra Energy, Inc.	NEE	\$96.59	6.60%	6.48%	6.00%	6.00%	5.61%	61.00%	57.00%	67.23%	(\$0.00)	9.46%	18.43	3.29					
Northeast Utilities	NU	\$45.36	6.50%	6.31%	8.00%	6.31%	5.61%	60.00%	58.00%	67.23%	\$0.00	9.92%	16.46	2.93					
Otter Tail Corporation	OTTR	\$28.37	NA	6.00%	15.00%	6.00%	5.61%	70.00%	59.00%	67.23%	(\$0.00)	9.38%	18.83	3.36					
Pinnacle West Capital Corporation	PNW	\$55.83	3.70%	3.75%	4.00%	3.70%	5.61%	62.00%	63.00%	67.23%	(\$0.00)	10.04%	16.04	2.86					
Portland General Electric Company	POR	\$33.27	7.80%	7.80%	5.00%	5.00%	5.61%	52.00%	57.00%	67.23%	(\$0.00)	9.42%	18.66	3.33					
Southern Company	SO	\$44.17	3.50%	3.35%	3.50%	3.35%	5.61%	74.00%	72.00%	67.23%	(\$0.00)	9.79%	16.97	3.03					
Westar Energy, Inc.	WR	\$36.13	3.80%	3.20%	6.00%	3.20%	5.61%	58.00%	55.00%	67.23%	(\$0.00)	9.61%	17.77	3.17					
DCF Result																			
Mean:													9.63%	17.81	3.17				
Max:													10.26%	22.13	3.94				
Min:													8.82%	15.26	2.72				
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
American Electric Power Company, Inc.	AEP	\$3.18	\$3.32	\$3.47	\$3.63	\$3.79	\$3.96	\$4.15	\$4.35	\$4.57	\$4.81	\$5.07	\$5.36	\$5.66	\$5.97	\$6.31	\$6.66	\$7.04	
Cleco Corporation	CNL	\$2.65	\$2.74	\$2.84	\$2.94	\$3.04	\$3.15	\$3.27	\$3.41	\$3.56	\$3.74	\$3.93	\$4.15	\$4.39	\$4.63	\$4.89	\$5.17	\$5.46	
Duke Energy Corporation	DUK	\$3.98	\$4.17	\$4.36	\$4.57	\$4.78	\$5.01	\$5.25	\$5.51	\$5.80	\$6.10	\$6.44	\$6.80	\$7.18	\$7.58	\$8.01	\$8.46	\$8.93	
Empire District Electric Company	EDE	\$1.48	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.84	\$1.92	\$2.01	\$2.12	\$2.24	\$2.36	\$2.49	\$2.63	\$2.78	\$2.94	
Great Plains Energy Inc.	GXP	\$1.62	\$1.70	\$1.79	\$1.88	\$1.97	\$2.07	\$2.17	\$2.29	\$2.41	\$2.54	\$2.68	\$2.83	\$2.99	\$3.15	\$3.33	\$3.52	\$3.71	
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27	\$3.46	
IDACORP, Inc.	IDA	\$3.64	\$3.68	\$3.71	\$3.75	\$3.79	\$3.83	\$3.89	\$3.99	\$4.12	\$4.29	\$4.50	\$4.75	\$5.02	\$5.30	\$5.60	\$5.91	\$6.24	
NextEra Energy, Inc.	NEE	\$4.83	\$5.12	\$5.43	\$5.75	\$6.10	\$6.46	\$6.85	\$7.25	\$7.67	\$8.11	\$8.57	\$9.05	\$9.56	\$10.10	\$10.66	\$11.26	\$11.89	
Northeast Utilities	NU	\$2.49	\$2.65	\$2.81	\$2.99	\$3.18	\$3.38	\$3.59	\$3.81	\$4.04	\$4.27	\$4.52	\$4.77	\$5.04	\$5.32	\$5.62	\$5.93	\$6.27	
Otter Tail Corporation	OTTR	\$1.37	\$1.45	\$1.54	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.18	\$2.30	\$2.43	\$2.57	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37	
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.94	\$4.08	\$4.23	\$4.39	\$4.57	\$4.76	\$4.99	\$5.23	\$5.51	\$5.82	\$6.15	\$6.49	\$6.85	\$7.24	\$7.65	
Portland General Electric Company	POR	\$1.77	\$1.86	\$1.95	\$2.05	\$2.15	\$2.26	\$2.37	\$2.50	\$2.63	\$2.77	\$2.93	\$3.09	\$3.26	\$3.45	\$3.64	\$3.84	\$4.06	
Southern Company	SO	\$2.70	\$2.79	\$2.88	\$2.98	\$3.08	\$3.18	\$3.30	\$3.44	\$3.59	\$3.77	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$5.21	\$5.50	
Westar Energy, Inc.	WR	\$2.27	\$2.34	\$2.42	\$2.49	\$2.57	\$2.66	\$2.75	\$2.86	\$2.99	\$3.13	\$3.30	\$3.48	\$3.68	\$3.88	\$4.10	\$4.33	\$4.57	
Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]		
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%		
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%		
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%		
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%		
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%		
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%		
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%		
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	56.48%	55.92%	55.36%	54.80%	54.24%	53.68%	53.12%	52.56%	52.00%	51.44%	50.88%		
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.60%	65.92%	67.24%	68.56%	69.88%	71.20%	72.52%		
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%		
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%		
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%		
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%		
Westar Energy, Inc.	WR	56.00%	57.25%	58.50%	59.75%	61.00%	62.25%	63.50%	64.75%	66.00%	67.25%	68.50%	69.75%	71.00%	72.25%	73.50%	74.75%		
Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value	
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.35	\$3.57	\$3.80	\$4.02	\$4.24	\$4.48	\$4.73	\$117.71	
Cleco Corporation	CNL	\$1.59	\$1.67	\$1.76	\$1.85	\$1.95	\$2.05	\$2.16	\$2.29	\$2.43	\$2.58	\$2.76	\$2.95	\$3.11	\$3.29	\$3.47	\$3.67	\$120.74	
Duke Energy Corporation	DUK	\$2.96	\$3.02	\$3.08	\$3.14	\$3.20	\$3.28	\$3.38	\$3.49	\$3.61	\$3.74	\$3.88	\$4.03	\$4.19	\$4.36	\$4.53	\$4.71	\$160.73	
Empire District Electric Company	EDE	\$1.01	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.25	\$1.32	\$1.40	\$1.49	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98	\$54.68	
Great Plains Energy Inc.	GXP	\$0.99	\$1.05	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.55	\$1.65	\$1.76	\$1.88	\$2.01	\$2.12	\$2.24	\$2.36	\$2.50	\$56.69	
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$55.83	
IDACORP, Inc.	IDA	\$1.73	\$1.82	\$1.91	\$2.01	\$2.10	\$2.21	\$2.34	\$2.48	\$2.66	\$2.87	\$3.11	\$3.37	\$3.66	\$3.97	\$4.20	\$4.20	\$124.20	
NextEra Energy, Inc.	NEE	\$3.12	\$3.26	\$3.39	\$3.54	\$3.68	\$4.00	\$4.34	\$4.71	\$5.10	\$5.51	\$5.95	\$6.43	\$6.93	\$7.47	\$8.05	\$8.67	\$219.16	
Northeast Utilities	NU	\$1.59	\$1.67	\$1.77	\$1.86	\$1.95	\$2.13	\$2.31	\$2.50	\$2.70	\$2.92	\$3.14	\$3.39	\$3.68	\$3.99	\$4.21	\$4.12	\$101.12	
Otter Tail Corporation	OTTR	\$1.02	\$1.04	\$1.05	\$1.07	\$1.08	\$1.17	\$1.26	\$1.36	\$1.47	\$1.58	\$1.70	\$1.82	\$1.93	\$2.03	\$2.15	\$2.27	\$63.50	
Pinnacle West Capital Corporation	PNW	\$2.35	\$2.45	\$2.55	\$2.66	\$2.77	\$2.90	\$3.06	\$3.23	\$3.42	\$3.64	\$3.88	\$4.13	\$4.36	\$4.61	\$4.87	\$5.14	\$122.66	
Portland General Electric Company	POR	\$0.97	\$1.04	\$1.12	\$1.20	\$1.29	\$1.39	\$1.50	\$1.61	\$1.74	\$1.88	\$2.03	\$2.19	\$2.32	\$2.45	\$2.58	\$2.73	\$75.73	
Southern Company	SO	\$2.06	\$2.12	\$2.18	\$2.23	\$2.29	\$2.36	\$2.43	\$2.51	\$2.61	\$2.72	\$2.84	\$2.97	\$3.14	\$3.31	\$3.50	\$3.70	\$93.33	
Westar Energy, Inc.	WR	\$1.36	\$1.38	\$1.41	\$1.44	\$1.46	\$1.56	\$1.67	\$1.80	\$1.94	\$2.10	\$2.28	\$2.47	\$2.61	\$2.76	\$2.91	\$3.07	\$81.25	
Projected Annual Data Investor Cash Flows		[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]
Company	Ticker																		

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]	[13]						
		Stock	EPS Growth Rate Estimates			Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal							
			Value			Growth	2013	2017	2024	Proof	IRR	P/E Ratio	PEG Ratio						
Company	Ticker	Price	Zacks	First Call	Line	Average													
American Electric Power Company, Inc.	AEP	\$52.12	4.80%	4.79%	4.50%	4.70%	5.61%	51.00%	53.00%	67.23%	\$0.00	10.00%	16.19	2.89					
Cleco Corporation	CNL	\$52.35	7.00%	7.00%	3.50%	5.83%	5.61%	58.00%	62.00%	67.23%	\$0.00	9.50%	18.24	3.25					
Duke Energy Corporation	DUK	\$72.31	4.70%	4.70%	5.00%	4.80%	5.61%	71.00%	64.00%	67.23%	\$0.00	9.64%	17.60	3.14					
Empire District Electric Company	EDE	\$24.44	3.00%	3.00%	4.00%	3.33%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.61%	17.74	3.16					
Great Plains Energy Inc.	GXP	\$25.70	5.00%	5.00%	6.00%	5.33%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.30%	15.13	2.70					
Hawaiian Electric Industries, Inc.	HE	\$24.90	4.00%	4.00%	4.00%	4.00%	5.61%	77.00%	66.00%	67.23%	\$0.00	10.21%	15.42	2.75					
IDACORP, Inc.	IDA	\$54.99	4.00%	4.00%	1.00%	3.00%	5.61%	47.00%	55.00%	67.23%	\$0.00	9.71%	17.32	3.09					
NextEra Energy, Inc.	NEE	\$95.68	6.60%	6.48%	6.00%	6.38%	5.61%	61.00%	57.00%	67.23%	\$0.00	9.59%	17.84	3.18					
Northeast Utilities	NU	\$45.22	6.50%	6.31%	8.00%	6.94%	5.61%	60.00%	58.00%	67.23%	\$0.00	10.11%	15.77	2.81					
Otter Tail Corporation	OTTR	\$28.93	NA	6.00%	15.50%	10.75%	5.61%	70.00%	59.00%	67.23%	\$0.00	10.58%	14.28	2.55					
Pinnacle West Capital Corporation	PNW	\$55.29	3.70%	3.75%	4.00%	3.82%	5.61%	62.00%	63.00%	67.23%	\$0.00	10.11%	15.76	2.81					
Portland General Electric Company	POR	\$32.71	7.80%	7.80%	5.00%	6.87%	5.61%	52.00%	57.00%	67.23%	\$0.00	9.97%	16.29	2.90					
Southern Company	SO	\$43.77	3.50%	3.35%	3.50%	3.45%	5.61%	74.00%	72.00%	67.23%	\$0.00	9.86%	16.70	2.98					
Westar Energy, Inc.	WR	\$35.52	3.80%	3.20%	6.00%	4.33%	5.61%	58.00%	55.00%	67.23%	\$0.00	9.99%	16.23	2.89					
DCF Result																			
Mean 9.94% 16.47 2.94																			
Max 10.58% 18.24 3.25																			
Min 9.50% 14.28 2.55																			
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.65	\$3.82	\$4.00	\$4.19	\$4.40	\$4.63	\$4.88	\$5.14	\$5.43	\$5.74	\$6.06	\$6.40	\$6.76	\$7.14	
Cleco Corporation	CNL	\$2.65	\$2.80	\$2.97	\$3.14	\$3.32	\$3.52	\$3.72	\$3.94	\$4.16	\$4.40	\$4.65	\$4.91	\$5.18	\$5.47	\$5.78	\$6.11	\$6.45	
Duke Energy Corporation	DUK	\$3.98	\$4.17	\$4.37	\$4.58	\$4.80	\$5.03	\$5.28	\$5.55	\$5.84	\$6.15	\$6.48	\$6.85	\$7.23	\$7.64	\$8.07	\$8.52	\$9.00	
Empire District Electric Company	EDE	\$1.48	\$1.53	\$1.58	\$1.63	\$1.69	\$1.74	\$1.81	\$1.88	\$1.97	\$2.06	\$2.17	\$2.29	\$2.42	\$2.56	\$2.70	\$2.85	\$3.01	
Great Plains Energy Inc.	GXP	\$1.62	\$1.71	\$1.80	\$1.89	\$1.99	\$2.10	\$2.21	\$2.33	\$2.46	\$2.60	\$2.74	\$2.90	\$3.06	\$3.23	\$3.41	\$3.60	\$3.80	
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27	\$3.46	
IDACORP, Inc.	IDA	\$3.64	\$3.75	\$3.86	\$3.98	\$4.10	\$4.22	\$4.36	\$4.53	\$4.73	\$4.95	\$5.21	\$5.50	\$5.81	\$6.14	\$6.48	\$6.84	\$7.23	
NextEra Energy, Inc.	NEE	\$4.83	\$5.14	\$5.46	\$5.81	\$6.18	\$6.57	\$6.98	\$7.41	\$7.85	\$8.31	\$8.79	\$9.28	\$9.81	\$10.36	\$10.94	\$11.55	\$12.20	
Northeast Utilities	NU	\$2.49	\$2.66	\$2.85	\$3.04	\$3.26	\$3.48	\$3.72	\$3.96	\$4.21	\$4.46	\$4.72	\$4.98	\$5.26	\$5.56	\$5.87	\$6.20	\$6.55	
Otter Tail Corporation	OTTR	\$1.37	\$1.52	\$1.68	\$1.86	\$2.06	\$2.28	\$2.51	\$2.74	\$2.96	\$3.18	\$3.38	\$3.57	\$3.77	\$3.98	\$4.21	\$4.44	\$4.69	
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.94	\$4.10	\$4.25	\$4.41	\$4.60	\$4.80	\$5.02	\$5.28	\$5.56	\$5.87	\$6.20	\$6.55	\$6.91	\$7.30	\$7.71	
Portland General Electric Company	POR	\$1.77	\$1.89	\$2.02	\$2.16	\$2.31	\$2.47	\$2.63	\$2.80	\$2.98	\$3.16	\$3.34	\$3.53	\$3.72	\$3.93	\$4.15	\$4.39	\$4.63	
Southern Company	SO	\$2.70	\$2.79	\$2.89	\$2.99	\$3.09	\$3.20	\$3.32	\$3.46	\$3.62	\$3.79	\$3.99	\$4.22	\$4.45	\$4.70	\$4.97	\$5.24	\$5.54	
Westar Energy, Inc.	WR	\$2.27	\$2.37	\$2.47	\$2.58	\$2.69	\$2.81	\$2.93	\$3.07	\$3.23	\$3.39	\$3.58	\$3.78	\$3.99	\$4.21	\$4.45	\$4.70	\$4.96	
Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]		
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%		
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%		
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%		
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%		
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%		
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%		
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%		
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%		
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%		
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%		
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%		
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%		
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%		
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%		
Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.67	\$2.83	\$3.00	\$3.19	\$3.40	\$3.62	\$3.86	\$4.07	\$4.30	\$4.54	\$4.80	\$115.51	
Cleco Corporation	CNL	\$1.63	\$1.75	\$1.88	\$2.03	\$2.18	\$2.34	\$2.50	\$2.67	\$2.86	\$3.05	\$3.26	\$3.48	\$3.68	\$3.89	\$4.10	\$4.33	\$117.60	
Duke Energy Corporation	DUK	\$2.96	\$3.03	\$3.09	\$3.16	\$3.22	\$3.40	\$3.60	\$3.82	\$4.05	\$4.30	\$4.57	\$4.86	\$5.14	\$5.42	\$5.73	\$6.05	\$158.35	
Empire District Electric Company	EDE	\$1.01	\$1.03	\$1.05	\$1.08	\$1.10	\$1.15	\$1.21	\$1.27	\$1.35	\$1.43	\$1.53	\$1.63	\$1.72	\$1.81	\$1.92	\$2.02	\$53.40	
Great Plains Energy Inc.	GXP	\$0.99	\$1.06	\$1.14	\$1.22	\$1.30	\$1.39	\$1.48	\$1.58	\$1.69	\$1.80	\$1.93	\$2.06	\$2.17	\$2.29	\$2.42	\$2.56	\$57.56	
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$53.33	
IDACORP, Inc.	IDA	\$1.76	\$1.89	\$2.03	\$2.17	\$2.32	\$2.48	\$2.65	\$2.85	\$3.07	\$3.32	\$3.60	\$3.91	\$4.13	\$4.36	\$4.60	\$4.86	\$125.20	
NextEra Energy, Inc.	NEE	\$3.13	\$3.28	\$3.43	\$3.58	\$3.75	\$4.08	\$4.44	\$4.82	\$5.23	\$5.65	\$6.11	\$6.59	\$6.96	\$7.35	\$7.77	\$8.20	\$217.67	
Northeast Utilities	NU	\$1.60	\$1.69	\$1.80	\$1.90	\$2.02	\$2.20	\$2.40	\$2.61	\$2.82	\$3.05	\$3.29	\$3.54	\$3.74	\$3.95	\$4.17	\$4.40	\$103.29	
Otter Tail Corporation	OTTR	\$1.06	\$1.13	\$1.20	\$1.27	\$1.35	\$1.51	\$1.68	\$1.85	\$2.02	\$2.19	\$2.36	\$2.54	\$2.68	\$2.83	\$2.99	\$3.15	\$67.00	
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.56	\$2.67	\$2.78	\$2.92	\$3.08	\$3.26	\$3.45	\$3.67	\$3.91	\$4.17	\$4.40	\$4.65	\$4.91	\$5.18	\$121.53	
Portland General Electric Company	POR	\$0.98	\$1.08	\$1.18	\$1.29	\$1.41	\$1.54	\$1.68	\$1.83	\$1.98	\$2.15	\$2.32	\$2.50	\$2.64	\$2.79	\$2.95	\$3.11	\$75.48	
Southern Company	SO	\$2.07	\$2.12	\$2.18	\$2.24	\$2.30	\$2.37	\$2.44	\$2.53	\$2.63	\$2.74	\$2.86	\$2.99	\$3.16	\$3.34	\$3.53	\$3.72	\$92.49	
Westar Energy, Inc.	WR	\$1.37	\$1.41	\$1.46	\$1.50	\$1.54	\$1.65	\$1.80	\$1.94	\$2.10	\$2.28	\$2.47	\$2.68	\$2.83	\$2.99	\$3.16	\$3.34	\$80.54	
Projected Annual Data Investor Cash Flows		[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]
Company	Ticker	Outflow	10/17/14	12/31/14	6/30/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29
American Electric Power Company, Inc.	AEP	(\$52.12)	\$0.00	\$0.42	\$2.08	\$2.26	\$2.39	\$2.52	\$2.67	\$2.83	\$3.00	\$3.19	\$3.40	\$3.62	\$3.86	\$4.07	\$4.30	\$4.54	\$120.31
Cleco Corporation	CNL	(\$52.35)	\$0.00	\$0.33	\$1.67	\$1.88	\$2.03	\$2.18	\$2.34	\$2.50	\$2.67	\$2.86	\$3.05	\$3.26	\$3.48	\$3.68	\$3.89	\$4.10	\$121.94
Duke Energy Corporation	DUK	(\$72.31)	\$0.00	\$0.61	\$3.03	\$3.09	\$3.16	\$3.22	\$3.40	\$3.60	\$3.82	\$4.05	\$4.30	\$4.57	\$4.86	\$5.14	\$5.42	\$5.73	\$164.40
Empire District Electric Company	EDE	(\$24.44)	\$0.00	\$0.21	\$1.03	\$1.05	\$1.08	\$1.10	\$1.15	\$1.21	\$1.27	\$1.35	\$1.43	\$1.53	\$1.63	\$1.72	\$1.81	\$1.92	\$55.43
Great Plains Energy Inc.	GXP	(\$25.70)	\$0.00	\$0.20	\$1.02	\$1.14	\$1.22	\$1.30	\$1.39	\$1.48									

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

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]					
		Stock	EPS Growth Rate Estimates			Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal							
			Value		High							Terminal	Terminal						
Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	2013	2017	2024	Proof	IRR	P/E Ratio	PEG					
American Electric Power Company, Inc.	AEP	\$52.12	4.80%	4.79%	4.50%	4.80%	5.61%	61.00%	63.00%	67.23%	(\$0.00)	10.03%	16.08	2.87					
Cleco Corporation	CNL	\$52.35	7.00%	7.00%	3.50%	7.00%	5.61%	58.00%	62.00%	67.23%	(\$0.00)	9.80%	16.93	3.02					
Duke Energy Corporation	DUK	\$72.31	4.70%	4.70%	5.00%	5.00%	5.61%	71.00%	64.00%	67.23%	(\$0.00)	9.70%	17.37	3.10					
Empire District Electric Company	EDE	\$24.44	3.00%	3.00%	4.00%	4.00%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.79%	16.97	3.03					
Great Plains Energy Inc.	GXP	\$25.70	5.00%	5.00%	6.00%	6.00%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.51%	14.50	2.59					
Hawaiian Electric Industries, Inc.	HE	\$24.90	4.00%	4.00%	4.00%	4.00%	5.61%	77.00%	66.00%	67.23%	(\$0.00)	10.21%	15.42	2.75					
IDACORP, Inc.	IDA	\$54.99	4.00%	4.00%	1.00%	4.00%	5.61%	47.00%	55.00%	67.23%	(\$0.00)	9.98%	16.23	2.89					
NextEra Energy, Inc.	NEE	\$95.68	6.60%	6.48%	6.00%	6.00%	5.61%	61.00%	57.00%	67.23%	(\$0.00)	9.65%	17.57	3.13					
Northeast Utilities	NU	\$45.22	6.50%	6.31%	8.00%	8.00%	5.61%	60.00%	58.00%	67.23%	(\$0.00)	10.42%	14.76	2.63					
Other Tail Corporation	OTTR	\$28.93	NA	6.00%	15.50%	15.50%	5.61%	70.00%	59.00%	67.23%	(\$0.00)	12.14%	10.88	1.94					
Pinnacle West Capital Corporation	PNW	\$55.29	3.70%	3.75%	4.00%	4.00%	5.61%	62.00%	63.00%	67.23%	(\$0.00)	10.17%	15.58	2.78					
Portland General Electric Company	POR	\$32.71	7.80%	7.80%	5.00%	7.80%	5.61%	52.00%	57.00%	67.23%	(\$0.00)	10.23%	15.37	2.74					
Southern Company	SO	\$43.77	3.50%	3.35%	3.50%	3.50%	5.61%	74.00%	72.00%	67.23%	\$0.00	9.88%	16.64	2.97					
Westar Energy, Inc.	WR	\$35.52	3.80%	3.20%	6.00%	6.00%	5.61%	58.00%	55.00%	67.23%	(\$0.00)	10.47%	14.60	2.60					
DCF Result																			
												Mean	10.21%	15.64	2.79				
												Max	12.14%	17.57	3.13				
												Min	9.65%	10.88	1.94				
Projected Annual Earnings per Share																			
		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.66	\$3.84	\$4.02	\$4.22	\$4.43	\$4.66	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45	\$6.81	\$7.19	
Cleco Corporation	CNL	\$2.65	\$2.84	\$3.03	\$3.25	\$3.47	\$3.72	\$3.97	\$4.23	\$4.49	\$4.77	\$5.05	\$5.33	\$5.63	\$5.94	\$6.28	\$6.63	\$7.00	
Duke Energy Corporation	DUK	\$3.98	\$4.18	\$4.39	\$4.61	\$4.84	\$5.08	\$5.34	\$5.62	\$5.91	\$6.23	\$6.58	\$6.95	\$7.34	\$7.75	\$8.18	\$8.64	\$9.13	
Empire District Electric Company	EDE	\$1.48	\$1.54	\$1.60	\$1.66	\$1.73	\$1.80	\$1.88	\$1.96	\$2.06	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$2.83	\$2.99	\$3.16	
Great Plains Energy Inc.	GXP	\$1.62	\$1.72	\$1.82	\$1.93	\$2.05	\$2.17	\$2.30	\$2.43	\$2.57	\$2.72	\$2.87	\$3.04	\$3.21	\$3.39	\$3.58	\$3.78	\$3.99	
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27	\$3.46	
IDACORP, Inc.	IDA	\$3.64	\$3.79	\$3.94	\$4.09	\$4.26	\$4.43	\$4.62	\$4.83	\$5.06	\$5.32	\$5.60	\$5.91	\$6.25	\$6.60	\$6.97	\$7.36	\$7.77	
NextEra Energy, Inc.	NEE	\$4.83	\$5.15	\$5.49	\$5.85	\$6.24	\$6.65	\$7.08	\$7.52	\$7.98	\$8.45	\$8.94	\$9.44	\$9.97	\$10.53	\$11.12	\$11.75	\$12.41	
Northeast Utilities	NU	\$2.49	\$2.69	\$2.90	\$3.14	\$3.39	\$3.66	\$3.94	\$4.22	\$4.51	\$4.80	\$5.08	\$5.37	\$5.67	\$5.99	\$6.33	\$6.68	\$7.05	
Other Tail Corporation	OTTR	\$1.37	\$1.58	\$1.83	\$2.11	\$2.44	\$2.82	\$3.21	\$3.60	\$3.98	\$4.33	\$4.65	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45	
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.64	\$4.85	\$5.09	\$5.34	\$5.63	\$5.95	\$6.28	\$6.63	\$7.00	\$7.40	\$7.81	
Portland General Electric Company	POR	\$1.77	\$1.91	\$2.06	\$2.22	\$2.39	\$2.58	\$2.77	\$2.96	\$3.16	\$3.36	\$3.56	\$3.76	\$3.98	\$4.20	\$4.43	\$4.68	\$4.95	
Southern Company	SO	\$2.70	\$2.79	\$2.89	\$2.99	\$3.10	\$3.21	\$3.33	\$3.47	\$3.63	\$3.81	\$4.01	\$4.23	\$4.47	\$4.72	\$4.98	\$5.26	\$5.56	
Westar Energy, Inc.	WR	\$2.27	\$2.41	\$2.55	\$2.70	\$2.87	\$3.04	\$3.22	\$3.41	\$3.60	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$5.01	\$5.29	\$5.59	
Projected Annual Dividend Payout Ratio																			
		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]		
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%		
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%		
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%		
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%		
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%		
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%		
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%		
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%		
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%		
Other Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%		
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%		
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%		
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%		
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%		
Projected Annual Cash Flows																			
		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value	
American Electric Power Company, Inc.	AEP	\$2.03	\$2.15	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.02	\$3.21	\$3.42	\$3.65	\$3.89	\$4.10	\$4.33	\$4.58	\$4.83	\$115.59	
Cleco Corporation	CNL	\$1.64	\$1.79	\$1.95	\$2.12	\$2.30	\$2.49	\$2.68	\$2.89	\$3.10	\$3.32	\$3.54	\$3.78	\$4.00	\$4.22	\$4.46	\$4.71	\$118.50	
Duke Energy Corporation	DUK	\$2.97	\$3.04	\$3.11	\$3.18	\$3.25	\$3.44	\$3.65	\$3.87	\$4.11	\$4.36	\$4.64	\$4.93	\$5.21	\$5.50	\$5.81	\$6.14	\$158.54	
Empire District Electric Company	EDE	\$1.02	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.71	\$1.80	\$1.90	\$2.01	\$2.12	\$53.62	
Great Plains Energy Inc.	GXP	\$1.00	\$1.07	\$1.16	\$1.25	\$1.34	\$1.44	\$1.54	\$1.65	\$1.77	\$1.89	\$2.02	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$67.85	
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$53.33	
IDACORP, Inc.	IDA	\$1.78	\$1.93	\$2.09	\$2.26	\$2.44	\$2.62	\$2.82	\$3.05	\$3.30	\$3.57	\$3.87	\$4.20	\$4.43	\$4.68	\$4.95	\$5.22	\$126.14	
NextEra Energy, Inc.	NEE	\$3.14	\$3.29	\$3.45	\$3.62	\$3.79	\$4.14	\$4.51	\$4.90	\$5.31	\$5.75	\$6.21	\$6.70	\$7.08	\$7.48	\$7.90	\$8.34	\$218.03	
Northeast Utilities	NU	\$1.61	\$1.73	\$1.85	\$1.98	\$2.12	\$2.34	\$2.56	\$2.79	\$3.03	\$3.28	\$3.54	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$104.15	
Other Tail Corporation	OTTR	\$1.11	\$1.23	\$1.36	\$1.51	\$1.66	\$1.93	\$2.21	\$2.49	\$2.76	\$3.01	\$3.24	\$3.48	\$3.68	\$3.89	\$4.10	\$4.33	\$70.12	
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.57	\$2.69	\$2.81	\$2.95	\$3.12	\$3.30	\$3.50	\$3.72	\$3.96	\$4.22	\$4.46	\$4.71	\$4.97	\$5.25	\$121.68	
Portland General Electric Company	POR	\$0.99	\$1.10	\$1.21	\$1.33	\$1.47	\$1.62	\$1.78	\$1.94	\$2.11	\$2.29	\$2.48	\$2.67	\$2.82	\$2.98	\$3.15	\$3.32	\$76.03	
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.31	\$2.38	\$2.45	\$2.54	\$2.64	\$2.75	\$2.87	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$92.52	
Westar Energy, Inc.	WR	\$1.40	\$1.46	\$1.53	\$1.60	\$1.67	\$1.83	\$1.99	\$2.17	\$2.36	\$2.57	\$2.79	\$3.02	\$3.19	\$3.37	\$3.56	\$3.76	\$81.61	
Projected Annual Data Investor Cash Flows																			
		[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]
Company	Ticker	initial	10/17/14	12/31/14	6/30/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29
American Electric Power Company, Inc.	AEP	(\$52.12)	\$0.00	\$0.42	\$2.08	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.02	\$3.21	\$3.42	\$3.65	\$3.89	\$4.10	\$4.33	\$4.58	\$120.43
Cleco Corporation	CNL	(\$52.35)	\$0.00	\$0.34	\$1.70	\$1.95	\$2.12	\$2.30	\$2.49	\$2.68	\$2.89	\$3.10	\$3.32	\$3.54	\$3.78	\$4.00	\$4.22	\$4.46	\$123.21
Duke Energy Corporation	DUK	(\$72.31)	\$0.00	\$0.61	\$3.04	\$3.11	\$3.18	\$3.25	\$3.44	\$3.65	\$3.87	\$4.11	\$4.36	\$4.64	\$4.93	\$5.21	\$5.51	\$5.81	\$164.68
Empire District Electric Company	EDE	(\$24.44)	\$0.00	\$0.21	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.71	\$1.80	\$1.90	\$2.01	\$55.74
Great Plains Energy Inc.	GXP	(\$25.70)	\$0.00	\$0.20	\$1.03	\$1.16	\$1.25	\$1.34	\$1.44	\$1.54	\$1.65	\$1.77	\$1.89	\$2.02	\$2.16	\$2.28	\$2.40		

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

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]						
		Stock	EPS Growth Rate Estimates			Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal								
			Value		Growth							PEG								
Company	Ticker	Price	Zacks	First Call	Line	Growth	2013	2017	2024	Proof	IRR	P/E Ratio	Ratio							
American Electric Power Company, Inc.	AEP	\$52.12	4.80%	4.79%	4.50%	4.50%	5.61%	61.00%	63.00%	67.23%	(\$0.00)	9.94%	16.40	2.92						
Cleco Corporation	CNL	\$52.35	7.00%	7.00%	3.50%	3.50%	5.61%	58.00%	62.00%	67.23%	(\$0.00)	8.95%	21.27	3.79						
Duke Energy Corporation	DUK	\$72.31	4.70%	4.70%	5.00%	4.70%	5.61%	71.00%	64.00%	67.23%	(\$0.00)	9.62%	17.72	3.16						
Empire District Electric Company	EDE	\$24.44	3.00%	3.00%	4.00%	3.00%	5.61%	66.00%	63.00%	67.23%	(\$0.00)	9.52%	18.14	3.23						
Great Plains Energy Inc.	GXP	\$25.70	5.00%	5.00%	6.00%	5.00%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.20%	15.46	2.76						
Hawaiian Electric Industries, Inc.	HE	\$24.90	4.00%	4.00%	4.00%	4.00%	5.61%	77.00%	66.00%	67.23%	(\$0.00)	10.21%	15.42	2.75						
IDACORP, Inc.	IDA	\$54.99	4.00%	4.00%	1.00%	1.00%	5.61%	47.00%	55.00%	67.23%	(\$0.00)	9.20%	19.79	3.53						
NextEra Energy, Inc.	NEE	\$95.68	6.60%	6.48%	6.00%	6.00%	5.61%	61.00%	57.00%	67.23%	(\$0.00)	9.50%	18.26	3.25						
Northeast Utilities	NU	\$45.22	6.50%	6.31%	8.00%	6.31%	5.61%	60.00%	58.00%	67.23%	\$0.00	9.94%	16.41	2.92						
Otter Tail Corporation	OTTR	\$28.93	NA	6.00%	15.50%	6.00%	5.61%	70.00%	59.00%	67.23%	(\$0.00)	9.31%	19.19	3.42						
Pinnacle West Capital Corporation	PNW	\$55.29	3.70%	3.75%	4.00%	3.70%	5.61%	62.00%	63.00%	67.23%	(\$0.00)	10.08%	15.88	2.83						
Portland General Electric Company	POR	\$32.71	7.80%	7.80%	5.00%	5.00%	5.61%	52.00%	57.00%	67.23%	(\$0.00)	9.48%	18.35	3.27						
Southern Company	SO	\$43.77	3.50%	3.35%	3.50%	3.50%	5.61%	74.00%	72.00%	67.23%	\$0.00	9.83%	16.81	3.00						
Westar Energy, Inc.	WR	\$35.52	3.80%	3.20%	6.00%	3.20%	5.61%	58.00%	55.00%	67.23%	(\$0.00)	9.67%	17.47	3.11						
DCF Result																				
											Mean	9.68%	17.61	3.14						
											Max	10.21%	21.27	3.79						
											Min	8.95%	15.42	2.75						
Projected Annual Earnings per Share																				
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
American Electric Power Company, Inc.	AEP	\$3.18	\$3.32	\$3.47	\$3.63	\$3.79	\$3.96	\$4.15	\$4.36	\$4.57	\$4.81	\$5.07	\$5.36	\$5.66	\$5.97	\$6.31	\$6.68	\$7.04		
Cleco Corporation	CNL	\$2.65	\$2.74	\$2.84	\$2.94	\$3.04	\$3.15	\$3.27	\$3.41	\$3.56	\$3.74	\$3.93	\$4.15	\$4.39	\$4.63	\$4.89	\$5.17	\$5.46		
Duke Energy Corporation	DUK	\$3.98	\$4.17	\$4.36	\$4.57	\$4.78	\$5.01	\$5.25	\$5.51	\$5.80	\$6.10	\$6.44	\$6.80	\$7.18	\$7.58	\$8.01	\$8.46	\$8.93		
Empire District Electric Company	EDE	\$1.48	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.84	\$1.92	\$2.01	\$2.12	\$2.24	\$2.36	\$2.49	\$2.63	\$2.78	\$2.94		
Great Plains Energy Inc.	GXP	\$1.62	\$1.70	\$1.79	\$1.88	\$1.97	\$2.07	\$2.17	\$2.29	\$2.41	\$2.54	\$2.68	\$2.83	\$2.99	\$3.15	\$3.33	\$3.52	\$3.71		
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27	\$3.46		
IDACORP, Inc.	IDA	\$3.64	\$3.68	\$3.71	\$3.75	\$3.79	\$3.83	\$3.89	\$3.99	\$4.12	\$4.29	\$4.50	\$4.75	\$5.02	\$5.30	\$5.60	\$5.91	\$6.24		
NextEra Energy, Inc.	NEE	\$4.83	\$5.12	\$5.43	\$5.75	\$6.10	\$6.46	\$6.85	\$7.25	\$7.67	\$8.11	\$8.57	\$9.05	\$9.56	\$10.10	\$10.66	\$11.26	\$11.89		
Northeast Utilities	NU	\$2.49	\$2.65	\$2.81	\$2.99	\$3.18	\$3.38	\$3.59	\$3.81	\$4.04	\$4.27	\$4.52	\$4.77	\$5.04	\$5.32	\$5.62	\$5.93	\$6.27		
Otter Tail Corporation	OTTR	\$1.37	\$1.45	\$1.54	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.18	\$2.30	\$2.43	\$2.57	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37		
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.94	\$4.08	\$4.23	\$4.39	\$4.57	\$4.76	\$4.99	\$5.23	\$5.51	\$5.82	\$6.15	\$6.49	\$6.85	\$7.24	\$7.65		
Portland General Electric Company	POR	\$1.77	\$1.86	\$1.95	\$2.05	\$2.15	\$2.26	\$2.37	\$2.50	\$2.63	\$2.77	\$2.93	\$3.09	\$3.26	\$3.45	\$3.64	\$3.84	\$4.06		
Southern Company	SO	\$2.70	\$2.79	\$2.88	\$2.98	\$3.08	\$3.18	\$3.30	\$3.44	\$3.59	\$3.77	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$5.21	\$5.50		
Westar Energy, Inc.	WR	\$2.27	\$2.34	\$2.42	\$2.49	\$2.57	\$2.66	\$2.75	\$2.86	\$2.99	\$3.13	\$3.30	\$3.48	\$3.68	\$3.88	\$4.10	\$4.33	\$4.57		
Projected Annual Dividend Payout Ratio																				
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029			
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%			
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%			
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%			
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	62.75%	63.49%	64.24%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%			
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%			
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%			
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%			
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%			
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%			
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%			
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%			
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%			
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%			
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%			
Projected Annual Cash Flows																				
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value		
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.35	\$3.57	\$3.80	\$4.02	\$4.24	\$4.48	\$4.73	\$115.37		
Cleco Corporation	CNL	\$1.59	\$1.67	\$1.76	\$1.85	\$1.95	\$2.05	\$2.16	\$2.29	\$2.43	\$2.58	\$2.76	\$2.95	\$3.11	\$3.29	\$3.47	\$3.67	\$116.04		
Duke Energy Corporation	DUK	\$2.96	\$3.02	\$3.08	\$3.14	\$3.20	\$3.38	\$3.58	\$3.79	\$4.02	\$4.27	\$4.54	\$4.83	\$5.10	\$5.38	\$5.69	\$6.01	\$158.26		
Empire District Electric Company	EDE	\$1.01	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.25	\$1.32	\$1.40	\$1.49	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98	\$53.30		
Great Plains Energy Inc.	GXP	\$0.99	\$1.05	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.55	\$1.65	\$1.76	\$1.88	\$2.01	\$2.12	\$2.24	\$2.36	\$2.50	\$57.42		
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.38	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$53.33		
IDACORP, Inc.	IDA	\$1.73	\$1.82	\$1.91	\$2.01	\$2.10	\$2.21	\$2.34	\$2.48	\$2.66	\$2.87	\$3.11	\$3.37	\$3.66	\$3.97	\$4.20	\$4.50	\$123.54		
NextEra Energy, Inc.	NEE	\$3.12	\$3.26	\$3.39	\$3.54	\$3.68	\$4.00	\$4.34	\$4.71	\$5.10	\$5.51	\$5.95	\$6.43	\$6.79	\$7.17	\$7.57	\$7.99	\$217.13		
Northeast Utilities	NU	\$1.59	\$1.67	\$1.77	\$1.86	\$1.96	\$2.13	\$2.31	\$2.50	\$2.70	\$2.92	\$3.14	\$3.39	\$3.68	\$3.98	\$4.27	\$4.57	\$102.80		
Otter Tail Corporation	OTTR	\$1.02	\$1.04	\$1.05	\$1.07	\$1.08	\$1.17	\$1.26	\$1.36	\$1.47	\$1.58	\$1.70	\$1.82	\$1.93	\$2.03	\$2.15	\$2.27	\$64.74		
Pinnacle West Capital Corporation	PNW	\$2.35	\$2.45	\$2.55	\$2.66	\$2.77	\$2.90	\$3.06	\$3.23	\$3.42	\$3.64	\$3.88	\$4.13	\$4.36	\$4.61	\$4.87	\$5.14	\$121.44		
Portland General Electric Company	POR	\$0.97	\$1.04	\$1.12	\$1.20	\$1.29	\$1.39	\$1.50	\$1.61	\$1.74	\$1.88	\$2.03	\$2.19	\$2.32	\$2.45	\$2.58	\$2.73	\$74.47		
Southern Company	SO	\$2.06	\$2.12	\$2.18	\$2.23	\$2.29	\$2.36	\$2.43	\$2.51	\$2.61	\$2.72	\$2.84	\$2.97	\$3.14	\$3.31	\$3.50	\$3.70	\$92.45		
Westar Energy, Inc.	WR	\$1.36	\$1.38	\$1.41	\$1.44	\$1.46	\$1.56	\$1.67	\$1.80	\$1.94	\$2.10	\$2.28	\$2.47	\$2.61	\$2.76	\$2.91	\$3.07	\$79.88		
Projected Annual Data Investor Cash Flows																				
Company	Ticker	Initial	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]
American Electric Power Company, Inc.	AEP	(\$52.12)	\$0.00	\$0.42	\$2.07	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.35	\$3.57	\$3.80	\$4.02	\$4.24	\$4.48	\$4.73	\$120.10
Cleco Corporation	CNL	(\$52.35)	\$0.00	\$0.33	\$1.62	\$1.76	\$1.85	\$1.95	\$2.05	\$2.16	\$2.29	\$2.43	\$2.58	\$2.76	\$2.95	\$3.11	\$3.29	\$3.47	\$3.67	\$119.71
Duke Energy Corporation	DUK	(\$72.31)	\$0.00	\$0.61	\$3.03	\$3.08	\$3.14	\$3.20	\$3.38	\$3.58	\$3.79	\$4.02	\$4.27	\$4.54	\$4.83	\$5.10	\$5.38	\$5.69	\$6.01	\$164.27
Empire District Electric Company	EDE	(\$24.44)	\$0.00	\$0.21	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.25	\$1.32	\$1.40	\$1.49	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98	\$55.28
Great Plains Energy Inc.	GXP	(\$25.70)	\$0.00	\$0.20	\$1.01	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.55	\$1.65	\$1.76	\$1.88	\$2.01	\$2.12	\$2.24	\$2.36	\$2.50	\$59.92
Hawaiian Electric Industries, Inc.	HE	(\$24.90)	\$0.00	\$0.27	\$1.32	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$55.66
IDACORP, Inc.	IDA	(\$54.99)	\$0.00	\$0.36	\$1.74	\$1.91	\$2.01	\$2.10	\$2.21	\$2.34	\$2.48	\$2.66	\$2.87	\$3.11	\$3.37	\$3.66	\$3.97	\$4.31	\$4.67	\$127.74
NextEra Energy, Inc.	NEE	(\$95.68)	\$0.00	\$0.64	\$3.22	\$3.39	\$3.54</													

Multi-Stage Growth Discounted Cash Flow Model
360 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 P/E	Terminal PEG Ratio		
		[1]	[2]	[3]	[4]		[5]	[6]	[7]				[8]	[9]
Company	Ticker	Price	Zacks	First Call	Line	Average	Growth	2014	2018	2024	Proof	IRR	Ratio	Ratio
American Electric Power Company, Inc.	AEP	\$48.88	4.80%	4.79%	4.50%	4.70%	5.61%	61.00%	63.00%	67.23%	(60.00)	10.29%	15.17	2.70
Cleco Corporation	CNL	\$49.33	7.00%	7.00%	3.50%	5.83%	5.61%	58.00%	62.00%	67.23%	(60.00)	9.74%	17.19	3.06
Duke Energy Corporation	DUK	\$70.56	4.70%	4.70%	5.00%	4.80%	5.61%	71.00%	64.00%	67.23%	(60.00)	9.75%	17.17	3.06
Empire District Electric Company	EDE	\$23.42	3.00%	3.00%	4.00%	3.33%	5.61%	66.00%	63.00%	67.23%	(60.00)	9.79%	16.98	3.03
Great Plains Energy Inc.	GXP	\$24.53	5.00%	5.00%	6.00%	5.33%	5.61%	58.00%	62.00%	67.23%	(60.00)	10.53%	14.44	2.57
Hawaiian Electric Industries, Inc.	HE	\$25.35	4.00%	4.00%	4.00%	4.00%	5.61%	77.00%	66.00%	67.23%	(60.00)	10.13%	15.71	2.80
IDACORP, Inc.	IDA	\$52.60	4.00%	4.00%	1.00%	3.00%	5.61%	47.00%	55.00%	67.23%	(60.00)	9.89%	16.58	2.96
NextEra Energy, Inc.	NEE	\$89.37	6.60%	6.48%	6.00%	6.36%	5.61%	61.00%	57.00%	67.23%	(60.00)	9.87%	16.68	2.97
Northeast Utilities	NU	\$43.70	6.50%	6.31%	8.00%	6.94%	5.61%	60.00%	58.00%	67.23%	(60.00)	10.27%	15.25	2.72
Otter Tail Corporation	OTTR	\$28.84	NA	6.00%	15.50%	10.75%	5.61%	70.00%	59.00%	67.23%	(60.00)	10.60%	14.24	2.54
Pinnacle West Capital Corporation	PNW	\$55.29	3.70%	3.75%	4.00%	3.82%	5.61%	62.00%	63.00%	67.23%	(60.00)	10.11%	15.76	2.81
Portland General Electric Company	POR	\$31.27	7.80%	7.80%	5.00%	6.87%	5.61%	52.00%	57.00%	67.23%	(60.00)	10.16%	15.60	2.78
Southern Company	SO	\$43.11	3.50%	3.35%	3.50%	3.45%	5.61%	74.00%	72.00%	67.23%	(60.00)	9.93%	16.43	2.93
Westar Energy, Inc.	WR	\$33.70	3.80%	3.20%	6.00%	4.33%	5.61%	58.00%	55.00%	67.23%	(60.00)	10.22%	15.40	2.75

DCF Result			
Mean	10.09%	15.90	2.93
Max	10.60%	17.19	3.06
Min	9.74%	14.24	2.54

Projected Annual Earnings per Share	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.65	\$3.82	\$4.00	\$4.19	\$4.40	\$4.63	\$4.88	\$5.14	\$5.43	\$5.74	\$6.06	\$6.40	\$6.76	\$7.14
Cleco Corporation	CNL	\$2.65	\$2.80	\$2.97	\$3.14	\$3.32	\$3.52	\$3.72	\$3.94	\$4.16	\$4.40	\$4.65	\$4.91	\$5.18	\$5.47	\$5.78	\$6.11	\$6.45
Duke Energy Corporation	DUK	\$3.98	\$4.17	\$4.37	\$4.58	\$4.80	\$5.03	\$5.28	\$5.55	\$5.84	\$6.15	\$6.48	\$6.85	\$7.23	\$7.64	\$8.07	\$8.52	\$9.00
Empire District Electric Company	EDE	\$1.48	\$1.53	\$1.58	\$1.63	\$1.69	\$1.74	\$1.81	\$1.88	\$1.97	\$2.06	\$2.17	\$2.29	\$2.42	\$2.56	\$2.70	\$2.85	\$3.01
Great Plains Energy Inc.	GXP	\$1.62	\$1.71	\$1.80	\$1.89	\$1.99	\$2.10	\$2.21	\$2.33	\$2.46	\$2.60	\$2.74	\$2.90	\$3.06	\$3.23	\$3.41	\$3.60	\$3.80
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27	\$3.46
IDACORP, Inc.	IDA	\$3.64	\$3.75	\$3.86	\$3.98	\$4.10	\$4.22	\$4.36	\$4.53	\$4.73	\$4.95	\$5.21	\$5.50	\$5.81	\$6.14	\$6.48	\$6.84	\$7.23
NextEra Energy, Inc.	NEE	\$4.83	\$5.14	\$5.46	\$5.81	\$6.18	\$6.57	\$7.01	\$7.45	\$7.95	\$8.51	\$9.13	\$9.79	\$10.49	\$11.23	\$12.01	\$12.84	\$13.71
Northeast Utilities	NU	\$2.49	\$2.66	\$2.85	\$3.04	\$3.26	\$3.48	\$3.72	\$3.96	\$4.21	\$4.46	\$4.72	\$4.98	\$5.26	\$5.56	\$5.87	\$6.20	\$6.55
Otter Tail Corporation	OTTR	\$1.37	\$1.52	\$1.68	\$1.86	\$2.06	\$2.28	\$2.51	\$2.74	\$2.96	\$3.18	\$3.38	\$3.57	\$3.77	\$3.98	\$4.21	\$4.44	\$4.69
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.94	\$4.10	\$4.25	\$4.41	\$4.60	\$4.80	\$5.02	\$5.28	\$5.56	\$5.87	\$6.20	\$6.55	\$6.91	\$7.30	\$7.71
Portland General Electric Company	POR	\$1.77	\$1.89	\$2.02	\$2.16	\$2.31	\$2.47	\$2.63	\$2.80	\$2.98	\$3.16	\$3.34	\$3.53	\$3.72	\$3.93	\$4.15	\$4.39	\$4.63
Southern Company	SO	\$2.70	\$2.79	\$2.89	\$2.99	\$3.09	\$3.20	\$3.32	\$3.46	\$3.62	\$3.79	\$3.99	\$4.22	\$4.45	\$4.70	\$4.97	\$5.24	\$5.54
Westar Energy, Inc.	WR	\$2.27	\$2.37	\$2.47	\$2.58	\$2.69	\$2.81	\$2.93	\$3.07	\$3.23	\$3.39	\$3.58	\$3.78	\$3.99	\$4.21	\$4.45	\$4.70	\$4.96

Projected Annual Dividend Payout Ratio	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.500%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.67	\$2.83	\$3.00	\$3.19	\$3.40	\$3.62	\$3.86	\$4.07	\$4.30	\$4.54	\$4.80	\$108.26
Cleco Corporation	CNL	\$1.63	\$1.75	\$1.88	\$2.03	\$2.18	\$2.34	\$2.50	\$2.67	\$2.86	\$3.05	\$3.26	\$3.48	\$3.68	\$3.89	\$4.10	\$4.33	\$110.85
Duke Energy Corporation	DUK	\$2.96	\$3.03	\$3.09	\$3.16	\$3.22	\$3.40	\$3.60	\$3.82	\$4.05	\$4.30	\$4.57	\$4.86	\$5.14	\$5.42	\$5.73	\$6.05	\$154.44
Empire District Electric Company	EDE	\$1.01	\$1.03	\$1.05	\$1.08	\$1.10	\$1.15	\$1.21	\$1.27	\$1.35	\$1.43	\$1.53	\$1.63	\$1.72	\$1.81	\$1.92	\$2.02	\$51.12
Great Plains Energy Inc.	GXP	\$0.99	\$1.06	\$1.14	\$1.22	\$1.30	\$1.39	\$1.48	\$1.58	\$1.69	\$1.80	\$1.93	\$2.06	\$2.17	\$2.29	\$2.42	\$2.56	\$54.94
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$54.33
IDACORP, Inc.	IDA	\$1.76	\$1.89	\$2.03	\$2.17	\$2.32	\$2.48	\$2.65	\$2.85	\$3.07	\$3.32	\$3.60	\$3.91	\$4.13	\$4.36	\$4.60	\$4.86	\$119.83
NextEra Energy, Inc.	NEE	\$3.13	\$3.28	\$3.43	\$3.58	\$3.75	\$4.08	\$4.44	\$4.82	\$5.23	\$5.65	\$6.11	\$6.59	\$7.09	\$7.57	\$8.07	\$8.59	\$203.50
Northeast Utilities	NU	\$1.60	\$1.69	\$1.80	\$1.90	\$2.02	\$2.20	\$2.40	\$2.61	\$2.82	\$3.05	\$3.29	\$3.54	\$3.74	\$3.95	\$4.17	\$4.40	\$99.86
Otter Tail Corporation	OTTR	\$1.06	\$1.13	\$1.20	\$1.27	\$1.35	\$1.51	\$1.68	\$1.85	\$2.02	\$2.19	\$2.36	\$2.54	\$2.68	\$2.83	\$2.99	\$3.15	\$66.80
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.56	\$2.67	\$2.78	\$2.92	\$3.08	\$3.26	\$3.45	\$3.67	\$3.91	\$4.17	\$4.40	\$4.65	\$4.91	\$5.18	\$121.54
Portland General Electric Company	POR	\$0.98	\$1.08	\$1.18	\$1.29	\$1.41	\$1.54	\$1.68	\$1.83	\$1.98	\$2.15	\$2.32	\$2.50	\$2.64	\$2.79	\$2.95	\$3.11	\$72.26
Southern Company	SO	\$2.07	\$2.12	\$2.18	\$2.24	\$2.30	\$2.37	\$2.44	\$2.53	\$2.63	\$2.74	\$2.86	\$2.99	\$3.16	\$3.34	\$3.53	\$3.72	\$91.01
Westar Energy, Inc.	WR	\$1.37	\$1.41	\$1.46	\$1.50	\$1.54	\$1.66	\$1.80	\$1.94	\$2.10	\$2.28	\$2.47	\$2.68	\$2.83	\$2.99			

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

Inputs	[1] Stock	[2]-[6] EPS Growth Rate Estimates					[7] Long-Term Growth	[8]-[10] Payout Ratio			[11] Iterative Solution IRR	[12] Terminal P/E Ratio	[13] Terminal PEG Ratio	
		Price	Zacks	First Call	Value Line	High Growth		2014	2018	2024				
American Electric Power Company, Inc.	AEP	\$48.88	4.80%	4.79%	4.50%	4.80%	5.61%	61.00%	63.00%	67.23%	(50.00)	10.32%	15.07	2.69
Cleco Corporation	CNL	\$49.33	7.00%	7.00%	3.50%	7.00%	5.61%	58.00%	62.00%	67.23%	(50.00)	10.06%	15.96	2.84
Duke Energy Corporation	DUK	\$70.56	4.70%	4.70%	5.00%	5.00%	5.61%	71.00%	64.00%	67.23%	(50.00)	9.80%	16.94	3.02
Empire District Electric Company	EDE	\$23.42	3.00%	3.00%	4.00%	4.00%	5.61%	66.00%	63.00%	67.23%	(50.00)	9.98%	16.25	2.90
Great Plains Energy Inc.	GXP	\$24.53	5.00%	5.00%	6.00%	6.00%	5.61%	58.00%	62.00%	67.23%	(50.00)	10.74%	13.85	2.47
Hawaiian Electric Industries, Inc.	HE	\$25.35	4.00%	4.00%	4.00%	4.00%	5.61%	77.00%	66.00%	67.23%	(50.00)	10.13%	15.71	2.80
IDACORP, Inc.	IDA	\$52.60	4.00%	4.00%	1.00%	4.00%	5.61%	47.00%	55.00%	67.23%	(50.00)	10.18%	15.54	2.77
NextEra Energy, Inc.	NEE	\$89.37	6.60%	6.48%	6.00%	6.00%	5.61%	61.00%	57.00%	67.23%	(50.00)	9.93%	16.43	2.93
Northeast Utilities	NU	\$43.70	6.50%	6.31%	8.00%	8.00%	5.61%	60.00%	58.00%	67.23%	(50.00)	10.58%	14.28	2.55
Otter Tail Corporation	OTTR	\$26.84	NA	6.00%	15.50%	15.50%	5.61%	70.00%	59.00%	67.23%	(50.00)	12.16%	10.85	1.93
Pinnacle West Capital Corporation	PNW	\$55.29	3.70%	3.75%	4.00%	4.00%	5.61%	62.00%	63.00%	67.23%	(50.00)	10.17%	15.58	2.78
Portland General Electric Company	POR	\$31.27	7.80%	7.80%	5.00%	7.80%	5.61%	52.00%	57.00%	67.23%	(50.00)	10.43%	14.72	2.62
Southern Company	SO	\$43.11	3.50%	3.35%	3.50%	3.50%	5.61%	74.00%	72.00%	67.23%	(50.00)	9.95%	16.38	2.92
Westar Energy, Inc.	WR	\$33.70	3.80%	3.20%	6.00%	6.00%	5.61%	58.00%	55.00%	67.23%	(50.00)	10.73%	13.87	2.47

DCF Result

Mean	10.37%	15.10	2.69
Max	12.16%	16.94	3.02
Min	9.80%	10.85	1.93

Projected Annual Earnings per Share	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.66	\$3.84	\$4.02	\$4.22	\$4.43	\$4.66	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45	\$6.81	\$7.19
Cleco Corporation	CNL	\$2.65	\$2.84	\$3.03	\$3.25	\$3.47	\$3.72	\$3.97	\$4.23	\$4.49	\$4.77	\$5.05	\$5.33	\$5.63	\$5.94	\$6.28	\$6.63	\$7.00
Duke Energy Corporation	DUK	\$3.98	\$4.18	\$4.39	\$4.61	\$4.84	\$5.08	\$5.34	\$5.62	\$5.91	\$6.23	\$6.58	\$6.95	\$7.34	\$7.75	\$8.18	\$8.64	\$9.13
Empire District Electric Company	EDE	\$1.48	\$1.54	\$1.60	\$1.66	\$1.73	\$1.80	\$1.88	\$1.96	\$2.06	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$2.83	\$2.99	\$3.16
Great Plains Energy Inc.	GXP	\$1.62	\$1.72	\$1.82	\$1.93	\$2.05	\$2.17	\$2.30	\$2.43	\$2.57	\$2.72	\$2.87	\$3.04	\$3.21	\$3.39	\$3.58	\$3.78	\$3.99
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27	\$3.46
IDACORP, Inc.	IDA	\$3.64	\$3.79	\$3.94	\$4.09	\$4.26	\$4.43	\$4.62	\$4.83	\$5.06	\$5.32	\$5.60	\$5.91	\$6.25	\$6.60	\$6.97	\$7.36	\$7.77
NextEra Energy, Inc.	NEE	\$4.83	\$5.15	\$5.49	\$5.85	\$6.24	\$6.65	\$7.08	\$7.52	\$7.98	\$8.45	\$8.94	\$9.44	\$9.97	\$10.53	\$11.12	\$11.75	\$12.41
Northeast Utilities	NU	\$2.49	\$2.69	\$2.90	\$3.14	\$3.39	\$3.66	\$3.94	\$4.22	\$4.51	\$4.80	\$5.09	\$5.37	\$5.67	\$5.99	\$6.33	\$6.68	\$7.05
Otter Tail Corporation	OTTR	\$1.37	\$1.58	\$1.83	\$2.11	\$2.44	\$2.82	\$3.21	\$3.60	\$3.98	\$4.33	\$4.65	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.64	\$4.85	\$5.09	\$5.34	\$5.63	\$5.95	\$6.28	\$6.63	\$7.00	\$7.40	\$7.81
Portland General Electric Company	POR	\$1.77	\$1.91	\$2.06	\$2.22	\$2.39	\$2.58	\$2.77	\$2.96	\$3.16	\$3.36	\$3.56	\$3.76	\$3.98	\$4.20	\$4.43	\$4.68	\$4.95
Southern Company	SO	\$2.70	\$2.79	\$2.89	\$2.99	\$3.10	\$3.21	\$3.33	\$3.47	\$3.63	\$3.81	\$4.01	\$4.23	\$4.47	\$4.72	\$4.98	\$5.26	\$5.56
Westar Energy, Inc.	WR	\$2.27	\$2.41	\$2.55	\$2.70	\$2.87	\$3.04	\$3.22	\$3.41	\$3.60	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$5.01	\$5.29	\$5.59

Projected Annual Dividend Payout Ratio	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
American Electric Power Company, Inc.	AEP	\$2.03	\$2.15	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.02	\$3.21	\$3.42	\$3.65	\$3.89	\$4.10	\$4.33	\$4.58	\$4.83	\$108.34
Cleco Corporation	CNL	\$1.64	\$1.79	\$1.95	\$2.12	\$2.30	\$2.49	\$2.68	\$2.89	\$3.10	\$3.32	\$3.54	\$3.78	\$4.00	\$4.22	\$4.46	\$4.71	\$111.74
Duke Energy Corporation	DUK	\$2.97	\$3.04	\$3.11	\$3.18	\$3.25	\$3.34	\$3.65	\$3.87	\$4.11	\$4.36	\$4.64	\$4.93	\$5.21	\$5.50	\$5.81	\$6.14	\$154.63
Empire District Electric Company	EDE	\$1.02	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.71	\$1.80	\$1.90	\$2.01	\$2.12	\$51.33
Great Plains Energy Inc.	GXP	\$1.00	\$1.07	\$1.16	\$1.25	\$1.34	\$1.44	\$1.54	\$1.65	\$1.77	\$1.89	\$2.02	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$55.23
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$54.33
IDACORP, Inc.	IDA	\$1.78	\$1.93	\$2.09	\$2.26	\$2.44	\$2.62	\$2.82	\$3.05	\$3.30	\$3.57	\$3.87	\$4.20	\$4.43	\$4.68	\$4.95	\$5.22	\$120.76
NextEra Energy, Inc.	NEE	\$3.14	\$3.29	\$3.45	\$3.62	\$3.79	\$4.14	\$4.51	\$4.90	\$5.31	\$5.75	\$6.21	\$6.70	\$7.08	\$7.48	\$7.90	\$8.34	\$203.86
Northeast Utilities	NU	\$1.61	\$1.73	\$1.85	\$1.98	\$2.12	\$2.34	\$2.56	\$2.79	\$3.03	\$3.28	\$3.54	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$100.73
Otter Tail Corporation	OTTR	\$1.11	\$1.23	\$1.36	\$1.51	\$1.66	\$1.93	\$2.21	\$2.49	\$2.76	\$3.01	\$3.24	\$3.48	\$3.68	\$3.89	\$4.10	\$4.33	\$69.92
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.57	\$2.69	\$2.81	\$2.95	\$3.12	\$3.30	\$3.50	\$3.72	\$3.96	\$4.22	\$4.46	\$4.71	\$4.97	\$5.25	\$121.69
Portland General Electric Company	POR	\$0.99	\$1.10	\$1.21	\$1.33	\$1.47	\$1.62	\$1.78	\$1.94	\$2.11	\$2.29	\$2.48	\$2.67	\$2.82	\$2.98	\$3.15	\$3.32	\$72.81
Southern Company	SO	\$2.07	\$2.13	\$2.19	\$2.25	\$2.31	\$2.38	\$2.45	\$2.54	\$2.64	\$2.75	\$2.87	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$91.03
Westar Energy, Inc.	WR	\$1.40	\$1.46	\$1.53	\$1.60	\$1.67	\$1.83	\$1.99	\$2.17	\$2.36	\$2.57	\$2.79	\$3.02	\$3.19	\$3.37	\$3.56	\$3.76	\$77.51

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

Inputs	Stock	EPS Growth Rate Estimates				Long-Term Growth	Payout Ratio			Iterative Solution			Terminal P/E Ratio	Terminal PEG Ratio
		Price	Zacks	First Call	Value Line		2014	2018	2024	Proof	IRR	Ratio		
American Electric Power Company, Inc.	AEP	\$48.88	4.80%	4.79%	4.50%	4.50%	5.61%	61.00%	63.00%	67.23%	(\$0.00)	10.23%	15.37	2.74
Cleco Corporation	CNL	\$49.33	7.00%	7.00%	3.50%	3.50%	5.61%	58.00%	62.00%	67.23%	(\$0.00)	9.15%	20.03	3.57
Duke Energy Corporation	DUK	\$70.56	4.70%	4.70%	5.00%	4.70%	5.61%	71.00%	64.00%	67.23%	(\$0.00)	9.72%	17.28	3.08
Empire District Electric Company	EDE	\$23.42	3.00%	3.00%	4.00%	3.00%	5.61%	66.00%	63.00%	67.23%	(\$0.00)	9.70%	17.36	3.09
Great Plains Energy Inc.	GXP	\$24.53	5.00%	5.00%	6.00%	5.00%	5.61%	58.00%	62.00%	67.23%	(\$0.00)	10.42%	14.75	2.63
Hawaiian Electric Industries, Inc.	HE	\$25.35	4.00%	4.00%	4.00%	4.00%	5.61%	77.00%	66.00%	67.23%	(\$0.00)	10.13%	15.71	2.60
IDACORP, Inc.	IDA	\$52.60	4.00%	4.00%	1.00%	1.00%	5.61%	47.00%	55.00%	67.23%	(\$0.00)	9.36%	18.93	3.37
NextEra Energy, Inc.	NEE	\$89.37	6.60%	6.48%	6.00%	6.00%	5.61%	61.00%	57.00%	67.23%	(\$0.00)	9.77%	17.07	3.04
Northeast Utilities	NU	\$43.70	6.50%	6.31%	8.00%	6.31%	5.61%	60.00%	58.00%	67.23%	(\$0.00)	10.09%	15.86	2.83
Otter Tail Corporation	OTTR	\$28.84	NA	6.00%	15.50%	6.00%	5.61%	70.00%	59.00%	67.23%	(\$0.00)	9.32%	19.14	3.41
Pinnacle West Capital Corporation	PNW	\$55.29	3.70%	3.75%	4.00%	3.70%	5.61%	62.00%	63.00%	67.23%	(\$0.00)	10.08%	15.89	2.83
Portland General Electric Company	POR	\$31.27	7.80%	7.80%	5.00%	5.00%	5.61%	52.00%	57.00%	67.23%	(\$0.00)	9.65%	17.56	3.13
Southern Company	SO	\$43.11	3.50%	3.35%	3.50%	3.35%	5.61%	74.00%	72.00%	67.23%	(\$0.00)	9.90%	16.54	2.95
Westar Energy, Inc.	WR	\$33.70	3.80%	3.20%	6.00%	3.20%	5.61%	58.00%	55.00%	67.23%	(\$0.00)	9.89%	16.57	2.95

DCF Result															
	Mean	9.82%	17.00	3.03											
	Max	10.42%	20.03	3.57											
	Min	9.15%	14.75	2.63											

Projected Annual Earnings per Share	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.32	\$3.47	\$3.63	\$3.79	\$3.96	\$4.15	\$4.35	\$4.57	\$4.81	\$5.07	\$5.36	\$5.66	\$5.97	\$6.31	\$6.66	\$7.04
Cleco Corporation	CNL	\$2.65	\$2.74	\$2.84	\$2.94	\$3.04	\$3.15	\$3.27	\$3.41	\$3.56	\$3.74	\$3.93	\$4.15	\$4.39	\$4.63	\$4.89	\$5.17	\$5.46
Duke Energy Corporation	DUK	\$3.98	\$4.17	\$4.36	\$4.57	\$4.78	\$5.01	\$5.25	\$5.51	\$5.80	\$6.10	\$6.44	\$6.80	\$7.18	\$7.58	\$8.01	\$8.46	\$8.93
Empire District Electric Company	EDE	\$1.48	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.84	\$1.92	\$2.01	\$2.12	\$2.24	\$2.36	\$2.49	\$2.63	\$2.78	\$2.94
Great Plains Energy Inc.	GXP	\$1.62	\$1.70	\$1.79	\$1.88	\$1.97	\$2.07	\$2.17	\$2.29	\$2.41	\$2.54	\$2.68	\$2.83	\$2.99	\$3.15	\$3.33	\$3.52	\$3.71
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27	\$3.46
IDACORP, Inc.	IDA	\$3.64	\$3.68	\$3.71	\$3.75	\$3.79	\$3.83	\$3.89	\$3.99	\$4.12	\$4.29	\$4.50	\$4.75	\$5.02	\$5.30	\$5.60	\$5.91	\$6.24
NextEra Energy, Inc.	NEE	\$4.83	\$5.12	\$5.43	\$5.75	\$6.10	\$6.46	\$6.85	\$7.25	\$7.67	\$8.11	\$8.57	\$9.05	\$9.56	\$10.10	\$10.66	\$11.26	\$11.89
Northeast Utilities	NU	\$2.49	\$2.65	\$2.81	\$2.99	\$3.18	\$3.38	\$3.59	\$3.81	\$4.04	\$4.27	\$4.52	\$4.77	\$5.04	\$5.32	\$5.62	\$5.93	\$6.27
Otter Tail Corporation	OTTR	\$1.37	\$1.45	\$1.54	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.18	\$2.30	\$2.43	\$2.57	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.94	\$4.08	\$4.23	\$4.39	\$4.57	\$4.76	\$4.99	\$5.23	\$5.51	\$5.82	\$6.15	\$6.49	\$6.85	\$7.24	\$7.65
Portland General Electric Company	POR	\$1.77	\$1.86	\$1.95	\$2.05	\$2.15	\$2.26	\$2.37	\$2.50	\$2.63	\$2.77	\$2.93	\$3.09	\$3.26	\$3.45	\$3.64	\$3.84	\$4.06
Southern Company	SO	\$2.70	\$2.79	\$2.88	\$2.98	\$3.08	\$3.18	\$3.30	\$3.44	\$3.59	\$3.77	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$5.21	\$5.50
Westar Energy, Inc.	WR	\$2.27	\$2.34	\$2.42	\$2.49	\$2.57	\$2.66	\$2.75	\$2.86	\$2.99	\$3.13	\$3.30	\$3.48	\$3.68	\$3.89	\$4.10	\$4.33	\$4.57

Projected Annual Dividend Payout Ratio	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.500%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.35	\$3.57	\$3.80	\$4.02	\$4.24	\$4.48	\$4.73	\$108.11
Cleco Corporation	CNL	\$1.59	\$1.67	\$1.76	\$1.85	\$1.95	\$2.05	\$2.16	\$2.29	\$2.43	\$2.58	\$2.76	\$2.95	\$3.11	\$3.29	\$3.47	\$3.67	\$109.30
Duke Energy Corporation	DUK	\$2.96	\$3.02	\$3.08	\$3.14	\$3.20	\$3.38	\$3.58	\$3.79	\$4.02	\$4.27	\$4.54	\$4.83	\$5.10	\$5.38	\$5.69	\$6.01	\$154.35
Empire District Electric Company	EDE	\$1.01	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.25	\$1.32	\$1.40	\$1.49	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98	\$51.02
Great Plains Energy Inc.	GXP	\$0.99	\$1.05	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.55	\$1.65	\$1.76	\$1.88	\$2.01	\$2.12	\$2.24	\$2.36	\$2.50	\$54.81
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$54.33
IDACORP, Inc.	IDA	\$1.73	\$1.82	\$1.91	\$2.01	\$2.10	\$2.21	\$2.34	\$2.48	\$2.66	\$2.87	\$3.11	\$3.37	\$3.66	\$3.97	\$4.20	\$4.48	\$118.18
NextEra Energy, Inc.	NEE	\$3.12	\$3.26	\$3.39	\$3.54	\$3.68	\$4.00	\$4.34	\$4.71	\$5.10	\$5.51	\$5.95	\$6.43	\$6.93	\$7.47	\$8.07	\$8.73	\$202.98
Northeast Utilities	NU	\$1.59	\$1.67	\$1.77	\$1.86	\$1.96	\$2.13	\$2.31	\$2.50	\$2.70	\$2.92	\$3.14	\$3.39	\$3.68	\$3.98	\$4.31	\$4.67	\$99.39
Otter Tail Corporation	OTTR	\$1.02	\$1.04	\$1.05	\$1.07	\$1.08	\$1.17	\$1.26	\$1.36	\$1.47	\$1.58	\$1.70	\$1.82	\$1.93	\$2.03	\$2.15	\$2.27	\$64.55
Pinnacle West Capital Corporation	PNW	\$2.35	\$2.45	\$2.55	\$2.66	\$2.77	\$2.90	\$3.06	\$3.23	\$3.42	\$3.64	\$3.88	\$4.13	\$4.38	\$4.61	\$4.87	\$5.14	\$121.45
Portland General Electric Company	POR	\$0.97	\$1.04	\$1.12	\$1.20	\$1.29	\$1.39	\$1.50	\$1.61	\$1.74	\$1.88	\$2.03	\$2.19	\$2.32	\$2.45	\$2.58	\$2.73	\$71.26
Southern Company	SO	\$2.06	\$2.12	\$2.18	\$2.23	\$2.29	\$2.36	\$2.43	\$2.51	\$2.61	\$2.72	\$2.84	\$2.97	\$3.14	\$3.31	\$3.50	\$3.70	\$90.96
Westar Energy, Inc.	WR	\$1.36	\$1.38	\$1.41	\$1.44	\$1.46	\$1.56	\$1.67	\$1.80	\$1.94	\$2.10	\$2.28	\$2.47	\$2.61	\$2.76	\$2.91	\$3.07	\$75.80

Projected Annual Data Investor Cash Flows	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[7
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Multi-Stage DCF Notes

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- [1] Source: Bloomberg; based on 30-, 90-, 180-, and 360-day historical average as of October 17, 2014
 - [2] Source: Zacks
 - [3] Source: Yahoo! Finance
 - [4] Source: Value Line
 - [5] Equals indicated value (average, minimum, maximum) of Columns [2], [3], [4]
 - [6] Source: Average of: 5.25%, 5.99%, 5.68%, 5.53% (see, Direct Testimony at 49-50)
 - [7] Source: Value Line
 - [8] Source: Value Line
 - [9] Source: Bloomberg Professional
 - [10] Equals Column [1] + Column [64]
 - [11] Equals result of Excel Solver function; goal: Column [10] equals \$0.00
 - [12] Equals Column [63] / Column [30]
 - [13] Equals Column [12] / (Column [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]) / (2024 - 2019 + 1)) x (2019 - 2018)))) x Column [19]
 - [21] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2024 - 2019 + 1)) x (2020 - 2018)))) x Column [20]
 - [22] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2024 - 2019 + 1)) x (2021 - 2018)))) x Column [21]
 - [23] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2024 - 2019 + 1)) x (2022 - 2018)))) x Column [22]
 - [24] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2024 - 2019 + 1)) x (2023 - 2018)))) x Column [23]
 - [25] Equals Column [24] x (1 + Column [6])
 - [26] Equals Column [25] x (1 + Column [6])
 - [27] Equals Column [26] x (1 + Column [6])
 - [28] Equals Column [27] x (1 + Column [6])
 - [29] Equals Column [28] x (1 + Column [6])
 - [30] Equals Column [29] x (1 + Column [6])
 - [31] Equals Column [7]
 - [32] Equals Column [31] + ((Column [35] - Column [31]) / 4)
 - [33] Equals Column [32] + ((Column [35] - Column [31]) / 4)
 - [34] Equals Column [33] + ((Column [35] - Column [31]) / 4)
 - [35] Equals Column [8]
 - [36] Equals Column [35] + ((Column [42] - Column [35]) / 7)
 - [37] Equals Column [36] + ((Column [42] - Column [35]) / 7)
 - [38] Equals Column [37] + ((Column [42] - Column [35]) / 7)
 - [39] Equals Column [38] + ((Column [42] - Column [35]) / 7)
 - [40] Equals Column [39] + ((Column [42] - Column [35]) / 7)
 - [41] Equals Column [40] + ((Column [42] - Column [35]) / 7)
 - [42] Equals Column [9]
 - [43] Equals Column [9]
 - [44] Equals Column [9]
 - [45] Equals Column [9]
 - [46] Equals Column [9]
 - [47] Equals Column [15] x Column [31]
 - [48] Equals Column [16] x Column [32]
 - [49] Equals Column [17] x Column [33]
 - [50] Equals Column [18] x Column [34]
 - [51] Equals Column [19] x Column [35]
 - [52] Equals Column [20] x Column [36]
 - [53] Equals Column [21] x Column [37]
 - [54] Equals Column [22] x Column [38]
 - [55] Equals Column [23] x Column [39]
 - [56] Equals Column [24] x Column [40]
 - [57] Equals Column [25] x Column [41]
 - [58] Equals Column [26] x Column [42]
 - [59] Equals Column [27] x Column [43]
 - [60] Equals Column [28] x Column [44]
 - [61] Equals Column [29] x Column [45]
 - [62] Equals Column [30] x Column [46]
 - [63] Equals (Column [62] x (1 + Column [6])) / (Column [11] - Column [6])
 - [64] Equals negative net present value; discount rate equals Column [11], cash flows equal Column [65] through Column [81]
 - [65] Equals \$0.00
 - [66] Equals Column [47] x (12/31/2014 - 10/17/2014) / 365
 - [67] Equals Column [48] x (1 + (0.5 x Column [5]))
 - [68] Equals Column [49]
 - [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]

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

Inputs	[1] Stock	[2]	[3] [4] [5] [6] [7] [8] [9] [10]				[11]	[12]	[13]	[14]						
			EPS Growth Rate Estimates								Long-Term	Payout Ratio		Iterative Solution	Terminal	Terminal
Company	Ticker	Price	Zacks	First Call	Line	Growth	Average	Growth	2014	2018	2024	Proof	IRR	P/E Ratio	Terminal	Terminal
				Value	Retention										PEG	PEG
American Electric Power Company, Inc.	AEP	\$53.16	4.80%	4.79%	4.50%	3.89%	4.50%	5.61%	61.00%	63.00%	67.23%	\$0.00	9.65%	16.73	2.98	
Cleco Corporation	CNL	\$51.50	7.00%	7.00%	3.50%	3.78%	5.32%	5.61%	58.00%	62.00%	67.23%	\$0.00	9.44%	18.55	3.31	
Duke Energy Corporation	DUK	\$75.19	4.70%	4.70%	5.00%	2.88%	4.32%	5.61%	71.00%	64.00%	67.23%	\$0.00	9.37%	18.91	3.37	
Empire District Electric Company	EDE	\$24.87	3.00%	3.00%	4.00%	3.70%	3.43%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.57%	17.94	3.20	
Great Plains Energy Inc.	GXP	\$24.78	5.00%	5.00%	6.00%	3.11%	4.78%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.31%	15.12	2.69	
Hawaiian Electric Industries, Inc.	HE	\$26.27	4.00%	4.00%	4.00%	4.22%	4.06%	5.61%	77.00%	66.00%	67.23%	\$0.00	9.98%	16.25	2.90	
IDACORP, Inc.	IDA	\$55.14	4.00%	4.00%	1.00%	3.97%	3.24%	5.61%	47.00%	55.00%	67.23%	\$0.00	9.76%	17.09	3.05	
NextEra Energy, Inc.	NEE	\$94.25	6.60%	6.48%	6.00%	5.91%	6.25%	5.61%	61.00%	57.00%	67.23%	\$0.00	9.62%	17.71	3.16	
Northeast Utilities	NU	\$45.59	6.50%	6.31%	8.00%	4.43%	6.31%	5.61%	60.00%	58.00%	67.23%	\$0.00	9.90%	16.54	2.95	
Otter Tail Corporation	OTTR	\$27.60	NA	6.00%	15.50%	6.99%	9.50%	5.61%	70.00%	59.00%	67.23%	\$0.00	10.44%	14.71	2.62	
Pinnacle West Capital Corporation	PNW	\$56.25	3.70%	3.75%	4.00%	3.98%	3.86%	5.61%	62.00%	63.00%	67.23%	\$0.00	10.05%	16.00	2.85	
Portland General Electric Company	POR	\$33.09	7.80%	7.80%	5.00%	3.98%	6.15%	5.61%	52.00%	57.00%	67.23%	\$0.00	9.73%	17.24	3.07	
Southern Company	SO	\$44.32	3.50%	3.35%	3.50%	4.63%	3.75%	5.61%	74.00%	72.00%	67.23%	\$0.00	9.89%	16.59	2.86	
Westar Energy, Inc.	WR	\$34.92	3.80%	3.20%	6.00%	4.95%	4.49%	5.61%	58.00%	55.00%	67.23%	\$0.00	10.10%	15.80	2.92	

DCF Result			
Mean	9.86%	16.80	2.99
Max	10.44%	18.91	3.37
Min	9.37%	14.71	2.62

Projected Annual Earnings per Share																		
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.32	\$3.47	\$3.63	\$3.79	\$3.96	\$4.15	\$4.35	\$4.57	\$4.81	\$5.07	\$5.35	\$5.65	\$5.97	\$6.31	\$6.66	\$7.03
Cleco Corporation	CNL	\$2.65	\$2.79	\$2.94	\$3.10	\$3.26	\$3.43	\$3.62	\$3.81	\$4.02	\$4.24	\$4.48	\$4.73	\$5.00	\$5.28	\$5.57	\$5.89	\$6.22
Duke Energy Corporation	DUK	\$3.98	\$4.15	\$4.33	\$4.52	\$4.71	\$4.92	\$5.14	\$5.38	\$5.65	\$5.94	\$6.26	\$6.62	\$6.99	\$7.38	\$7.79	\$8.23	\$8.69
Empire District Electric Company	EDE	\$1.48	\$1.53	\$1.58	\$1.64	\$1.69	\$1.75	\$1.82	\$1.89	\$1.98	\$2.08	\$2.18	\$2.31	\$2.44	\$2.57	\$2.72	\$2.87	\$3.03
Great Plains Energy Inc.	GXP	\$1.62	\$1.70	\$1.78	\$1.86	\$1.95	\$2.05	\$2.15	\$2.25	\$2.37	\$2.50	\$2.64	\$2.78	\$2.94	\$3.10	\$3.28	\$3.46	\$3.66
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.69	\$1.75	\$1.83	\$1.90	\$1.98	\$2.06	\$2.16	\$2.26	\$2.38	\$2.50	\$2.64	\$2.79	\$2.95	\$3.11	\$3.29	\$3.47
IDACORP, Inc.	IDA	\$3.64	\$3.76	\$3.88	\$4.01	\$4.14	\$4.27	\$4.43	\$4.60	\$4.81	\$5.04	\$5.30	\$5.60	\$5.91	\$6.25	\$6.60	\$6.97	\$7.36
NextEra Energy, Inc.	NEE	\$4.83	\$5.13	\$5.45	\$5.79	\$6.15	\$6.54	\$6.94	\$7.36	\$7.80	\$8.25	\$8.72	\$9.21	\$9.73	\$10.27	\$10.85	\$11.46	\$12.10
Northeast Utilities	NU	\$2.49	\$2.65	\$2.81	\$2.99	\$3.18	\$3.38	\$3.59	\$3.81	\$4.04	\$4.27	\$4.52	\$4.77	\$5.04	\$5.32	\$5.62	\$5.93	\$6.27
Otter Tail Corporation	OTTR	\$1.37	\$1.50	\$1.64	\$1.80	\$1.97	\$2.16	\$2.35	\$2.54	\$2.73	\$2.92	\$3.10	\$3.28	\$3.46	\$3.66	\$3.86	\$4.08	\$4.31
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.95	\$4.10	\$4.26	\$4.42	\$4.61	\$4.81	\$5.04	\$5.29	\$5.57	\$5.89	\$6.22	\$6.56	\$6.93	\$7.32	\$7.73
Portland General Electric Company	POR	\$1.77	\$1.88	\$1.99	\$2.12	\$2.25	\$2.38	\$2.53	\$2.68	\$2.84	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$3.95	\$4.17	\$4.40
Southern Company	SO	\$2.70	\$2.80	\$2.91	\$3.01	\$3.13	\$3.24	\$3.38	\$3.52	\$3.69	\$3.87	\$4.08	\$4.31	\$4.55	\$4.80	\$5.07	\$5.36	\$5.66
Westar Energy, Inc.	WR	\$2.27	\$2.37	\$2.48	\$2.59	\$2.71	\$2.83	\$2.96	\$3.10	\$3.26	\$3.43	\$3.62	\$3.82	\$4.03	\$4.26	\$4.50	\$4.75	\$5.02

Projected Annual Dividend Payout Ratio																	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	56.46%	55.92%	55.38%	54.85%	54.31%	53.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	58.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows																		
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.35	\$3.57	\$3.80	\$4.01	\$4.24	\$4.48	\$4.73	\$117.87
Cleco Corporation	CNL	\$1.62	\$1.73	\$1.86	\$1.99	\$2.13	\$2.27	\$2.42	\$2.58	\$2.76	\$2.95	\$3.15	\$3.36	\$3.55	\$3.75	\$3.96	\$4.18	\$115.33
Duke Energy Corporation	DUK	\$2.95	\$3.00	\$3.05	\$3.10	\$3.15	\$3.31	\$3.50	\$3.70	\$3.91	\$4.15	\$4.42	\$4.70	\$4.96	\$5.24	\$5.53	\$5.84	\$164.34
Empire District Electric Company	EDE	\$1.01	\$1.03	\$1.06	\$1.08	\$1.10	\$1.16	\$1.22	\$1.28	\$1.36	\$1.44	\$1.54	\$1.64	\$1.73	\$1.83	\$1.93	\$2.04	\$54.39
Great Plains Energy Inc.	GXP	\$0.98	\$1.05	\$1.12	\$1.19	\$1.27	\$1.35	\$1.43	\$1.52	\$1.62	\$1.73	\$1.85	\$1.98	\$2.09	\$2.20	\$2.33	\$2.46	\$55.27
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.31	\$1.31	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.77	\$1.88	\$1.98	\$2.09	\$2.21	\$2.33	\$56.40
IDACORP, Inc.	IDA	\$1.77	\$1.90	\$2.04	\$2.19	\$2.35	\$2.51	\$2.69	\$2.90	\$3.12	\$3.38	\$3.67	\$3.98	\$4.20	\$4.43	\$4.68	\$4.95	\$125.74
NextEra Energy, Inc.	NEE	\$3.13	\$3.27	\$3.42	\$3.57	\$3.73	\$4.06	\$4.41	\$4.79	\$5.18	\$5.61	\$6.06	\$6.54	\$6.91	\$7.29	\$7.70	\$8.14	\$214.29
Northeast Utilities	NU	\$1.59	\$1.67	\$1.77	\$1.86	\$1.96	\$2.13	\$2.31	\$2.50	\$2.70	\$2.92	\$3.14	\$3.39	\$3.58	\$3.78	\$3.99	\$4.21	\$103.62
Otter Tail Corporation	OTTR	\$1.05	\$1.10	\$1.16	\$1.22	\$1.27	\$1.41	\$1.56	\$1.71	\$1.86	\$2.01	\$2.16	\$2.33	\$2.52	\$2.60	\$2.74	\$2.89	\$63.34
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09	\$3.27	\$3.46	\$3.68	\$3.92	\$4.18	\$4.41	\$4.66	\$4.92	\$5.20	\$123.71
Portland General Electric Company	POR	\$0.98	\$1.06	\$1.15	\$1.25	\$1.36	\$1.48	\$1.61	\$1.74	\$1.89	\$2.04	\$2.20	\$2.38	\$2.51	\$2.65	\$2.80	\$2.96	\$75.92
Southern Company	SO	\$2.07	\$2.14	\$2.20	\$2.27	\$2.34	\$2.41	\$2.49	\$2.58	\$2.68	\$2.80	\$2.92	\$3.06	\$3.23	\$3.41	\$3.60	\$3.80	\$93.85
Westar Energy, Inc.	WR	\$1.38	\$1.42	\$1.46	\$1.51	\$1.55	\$1.68	\$1.82	\$1.96	\$2.13	\$2.31	\$2.50	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37	\$79.28

Projected Annual Data Investor Cash Flows																			
Company	Ticker	Initial	10/17/14	12/31/14	6/30/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29
American Electric Power Company, Inc.	AEP	(\$53.16)	\$0.00	\$0.42	\$2.07	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.35	\$3.57	\$3.80	\$4.01	\$4.24	\$4.48	\$122.39
Cleco Corporation	CNL	(\$51.50)	\$0.00	\$0.33	\$1.66	\$1.86	\$1.99	\$2.13	\$2.27	\$2.42	\$2.58	\$2.76	\$2.95	\$3.15	\$3.36	\$3.55	\$3.75	\$3.96	\$110.11
Duke Energy Corporation	DUK	(\$75.19)	\$0.00	\$0.61	\$3.01	\$3.05	\$3.10	\$3.15	\$3.31	\$3.50	\$3.70	\$3.91	\$4.15	\$4.42	\$4.70	\$4.96	\$5.24	\$5.53	\$170.18
Empire District Electric Company	EDE	(\$24.87)	\$0.00	\$0.21	\$1.03	\$1.06	\$1.08	\$1.10	\$1.16	\$1.22	\$1.28	\$1.36	\$1.44	\$1.54	\$1.64	\$1.73	\$1.83	\$1.93	\$56.43
Great Plains Energy Inc.	GXP	(\$24.78)	\$0.00	\$0.20	\$1.01	\$1.12	\$1.19	\$1.27	\$1.35	\$1.43	\$1.52	\$1.62	\$1.73	\$1.85	\$1.98	\$2.09	\$2.20		

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

Inputs	Stock	[2]	[3] [4] [5] [6]				[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	
			EPS Growth Rate Estimates												Long-Term
Company	Ticker	Price	Zacks	First Call	Line	Growth	High	Growth	2014	2018	2024	IRR	P/E Ratio	Ratio	
American Electric Power Company, Inc.	AEP	\$53.16	4.80%	4.79%	4.50%	3.85%	4.80%	5.61%	61.00%	63.00%	67.23%	\$0.00	9.94%	16.40	2.92
Cleco Corporation	CNL	\$51.50	7.00%	7.00%	3.50%	3.78%	7.00%	5.61%	58.00%	62.00%	67.23%	\$0.00	9.87%	16.65	2.97
Duke Energy Corporation	DUK	\$75.19	4.70%	4.70%	5.00%	2.88%	5.00%	5.61%	71.00%	64.00%	67.23%	\$0.00	9.54%	18.08	3.22
Empire District Electric Company	EDE	\$24.87	3.00%	3.00%	4.00%	3.70%	4.00%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.72%	17.28	3.08
Great Plains Energy Inc.	GXP	\$24.78	5.00%	5.00%	6.00%	3.11%	6.00%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.69%	13.99	2.49
Hawaiian Electric Industries, Inc.	HE	\$26.27	4.00%	4.00%	4.00%	4.22%	4.22%	5.61%	77.00%	66.00%	67.23%	(\$0.00)	10.03%	16.07	2.86
IDACORP, Inc.	IDA	\$55.14	4.00%	4.00%	1.00%	3.97%	4.00%	5.61%	47.00%	55.00%	67.23%	(\$0.00)	9.97%	16.28	2.90
NextEra Energy, Inc.	NEE	\$94.25	6.60%	6.48%	6.00%	5.91%	6.60%	5.61%	61.00%	57.00%	67.23%	\$0.00	9.71%	17.32	3.09
Northeast Utilities	NU	\$45.59	6.50%	6.31%	8.00%	4.43%	8.00%	5.61%	60.00%	58.00%	67.23%	\$0.00	10.38%	14.88	2.65
Otter Tail Corporation	OTTR	\$27.60	NA	6.00%	15.50%	6.99%	15.50%	5.61%	70.00%	59.00%	67.23%	\$0.00	12.43%	10.41	1.86
Pinnacle West Capital Corporation	PNW	\$56.25	3.70%	3.75%	4.00%	3.98%	4.00%	5.61%	62.00%	63.00%	67.23%	(\$0.00)	10.09%	15.85	2.83
Portland General Electric Company	POR	\$33.09	7.80%	7.80%	5.00%	3.95%	7.80%	5.61%	52.00%	57.00%	67.23%	\$0.00	10.18%	15.55	2.77
Southern Company	SO	\$44.32	3.50%	3.35%	3.50%	4.83%	4.63%	5.61%	74.00%	72.00%	67.23%	(\$0.00)	10.15%	15.64	2.79
Westar Energy, Inc.	WR	\$34.92	3.80%	3.20%	6.00%	4.95%	6.00%	5.61%	58.00%	55.00%	67.23%	\$0.00	10.55%	14.36	2.56

DCF Result			
Mean	10.23%	15.62	2.79
Max	12.43%	18.08	3.22
Min	9.54%	10.41	1.86

Projected Annual Earnings per Share	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.66	\$3.84	\$4.02	\$4.22	\$4.43	\$4.66	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45	\$6.81	\$7.19
Cleco Corporation	CNL	\$2.65	\$2.84	\$3.03	\$3.25	\$3.47	\$3.72	\$3.97	\$4.23	\$4.49	\$4.77	\$5.05	\$5.33	\$5.63	\$5.94	\$6.28	\$6.63	\$7.00
Duke Energy Corporation	DUK	\$3.98	\$4.18	\$4.39	\$4.61	\$4.84	\$5.08	\$5.34	\$5.62	\$5.91	\$6.23	\$6.58	\$6.95	\$7.34	\$7.75	\$8.18	\$8.64	\$9.13
Empire District Electric Company	EDE	\$1.48	\$1.54	\$1.60	\$1.66	\$1.73	\$1.80	\$1.88	\$1.96	\$2.06	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$2.83	\$2.99	\$3.16
Great Plains Energy Inc.	GXP	\$1.62	\$1.72	\$1.82	\$1.93	\$2.05	\$2.17	\$2.30	\$2.43	\$2.57	\$2.72	\$2.87	\$3.04	\$3.21	\$3.39	\$3.58	\$3.78	\$3.99
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.69	\$1.76	\$1.83	\$1.91	\$1.99	\$2.08	\$2.18	\$2.29	\$2.40	\$2.53	\$2.67	\$2.82	\$2.98	\$3.15	\$3.33	\$3.51
IDACORP, Inc.	IDA	\$3.64	\$3.79	\$3.94	\$4.09	\$4.26	\$4.43	\$4.62	\$4.83	\$5.06	\$5.32	\$5.60	\$5.91	\$6.25	\$6.60	\$6.97	\$7.36	\$7.77
NextEra Energy, Inc.	NEE	\$4.83	\$5.15	\$5.49	\$5.85	\$6.24	\$6.65	\$7.08	\$7.52	\$7.98	\$8.45	\$8.94	\$9.44	\$9.97	\$10.53	\$11.12	\$11.75	\$12.41
Northeast Utilities	NU	\$2.49	\$2.69	\$2.90	\$3.14	\$3.39	\$3.66	\$3.94	\$4.22	\$4.51	\$4.80	\$5.08	\$5.37	\$5.67	\$5.99	\$6.33	\$6.68	\$7.05
Otter Tail Corporation	OTTR	\$1.37	\$1.58	\$1.83	\$2.11	\$2.44	\$2.82	\$3.21	\$3.60	\$3.98	\$4.33	\$4.65	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.64	\$4.85	\$5.09	\$5.34	\$5.63	\$5.95	\$6.28	\$6.63	\$7.00	\$7.40	\$7.81
Portland General Electric Company	POR	\$1.77	\$1.91	\$2.06	\$2.22	\$2.39	\$2.58	\$2.77	\$2.96	\$3.16	\$3.36	\$3.56	\$3.76	\$3.98	\$4.20	\$4.43	\$4.68	\$4.95
Southern Company	SO	\$2.70	\$2.83	\$2.96	\$3.09	\$3.24	\$3.39	\$3.55	\$3.72	\$3.92	\$4.12	\$4.35	\$4.59	\$4.85	\$5.12	\$5.41	\$5.71	\$6.03
Westar Energy, Inc.	WR	\$2.27	\$2.41	\$2.55	\$2.70	\$2.87	\$3.04	\$3.22	\$3.41	\$3.60	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$5.01	\$5.29	\$5.59

Projected Annual Dividend Payout Ratio	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	56.46%	55.92%	55.38%	54.85%	54.31%	53.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	[64]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.15	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.02	\$3.21	\$3.42	\$3.65	\$3.89	\$4.10	\$4.33	\$4.58	\$4.83	\$117.90
Cleco Corporation	CNL	\$1.64	\$1.79	\$1.95	\$2.12	\$2.30	\$2.49	\$2.68	\$2.89	\$3.10	\$3.32	\$3.54	\$3.78	\$4.00	\$4.22	\$4.46	\$4.71	\$116.80
Duke Energy Corporation	DUK	\$2.97	\$3.04	\$3.11	\$3.18	\$3.25	\$3.44	\$3.65	\$3.87	\$4.11	\$4.36	\$4.64	\$4.93	\$5.21	\$5.50	\$5.81	\$6.14	\$164.97
Empire District Electric Company	EDE	\$1.02	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.71	\$1.80	\$1.90	\$2.01	\$2.12	\$54.57
Great Plains Energy Inc.	GXP	\$1.00	\$1.07	\$1.16	\$1.25	\$1.34	\$1.44	\$1.54	\$1.65	\$1.77	\$1.89	\$2.02	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$55.78
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.31	\$1.31	\$1.31	\$1.31	\$1.38	\$1.45	\$1.52	\$1.60	\$1.69	\$1.79	\$1.90	\$2.01	\$2.12	\$2.24	\$2.36	\$56.46
IDACORP, Inc.	IDA	\$1.78	\$1.93	\$2.09	\$2.26	\$2.44	\$2.62	\$2.82	\$3.05	\$3.30	\$3.57	\$3.87	\$4.20	\$4.43	\$4.68	\$4.95	\$5.22	\$126.45
NextEra Energy, Inc.	NEE	\$3.14	\$3.29	\$3.45	\$3.62	\$3.79	\$4.14	\$4.51	\$4.90	\$5.31	\$5.75	\$6.21	\$6.70	\$7.08	\$7.48	\$7.90	\$8.34	\$214.82
Northeast Utilities	NU	\$1.61	\$1.73	\$1.85	\$1.98	\$2.12	\$2.34	\$2.56	\$2.79	\$3.03	\$3.28	\$3.54	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$104.97
Otter Tail Corporation	OTTR	\$1.11	\$1.23	\$1.36	\$1.51	\$1.66	\$1.93	\$2.21	\$2.49	\$2.76	\$3.01	\$3.24	\$3.48	\$3.68	\$3.89	\$4.10	\$4.33	\$67.10
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.57	\$2.69	\$2.81	\$2.95	\$3.12	\$3.30	\$3.50	\$3.72	\$3.96	\$4.22	\$4.46	\$4.71	\$4.97	\$5.25	\$123.83
Portland General Electric Company	POR	\$0.99	\$1.10	\$1.21	\$1.33	\$1.47	\$1.62	\$1.78	\$1.94	\$2.11	\$2.29	\$2.48	\$2.67	\$2.82	\$2.98	\$3.15	\$3.32	\$76.89
Southern Company	SO	\$2.09	\$2.17	\$2.26	\$2.35	\$2.44	\$2.53	\$2.63	\$2.74	\$2.86	\$2.98	\$3.12	\$3.26	\$3.44	\$3.64	\$3.84	\$4.05	\$94.29
Westar Energy, Inc.	WR	\$1.40	\$1.46	\$1.53	\$1.60	\$1.67	\$1.83	\$1.99	\$2.17	\$2.36	\$2.57	\$2.79	\$3.02	\$3.19	\$3.37	\$3.56	\$3.76	\$80.26

Projected Annual Data Investor Cash Flows	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]	[82]	
Company	Ticker	Initial	10/17/14	12/31/14	6/30/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29
American Electric Power Company, Inc.	AEP	(\$53.15)	\$0.00	\$0.42	\$2.08	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.02	\$3.21	\$3.42	\$3.65	\$3.89	\$4.10	\$4.33	\$4.58	\$122.73
Cleco Corporation	CNL	(\$51.50)	\$0.00	\$0.34	\$1.70	\$1.95	\$2.12	\$2.30	\$2.49	\$2.68	\$2.89	\$3.10	\$3.32	\$3.54	\$3.78	\$4.00	\$4.22	\$4.46	\$121.30
Duke Energy Corporation	DUK	(\$75.19)	\$0.00	\$0.61	\$3.04	\$3.11	\$3.18	\$3.25	\$3.44	\$3.65	\$3.87	\$4.11	\$4.36						

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

Inputs	[1]	[2]	[4] [5] [6] [7]				[8]	[9]	[10]	[11]	[12]	[13]	[14]		
			Stock	EPS Growth Rate Estimates		Long-Term								Payout Ratio	Iterative Solution
Company	Ticker	Price	Zacks	First Call	Value Line	Retention Growth	Low Growth	Growth	2014	2018	2024	Proof	IRR	P/E Ratio	Terminal PEG Ratio
American Electric Power Company, Inc.	AEP	\$53.16	4.80%	4.79%	4.50%	3.89%	3.89%	5.61%	61.00%	63.00%	67.23%	(\$0.00)	9.69%	17.40	3.10
Cleco Corporation	CNL	\$51.50	7.00%	7.00%	3.50%	3.78%	3.50%	5.61%	58.00%	62.00%	67.23%	\$0.00	9.00%	20.92	3.73
Duke Energy Corporation	DUK	\$75.19	4.70%	4.70%	5.00%	2.88%	2.88%	5.61%	71.00%	64.00%	67.23%	(\$0.00)	9.02%	20.83	3.71
Empire District Electric Company	EDE	\$24.87	3.00%	3.00%	4.00%	3.70%	3.00%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.46%	18.46	3.29
Great Plains Energy Inc.	GXP	\$24.78	5.00%	5.00%	6.00%	3.11%	3.11%	5.61%	58.00%	62.00%	67.23%	(\$0.00)	9.82%	16.85	3.00
Hawaiian Electric Industries, Inc.	HE	\$26.27	4.00%	4.00%	4.00%	4.22%	4.00%	5.61%	77.00%	66.00%	67.23%	\$0.00	9.96%	16.31	2.91
IDACORP, Inc.	IDA	\$55.14	4.00%	4.00%	1.00%	3.97%	1.00%	5.61%	47.00%	55.00%	67.23%	\$0.00	9.19%	19.84	3.54
NextEra Energy, Inc.	NEE	\$94.25	6.60%	6.48%	6.00%	5.91%	5.91%	5.61%	61.00%	57.00%	67.23%	(\$0.00)	9.53%	18.10	3.23
Northeast Utilities	NU	\$45.59	6.50%	6.31%	8.00%	4.43%	4.43%	5.61%	60.00%	58.00%	67.23%	(\$0.00)	9.41%	18.66	3.33
Otter Tail Corporation	OTTR	\$27.60	NA	6.00%	15.50%	6.99%	6.00%	5.61%	70.00%	59.00%	67.23%	\$0.00	9.49%	18.31	3.26
Pinnacle West Capital Corporation	PNW	\$56.25	3.70%	3.75%	4.00%	3.98%	3.70%	5.61%	62.00%	63.00%	67.23%	\$0.00	10.00%	16.17	2.88
Portland General Electric Company	POR	\$33.09	7.80%	7.60%	5.00%	3.98%	3.98%	5.61%	52.00%	57.00%	67.23%	(\$0.00)	9.19%	19.83	3.54
Southern Company	SO	\$44.32	3.50%	3.35%	3.50%	4.63%	3.35%	5.61%	74.00%	72.00%	67.23%	\$0.00	9.78%	17.03	3.04
Westar Energy, Inc.	WR	\$34.92	3.80%	3.20%	6.00%	4.95%	3.20%	5.61%	58.00%	55.00%	67.23%	\$0.00	9.74%	17.17	3.06

DCF Result		
Mean	9.52%	18.28
Max	10.00%	20.92
Min	9.00%	16.17

Projected Annual Earnings per Share	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]
American Electric Power Company, Inc.	AEP	\$3.18	\$3.30	\$3.43	\$3.57	\$3.71	\$3.85	\$4.01	\$4.19	\$4.39	\$4.61	\$4.86	\$5.13	\$5.42	\$5.72	\$6.04	\$6.38
Cleco Corporation	CNL	\$2.65	\$2.74	\$2.84	\$2.94	\$3.04	\$3.15	\$3.27	\$3.41	\$3.56	\$3.74	\$3.93	\$4.15	\$4.39	\$4.63	\$4.89	\$5.17
Duke Energy Corporation	DUK	\$3.98	\$4.09	\$4.21	\$4.33	\$4.46	\$4.59	\$4.74	\$4.92	\$5.13	\$5.37	\$5.64	\$5.96	\$6.30	\$6.65	\$7.02	\$7.42
Empire District Electric Company	EDE	\$1.48	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.84	\$1.92	\$2.01	\$2.12	\$2.24	\$2.36	\$2.49	\$2.63	\$2.78
Great Plains Energy Inc.	GXP	\$1.62	\$1.67	\$1.72	\$1.78	\$1.83	\$1.89	\$1.95	\$2.03	\$2.12	\$2.22	\$2.34	\$2.47	\$2.61	\$2.75	\$2.91	\$3.07
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27
IDACORP, Inc.	IDA	\$3.64	\$3.68	\$3.71	\$3.75	\$3.79	\$3.83	\$3.89	\$3.99	\$4.12	\$4.29	\$4.50	\$4.75	\$5.02	\$5.30	\$5.60	\$5.91
NextEra Energy, Inc.	NEE	\$4.83	\$5.12	\$5.42	\$5.74	\$6.08	\$6.43	\$6.81	\$7.21	\$7.62	\$8.06	\$8.51	\$8.99	\$9.50	\$10.03	\$10.59	\$11.18
Northeast Utilities	NU	\$2.49	\$2.60	\$2.72	\$2.84	\$2.96	\$3.09	\$3.24	\$3.39	\$3.56	\$3.75	\$3.95	\$4.17	\$4.41	\$4.65	\$4.91	\$5.19
Otter Tail Corporation	OTTR	\$1.37	\$1.45	\$1.54	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.18	\$2.30	\$2.43	\$2.57	\$2.71	\$2.86	\$3.02	\$3.19
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.94	\$4.08	\$4.23	\$4.39	\$4.57	\$4.76	\$4.99	\$5.23	\$5.51	\$5.82	\$6.15	\$6.49	\$6.85	\$7.24
Portland General Electric Company	POR	\$1.77	\$1.84	\$1.91	\$1.99	\$2.07	\$2.15	\$2.24	\$2.34	\$2.46	\$2.58	\$2.72	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57
Southern Company	SO	\$2.70	\$2.79	\$2.88	\$2.98	\$3.08	\$3.18	\$3.30	\$3.44	\$3.59	\$3.77	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$5.21
Westar Energy, Inc.	WR	\$2.27	\$2.34	\$2.42	\$2.49	\$2.57	\$2.65	\$2.75	\$2.86	\$2.99	\$3.13	\$3.30	\$3.48	\$3.68	\$3.88	\$4.10	\$4.33

Projected Annual Dividend Payout Ratio	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	[64]	Terminal
American Electric Power Company, Inc.	AEP	\$2.02	\$2.11	\$2.21	\$2.32	\$2.43	\$2.55	\$2.69	\$2.84	\$3.02	\$3.21	\$3.42	\$3.64	\$3.84	\$4.06	\$4.29	\$4.53	\$117.22
Cleco Corporation	CNL	\$1.59	\$1.67	\$1.76	\$1.85	\$1.95	\$2.05	\$2.16	\$2.29	\$2.43	\$2.58	\$2.76	\$2.95	\$3.11	\$3.29	\$3.47	\$3.67	\$114.15
Duke Energy Corporation	DUK	\$2.91	\$2.92	\$2.93	\$2.93	\$2.94	\$3.05	\$3.19	\$3.35	\$3.53	\$3.74	\$3.98	\$4.23	\$4.47	\$4.72	\$4.99	\$5.27	\$163.14
Empire District Electric Company	EDE	\$1.01	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.25	\$1.32	\$1.40	\$1.49	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98	\$54.26
Great Plains Energy Inc.	GXP	\$0.97	\$1.02	\$1.07	\$1.12	\$1.17	\$1.23	\$1.29	\$1.36	\$1.44	\$1.54	\$1.64	\$1.75	\$1.85	\$1.95	\$2.06	\$2.18	\$54.65
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$56.38
IDACORP, Inc.	IDA	\$1.73	\$1.82	\$1.91	\$2.01	\$2.10	\$2.21	\$2.34	\$2.48	\$2.66	\$2.87	\$3.11	\$3.37	\$3.66	\$3.97	\$4.20	\$4.45	\$123.86
NextEra Energy, Inc.	NEE	\$3.12	\$3.25	\$3.38	\$3.52	\$3.67	\$3.98	\$4.32	\$4.68	\$5.06	\$5.47	\$5.91	\$6.38	\$6.74	\$7.12	\$7.52	\$7.94	\$213.79
Northeast Utilities	NU	\$1.56	\$1.62	\$1.67	\$1.73	\$1.79	\$1.92	\$2.06	\$2.21	\$2.37	\$2.55	\$2.75	\$2.96	\$3.13	\$3.30	\$3.49	\$3.69	\$102.31
Otter Tail Corporation	OTTR	\$1.02	\$1.04	\$1.05	\$1.07	\$1.08	\$1.17	\$1.26	\$1.36	\$1.47	\$1.58	\$1.70	\$1.82	\$1.93	\$2.03	\$2.15	\$2.27	\$61.77
Pinnacle West Capital Corporation	PNW	\$2.35	\$2.45	\$2.55	\$2.66	\$2.77	\$2.90	\$3.06	\$3.23	\$3.42	\$3.64	\$3.88	\$4.13	\$4.36	\$4.61	\$4.87	\$5.14	\$123.59
Portland General Electric Company	POR	\$0.96	\$1.02	\$1.08	\$1.15	\$1.23	\$1.31	\$1.40	\$1.51	\$1.62	\$1.75	\$1.89	\$2.04	\$2.15	\$2.27	\$2.40	\$2.54	\$74.83
Southern Company	SO	\$2.06	\$2.12	\$2.18	\$2.23	\$2.29	\$2.36	\$2.43	\$2.51	\$2.61	\$2.72	\$2.84	\$2.97	\$3.14	\$3.31	\$3.50	\$3.70	\$93.97
Westar Energy, Inc.	WR	\$1.36	\$1.38	\$1.41	\$1.44	\$1.46	\$1.56	\$1.67	\$1.80	\$1.94	\$2.10	\$2.28	\$2.47	\$2.61	\$2.76	\$2.91	\$3.07	\$78.54

Projected Annual Data Investor Cash Flows	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]	[82]	
American Electric Power Company, Inc.	AEP	(\$53.16)	\$0.00	\$0.41	\$2.05	\$2.21	\$2.32	\$2.43	\$2.55	\$2.69	\$2.84	\$3.02	\$3.21	\$3.42	\$3.64	\$3.84	\$4.06	\$4.29	\$121.75
Cleco Corporation	CNL	(\$51.50)	\$0.00	\$0.33	\$1.62	\$1.76	\$1.85	\$1.95	\$2.05	\$2.16	\$2.29	\$2.43	\$2.58	\$2.76	\$2.95	\$3.11	\$3.29	\$3.47	\$117.81
Duke Energy Corporation	DUK	(\$75.19)	\$0.00	\$0.60	\$2.95	\$2.93	\$2.94	\$3.05	\$3.19	\$3.35	\$3.53	\$3.74	\$3.98	\$4.23	\$4.47	\$4.72	\$4.99	\$5.27	\$168.40
Empire District Electric Company	EDE	(\$24.87)	\$0.00	\$0.21	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.25	\$1.32	\$1.40	\$1.49	\$1.59	\$1.68	\$1.77	\$1.87	\$56.23
Great Plains Energy Inc.	GXP	(\$24.78)	\$0.00	\$0.20	\$0.98	\$1.07	\$1.12	\$1.17	\$1.23	\$1.29	\$1.36	\$1.44	\$1.54	\$1.64	\$1.75	\$1.85	\$1.95	\$2.06	\$56.83
Hawaiian Electric Industries, Inc.	HE	(\$26.27)	\$0.00	\$0.27	\$1.32	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$58.71
IDACORP, Inc.	IDA	(\$55.14)	\$0.00	\$0.36	\$1.74	\$1.91	\$2.01	\$2.10	\$2.21	\$2.34	\$2.48	\$2.66	\$2.87	\$3.11	\$3.37	\$3.66	\$3.97	\$4.29	\$128.05
NextEra Energy, Inc.	NEE	(\$94.25)	\$0.00	\$0.64	\$3.21	\$3.38	\$3.52	\$3.67	\$3.98	\$4.32	\$4.68	\$5.06	\$5.47	\$5.91	\$6.38	\$6.74	\$7.12	\$7.52	\$221.73
Northeast Utilities	NU	(\$45.59)	\$0.00	\$0.32	\$1.59	\$1.67	\$1.73	\$1.79	\$1.92										

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

Inputs	[1]	[2]	[3] [4] [5] [6]				[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	
			Stock	EPS Growth Rate Estimates		Value Retention									Long-Term
Company	Ticker	Price	Zacks	First Call	Line	Growth	Average	Growth	2013	2017	2024	Proof	iRR	P/E Ratio	Ratio
American Electric Power Company, Inc.	AEP	\$53.18	4.80%	4.79%	4.50%	3.89%	4.50%	5.61%	61.00%	63.00%	67.23%	\$0.00	9.85%	16.73	2.98
Cleco Corporation	CNL	\$54.45	7.00%	7.00%	3.50%	3.78%	5.32%	5.61%	58.00%	62.00%	67.23%	\$0.00	9.23%	19.61	3.50
Duke Energy Corporation	DUK	\$73.42	4.70%	4.70%	5.00%	2.88%	4.32%	5.61%	71.00%	64.00%	67.23%	\$0.00	9.46%	18.45	3.29
Empire District Electric Company	EDE	\$25.05	3.00%	3.00%	4.00%	3.70%	3.43%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.54%	18.08	3.22
Great Plains Energy Inc.	GXP	\$25.37	5.00%	5.00%	6.00%	3.11%	4.78%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.20%	15.48	2.76
Hawaiian Electric Industries, Inc.	HE	\$25.13	4.00%	4.00%	4.00%	4.22%	4.06%	5.61%	77.00%	66.00%	67.23%	\$0.00	10.19%	15.51	2.76
IDACORP, Inc.	IDA	\$55.29	4.00%	4.00%	1.00%	3.97%	3.24%	5.61%	47.00%	55.00%	67.23%	\$0.00	9.75%	17.14	3.05
NextEra Energy, Inc.	NEE	\$96.59	6.60%	6.48%	6.00%	5.91%	6.25%	5.61%	61.00%	57.00%	67.23%	\$0.00	9.52%	18.14	3.23
Northeast Utilities	NU	\$45.36	6.50%	6.31%	8.00%	4.43%	6.31%	5.61%	60.00%	58.00%	67.23%	\$0.00	9.92%	16.46	2.93
Otter Tail Corporation	OTTR	\$28.37	NA	6.00%	15.50%	6.99%	9.50%	5.61%	70.00%	59.00%	67.23%	\$0.00	10.31%	15.11	2.69
Pinnacle West Capital Corporation	PNW	\$55.83	3.70%	3.75%	4.00%	3.98%	3.86%	5.61%	62.00%	63.00%	67.23%	\$0.00	10.08%	15.88	2.83
Portland General Electric Company	POR	\$33.27	7.80%	7.80%	5.00%	3.98%	6.15%	5.61%	52.00%	57.00%	67.23%	\$0.00	9.71%	17.34	3.09
Southern Company	SO	\$44.17	3.50%	3.35%	3.50%	4.63%	3.75%	5.61%	74.00%	72.00%	67.23%	\$0.00	9.91%	16.53	2.95
Westar Energy, Inc.	WR	\$36.13	3.80%	3.20%	6.00%	4.95%	4.49%	5.61%	58.00%	55.00%	67.23%	\$0.00	9.96%	16.34	2.91

DCF Result			
Mean	9.83%	16.91	3.02
Max	10.31%	19.61	3.50
Min	9.23%	15.11	2.69

Projected Annual Earnings per Share	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.32	\$3.47	\$3.63	\$3.79	\$3.96	\$4.15	\$4.35	\$4.57	\$4.81	\$5.07	\$5.35	\$5.65	\$5.97	\$6.31	\$6.66	\$7.03
Cleco Corporation	CNL	\$2.65	\$2.79	\$2.94	\$3.10	\$3.26	\$3.43	\$3.62	\$3.81	\$4.02	\$4.24	\$4.48	\$4.73	\$5.00	\$5.28	\$5.57	\$5.89	\$6.22
Duke Energy Corporation	DUK	\$3.98	\$4.15	\$4.33	\$4.52	\$4.71	\$4.92	\$5.14	\$5.38	\$5.65	\$5.94	\$6.26	\$6.62	\$6.99	\$7.38	\$7.79	\$8.23	\$8.69
Empire District Electric Company	EDE	\$1.48	\$1.53	\$1.58	\$1.64	\$1.69	\$1.75	\$1.82	\$1.89	\$1.98	\$2.08	\$2.18	\$2.31	\$2.44	\$2.57	\$2.72	\$2.87	\$3.03
Great Plains Energy Inc.	GXP	\$1.62	\$1.70	\$1.78	\$1.86	\$1.95	\$2.05	\$2.15	\$2.25	\$2.37	\$2.50	\$2.64	\$2.78	\$2.94	\$3.10	\$3.28	\$3.46	\$3.66
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.69	\$1.75	\$1.83	\$1.90	\$1.98	\$2.06	\$2.16	\$2.26	\$2.38	\$2.50	\$2.64	\$2.79	\$2.95	\$3.11	\$3.29	\$3.47
IDACORP, Inc.	IDA	\$3.64	\$3.76	\$3.88	\$4.01	\$4.14	\$4.27	\$4.43	\$4.60	\$4.81	\$5.04	\$5.30	\$5.60	\$5.91	\$6.25	\$6.60	\$6.97	\$7.36
NextEra Energy, Inc.	NEE	\$4.83	\$5.13	\$5.45	\$5.79	\$6.15	\$6.54	\$6.94	\$7.36	\$7.80	\$8.25	\$8.72	\$9.21	\$9.73	\$10.27	\$10.85	\$11.46	\$12.10
Northeast Utilities	NU	\$2.49	\$2.65	\$2.81	\$2.99	\$3.18	\$3.38	\$3.59	\$3.81	\$4.04	\$4.27	\$4.52	\$4.77	\$5.04	\$5.32	\$5.62	\$5.93	\$6.27
Otter Tail Corporation	OTTR	\$1.37	\$1.50	\$1.64	\$1.80	\$1.97	\$2.16	\$2.35	\$2.54	\$2.73	\$2.92	\$3.10	\$3.28	\$3.46	\$3.66	\$3.86	\$4.08	\$4.31
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.95	\$4.10	\$4.26	\$4.42	\$4.61	\$4.81	\$5.04	\$5.29	\$5.57	\$5.89	\$6.22	\$6.56	\$6.93	\$7.32	\$7.73
Portland General Electric Company	POR	\$1.77	\$1.88	\$1.99	\$2.12	\$2.25	\$2.38	\$2.53	\$2.68	\$2.84	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$3.95	\$4.17	\$4.40
Southern Company	SO	\$2.70	\$2.80	\$2.91	\$3.01	\$3.13	\$3.24	\$3.38	\$3.52	\$3.69	\$3.87	\$4.08	\$4.31	\$4.55	\$4.80	\$5.07	\$5.36	\$5.66
Westar Energy, Inc.	WR	\$2.27	\$2.37	\$2.48	\$2.59	\$2.71	\$2.83	\$2.96	\$3.10	\$3.26	\$3.43	\$3.62	\$3.82	\$4.03	\$4.26	\$4.50	\$4.75	\$5.02

Projected Annual Dividend Payout Ratio	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.00%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	[64]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.35	\$3.57	\$3.80	\$4.01	\$4.24	\$4.48	\$4.73	\$117.71
Cleco Corporation	CNL	\$1.62	\$1.73	\$1.86	\$1.99	\$2.13	\$2.27	\$2.42	\$2.58	\$2.76	\$2.95	\$3.15	\$3.36	\$3.55	\$3.75	\$3.96	\$4.18	\$121.93
Duke Energy Corporation	DUK	\$2.95	\$3.00	\$3.05	\$3.10	\$3.15	\$3.21	\$3.50	\$3.70	\$3.91	\$4.15	\$4.42	\$4.70	\$4.96	\$5.24	\$5.53	\$5.84	\$160.39
Empire District Electric Company	EDE	\$1.01	\$1.03	\$1.06	\$1.08	\$1.10	\$1.16	\$1.22	\$1.28	\$1.36	\$1.44	\$1.54	\$1.64	\$1.73	\$1.83	\$1.93	\$2.04	\$54.79
Great Plains Energy Inc.	GXP	\$0.98	\$1.05	\$1.12	\$1.19	\$1.27	\$1.35	\$1.43	\$1.52	\$1.62	\$1.73	\$1.85	\$1.98	\$2.09	\$2.20	\$2.33	\$2.46	\$56.60
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.31	\$1.31	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.77	\$1.88	\$1.98	\$2.09	\$2.21	\$2.33	\$53.85
IDACORP, Inc.	IDA	\$1.77	\$1.90	\$2.04	\$2.19	\$2.35	\$2.51	\$2.69	\$2.90	\$3.12	\$3.38	\$3.67	\$3.98	\$4.20	\$4.43	\$4.68	\$4.95	\$126.09
NextEra Energy, Inc.	NEE	\$3.13	\$3.27	\$3.42	\$3.57	\$3.73	\$4.06	\$4.41	\$4.79	\$5.18	\$5.61	\$6.06	\$6.54	\$6.91	\$7.29	\$7.70	\$8.14	\$219.53
Northeast Utilities	NU	\$1.59	\$1.67	\$1.77	\$1.86	\$1.96	\$2.13	\$2.31	\$2.50	\$2.70	\$2.92	\$3.14	\$3.39	\$3.58	\$3.78	\$3.99	\$4.21	\$103.12
Otter Tail Corporation	OTTR	\$1.05	\$1.10	\$1.16	\$1.22	\$1.27	\$1.41	\$1.56	\$1.71	\$1.86	\$2.01	\$2.16	\$2.33	\$2.46	\$2.60	\$2.74	\$2.89	\$65.08
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09	\$3.27	\$3.46	\$3.68	\$3.92	\$4.18	\$4.41	\$4.66	\$4.92	\$5.20	\$122.78
Portland General Electric Company	POR	\$0.98	\$1.06	\$1.15	\$1.25	\$1.36	\$1.48	\$1.61	\$1.74	\$1.89	\$2.04	\$2.20	\$2.38	\$2.51	\$2.65	\$2.80	\$2.96	\$76.33
Southern Company	SO	\$2.07	\$2.14	\$2.20	\$2.27	\$2.34	\$2.41	\$2.49	\$2.58	\$2.68	\$2.80	\$2.92	\$3.06	\$3.23	\$3.41	\$3.60	\$3.80	\$93.51
Westar Energy, Inc.	WR	\$1.38	\$1.42	\$1.46	\$1.51	\$1.55	\$1.68	\$1.82	\$1.96	\$2.13	\$2.31	\$2.50	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37	\$82.00

Projected Annual Data Investor Cash Flows	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]	[82]	
Company	Ticker	Initial	10/17/14	12/31/14	6/30/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29
American Electric Power Company, Inc.	AEP	(\$53.18)	\$0.00	\$0.42	\$2.07	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.35	\$3.57	\$3.80	\$4.01	\$4.24	\$4.48	\$4.73
Cleco Corporation	CNL	(\$54.45)	\$0.00	\$0.33	\$1.66	\$1.86	\$1.99	\$2.13	\$2.27	\$2.42	\$2.58	\$2.76	\$2.95	\$3.15	\$3.36	\$3.55	\$3.75	\$3.96	\$4.18
Duke Energy Corporation	DUK	(\$73.42)	\$0.00	\$0.61	\$3.01	\$3.05	\$3.10	\$3.15	\$3.21	\$3.50	\$3.70	\$3.							

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

Inputs	[1] Stock	[2]	[3] EPS Growth Rate Estimates				[5] Value Retention	[6] High Growth	[7] Long-Term Growth			[9] Payout Ratio			[11] Iterative Solution	[12] IRR	[13] Terminal P/E Ratio	[14] Terminal PEG Ratio
			First Call	Line	Growth	High			2013	2017	2024	2013	2017	2024				
American Electric Power Company, Inc.	AEP	\$53.18	4.80%	4.79%	4.50%	3.85%	4.80%	5.61%	61.00%	63.00%	67.23%	\$0.00	9.94%	16.41	2.92			
Cleco Corporation	CNL	\$54.45	7.00%	7.00%	3.50%	3.78%	7.00%	5.61%	58.00%	62.00%	67.23%	\$0.00	9.64%	17.60	3.14			
Duke Energy Corporation	DUK	\$73.42	4.70%	4.70%	5.00%	2.88%	5.00%	5.61%	71.00%	64.00%	67.23%	\$0.00	9.63%	17.64	3.14			
Empire District Electric Company	EDE	\$25.05	3.00%	3.00%	4.00%	3.70%	4.00%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.69%	17.40	3.10			
Great Plains Energy Inc.	GXP	\$25.37	5.00%	5.00%	6.00%	3.11%	6.00%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.57%	14.32	2.55			
Hawaiian Electric Industries, Inc.	HE	\$25.13	4.00%	4.00%	4.00%	4.22%	4.22%	5.61%	77.00%	66.00%	67.23%	(\$0.00)	10.24%	15.34	2.73			
IDACORP, Inc.	IDA	\$55.29	4.00%	4.00%	1.00%	3.97%	4.00%	5.61%	47.00%	55.00%	67.23%	(\$0.00)	9.96%	16.32	2.91			
NextEra Energy, Inc.	NEE	\$96.59	6.60%	6.48%	6.00%	5.91%	6.60%	5.61%	61.00%	57.00%	67.23%	\$0.00	9.61%	17.74	3.16			
Northeast Utilities	NU	\$45.36	6.50%	6.31%	8.00%	4.43%	8.00%	5.61%	60.00%	58.00%	67.23%	\$0.00	10.40%	14.81	2.64			
Otter Tail Corporation	OTTR	\$28.37	NA	6.00%	15.50%	6.99%	15.50%	5.61%	70.00%	59.00%	67.23%	\$0.00	12.26%	10.68	1.90			
Pinnacle West Capital Corporation	PNW	\$55.83	3.70%	3.75%	4.00%	3.98%	4.00%	5.61%	62.00%	63.00%	67.23%	(\$0.00)	10.12%	15.73	2.80			
Portland General Electric Company	POR	\$33.27	7.80%	7.80%	5.00%	3.98%	7.80%	5.61%	52.00%	57.00%	67.23%	\$0.00	10.15%	15.63	2.79			
Southern Company	SO	\$44.17	3.50%	3.35%	3.50%	4.63%	4.63%	5.61%	74.00%	72.00%	67.23%	(\$0.00)	10.17%	15.58	2.78			
Westar Energy, Inc.	WR	\$36.13	3.80%	3.20%	6.00%	4.95%	6.00%	5.61%	58.00%	55.00%	67.23%	\$0.00	10.39%	14.85	2.65			

DCF Result			
Mean	10.20%	15.72	2.80
Max	12.26%	17.74	3.16
Min	9.61%	10.68	1.90

Projected Annual Earnings per Share	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.66	\$3.84	\$4.02	\$4.22	\$4.43	\$4.66	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45	\$6.81	\$7.19
Cleco Corporation	CNL	\$2.65	\$2.84	\$3.03	\$3.25	\$3.47	\$3.72	\$3.97	\$4.23	\$4.49	\$4.77	\$5.05	\$5.33	\$5.63	\$6.04	\$6.28	\$6.63	\$7.00
Duke Energy Corporation	DUK	\$3.98	\$4.18	\$4.39	\$4.61	\$4.84	\$5.08	\$5.34	\$5.62	\$5.91	\$6.23	\$6.58	\$6.95	\$7.34	\$7.75	\$8.18	\$8.64	\$9.13
Empire District Electric Company	EDE	\$1.48	\$1.54	\$1.60	\$1.66	\$1.73	\$1.80	\$1.88	\$1.96	\$2.06	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$2.83	\$2.99	\$3.16
Great Plains Energy Inc.	GXP	\$1.62	\$1.72	\$1.82	\$1.93	\$2.05	\$2.17	\$2.30	\$2.43	\$2.57	\$2.72	\$2.87	\$3.04	\$3.21	\$3.39	\$3.58	\$3.78	\$3.99
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.69	\$1.76	\$1.83	\$1.91	\$1.99	\$2.08	\$2.18	\$2.29	\$2.40	\$2.53	\$2.67	\$2.82	\$2.98	\$3.15	\$3.33	\$3.51
IDACORP, Inc.	IDA	\$3.64	\$3.79	\$3.94	\$4.09	\$4.26	\$4.43	\$4.62	\$4.83	\$5.06	\$5.32	\$5.60	\$5.91	\$6.25	\$6.60	\$6.97	\$7.36	\$7.77
NextEra Energy, Inc.	NEE	\$4.63	\$5.15	\$5.49	\$5.85	\$6.24	\$6.65	\$7.08	\$7.52	\$7.98	\$8.45	\$8.94	\$9.44	\$9.97	\$10.53	\$11.12	\$11.75	\$12.41
Northeast Utilities	NU	\$2.49	\$2.69	\$2.90	\$3.14	\$3.39	\$3.66	\$3.94	\$4.22	\$4.51	\$4.80	\$5.08	\$5.37	\$5.67	\$5.99	\$6.33	\$6.68	\$7.05
Otter Tail Corporation	OTTR	\$1.37	\$1.58	\$1.83	\$2.11	\$2.44	\$2.82	\$3.21	\$3.60	\$3.98	\$4.33	\$4.65	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.64	\$4.85	\$5.09	\$5.34	\$5.63	\$5.95	\$6.28	\$6.63	\$7.00	\$7.40	\$7.81
Portland General Electric Company	POR	\$1.77	\$1.91	\$2.06	\$2.22	\$2.39	\$2.58	\$2.77	\$2.96	\$3.16	\$3.36	\$3.56	\$3.76	\$3.98	\$4.20	\$4.43	\$4.68	\$4.95
Southern Company	SO	\$2.70	\$2.83	\$2.96	\$3.09	\$3.24	\$3.39	\$3.55	\$3.72	\$3.92	\$4.12	\$4.35	\$4.59	\$4.85	\$5.12	\$5.41	\$5.71	\$6.03
Westar Energy, Inc.	WR	\$2.27	\$2.41	\$2.55	\$2.70	\$2.87	\$3.04	\$3.22	\$3.41	\$3.60	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$5.01	\$5.29	\$5.59

Projected Annual Dividend Payout Ratio	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	[64]	Terminal Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.15	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.02	\$3.21	\$3.42	\$3.65	\$3.89	\$4.10	\$4.33	\$4.58	\$4.83	\$117.94
Cleco Corporation	CNL	\$1.64	\$1.79	\$1.95	\$2.12	\$2.30	\$2.49	\$2.68	\$2.89	\$3.10	\$3.32	\$3.54	\$3.78	\$4.00	\$4.22	\$4.46	\$4.71	\$123.21
Duke Energy Corporation	DUK	\$2.97	\$3.04	\$3.11	\$3.18	\$3.25	\$3.44	\$3.65	\$3.87	\$4.11	\$4.36	\$4.64	\$4.93	\$5.21	\$5.50	\$5.81	\$6.14	\$161.01
Empire District Electric Company	EDE	\$1.02	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.71	\$1.80	\$1.90	\$2.01	\$2.12	\$54.98
Great Plains Energy Inc.	GXP	\$1.00	\$1.07	\$1.16	\$1.25	\$1.34	\$1.44	\$1.54	\$1.65	\$1.77	\$1.89	\$2.02	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$57.11
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.31	\$1.31	\$1.31	\$1.31	\$1.38	\$1.45	\$1.52	\$1.60	\$1.69	\$1.79	\$1.90	\$2.01	\$2.12	\$2.24	\$2.36	\$53.91
IDACORP, Inc.	IDA	\$1.78	\$1.93	\$2.09	\$2.26	\$2.44	\$2.62	\$2.82	\$3.05	\$3.30	\$3.57	\$3.87	\$4.20	\$4.43	\$4.68	\$4.95	\$5.22	\$126.80
NextEra Energy, Inc.	NEE	\$3.14	\$3.29	\$3.45	\$3.62	\$3.79	\$4.14	\$4.51	\$4.90	\$5.31	\$5.75	\$6.21	\$6.70	\$7.08	\$7.48	\$7.90	\$8.34	\$220.06
Northeast Utilities	NU	\$1.61	\$1.73	\$1.85	\$1.98	\$2.12	\$2.34	\$2.56	\$2.79	\$3.03	\$3.28	\$3.54	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$104.47
Otter Tail Corporation	OTTR	\$1.11	\$1.23	\$1.36	\$1.51	\$1.66	\$1.93	\$2.21	\$2.49	\$2.76	\$3.01	\$3.24	\$3.48	\$3.68	\$3.89	\$4.10	\$4.33	\$68.86
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.57	\$2.69	\$2.81	\$2.95	\$3.12	\$3.30	\$3.50	\$3.72	\$3.96	\$4.22	\$4.46	\$4.71	\$4.97	\$5.25	\$122.90
Portland General Electric Company	POR	\$0.99	\$1.10	\$1.21	\$1.33	\$1.47	\$1.62	\$1.78	\$1.94	\$2.11	\$2.29	\$2.48	\$2.67	\$2.82	\$2.98	\$3.15	\$3.32	\$77.29
Southern Company	SO	\$2.09	\$2.17	\$2.26	\$2.35	\$2.44	\$2.53	\$2.63	\$2.74	\$2.86	\$2.98	\$3.12	\$3.26	\$3.44	\$3.64	\$3.84	\$4.05	\$93.95
Westar Energy, Inc.	WR	\$1.40	\$1.46	\$1.53	\$1.60	\$1.67	\$1.83	\$1.99	\$2.17	\$2.36	\$2.57	\$2.79	\$3.02	\$3.19	\$3.37	\$3.56	\$3.76	\$82.98

Projected Annual Data Investor Cash Flows	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]	[82]	
American Electric Power Company, Inc.	AEP	(\$53.18)	\$0.00	\$0.42	\$2.08	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.02	\$3.21	\$3.42	\$3.65	\$3.89	\$4.10	\$4.33	\$4.58	\$122.78
Cleco Corporation	CNL	(\$54.45)	\$0.00	\$0.34	\$1.70	\$1.95	\$2.12	\$2.30	\$2.49	\$2.68	\$2.89	\$3.10	\$3.32	\$3.54	\$3.78	\$4.0			

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

Inputs	[1] Stock	[2]	[3] EPS Growth Rate Estimates				[5] Long-Term		[9] Payout Ratio			[11] Iterative Solution	[13] Terminal	[14] Terminal PEG			
			Zacks	[4] Value		Growth	Growth	2013	2017	2024							
				First Call	Line						Retention				Low		
Company	Ticker	Price	Zacks	First Call	Line	Growth	Retention	Low	Growth	2013	2017	2024	Proof	IRR	P/E Ratio	Ratio	
American Electric Power Company, Inc.	AEP	\$53.18	4.80%	4.75%	4.50%	3.89%	3.89%	5.61%	61.00%	63.00%	67.23%	(\$0.00)	9.69%	17.41	3.10		
Cleco Corporation	CNL	\$54.45	7.00%	7.00%	3.50%	3.78%	3.50%	5.61%	58.00%	62.00%	67.23%	\$0.00	8.82%	22.13	3.94		
Duke Energy Corporation	DUK	\$73.42	4.70%	4.70%	5.00%	2.88%	2.88%	5.61%	71.00%	64.00%	67.23%	(\$0.00)	9.10%	20.32	3.62		
Empire District Electric Company	EDE	\$25.05	3.00%	3.00%	4.00%	3.70%	3.00%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.43%	18.60	3.32		
Great Plains Energy Inc.	GXP	\$25.37	5.00%	5.00%	6.00%	3.11%	3.11%	5.61%	58.00%	62.00%	67.23%	\$0.00	9.72%	17.26	3.08		
Hawaiian Electric Industries, Inc.	HE	\$25.13	4.00%	4.00%	4.00%	4.22%	4.00%	5.61%	77.00%	66.00%	67.23%	\$0.00	10.17%	15.57	2.78		
IDACORP, Inc.	IDA	\$55.29	4.00%	4.00%	1.00%	3.97%	1.00%	5.61%	47.00%	55.00%	67.23%	\$0.00	9.18%	19.89	3.55		
NextEra Energy, Inc.	NEE	\$96.59	6.60%	6.48%	6.00%	5.91%	5.91%	5.61%	61.00%	57.00%	67.23%	(\$0.00)	9.44%	18.54	3.31		
Northeast Utilities	NU	\$45.36	6.50%	6.31%	8.00%	4.43%	4.43%	5.61%	60.00%	58.00%	67.23%	(\$0.00)	9.43%	18.57	3.31		
Otter Tail Corporation	OTTR	\$28.37	NA	6.00%	15.50%	6.99%	6.00%	5.61%	70.00%	59.00%	67.23%	\$0.00	9.38%	18.83	3.36		
Pinnacle West Capital Corporation	PNW	\$55.83	3.70%	3.75%	4.00%	3.98%	3.70%	5.61%	62.00%	63.00%	67.23%	\$0.00	10.04%	16.04	2.86		
Portland General Electric Company	POR	\$33.27	7.80%	7.80%	5.00%	3.98%	3.98%	5.61%	52.00%	57.00%	67.23%	(\$0.00)	9.17%	19.94	3.55		
Southern Company	SO	\$44.17	3.50%	3.35%	3.50%	4.63%	3.56%	5.61%	74.00%	72.00%	67.23%	\$0.00	9.79%	16.97	3.03		
Westar Energy, Inc.	WR	\$36.13	3.80%	3.20%	6.00%	4.95%	3.20%	5.61%	58.00%	55.00%	67.23%	\$0.00	9.61%	17.77	3.17		
DCF Result																	
														Mean	9.50%	18.42	3.28
														Max	10.17%	22.13	3.94
														Min	8.82%	15.57	2.78

Projected Annual Earnings per Share	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.30	\$3.43	\$3.57	\$3.71	\$3.85	\$4.01	\$4.19	\$4.39	\$4.61	\$4.86	\$5.13	\$5.42	\$5.72	\$6.04	\$6.38	\$6.74
Cleco Corporation	CNL	\$2.65	\$2.74	\$2.84	\$2.94	\$3.04	\$3.15	\$3.27	\$3.41	\$3.56	\$3.74	\$3.93	\$4.15	\$4.39	\$4.63	\$4.89	\$5.17	\$5.46
Duke Energy Corporation	DUK	\$3.98	\$4.09	\$4.21	\$4.33	\$4.46	\$4.59	\$4.74	\$4.92	\$5.13	\$5.37	\$5.64	\$5.96	\$6.30	\$6.65	\$7.02	\$7.42	\$7.83
Empire District Electric Company	EDE	\$1.48	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.84	\$1.92	\$2.01	\$2.12	\$2.24	\$2.36	\$2.49	\$2.63	\$2.78	\$2.94
Great Plains Energy Inc.	GXP	\$1.82	\$1.87	\$1.92	\$1.98	\$2.04	\$2.10	\$2.16	\$2.23	\$2.31	\$2.40	\$2.50	\$2.61	\$2.72	\$2.84	\$2.97	\$3.11	\$3.26
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27	\$3.46
IDACORP, Inc.	IDA	\$3.64	\$3.68	\$3.71	\$3.75	\$3.79	\$3.83	\$3.89	\$3.99	\$4.12	\$4.29	\$4.50	\$4.75	\$5.02	\$5.30	\$5.60	\$5.91	\$6.24
NextEra Energy, Inc.	NEE	\$4.83	\$5.12	\$5.42	\$5.74	\$6.08	\$6.43	\$6.81	\$7.21	\$7.62	\$8.06	\$8.51	\$8.99	\$9.50	\$10.03	\$10.59	\$11.18	\$11.81
Northeast Utilities	NU	\$2.49	\$2.60	\$2.72	\$2.84	\$2.96	\$3.09	\$3.24	\$3.39	\$3.56	\$3.75	\$3.95	\$4.17	\$4.41	\$4.65	\$4.91	\$5.19	\$5.48
Otter Tail Corporation	OTTR	\$1.37	\$1.45	\$1.54	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.18	\$2.30	\$2.43	\$2.57	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.94	\$4.08	\$4.23	\$4.39	\$4.57	\$4.76	\$4.99	\$5.23	\$5.51	\$5.82	\$6.15	\$6.49	\$6.85	\$7.24	\$7.65
Portland General Electric Company	POR	\$1.77	\$1.84	\$1.91	\$1.99	\$2.07	\$2.15	\$2.24	\$2.34	\$2.46	\$2.58	\$2.72	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57	\$3.77
Southern Company	SO	\$2.70	\$2.79	\$2.88	\$2.98	\$3.08	\$3.18	\$3.30	\$3.44	\$3.59	\$3.77	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$5.21	\$5.50
Westar Energy, Inc.	WR	\$2.27	\$2.34	\$2.42	\$2.49	\$2.57	\$2.66	\$2.75	\$2.86	\$2.99	\$3.13	\$3.30	\$3.48	\$3.68	\$3.88	\$4.10	\$4.33	\$4.57

Projected Annual Dividend Payout Ratio	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.83%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.83%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.2500%	67.50%	65.75%	64.00%	64.48%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.83%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.83%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.83%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.83%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.83%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.83%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.83%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.83%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.83%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.83%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.83%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.83%	67.23%	67.23%	67.23%

Projected Annual Cash Flows	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	[64]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Value
American Electric Power Company, Inc.	AEP	\$2.02	\$2.11	\$2.21	\$2.32	\$2.43	\$2.55	\$2.69	\$2.84	\$3.02	\$3.21	\$3.42	\$3.64	\$3.84	\$4.06	\$4.29	\$4.53	\$117.27
Cleco Corporation	CNL	\$1.59	\$1.67	\$1.76	\$1.85	\$1.95	\$2.05	\$2.16	\$2.29	\$2.43	\$2.58	\$2.76	\$2.95	\$3.11	\$3.29	\$3.47	\$3.67	\$120.74
Duke Energy Corporation	DUK	\$2.91	\$2.92	\$2.93	\$2.93	\$2.94	\$3.05	\$3.19	\$3.35	\$3.53	\$3.74	\$3.98	\$4.23	\$4.47	\$4.72	\$4.99	\$5.27	\$159.19
Empire District Electric Company	EDE	\$1.01	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.25	\$1.32	\$1.40	\$1.49	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98	\$54.66
Great Plains Energy Inc.	GXP	\$0.97	\$1.02	\$1.07	\$1.12	\$1.17	\$1.23	\$1.29	\$1.36	\$1.44	\$1.54	\$1.64	\$1.75	\$1.85	\$1.95	\$2.06	\$2.18	\$55.98
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$53.83
IDACORP, Inc.	IDA	\$1.73	\$1.82	\$1.91	\$2.01	\$2.10	\$2.21	\$2.34	\$2.48	\$2.66	\$2.87	\$3.11	\$3.37	\$3.66	\$3.96	\$4.29	\$4.64	\$124.20
NextEra Energy, Inc.	NEE	\$3.12	\$3.25	\$3.38	\$3.52	\$3.67	\$3.98	\$4.32	\$4.68	\$5.06	\$5.47	\$5.91	\$6.38	\$6.74	\$7.12	\$7.52	\$7.94	\$219.03
Northeast Utilities	NU	\$1.56	\$1.62	\$1.67	\$1.73	\$1.79	\$1.92	\$2.06	\$2.21	\$2.37	\$2.55	\$2.75	\$2.96	\$3.13	\$3.30	\$3.49	\$3.69	\$101.81
Otter Tail Corporation	OTTR	\$1.02	\$1.04	\$1.05	\$1.07	\$1.08	\$1.17	\$1.26	\$1.36	\$1.47	\$1.58	\$1.70	\$1.82	\$1.93	\$2.03	\$2.15	\$2.27	\$63.50
Pinnacle West Capital Corporation	PNW	\$2.35	\$2.45	\$2.55	\$2.66	\$2.77	\$2.90	\$3.06	\$3.23	\$3.42	\$3.64	\$3.88	\$4.13	\$4.36	\$4.61	\$4.87	\$5.14	\$122.66
Portland General Electric Company	POR	\$0.96	\$1.02	\$1.08	\$1.15	\$1.23	\$1.31	\$1.40	\$1.51	\$1.62	\$1.75	\$1.89	\$2.04	\$2.15	\$2.27	\$2.40	\$2.54	\$75.24
Southern Company	SO	\$2.06	\$2.12	\$2.18	\$2.23	\$2.29	\$2.36	\$2.43	\$2.51	\$2.61	\$2.72	\$2.84	\$2.97	\$3.14	\$3.31	\$3.50	\$3.70</	

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

Inputs	[1] Stock	[2]	[3] EPS Growth Rate Estimates					[7] Long-Term	[9] Payout Ratio				[11] Iterative Solution	[12] IRR	[13] Terminal P/E Ratio	[14] Terminal PEG
			Zacks	[4] Value		[5] Retention			Growth	2013	2017	2024				
				First Call	Line	Average	Growth									
Company	Ticker	Price	Zacks	First Call	Line	Average	Growth	2013	2017	2024	Proof	IRR	P/E Ratio	Ratio		
American Electric Power Company, Inc.	AEP	\$52.12	4.80%	4.79%	4.50%	3.99%	4.50%	5.61%	61.00%	67.23%	\$0.00	9.94%	16.40	2.92		
Cleco Corporation	CNL	\$52.35	7.00%	7.00%	3.50%	3.78%	5.32%	5.61%	58.00%	62.00%	\$0.00	9.38%	18.86	3.36		
Duke Energy Corporation	DUK	\$72.31	4.70%	4.70%	5.00%	2.38%	4.32%	5.61%	71.00%	64.00%	\$0.00	9.52%	18.17	3.24		
Empire District Electric Company	EDE	\$24.44	3.00%	3.00%	4.00%	3.70%	3.43%	5.61%	66.00%	63.00%	\$0.00	9.64%	17.63	3.14		
Great Plains Energy Inc.	GXP	\$25.70	5.00%	5.00%	6.00%	3.11%	4.78%	5.61%	58.00%	62.00%	\$0.00	10.14%	15.68	2.80		
Hawaiian Electric Industries, Inc.	HE	\$24.90	4.00%	4.00%	4.00%	4.22%	4.06%	5.61%	77.00%	66.00%	\$0.00	10.23%	15.37	2.74		
IDACORP, Inc.	IDA	\$54.99	4.00%	4.00%	1.00%	3.97%	3.24%	5.61%	47.00%	55.00%	\$0.00	9.77%	17.05	3.04		
NextEra Energy, Inc.	NEE	\$95.68	6.60%	6.48%	6.00%	5.91%	6.25%	5.61%	61.00%	57.00%	\$0.00	9.56%	17.97	3.20		
Northeast Utilities	NU	\$45.22	6.50%	6.31%	8.00%	4.43%	6.31%	5.61%	60.00%	58.00%	\$0.00	9.94%	16.41	2.92		
Otter Tail Corporation	OTTR	\$28.93	NA	6.00%	15.50%	6.99%	9.50%	5.61%	70.00%	59.00%	\$0.00	10.22%	15.40	2.75		
Pinnacle West Capital Corporation	PNW	\$55.29	3.70%	3.75%	4.00%	3.98%	3.86%	5.61%	62.00%	63.00%	\$0.00	10.13%	15.72	2.80		
Portland General Electric Company	POR	\$32.71	7.80%	7.80%	5.00%	3.98%	6.15%	5.61%	52.00%	57.00%	\$0.00	9.77%	17.05	3.04		
Southern Company	SO	\$43.77	3.50%	3.35%	3.50%	4.63%	3.75%	5.61%	74.00%	72.00%	\$0.00	9.95%	16.37	2.92		
Westar Energy, Inc.	WR	\$35.52	3.80%	3.20%	6.00%	4.95%	4.49%	5.61%	58.00%	55.00%	\$0.00	10.03%	16.07	2.86		

DCF Result			
Mean	9.87%	16.72	2.98
Max	10.23%	18.86	3.36
Min	9.38%	15.37	2.74

Projected Annual Earnings per Share	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.32	\$3.47	\$3.63	\$3.79	\$3.96	\$4.15	\$4.35	\$4.57	\$4.81	\$5.07	\$5.35	\$5.65	\$5.97	\$6.31	\$6.66	\$7.03
Cleco Corporation	CNL	\$2.65	\$2.79	\$2.94	\$3.10	\$3.26	\$3.43	\$3.62	\$3.81	\$4.02	\$4.24	\$4.48	\$4.73	\$5.00	\$5.28	\$5.57	\$5.89	\$6.22
Duke Energy Corporation	DUK	\$3.98	\$4.15	\$4.33	\$4.52	\$4.71	\$4.92	\$5.14	\$5.38	\$5.65	\$5.94	\$6.26	\$6.62	\$6.99	\$7.38	\$7.79	\$8.23	\$8.69
Empire District Electric Company	EDE	\$1.48	\$1.53	\$1.58	\$1.64	\$1.69	\$1.75	\$1.82	\$1.89	\$1.98	\$2.08	\$2.18	\$2.31	\$2.44	\$2.57	\$2.72	\$2.87	\$3.03
Great Plains Energy Inc.	GXP	\$1.62	\$1.70	\$1.78	\$1.86	\$1.95	\$2.05	\$2.15	\$2.25	\$2.37	\$2.50	\$2.64	\$2.78	\$2.94	\$3.10	\$3.28	\$3.46	\$3.66
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.69	\$1.75	\$1.83	\$1.90	\$1.98	\$2.06	\$2.16	\$2.26	\$2.38	\$2.50	\$2.64	\$2.79	\$2.95	\$3.11	\$3.29	\$3.47
IDACORP, Inc.	IDA	\$3.64	\$3.76	\$3.88	\$4.01	\$4.14	\$4.27	\$4.43	\$4.60	\$4.81	\$5.04	\$5.30	\$5.60	\$5.91	\$6.25	\$6.60	\$6.97	\$7.36
NextEra Energy, Inc.	NEE	\$4.83	\$5.13	\$5.45	\$5.79	\$6.15	\$6.54	\$6.94	\$7.36	\$7.80	\$8.25	\$8.72	\$9.21	\$9.73	\$10.27	\$10.85	\$11.46	\$12.10
Northeast Utilities	NU	\$2.49	\$2.65	\$2.81	\$2.99	\$3.18	\$3.38	\$3.59	\$3.81	\$4.04	\$4.27	\$4.52	\$4.77	\$5.04	\$5.32	\$5.62	\$5.93	\$6.27
Otter Tail Corporation	OTTR	\$1.37	\$1.50	\$1.64	\$1.80	\$1.97	\$2.16	\$2.35	\$2.54	\$2.73	\$2.92	\$3.10	\$3.28	\$3.46	\$3.66	\$3.86	\$4.08	\$4.31
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.95	\$4.10	\$4.26	\$4.42	\$4.61	\$4.81	\$5.04	\$5.29	\$5.57	\$5.89	\$6.22	\$6.56	\$6.93	\$7.32	\$7.73
Portland General Electric Company	POR	\$1.77	\$1.88	\$1.99	\$2.12	\$2.25	\$2.38	\$2.53	\$2.68	\$2.84	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$3.95	\$4.17	\$4.40
Southern Company	SO	\$2.70	\$2.80	\$2.91	\$3.02	\$3.13	\$3.24	\$3.36	\$3.52	\$3.69	\$3.87	\$4.08	\$4.31	\$4.55	\$4.80	\$5.05	\$5.36	\$5.66
Westar Energy, Inc.	WR	\$2.27	\$2.37	\$2.48	\$2.59	\$2.71	\$2.83	\$2.96	\$3.10	\$3.26	\$3.43	\$3.62	\$3.82	\$4.03	\$4.26	\$4.50	\$4.75	\$5.02

Projected Annual Dividend Payout Ratio	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.83%	68.43%	69.03%	69.63%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.97%	68.72%	69.47%	70.22%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.69%	68.15%	68.61%	69.07%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.83%	68.43%	69.03%	69.63%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.97%	68.72%	69.47%	70.22%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.40%	67.57%	67.74%	67.91%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	68.97%	70.72%	72.47%	74.22%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	56.46%	55.92%	55.38%	54.84%	54.31%	53.77%	53.23%	52.69%	52.15%	51.61%	51.07%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	68.55%	69.87%	71.19%	72.51%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	68.40%	69.57%	70.74%	71.91%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.83%	68.43%	69.03%	69.63%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	68.69%	70.15%	71.61%	73.07%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	66.55%	65.87%	65.19%	64.51%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	68.97%	70.72%	72.47%	74.22%

Projected Annual Cash Flows	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	[64]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.95	\$3.15	\$3.35	\$3.57	\$3.80	\$4.01	\$4.24	\$4.48	\$4.73	\$115.36
Cleco Corporation	CNL	\$1.62	\$1.73	\$1.86	\$1.99	\$2.13	\$2.27	\$2.42	\$2.58	\$2.76	\$2.95	\$3.15	\$3.36	\$3.55	\$3.75	\$3.96	\$4.18	\$117.23
Duke Energy Corporation	DUK	\$2.95	\$3.00	\$3.05	\$3.10	\$3.15	\$3.31	\$3.50	\$3.70	\$3.91	\$4.15	\$4.42	\$4.70	\$4.95	\$5.24	\$5.53	\$5.84	\$157.92
Empire District Electric Company	EDE	\$1.01	\$1.03	\$1.06	\$1.08	\$1.10	\$1.16	\$1.22	\$1.28	\$1.36	\$1.44	\$1.54	\$1.64	\$1.73	\$1.83	\$1.93	\$2.04	\$53.43
Great Plains Energy Inc.	GXP	\$0.98	\$1.05	\$1.12	\$1.19	\$1.27	\$1.35	\$1.43	\$1.52	\$1.62	\$1.73	\$1.85	\$1.98	\$2.09	\$2.20	\$2.33	\$2.46	\$57.33
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.31	\$1.31	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.77	\$1.88	\$1.98	\$2.09	\$2.21	\$2.33	\$55.35
IDACORP, Inc.	IDA	\$1.77	\$1.90	\$2.04	\$2.19	\$2.35	\$2.51	\$2.69	\$2.90	\$3.12	\$3.38	\$3.67	\$3.98	\$4.20	\$4.43	\$4.68	\$4.95	\$125.42
NextEra Energy, Inc.	NEE	\$3.13	\$3.27	\$3.42	\$3.57	\$3.73	\$4.06	\$4.41	\$4.79	\$5.18	\$5.61	\$6.06	\$6.54	\$6.91	\$7.29	\$7.70	\$8.14	\$217.50
Northeast Utilities	NU	\$1.59	\$1.67	\$1.77	\$1.86	\$1.96	\$2.13	\$2.31	\$2.50	\$2.70	\$2.92	\$3.14	\$3.39	\$3.58	\$3.78	\$3.99	\$4.21	\$102.80
Otter Tail Corporation	OTTR	\$1.05	\$1.10	\$1.16	\$1.22	\$1.27	\$1.41	\$1.56	\$1.71	\$1.86	\$2.01	\$2.16	\$2.33	\$2.46	\$2.60	\$2.74	\$2.89	\$66.32
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09	\$3.27	\$3.46	\$3.68	\$3.92	\$4.18	\$4.41	\$4.66	\$4.92	\$5.20	\$121.57
Portland General Electric Company	POR	\$0.98	\$1.06	\$1.15	\$1.25	\$1.36	\$1.48	\$1.61	\$1.74	\$1.89	\$2.04	\$2.20	\$2.38	\$2.51	\$2.65	\$2.80	\$2.96	\$75.07
Southern Company	SO	\$2.07	\$2.14	\$2.20	\$2.27	\$2.34	\$2.41	\$2.49	\$2.58	\$2.68	\$2.80	\$2.92	\$3.06	\$3.23	\$3.41	\$3.60	\$3.80	\$92.83
Westar Energy, Inc.	WR	\$1.38	\$1.42	\$1.46	\$1.51	\$1.55	\$1.68	\$1.82	\$1.96	\$2.13								

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

Inputs	[1]	[2]	[4]			[5]			[7]	[8]	[9]			[11]	[12]	[13]	[14]
			Stock	EPS Growth Rate Estimates			Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal				
				Zacks	First Call	Value Line											
Company	Ticker	Price															
American Electric Power Company, Inc.	AEP	\$52.12	4.80%	4.79%	4.50%	3.89%	4.80%	5.61%	61.00%	63.00%	67.23%	\$0.00	10.03%	16.08	2.87		
Cleco Corporation	CNL	\$52.35	7.00%	7.00%	3.50%	3.78%	7.00%	5.61%	58.00%	62.00%	67.23%	\$0.00	9.80%	16.93	3.02		
Duke Energy Corporation	DUK	\$72.31	4.70%	4.70%	5.00%	2.88%	5.00%	5.61%	71.00%	64.00%	67.23%	\$0.00	9.70%	17.37	3.10		
Empire District Electric Company	EDE	\$24.44	3.00%	3.00%	4.00%	3.70%	4.00%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.79%	16.97	3.03		
Great Plains Energy Inc.	GXP	\$25.70	5.00%	5.00%	6.00%	3.11%	6.00%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.51%	14.50	2.59		
Hawaiian Electric Industries, Inc.	HE	\$24.90	4.00%	4.00%	4.00%	4.22%	4.22%	5.61%	77.00%	66.00%	67.23%	(\$0.00)	10.28%	15.20	2.71		
IDACORP, Inc.	IDA	\$54.99	4.00%	4.00%	1.00%	3.97%	4.00%	5.61%	47.00%	55.00%	67.23%	(\$0.00)	9.98%	16.23	2.89		
NextEra Energy, Inc.	NEE	\$95.68	6.60%	6.48%	6.00%	5.91%	6.60%	5.61%	61.00%	57.00%	67.23%	\$0.00	9.65%	17.57	3.13		
Northeast Utilities	NU	\$45.22	6.50%	6.31%	8.00%	4.43%	8.00%	5.61%	60.00%	58.00%	67.23%	\$0.00	10.42%	14.76	2.63		
Otter Tail Corporation	OTTR	\$28.93	NA	6.00%	15.50%	6.99%	15.50%	5.61%	70.00%	59.00%	67.23%	\$0.00	12.14%	10.88	1.94		
Pinnacle West Capital Corporation	PNW	\$55.29	3.70%	3.75%	4.00%	3.98%	4.00%	5.61%	62.00%	63.00%	67.23%	(\$0.00)	10.17%	15.58	2.78		
Portland General Electric Company	POR	\$32.71	7.80%	7.80%	5.00%	3.98%	7.80%	5.61%	52.00%	57.00%	67.23%	\$0.00	10.23%	15.37	2.74		
Southern Company	SO	\$43.77	3.50%	3.35%	3.50%	4.63%	4.63%	5.61%	74.00%	72.00%	67.23%	(\$0.00)	10.21%	15.43	2.75		
Westar Energy, Inc.	WR	\$35.52	3.80%	3.20%	6.00%	4.95%	6.00%	5.61%	58.00%	55.00%	67.23%	\$0.00	10.47%	14.60	2.60		
DCF Result																	
														Mean	10.24%	15.53	2.77
														Max	12.14%	17.57	3.13
														Min	9.65%	10.88	1.94

Projected Annual Earnings per Share																		
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.66	\$3.84	\$4.02	\$4.22	\$4.43	\$4.66	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45	\$6.81	\$7.19
Cleco Corporation	CNL	\$2.65	\$2.84	\$3.03	\$3.25	\$3.47	\$3.72	\$3.97	\$4.23	\$4.49	\$4.77	\$5.05	\$5.33	\$5.63	\$5.94	\$6.28	\$6.63	\$7.00
Duke Energy Corporation	DUK	\$3.98	\$4.18	\$4.39	\$4.61	\$4.84	\$5.08	\$5.34	\$5.62	\$5.91	\$6.23	\$6.58	\$6.95	\$7.34	\$7.75	\$8.18	\$8.64	\$9.13
Empire District Electric Company	EDE	\$1.48	\$1.54	\$1.60	\$1.66	\$1.73	\$1.80	\$1.88	\$1.96	\$2.06	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$2.83	\$2.99	\$3.16
Great Plains Energy Inc.	GXP	\$1.62	\$1.72	\$1.82	\$1.93	\$2.05	\$2.17	\$2.30	\$2.43	\$2.57	\$2.72	\$2.87	\$3.04	\$3.21	\$3.39	\$3.58	\$3.78	\$3.99
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.69	\$1.76	\$1.83	\$1.91	\$1.99	\$2.08	\$2.18	\$2.29	\$2.40	\$2.53	\$2.67	\$2.82	\$2.98	\$3.15	\$3.33	\$3.51
IDACORP, Inc.	IDA	\$3.64	\$3.79	\$3.94	\$4.09	\$4.26	\$4.43	\$4.62	\$4.83	\$5.06	\$5.32	\$5.60	\$5.91	\$6.25	\$6.60	\$6.97	\$7.36	\$7.77
NextEra Energy, Inc.	NEE	\$4.83	\$5.15	\$5.49	\$5.85	\$6.24	\$6.65	\$7.08	\$7.52	\$7.98	\$8.45	\$8.94	\$9.44	\$9.97	\$10.53	\$11.12	\$11.75	\$12.41
Northeast Utilities	NU	\$2.49	\$2.69	\$2.90	\$3.14	\$3.39	\$3.66	\$3.94	\$4.22	\$4.51	\$4.80	\$5.08	\$5.37	\$5.67	\$5.99	\$6.33	\$6.68	\$7.05
Otter Tail Corporation	OTTR	\$1.37	\$1.58	\$1.83	\$2.11	\$2.44	\$2.82	\$3.21	\$3.60	\$3.98	\$4.33	\$4.65	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.64	\$4.85	\$5.09	\$5.34	\$5.63	\$5.95	\$6.28	\$6.63	\$7.00	\$7.40	\$7.81
Portland General Electric Company	POR	\$1.77	\$1.91	\$2.06	\$2.22	\$2.39	\$2.58	\$2.77	\$2.96	\$3.16	\$3.36	\$3.56	\$3.76	\$3.96	\$4.20	\$4.43	\$4.68	\$4.93
Southern Company	SO	\$2.70	\$2.83	\$2.96	\$3.09	\$3.24	\$3.39	\$3.55	\$3.72	\$3.92	\$4.12	\$4.35	\$4.59	\$4.85	\$5.12	\$5.41	\$5.71	\$6.05
Westar Energy, Inc.	WR	\$2.27	\$2.41	\$2.55	\$2.70	\$2.87	\$3.04	\$3.22	\$3.41	\$3.60	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$5.01	\$5.29	\$5.59

Projected Annual Dividend Payout Ratio																	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.80%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.00%	58.00%	57.00%	56.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows																		
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.15	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.02	\$3.21	\$3.42	\$3.65	\$3.89	\$4.10	\$4.33	\$4.58	\$4.83	\$115.59
Cleco Corporation	CNL	\$1.64	\$1.79	\$1.95	\$2.12	\$2.30	\$2.49	\$2.68	\$2.89	\$3.10	\$3.32	\$3.54	\$3.78	\$4.00	\$4.22	\$4.46	\$4.71	\$118.50
Duke Energy Corporation	DUK	\$2.97	\$3.04	\$3.11	\$3.18	\$3.25	\$3.44	\$3.65	\$3.87	\$4.11	\$4.36	\$4.64	\$4.93	\$5.21	\$5.50	\$5.81	\$6.14	\$158.54
Empire District Electric Company	EDE	\$1.02	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.71	\$1.80	\$1.90	\$2.01	\$2.12	\$53.62
Great Plains Energy Inc.	GXP	\$1.00	\$1.07	\$1.16	\$1.25	\$1.34	\$1.44	\$1.54	\$1.65	\$1.77	\$1.89	\$2.02	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$57.85
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.31	\$1.31	\$1.31	\$1.31	\$1.38	\$1.45	\$1.52	\$1.60	\$1.69	\$1.79	\$1.90	\$2.01	\$2.12	\$2.24	\$2.36	\$53.40
IDACORP, Inc.	IDA	\$1.78	\$1.93	\$2.09	\$2.26	\$2.44	\$2.62	\$2.82	\$3.05	\$3.30	\$3.57	\$3.87	\$4.20	\$4.43	\$4.68	\$4.95	\$5.22	\$126.14
NextEra Energy, Inc.	NEE	\$3.14	\$3.29	\$3.45	\$3.62	\$3.79	\$4.14	\$4.51	\$4.90	\$5.31	\$5.75	\$6.21	\$6.70	\$7.08	\$7.48	\$7.90	\$8.34	\$218.03
Northeast Utilities	NU	\$1.61	\$1.73	\$1.85	\$1.98	\$2.12	\$2.34	\$2.56	\$2.79	\$3.03	\$3.28	\$3.54	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$104.15
Otter Tail Corporation	OTTR	\$1.11	\$1.23	\$1.36	\$1.51	\$1.66	\$1.93	\$2.21	\$2.49	\$2.76	\$3.01	\$3.24	\$3.48	\$3.68	\$3.89	\$4.10	\$4.33	\$70.12
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.57	\$2.69	\$2.81	\$2.95	\$3.12	\$3.30	\$3.50	\$3.72	\$3.96	\$4.22	\$4.46	\$4.71	\$4.97	\$5.25	\$121.68
Portland General Electric Company	POR	\$0.99	\$1.10	\$1.21	\$1.33	\$1.47	\$1.62	\$1.78	\$1.94	\$2.11	\$2.29	\$2.48	\$2.67	\$2.82	\$2.98	\$3.15	\$3.32	\$76.03
Southern Company	SO	\$2.09	\$2.17	\$2.26	\$2.35	\$2.44	\$2.53	\$2.63	\$2.74	\$2.86	\$2.98	\$3.12	\$3.26	\$3.44	\$3.64	\$3.84	\$4.05	\$93.08
Westar Energy, Inc.	WR	\$1.40	\$1.46	\$1.53	\$1.60	\$1.67	\$1.83	\$1.99	\$2.17	\$2.36	\$2.57	\$2.79	\$3.02	\$3.19	\$3.37	\$3.56	\$3.76	\$81

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]	[14]			
			Stock	EPS Growth Rate Estimates			Value	Retention	Low	Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal				
Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	Growth	2013	2017	2024	Proof	IRR	P/E Ratio	Ratio	PEG				
American Electric Power Company, Inc.	AEP	\$52.12	4.80%	4.79%	4.50%	3.89%	3.89%	5.61%	61.00%	63.00%	67.23%	(50.00)	9.77%	17.06	3.04					
Cleco Corporation	CNL	\$52.35	7.00%	7.00%	3.50%	3.78%	3.50%	5.61%	58.00%	62.00%	67.23%	\$0.00	8.95%	21.27	3.79					
Duke Energy Corporation	DUK	\$72.31	4.70%	4.70%	5.00%	2.88%	2.88%	5.61%	71.00%	64.00%	67.23%	(50.00)	9.16%	20.01	3.57					
Empire District Electric Company	EDE	\$24.44	3.00%	3.00%	4.00%	3.70%	3.00%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.52%	18.14	3.23					
Great Plains Energy Inc.	GXP	\$25.70	5.00%	5.00%	6.00%	3.11%	3.11%	5.61%	58.00%	62.00%	67.23%	\$0.00	9.67%	17.49	3.12					
Hawaiian Electric Industries, Inc.	HE	\$24.90	4.00%	4.00%	4.00%	4.22%	4.00%	5.61%	77.00%	66.00%	67.23%	\$0.00	10.21%	15.42	2.75					
IDACORP, Inc.	IDA	\$54.99	4.00%	4.00%	1.00%	3.97%	1.00%	5.61%	47.00%	55.00%	67.23%	\$0.00	9.20%	19.79	3.53					
NextEra Energy, Inc.	NEE	\$95.68	6.60%	6.48%	6.00%	5.91%	5.91%	5.61%	61.00%	57.00%	67.23%	(50.00)	9.47%	18.37	3.27					
Northeast Utilities	NU	\$45.22	6.50%	6.31%	8.00%	4.43%	4.43%	5.61%	60.00%	58.00%	67.23%	(50.00)	9.44%	18.52	3.30					
Otter Tail Corporation	OTTR	\$28.93	NA	6.00%	15.50%	6.99%	6.00%	5.61%	70.00%	59.00%	67.23%	\$0.00	9.31%	19.19	3.42					
Pinnacle West Capital Corporation	PNW	\$55.29	3.70%	3.75%	4.00%	3.98%	3.70%	5.61%	62.00%	63.00%	67.23%	\$0.00	10.08%	15.88	2.83					
Portland General Electric Company	POR	\$32.71	7.80%	7.80%	5.00%	3.98%	3.98%	5.61%	52.00%	57.00%	67.23%	(50.00)	9.23%	19.81	3.50					
Southern Company	SO	\$43.77	3.50%	3.35%	3.50%	4.63%	3.35%	5.61%	74.00%	72.00%	67.23%	\$0.00	9.83%	16.81	3.00					
Westar Energy, Inc.	WR	\$35.52	3.80%	3.20%	6.00%	4.95%	3.20%	5.61%	58.00%	55.00%	67.23%	\$0.00	9.67%	17.47	3.11					
														DCF Result						
														Mean	9.54%	18.22	3.25			
														Max	10.21%	21.27	3.79			
														Min	8.95%	15.42	2.75			
Projected Annual Earnings per Share																				
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
American Electric Power Company, Inc.	AEP	\$3.18	\$3.30	\$3.43	\$3.57	\$3.71	\$3.85	\$4.01	\$4.19	\$4.39	\$4.61	\$4.86	\$5.13	\$5.42	\$5.72	\$6.04	\$6.38	\$6.74		
Cleco Corporation	CNL	\$2.65	\$2.74	\$2.84	\$2.94	\$3.04	\$3.15	\$3.27	\$3.41	\$3.56	\$3.74	\$3.93	\$4.15	\$4.39	\$4.63	\$4.89	\$5.17	\$5.46		
Duke Energy Corporation	DUK	\$3.98	\$4.09	\$4.21	\$4.33	\$4.46	\$4.59	\$4.74	\$4.92	\$5.13	\$5.37	\$5.64	\$5.96	\$6.30	\$6.65	\$7.02	\$7.42	\$7.83		
Empire District Electric Company	EDE	\$1.48	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.84	\$1.92	\$2.01	\$2.12	\$2.24	\$2.36	\$2.49	\$2.63	\$2.78	\$2.94		
Great Plains Energy Inc.	GXP	\$1.62	\$1.67	\$1.72	\$1.78	\$1.83	\$1.89	\$1.95	\$2.03	\$2.12	\$2.22	\$2.34	\$2.47	\$2.61	\$2.75	\$2.91	\$3.07	\$3.24		
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27	\$3.46		
IDACORP, Inc.	IDA	\$3.64	\$3.68	\$3.71	\$3.75	\$3.79	\$3.83	\$3.89	\$3.99	\$4.12	\$4.29	\$4.50	\$4.75	\$5.02	\$5.30	\$5.60	\$5.91	\$6.24		
NextEra Energy, Inc.	NEE	\$4.83	\$5.12	\$5.42	\$5.74	\$6.08	\$6.43	\$6.81	\$7.21	\$7.62	\$8.06	\$8.51	\$8.99	\$9.50	\$10.03	\$10.59	\$11.18	\$11.81		
Northeast Utilities	NU	\$2.49	\$2.60	\$2.72	\$2.84	\$2.96	\$3.09	\$3.24	\$3.39	\$3.56	\$3.75	\$3.95	\$4.17	\$4.41	\$4.65	\$4.91	\$5.19	\$5.48		
Otter Tail Corporation	OTTR	\$1.37	\$1.45	\$1.54	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.18	\$2.30	\$2.43	\$2.57	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37		
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.84	\$4.06	\$4.23	\$4.39	\$4.57	\$4.76	\$4.98	\$5.23	\$5.51	\$5.82	\$6.15	\$6.49	\$6.85	\$7.24	\$7.65			
Portland General Electric Company	POR	\$1.77	\$1.84	\$1.91	\$1.99	\$2.07	\$2.15	\$2.24	\$2.34	\$2.46	\$2.58	\$2.72	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57	\$3.77		
Southern Company	SO	\$2.70	\$2.79	\$2.88	\$2.98	\$3.08	\$3.18	\$3.30	\$3.44	\$3.59	\$3.77	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$5.21	\$5.50		
Westar Energy, Inc.	WR	\$2.27	\$2.34	\$2.42	\$2.49	\$2.57	\$2.66	\$2.75	\$2.86	\$2.99	\$3.13	\$3.30	\$3.48	\$3.68	\$3.88	\$4.10	\$4.33	\$4.57		
Projected Annual Dividend Payout Ratio																				
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029			
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%			
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%			
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%			
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%			
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%			
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%			
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%			
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%			
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%			
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.16%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%			
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%			
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%			
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%			
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%			
Projected Annual Cash Flows																				
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value		
American Electric Power Company, Inc.	AEP	\$2.02	\$2.11	\$2.21	\$2.32	\$2.43	\$2.55	\$2.69	\$2.84	\$3.02	\$3.21	\$3.42	\$3.64	\$3.84	\$4.06	\$4.29	\$4.53	\$114.92		
Cleco Corporation	CNL	\$1.59	\$1.67	\$1.76	\$1.85	\$1.95	\$2.05	\$2.16	\$2.29	\$2.43	\$2.58	\$2.76	\$2.95	\$3.11	\$3.29	\$3.47	\$3.67	\$116.04		
Duke Energy Corporation	DUK	\$2.91	\$2.92	\$2.93	\$2.93	\$2.94	\$3.05	\$3.19	\$3.35	\$3.53	\$3.74	\$3.98	\$4.23	\$4.47	\$4.72	\$4.99	\$5.27	\$156.72		
Empire District Electric Company	EDE	\$1.01	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.19	\$1.25	\$1.32	\$1.40	\$1.49	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98	\$53.30		
Great Plains Energy Inc.	GXP	\$0.97	\$1.02	\$1.07	\$1.12	\$1.17	\$1.23	\$1.29	\$1.36	\$1.44	\$1.54	\$1.64	\$1.75	\$1.85	\$1.95	\$2.06	\$2.18	\$56.71		
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$53.33		
IDACORP, Inc.	IDA	\$1.73	\$1.82	\$1.91	\$2.01	\$2.10	\$2.21	\$2.34	\$2.48	\$2.66	\$2.87	\$3.11	\$3.37	\$3.66	\$3.97	\$4.20	\$4.50	\$123.54		
NextEra Energy, Inc.	NEE	\$3.12	\$3.25	\$3.38	\$3.52	\$3.67	\$3.98	\$4.32	\$4.68	\$5.06	\$5.47	\$5.91	\$6.38	\$6.74	\$7.12	\$7.52	\$7.94	\$217.00		
Northeast Utilities	NU	\$1.56	\$1.62	\$1.67	\$1.73	\$1.79	\$1.92	\$2.06	\$2.21	\$2.37	\$2.55	\$2.75	\$2.96	\$3.13	\$3.30	\$3.49	\$3.69	\$101.49		
Otter Tail Corporation	OTTR	\$1.02	\$1.04	\$1.05	\$1.07	\$1.08	\$1.17	\$1.26	\$1.36	\$1.47	\$1.58	\$1.70	\$1.82	\$1.93	\$2.03	\$2.15	\$2.27	\$64.74		
Pinnacle West Capital Corporation	PNW	\$2.35	\$2.45	\$2.55	\$2.66	\$2.77	\$2.90	\$3.06	\$3.23	\$3.42	\$3.64	\$3.88	\$4.13	\$4.36	\$4.61	\$4.87	\$5.14	\$121.44		
Portland General Electric Company	POR	\$0.96	\$1.02	\$1.08	\$1.15	\$1.23	\$1.31	\$1.40	\$1.51	\$1.62	\$1.75	\$1.89	\$2.04	\$2.16	\$2.27	\$2.40	\$2.54	\$73.98		
Southern Company	SO	\$2.06	\$2.12	\$2.18	\$2.23	\$2.29	\$2.36	\$2.43	\$2.51	\$2.61	\$2.72	\$2.84	\$2.97	\$3.14	\$3.31	\$3.50	\$3.70	\$92.45		
Westar Energy, Inc.	WR	\$1.36	\$1.38	\$1.41	\$1.44	\$1.46	\$1.56	\$1.67	\$1.80	\$1.94	\$2.10	\$2.28	\$2.47	\$2.61	\$2.76	\$2.91	\$3.07	\$79.88		
Projected Annual Data Investor Cash Flows																				
Company	Ticker	Initial	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]	[82]
American Electric Power Company, Inc.	AEP	(\$52.12)	\$0.00	\$0.41	\$2.05	\$2.21	\$2.32	\$2.43	\$2.55	\$2.69	\$2									

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

Inputs	[1] Stock	[2]	[3] - [6] EPS Growth Rate Estimates				[7] Long-Term	[8] - [10] Payout Ratio			[11] Iterative Solution	[12] Terminal	[13] Terminal	[14] Terminal	
			Price	Zacks	First Call	Value Line		Growth	Average	Growth					2014
Company	Ticker	Price	Zacks	First Call	Value Line	Growth	Average	Growth	2014	2018	2024	Proof	IRR	P/E Ratio	Terminal PEG
American Electric Power Company, Inc.	AEP	\$48.88	4.80%	4.79%	4.50%	3.89%	4.50%	5.61%	61.00%	63.00%	67.23%	\$0.00	10.23%	15.37	2.74
Cleco Corporation	CNL	\$49.33	7.00%	7.00%	3.50%	3.78%	5.32%	5.61%	58.00%	62.00%	67.23%	\$0.00	9.61%	17.77	3.17
Duke Energy Corporation	DUK	\$70.56	4.70%	4.70%	5.00%	2.88%	4.32%	5.61%	71.00%	64.00%	67.23%	\$0.00	9.62%	17.72	3.16
Empire District Electric Company	EDE	\$23.42	3.00%	3.00%	4.00%	3.70%	4.33%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.82%	16.87	3.01
Great Plains Energy Inc.	GXP	\$24.53	5.00%	5.00%	6.00%	3.11%	4.78%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.35%	14.97	2.67
Hawaiian Electric Industries, Inc.	HE	\$25.35	4.00%	4.00%	4.00%	4.22%	4.06%	5.61%	77.00%	66.00%	67.23%	\$0.00	10.15%	15.65	2.79
IDACORP, Inc.	IDA	\$52.60	4.00%	4.00%	1.00%	3.97%	3.24%	5.61%	47.00%	55.00%	67.23%	\$0.00	9.96%	16.32	2.91
NextEra Energy, Inc.	NEE	\$89.37	6.60%	6.48%	6.00%	5.91%	6.25%	5.61%	61.00%	57.00%	67.23%	\$0.00	9.84%	16.80	3.00
Northeast Utilities	NU	\$43.70	6.50%	6.31%	8.00%	4.43%	6.31%	5.61%	60.00%	58.00%	67.23%	\$0.00	10.09%	15.86	2.83
Otter Tail Corporation	OTTR	\$28.84	NA	6.00%	15.50%	6.99%	9.50%	5.61%	70.00%	59.00%	67.23%	\$0.00	10.23%	15.36	2.74
Pinnacle West Capital Corporation	PNW	\$55.29	3.70%	3.75%	4.00%	3.98%	3.86%	5.61%	62.00%	63.00%	67.23%	\$0.00	10.13%	15.72	2.80
Portland General Electric Company	POR	\$31.27	7.80%	7.80%	5.00%	3.98%	6.15%	5.61%	52.00%	57.00%	67.23%	\$0.00	9.96%	16.32	2.91
Southern Company	SO	\$43.11	3.50%	3.35%	3.50%	4.63%	3.75%	5.61%	74.00%	72.00%	67.23%	\$0.00	10.02%	16.11	2.87
Westar Energy, Inc.	WR	\$33.70	3.80%	3.20%	6.00%	4.95%	4.49%	5.61%	58.00%	55.00%	67.23%	\$0.00	10.26%	15.25	2.72

DCF Result			
Mean	10.02%	16.15	2.88
Max	10.35%	17.77	3.17
Min	9.61%	14.97	2.67

Projected Annual Earnings per Share	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.32	\$3.47	\$3.63	\$3.79	\$3.96	\$4.15	\$4.35	\$4.57	\$4.81	\$5.07	\$5.35	\$5.65	\$5.97	\$6.31	\$6.66	\$7.03
Cleco Corporation	CNL	\$2.65	\$2.79	\$2.94	\$3.10	\$3.26	\$3.43	\$3.62	\$3.81	\$4.02	\$4.24	\$4.48	\$4.73	\$5.00	\$5.28	\$5.57	\$5.89	\$6.22
Duke Energy Corporation	DUK	\$3.98	\$4.15	\$4.33	\$4.52	\$4.71	\$4.92	\$5.14	\$5.38	\$5.65	\$5.94	\$6.26	\$6.62	\$6.99	\$7.38	\$7.79	\$8.23	\$8.69
Empire District Electric Company	EDE	\$1.48	\$1.53	\$1.58	\$1.64	\$1.69	\$1.75	\$1.82	\$1.89	\$1.98	\$2.08	\$2.18	\$2.31	\$2.44	\$2.57	\$2.72	\$2.87	\$3.03
Great Plains Energy Inc.	GXP	\$1.62	\$1.70	\$1.78	\$1.86	\$1.95	\$2.05	\$2.15	\$2.25	\$2.37	\$2.50	\$2.64	\$2.78	\$2.94	\$3.10	\$3.28	\$3.46	\$3.63
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.69	\$1.75	\$1.83	\$1.90	\$1.98	\$2.06	\$2.16	\$2.26	\$2.38	\$2.50	\$2.64	\$2.79	\$2.95	\$3.11	\$3.29	\$3.47
IDACORP, Inc.	IDA	\$3.64	\$3.76	\$3.88	\$4.01	\$4.14	\$4.27	\$4.43	\$4.60	\$4.81	\$5.04	\$5.30	\$5.60	\$5.91	\$6.25	\$6.60	\$6.97	\$7.36
NextEra Energy, Inc.	NEE	\$4.83	\$5.13	\$5.45	\$5.79	\$6.15	\$6.54	\$6.94	\$7.36	\$7.80	\$8.25	\$8.72	\$9.21	\$9.73	\$10.27	\$10.85	\$11.46	\$12.10
Northeast Utilities	NU	\$2.49	\$2.65	\$2.81	\$2.99	\$3.18	\$3.38	\$3.59	\$3.81	\$4.04	\$4.27	\$4.52	\$4.77	\$5.04	\$5.32	\$5.62	\$5.93	\$6.27
Otter Tail Corporation	OTTR	\$1.37	\$1.50	\$1.64	\$1.80	\$1.97	\$2.16	\$2.35	\$2.54	\$2.73	\$2.92	\$3.10	\$3.28	\$3.46	\$3.66	\$3.86	\$4.08	\$4.31
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.95	\$4.10	\$4.26	\$4.42	\$4.61	\$4.81	\$5.04	\$5.29	\$5.57	\$5.89	\$6.22	\$6.56	\$6.93	\$7.32	\$7.73
Portland General Electric Company	POR	\$1.77	\$1.88	\$1.99	\$2.12	\$2.25	\$2.38	\$2.53	\$2.68	\$2.84	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$3.95	\$4.17	\$4.40
Southern Company	SO	\$2.70	\$2.80	\$2.91	\$3.01	\$3.13	\$3.24	\$3.38	\$3.52	\$3.69	\$3.87	\$4.08	\$4.31	\$4.55	\$4.80	\$5.07	\$5.36	\$5.66
Westar Energy, Inc.	WR	\$2.27	\$2.37	\$2.48	\$2.59	\$2.71	\$2.83	\$2.96	\$3.10	\$3.26	\$3.43	\$3.62	\$3.82	\$4.03	\$4.26	\$4.50	\$4.75	\$5.02

Projected Annual Dividend Payout Ratio	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	[64]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Terminal Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.64	\$2.79	\$2.96	\$3.15	\$3.35	\$3.57	\$3.80	\$4.01	\$4.24	\$4.48	\$4.73	\$108.11
Cleco Corporation	CNL	\$1.62	\$1.73	\$1.86	\$1.99	\$2.13	\$2.27	\$2.42	\$2.58	\$2.76	\$2.95	\$3.15	\$3.36	\$3.55	\$3.75	\$3.96	\$4.18	\$110.48
Duke Energy Corporation	DUK	\$2.95	\$3.00	\$3.05	\$3.10	\$3.15	\$3.31	\$3.50	\$3.70	\$3.91	\$4.15	\$4.42	\$4.70	\$4.96	\$5.24	\$5.53	\$5.84	\$154.00
Empire District Electric Company	EDE	\$1.01	\$1.03	\$1.06	\$1.08	\$1.10	\$1.16	\$1.22	\$1.28	\$1.36	\$1.44	\$1.54	\$1.64	\$1.73	\$1.83	\$1.93	\$2.04	\$51.15
Great Plains Energy Inc.	GXP	\$0.98	\$1.05	\$1.12	\$1.19	\$1.27	\$1.35	\$1.43	\$1.52	\$1.62	\$1.73	\$1.85	\$1.98	\$2.09	\$2.20	\$2.33	\$2.46	\$54.72
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.31	\$1.31	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.77	\$1.88	\$1.98	\$2.09	\$2.21	\$2.33	\$54.34
IDACORP, Inc.	IDA	\$1.77	\$1.90	\$2.04	\$2.19	\$2.35	\$2.51	\$2.69	\$2.90	\$3.12	\$3.38	\$3.67	\$3.98	\$4.20	\$4.43	\$4.68	\$4.95	\$120.05
NextEra Energy, Inc.	NEE	\$3.13	\$3.27	\$3.42	\$3.57	\$3.73	\$4.06	\$4.41	\$4.79	\$5.19	\$5.61	\$6.06	\$6.54	\$6.91	\$7.29	\$7.68	\$8.14	\$203.33
Northeast Utilities	NU	\$1.59	\$1.67	\$1.77	\$1.86	\$1.96	\$2.13	\$2.31	\$2.50	\$2.70	\$2.92	\$3.14	\$3.39	\$3.65	\$3.92	\$4.19	\$4.47	\$99.38
Otter Tail Corporation	OTTR	\$1.05	\$1.10	\$1.16	\$1.22	\$1.27	\$1.41	\$1.56	\$1.71	\$1.86	\$2.01	\$2.16	\$2.33	\$2.58	\$2.60	\$2.74	\$2.89	\$66.13
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09	\$3.27	\$3.46	\$3.68	\$3.92	\$4.18	\$4.41	\$4.66	\$4.92	\$5.20	\$121.57
Portland General Electric Company	POR	\$0.98	\$1.06	\$1.15	\$1.25	\$1.36	\$1.48	\$1.61	\$1.74	\$1.89	\$2.04	\$2.20	\$2.38	\$2.51	\$2.65	\$2.80	\$2.96	\$71.85
Southern Company	SO	\$2.07	\$2.14	\$2.20	\$2.27	\$2.34	\$2.41	\$2.49	\$2.58	\$2.68	\$2.80	\$2.92	\$3.06	\$3.23	\$3.41	\$3.		

Multi-Stage Growth Discounted Cash Flow Model
360 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]	[14]
	Stock	EPS Growth Rate Estimates					Long-Term	Payout Ratio			Iterative Solution		Terminal	Terminal	
Company	Ticker	Price	Zacks	First Call	Value Line	Retention Growth	High Growth	Growth	2014	2018	2024	Proof	IRR	P/E Ratio	PEG Ratio
American Electric Power Company, Inc.	AEP	\$48.88	4.80%	4.79%	4.50%	3.89%	4.80%	5.61%	61.00%	63.00%	67.23%	\$0.00	10.32%	15.07	2.69
Cleco Corporation	CNL	\$49.33	7.00%	7.00%	3.50%	3.78%	7.00%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.06%	15.96	2.84
Duke Energy Corporation	DUK	\$70.56	4.70%	4.70%	5.00%	2.88%	5.00%	5.61%	71.00%	64.00%	67.23%	\$0.00	9.80%	16.94	3.02
Empire District Electric Company	EDE	\$23.42	3.00%	3.00%	4.00%	3.70%	4.00%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.98%	16.25	2.90
Great Plains Energy Inc.	GXP	\$24.53	5.00%	5.00%	6.00%	3.11%	6.00%	5.61%	58.00%	62.00%	67.23%	\$0.00	10.74%	13.85	2.47
Hawaiian Electric Industries, Inc.	HE	\$25.35	4.00%	4.00%	4.00%	4.22%	4.22%	5.61%	77.00%	66.00%	67.23%	\$0.00	10.20%	15.48	2.76
IDACORP, Inc.	IDA	\$52.60	4.00%	4.00%	1.00%	3.97%	4.00%	5.61%	47.00%	55.00%	67.23%	\$0.00	10.18%	15.54	2.77
NextEra Energy, Inc.	NEE	\$89.37	6.60%	6.48%	6.00%	5.91%	6.60%	5.61%	61.00%	57.00%	67.23%	\$0.00	9.93%	16.43	2.93
Northeast Utilities	NU	\$43.70	6.50%	6.31%	8.00%	4.43%	8.00%	5.61%	60.00%	58.00%	67.23%	\$0.00	10.58%	14.28	2.55
Otter Tail Corporation	OTTR	\$28.84	NA	6.00%	15.50%	6.99%	15.50%	5.61%	70.00%	59.00%	67.23%	\$0.00	12.16%	10.85	1.93
Pinnacle West Capital Corporation	PNW	\$55.29	3.70%	3.75%	4.00%	3.98%	4.00%	5.61%	62.00%	63.00%	67.23%	\$0.00	10.17%	15.58	2.78
Portland General Electric Company	POR	\$31.27	7.80%	7.80%	5.00%	3.98%	7.80%	5.61%	52.00%	57.00%	67.23%	\$0.00	10.43%	14.72	2.82
Southern Company	SO	\$43.11	3.50%	3.35%	3.50%	4.63%	4.63%	5.61%	74.00%	72.00%	67.23%	\$0.00	10.29%	15.19	2.71
Westar Energy, Inc.	WR	\$33.70	3.80%	3.20%	6.00%	4.95%	6.00%	5.61%	58.00%	55.00%	67.23%	\$0.00	10.73%	13.87	2.47

DCF Result			
Mean	10.40%	15.00	2.67
Max	12.16%	16.94	3.02
Min	9.80%	10.85	1.93

Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]
Company	Ticker	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	\$3.18	\$3.33	\$3.49	\$3.66	\$3.84	\$4.02	\$4.22	\$4.43	\$4.66	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45	\$6.81	\$7.19
Cleco Corporation	CNL	\$2.65	\$2.84	\$3.03	\$3.25	\$3.47	\$3.72	\$3.97	\$4.23	\$4.49	\$4.77	\$5.05	\$5.33	\$5.63	\$5.94	\$6.28	\$6.63	\$7.00
Duke Energy Corporation	DUK	\$3.98	\$4.18	\$4.39	\$4.61	\$4.84	\$5.08	\$5.34	\$5.62	\$5.91	\$6.23	\$6.58	\$6.95	\$7.34	\$7.75	\$8.18	\$8.64	\$9.13
Empire District Electric Company	EDE	\$1.48	\$1.54	\$1.60	\$1.66	\$1.73	\$1.80	\$1.88	\$1.96	\$2.06	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$2.83	\$2.99	\$3.16
Great Plains Energy Inc.	GXP	\$1.62	\$1.72	\$1.82	\$1.93	\$2.05	\$2.17	\$2.30	\$2.43	\$2.57	\$2.72	\$2.87	\$3.04	\$3.21	\$3.39	\$3.58	\$3.78	\$3.99
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.69	\$1.76	\$1.83	\$1.91	\$1.99	\$2.08	\$2.18	\$2.29	\$2.40	\$2.53	\$2.67	\$2.82	\$2.98	\$3.15	\$3.33	\$3.51
IDACORP, Inc.	IDA	\$3.64	\$3.79	\$3.94	\$4.09	\$4.26	\$4.43	\$4.62	\$4.83	\$5.06	\$5.32	\$5.60	\$5.91	\$6.25	\$6.60	\$6.97	\$7.36	\$7.77
NextEra Energy, Inc.	NEE	\$4.83	\$5.15	\$5.49	\$5.85	\$6.24	\$6.65	\$7.08	\$7.52	\$7.98	\$8.45	\$8.94	\$9.44	\$9.97	\$10.53	\$11.12	\$11.75	\$12.41
Northeast Utilities	NU	\$2.49	\$2.69	\$2.90	\$3.14	\$3.39	\$3.66	\$3.94	\$4.22	\$4.51	\$4.80	\$5.08	\$5.37	\$5.67	\$5.99	\$6.33	\$6.68	\$7.05
Otter Tail Corporation	OTTR	\$1.37	\$1.58	\$1.83	\$2.11	\$2.44	\$2.82	\$3.21	\$3.60	\$3.98	\$4.33	\$4.65	\$4.91	\$5.18	\$5.47	\$5.78	\$6.10	\$6.45
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.81	\$3.96	\$4.12	\$4.28	\$4.45	\$4.64	\$4.85	\$5.09	\$5.34	\$5.63	\$5.95	\$6.28	\$6.63	\$7.00	\$7.40	\$7.81
Portland General Electric Company	POR	\$1.77	\$1.91	\$2.06	\$2.22	\$2.39	\$2.58	\$2.77	\$2.96	\$3.16	\$3.36	\$3.56	\$3.76	\$3.98	\$4.20	\$4.43	\$4.68	\$4.95
Southern Company	SO	\$2.70	\$2.83	\$2.96	\$3.09	\$3.24	\$3.39	\$3.55	\$3.72	\$3.92	\$4.12	\$4.35	\$4.59	\$4.85	\$5.12	\$5.41	\$5.71	\$6.03
Westar Energy, Inc.	WR	\$2.27	\$2.41	\$2.55	\$2.70	\$2.87	\$3.04	\$3.22	\$3.41	\$3.60	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$5.01	\$5.29	\$5.59

Projected Annual Dividend Payout Ratio		[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.35%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	58.00%	57.25%	56.50%	55.75%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%	67.23%

Projected Annual Cash Flows		[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	[64]	Terminal Value
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Value
American Electric Power Company, Inc.	AEP	\$2.03	\$2.15	\$2.27	\$2.40	\$2.53	\$2.68	\$2.85	\$3.02	\$3.21	\$3.42	\$3.65	\$3.89	\$4.10	\$4.33	\$4.58	\$4.83	\$5.08	\$108.34
Cleco Corporation	CNL	\$1.64	\$1.79	\$1.95	\$2.12	\$2.30	\$2.49	\$2.68	\$2.89	\$3.10	\$3.32	\$3.54	\$3.78	\$4.00	\$4.22	\$4.46	\$4.71	\$111.74	
Duke Energy Corporation	DUK	\$2.97	\$3.04	\$3.11	\$3.18	\$3.25	\$3.34	\$3.65	\$3.87	\$4.11	\$4.36	\$4.64	\$4.93	\$5.21	\$5.50	\$5.81	\$6.14	\$154.63	
Empire District Electric Company	EDE	\$1.02	\$1.04	\$1.07	\$1.10	\$1.13	\$1.19	\$1.26	\$1.33	\$1.41	\$1.50	\$1.60	\$1.71	\$1.80	\$1.90	\$2.01	\$2.12	\$51.33	
Great Plains Energy Inc.	GXP	\$1.00	\$1.07	\$1.16	\$1.25	\$1.34	\$1.44	\$1.54	\$1.65	\$1.77	\$1.89	\$2.02	\$2.16	\$2.28	\$2.40	\$2.54	\$2.68	\$55.23	
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.31	\$1.31	\$1.31	\$1.31	\$1.38	\$1.45	\$1.52	\$1.60	\$1.69	\$1.79	\$1.90	\$2.01	\$2.12	\$2.24	\$2.36	\$54.40	
IDACORP, Inc.	IDA	\$1.78	\$1.93	\$2.09	\$2.26	\$2.44	\$2.62	\$2.82	\$3.05	\$3.30	\$3.57	\$3.87	\$4.20	\$4.43	\$4.68	\$4.95	\$5.22	\$120.76	
NextEra Energy, Inc.	NEE	\$3.14	\$3.29	\$3.45	\$3.62	\$3.79	\$4.14	\$4.52	\$4.90	\$5.31	\$5.75	\$6.21	\$6.70	\$7.08	\$7.48	\$7.90	\$8.34	\$203.86	
Northeast Utilities	NU	\$1.61	\$1.73	\$1.85	\$1.98	\$2.12	\$2.34	\$2.56	\$2.79	\$3.03	\$3.28	\$3.54	\$3.81	\$4.03	\$4.25	\$4.49	\$4.74	\$100.73	
Otter Tail Corporation	OTTR	\$1.11	\$1.23	\$1.36	\$1.51	\$1.66	\$1.93	\$2.21	\$2.49	\$2.76	\$3.01	\$3.24	\$3.48	\$3.68	\$3.89	\$4.10	\$4.33	\$69.92	
Pinnacle West Capital Corporation	PNW	\$2.36	\$2.46	\$2.57	\$2.69	\$2.81	\$2.95	\$3.12	\$3.30	\$3.50	\$3.72	\$3.96	\$4.22	\$4.46	\$4.71	\$4.97	\$5.25	\$121.69	
Portland General Electric Company	POR	\$0.99	\$1.10	\$1.21	\$1.33	\$1.47	\$1.62	\$1.78	\$1.94	\$2.11	\$2.29	\$2.48	\$2.67	\$2.82	\$2.98	\$3.15	\$3.32	\$72.81	
Southern Company	SO	\$2.09	\$2.17	\$2.26	\$2.35	\$2.44	\$2.53	\$2.63	\$2.74	\$2.86	\$2.98	\$3.12	\$3.26	\$3.44	\$3.64	\$3.84	\$4.05	\$91.59	
Westar Energy, Inc.	WR	\$1.40	\$1.46	\$1.53	\$1.60	\$1.67	\$1.83	\$1.99	\$2.17	\$2.36	\$2.57	\$2.79	\$3.02	\$3.19	\$3.37	\$3.56	\$3.76	\$77.51	

Projected Annual Data Investor Cash Flows		[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]	[82]
Company	Ticker	Initial	10/17/14	12/31/14	6/30/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29
American Electric Power Company, Inc.	AEP	(\$48.88)	\$0.00	\$0.42	\$2.08	\$2.27	\$2.40	\$2.63	\$2.66	\$2.85	\$3.02	\$3.21	\$3.42	\$3.65	\$3.89	\$4.10	\$4.33	\$4.58	\$113.17
Cleco Corporation	CNL	(\$49.33)	\$0.00	\$0.34	\$1.70	\$1.95	\$2.12	\$2.30	\$2.49	\$2.68	\$2.89	\$3.10	\$3.32	\$3.54	\$3.78	\$4.00	\$4.22	\$4.46	\$116.44
Duke Energy Corporation	DUK	(\$70.56)	\$0.00	\$0.61	\$3.04	\$3.11													

Multi-Stage Growth Discounted Cash Flow Model
360 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]	[14]
		Price	Zacks	First Call	Value Line	Retention Growth	Low Growth	Long-Term Growth	2014	2018	2024	Proof	IRR	P/E Ratio	Terminal PEG Ratio
American Electric Power Company, Inc.	AEP	\$48.88	4.80%	4.79%	4.50%	3.89%	3.89%	5.61%	61.00%	63.00%	67.23%	(30.00)	10.05%	15.98	2.85
Cleco Corporation	CNL	\$49.33	7.00%	7.00%	3.50%	3.78%	3.50%	5.61%	58.00%	62.00%	67.23%	\$0.00	9.15%	20.03	3.57
Duke Energy Corporation	DUK	\$70.56	4.70%	4.70%	5.00%	2.88%	2.88%	5.61%	71.00%	64.00%	67.23%	(30.00)	9.25%	19.51	3.48
Empire District Electric Company	EDE	\$23.42	3.00%	3.00%	4.00%	3.70%	3.00%	5.61%	66.00%	63.00%	67.23%	\$0.00	9.70%	17.36	3.09
Great Plains Energy Inc.	GXP	\$24.53	5.00%	5.00%	6.00%	3.11%	3.11%	5.61%	58.00%	62.00%	67.23%	(30.00)	9.87%	16.68	2.97
Hawaiian Electric Industries, Inc.	HE	\$25.35	4.00%	4.00%	4.00%	4.22%	4.00%	5.61%	77.00%	66.00%	67.23%	\$0.00	10.13%	15.71	2.80
IDACORP, Inc.	IDA	\$52.60	4.00%	4.00%	1.00%	3.97%	1.00%	5.61%	47.00%	55.00%	67.23%	\$0.00	9.36%	18.93	3.37
NextEra Energy, Inc.	NEE	\$89.37	6.60%	6.48%	6.00%	5.91%	5.91%	5.61%	61.00%	57.00%	67.23%	(30.00)	9.74%	17.17	3.06
Northeast Utilities	NU	\$43.70	6.50%	6.31%	8.00%	4.43%	4.43%	5.61%	60.00%	58.00%	67.23%	(30.00)	9.58%	17.89	3.19
Otter Tail Corporation	OTTR	\$28.84	NA	NA	15.50%	6.99%	6.00%	5.61%	70.00%	59.00%	67.23%	\$0.00	9.32%	19.14	3.41
Pinnacle West Capital Corporation	PNW	\$55.29	3.70%	3.75%	4.00%	3.98%	3.70%	5.61%	62.00%	63.00%	67.23%	\$0.00	10.08%	15.89	2.83
Portland General Electric Company	POR	\$31.27	7.80%	7.80%	5.00%	3.98%	3.98%	5.61%	52.00%	57.00%	67.23%	(30.00)	9.40%	18.76	3.34
Southern Company	SO	\$43.11	3.50%	3.35%	3.50%	4.63%	3.35%	5.61%	74.00%	72.00%	67.23%	\$0.00	9.90%	16.54	2.95
Westar Energy, Inc.	WR	\$33.70	3.80%	3.20%	6.00%	4.95%	3.20%	5.61%	58.00%	55.00%	67.23%	\$0.00	9.89%	16.57	2.95

DCF Result		
Mean	9.67%	17.58
Max	10.13%	20.03
Min	9.15%	15.71

Projected Annual Earnings per Share	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
American Electric Power Company, Inc.	AEP	\$3.18	\$3.30	\$3.43	\$3.57	\$3.71	\$3.85	\$4.01	\$4.19	\$4.39	\$4.61	\$4.86	\$5.13	\$5.42	\$5.72	\$6.04	\$6.38	\$6.74
Cleco Corporation	CNL	\$2.65	\$2.74	\$2.84	\$2.94	\$3.04	\$3.15	\$3.27	\$3.41	\$3.56	\$3.74	\$3.93	\$4.15	\$4.39	\$4.63	\$4.89	\$5.17	\$5.46
Duke Energy Corporation	DUK	\$3.98	\$4.09	\$4.21	\$4.33	\$4.46	\$4.59	\$4.74	\$4.92	\$5.13	\$5.37	\$5.64	\$5.96	\$6.30	\$6.65	\$7.02	\$7.42	\$7.83
Empire District Electric Company	EDE	\$1.48	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.84	\$1.92	\$2.01	\$2.12	\$2.24	\$2.36	\$2.49	\$2.63	\$2.78	\$2.94
Great Plains Energy Inc.	GXP	\$1.62	\$1.67	\$1.72	\$1.78	\$1.83	\$1.89	\$1.95	\$2.03	\$2.12	\$2.22	\$2.34	\$2.47	\$2.61	\$2.75	\$2.91	\$3.07	\$3.24
Hawaiian Electric Industries, Inc.	HE	\$1.62	\$1.68	\$1.75	\$1.82	\$1.90	\$1.97	\$2.06	\$2.15	\$2.25	\$2.37	\$2.49	\$2.63	\$2.78	\$2.94	\$3.10	\$3.27	\$3.46
IDACORP, Inc.	IDA	\$3.64	\$3.68	\$3.71	\$3.75	\$3.79	\$3.83	\$3.89	\$3.99	\$4.12	\$4.29	\$4.50	\$4.75	\$5.02	\$5.30	\$5.60	\$5.91	\$6.24
NextEra Energy, Inc.	NEE	\$4.83	\$5.12	\$5.42	\$5.74	\$6.08	\$6.43	\$6.81	\$7.21	\$7.62	\$8.06	\$8.51	\$8.99	\$9.50	\$10.03	\$10.59	\$11.18	\$11.81
Northeast Utilities	NU	\$2.49	\$2.60	\$2.72	\$2.84	\$2.96	\$3.09	\$3.24	\$3.39	\$3.56	\$3.75	\$3.95	\$4.17	\$4.41	\$4.65	\$4.91	\$5.19	\$5.48
Otter Tail Corporation	OTTR	\$1.37	\$1.45	\$1.54	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.18	\$2.30	\$2.43	\$2.57	\$2.71	\$2.86	\$3.02	\$3.19	\$3.37
Pinnacle West Capital Corporation	PNW	\$3.66	\$3.80	\$3.94	\$4.08	\$4.23	\$4.39	\$4.57	\$4.76	\$4.99	\$5.23	\$5.51	\$5.82	\$6.15	\$6.49	\$6.85	\$7.24	\$7.65
Portland General Electric Company	POR	\$1.77	\$1.84	\$1.91	\$1.99	\$2.07	\$2.15	\$2.24	\$2.34	\$2.46	\$2.58	\$2.72	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57	\$3.77
Southern Company	SO	\$2.70	\$2.79	\$2.88	\$2.98	\$3.08	\$3.18	\$3.30	\$3.44	\$3.59	\$3.77	\$3.96	\$4.19	\$4.42	\$4.67	\$4.93	\$5.21	\$5.50
Westar Energy, Inc.	WR	\$2.27	\$2.34	\$2.42	\$2.49	\$2.57	\$2.66	\$2.75	\$2.86	\$2.99	\$3.13	\$3.30	\$3.48	\$3.68	\$3.88	\$4.10	\$4.33	\$4.57

Projected Annual Dividend Payout Ratio	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]
American Electric Power Company, Inc.	AEP	61.00%	61.50%	62.00%	62.50%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%
Cleco Corporation	CNL	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%
Duke Energy Corporation	DUK	71.00%	69.25%	67.50%	65.75%	64.00%	64.46%	64.92%	65.38%	65.85%	66.31%	66.77%	67.23%	67.23%	67.23%	67.23%
Empire District Electric Company	EDE	66.00%	65.25%	64.50%	63.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%
Great Plains Energy Inc.	GXP	58.00%	59.00%	60.00%	61.00%	62.00%	62.75%	63.49%	64.24%	64.99%	65.74%	66.48%	67.23%	67.23%	67.23%	67.23%
Hawaiian Electric Industries, Inc.	HE	77.00%	74.25%	71.50%	68.75%	66.00%	66.18%	66.35%	66.53%	66.70%	66.88%	67.06%	67.23%	67.23%	67.23%	67.23%
IDACORP, Inc.	IDA	47.00%	49.00%	51.00%	53.00%	55.00%	56.75%	58.49%	60.24%	61.99%	63.74%	65.48%	67.23%	67.23%	67.23%	67.23%
NextEra Energy, Inc.	NEE	61.00%	60.00%	59.00%	58.00%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%
Northeast Utilities	NU	60.00%	59.50%	59.00%	58.50%	58.00%	59.32%	60.64%	61.96%	63.28%	64.59%	65.91%	67.23%	67.23%	67.23%	67.23%
Otter Tail Corporation	OTTR	70.00%	67.25%	64.50%	61.75%	59.00%	60.18%	61.36%	62.53%	63.70%	64.88%	66.06%	67.23%	67.23%	67.23%	67.23%
Pinnacle West Capital Corporation	PNW	62.00%	62.25%	62.50%	62.75%	63.00%	63.60%	64.21%	64.81%	65.42%	66.02%	66.63%	67.23%	67.23%	67.23%	67.23%
Portland General Electric Company	POR	52.00%	53.25%	54.50%	55.75%	57.00%	58.46%	59.92%	61.38%	62.85%	64.31%	65.77%	67.23%	67.23%	67.23%	67.23%
Southern Company	SO	74.00%	73.50%	73.00%	72.50%	72.00%	71.32%	70.64%	69.96%	69.28%	68.59%	67.91%	67.23%	67.23%	67.23%	67.23%
Westar Energy, Inc.	WR	68.00%	67.25%	66.50%	65.75%	65.00%	66.75%	68.49%	70.24%	71.99%	73.74%	75.48%	77.23%	77.23%	77.23%	77.23%

Projected Annual Cash Flows	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	[64]	Terminal Value
American Electric Power Company, Inc.	AEP	\$2.02	\$2.11	\$2.21	\$2.32	\$2.43	\$2.55	\$2.69	\$2.84	\$3.02	\$3.21	\$3.42	\$3.64	\$3.84	\$4.06	\$4.29	\$4.53	\$107.67
Cleco Corporation	CNL	\$1.59	\$1.67	\$1.76	\$1.85	\$1.95	\$2.05	\$2.16	\$2.29	\$2.43	\$2.58	\$2.76	\$2.95	\$3.11	\$3.29	\$3.47	\$3.67	\$109.30
Duke Energy Corporation	DUK	\$2.91	\$2.92	\$2.93	\$2.93	\$2.94	\$3.05	\$3.19	\$3.35	\$3.53	\$3.74	\$3.98	\$4.23	\$4.47	\$4.72	\$4.99	\$5.27	\$152.81
Empire District Electric Company	EDE	\$1.01	\$1.02	\$1.04	\$1.06	\$1.08	\$1.13	\$1.18	\$1.25	\$1.32	\$1.40	\$1.49	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98	\$51.02
Great Plains Energy Inc.	GXP	\$0.97	\$1.02	\$1.07	\$1.12	\$1.17	\$1.23	\$1.29	\$1.36	\$1.44	\$1.54	\$1.64	\$1.75	\$1.85	\$1.95	\$2.06	\$2.18	\$54.10
Hawaiian Electric Industries, Inc.	HE	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.36	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.32	\$54.33
IDACORP, Inc.	IDA	\$1.73	\$1.82	\$1.91	\$2.01	\$2.10	\$2.21	\$2.34	\$2.48	\$2.66	\$2.87	\$3.11	\$3.37	\$3.66	\$3.96	\$4.29	\$4.64	\$118.19
NextEra Energy, Inc.	NEE	\$3.12	\$3.25	\$3.38	\$3.52	\$3.67	\$3.98	\$4.32	\$4.68	\$5.06	\$5.47	\$5.91	\$6.38	\$6.74	\$7.12	\$7.52	\$7.94	\$202.84
Northeast Utilities	NU	\$1.56	\$1.62	\$1.67	\$1.73	\$1.79	\$1.92	\$2.06	\$2.21	\$2.37	\$2.55	\$2.75	\$2.96	\$3.13	\$3.30	\$3.49	\$3.69	\$98.08
Otter Tail Corporation	OTTR	\$1.02	\$1.04	\$1.05	\$1.07	\$1.08	\$1.17	\$1.26	\$1.36	\$1.47	\$1.58	\$1.70	\$1.82	\$1.93	\$2.03	\$2.15	\$2.27	\$64.55
Pinnacle West Capital Corporation	PNW	\$2.35	\$2.45	\$2.55	\$2.66	\$2.77	\$2.90	\$3.05	\$3.23	\$3.42	\$3.64	\$3.88	\$4.13	\$4.36	\$4.61	\$4.87	\$5.14	\$121.45
Portland General Electric Company	POR	\$0.96	\$1.02	\$1.08	\$1.15	\$1.23	\$1.31	\$1.40	\$1.51	\$1.62	\$1.75	\$1.89	\$2.04	\$2.15	\$2.27	\$2.40	\$2.54	\$70.77
Southern Company	SO	\$2.06	\$2.12	\$2.18	\$2.23	\$2.29	\$2.36	\$2.43	\$2.51	\$2.61	\$2.72	\$2.84	\$2.97	\$3.14	\$3.31	\$3.50	\$3.70	\$96.96
Westar Energy, Inc.	WR	\$1.36	\$1.38	\$1.41	\$1.44	\$1.46	\$1.56	\$1.67	\$1.80	\$1.94	\$2.10	\$2.28	\$2.47	\$2.61	\$2.76	\$2.91	\$3.07	\$75.80

Projected Annual Data Investor Cash Flows	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	[81]	[82]	
American Electric Power Company, Inc.	AEP	(\$48.88)	\$0.00	\$0.41	\$2.05	\$2.21	\$2.32	\$2.43	\$2.55	\$2.69	\$2.84	\$3.02	\$3.21	\$3.42	\$3.64	\$3.84	\$4.06	\$4.29	\$112.20
Cleco Corporation	CNL	(\$49.33)	\$0.00	\$0.33	\$1.62	\$1.76	\$1.85	\$1.95	\$2.05	\$2.16	\$2.29	\$2.43	\$2.58	\$2.76	\$2.95	\$3.11	\$3.29	\$3.47	\$112.97
Duke Energy Corporation	DUK																		

Multi-Stage with Sustainable Growth DCF Notes:

- [1] Source: Bloomberg; based on 30-, 90-, 180-, and 360-day historical average as of October 17, 2014
- [2] Source: Zacks
- [3] Source: Yahoo! Finance
- [4] Source: Value Line
- [5] Source: PNM Exhibit RBH-5
- [6] Equals indicated value (average, minimum, maximum) of Columns [2], [3], [4], [5]
- [7] Source: Average of: 5.25%, 5.99%, 5.68%, 5.53% (see Direct Testimony at 49-50)
- [8] Source: Value Line
- [9] Source: Value Line
- [10] Source: Bloomberg Professional
- [11] Equals Column [1] + Column [65]
- [12] Equals result of Excel Solver function; goal: Column [11] equals \$0.00
- [13] Equals Column [64] / Column [31]
- [14] Equals Column [13] / (Column [7] x 100)
- [15] Source: Value Line
- [16] Equals Column [15] x (1 + Column [6])
- [17] Equals Column [16] x (1 + Column [6])
- [18] Equals Column [17] x (1 + Column [6])
- [19] Equals Column [18] x (1 + Column [6])
- [20] Equals Column [19] x (1 + Column [6])
- [21] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2024 - 2019 + 1)) x (2019 - 2018)))) x Column [20]
- [22] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2024 - 2019 + 1)) x (2020 - 2018)))) x Column [21]
- [23] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2024 - 2019 + 1)) x (2021 - 2018)))) x Column [22]
- [24] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2024 - 2019 + 1)) x (2022 - 2018)))) x Column [23]
- [25] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2024 - 2019 + 1)) x (2023 - 2018)))) x Column [24]
- [26] Equals Column [25] x (1 + Column [7])
- [27] Equals Column [26] x (1 + Column [7])
- [28] Equals Column [27] x (1 + Column [7])
- [29] Equals Column [28] x (1 + Column [7])
- [30] Equals Column [29] x (1 + Column [7])
- [31] Equals Column [30] x (1 + Column [7])
- [32] Equals Column [8]
- [33] Equals Column [32] + ((Column [36] - Column [32]) / 4)
- [34] Equals Column [33] + ((Column [36] - Column [32]) / 4)
- [35] Equals Column [34] + ((Column [36] - Column [32]) / 4)
- [36] Equals Column [9]
- [37] Equals Column [36] + ((Column [43] - Column [36]) / 7)
- [38] Equals Column [37] + ((Column [43] - Column [36]) / 7)
- [39] Equals Column [38] + ((Column [43] - Column [36]) / 7)
- [40] Equals Column [39] + ((Column [43] - Column [36]) / 7)
- [41] Equals Column [40] + ((Column [43] - Column [36]) / 7)
- [42] Equals Column [41] + ((Column [43] - Column [36]) / 7)
- [43] Equals Column [10]
- [44] Equals Column [10]
- [45] Equals Column [10]
- [46] Equals Column [10]
- [47] Equals Column [10]
- [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 [31] x Column [47]
- [64] Equals (Column [63] x (1 + Column [7])) / (Column [12] - Column [7])
- [65] Equals negative net present value; discount rate equals Column [12], cash flows equal Column [66] through Column [82]
- [66] Equals \$0.00
- [67] Equals Column [48] x (12/31/2014 - 10/17/2014) / 365
- [68] Equals Column [49] x (1 + (0.5 x Column [5]))
- [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]
- 82 Equals Column [63] + [64]

Ex-Ante Market Risk Premia

PNM Exhibit RBH-7

Is contained in the following 14 pages.

Ex-Ante Market Risk Premium
Market DCF Method Based - Bloomberg

[1]	[2]	[3]
S&P 500	Current 30-Year	
Est. Required	Treasury (30-day	Implied Market
Market Return	average)	Risk Premium
13.32%	3.18%	10.14%

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	17,152.56	0.10%	1.03%	8.32%	9.40%	0.0094%
ALCOA INC	AA	18,230.36	0.11%	0.78%	10.67%	11.48%	0.0122%
APPLE INC	AAPL	595,014.34	N/A	1.83%	NA	N/A	N/A
ABBVIE INC	ABBV	86,444.77	0.50%	3.10%	7.63%	10.85%	0.0546%
AMERISOURCEBERGEN CORP	ABC	16,871.26	0.10%	1.25%	12.03%	13.36%	0.0131%
ABBOTT LABORATORIES	ABT	61,937.36	0.36%	2.14%	10.79%	13.04%	0.0470%
ACE LTD	ACE	35,224.90	0.21%	2.45%	8.33%	10.87%	0.0223%
ACCENTURE PLC-CL A	ACN	50,853.04	0.30%	2.68%	10.45%	13.27%	0.0393%
ACTAVIS PLC	ACT	59,363.53	0.35%	0.00%	17.01%	17.01%	0.0588%
ADOBE SYSTEMS INC	ADBE	32,068.91	0.19%	0.00%	12.50%	12.50%	0.0233%
ANALOG DEVICES INC	ADI	14,174.14	0.08%	3.20%	11.80%	15.19%	0.0125%
ARCHER-DANIELS-MIDLAND CO	ADM	29,313.10	0.17%	1.97%	7.33%	9.38%	0.0160%
AUTOMATIC DATA PROCESSING	ADP	34,986.36	0.20%	2.54%	10.00%	12.67%	0.0258%
ALLIANCE DATA SYSTEMS CORP	ADS	14,482.89	0.08%	0.00%	16.38%	16.38%	0.0138%
AUTODESK INC	ADSK	11,634.51	0.07%	0.00%	11.64%	11.64%	0.0079%
ADT CORP/THE	ADT	5,710.95	0.03%	2.22%	5.40%	7.68%	0.0026%
AMEREN CORPORATION	AEE	9,773.33	0.06%	4.02%	6.93%	11.10%	0.0063%
AMERICAN ELECTRIC POWER	AEP	27,023.47	0.16%	3.70%	5.39%	9.18%	0.0144%
AES CORP	AES	9,568.85	0.06%	1.53%	7.37%	8.95%	0.0050%
AETNA INC	AET	26,938.96	0.16%	1.19%	11.87%	13.13%	0.0206%
AFLAC INC	AFL	25,877.98	0.15%	2.63%	9.25%	12.00%	0.0181%
ALLERGAN INC	AGN	53,606.02	0.31%	0.11%	21.00%	21.12%	0.0659%
AMERICAN INTERNATIONAL GROUP	AIG	72,614.12	0.42%	0.99%	9.38%	10.41%	0.0440%
APARTMENT INVT & MGMT CO -A	AIV	4,967.49	0.03%	3.07%	7.18%	10.36%	0.0030%
ASSURANT INC	AIZ	4,480.49	0.03%	1.69%	6.51%	8.25%	0.0022%
AKAMAI TECHNOLOGIES INC	AKAM	9,629.72	0.06%	0.00%	15.50%	15.50%	0.0087%
ALLSTATE CORP	ALL	26,333.40	0.15%	1.83%	8.43%	10.34%	0.0158%
ALLEGION PLC	ALLE	4,495.67	0.03%	0.67%	16.80%	17.53%	0.0046%
ALTERA CORP	ALTR	10,171.60	0.06%	1.93%	11.21%	13.25%	0.0078%
ALEXION PHARMACEUTICALS INC	ALXN	33,266.55	0.19%	0.00%	33.18%	33.18%	0.0643%
APPLIED MATERIALS INC	AMAT	24,433.25	0.14%	2.00%	17.38%	19.56%	0.0278%
AMETEK INC	AME	12,048.30	0.07%	0.61%	15.00%	15.66%	0.0110%
AFFILIATED MANAGERS GROUP	AMG	10,259.48	0.06%	0.00%	14.88%	14.88%	0.0089%
AMGEN INC	AMGN	102,767.26	0.60%	1.79%	8.59%	10.45%	0.0625%
AMERIPRISE FINANCIAL INC	AMP	21,159.28	0.12%	2.02%	13.00%	15.15%	0.0187%
AMERICAN TOWER CORP	AMT	37,087.02	0.22%	1.43%	22.05%	23.64%	0.0511%
AMAZON COM INC	AMZN	139,973.84	0.81%	0.00%	32.95%	32.95%	0.2685%
AUTONATION INC	AN	5,891.40	0.03%	0.00%	12.43%	12.43%	0.0043%
AON PLC	AON	23,332.06	0.14%	1.12%	14.08%	15.28%	0.0208%
APACHE CORP	APA	27,756.07	0.16%	1.36%	4.93%	6.32%	0.0102%
ANADARKO PETROLEUM CORP	APC	45,445.59	0.26%	1.10%	17.60%	18.80%	0.0497%
AIR PRODUCTS & CHEMICALS INC	APD	27,474.77	0.16%	2.31%	9.06%	11.47%	0.0183%
AMPHENOL CORP-CL A	APH	15,099.94	0.09%	1.05%	10.84%	11.94%	0.0105%
AIRGAS INC	ARG	8,208.84	0.05%	1.95%	11.98%	14.05%	0.0067%
ALLEGHENY TECHNOLOGIES INC	ATI	3,532.35	0.02%	2.22%	17.15%	19.56%	0.0040%
AVALONBAY COMMUNITIES INC	AVB	20,454.98	0.12%	3.09%	6.47%	9.66%	0.0115%
AVAGO TECHNOLOGIES LTD	AVGO	19,533.93	0.11%	1.41%	20.63%	22.18%	0.0252%
AVON PRODUCTS INC	AVP	4,985.10	0.03%	2.13%	6.97%	9.17%	0.0027%
AVERY DENNISON CORP	AVY	4,032.26	0.02%	2.86%	10.40%	13.41%	0.0031%
AMERICAN EXPRESS CO	AXP	87,597.69	0.51%	1.21%	9.82%	11.08%	0.0565%
AUTOZONE INC	AZO	16,756.15	0.10%	0.00%	13.39%	13.39%	0.0131%
BOEING CO/THE	BA	89,377.64	0.52%	2.36%	11.13%	13.62%	0.0709%
BANK OF AMERICA CORP	BAC	170,577.81	0.99%	0.74%	10.83%	11.60%	0.1152%
BAXTER INTERNATIONAL INC	BAX	36,655.04	0.21%	2.98%	9.63%	12.76%	0.0272%
BED BATH & BEYOND INC	BBBY	11,808.97	0.07%	0.00%	8.21%	8.21%	0.0056%
BB&T CORP	BBT	25,458.89	0.15%	2.69%	11.70%	14.54%	0.0215%
BEST BUY CO INC	BBY	11,117.44	0.06%	2.23%	13.01%	15.39%	0.0100%
CR BARD INC	BCR	10,909.54	0.06%	0.59%	10.78%	11.40%	0.0072%
BECTON DICKINSON AND CO	BDX	23,568.96	0.14%	1.75%	9.49%	11.32%	0.0155%
FRANKLIN RESOURCES INC	BEN	32,277.53	0.19%	0.93%	12.75%	13.74%	0.0258%
BROWN-FORMAN CORP-CLASS B	BF/B	18,404.00	0.11%	1.45%	9.60%	11.12%	0.0119%
BAKER HUGHES INC	BHI	22,791.89	0.13%	1.21%	33.10%	34.51%	0.0458%
BIOGEN IDEC INC	BIIB	73,393.77	0.43%	0.00%	18.37%	18.37%	0.0785%
BANK OF NEW YORK MELLON CORP	BK	41,093.91	0.24%	1.82%	9.10%	11.00%	0.0263%
BLACKROCK INC	BLK	52,764.21	0.31%	2.47%	12.37%	14.99%	0.0461%
BALL CORP	BLL	9,092.63	0.05%	0.80%	9.83%	10.67%	0.0057%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
BEMIS COMPANY	BMS	3,833.37	0.02%	2.79%	6.83%	9.72%	0.0022%
BRISTOL-MYERS SQUIBB CO	BMJ	83,359.45	0.49%	2.86%	12.08%	15.11%	0.0733%
BROADCOM CORP-CL A	BRM	21,281.91	0.12%	1.33%	10.28%	11.67%	0.0145%
BERKSHIRE HATHAWAY INC-CL B	BRK/B	336,795.59	1.96%	0.00%	3.20%	3.20%	0.0627%
BOSTON SCIENTIFIC CORP	BSX	15,260.22	0.09%	0.00%	10.33%	10.33%	0.0092%
BORGWARNER INC	BWA	12,411.98	0.07%	0.95%	13.91%	14.92%	0.0108%
BOSTON PROPERTIES INC	BXP	18,465.15	0.11%	3.46%	5.51%	9.07%	0.0097%
CITIGROUP INC	C	152,619.44	0.89%	0.08%	10.72%	10.80%	0.0960%
CA INC	CA	11,767.41	0.07%	3.78%	4.77%	8.64%	0.0059%
CONAGRA FOODS INC	CAG	14,533.35	0.08%	2.92%	9.37%	12.42%	0.0105%
CARDINAL HEALTH INC	CAH	24,781.01	0.14%	1.87%	12.16%	14.14%	0.0204%
CAMERON INTERNATIONAL CORP	CAM	11,750.02	0.07%	0.00%	19.20%	19.20%	0.0131%
CATERPILLAR INC	CAT	58,979.91	0.34%	2.71%	9.76%	12.60%	0.0433%
CHUBB CORP	CB	22,348.15	0.13%	2.15%	7.98%	10.21%	0.0133%
CBRE GROUP INC - A	CBG	9,754.30	0.06%	0.00%	12.17%	12.17%	0.0069%
CBS CORP-CLASS B NON VOTING	CBS	28,114.33	0.16%	1.00%	14.94%	16.02%	0.0262%
COCA-COLA ENTERPRISES	CCE	10,290.48	0.06%	2.36%	9.04%	11.51%	0.0069%
CROWN CASTLE INTL CORP	CCI	27,289.67	0.16%	1.72%	17.50%	19.37%	0.0308%
CARNIVAL CORP	CCL	27,791.66	0.16%	2.81%	17.03%	20.07%	0.0325%
CELGENE CORP	CELG	73,379.04	0.43%	0.00%	25.95%	25.95%	0.1109%
CERNER CORP	CERN	19,716.32	0.11%	0.00%	16.80%	16.80%	0.0193%
CF INDUSTRIES HOLDINGS INC	CF	12,311.39	0.07%	1.99%	12.14%	14.25%	0.0102%
CAREFUSION CORP	CFN	11,484.07	0.07%	0.00%	11.74%	11.74%	0.0078%
CHESAPEAKE ENERGY CORP	CHK	13,641.74	0.08%	1.70%	6.83%	8.58%	0.0068%
C.H. ROBINSON WORLDWIDE INC	CHRW	10,087.65	0.06%	2.06%	10.19%	12.35%	0.0073%
CIGNA CORP	CI	23,817.41	0.14%	0.04%	10.66%	10.70%	0.0148%
CINCINNATI FINANCIAL CORP	CINF	7,680.15	N/A	3.75%	NA	N/A	N/A
COLGATE-PALMOLIVE CO	CL	58,744.09	0.34%	2.25%	9.80%	12.16%	0.0416%
CLOROX COMPANY	CLX	12,555.62	0.07%	3.06%	7.02%	10.19%	0.0074%
COMERICA INC	CMA	7,934.64	0.05%	1.80%	10.63%	12.53%	0.0058%
COMCAST CORP-CLASS A	CMCSA	132,661.68	0.77%	1.75%	13.03%	14.89%	0.1150%
CME GROUP INC	CME	26,737.31	0.16%	4.65%	12.08%	17.01%	0.0265%
CHIPOTLE MEXICAN GRILL INC	CMG	20,173.80	0.12%	0.00%	23.36%	23.36%	0.0274%
CUMMINS INC	CMI	23,967.55	0.14%	2.07%	14.44%	16.67%	0.0233%
CMS ENERGY CORP	CMS	8,621.43	0.05%	3.46%	6.00%	9.56%	0.0048%
CENTERPOINT ENERGY INC	CNP	10,087.31	0.06%	4.05%	5.45%	9.61%	0.0056%
CONSOL ENERGY INC	CNX	7,989.09	0.05%	0.72%	9.70%	10.46%	0.0049%
CAPITAL ONE FINANCIAL CORP	COF	42,929.66	0.25%	1.57%	5.50%	7.11%	0.0178%
CABOT OIL & GAS CORP	COG	12,886.04	0.08%	0.26%	43.96%	44.28%	0.0332%
COACH INC	COH	9,579.49	0.06%	3.88%	8.31%	12.36%	0.0069%
ROCKWELL COLLINS INC	COL	10,344.53	0.06%	1.61%	9.50%	11.19%	0.0067%
CONOCOPHILLIPS	COP	84,077.86	0.49%	4.13%	6.07%	10.32%	0.0505%
COSTCO WHOLESALE CORP	COST	55,889.08	0.33%	1.13%	10.70%	11.89%	0.0387%
COVIDIEN PLC	COV	38,006.55	0.22%	1.52%	9.42%	11.02%	0.0244%
CAMPBELL SOUP CO	CPB	13,382.60	0.08%	3.18%	4.56%	7.81%	0.0061%
SALESFORCE COM INC	CRM	34,564.96	0.20%	0.00%	20.98%	20.98%	0.0422%
COMPUTER SCIENCES CORP	CSC	8,167.13	0.05%	1.61%	9.55%	11.24%	0.0053%
CISCO SYSTEMS INC	CSCO	116,943.60	0.68%	3.20%	8.80%	12.14%	0.0827%
CSX CORP	CSX	33,155.82	0.19%	1.90%	11.88%	13.89%	0.0268%
CINTAS CORP	CTAS	8,069.22	0.05%	1.18%	10.68%	11.92%	0.0056%
CENTURYLINK INC	CTL	22,287.74	0.13%	5.53%	0.07%	5.59%	0.0073%
COGNIZANT TECH SOLUTIONS-A	CTSH	26,584.53	0.15%	0.00%	17.39%	17.39%	0.0269%
CITRIX SYSTEMS INC	CTXS	10,715.24	0.06%	0.00%	14.13%	14.13%	0.0088%
CABLEVISION SYSTEMS-NY GRP-A	CVC	4,777.37	0.03%	3.41%	-4.28%	-0.94%	-0.0003%
CVS HEALTH CORP	CVS	94,144.07	0.55%	1.35%	14.13%	15.57%	0.0854%
CHEVRON CORP	CVX	211,307.44	1.23%	3.77%	5.71%	9.59%	0.1180%
DOMINION RESOURCES INC/VA	D	40,332.27	0.23%	3.47%	6.16%	9.73%	0.0229%
DELTA AIR LINES INC	DAL	30,044.73	0.17%	0.82%	11.72%	12.58%	0.0220%
DU PONT (E.I.) DE NEMOURS	DD	61,897.82	0.36%	2.76%	7.62%	10.48%	0.0378%
DEERE & CO	DE	29,512.34	0.17%	2.55%	6.38%	9.02%	0.0155%
DISCOVER FINANCIAL SERVICES	DFS	28,901.36	0.17%	1.48%	9.93%	11.48%	0.0193%
DOLLAR GENERAL CORP	DG	18,431.37	0.11%	0.00%	13.34%	13.34%	0.0143%
QUEST DIAGNOSTICS INC	DGX	8,510.36	0.05%	2.24%	8.87%	11.21%	0.0056%
DR HORTON INC	DHI	8,062.13	0.05%	0.71%	10.71%	11.46%	0.0054%
DANAHER CORP	DHR	52,371.60	0.30%	0.46%	11.25%	11.73%	0.0358%
WALT DISNEY CO/THE	DIS	145,906.29	0.85%	1.01%	11.54%	12.61%	0.1071%
DISCOVERY COMMUNICATIONS-A	DISCA	23,321.90	0.14%	0.00%	19.68%	19.68%	0.0267%
DISCOVERY COMMUNICATIONS-C	DISCK	23,327.86	0.14%	0.00%	19.68%	19.68%	0.0267%
DELPHI AUTOMOTIVE PLC	DLPH	18,927.75	0.11%	1.58%	13.71%	15.40%	0.0170%
DOLLAR TREE INC	DLTR	11,683.65	0.07%	0.00%	15.70%	15.70%	0.0107%
DUN & BRADSTREET CORP	DNB	4,225.08	0.02%	1.48%	9.55%	11.10%	0.0027%
DENBURY RESOURCES INC	DNR	4,382.48	0.03%	2.01%	5.65%	7.72%	0.0020%
DIAMOND OFFSHORE DRILLING	DO	5,125.14	0.03%	9.38%	-7.00%	2.05%	0.0006%
DOVER CORP	DOV	12,311.22	0.07%	2.08%	11.88%	14.08%	0.0101%
DOW CHEMICAL CO/THE	DOW	55,417.86	0.32%	3.18%	6.54%	9.82%	0.0317%
DR PEPPER SNAPPLE GROUP INC	DPS	12,599.28	0.07%	2.52%	7.28%	9.90%	0.0073%
DARDEN RESTAURANTS INC	DRI	6,482.48	0.04%	4.50%	12.90%	17.69%	0.0067%

Company	Ticker	[4]	[5]	[6]	[7]	[8]	[9]
		Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est	DCF Result	Weighted DCF Result
DTE ENERGY COMPANY	DTE	13,832.03	0.08%	3.45%	5.50%	9.04%	0.0073%
DIRECTV	DTV	42,744.70	0.25%	0.00%	6.85%	6.85%	0.0170%
DUKE ENERGY CORP	DUK	56,072.50	0.33%	3.99%	4.77%	8.85%	0.0289%
DAVITA HEALTHCARE PARTNERS I	DVA	15,719.06	0.09%	0.00%	8.66%	8.66%	0.0079%
DEVON ENERGY CORP	DVN	23,633.71	0.14%	1.63%	10.18%	11.89%	0.0164%
ELECTRONIC ARTS INC	EA	10,847.67	0.06%	0.00%	9.90%	9.90%	0.0063%
EBAY INC	EBAY	60,596.46	0.35%	0.00%	12.75%	12.75%	0.0450%
ECOLAB INC	ECL	32,722.60	0.19%	1.01%	14.27%	15.35%	0.0292%
CONSOLIDATED EDISON INC	ED	17,959.71	0.10%	4.09%	3.49%	7.66%	0.0080%
EQUIFAX INC	EFX	8,833.72	0.05%	1.38%	12.05%	13.51%	0.0069%
EDISON INTERNATIONAL	EIX	19,405.32	0.11%	2.41%	5.08%	7.55%	0.0085%
ESTEE LAUDER COMPANIES-CL A	EL	27,721.27	0.16%	1.22%	11.49%	12.78%	0.0206%
EMC CORP/MA	EMC	54,520.19	0.32%	1.63%	10.66%	12.38%	0.0393%
EASTMAN CHEMICAL CO	EMN	11,216.16	0.07%	1.86%	7.80%	9.73%	0.0064%
EMERSON ELECTRIC CO	EMR	42,628.66	0.25%	2.81%	8.60%	11.53%	0.0286%
EOG RESOURCES INC	EOG	50,617.74	0.29%	0.59%	9.22%	9.84%	0.0290%
EQUITY RESIDENTIAL	EQR	24,171.65	0.14%	3.00%	6.67%	9.76%	0.0137%
EQT CORP	EQT	12,574.67	0.07%	0.16%	30.00%	30.18%	0.0221%
EXPRESS SCRIPTS HOLDING CO	ESRX	53,016.40	0.31%	0.00%	13.50%	13.50%	0.0417%
ESSEX PROPERTY TRUST INC	ESS	12,026.69	0.07%	2.67%	5.95%	8.69%	0.0061%
ENSCO PLC-CL A	ESV	8,915.44	0.05%	7.89%	2.77%	10.77%	0.0056%
E*TRADE FINANCIAL CORP	ETFC	5,889.86	0.03%	0.00%	40.00%	40.00%	0.0137%
EATON CORP PLC	ETN	28,868.09	0.17%	3.24%	9.95%	13.35%	0.0224%
ENERGY CORP	ETR	14,314.76	0.08%	4.17%	2.70%	6.92%	0.0058%
EDWARDS LIFESCIENCES CORP	EW	10,734.82	0.06%	0.00%	13.95%	13.95%	0.0087%
EXELON CORP	EXC	29,994.58	0.17%	3.55%	5.50%	9.15%	0.0160%
EXPEDITORS INTL WASH INC	EXPD	7,749.69	0.05%	1.61%	8.77%	10.45%	0.0047%
EXPEDIA INC	EXPE	9,724.80	0.06%	0.84%	18.25%	19.17%	0.0109%
FORD MOTOR CO	F	54,647.48	0.32%	3.46%	9.31%	12.93%	0.0411%
FASTENAL CO	FAST	12,207.43	0.07%	2.43%	16.38%	19.00%	0.0135%
FACEBOOK INC-A	FB	198,422.20	1.16%	0.00%	35.21%	35.21%	0.4067%
FREEMPORT-MCMORAN INC	FCX	32,002.62	0.19%	4.06%	10.11%	14.37%	0.0268%
FAMILY DOLLAR STORES	FDX	8,754.75	0.05%	1.65%	5.92%	7.62%	0.0039%
FEDEX CORP	FDX	43,866.37	0.26%	0.51%	14.01%	14.56%	0.0372%
FIRSTENERGY CORP	FE	14,674.23	0.09%	4.12%	3.24%	7.43%	0.0063%
F5 NETWORKS INC	FFIV	8,271.49	0.05%	0.00%	16.84%	16.84%	0.0081%
FIDELITY NATIONAL INFORMATIO	FIS	15,281.30	0.09%	1.76%	12.00%	13.86%	0.0123%
FISERV INC	FISV	15,673.40	0.09%	0.00%	11.50%	11.50%	0.0105%
FIFTH THIRD BANCORP	FITB	15,274.83	0.09%	2.79%	10.46%	13.39%	0.0119%
FLIR SYSTEMS INC	FLIR	4,093.14	0.02%	1.44%	14.00%	15.54%	0.0037%
FLUOR CORP	FLR	9,824.07	0.06%	1.34%	11.54%	12.95%	0.0074%
FLOWSERVE CORP	FLS	8,804.71	0.05%	0.99%	12.49%	13.55%	0.0069%
FMC CORP	FMC	7,537.45	0.04%	1.14%	9.00%	10.20%	0.0045%
FOSSIL GROUP INC	FOSL	5,113.10	0.03%	0.00%	13.92%	13.92%	0.0041%
TWENTY-FIRST CENTURY FOX-A	FOXA	71,204.37	0.41%	0.80%	16.68%	17.55%	0.0727%
FIRST SOLAR INC	FSLR	5,409.43	0.03%	0.00%	-3.28%	-3.28%	-0.0010%
FMC TECHNOLOGIES INC	FTI	11,911.97	0.07%	0.00%	19.15%	19.15%	0.0133%
FRONTIER COMMUNICATIONS CORP	FTR	6,092.79	0.04%	6.58%	3.00%	9.68%	0.0034%
AGL RESOURCES INC	GAS	6,277.40	0.04%	3.75%	5.53%	9.38%	0.0034%
GANNETT CO	GCI	6,566.33	0.04%	2.93%	8.85%	11.91%	0.0046%
GENERAL DYNAMICS CORP	GD	40,415.46	0.24%	2.04%	7.24%	9.35%	0.0220%
GENERAL ELECTRIC CO	GE	250,345.90	1.46%	3.54%	8.92%	12.61%	0.1838%
GENERAL GROWTH PROPERTIES	GGP	21,423.88	0.12%	2.47%	5.79%	8.33%	0.0104%
GILEAD SCIENCES INC	GILD	154,039.22	0.90%	0.00%	24.95%	24.95%	0.2238%
GENERAL MILLS INC	GIS	30,060.60	0.18%	3.34%	7.75%	11.22%	0.0196%
CORNING INC	GLW	23,199.76	0.14%	2.28%	10.16%	12.56%	0.0170%
GENERAL MOTORS CO	GM	48,573.72	0.28%	4.01%	10.62%	14.84%	0.0420%
KEURIG GREEN MOUNTAIN INC	GMCR	23,151.70	0.13%	0.59%	15.83%	16.48%	0.0222%
GAMESTOP CORP-CLASS A	GME	4,537.11	0.03%	3.28%	15.37%	18.89%	0.0050%
GENWORTH FINANCIAL INC-CL A	GNW	6,336.83	0.04%	0.00%	5.00%	5.00%	0.0018%
GOOGLE INC-CL C	GOOG	352,818.97	2.05%	0.00%	17.72%	17.72%	0.3639%
GENUINE PARTS CO	GPC	13,566.72	0.08%	2.60%	6.62%	9.30%	0.0073%
GAP INC/THE	GPS	15,720.39	0.09%	2.35%	12.94%	15.44%	0.0141%
GARMIN LTD	GRMN	10,100.80	0.06%	3.59%	6.73%	10.44%	0.0061%
GOLDMAN SACHS GROUP INC	GS	80,852.96	0.47%	1.27%	8.28%	9.61%	0.0452%
GOODYEAR TIRE & RUBBER CO	GT	5,623.26	0.03%	1.01%	9.02%	10.07%	0.0033%
WW GRAINGER INC	GWW	15,727.62	0.09%	1.81%	13.02%	14.94%	0.0137%
HALLIBURTON CO	HAL	45,069.46	0.26%	1.20%	17.84%	19.15%	0.0502%
HARMAN INTERNATIONAL	HAR	6,285.99	0.04%	1.37%	15.55%	17.02%	0.0062%
HASBRO INC	HAS	7,135.22	0.04%	3.05%	11.30%	14.52%	0.0060%
HUNTINGTON BANCSHARES INC	HBAN	7,463.32	0.04%	2.30%	10.98%	13.41%	0.0058%
HUDSON CITY BANCORP INC	HCBK	4,679.57	N/A	1.81%	NA	N/A	N/A
HEALTH CARE REIT INC	HCN	22,110.03	0.13%	4.69%	5.49%	10.30%	0.0133%
HCP INC	HCP	19,628.36	0.11%	5.10%	4.02%	9.22%	0.0105%
HOME DEPOT INC	HD	123,151.82	0.72%	2.05%	15.71%	17.92%	0.1285%
HESS CORP	HES	24,464.10	0.14%	1.26%	9.17%	10.49%	0.0149%
HARTFORD FINANCIAL SVCS GRP	HIG	16,393.74	0.10%	1.81%	9.00%	10.89%	0.0104%

Company	Ticker	[4]	[5]	[6]	[7]	[8]	[9]
		Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
HARLEY-DAVIDSON INC	HOG	12,671.64	0.07%	1.89%	11.75%	13.75%	0.0101%
HONEYWELL INTERNATIONAL INC	HON	70,038.04	0.41%	2.06%	10.05%	12.22%	0.0498%
STARWOOD HOTELS & RESORTS	HOT	14,615.03	0.09%	1.82%	10.29%	12.20%	0.0104%
HELMERICH & PAYNE	HP	9,384.36	0.05%	2.84%	13.00%	16.02%	0.0088%
HEWLETT-PACKARD CO	HPQ	62,669.53	0.36%	1.81%	6.63%	8.50%	0.0310%
H&R BLOCK INC	HRB	8,280.16	0.05%	2.66%	11.00%	13.80%	0.0067%
HORMEL FOODS CORP	HRL	13,491.61	0.08%	1.55%	8.10%	9.72%	0.0076%
HARRIS CORP	HRS	6,752.99	N/A	2.66%	NA	N/A	N/A
HOSPIRA INC	HSP	8,406.22	0.05%	0.00%	14.01%	14.01%	0.0069%
HOST HOTELS & RESORTS INC	HST	16,485.40	0.10%	3.10%	10.72%	13.99%	0.0134%
HERSHEY CO/THE	HSY	20,574.61	0.12%	2.16%	9.50%	11.77%	0.0141%
HUMANA INC	HUM	19,895.80	0.12%	0.86%	9.05%	9.95%	0.0115%
INTL BUSINESS MACHINES CORP	IBM	167,379.30	0.97%	2.51%	9.05%	11.68%	0.1138%
INTERCONTINENTAL EXCHANGE IN	ICE	22,534.14	0.13%	1.31%	16.57%	18.00%	0.0236%
INTL FLAVORS & FRAGRANCES	IFF	7,754.94	0.05%	1.81%	8.33%	10.22%	0.0046%
INTEL CORP	INTC	155,362.38	0.90%	2.89%	7.41%	10.41%	0.0942%
INTUIT INC	INTU	23,031.67	0.13%	1.11%	14.42%	15.61%	0.0209%
INTERNATIONAL PAPER CO	IP	20,441.56	0.12%	3.05%	5.95%	9.09%	0.0108%
INTERPUBLIC GROUP OF COS INC	IPG	7,344.95	0.04%	2.16%	10.93%	13.20%	0.0056%
INGERSOLL-RAND PLC	IR	15,221.18	0.09%	1.77%	12.18%	14.05%	0.0125%
IRON MOUNTAIN INC	IRM	6,370.84	0.04%	10.43%	12.77%	23.86%	0.0088%
INTUITIVE SURGICAL INC	ISRG	17,353.84	0.10%	0.00%	8.37%	8.37%	0.0085%
ILLINOIS TOOL WORKS	ITW	32,942.30	0.19%	2.10%	11.80%	14.03%	0.0269%
INVESCO LTD	IVZ	15,820.09	0.09%	2.71%	12.92%	15.81%	0.0146%
JABIL CIRCUIT INC	JBL	3,710.84	0.02%	1.80%	10.00%	11.89%	0.0026%
JOHNSON CONTROLS INC	JCI	26,996.04	0.16%	2.15%	11.86%	14.14%	0.0222%
JACOBS ENGINEERING GROUP INC	JEC	6,047.44	0.04%	0.00%	10.49%	10.49%	0.0037%
JOHNSON & JOHNSON	JNJ	277,882.91	1.62%	2.81%	6.96%	9.86%	0.1596%
JUNIPER NETWORKS INC	JNPR	8,924.50	0.05%	0.73%	9.76%	10.53%	0.0055%
JOY GLOBAL INC	JOY	5,005.97	0.03%	1.46%	9.65%	11.18%	0.0033%
JPMORGAN CHASE & CO	JPM	212,813.27	1.24%	2.79%	6.66%	9.55%	0.1183%
NORDSTROM INC	JWN	13,349.88	0.08%	1.88%	11.09%	13.07%	0.0102%
KELLOGG CO	K	22,098.93	0.13%	3.06%	6.14%	9.30%	0.0120%
KEYCORP	KEY	10,926.61	0.06%	2.00%	7.33%	9.41%	0.0060%
KIMCO REALTY CORP	KIM	9,470.73	0.06%	3.93%	3.39%	7.38%	0.0041%
KLA-TENCOR CORP	KLAC	11,404.58	0.07%	2.80%	19.62%	22.69%	0.0151%
KIMBERLY-CLARK CORP	KMB	40,226.54	0.23%	3.11%	7.27%	10.50%	0.0246%
KINDER MORGAN INC	KMI	38,249.90	0.22%	4.64%	19.65%	24.74%	0.0551%
CARMAX INC	KMX	10,092.33	0.06%	0.00%	13.76%	13.76%	0.0081%
COCA-COLA CO/THE	KO	189,428.05	1.10%	2.82%	6.89%	9.80%	0.1081%
MICHAEL KORS HOLDINGS LTD	KORS	15,001.71	0.09%	0.00%	23.39%	23.39%	0.0204%
KROGER CO	KR	25,821.55	0.15%	1.32%	11.07%	12.46%	0.0187%
KRAFT FOODS GROUP INC	KRFT	33,102.00	0.19%	3.83%	8.36%	12.35%	0.0238%
KOHL'S CORP	KSS	11,696.80	0.07%	2.73%	5.94%	8.75%	0.0060%
KANSAS CITY SOUTHERN	KSU	12,926.51	0.08%	0.93%	19.42%	20.44%	0.0154%
LOEWS CORP	L	15,728.33	N/A	0.61%	NA	N/A	N/A
L BRANDS INC	LB	19,982.19	0.12%	2.88%	12.22%	15.27%	0.0178%
LEGGETT & PLATT INC	LEG	4,762.93	0.03%	3.46%	15.00%	18.72%	0.0052%
LENNAR CORP-A	LEN	8,543.59	0.05%	0.37%	16.50%	16.90%	0.0084%
LABORATORY CRP OF AMER HLDGS	LH	8,367.74	0.05%	0.00%	9.11%	9.11%	0.0044%
L-3 COMMUNICATIONS HOLDINGS	LLL	9,258.50	0.05%	2.19%	3.93%	6.16%	0.0033%
LINEAR TECHNOLOGY CORP	LLTC	9,616.75	0.06%	2.79%	9.51%	12.44%	0.0070%
ELI LILLY & CO	LLY	70,099.92	0.41%	3.13%	1.80%	4.96%	0.0202%
LEGG MASON INC	LM	5,687.68	0.03%	1.32%	13.49%	14.90%	0.0049%
LOCKHEED MARTIN CORP	LMT	55,546.08	0.32%	3.14%	7.87%	11.13%	0.0360%
LINCOLN NATIONAL CORP	LNC	12,557.66	0.07%	1.35%	11.65%	13.07%	0.0096%
LORILLARD INC	LO	21,295.02	0.12%	4.14%	9.26%	13.58%	0.0168%
LOWE'S COS INC	LOW	52,662.34	0.31%	1.57%	15.95%	17.64%	0.0541%
LAM RESEARCH CORP	LRCX	11,504.08	0.07%	1.02%	32.89%	34.07%	0.0228%
LEUCADIA NATIONAL CORP	LUK	8,185.07	N/A	0.00%	NA	N/A	N/A
SOUTHWEST AIRLINES CO	LUV	22,232.80	0.13%	0.70%	18.08%	18.84%	0.0244%
LYONDELLBASELL INDU-CL A	LYB	46,642.40	0.27%	2.93%	6.50%	9.52%	0.0259%
MACY'S INC	M	20,029.36	0.12%	2.09%	9.68%	11.88%	0.0138%
MASTERCARD INC-CLASS A	MA	83,153.91	0.48%	0.61%	16.64%	17.30%	0.0838%
MACERICH CO/THE	MAC	9,367.34	0.05%	3.75%	4.40%	8.24%	0.0045%
MARRIOTT INTERNATIONAL -CL A	MAR	19,331.62	0.11%	1.13%	10.75%	11.94%	0.0134%
MASCO CORP	MAS	7,898.98	0.05%	1.47%	11.93%	13.48%	0.0062%
MATTEL INC	MAT	9,898.94	0.06%	5.19%	6.25%	11.61%	0.0067%
MCDONALD'S CORP	MCD	89,394.84	0.52%	3.62%	7.43%	11.18%	0.0582%
MICROCHIP TECHNOLOGY INC	MCHP	7,769.54	0.05%	3.62%	6.30%	10.04%	0.0045%
MCKESSON CORP	MCK	44,515.69	0.26%	0.50%	15.10%	15.64%	0.0405%
MOODY'S CORP	MCO	19,301.57	0.11%	1.22%	13.50%	14.80%	0.0166%
MONDELEZ INTERNATIONAL INC-A	MDLZ	55,246.56	0.32%	1.79%	13.70%	15.61%	0.0502%
MEDTRONIC INC	MDT	62,551.92	0.36%	1.91%	7.93%	9.92%	0.0361%
METLIFE INC	MET	55,179.01	0.32%	2.71%	7.43%	10.25%	0.0329%
MCGRAW HILL FINANCIAL INC	MHFI	21,669.29	0.13%	1.50%	11.38%	12.96%	0.0164%
MOHAWK INDUSTRIES INC	MHK	9,399.54	0.05%	0.00%	10.60%	10.60%	0.0058%

Company	Ticker	[4]	[5]	[6]	[7]	[8]	[9]
		Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
MEAD JOHNSON NUTRITION CO	MJN	19,448.33	0.11%	1.56%	10.53%	12.17%	0.0138%
MCCORMICK & CO-NON VTG SHRS	MKC	8,725.93	0.05%	2.18%	7.73%	10.00%	0.0051%
MARTIN MARIETTA MATERIALS	MLM	7,959.98	0.05%	1.35%	19.15%	20.63%	0.0096%
MARSH & MCLENNAN COS	MMC	27,498.89	0.16%	2.11%	11.36%	13.60%	0.0218%
3M CO	MMM	88,856.01	0.52%	2.50%	9.33%	11.94%	0.0618%
MALLINCKRODT PLC	MNK	9,818.58	0.06%	0.00%	23.36%	23.36%	0.0134%
MONSTER BEVERAGE CORP	MNST	15,768.07	0.09%	0.00%	21.87%	21.87%	0.0201%
ALTRIA GROUP INC	MO	91,833.68	0.53%	4.35%	7.77%	12.29%	0.0657%
MONSANTO CO	MON	58,707.27	0.34%	1.72%	11.65%	13.47%	0.0460%
MOSAIC CO/THE	MOS	15,638.10	0.09%	2.42%	18.33%	20.96%	0.0191%
MARATHON PETROLEUM CORP	MPC	22,782.18	0.13%	2.26%	11.35%	13.74%	0.0182%
MERCK & CO INC	MRK	155,856.67	0.91%	3.27%	4.92%	8.27%	0.0751%
MARATHON OIL CORP	MRO	23,026.90	0.13%	2.33%	9.05%	11.48%	0.0154%
MORGAN STANLEY	MS	65,418.97	0.38%	1.09%	35.88%	37.16%	0.1415%
MICROSOFT CORP	MSFT	361,564.56	2.11%	2.66%	8.31%	11.08%	0.2332%
MOTOROLA SOLUTIONS INC	MSI	15,208.26	0.09%	2.12%	6.33%	8.52%	0.0075%
M & T BANK CORP	MTB	14,925.35	0.09%	2.48%	5.67%	8.21%	0.0071%
MICRON TECHNOLOGY INC	MU	31,439.37	0.18%	0.11%	12.77%	12.89%	0.0236%
MURPHY OIL CORP	MUR	9,112.97	0.05%	2.59%	7.27%	9.95%	0.0053%
MEADWESTVACO CORP	MWV	6,835.31	0.04%	3.58%	7.65%	11.37%	0.0045%
MYLAN INC	MYL	18,784.66	0.11%	0.00%	11.76%	11.76%	0.0129%
NAVIENT CORP	NAVI	7,778.49	N/A	3.24%	NA	N/A	N/A
NOBLE ENERGY INC	NBL	20,727.26	0.12%	1.14%	12.48%	13.69%	0.0165%
NABORS INDUSTRIES LTD	NBR	5,311.46	0.03%	1.07%	36.42%	37.69%	0.0117%
NASDAQ OMX GROUP/THE	NDAQ	6,862.49	0.04%	1.44%	10.37%	11.88%	0.0047%
NOBLE CORP PLC	NE	5,141.32	0.03%	7.66%	2.00%	9.73%	0.0029%
NEXTERA ENERGY INC	NEE	41,357.92	0.24%	3.04%	6.17%	9.30%	0.0224%
NEWMONT MINING CORP	NEM	11,356.74	0.07%	0.89%	-1.28%	-0.39%	-0.0003%
NETFLIX INC	NFLX	21,691.05	0.13%	0.00%	26.60%	26.60%	0.0336%
NEWFIELD EXPLORATION CO	NFX	3,837.23	0.02%	0.00%	9.00%	9.00%	0.0020%
NISOURCE INC	NI	12,757.77	0.07%	2.53%	5.89%	8.49%	0.0063%
NIKE INC -CL B	NKE	76,062.58	0.44%	1.16%	13.33%	14.57%	0.0645%
NIELSEN NV	NLSN	16,025.65	0.09%	2.23%	16.17%	18.58%	0.0173%
NORTHROP GRUMMAN CORP	NOC	25,796.88	0.15%	2.20%	7.61%	9.89%	0.0149%
NATIONAL OILWELL VARCO INC	NOV	30,379.15	0.18%	2.19%	10.03%	12.33%	0.0218%
NRG ENERGY INC	NRG	9,570.71	0.06%	1.87%	41.50%	43.76%	0.0244%
NORFOLK SOUTHERN CORP	NSC	32,960.27	0.19%	2.07%	12.66%	14.86%	0.0285%
NETAPP INC	NTAP	12,176.42	0.07%	1.73%	12.80%	14.64%	0.0104%
NORTHERN TRUST CORP	NTRS	15,027.97	0.09%	2.04%	14.74%	16.93%	0.0148%
NORTHEAST UTILITIES	NU	15,170.70	0.09%	3.27%	6.73%	10.10%	0.0089%
NUCOR CORP	NUE	15,954.90	0.09%	2.96%	13.90%	17.06%	0.0158%
NVIDIA CORP	NVDA	9,510.61	0.06%	1.95%	9.70%	11.75%	0.0065%
NEWELL RUBBERMAID INC	NWL	9,136.71	0.05%	1.99%	9.90%	11.99%	0.0064%
NEWS CORP - CLASS A	NWSA	8,498.70	0.05%	0.31%	7.05%	7.37%	0.0036%
OWENS-ILLINOIS INC	OI	4,152.42	0.02%	0.00%	4.16%	4.16%	0.0010%
ONEOK INC	OKE	12,080.79	0.07%	3.91%	9.00%	13.08%	0.0092%
OMNICOM GROUP	OMC	16,885.30	0.10%	2.75%	6.67%	9.51%	0.0093%
ORACLE CORP	ORCL	166,572.72	0.97%	1.29%	9.59%	10.94%	0.1061%
O'REILLY AUTOMOTIVE INC	ORLY	15,909.58	0.09%	0.00%	18.92%	18.92%	0.0175%
OCCIDENTAL PETROLEUM CORP	OXY	68,880.16	0.40%	3.24%	6.05%	9.38%	0.0376%
PAYCHEX INC	PAYX	15,779.38	0.09%	3.42%	9.83%	13.41%	0.0123%
PEOPLE'S UNITED FINANCIAL	PBCT	4,319.45	0.03%	4.73%	13.66%	16.92%	0.0048%
PITNEY BOWES INC	PBI	4,877.62	N/A	3.12%	NA	N/A	N/A
PACCAR INC	PCAR	20,434.68	0.12%	2.09%	9.80%	11.99%	0.0143%
P G & E CORP	PCG	21,227.66	0.12%	4.05%	6.85%	11.04%	0.0136%
PLUM CREEK TIMBER CO	PCL	7,210.76	0.04%	4.34%	7.40%	11.90%	0.0050%
PRICELINE GROUP INC/THE	PCLN	57,584.96	0.34%	0.00%	22.92%	22.92%	0.0768%
PRECISION CASTPARTS CORP	PCP	32,452.31	0.19%	0.05%	11.60%	11.66%	0.0220%
PATTERSON COS INC	PDCO	4,206.88	0.02%	2.08%	10.86%	13.06%	0.0032%
PUBLIC SERVICE ENTERPRISE GP	PEG	19,274.29	0.11%	3.89%	4.53%	8.51%	0.0095%
PEPSICO INC	PEP	139,678.24	0.81%	2.70%	7.83%	10.64%	0.0865%
PETSMART INC	PETM	6,709.87	0.04%	0.99%	11.25%	12.30%	0.0048%
PFIZER INC	PFE	176,275.99	1.03%	3.74%	2.48%	6.26%	0.0643%
PRINCIPAL FINANCIAL GROUP	PFG	14,419.03	0.08%	2.59%	13.50%	16.26%	0.0137%
PROCTER & GAMBLE CO/THE	PG	227,280.34	1.32%	3.08%	8.53%	11.74%	0.1554%
PROGRESSIVE CORP	PGR	14,710.61	0.09%	3.98%	8.25%	12.40%	0.0106%
PARKER HANNIFIN CORP	PH	15,809.00	0.09%	1.94%	10.19%	12.23%	0.0113%
PULTEGROUP INC	PHM	7,056.50	0.04%	1.07%	5.33%	6.43%	0.0028%
PERKINELMER INC	PKI	4,516.78	0.03%	0.70%	13.37%	14.11%	0.0037%
PROLOGIS INC	PLD	19,749.64	0.11%	3.32%	9.59%	13.06%	0.0150%
PALL CORP	PLL	8,849.80	0.05%	1.39%	12.44%	13.92%	0.0072%
PHILIP MORRIS INTERNATIONAL	PM	134,936.88	0.79%	4.48%	6.88%	11.52%	0.0905%
PNC FINANCIAL SERVICES GROUP	PNC	43,088.55	0.25%	2.36%	5.21%	7.63%	0.0192%
PENTAIR PLC	PNR	12,321.97	0.07%	1.72%	14.75%	16.60%	0.0119%
PINNACLE WEST CAPITAL	PNW	6,437.94	0.04%	3.95%	4.47%	8.52%	0.0032%
PEPCO HOLDINGS INC	POM	6,766.85	0.04%	4.01%	6.67%	10.82%	0.0043%
PPG INDUSTRIES INC	PPG	26,052.11	0.15%	1.38%	8.13%	9.56%	0.0145%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
PPL CORP	PPL	22,469.37	0.13%	4.41%	4.47%	8.97%	0.0117%
PERRIGO CO PLC	PRGO	20,027.80	0.12%	0.28%	11.81%	12.11%	0.0141%
PRUDENTIAL FINANCIAL INC	PRU	37,117.40	0.22%	2.60%	10.67%	13.40%	0.0290%
PUBLIC STORAGE	PSA	29,785.63	0.17%	3.26%	4.21%	7.56%	0.0131%
PHILLIPS 66	PSX	40,279.10	0.23%	2.51%	7.83%	10.44%	0.0245%
PVH CORP	PVH	9,139.06	0.05%	0.15%	11.04%	11.20%	0.0060%
QUANTA SERVICES INC	PWR	6,670.02	0.04%	0.00%	11.75%	11.75%	0.0046%
PRAXAIR INC	PX	36,436.80	0.21%	2.08%	10.40%	12.59%	0.0267%
PIONEER NATURAL RESOURCES CO	PXD	25,671.85	0.15%	0.04%	19.00%	19.04%	0.0285%
QUALCOMM INC	QCOM	122,215.64	0.71%	2.09%	13.56%	15.79%	0.1124%
QEP RESOURCES INC	QEP	4,374.42	0.03%	0.33%	15.00%	15.35%	0.0039%
RYDER SYSTEM INC	R	4,417.36	0.03%	1.71%	12.88%	14.69%	0.0038%
REYNOLDS AMERICAN INC	RAI	31,398.86	0.18%	4.52%	6.70%	11.38%	0.0208%
REGENERON PHARMACEUTICALS	REGN	36,656.51	0.21%	0.00%	21.22%	21.22%	0.0453%
REGIONS FINANCIAL CORP	RF	12,730.51	0.07%	1.95%	5.26%	7.26%	0.0054%
ROBERT HALF INTL INC	RHI	6,414.53	0.04%	1.54%	16.23%	17.89%	0.0067%
RED HAT INC	RHT	10,548.10	0.06%	0.00%	16.72%	16.72%	0.0103%
TRANSOCEAN LTD	RIG	10,525.22	0.06%	9.85%	12.05%	22.49%	0.0138%
RALPH LAUREN CORP	RL	13,767.10	0.08%	1.18%	12.55%	13.81%	0.0111%
ROCKWELL AUTOMATION INC	ROK	14,417.32	0.08%	2.20%	10.57%	12.89%	0.0108%
ROPER INDUSTRIES INC	ROP	14,440.96	0.08%	0.55%	12.10%	12.68%	0.0107%
ROSS STORES INC	ROST	16,318.61	0.10%	0.99%	11.23%	12.28%	0.0117%
RANGE RESOURCES CORP	RRC	11,135.73	0.06%	0.24%	26.97%	27.24%	0.0177%
REPUBLIC SERVICES INC	RSG	13,573.42	0.08%	2.78%	6.55%	9.42%	0.0074%
RAYTHEON COMPANY	RTN	29,953.31	0.17%	2.47%	8.50%	11.08%	0.0193%
STARBUCKS CORP	SBUX	55,874.26	0.33%	1.42%	18.06%	19.61%	0.0638%
SCANA CORP	SCG	7,383.91	0.04%	4.02%	5.65%	9.78%	0.0042%
SCHWAB (CHARLES) CORP	SCHW	33,307.24	0.19%	0.94%	20.98%	22.02%	0.0427%
SPECTRA ENERGY CORP	SE	25,325.57	0.15%	3.56%	5.00%	8.65%	0.0128%
SEALED AIR CORP	SEE	6,899.22	0.04%	1.60%	11.78%	13.47%	0.0054%
SHERWIN-WILLIAMS CO/THE	SHW	21,402.85	0.12%	1.01%	12.50%	13.57%	0.0169%
SIGMA-ALDRICH	SIAL	15,994.98	0.09%	0.69%	8.77%	9.49%	0.0088%
JM SMUCKER CO/THE	SJM	10,260.13	0.06%	2.52%	6.60%	9.20%	0.0055%
SCHLUMBERGER LTD	SLB	122,163.19	0.71%	1.63%	14.36%	16.11%	0.1146%
SNAP-ON INC	SNA	7,187.33	0.04%	1.46%	4.40%	5.89%	0.0025%
SANDISK CORP	SNDK	18,875.59	0.11%	1.24%	12.10%	13.41%	0.0147%
SCRIPPS NETWORKS INTER-CL A	SNI	10,245.75	0.06%	1.09%	12.04%	13.20%	0.0079%
SOUTHERN CO/THE	SO	41,891.73	0.24%	4.45%	4.19%	8.73%	0.0213%
SIMON PROPERTY GROUP INC	SPG	52,640.54	0.31%	3.07%	5.04%	8.18%	0.0251%
STAPLES INC	SPLS	7,872.14	0.05%	3.99%	0.26%	4.26%	0.0020%
STERICYCLE INC	SRCL	10,052.56	0.06%	0.00%	14.92%	14.92%	0.0087%
SEMPRA ENERGY	SRE	25,617.21	0.15%	2.53%	7.52%	10.15%	0.0151%
SUNTRUST BANKS INC	STI	19,363.25	0.11%	1.92%	8.39%	10.39%	0.0117%
ST JUDE MEDICAL INC	STJ	16,640.33	0.10%	1.80%	10.89%	12.79%	0.0124%
STATE STREET CORP	STT	28,477.44	0.17%	1.73%	10.40%	12.22%	0.0203%
SEAGATE TECHNOLOGY	STX	17,465.72	0.10%	3.38%	8.88%	12.41%	0.0126%
CONSTELLATION BRANDS INC-A	STZ	16,302.81	0.09%	0.00%	16.35%	16.35%	0.0155%
STANLEY BLACK & DECKER INC	SWK	13,119.28	0.08%	2.43%	9.33%	11.88%	0.0091%
SOUTHWESTERN ENERGY CO	SWN	11,414.12	0.07%	0.00%	12.27%	12.27%	0.0082%
SAFEWAY INC	SWY	7,846.22	0.05%	2.48%	7.73%	10.31%	0.0047%
STRYKER CORP	SYK	30,392.64	0.18%	1.51%	10.43%	12.02%	0.0213%
SYMANTEC CORP	SYMC	15,338.71	0.09%	2.79%	7.64%	10.54%	0.0094%
SYSCO CORP	SYI	21,640.15	0.13%	3.28%	9.44%	12.87%	0.0162%
AT&T INC	T	176,998.18	1.03%	5.41%	5.99%	11.56%	0.1192%
MOLSON COORS BREWING CO -B	TAP	12,944.34	0.08%	2.09%	5.88%	8.03%	0.0061%
TERADATA CORP	TDC	6,333.30	0.04%	0.00%	10.77%	10.77%	0.0040%
TECO ENERGY INC	TE	4,376.40	0.03%	4.73%	5.77%	10.63%	0.0027%
INTEGRYS ENERGY GROUP INC	TEG	5,547.04	0.03%	3.92%	4.37%	8.37%	0.0027%
TE CONNECTIVITY LTD	TEL	21,756.49	0.13%	2.03%	12.25%	14.41%	0.0182%
TARGET CORP	TGT	37,870.90	0.22%	3.11%	10.64%	13.91%	0.0307%
TENET HEALTHCARE CORP	THC	5,453.90	0.03%	0.00%	16.86%	16.86%	0.0054%
TIFFANY & CO	TIF	11,683.08	0.07%	1.67%	12.60%	14.38%	0.0098%
TJX COMPANIES INC	TJX	42,082.35	0.25%	1.13%	12.01%	13.21%	0.0324%
TORCHMARK CORP	TMK	6,729.28	0.04%	0.96%	8.61%	9.60%	0.0038%
THERMO FISHER SCIENTIFIC INC	TMO	45,282.86	0.26%	0.53%	12.39%	12.96%	0.0342%
TRIPADVISOR INC	TRIP	11,941.14	0.07%	0.00%	28.19%	28.19%	0.0196%
T ROWE PRICE GROUP INC	TROW	19,989.44	0.12%	2.32%	12.50%	14.96%	0.0174%
TRAVELERS COS INC/THE	TRV	31,636.16	0.18%	2.33%	6.44%	8.84%	0.0163%
TRACTOR SUPPLY COMPANY	TSCO	8,259.22	0.05%	1.01%	16.48%	17.57%	0.0084%
TYSON FOODS INC-CL A	TSN	13,368.05	0.08%	0.79%	14.95%	15.80%	0.0123%
TESORO CORP	TSO	8,193.21	0.05%	1.72%	14.90%	16.75%	0.0080%
TOTAL SYSTEM SERVICES INC	TSS	5,498.00	0.03%	1.35%	11.26%	12.69%	0.0041%
TIME WARNER CABLE	TWC	38,004.65	0.22%	2.21%	7.82%	10.12%	0.0224%
TIME WARNER INC	TWX	66,018.96	0.38%	1.64%	11.60%	13.34%	0.0513%
TEXAS INSTRUMENTS INC	TXN	47,356.77	0.28%	2.79%	10.66%	13.60%	0.0375%
TEXTRON INC	TXT	10,168.52	0.06%	0.22%	17.08%	17.32%	0.0103%
TYCO INTERNATIONAL LTD	TYC	17,767.13	0.10%	1.72%	12.20%	14.02%	0.0145%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
UNDER ARMOUR INC-CLASS A	UA	13,820.44	0.08%	0.00%	24.07%	24.07%	0.0194%
UNIVERSAL HEALTH SERVICES-B	UHS	10,313.03	0.06%	0.23%	9.47%	9.71%	0.0058%
UNITEDHEALTH GROUP INC	UNH	85,881.92	0.50%	1.57%	10.42%	12.07%	0.0604%
UNUM GROUP	UNM	8,379.68	0.05%	1.88%	9.00%	10.96%	0.0053%
UNION PACIFIC CORP	UNP	95,046.59	0.55%	1.75%	13.02%	14.88%	0.0824%
UNITED PARCEL SERVICE-CL B	UPS	89,258.36	0.52%	2.74%	10.53%	13.41%	0.0697%
URBAN OUTFITTERS INC	URBN	4,055.61	0.02%	0.00%	16.01%	16.01%	0.0038%
UNITED RENTALS INC	URI	10,261.28	0.06%	0.00%	22.82%	22.82%	0.0136%
US BANCORP	USB	70,977.91	0.41%	2.46%	8.90%	11.47%	0.0474%
UNITED TECHNOLOGIES CORP	UTX	92,780.03	0.54%	2.34%	10.72%	13.19%	0.0712%
VISA INC-CLASS A SHARES	V	129,201.81	0.75%	0.77%	18.14%	18.98%	0.1428%
VARIAN MEDICAL SYSTEMS INC	VAR	8,229.28	0.05%	0.00%	10.95%	10.95%	0.0052%
VF CORP	VFC	27,370.58	0.16%	1.69%	13.27%	15.07%	0.0240%
VIACOM INC-CLASS B	VIAB	29,092.14	0.17%	1.82%	12.39%	14.32%	0.0243%
VALERO ENERGY CORP	VLO	24,281.03	0.14%	2.27%	7.72%	10.08%	0.0142%
VULCAN MATERIALS CO	VMC	7,748.57	0.05%	0.35%	6.67%	7.03%	0.0032%
VORNADO REALTY TRUST	VNO	19,815.52	0.12%	2.77%	8.84%	11.73%	0.0135%
VERISIGN INC	VRSN	6,858.63	0.04%	0.00%	11.73%	11.73%	0.0047%
VERTEX PHARMACEUTICALS INC	VRTX	24,679.53	0.14%	0.00%	114.67%	114.67%	0.1648%
VENTAS INC	VTR	19,711.71	0.11%	4.36%	4.13%	8.58%	0.0099%
VERIZON COMMUNICATIONS INC	VZ	199,717.28	1.16%	4.43%	6.93%	11.52%	0.1340%
WALGREEN CO	WAG	57,623.21	0.34%	2.22%	14.25%	16.63%	0.0558%
WATERS CORP	WAT	8,160.47	0.05%	0.00%	9.77%	9.77%	0.0046%
WESTERN DIGITAL CORP	WDC	20,466.51	0.12%	1.70%	5.47%	7.22%	0.0086%
WISCONSIN ENERGY CORP	WEC	10,745.90	0.06%	3.28%	5.08%	8.44%	0.0053%
WELLS FARGO & CO	WFC	255,613.23	1.49%	2.75%	11.11%	14.02%	0.2086%
WHOLE FOODS MARKET INC	WFM	13,394.97	0.08%	1.29%	13.02%	14.39%	0.0112%
WHIRLPOOL CORP	WHR	11,847.04	0.07%	1.87%	23.45%	25.54%	0.0176%
WINDSTREAM HOLDINGS INC	WIN	6,047.83	0.04%	9.97%	-2.50%	7.34%	0.0026%
WELLPOINT INC	WLP	31,493.48	0.18%	1.51%	9.47%	11.06%	0.0203%
WASTE MANAGEMENT INC	WM	21,720.32	0.13%	3.11%	8.00%	11.23%	0.0142%
WILLIAMS COS INC	WMB	39,629.94	0.23%	3.70%	12.00%	15.92%	0.0367%
WAL-MART STORES INC	WMT	241,591.82	1.41%	2.56%	7.41%	10.06%	0.1415%
WESTERN UNION CO	WU	8,439.23	0.05%	3.15%	8.22%	11.49%	0.0056%
WEYERHAEUSER CO	WY	17,508.02	0.10%	3.03%	5.50%	8.61%	0.0088%
WYNDHAM WORLDWIDE CORP	WYN	9,606.30	0.06%	1.82%	10.00%	11.92%	0.0067%
WYNN RESORTS LTD	WYNN	18,315.67	0.11%	2.79%	14.40%	17.39%	0.0185%
CIMAREX ENERGY CO	XEC	9,522.81	0.06%	0.56%	12.78%	13.38%	0.0074%
XCEL ENERGY INC	XEL	16,303.24	0.09%	3.71%	5.00%	8.80%	0.0084%
XL GROUP PLC	XL	8,596.86	0.05%	1.92%	2.33%	4.27%	0.0021%
XILINX INC	XLNX	11,131.26	0.06%	2.74%	8.66%	11.51%	0.0075%
EXXON MOBIL CORP	XOM	389,323.74	2.27%	2.98%	6.12%	9.19%	0.2083%
DENTSPLY INTERNATIONAL INC	XRAY	6,333.21	0.04%	0.59%	10.50%	11.12%	0.0041%
XEROX CORP	XRX	14,552.79	0.08%	1.94%	10.00%	12.04%	0.0102%
XYLEM INC	XYL	6,145.39	0.04%	1.52%	11.83%	13.44%	0.0048%
YAHOO! INC	YHOO	38,819.39	0.23%	0.00%	7.06%	7.06%	0.0160%
YUM! BRANDS INC	YUM	30,178.25	0.18%	2.12%	12.26%	14.51%	0.0255%
ZIONS BANCORPORATION	ZION	5,302.76	0.03%	0.61%	9.80%	10.44%	0.0032%
ZIMMER HOLDINGS INC	ZMH	16,633.80	0.10%	0.00%	10.40%	10.40%	0.0101%
ZOETIS INC	ZTS	17,772.32	0.10%	0.82%	11.64%	12.51%	0.0129%
Total Market Capitalization:		17,176,314					13.32%

Notes:

[1] Equals sum of Col. [9]

[2] Source: Bloomberg Professional

[3] Equals [1] - [2]

[4] Source: Bloomberg Professional

[5] Equals weight in S&P 500 based on market capitalization

[6] Source: Bloomberg Professional

[7] Source: Bloomberg Professional

[8] Equals ([6] 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
12.88%	3.18%	9.69%

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	\$ 17,245.96	0.12%	1.02%	7.50%	8.56%	0.0104%
ALCOA INC	AA	\$ 17,194.01	0.12%	0.83%	17.00%	17.90%	0.0218%
APPLE INC	AAPL	\$ 576,392.08	4.08%	1.93%	12.50%	14.55%	0.5934%
ABBVIE INC	ABBV	\$ 84,293.56	N/A	3.08%	N/A	N/A	N/A
AMERISOURCEBERGEN CORP	ABC	\$ 16,833.14	0.12%	1.24%	13.50%	14.82%	0.0177%
ABBOTT LABORATORIES	ABT	\$ 60,132.92	0.43%	2.20%	-4.00%	-1.84%	-0.0079%
ACE LTD	ACE	N/A	N/A	0.00%	N/A	N/A	N/A
ACCENTURE PLC-CL A	ACN	N/A	N/A	0.00%	N/A	N/A	N/A
ACTAVIS PLC	ACT	\$ 58,684.44	N/A	0.00%	N/A	N/A	N/A
ADOBE SYSTEMS INC	ADBE	\$ 31,350.73	N/A	0.00%	N/A	N/A	N/A
ANALOG DEVICES INC	ADI	\$ 14,013.90	0.10%	3.35%	11.00%	14.54%	0.0144%
ARCHER-DANIELS-MIDLAND CO	ADM	\$ 27,867.14	0.20%	2.23%	6.50%	8.81%	0.0174%
AUTOMATIC DATA PROCESSING	ADP	\$ 34,530.39	0.24%	2.68%	9.50%	12.30%	0.0301%
ALLIANCE DATA SYSTEMS CORP	ADS	\$ 14,001.39	N/A	0.00%	N/A	N/A	N/A
AUTODESK INC	ADSK	\$ 11,336.80	N/A	0.00%	N/A	N/A	N/A
ADT CORP/THE	ADT	\$ 5,561.30	N/A	2.47%	N/A	N/A	N/A
AMEREN CORPORATION	AEE	\$ 9,603.49	0.07%	4.09%	2.50%	6.64%	0.0045%
AMERICAN ELECTRIC POWER	AEP	\$ 26,358.86	0.19%	3.68%	4.50%	8.26%	0.0154%
AES CORP	AES	\$ 9,388.03	0.07%	1.56%	10.50%	12.14%	0.0081%
AETNA INC	AET	\$ 26,038.28	0.18%	1.22%	10.50%	11.79%	0.0217%
AFLAC INC	AFL	\$ 25,307.15	0.18%	2.65%	7.50%	10.25%	0.0184%
ALLERGAN INC	AGN	\$ 52,898.75	0.37%	0.11%	13.50%	13.62%	0.0510%
AMERICAN INTERNATIONAL GROUP	AIG	\$ 70,488.07	0.50%	1.01%	9.50%	10.55%	0.0526%
APARTMENT INVT & MGMT CO -A	AIV	\$ 4,935.31	N/A	3.05%	N/A	N/A	N/A
ASSURANT INC	AIZ	\$ 4,401.23	0.03%	1.77%	7.50%	9.33%	0.0029%
AKAMAI TECHNOLOGIES INC	AKAM	\$ 9,510.34	N/A	0.00%	N/A	N/A	N/A
ALLSTATE CORP	ALL	\$ 25,943.32	0.18%	1.85%	16.00%	18.00%	0.0330%
ALLEGION PLC	ALLE	N/A	N/A	0.00%	N/A	N/A	N/A
ALTERA CORP	ALTR	\$ 9,786.91	0.07%	2.28%	3.00%	5.32%	0.0037%
ALEXION PHARMACEUTICALS INC	ALXN	\$ 32,293.30	N/A	0.00%	N/A	N/A	N/A
APPLIED MATERIALS INC	AMAT	\$ 24,209.49	0.17%	2.06%	17.00%	19.23%	0.0330%
AMETEK INC	AME	\$ 11,652.57	0.08%	0.77%	10.50%	11.31%	0.0093%
AFFILIATED MANAGERS GROUP	AMG	\$ 10,069.54	N/A	0.00%	N/A	N/A	N/A
AMGEN INC	AMGN	\$ 99,090.73	0.70%	1.86%	8.50%	10.44%	0.0732%
AMERIPRISE FINANCIAL INC	AMP	\$ 20,567.77	0.15%	2.12%	13.50%	15.77%	0.0229%
AMERICAN TOWER CORP	AMT	\$ 36,627.47	0.26%	1.57%	16.50%	18.20%	0.0472%
AMAZON.COM INC	AMZN	\$ 139,932.22	N/A	0.00%	N/A	N/A	N/A
AUTONATION INC	AN	\$ 5,715.95	N/A	0.00%	N/A	N/A	N/A
ACON PLC	ACON	\$ 23,215.91	0.16%	1.25%	15.50%	16.85%	0.0277%
APACHE CORP	APA	\$ 28,008.50	0.20%	1.38%	8.00%	9.43%	0.0187%
ANADARKO PETROLEUM CORP	APC	\$ 45,319.11	0.32%	1.26%	74.50%	76.23%	0.2445%
AIR PRODUCTS & CHEMICALS INC	APD	\$ 27,204.27	0.19%	2.44%	9.00%	11.55%	0.0222%
AMPHENOL CORP-CL A	APH	\$ 14,839.02	0.11%	1.06%	8.00%	9.10%	0.0096%
AIRGAS INC	ARG	\$ 8,065.74	0.06%	2.07%	13.50%	15.71%	0.0090%
ALLEGHENY TECHNOLOGIES INC	ATI	\$ 3,547.57	0.03%	2.24%	17.50%	19.94%	0.0050%
AVALONBAY COMMUNITIES INC	AVB	\$ 19,578.04	0.14%	3.10%	129.00%	134.10%	0.1858%
AVAGO TECHNOLOGIES LTD	AVGO	N/A	N/A	0.00%	N/A	N/A	N/A
AVON PRODUCTS INC	AVP	\$ 4,919.91	0.03%	2.12%	36.50%	39.01%	0.0136%
AVERY DENNISON CORP	AVY	\$ 3,989.15	0.03%	3.35%	10.00%	13.52%	0.0038%
AMERICAN EXPRESS CO	AXP	\$ 83,976.54	0.59%	1.29%	10.00%	11.35%	0.0674%
AUTOZONE INC	AZO	\$ 16,299.95	N/A	0.00%	N/A	N/A	N/A
BOEING CO/THE	BA	\$ 86,682.54	0.61%	2.43%	11.00%	13.56%	0.0832%
BANK OF AMERICA CORP	BAC	\$ 169,095.08	1.20%	1.27%	28.50%	29.95%	0.3584%
BAXTER INTERNATIONAL INC	BAX	\$ 36,931.27	0.26%	3.04%	8.00%	11.17%	0.0292%
BED BATH & BEYOND INC	BBBY	\$ 11,558.91	N/A	0.00%	N/A	N/A	N/A
BB&T CORP	BBT	\$ 25,538.04	0.18%	2.67%	11.50%	14.32%	0.0259%
BEST BUY CO INC	BBY	\$ 10,935.99	0.08%	2.46%	2.50%	4.99%	0.0039%
CR BARD INC	BCR	\$ 10,805.05	0.08%	0.60%	8.00%	8.62%	0.0066%
BECTON DICKINSON AND CO	BDX	\$ 23,169.95	0.16%	1.75%	8.00%	9.82%	0.0161%
FRANKLIN RESOURCES INC	BEN	\$ 31,839.82	0.23%	0.95%	9.50%	10.50%	0.0236%
BROWN-FORMAN CORP-CLASS B	BF/B	N/A	N/A	0.00%	N/A	N/A	N/A
BAKER HUGHES INC	BHI	\$ 22,626.59	0.16%	1.27%	13.00%	14.35%	0.0230%
BIOGEN IDEC INC	BIIB	\$ 71,490.54	N/A	0.00%	N/A	N/A	N/A
BANK OF NEW YORK MELLON CORP	BK	\$ 40,918.51	0.29%	1.89%	10.00%	11.99%	0.0347%
BLACKROCK INC	BLK	\$ 51,571.43	0.36%	2.49%	9.00%	11.60%	0.0423%
BALL CORP	BLL	\$ 8,855.88	0.06%	0.81%	12.00%	12.86%	0.0081%

Company	Ticker	[4]	[5]	[6]	[7]	[8]	[9]
		Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
BEMIS COMPANY	BMS	\$ 3,761.44	0.03%	2.87%	8.00%	10.99%	0.0029%
BRISTOL-MYERS SQUIBB CO	BMJ	\$ 81,602.08	0.58%	2.94%	8.50%	11.57%	0.0668%
BROADCOM CORP-CL A	BRCM	\$ 20,868.21	0.15%	1.35%	2.50%	3.87%	0.0057%
BERKSHIRE HATHAWAY INC-CL B	BRK/B	N/A	N/A	0.00%	N/A	N/A	N/A
BOSTON SCIENTIFIC CORP	BSX	\$ 15,179.36	N/A	0.00%	N/A	N/A	N/A
BORGWARNER INC	BWA	\$ 12,453.08	0.09%	0.99%	14.00%	15.06%	0.0133%
BOSTON PROPERTIES INC	BXP	\$ 18,132.93	N/A	2.18%	N/A	N/A	N/A
CITIGROUP INC	C	\$ 150,717.63	1.07%	0.08%	14.00%	14.09%	0.1502%
CA INC	CA	\$ 11,491.48	0.08%	3.89%	5.00%	8.98%	0.0073%
CONAGRA FOODS INC	CAG	\$ 14,142.52	0.10%	2.97%	8.50%	11.60%	0.0116%
CARDINAL HEALTH INC	CAH	\$ 24,246.50	0.17%	1.87%	12.00%	13.98%	0.0240%
CAMERON INTERNATIONAL CORP	CAM	\$ 11,681.01	N/A	0.00%	N/A	N/A	N/A
CATERPILLAR INC	CAT	\$ 58,540.45	0.41%	3.02%	5.50%	8.61%	0.0357%
CHUBB CORP	CB	\$ 21,982.64	0.16%	2.18%	8.50%	10.77%	0.0167%
CBRE GROUP INC - A	CBG	\$ 9,501.90	N/A	0.00%	N/A	N/A	N/A
CBS CORP-CLASS B NON VOTING	CBS	\$ 24,973.49	0.18%	1.18%	13.00%	14.26%	0.0252%
COCA-COLA ENTERPRISES	CCE	\$ 9,823.94	0.07%	2.50%	10.50%	13.13%	0.0091%
CROWN CASTLE INTL CORP	CCI	\$ 26,458.41	0.19%	1.76%	27.00%	29.00%	0.0543%
CARNIVAL CORP	CCL	N/A	N/A	0.00%	N/A	N/A	N/A
CELGENE CORP	CELG	\$ 69,061.67	N/A	0.00%	N/A	N/A	N/A
CERNER CORP	CERN	\$ 19,320.71	N/A	0.00%	N/A	N/A	N/A
CF INDUSTRIES HOLDINGS INC	CF	\$ 12,608.98	0.09%	2.36%	4.50%	6.91%	0.0062%
CAREFUSION CORP	CFN	\$ 11,457.63	N/A	0.00%	N/A	N/A	N/A
CHESAPEAKE ENERGY CORP	CHK	\$ 13,841.48	0.10%	1.97%	7.00%	9.04%	0.0089%
C. H. ROBINSON WORLDWIDE INC	CHRW	\$ 9,838.98	0.07%	2.09%	7.00%	9.16%	0.0064%
CIGNA CORP	CI	\$ 23,223.81	0.16%	0.05%	9.00%	9.05%	0.0149%
CINCINNATI FINANCIAL CORP	CINF	\$ 7,541.04	0.05%	3.82%	12.50%	16.56%	0.0088%
COLGATE-PALMOLIVE CO	CL	\$ 57,638.99	0.41%	2.27%	10.50%	12.89%	0.0526%
CLOROX COMPANY	CLX	\$ 12,420.00	0.09%	3.04%	8.50%	11.67%	0.0103%
COMERICA INC	CMA	\$ 8,032.29	0.06%	1.82%	11.00%	12.92%	0.0073%
COMCAST CORP-CLASS A	CMCSA	\$ 106,597.47	0.75%	1.77%	12.00%	13.88%	0.1047%
CME GROUP INC	CME	\$ 26,589.18	0.19%	2.37%	8.50%	10.97%	0.0206%
CHIPOTLE MEXICAN GRILL INC	CMG	\$ 20,035.72	N/A	0.00%	N/A	N/A	N/A
CUMMINS INC	CMI	\$ 24,013.52	0.17%	2.43%	8.50%	11.03%	0.0187%
CMS ENERGY CORP	CMS	\$ 8,444.74	0.06%	3.52%	6.50%	10.13%	0.0061%
CENTERPOINT ENERGY INC	CNP	\$ 9,691.90	0.07%	4.29%	2.50%	6.84%	0.0047%
CONSOL ENERGY INC	CNX	\$ 7,943.06	0.06%	0.74%	4.00%	4.76%	0.0027%
CAPITAL ONE FINANCIAL CORP	COF	\$ 44,080.38	0.31%	1.52%	4.00%	5.55%	0.0173%
CABOT OIL & GAS CORP	COG	\$ 13,011.23	0.09%	0.26%	33.00%	33.31%	0.0307%
COACH INC	COH	\$ 9,675.91	0.07%	3.80%	2.50%	6.35%	0.0043%
ROCKWELL COLLINS INC	COL	\$ 10,028.40	0.07%	1.62%	7.00%	8.68%	0.0062%
CONOCOPHILLIPS	COP	\$ 82,294.99	0.58%	4.41%	3.50%	7.99%	0.0465%
COSTCO WHOLESALE CORP	COST	\$ 53,822.84	0.38%	1.14%	10.50%	11.70%	0.0446%
COVIDIEN PLC	COV	N/A	N/A	0.00%	N/A	N/A	N/A
CAMPBELL SOUP CO	CPB	\$ 13,074.59	0.09%	2.97%	5.00%	8.05%	0.0074%
SALESFORCE.COM INC	CRM	\$ 33,345.53	N/A	0.00%	N/A	N/A	N/A
COMPUTER SCIENCES CORP	CSC	\$ 8,033.64	0.06%	1.66%	7.00%	8.72%	0.0050%
CISCO SYSTEMS INC	CSCO	\$ 116,841.21	0.83%	3.31%	5.50%	8.90%	0.0736%
CSX CORP	CSX	\$ 32,828.19	0.23%	1.94%	9.00%	11.03%	0.0256%
CINTAS CORP	CTAS	\$ 8,004.87	0.06%	1.13%	9.50%	10.68%	0.0061%
CENTURYLINK INC	CTL	\$ 21,837.32	0.15%	5.59%	6.50%	12.28%	0.0190%
COGNIZANT TECH SOLUTIONS-A	CTSH	\$ 26,821.61	N/A	0.00%	N/A	N/A	N/A
CITRIX SYSTEMS INC	CTXS	\$ 10,527.72	N/A	0.00%	N/A	N/A	N/A
CABLEVISION SYSTEMS-NY GRP-A	CVC	\$ 4,687.89	0.03%	3.44%	19.00%	22.77%	0.0076%
CVS HEALTH CORP	CVS	\$ 91,271.91	0.65%	1.39%	11.00%	12.47%	0.0805%
CHEVRON CORP	CVX	\$ 210,895.39	1.49%	3.92%	4.50%	8.51%	0.1269%
DOMINION RESOURCES INC/VA	D	\$ 39,609.77	0.28%	3.62%	5.00%	8.71%	0.0244%
DELTA AIR LINES INC	DAL	\$ 28,088.96	0.20%	1.11%	11.50%	12.68%	0.0252%
DU PONT (E.I.) DE NEMOURS	DD	\$ 60,616.48	0.43%	2.83%	8.50%	11.45%	0.0491%
DEERE & CO	DE	\$ 30,150.29	0.21%	2.83%	6.00%	8.91%	0.0190%
DISCOVER FINANCIAL SERVICES	DFS	\$ 28,554.91	0.20%	1.55%	8.50%	10.11%	0.0204%
DOLLAR GENERAL CORP	DG	\$ 17,830.64	N/A	0.00%	N/A	N/A	N/A
QUEST DIAGNOSTICS INC	DGX	\$ 8,365.96	0.06%	2.29%	6.50%	8.86%	0.0052%
DR HORTON INC	DHI	\$ 7,402.43	0.05%	1.21%	25.00%	26.36%	0.0138%
DANAHER CORP	DHR	\$ 51,983.75	0.37%	0.56%	12.00%	12.59%	0.0463%
WALT DISNEY CO/THE	DIS	\$ 140,310.39	0.99%	1.05%	11.50%	12.61%	0.1252%
DISCOVERY COMMUNICATIONS-A	DISCA	\$ 5,058.65	N/A	0.00%	N/A	N/A	N/A
DISCOVERY COMMUNICATIONS-C	DISCK	N/A	N/A	0.00%	N/A	N/A	N/A
DELPHI AUTOMOTIVE PLC	DLPH	\$ 18,679.06	0.13%	1.62%	12.00%	13.72%	0.0181%
DOLLAR TREE INC	DLTR	\$ 11,319.71	N/A	0.00%	N/A	N/A	N/A
DUN & BRADSTREET CORP	DNB	\$ 4,102.54	0.03%	1.59%	6.00%	7.64%	0.0022%
DENBURY RESOURCES INC	DNR	\$ 4,509.30	0.03%	2.07%	11.50%	13.69%	0.0044%
DIAMOND OFFSHORE DRILLING	DO	\$ 5,201.95	0.04%	1.29%	6.50%	7.83%	0.0029%
DOVER CORP	DOV	\$ 12,231.36	0.09%	2.22%	7.00%	9.30%	0.0080%
DOW CHEMICAL CO/THE	DOW	\$ 53,447.60	0.38%	3.36%	14.50%	18.10%	0.0685%
DR PEPPER SNAPPLE GROUP INC	DPS	\$ 12,068.54	0.09%	2.64%	7.50%	10.24%	0.0087%
DARDEN RESTAURANTS INC	DRI	\$ 6,414.81	0.05%	4.56%	8.00%	12.74%	0.0058%

Company	Ticker		[4]	[5]	[6]	[7]	[8]	[9]
			Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
DTE ENERGY COMPANY	DTE	\$	13,607.22	0.10%	3.54%	5.00%	8.63%	0.0083%
DIRECTV	DTV	\$	42,126.97	N/A	0.00%	N/A	N/A	N/A
DUKE ENERGY CORP	DUK	\$	55,287.45	0.39%	4.03%	4.00%	8.11%	0.0317%
DAVITA HEALTHCARE PARTNERS I	DVA	\$	15,472.04	N/A	0.00%	N/A	N/A	N/A
DEVON ENERGY CORP	DVN	\$	23,130.51	0.16%	1.74%	6.50%	8.30%	0.0136%
ELECTRONIC ARTS INC	EA	\$	10,172.35	N/A	0.00%	N/A	N/A	N/A
EBAY INC	EBAY	\$	59,429.28	N/A	0.00%	N/A	N/A	N/A
ECOLAB INC	ECL	\$	31,578.01	0.22%	1.04%	11.50%	12.60%	0.0282%
CONSOLIDATED EDISON INC	ED	\$	17,842.55	0.13%	4.10%	1.50%	5.63%	0.0071%
EQUIFAX INC	EFX	\$	8,737.50	0.06%	1.42%	10.00%	11.49%	0.0071%
EDISON INTERNATIONAL	EIX	\$	19,024.10	0.13%	2.41%	2.50%	4.94%	0.0066%
ESTEE LAUDER COMPANIES-CL A	EL	\$	27,362.97	0.19%	1.12%	14.00%	15.20%	0.0294%
EMC CORP/MA	EMC	\$	54,559.81	0.39%	1.69%	9.00%	10.76%	0.0416%
EASTMAN CHEMICAL CO	EMN	\$	11,086.40	0.08%	1.91%	13.00%	15.03%	0.0118%
EMERSON ELECTRIC CO	EMR	\$	42,202.92	0.30%	2.90%	7.00%	10.00%	0.0299%
EOG RESOURCES INC	EOG	\$	49,966.31	0.35%	0.76%	21.50%	22.34%	0.0790%
EQUITY RESIDENTIAL	EQR	\$	23,976.33	N/A	2.98%	N/A	N/A	N/A
EQT CORP	EQT	\$	12,918.58	0.09%	0.15%	15.50%	15.66%	0.0143%
EXPRESS SCRIPTS HOLDING CO	ESRX	\$	52,159.14	N/A	0.00%	N/A	N/A	N/A
ESSEX PROPERTY TRUST INC	ESS	\$	11,905.34	N/A	2.77%	N/A	N/A	N/A
ENSCO PLC-CL A	ESV	\$	8,931.82	0.06%	7.86%	17.00%	25.53%	0.0161%
E*TRADE FINANCIAL CORP	ETFC	\$	5,739.71	N/A	0.00%	N/A	N/A	N/A
EATON CORP PLC	ETN	\$	28,515.93	0.20%	3.32%	9.00%	12.47%	0.0252%
ENTERGY CORP	ETR	\$	14,260.88	0.10%	4.21%	-2.50%	1.65%	0.0017%
EDWARDS LIFESCIENCES CORP	EW	\$	10,394.41	N/A	0.00%	N/A	N/A	N/A
EXELON CORP	EXC	\$	29,290.03	0.21%	3.66%	-5.00%	-1.44%	-0.0030%
EXPEDITORS INTL WASH INC	EXPD	\$	7,650.18	0.05%	1.62%	6.50%	8.17%	0.0044%
EXPEDIA INC	EXPE	\$	9,549.28	0.07%	0.97%	7.50%	8.51%	0.0057%
FORD MOTOR CO	F	\$	54,220.84	0.38%	3.67%	8.00%	11.82%	0.0453%
FASTENAL CO	FAST	\$	12,088.86	0.09%	2.44%	12.00%	14.59%	0.0125%
FACEBOOK INC-A	FB	\$	188,841.78	N/A	0.00%	N/A	N/A	N/A
FREEPORT-MCMORAN INC	FCX	\$	31,420.75	0.22%	4.16%	6.00%	10.29%	0.0229%
FAMILY DOLLAR STORES	FDO	\$	8,702.51	0.06%	1.62%	8.00%	9.68%	0.0060%
FEDEX CORP	FDX	\$	43,033.56	0.30%	0.52%	15.00%	15.56%	0.0474%
FIRSTENERGY CORP	FE	\$	14,569.16	0.10%	4.10%	2.00%	6.14%	0.0063%
F5 NETWORKS INC	FFIV	\$	8,129.98	N/A	0.00%	N/A	N/A	N/A
FIDELITY NATIONAL INFORMATIO	FIS	\$	14,950.19	0.11%	1.83%	10.00%	11.92%	0.0126%
FISERV INC	FISV	\$	15,379.30	N/A	0.00%	N/A	N/A	N/A
FIFTH THIRD BANCORP	FITB	\$	14,799.31	0.10%	2.80%	10.00%	12.94%	0.0136%
FLIR SYSTEMS INC	FLIR	\$	4,138.49	0.03%	1.36%	11.00%	12.44%	0.0036%
FLUOR CORP	FLR	\$	9,624.04	0.07%	1.36%	7.00%	8.41%	0.0057%
FLOWERVE CORP	FLS	\$	8,685.69	0.06%	1.05%	12.00%	13.11%	0.0081%
FMC CORP	FMC	\$	7,480.15	0.05%	1.11%	12.00%	13.17%	0.0070%
FOSSIL GROUP INC	FOSL	\$	5,190.37	N/A	0.00%	N/A	N/A	N/A
TWENTY-FIRST CENTURY FOX-A	FOXA	\$	44,983.97	0.32%	0.79%	11.00%	11.83%	0.0377%
FIRST SOLAR INC	FSLR	\$	5,432.46	N/A	0.00%	N/A	N/A	N/A
FMC TECHNOLOGIES INC	FTI	\$	11,933.08	N/A	0.00%	N/A	N/A	N/A
FRONTIER COMMUNICATIONS CORP	FTR	\$	6,102.81	0.04%	6.78%	13.50%	20.74%	0.0090%
AGL RESOURCES INC	GAS	\$	6,205.74	0.04%	3.79%	9.00%	12.96%	0.0057%
GANNETT CO	GCI	\$	6,166.93	0.04%	2.98%	6.50%	9.57%	0.0042%
GENERAL DYNAMICS CORP	GD	\$	39,399.14	0.28%	2.10%	3.00%	5.13%	0.0143%
GENERAL ELECTRIC CO	GE	\$	243,322.17	1.72%	3.62%	10.50%	14.31%	0.2465%
GENERAL GROWTH PROPERTIES	GGP	\$	21,238.29	N/A	2.66%	N/A	N/A	N/A
GILEAD SCIENCES INC	GILD	\$	146,450.59	N/A	0.00%	N/A	N/A	N/A
GENERAL MILLS INC	GIS	\$	29,499.13	0.21%	3.34%	7.00%	10.46%	0.0218%
CORNING INC	GLW	\$	22,592.97	0.16%	2.28%	6.50%	8.85%	0.0142%
GENERAL MOTORS CO	GM	\$	48,044.18	0.34%	4.04%	9.50%	13.73%	0.0467%
KEURIG GREEN MOUNTAIN INC	GMCR	\$	22,410.99	0.16%	0.72%	26.50%	27.31%	0.0433%
GAMESTOP CORP-CLASS A	GME	\$	4,419.93	0.03%	3.43%	11.50%	15.13%	0.0047%
GENWORTH FINANCIAL INC-CL A	GNW	\$	6,197.78	N/A	0.00%	N/A	N/A	N/A
GOOGLE INC-CL C	GOOG	\$	177,394.53	N/A	0.00%	N/A	N/A	N/A
GENUINE PARTS CO	GPC	\$	13,479.49	0.10%	2.64%	9.00%	11.75%	0.0112%
GAP INC/THE	GPS	\$	15,868.26	0.11%	2.45%	13.50%	16.11%	0.0181%
GARMIN LTD	GRMN	\$	10,133.53	0.07%	3.70%	1.50%	5.23%	0.0038%
GOLDMAN SACHS GROUP INC	GS	\$	76,035.30	0.54%	1.24%	13.00%	14.32%	0.0771%
GOODYEAR TIRE & RUBBER CO	GT	\$	5,499.38	0.04%	1.21%	11.50%	12.78%	0.0050%
WW GRAINGER INC	GWW	\$	15,711.93	0.11%	1.81%	12.50%	14.42%	0.0160%
HALLIBURTON CO	HAL	\$	43,521.52	0.31%	1.19%	11.50%	12.75%	0.0393%
HARMAN INTERNATIONAL	HAR	\$	6,265.57	0.04%	1.46%	25.00%	26.66%	0.0118%
HASBRO INC	HAS	\$	6,910.85	0.05%	3.17%	7.00%	10.28%	0.0050%
HUNTINGTON BANCSHARES INC	HBAN	\$	7,508.25	0.05%	2.16%	6.00%	8.24%	0.0044%
HUDSON CITY BANCORP INC	HCBK	\$	4,785.32	N/A	1.80%	N/A	N/A	N/A
HEALTH CARE REIT INC	HCN	\$	22,031.77	0.16%	4.70%	94.50%	101.42%	0.1581%
HCP INC	HCP	\$	19,550.36	N/A	5.10%	N/A	N/A	N/A
HOME DEPOT INC	HD	\$	119,625.55	0.85%	2.14%	14.50%	16.80%	0.1422%
HESS CORP	HES	\$	24,014.86	0.17%	1.31%	-1.00%	0.30%	0.0005%
HARTFORD FINANCIAL SVCS GRP	HIG	\$	15,928.03	0.11%	2.03%	11.00%	13.14%	0.0148%

Company	Ticker	Market	[4]	[5]	[6]	[7]	[8]	[9]
			Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
HARLEY-DAVIDSON INC	HOG	\$	12,412.85	0.09%	1.98%	16.00%	18.14%	0.0159%
HONEYWELL INTERNATIONAL INC	HON	\$	67,603.98	0.48%	2.12%	9.50%	11.72%	0.0560%
STARWOOD HOTELS & RESORTS	HOT	\$	13,932.95	0.10%	1.98%	14.00%	16.11%	0.0159%
HELMERICH & PAYNE	HP	\$	9,371.38	0.07%	3.34%	10.00%	13.50%	0.0090%
HEWLETT-PACKARD CO	HPQ	\$	63,453.35	N/A	1.95%	N/A	N/A	N/A
H&R BLOCK INC	HRB	\$	8,084.84	0.06%	2.79%	9.00%	11.91%	0.0068%
HORMEL FOODS CORP	HRL	\$	13,135.97	0.09%	1.57%	11.50%	13.16%	0.0122%
HARRIS CORP	HRS	\$	6,581.64	0.05%	3.00%	3.00%	6.04%	0.0028%
HOSPIRA INC	HSP	\$	8,380.92	N/A	0.00%	N/A	N/A	N/A
HOST HOTELS & RESORTS INC	HST	\$	16,015.54	N/A	3.89%	N/A	N/A	N/A
HERSHEY CO/THE	HSY	\$	14,684.53	0.10%	2.31%	12.00%	14.45%	0.0150%
HUMANA INC	HUM	\$	19,394.48	0.14%	0.90%	7.50%	8.44%	0.0116%
INTL BUSINESS MACHINES CORP	IBM	\$	179,406.95	1.27%	2.42%	7.50%	10.01%	0.1271%
INTERCONTINENTAL EXCHANGE IN	ICE	\$	22,425.21	0.16%	1.28%	18.50%	19.90%	0.0316%
INTL FLAVORS & FRAGRANCES	IFF	\$	7,681.08	0.05%	2.00%	7.00%	9.07%	0.0049%
INTEL CORP	INTC	\$	152,738.35	1.08%	2.88%	6.00%	8.96%	0.0969%
INTUIT INC	INTU	\$	22,454.87	0.16%	1.26%	10.00%	11.32%	0.0180%
INTERNATIONAL PAPER CO	IP	\$	19,698.52	0.14%	3.50%	12.00%	15.71%	0.0219%
INTERPUBLIC GROUP OF COS INC	IPG	\$	7,298.60	0.05%	2.23%	13.50%	15.88%	0.0082%
INGERSOLL-RAND PLC	IR	\$	14,688.86	0.10%	1.85%	12.50%	14.47%	0.0150%
IRON MOUNTAIN INC	IRM	\$	6,714.66	0.05%	5.48%	5.50%	11.13%	0.0053%
INTUITIVE SURGICAL INC	ISRG	\$	16,412.45	N/A	0.00%	N/A	N/A	N/A
ILLINOIS TOOL WORKS	ITW	\$	32,938.33	0.23%	2.40%	10.50%	13.02%	0.0304%
INVESCO LTD	IVZ	\$	15,474.76	0.11%	2.81%	17.00%	20.05%	0.0220%
JABIL CIRCUIT INC	JBL	\$	3,694.86	0.03%	1.73%	4.00%	5.76%	0.0015%
JOHNSON CONTROLS INC	JCI	\$	27,102.59	0.19%	2.21%	12.00%	14.34%	0.0275%
JACOBS ENGINEERING GROUP INC	JEC	\$	6,018.17	N/A	0.00%	N/A	N/A	N/A
JOHNSON & JOHNSON	JNJ	\$	272,947.38	1.93%	2.85%	6.50%	9.44%	0.1824%
JUNIPER NETWORKS INC	JNPR	\$	8,658.30	0.06%	2.09%	16.50%	18.76%	0.0115%
JOY GLOBAL INC	JOY	\$	5,059.99	0.04%	1.57%	2.00%	3.58%	0.0013%
JPMORGAN CHASE & CO	JPM	\$	207,171.36	1.47%	2.88%	8.00%	11.00%	0.1612%
NORDSTROM INC	JWN	\$	13,161.11	0.09%	1.93%	10.00%	12.02%	0.0112%
KELLOGG CO	K	\$	21,517.35	0.15%	3.27%	7.50%	10.89%	0.0166%
KEYCORP	KEY	\$	10,659.90	0.08%	2.14%	8.50%	10.73%	0.0081%
KIMCO REALTY CORP	KIM	\$	9,433.74	N/A	3.93%	N/A	N/A	N/A
KLA-TENCOR CORP	KLAC	\$	11,247.99	0.08%	2.97%	6.00%	9.05%	0.0072%
KIMBERLY-CLARK CORP	KMB	\$	39,276.77	0.28%	3.19%	8.50%	11.82%	0.0329%
KINDER MORGAN INC	KMI	\$	37,859.17	0.27%	4.87%	15.00%	20.24%	0.0542%
CARMAX INC	KMX	\$	9,882.32	N/A	0.00%	N/A	N/A	N/A
COCA-COLA CO/THE	KO	\$	186,664.93	1.32%	2.82%	8.00%	10.93%	0.1444%
MICHAEL KORS HOLDINGS LTD	KORS	\$	N/A	N/A	0.00%	N/A	N/A	N/A
KROGER CO	KR	\$	25,153.68	0.18%	1.41%	10.50%	11.99%	0.0213%
KRAFT FOODS GROUP INC	KRFT	\$	32,306.08	N/A	4.03%	N/A	N/A	N/A
KOHL'S CORP	KSS	\$	11,518.72	0.08%	2.76%	7.00%	9.86%	0.0080%
KANSAS CITY SOUTHERN	KSU	\$	12,844.33	0.09%	0.97%	14.00%	15.04%	0.0137%
LOEWS CORP	L	\$	15,472.98	0.11%	0.62%	13.00%	13.66%	0.0150%
L BRANDS INC	LB	\$	19,675.22	0.14%	2.04%	9.50%	11.64%	0.0162%
LEGGETT & PLATT INC	LEG	\$	4,618.80	0.03%	3.68%	12.50%	16.40%	0.0054%
LENNAR CORP-A	LEN	\$	6,902.02	0.05%	0.40%	27.00%	27.46%	0.0134%
LABORATORY CRP OF AMER HLDGS	LH	\$	8,321.05	N/A	0.00%	N/A	N/A	N/A
L-3 COMMUNICATIONS HOLDINGS	LLL	\$	9,285.75	0.07%	2.20%	4.00%	6.24%	0.0041%
LINEAR TECHNOLOGY CORP	LLTC	\$	9,638.72	0.07%	2.79%	10.50%	13.44%	0.0092%
ELI LILLY & CO	LLY	\$	69,161.37	0.49%	3.12%	-2.50%	0.58%	0.0028%
LEGG MASON INC	LM	\$	5,606.60	0.04%	1.33%	14.50%	15.92%	0.0063%
LOCKHEED MARTIN CORP	LMT	\$	55,454.03	0.39%	3.43%	7.50%	11.05%	0.0434%
LINCOLN NATIONAL CORP	LNC	\$	12,236.54	0.09%	1.38%	8.00%	9.43%	0.0082%
LORILLARD INC	LO	\$	20,880.99	0.15%	4.19%	12.00%	16.44%	0.0243%
LOWE'S COS INC	LOW	\$	50,747.33	0.36%	1.80%	15.00%	16.93%	0.0608%
LAM RESEARCH CORP	LRCX	\$	11,320.51	0.08%	1.03%	24.00%	25.15%	0.0201%
LEUCADIA NATIONAL CORP	LUK	\$	8,063.46	0.06%	1.15%	4.50%	5.67%	0.0032%
SOUTHWEST AIRLINES CO	LUV	\$	21,198.23	0.15%	0.80%	17.00%	17.87%	0.0268%
LYONDELLBASELL INDU-CL A	LYB	\$	N/A	N/A	0.00%	N/A	N/A	N/A
MACY'S INC	M	\$	19,976.39	0.14%	2.23%	13.50%	15.88%	0.0225%
MASTERCARD INC-CLASS A	MA	\$	82,053.83	0.58%	0.62%	15.00%	15.66%	0.0909%
MACERICH CO/THE	MAC	\$	9,171.74	N/A	3.76%	N/A	N/A	N/A
MARRIOTT INTERNATIONAL -CL A	MAR	\$	18,244.89	0.13%	1.29%	14.00%	15.38%	0.0199%
MASCO CORP	MAS	\$	7,563.91	0.05%	1.73%	33.50%	35.52%	0.0190%
MATTEL INC	MAT	\$	10,007.06	0.07%	4.98%	9.50%	14.71%	0.0104%
MCDONALD'S CORP	MCD	\$	88,285.24	0.62%	3.76%	7.00%	10.89%	0.0680%
MICROCHIP TECHNOLOGY INC	MCHP	\$	7,853.72	0.06%	3.77%	9.00%	12.94%	0.0072%
MCKESSON CORP	MCK	\$	42,919.93	0.30%	0.52%	14.00%	14.56%	0.0442%
MOODY'S CORP	MCO	\$	19,048.13	0.13%	1.23%	12.50%	13.80%	0.0186%
MONDELEZ INTERNATIONAL INC-A	MDLZ	\$	54,117.00	0.38%	1.84%	4.50%	6.38%	0.0244%
MEDTRONIC INC	MDT	\$	60,543.88	0.43%	1.96%	6.50%	8.52%	0.0365%
METLIFE INC	MET	\$	53,829.34	0.38%	2.93%	7.50%	10.54%	0.0402%
MCGRAW HILL FINANCIAL INC	MHFI	\$	20,702.18	N/A	1.57%	N/A	N/A	N/A
MOHAWK INDUSTRIES INC	MHK	\$	9,177.34	N/A	0.00%	N/A	N/A	N/A

			[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market	Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
MEAD JOHNSON NUTRITION CO	MJN	\$	18,439.56	0.13%	1.65%	12.00%	13.75%	0.0179%
MCCORMICK & CO-NON VTG SHRS	MKC	\$	7,748.00	0.05%	2.23%	8.50%	10.82%	0.0059%
MARTIN MARIETTA MATERIALS	MLM	\$	7,579.92	0.05%	1.46%	20.50%	22.11%	0.0119%
MARSH & MCLENNAN COS	MMC	\$	27,058.00	0.19%	2.26%	13.00%	15.41%	0.0295%
3M CO	MMM	\$	87,508.21	0.62%	2.55%	7.50%	10.14%	0.0628%
MALLINCKRODT PLC	MNK	\$	9,458.20	N/A	0.00%	N/A	N/A	N/A
MONSTER BEVERAGE CORP	MNST	\$	15,226.20	N/A	0.00%	N/A	N/A	N/A
ALTRIA GROUP INC	MO	\$	89,592.39	0.63%	4.57%	11.00%	15.82%	0.1003%
MONSANTO CO	MON	\$	58,051.57	0.41%	1.80%	13.50%	15.42%	0.0634%
MOSAIC CO/THE	MOS	\$	15,323.39	0.11%	2.42%	6.00%	8.49%	0.0092%
MARATHON PETROLEUM CORP	MPC	\$	22,226.85	0.16%	2.62%	10.00%	12.75%	0.0201%
MERCK & CO. INC	MRK	\$	154,125.89	1.09%	3.22%	2.00%	5.25%	0.0572%
MARATHON OIL CORP	MRO	\$	22,595.21	0.16%	2.57%	9.50%	12.19%	0.0195%
MORGAN STANLEY	MS	\$	63,867.91	0.45%	1.23%	30.00%	31.41%	0.1420%
MICROSOFT CORP	MSFT	\$	352,171.15	2.49%	2.87%	7.00%	9.97%	0.2485%
MOTOROLA SOLUTIONS INC	MSI	\$	14,847.02	0.11%	2.29%	8.00%	10.38%	0.0109%
M & T BANK CORP	MTB	\$	15,329.17	0.11%	2.42%	7.00%	9.50%	0.0103%
MICRON TECHNOLOGY INC	MU	\$	30,304.29	N/A	0.00%	N/A	N/A	N/A
MURPHY OIL CORP	MUR	\$	9,212.44	0.07%	2.74%	9.00%	11.86%	0.0077%
MEADWESTVACO CORP	MWV	\$	6,609.55	0.05%	2.59%	11.00%	13.74%	0.0064%
MYLAN INC	MYL	\$	18,242.27	N/A	0.00%	N/A	N/A	N/A
NAVIENT CORP	NAVI	\$	7,398.89	N/A	3.44%	N/A	N/A	N/A
NOBLE ENERGY INC	NBL	\$	20,499.35	0.15%	1.31%	17.00%	18.42%	0.0267%
NABORS INDUSTRIES LTD	NBR		N/A	N/A	0.00%	N/A	N/A	N/A
NASDAQ OMX GROUP/THE	NDAQ	\$	6,703.88	0.05%	1.51%	8.50%	10.07%	0.0048%
NOBLE CORP PLC	NE	\$	4,914.87	0.03%	7.95%	19.50%	28.22%	0.0098%
NEXTERA ENERGY INC	NEE	\$	40,742.65	0.29%	3.16%	4.50%	7.73%	0.0223%
NEWMONT MINING CORP	NEM	\$	11,331.80	0.08%	0.44%	-17.50%	-17.10%	-0.0137%
NETFLIX INC	NFLX	\$	21,734.91	N/A	0.00%	N/A	N/A	N/A
NEWFIELD EXPLORATION CO	NFX	\$	3,745.66	N/A	0.00%	N/A	N/A	N/A
NISOURCE INC	NI	\$	12,432.99	0.09%	2.70%	10.50%	13.34%	0.0117%
NIKE INC -CL B	NKE	\$	74,985.66	0.53%	1.13%	13.50%	14.70%	0.0780%
NIELSEN NV	NLSN	\$	15,816.47	0.11%	2.39%	13.00%	15.55%	0.0174%
NORTHROP GRUMMAN CORP	NOC	\$	25,285.38	0.18%	2.31%	5.00%	7.37%	0.0132%
NATIONAL OILWELL VARCO INC	NOV	\$	30,637.32	0.22%	2.63%	11.50%	14.28%	0.0310%
NRG ENERGY INC	NRG	\$	9,467.98	0.07%	2.07%	7.00%	9.14%	0.0061%
NORFOLK SOUTHERN CORP	NSC	\$	32,437.17	0.23%	2.17%	8.50%	10.76%	0.0247%
NETAPP INC	NTAP	\$	12,259.43	0.09%	1.70%	9.50%	11.28%	0.0098%
NORTHERN TRUST CORP	NTRS	\$	14,785.31	0.10%	2.11%	9.50%	11.71%	0.0123%
NORTHEAST UTILITIES	NU	\$	14,851.16	0.11%	3.30%	8.00%	11.43%	0.0120%
NUCOR CORP	NUE	\$	15,798.67	0.11%	3.02%	22.00%	25.35%	0.0283%
NVIDIA CORP	NVDA	\$	9,456.42	0.07%	1.95%	6.50%	8.51%	0.0057%
NEWELL RUBBERMAID INC	NWL	\$	6,753.39	0.06%	2.13%	12.50%	14.76%	0.0091%
NEWS CORP - CLASS A	NWSA	\$	5,554.21	N/A	0.00%	N/A	N/A	N/A
OWENS-ILLINOIS INC	OI	\$	4,056.81	N/A	0.00%	N/A	N/A	N/A
ONEOK INC	OKE	\$	11,762.57	0.08%	4.22%	10.00%	14.43%	0.0120%
OMNICOM GROUP	OMC	\$	16,616.55	0.12%	3.04%	11.50%	14.72%	0.0173%
ORACLE CORP	ORCL	\$	166,439.78	1.18%	1.25%	9.50%	10.81%	0.1274%
O'REILLY AUTOMOTIVE INC	ORLY	\$	15,509.02	N/A	0.00%	N/A	N/A	N/A
OCCIDENTAL PETROLEUM CORP	OXY	\$	67,391.04	0.48%	3.38%	3.50%	6.94%	0.0331%
PAYCHEX INC	PAYX	\$	15,634.26	0.11%	3.53%	8.00%	11.67%	0.0129%
PEOPLE'S UNITED FINANCIAL	PBCT	\$	4,384.61	0.03%	4.70%	14.00%	19.03%	0.0059%
PITNEY BOWES INC	PBI	\$	4,792.45	0.03%	3.23%	2.00%	5.27%	0.0018%
PACCAR INC	PCAR	\$	20,594.34	0.15%	1.54%	12.50%	14.14%	0.0208%
P G & E CORP	PCG	\$	21,062.69	0.15%	3.98%	2.50%	6.53%	0.0097%
PLUM CREEK TIMBER CO	PCL	\$	7,102.71	0.05%	4.45%	12.50%	17.22%	0.0087%
PRICELINE GROUP INC/THE	PCLN	\$	56,286.67	N/A	0.00%	N/A	N/A	N/A
PRECISION CASTPARTS CORP	PCP	\$	31,961.70	0.23%	0.05%	13.00%	13.06%	0.0295%
PATTERSON COS INC	PDCO	\$	4,150.59	0.03%	1.98%	11.50%	13.60%	0.0040%
PUBLIC SERVICE ENTERPRISE GP	PEG	\$	18,829.11	0.13%	3.96%	-0.50%	3.45%	0.0046%
PEPSICO INC	PEP	\$	135,876.86	0.96%	2.86%	8.50%	11.48%	0.1103%
PETSMART INC	PETM	\$	6,517.17	0.05%	1.21%	14.00%	15.29%	0.0071%
PFIZER INC	PFE	\$	175,641.91	1.24%	3.69%	10.50%	14.38%	0.1788%
PRINCIPAL FINANCIAL GROUP	PFGB	\$	14,145.70	0.10%	2.84%	9.50%	12.47%	0.0125%
PROCTER & GAMBLE CO/THE	PG	\$	222,622.36	1.58%	3.10%	9.00%	12.24%	0.1929%
PROGRESSIVE CORP	PGR	\$	14,394.16	0.10%	2.01%	14.00%	16.15%	0.0165%
PARKER HANNIFIN CORP	PH	\$	15,640.88	0.11%	1.87%	8.00%	9.94%	0.0110%
PULTEGROUP INC	PHM	\$	6,537.70	0.05%	1.14%	31.50%	32.82%	0.0152%
PERKINELMER INC	PKI	\$	4,524.66	0.03%	0.70%	8.50%	9.23%	0.0030%
PROLOGIS INC	PLD	\$	19,209.65	N/A	3.46%	N/A	N/A	N/A
PALL CORP	PLL	\$	8,650.06	0.06%	1.49%	10.50%	12.07%	0.0074%
PHILIP MORRIS INTERNATIONAL	PM	\$	133,187.29	0.94%	4.79%	9.00%	14.00%	0.1320%
PNC FINANCIAL SERVICES GROUP	PNC	\$	42,634.44	0.30%	2.46%	7.00%	9.55%	0.0288%
PENTAIR PLC	PNR	\$	11,902.20	0.08%	1.97%	16.50%	18.63%	0.0157%
PINNACLE WEST CAPITAL	PNW	\$	6,303.25	0.04%	3.96%	4.00%	8.04%	0.0036%
PEPCO HOLDINGS INC	POM	\$	6,715.69	0.05%	4.04%	5.50%	9.65%	0.0046%
PPG INDUSTRIES INC	PPG	\$	25,062.54	0.18%	1.49%	13.00%	14.58%	0.0259%

Company	Ticker	Market	[4]	[5]	[6]	[7]	[8]	[9]
			Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
PPL CORP	PPL	\$	21,957.79	0.16%	4.59%	0.00%	4.59%	0.0071%
PERRIGO CO PLC	PRGO	\$	19,512.12	0.14%	0.29%	12.00%	12.31%	0.0170%
PRUDENTIAL FINANCIAL INC	PRU	\$	36,257.20	0.26%	2.72%	10.00%	12.86%	0.0330%
PUBLIC STORAGE	PSA	\$	29,331.54	N/A	3.30%	N/A	N/A	N/A
PHILLIPS 66	PSX	\$	38,960.15	N/A	2.95%	N/A	N/A	N/A
PVH CORP	PVH	\$	9,227.19	0.07%	0.13%	13.50%	13.64%	0.0089%
QUANTA SERVICES INC	PWR	\$	6,556.73	N/A	0.00%	N/A	N/A	N/A
PRAXAIR INC	PX	\$	35,733.04	0.25%	2.14%	10.50%	12.75%	0.0323%
PIONEER NATURAL RESOURCES CO	PXD	\$	25,460.00	0.18%	0.05%	23.00%	23.05%	0.0415%
QUALCOMM INC	QCOM	\$	119,232.35	0.84%	2.36%	9.50%	11.97%	0.1010%
QEP RESOURCES INC	QEP	\$	4,201.52	0.03%	0.37%	11.50%	11.89%	0.0035%
RYDER SYSTEM INC	R	\$	4,347.33	0.03%	1.84%	14.50%	16.48%	0.0051%
REYNOLDS AMERICAN INC	RAI	\$	30,320.38	0.21%	4.67%	9.50%	14.40%	0.0309%
REGENERON PHARMACEUTICALS	REGN	\$	34,434.20	N/A	0.00%	N/A	N/A	N/A
REGIONS FINANCIAL CORP	RF	\$	12,489.27	0.09%	2.20%	72.50%	75.49%	0.0667%
ROBERT HALF INTL INC	RHI	\$	6,376.15	0.05%	1.54%	12.00%	13.63%	0.0062%
RED HAT INC	RHT	\$	10,317.06	N/A	0.00%	N/A	N/A	N/A
TRANSOCEAN LTD	RIG	\$	10,920.00	0.08%	10.19%	13.50%	24.38%	0.0188%
RALPH LAUREN CORP	RL	\$	13,866.45	0.10%	1.15%	9.50%	10.70%	0.0105%
ROCKWELL AUTOMATION INC	ROK	\$	14,217.36	0.10%	2.30%	8.50%	10.90%	0.0110%
ROPER INDUSTRIES INC	ROP	\$	14,115.80	0.10%	0.57%	11.00%	11.60%	0.0116%
ROSS STORES INC	ROST	\$	16,098.31	0.11%	1.05%	12.00%	13.11%	0.0149%
RANGE RESOURCES CORP	RRC	\$	11,663.78	0.08%	0.24%	38.00%	38.29%	0.0316%
REPUBLIC SERVICES INC	RSG	\$	13,402.66	0.09%	2.95%	8.50%	11.57%	0.0110%
RAYTHEON COMPANY	RTN	\$	29,617.74	0.21%	2.54%	9.50%	12.16%	0.0255%
STARBUCKS CORP	SBUX	\$	54,567.17	0.39%	1.44%	18.50%	20.07%	0.0775%
SCANA CORP	SCG	\$	7,277.38	0.05%	4.11%	5.00%	9.21%	0.0047%
SCHWAB (CHARLES) CORP	SCHW	\$	33,235.55	0.24%	0.95%	10.50%	11.50%	0.0270%
SPECTRA ENERGY CORP	SE	\$	24,903.59	0.18%	3.71%	3.00%	6.77%	0.0119%
SEALED AIR CORP	SEE	\$	6,820.78	0.05%	1.67%	19.50%	21.33%	0.0103%
SHERWIN-WILLIAMS CO/THE	SHW	\$	20,690.96	0.15%	1.05%	15.50%	16.63%	0.0243%
SIGMA-ALDRICH	SIAL	\$	15,990.24	0.11%	0.68%	7.50%	8.21%	0.0093%
JM SMUCKER CO/THE	SJM	\$	9,965.85	0.07%	2.63%	8.50%	11.24%	0.0079%
SCHLUMBERGER LTD	SLB	\$	117,508.96	0.83%	1.79%	15.00%	16.93%	0.1408%
SNAP-ON INC	SNA	\$	7,081.31	0.05%	1.54%	9.00%	10.61%	0.0053%
SANDISK CORP	SNDK	\$	19,128.98	0.14%	1.42%	11.50%	13.00%	0.0176%
SCRIPPS NETWORKS INTER-CL A	SNI	\$	10,034.14	0.07%	1.09%	9.00%	10.14%	0.0072%
SOUTHERN CO/THE	SO	\$	41,533.47	0.29%	4.48%	3.50%	8.06%	0.0237%
SIMON PROPERTY GROUP INC	SPG	\$	51,670.90	N/A	3.13%	N/A	N/A	N/A
STAPLES INC	SPLS	\$	7,723.97	0.05%	3.95%	-1.50%	2.42%	0.0013%
STERICYCLE INC	SRCL	\$	9,932.95	N/A	0.00%	N/A	N/A	N/A
SEMPRA ENERGY	SRE	\$	24,985.29	0.18%	2.63%	4.50%	7.19%	0.0127%
SUNTRUST BANKS INC	STI	\$	18,550.90	0.13%	2.30%	26.00%	28.60%	0.0375%
ST JUDE MEDICAL INC	STJ	\$	16,153.48	0.11%	1.89%	8.50%	10.47%	0.0120%
STATE STREET CORP	STT	\$	28,032.72	0.20%	1.82%	10.00%	11.91%	0.0236%
SEAGATE TECHNOLOGY	STX	\$	N/A	N/A	0.00%	N/A	N/A	N/A
CONSTELLATION BRANDS INC-A	STZ	\$	13,911.33	N/A	0.00%	N/A	N/A	N/A
STANLEY BLACK & DECKER INC	SWK	\$	12,952.07	0.09%	2.56%	10.00%	12.69%	0.0116%
SOUTHWESTERN ENERGY CO	SWN	\$	11,290.53	N/A	0.00%	N/A	N/A	N/A
SAFEWAY INC	SWY	\$	7,667.18	0.05%	2.76%	6.50%	9.35%	0.0051%
STRYKER CORP	SYK	\$	29,983.77	0.21%	1.54%	7.50%	9.09%	0.0193%
SYMANTEC CORP	SYMC	\$	15,207.55	0.11%	2.71%	15.00%	17.91%	0.0193%
SYSCO CORP	SYI	\$	21,270.20	0.15%	3.17%	8.50%	11.80%	0.0178%
AT&T INC	T	\$	174,457.04	1.23%	5.43%	7.00%	12.62%	0.1558%
MOLSON COORS BREWING CO -B	TAP	\$	N/A	N/A	0.00%	N/A	N/A	N/A
TERADATA CORP	TDC	\$	6,355.00	N/A	0.00%	N/A	N/A	N/A
TECO ENERGY INC	TE	\$	4,250.36	0.03%	4.81%	2.00%	6.86%	0.0021%
INTEGRYS ENERGY GROUP INC	TEG	\$	5,478.27	0.04%	3.93%	3.50%	7.50%	0.0029%
TE CONNECTIVITY LTD	TEL	\$	N/A	N/A	0.00%	N/A	N/A	N/A
TARGET CORP	TGT	\$	37,668.08	0.27%	3.47%	6.00%	9.57%	0.0255%
TENET HEALTHCARE CORP	THC	\$	5,444.13	N/A	0.00%	N/A	N/A	N/A
TIFFANY & CO	TIF	\$	11,729.64	0.08%	1.73%	11.50%	13.33%	0.0111%
TJX COMPANIES INC	TJX	\$	41,313.20	0.29%	1.17%	12.50%	13.74%	0.0402%
TORCHMARK CORP	TMK	\$	6,571.24	0.05%	1.00%	5.50%	6.53%	0.0030%
THERMO FISHER SCIENTIFIC INC	TMO	\$	43,805.25	0.31%	0.54%	11.00%	11.57%	0.0359%
TRIPADVISOR INC	TRIP	\$	11,354.26	N/A	0.00%	N/A	N/A	N/A
T ROWE PRICE GROUP INC	TROW	\$	19,842.16	0.14%	2.36%	12.50%	15.01%	0.0211%
TRAVELERS COS INC/THE	TRV	\$	31,123.59	0.22%	2.39%	9.50%	12.01%	0.0264%
TRACTOR SUPPLY COMPANY	TSCO	\$	8,058.23	0.06%	1.11%	16.00%	17.20%	0.0098%
TYSON FOODS INC-CL A	TSN	\$	13,940.90	0.10%	0.77%	10.00%	10.81%	0.0107%
TESORO CORP	TSO	\$	7,669.97	0.05%	2.05%	15.50%	17.70%	0.0096%
TOTAL SYSTEM SERVICES INC	TSS	\$	5,353.18	0.04%	1.37%	9.50%	10.94%	0.0041%
TIME WARNER CABLE	TWC	\$	36,872.33	0.26%	2.20%	10.00%	12.31%	0.0321%
TIME WARNER INC	TWX	\$	64,463.18	0.46%	1.76%	12.50%	14.37%	0.0655%
TEXAS INSTRUMENTS INC	TXN	\$	46,534.77	0.33%	3.18%	8.00%	11.31%	0.0372%
TEXTRON INC	TXT	\$	9,397.91	0.07%	0.24%	17.00%	17.26%	0.0115%
TYCO INTERNATIONAL LTD	TYC	\$	N/A	N/A	0.00%	N/A	N/A	N/A

			[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market	Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
UNDER ARMOUR INC-CLASS A	UA	\$	13,784.16	N/A	0.00%	N/A	N/A	N/A
UNIVERSAL HEALTH SERVICES-B	UHS	\$	10,237.28	0.07%	0.40%	9.00%	9.42%	0.0068%
UNITEDHEALTH GROUP INC	UNH	\$	82,967.06	0.59%	1.83%	10.00%	11.92%	0.0700%
UNUM GROUP	UNM	\$	8,193.69	0.06%	2.07%	7.50%	9.65%	0.0056%
UNION PACIFIC CORP	UNP	\$	93,359.43	0.66%	2.01%	11.00%	13.12%	0.0867%
UNITED PARCEL SERVICE-CL B	UPS	\$	87,358.29	0.62%	2.78%	7.50%	10.38%	0.0642%
URBAN OUTFITTERS INC	URBN	\$	4,642.65	N/A	0.00%	N/A	N/A	N/A
UNITED RENTALS INC	URI	\$	9,944.87	N/A	0.00%	N/A	N/A	N/A
US BANCORP	USB	\$	70,455.35	0.50%	2.52%	5.50%	8.09%	0.0403%
UNITED TECHNOLOGIES CORP	UTX	\$	90,776.60	0.64%	2.38%	9.50%	11.99%	0.0770%
VISA INC-CLASS A SHARES	V	\$	126,497.42	0.90%	0.80%	18.50%	19.37%	0.1734%
VARIAN MEDICAL SYSTEMS INC	VAR	\$	8,149.78	N/A	0.00%	N/A	N/A	N/A
VF CORP	VFC	\$	27,581.84	0.20%	1.67%	13.50%	15.28%	0.0298%
VIACOM INC-CLASS B	VIAB	\$	25,386.40	0.18%	1.94%	13.50%	15.57%	0.0280%
VALERO ENERGY CORP	VLO	\$	23,626.34	0.17%	2.51%	15.00%	17.70%	0.0296%
VULCAN MATERIALS CO	VMC	\$	7,431.76	N/A	0.43%	N/A	N/A	N/A
VORNADO REALTY TRUST	VNO	\$	19,474.00	0.14%	2.83%	6.50%	9.42%	0.0130%
VERISIGN INC	VRSN	\$	6,719.88	N/A	0.00%	N/A	N/A	N/A
VERTEX PHARMACEUTICALS INC	VRTX	\$	24,108.18	N/A	0.00%	N/A	N/A	N/A
VENTAS INC	VTR	\$	19,470.26	N/A	4.39%	N/A	N/A	N/A
VERIZON COMMUNICATIONS INC	VZ	\$	197,603.21	1.40%	4.59%	10.50%	15.33%	0.2144%
WALGREEN CO	WAG	\$	57,766.72	0.41%	2.22%	11.00%	13.34%	0.0545%
WATERS CORP	WAT	\$	7,986.66	N/A	0.00%	N/A	N/A	N/A
WESTERN DIGITAL CORP	WDC	\$	19,992.26	0.14%	1.88%	6.00%	7.94%	0.0112%
WISCONSIN ENERGY CORP	WEC	\$	10,626.36	0.08%	3.27%	6.00%	9.37%	0.0070%
WELLS FARGO & CO	WFC	\$	252,788.39	1.79%	2.93%	8.00%	11.04%	0.1975%
WHOLE FOODS MARKET INC	WFM	\$	13,319.10	0.09%	1.30%	17.50%	18.91%	0.0178%
WHIRLPOOL CORP	WHR	\$	11,368.11	0.08%	2.09%	7.50%	9.67%	0.0078%
WINDSTREAM HOLDINGS INC	WIN	\$	6,044.82	0.04%	10.02%	4.00%	14.22%	0.0061%
WELLPOINT INC	WLP	\$	30,488.24	0.22%	1.58%	6.50%	8.13%	0.0175%
WASTE MANAGEMENT INC	WM	\$	21,589.75	0.15%	3.24%	8.50%	9.85%	0.0150%
WILLIAMS COS INC	WMB	\$	38,150.28	0.27%	4.51%	8.00%	12.69%	0.0342%
WAL-MART STORES INC	WMT	\$	237,885.91	1.68%	2.55%	7.50%	10.15%	0.1708%
WESTERN UNION CO	WU	\$	8,391.56	0.06%	3.16%	5.00%	8.24%	0.0049%
WEYERHAEUSER CO	WY	\$	17,111.80	0.12%	3.62%	17.00%	20.92%	0.0253%
WYNDHAM WORLDWIDE CORP	WYN	\$	9,262.06	0.07%	1.95%	13.50%	15.58%	0.0102%
WYNN RESORTS LTD	WYNN	\$	18,452.43	0.13%	2.87%	14.00%	17.07%	0.0223%
CIMAREX ENERGY CO	XEC	\$	9,549.79	0.07%	0.60%	7.00%	7.62%	0.0051%
XCEL ENERGY INC	XEL	\$	16,116.25	0.11%	3.72%	4.50%	8.31%	0.0095%
XL GROUP PLC	XL		N/A	N/A	0.00%	N/A	N/A	N/A
XILINX INC	XLNX	\$	10,333.87	0.07%	3.09%	8.50%	11.72%	0.0086%
EXXON MOBIL CORP	XOM	\$	386,381.10	2.73%	3.06%	6.00%	9.15%	0.2502%
DENTSPLY INTERNATIONAL INC	XRAY	\$	6,350.24	0.04%	0.58%	8.50%	9.10%	0.0041%
XEROX CORP	XRX	\$	14,333.69	0.10%	1.97%	6.00%	8.03%	0.0081%
XYLEM INC	XYL	\$	6,218.46	0.04%	1.54%	10.50%	12.12%	0.0053%
YAHOO! INC	YHOO	\$	37,909.33	N/A	0.00%	N/A	N/A	N/A
YUM! BRANDS INC	YUM	\$	29,583.28	0.21%	2.44%	9.50%	12.05%	0.0252%
ZIONS BANCORPORATION	ZION	\$	5,312.89	0.04%	0.62%	11.00%	11.65%	0.0044%
ZIMMER HOLDINGS INC	ZMH	\$	16,207.59	0.11%	0.90%	9.50%	10.44%	0.0120%
ZOETIS INC	ZTS	\$	17,576.84	N/A	0.82%	N/A	N/A	N/A
Total Market Capitalization:		\$	14,131,203					12.88%

Notes:

[1] Equals sum of Col. [9]

[2] Source: Bloomberg Professional

[3] Equals [1] - [2]

[4] Source: Value Line

[5] Equals weight in S&P 500 based on market capitalization

[6] Source: Value Line

[7] Source: Value Line

[8] Equals (([6] x (1 + (0.5 x [7]))) + [7])

[9] Equals Col. [5] x Col. [8]

Bloomberg and Value Line Beta coefficients

PNM Exhibit RBH-8

Is contained in the following page.

Bloomberg and Value Line Beta Coefficients

Company	Ticker	[1]	[2]
		Bloomberg	Value Line
American Electric Power Company, Inc.	AEP	0.769	0.70
Cleco Corporation	CNL	0.843	0.75
Duke Energy Corporation	DUK	0.609	0.60
Empire District Electric Company	EDE	0.670	0.65
Great Plains Energy Inc.	GXP	0.860	0.85
Hawaiian Electric Industries, Inc.	HE	0.770	0.75
IDACORP, Inc.	IDA	0.856	0.80
NextEra Energy, Inc.	NEE	0.762	0.70
Northeast Utilities	NU	0.685	0.75
Otter Tail Corporation	OTTR	0.930	0.95
Pinnacle West Capital Corporation	PNW	0.816	0.70
Portland General Electric Company	POR	0.790	0.75
Southern Company	SO	0.627	0.60
Westar Energy, Inc.	WR	0.717	0.75
Mean		0.765	0.74

Notes:

[1] Source: Bloomberg Professional Service

[2] Source: Value Line

CAPM Analysis

PNM Exhibit RBH-9

Is contained in the following page.

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

	[1]	[2]	[3]	[4]	[5]	[6]
			Ex-Ante Market Risk Premium		CAPM Result	
	Risk-Free Rate	Average Beta Coefficient	Bloomberg Market DCF Derived	Value Line Market DCF Derived	Bloomberg Market DCF Derived	Value Line Market DCF Derived
PROXY GROUP BLOOMBERG AVERAGE BETA COEFFICIENT						
Current 30-Year Treasury (30-day average) [7]	3.18%	0.765	10.14%	9.69%	10.93%	10.59%
Near-Term Projected 30-Year Treasury [8]	3.88%	0.765	10.14%	9.69%	11.63%	11.30%
Mean					11.28%	10.94%
			Ex-Ante Market Risk Premium		CAPM Result	
	Risk-Free Rate	Average Beta Coefficient	Bloomberg Market DCF Derived	Value Line Market DCF Derived	Bloomberg Market DCF Derived	Value Line Market DCF Derived
PROXY GROUP VALUE LINE AVERAGE BETA COEFFICIENT						
Current 30-Year Treasury (30-day average) [7]	3.18%	0.736	10.14%	9.69%	10.64%	10.31%
Near-Term Projected 30-Year Treasury [8]	3.88%	0.736	10.14%	9.69%	11.34%	11.02%
Mean					10.99%	10.66%

Notes:

[1] See Notes [7] and [8]

[2] Source: Schedule RBH-4

[3] Source: Schedule RBH-3

[4] Source: Schedule 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. 33, No. 10, October 1, 2014, at 2

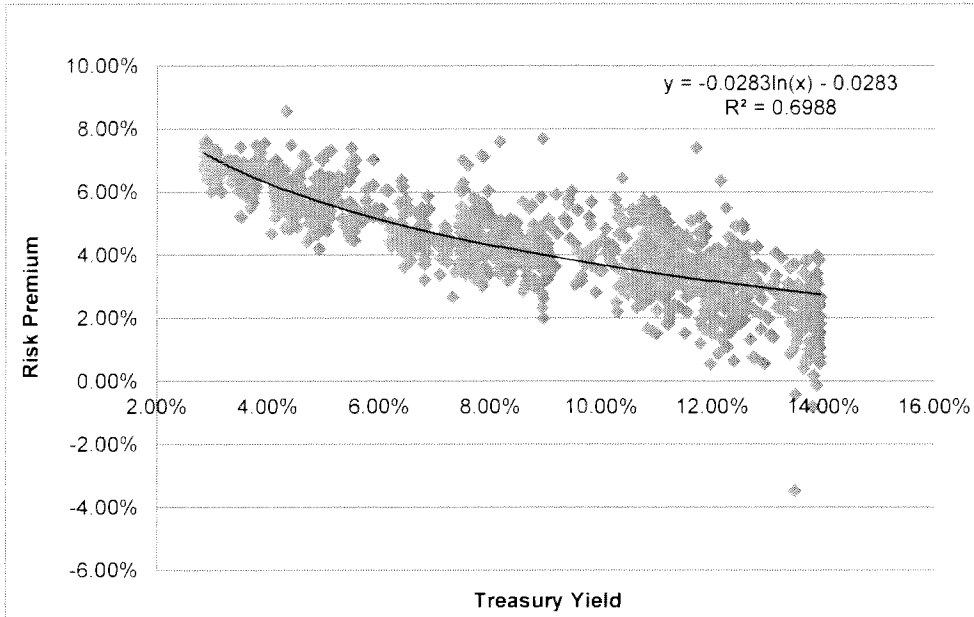
Bond Yield Plus Risk Premium Analysis

PNM Exhibit RBH-10

Is contained in the following 25 pages.

Bond Yield Plus Risk Premium

[1]	[2]	[3]	[4]	[5]
Constant	Slope	30-Year Treasury Yield	Risk Premium	Return on Equity
-2.83%	-2.83%			
	Current	3.18%	6.93%	10.11%
	Near Term Projected	3.88%	6.37%	10.25%
	Long Term Projected	5.45%	5.41%	10.86%



Notes:

- [1] Constant of regression equation
- [2] Slope of regression equation
- [3] Source: Current = Bloomberg Professional, Near Term Projected = Blue Chip Financial Forecasts, Vol. 33, No. 10, October 1, 2014, at 2, Long Term Projected = Blue Chip Financial Forecasts, Vol. 33, No. 6, June 1, 2014, at 14
- [4] Equals [1] + ln([3]) x [2]
- [5] Equals [3] + [4]
- [6] Source: SNL Financial
- [7] Source: SNL Financial (excludes Virginia Generation Riders)
- [8] Source: Bloomberg Professional, equals 200-trading day average (i.e. lag period) as of October 17, 2014
- [9] Equals [7] - [8]

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
1/1/1980	14.50%	9.36%	5.14%
1/7/1980	14.39%	9.38%	5.01%
1/9/1980	15.00%	9.39%	5.61%
1/14/1980	15.17%	9.41%	5.76%
1/17/1980	13.93%	9.43%	4.50%
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%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
2/14/1980	13.00%	9.64%	3.36%
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%	9.96%	3.54%
3/26/1980	14.16%	10.09%	4.07%
3/27/1980	14.24%	10.11%	4.13%
3/28/1980	14.50%	10.13%	4.37%
4/11/1980	12.75%	10.27%	2.48%
4/14/1980	13.85%	10.28%	3.57%
4/16/1980	15.50%	10.30%	5.20%
4/22/1980	13.25%	10.34%	2.91%
4/22/1980	13.90%	10.34%	3.56%
4/24/1980	16.80%	10.37%	6.43%
4/29/1980	15.50%	10.40%	5.10%
5/6/1980	13.70%	10.44%	3.26%
5/7/1980	15.00%	10.45%	4.55%
5/8/1980	13.75%	10.45%	3.30%
5/9/1980	14.35%	10.46%	3.89%
5/13/1980	13.60%	10.47%	3.13%
5/15/1980	13.25%	10.49%	2.76%
5/19/1980	13.75%	10.50%	3.25%
5/27/1980	13.62%	10.53%	3.09%
5/27/1980	14.60%	10.53%	4.07%
5/29/1980	16.00%	10.55%	5.45%
5/30/1980	13.80%	10.56%	3.24%
6/2/1980	15.63%	10.56%	5.07%
6/9/1980	15.90%	10.59%	5.31%
6/10/1980	13.78%	10.59%	3.19%
6/12/1980	14.25%	10.60%	3.65%
6/19/1980	13.40%	10.61%	2.79%
6/30/1980	13.00%	10.64%	2.36%
6/30/1980	13.40%	10.64%	2.76%
7/9/1980	14.75%	10.67%	4.08%
7/10/1980	15.00%	10.67%	4.33%
7/15/1980	15.80%	10.69%	5.11%
7/18/1980	13.80%	10.70%	3.10%
7/22/1980	14.10%	10.71%	3.39%
7/24/1980	15.00%	10.72%	4.28%
7/25/1980	13.48%	10.73%	2.75%
7/31/1980	14.58%	10.75%	3.83%
8/8/1980	13.50%	10.77%	2.73%
8/8/1980	14.00%	10.77%	3.23%
8/8/1980	15.45%	10.77%	4.68%
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%	5.46%
8/25/1980	13.75%	10.82%	2.93%
8/27/1980	13.80%	10.83%	2.97%
8/29/1980	12.50%	10.83%	1.67%
9/15/1980	13.50%	10.87%	2.63%
9/15/1980	13.93%	10.87%	3.06%
9/15/1980	15.80%	10.87%	4.93%
9/24/1980	12.50%	10.92%	1.58%
9/24/1980	15.00%	10.92%	4.08%
9/26/1980	13.75%	10.94%	2.81%
9/30/1980	14.10%	10.96%	3.14%
9/30/1980	14.20%	10.96%	3.24%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
10/1/1980	13.90%	10.96%	2.94%
10/3/1980	15.50%	10.98%	4.52%
10/7/1980	12.50%	10.99%	1.51%
10/9/1980	13.25%	11.00%	2.25%
10/9/1980	14.50%	11.00%	3.50%
10/9/1980	14.50%	11.00%	3.50%
10/16/1980	16.10%	11.02%	5.08%
10/17/1980	14.50%	11.03%	3.47%
10/31/1980	13.75%	11.10%	2.65%
10/31/1980	14.25%	11.10%	3.15%
11/4/1980	15.00%	11.11%	3.89%
11/5/1980	13.75%	11.12%	2.63%
11/5/1980	14.00%	11.12%	2.88%
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	14.15%	11.23%	2.92%
12/8/1980	15.10%	11.23%	3.87%
12/9/1980	15.35%	11.23%	4.12%
12/12/1980	15.45%	11.23%	4.22%
12/17/1980	13.25%	11.24%	2.01%
12/18/1980	15.80%	11.24%	4.56%
12/19/1980	14.50%	11.24%	3.26%
12/19/1980	14.64%	11.24%	3.40%
12/22/1980	13.45%	11.24%	2.21%
12/22/1980	15.00%	11.24%	3.76%
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	13.10%	11.20%	1.90%
1/23/1981	14.40%	11.20%	3.20%
1/26/1981	15.25%	11.21%	4.04%
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%	11.24%	4.51%
2/11/1981	15.60%	11.28%	4.32%
2/20/1981	15.25%	11.33%	3.92%
3/11/1981	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%	11.51%	1.51%
3/18/1981	16.19%	11.54%	4.65%
3/19/1981	13.75%	11.55%	2.20%
3/23/1981	14.30%	11.57%	2.73%
3/25/1981	15.30%	11.60%	3.70%
4/1/1981	14.53%	11.67%	2.86%
4/3/1981	19.10%	11.70%	7.40%
4/9/1981	15.00%	11.77%	3.23%
4/9/1981	15.30%	11.77%	3.53%
4/9/1981	16.50%	11.77%	4.73%
4/9/1981	17.00%	11.77%	5.23%
4/10/1981	13.75%	11.79%	1.96%
4/13/1981	13.57%	11.81%	1.76%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
4/15/1981	15.30%	11.84%	3.46%
4/16/1981	13.50%	11.86%	1.64%
4/17/1981	14.10%	11.86%	2.24%
4/21/1981	14.00%	11.89%	2.11%
4/21/1981	16.80%	11.89%	4.91%
4/24/1981	16.00%	11.94%	4.06%
4/27/1981	12.50%	11.96%	0.54%
4/27/1981	13.61%	11.96%	1.65%
4/29/1981	13.65%	11.99%	1.66%
4/30/1981	13.50%	12.01%	1.49%
5/4/1981	16.22%	12.04%	4.18%
5/5/1981	14.40%	12.06%	2.34%
5/7/1981	16.25%	12.10%	4.15%
5/7/1981	16.27%	12.10%	4.17%
5/8/1981	13.00%	12.12%	0.88%
5/8/1981	16.00%	12.12%	3.88%
5/12/1981	13.50%	12.15%	1.35%
5/15/1981	15.75%	12.21%	3.54%
5/18/1981	14.88%	12.22%	2.66%
5/20/1981	16.00%	12.25%	3.75%
5/21/1981	14.00%	12.27%	1.73%
5/26/1981	14.90%	12.29%	2.61%
5/27/1981	15.00%	12.31%	2.69%
5/29/1981	15.50%	12.33%	3.17%
6/1/1981	16.50%	12.34%	4.16%
6/3/1981	14.67%	12.36%	2.31%
6/5/1981	13.00%	12.38%	0.62%
6/10/1981	16.75%	12.41%	4.34%
6/17/1981	14.40%	12.45%	1.95%
6/18/1981	16.33%	12.46%	3.87%
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%	12.55%	2.95%
7/1/1981	17.50%	12.55%	4.95%
7/10/1981	16.00%	12.61%	3.39%
7/14/1981	16.90%	12.63%	4.27%
7/15/1981	16.00%	12.64%	3.36%
7/17/1981	15.00%	12.66%	2.34%
7/20/1981	15.00%	12.67%	2.33%
7/21/1981	14.00%	12.68%	1.32%
7/28/1981	13.48%	12.73%	0.75%
7/31/1981	13.50%	12.77%	0.73%
7/31/1981	15.00%	12.77%	2.23%
7/31/1981	16.00%	12.77%	3.23%
8/5/1981	15.71%	12.82%	2.89%
8/10/1981	14.50%	12.86%	1.64%
8/11/1981	15.00%	12.87%	2.13%
8/20/1981	13.50%	12.94%	0.56%
8/20/1981	16.50%	12.94%	3.56%
8/24/1981	15.00%	12.96%	2.04%
8/28/1981	15.00%	13.01%	1.99%
9/3/1981	14.50%	13.05%	1.45%
9/10/1981	14.50%	13.10%	1.40%
9/11/1981	16.00%	13.11%	2.89%
9/16/1981	16.00%	13.14%	2.86%
9/17/1981	16.50%	13.15%	3.35%
9/23/1981	15.85%	13.19%	2.66%
9/28/1981	15.50%	13.23%	2.27%
10/9/1981	15.75%	13.32%	2.43%
10/15/1981	16.25%	13.36%	2.89%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
10/16/1981	15.50%	13.37%	2.13%
10/16/1981	16.50%	13.37%	3.13%
10/19/1981	14.25%	13.38%	0.87%
10/20/1981	15.25%	13.40%	1.85%
10/20/1981	17.00%	13.40%	3.60%
10/23/1981	16.00%	13.44%	2.56%
10/27/1981	10.00%	13.48%	-3.48%
10/29/1981	14.75%	13.50%	1.25%
10/29/1981	16.50%	13.50%	3.00%
11/3/1981	15.17%	13.53%	1.64%
11/5/1981	16.60%	13.55%	3.05%
11/6/1981	15.17%	13.55%	1.62%
11/24/1981	15.50%	13.60%	1.90%
11/25/1981	15.25%	13.60%	1.65%
11/25/1981	15.35%	13.60%	1.75%
11/25/1981	16.10%	13.60%	2.50%
11/25/1981	16.10%	13.60%	2.50%
12/1/1981	15.70%	13.61%	2.09%
12/1/1981	16.00%	13.61%	2.39%
12/1/1981	16.49%	13.61%	2.88%
12/1/1981	16.50%	13.61%	2.89%
12/4/1981	16.00%	13.61%	2.39%
12/11/1981	16.25%	13.62%	2.63%
12/14/1981	14.00%	13.62%	0.38%
12/15/1981	15.81%	13.63%	2.18%
12/15/1981	16.00%	13.63%	2.37%
12/16/1981	15.25%	13.63%	1.62%
12/17/1981	16.50%	13.63%	2.87%
12/18/1981	15.45%	13.63%	1.82%
12/30/1981	14.25%	13.66%	0.59%
12/30/1981	16.00%	13.66%	2.34%
12/30/1981	16.25%	13.66%	2.59%
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%	13.74%	2.01%
1/15/1982	15.00%	13.75%	1.25%
1/15/1982	16.50%	13.75%	2.75%
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%	13.81%	1.69%
2/1/1982	15.85%	13.82%	2.03%
2/3/1982	16.44%	13.83%	2.61%
2/8/1982	15.50%	13.85%	1.65%
2/11/1982	16.00%	13.87%	2.13%
2/11/1982	16.20%	13.87%	2.33%
2/17/1982	15.00%	13.88%	1.12%
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%	13.88%	1.22%
3/27/1982	15.40%	13.89%	1.51%
3/30/1982	15.50%	13.90%	1.60%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
3/31/1982	17.00%	13.90%	3.10%
4/1/1982	14.70%	13.91%	0.79%
4/1/1982	16.50%	13.91%	2.59%
4/2/1982	15.50%	13.91%	1.59%
4/5/1982	15.50%	13.91%	1.59%
4/8/1982	16.40%	13.93%	2.47%
4/13/1982	14.50%	13.93%	0.57%
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	14.70%	13.94%	0.76%
4/30/1982	15.50%	13.94%	1.56%
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%	13.91%	0.78%
5/20/1982	15.00%	13.91%	1.09%
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%
5/21/1982	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%	13.87%	2.13%
6/23/1982	16.17%	13.87%	2.30%
6/24/1982	14.85%	13.86%	0.99%
6/25/1982	14.70%	13.86%	0.84%
7/1/1982	16.00%	13.85%	2.15%
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	14.50%	13.78%	0.72%
7/22/1982	17.00%	13.78%	3.22%
7/27/1982	16.75%	13.75%	3.00%
7/29/1982	16.50%	13.74%	2.76%
8/11/1982	17.50%	13.69%	3.81%
8/18/1982	17.07%	13.64%	3.43%
8/20/1982	15.73%	13.61%	2.12%
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%	13.49%	1.76%
9/23/1982	17.17%	13.47%	3.70%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
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%	13.25%	2.50%
10/22/1982	17.15%	13.25%	3.90%
10/29/1982	15.54%	13.17%	2.37%
11/1/1982	15.50%	13.15%	2.35%
11/3/1982	17.20%	13.13%	4.07%
11/4/1982	16.25%	13.12%	3.13%
11/5/1982	16.20%	13.10%	3.10%
11/9/1982	16.00%	13.06%	2.94%
11/23/1982	15.50%	12.89%	2.61%
11/23/1982	15.85%	12.89%	2.96%
11/30/1982	16.50%	12.82%	3.68%
12/1/1982	17.04%	12.79%	4.25%
12/6/1982	15.00%	12.74%	2.26%
12/6/1982	16.35%	12.74%	3.61%
12/10/1982	15.50%	12.67%	2.83%
12/13/1982	16.00%	12.65%	3.35%
12/14/1982	15.30%	12.63%	2.67%
12/14/1982	16.40%	12.63%	3.77%
12/20/1982	16.00%	12.58%	3.42%
12/21/1982	14.75%	12.56%	2.19%
12/21/1982	15.85%	12.56%	3.29%
12/22/1982	16.25%	12.55%	3.70%
12/22/1982	16.58%	12.55%	4.03%
12/22/1982	16.75%	12.55%	4.20%
12/29/1982	14.90%	12.49%	2.41%
12/29/1982	16.25%	12.49%	3.76%
12/30/1982	16.00%	12.47%	3.53%
12/30/1982	16.35%	12.47%	3.88%
12/30/1982	16.77%	12.47%	4.30%
1/5/1983	17.33%	12.41%	4.92%
1/11/1983	15.90%	12.35%	3.55%
1/12/1983	14.63%	12.34%	2.29%
1/12/1983	15.50%	12.34%	3.16%
1/20/1983	17.75%	12.24%	5.51%
1/21/1983	15.00%	12.23%	2.77%
1/24/1983	14.50%	12.21%	2.29%
1/24/1983	15.50%	12.21%	3.29%
1/25/1983	15.85%	12.20%	3.65%
1/27/1983	16.14%	12.17%	3.97%
2/1/1983	18.50%	12.14%	6.36%
2/4/1983	14.00%	12.10%	1.90%
2/10/1983	15.00%	12.06%	2.94%
2/21/1983	15.50%	11.99%	3.51%
2/22/1983	15.50%	11.98%	3.52%
2/23/1983	15.10%	11.96%	3.14%
2/23/1983	16.00%	11.96%	4.04%
3/2/1983	15.25%	11.90%	3.35%
3/9/1983	15.20%	11.83%	3.37%
3/15/1983	13.00%	11.78%	1.22%
3/18/1983	15.25%	11.74%	3.51%
3/23/1983	15.40%	11.70%	3.70%
3/24/1983	15.00%	11.68%	3.32%
3/29/1983	15.50%	11.64%	3.86%
3/30/1983	16.71%	11.62%	5.09%
3/31/1983	15.00%	11.61%	3.39%
4/4/1983	15.20%	11.59%	3.61%
4/8/1983	15.50%	11.52%	3.98%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
4/11/1983	14.81%	11.50%	3.31%
4/19/1983	14.50%	11.39%	3.11%
4/20/1983	16.00%	11.37%	4.63%
4/29/1983	16.00%	11.26%	4.74%
5/1/1983	14.50%	11.26%	3.24%
5/9/1983	15.50%	11.16%	4.34%
5/11/1983	16.46%	11.13%	5.33%
5/12/1983	14.14%	11.12%	3.02%
5/18/1983	15.00%	11.06%	3.94%
5/23/1983	14.90%	11.02%	3.88%
5/23/1983	15.50%	11.02%	4.48%
5/25/1983	15.50%	11.00%	4.50%
5/27/1983	15.00%	10.97%	4.03%
5/31/1983	14.00%	10.96%	3.04%
5/31/1983	15.50%	10.96%	4.54%
6/2/1983	14.50%	10.94%	3.56%
6/17/1983	15.03%	10.85%	4.18%
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%	10.76%	2.44%
7/19/1983	15.00%	10.75%	4.25%
7/19/1983	15.10%	10.75%	4.35%
7/25/1983	16.25%	10.74%	5.51%
7/28/1983	15.90%	10.74%	5.16%
8/3/1983	16.34%	10.75%	5.59%
8/3/1983	16.50%	10.75%	5.75%
8/19/1983	15.00%	10.80%	4.20%
8/22/1983	15.50%	10.80%	4.70%
8/22/1983	16.40%	10.80%	5.60%
8/31/1983	14.75%	10.84%	3.91%
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%	10.94%	4.56%
9/30/1983	15.25%	10.95%	4.30%
9/30/1983	16.15%	10.95%	5.20%
10/4/1983	14.80%	10.96%	3.84%
10/7/1983	16.00%	10.97%	5.03%
10/13/1983	15.52%	10.98%	4.54%
10/17/1983	15.50%	10.99%	4.51%
10/18/1983	14.50%	11.00%	3.50%
10/19/1983	16.25%	11.00%	5.25%
10/19/1983	16.50%	11.00%	5.50%
10/26/1983	15.00%	11.03%	3.97%
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%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
12/19/1983	14.80%	11.21%	3.59%
12/20/1983	14.69%	11.21%	3.48%
12/20/1983	16.00%	11.21%	4.79%
12/20/1983	16.25%	11.21%	5.04%
12/22/1983	14.75%	11.23%	3.52%
12/22/1983	15.75%	11.23%	4.52%
1/3/1984	14.75%	11.26%	3.49%
1/10/1984	15.90%	11.29%	4.61%
1/12/1984	15.60%	11.30%	4.30%
1/18/1984	13.75%	11.32%	2.43%
1/19/1984	15.90%	11.33%	4.57%
1/30/1984	16.10%	11.36%	4.74%
1/31/1984	15.25%	11.37%	3.88%
2/1/1984	14.80%	11.38%	3.42%
2/6/1984	13.75%	11.40%	2.35%
2/6/1984	14.75%	11.40%	3.35%
2/9/1984	15.25%	11.42%	3.83%
2/15/1984	15.70%	11.44%	4.26%
2/20/1984	15.00%	11.45%	3.55%
2/20/1984	15.00%	11.45%	3.55%
2/22/1984	14.75%	11.47%	3.28%
2/28/1984	14.50%	11.50%	3.00%
3/2/1984	14.25%	11.53%	2.72%
3/20/1984	16.00%	11.64%	4.36%
3/23/1984	15.50%	11.66%	3.84%
3/26/1984	14.71%	11.67%	3.04%
4/2/1984	15.50%	11.71%	3.79%
4/6/1984	14.74%	11.75%	2.99%
4/11/1984	15.72%	11.77%	3.95%
4/17/1984	15.00%	11.80%	3.20%
4/18/1984	16.20%	11.81%	4.39%
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%	12.25%	3.00%
7/2/1984	13.35%	12.26%	1.09%
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	15.30%	12.35%	2.95%
7/18/1984	15.50%	12.35%	3.15%
7/19/1984	14.30%	12.36%	1.94%
7/24/1984	16.79%	12.39%	4.40%
7/31/1984	16.00%	12.42%	3.58%
8/3/1984	14.25%	12.44%	1.81%
8/17/1984	14.30%	12.48%	1.82%
8/20/1984	15.00%	12.49%	2.51%
8/27/1984	16.30%	12.50%	3.80%
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%	12.55%	4.83%
9/26/1984	14.50%	12.57%	1.93%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
9/28/1984	15.00%	12.57%	2.43%
9/28/1984	16.25%	12.57%	3.68%
10/9/1984	14.75%	12.58%	2.17%
10/12/1984	15.60%	12.58%	3.02%
10/22/1984	15.00%	12.58%	2.42%
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%	12.57%	2.68%
11/20/1984	15.92%	12.57%	3.35%
11/23/1984	15.00%	12.57%	2.43%
11/28/1984	16.15%	12.56%	3.59%
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%	12.52%	3.48%
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%	12.36%	2.11%
3/1/1985	13.84%	12.31%	1.53%
3/8/1985	16.85%	12.29%	4.56%
3/14/1985	15.50%	12.26%	3.24%
3/15/1985	15.62%	12.26%	3.36%
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%	11.99%	3.51%
4/29/1985	15.00%	11.98%	3.02%
5/2/1985	14.68%	11.94%	2.74%
5/8/1985	15.62%	11.90%	3.72%
5/10/1985	16.50%	11.88%	4.62%
5/29/1985	14.61%	11.74%	2.87%
5/31/1985	16.00%	11.72%	4.28%
6/14/1985	15.50%	11.61%	3.89%
7/9/1985	15.00%	11.45%	3.55%
7/16/1985	14.50%	11.40%	3.10%
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	14.60%	11.11%	3.49%
9/9/1985	14.90%	11.11%	3.79%
9/17/1985	14.90%	11.09%	3.81%
9/23/1985	15.00%	11.07%	3.93%
9/27/1985	15.50%	11.05%	4.45%
9/27/1985	15.80%	11.05%	4.75%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
10/2/1985	14.00%	11.04%	2.96%
10/2/1985	14.75%	11.04%	3.71%
10/3/1985	15.25%	11.03%	4.22%
10/24/1985	15.40%	10.96%	4.44%
10/24/1985	15.82%	10.96%	4.86%
10/24/1985	15.85%	10.96%	4.89%
10/28/1985	16.00%	10.95%	5.05%
10/29/1985	16.65%	10.95%	5.70%
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%
12/12/1985	14.75%	10.73%	4.02%
12/18/1985	15.00%	10.70%	4.30%
12/20/1985	14.50%	10.68%	3.82%
12/20/1985	14.50%	10.68%	3.82%
12/20/1985	15.00%	10.68%	4.32%
1/24/1986	15.40%	10.41%	4.99%
1/31/1986	15.00%	10.36%	4.64%
2/5/1986	15.00%	10.33%	4.67%
2/5/1986	15.75%	10.33%	5.42%
2/10/1986	13.30%	10.30%	3.00%
2/11/1986	12.50%	10.28%	2.22%
2/14/1986	14.40%	10.25%	4.15%
2/18/1986	16.00%	10.24%	5.76%
2/24/1986	14.50%	10.18%	4.32%
2/26/1986	14.00%	10.16%	3.84%
3/5/1986	14.90%	10.08%	4.82%
3/11/1986	14.50%	10.02%	4.48%
3/12/1986	13.50%	10.01%	3.49%
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%	9.58%	5.42%
5/16/1986	14.50%	9.33%	5.17%
5/16/1986	14.50%	9.33%	5.17%
5/29/1986	13.90%	9.20%	4.70%
5/30/1986	15.10%	9.19%	5.91%
6/2/1986	12.81%	9.17%	3.64%
6/11/1986	14.00%	9.08%	4.92%
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%	8.88%	4.12%
7/10/1986	14.34%	8.76%	5.58%
7/11/1986	12.75%	8.74%	4.01%
7/14/1986	12.60%	8.72%	3.88%
7/17/1986	12.40%	8.67%	3.73%
7/25/1986	14.25%	8.58%	5.67%
8/6/1986	13.50%	8.45%	5.05%
8/14/1986	13.50%	8.36%	5.14%
9/16/1986	12.75%	8.07%	4.68%
9/19/1986	13.25%	8.04%	5.21%
10/1/1986	14.00%	7.96%	6.04%
10/3/1986	13.40%	7.94%	5.46%
10/31/1986	13.50%	7.78%	5.72%
11/5/1986	13.00%	7.76%	5.24%
12/3/1986	12.90%	7.59%	5.31%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
12/4/1986	14.44%	7.58%	6.86%
12/16/1986	13.60%	7.53%	6.07%
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%	7.47%	5.53%
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%	7.62%	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	13.50%	7.88%	5.62%
7/16/1987	15.00%	7.88%	7.12%
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%	7.94%	5.04%
8/26/1987	12.63%	8.05%	4.58%
8/26/1987	12.75%	8.05%	4.70%
8/27/1987	13.25%	8.06%	5.19%
9/9/1987	13.00%	8.13%	4.87%
9/30/1987	12.75%	8.30%	4.45%
9/30/1987	13.00%	8.30%	4.70%
10/2/1987	11.50%	8.33%	3.17%
10/15/1987	13.00%	8.43%	4.57%
11/2/1987	13.00%	8.54%	4.46%
11/19/1987	13.00%	8.63%	4.37%
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	13.50%	8.78%	4.72%
12/16/1987	13.72%	8.78%	4.94%
12/17/1987	11.75%	8.78%	2.97%
12/18/1987	13.50%	8.79%	4.71%
12/21/1987	12.01%	8.80%	3.21%
12/22/1987	12.00%	8.81%	3.19%
12/22/1987	12.00%	8.81%	3.19%
12/22/1987	12.75%	8.81%	3.94%
12/22/1987	13.00%	8.81%	4.19%
1/20/1988	13.80%	8.93%	4.87%
1/26/1988	13.90%	8.95%	4.95%
1/29/1988	13.20%	8.95%	4.25%
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%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
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%	8.95%	2.01%
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%	9.00%	3.75%
7/20/1988	13.40%	8.97%	4.43%
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%	9.01%	3.99%
12/20/1988	12.25%	9.02%	3.23%
12/20/1988	13.00%	9.02%	3.98%
12/21/1988	12.90%	9.02%	3.88%
12/27/1988	13.00%	9.03%	3.97%
12/28/1988	13.10%	9.03%	4.07%
12/30/1988	13.40%	9.03%	4.37%
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%	9.01%	4.19%
6/8/1989	13.50%	8.98%	4.52%
6/27/1989	13.25%	8.92%	4.33%
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%	8.32%	4.58%
12/27/1989	12.50%	8.30%	4.20%
12/27/1989	13.00%	8.30%	4.70%
1/10/1990	12.80%	8.25%	4.55%
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%	8.18%	3.92%
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%
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%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
6/15/1990	13.20%	8.31%	4.89%
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	12.10%	8.34%	3.76%
7/6/1990	12.35%	8.34%	4.01%
8/10/1990	12.55%	8.40%	4.15%
8/16/1990	13.21%	8.42%	4.79%
8/22/1990	13.10%	8.44%	4.66%
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%	8.66%	4.34%
10/25/1990	12.30%	8.67%	3.63%
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%	8.61%	3.89%
2/7/1991	12.50%	8.59%	3.91%
2/12/1991	13.00%	8.58%	4.42%
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	12.30%	8.52%	3.78%
3/8/1991	13.00%	8.52%	4.48%
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	11.60%	8.18%	3.42%
11/26/1991	12.50%	8.18%	4.32%
11/27/1991	12.10%	8.18%	3.92%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
12/18/1991	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%	8.06%	4.59%
1/31/1992	12.00%	8.05%	3.95%
2/11/1992	12.40%	8.03%	4.37%
2/25/1992	12.50%	8.01%	4.49%
3/16/1992	11.43%	7.99%	3.44%
3/18/1992	12.28%	7.98%	4.30%
4/2/1992	12.10%	7.95%	4.15%
4/9/1992	11.45%	7.94%	3.51%
4/10/1992	11.50%	7.94%	3.56%
4/14/1992	11.50%	7.93%	3.57%
5/5/1992	11.50%	7.90%	3.60%
5/12/1992	11.87%	7.89%	3.98%
5/12/1992	12.46%	7.89%	4.57%
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	11.90%	7.84%	4.06%
7/13/1992	13.50%	7.84%	5.66%
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	12.30%	7.65%	4.65%
12/22/1992	12.40%	7.65%	4.75%
12/29/1992	12.25%	7.63%	4.62%
12/30/1992	12.00%	7.63%	4.37%
12/31/1992	11.90%	7.63%	4.27%
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%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
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%	6.61%	4.19%
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%	6.45%	3.62%
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%	6.36%	4.89%
2/25/1994	12.00%	6.36%	5.64%
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%	6.53%	4.47%
6/27/1994	11.40%	6.64%	4.76%
8/5/1994	12.75%	6.87%	5.88%
10/31/1994	10.00%	7.32%	2.68%
11/9/1994	10.85%	7.38%	3.47%
11/9/1994	10.85%	7.38%	3.47%
11/18/1994	11.20%	7.45%	3.75%
11/22/1994	11.60%	7.46%	4.14%
11/28/1994	11.06%	7.49%	3.57%
12/8/1994	11.50%	7.54%	3.96%
12/8/1994	11.70%	7.54%	4.16%
12/14/1994	10.95%	7.56%	3.39%
12/15/1994	11.50%	7.57%	3.93%
12/19/1994	11.50%	7.57%	3.93%
12/28/1994	12.15%	7.61%	4.54%
1/9/1995	12.28%	7.64%	4.64%
1/31/1995	11.00%	7.68%	3.32%
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%	7.21%	4.09%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
9/27/1995	11.30%	7.13%	4.17%
9/27/1995	11.50%	7.13%	4.37%
9/27/1995	11.75%	7.13%	4.62%
9/29/1995	11.00%	7.12%	3.88%
11/9/1995	11.38%	6.90%	4.48%
11/9/1995	12.36%	6.90%	5.46%
11/17/1995	11.00%	6.86%	4.14%
12/4/1995	11.35%	6.78%	4.57%
12/11/1995	11.40%	6.75%	4.65%
12/20/1995	11.60%	6.70%	4.90%
12/27/1995	12.00%	6.67%	5.33%
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%	6.44%	4.81%
4/30/1996	11.00%	6.43%	4.57%
5/13/1996	11.00%	6.44%	4.56%
5/23/1996	11.25%	6.44%	4.81%
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%	6.70%	4.30%
10/16/1996	12.25%	6.76%	5.49%
11/5/1996	11.00%	6.80%	4.20%
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%	6.61%	4.39%
12/23/1997	11.12%	6.57%	4.55%
2/2/1998	12.75%	6.40%	6.35%
3/2/1998	11.25%	6.29%	4.96%
3/6/1998	10.75%	6.27%	4.48%
3/20/1998	10.50%	6.23%	4.27%
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%	5.55%	6.65%
12/17/1998	12.10%	5.52%	6.58%
2/5/1999	10.30%	5.39%	4.91%
3/4/1999	10.50%	5.34%	5.16%
4/6/1999	10.94%	5.32%	5.62%
7/29/1999	10.75%	5.51%	5.24%
9/23/1999	10.75%	5.70%	5.05%
11/17/1999	11.10%	5.89%	5.21%
1/7/2000	11.50%	6.04%	5.46%
1/7/2000	11.50%	6.04%	5.46%
2/17/2000	10.60%	6.17%	4.43%
3/28/2000	11.25%	6.19%	5.06%
5/24/2000	11.00%	6.18%	4.82%
7/18/2000	12.20%	6.16%	6.04%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
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%	5.47%	5.53%
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%	4.99%	7.01%
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%	4.93%	4.92%
12/17/2003	10.70%	4.93%	5.77%
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%	4.98%	5.77%
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%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
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%	5.06%	5.44%
11/23/2004	11.00%	5.06%	5.94%
12/14/2004	10.97%	5.06%	5.91%
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%
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%	4.77%	5.98%
5/26/2005	9.75%	4.76%	4.99%
6/1/2005	9.75%	4.75%	5.00%
7/19/2005	11.50%	4.65%	6.85%
8/5/2005	11.75%	4.62%	7.13%
8/15/2005	10.13%	4.62%	5.51%
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%	4.55%	5.74%
12/21/2005	10.40%	4.55%	5.85%
12/22/2005	11.00%	4.54%	6.46%
12/22/2005	11.15%	4.54%	6.61%
12/28/2005	10.00%	4.54%	5.46%
12/28/2005	10.00%	4.54%	5.46%
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	10.60%	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%	4.82%	5.38%
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%	4.89%	5.65%
9/14/2006	10.00%	4.90%	5.10%
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	10.25%	4.95%	5.30%
12/1/2006	10.50%	4.95%	5.55%
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%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
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%	4.87%	4.88%
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%	4.81%	5.39%
5/22/2007	10.50%	4.81%	5.69%
5/23/2007	10.70%	4.81%	5.89%
5/25/2007	9.67%	4.81%	4.86%
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%	4.85%	5.35%
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%
1/8/2008	10.75%	4.83%	5.92%
1/17/2008	10.75%	4.82%	5.93%
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%	4.69%	4.41%
4/22/2008	10.25%	4.61%	5.64%
4/24/2008	10.10%	4.60%	5.50%
5/1/2008	10.70%	4.59%	6.11%
5/19/2008	11.00%	4.57%	6.43%
5/27/2008	10.00%	4.55%	5.45%
6/10/2008	10.70%	4.54%	6.16%
6/27/2008	10.50%	4.54%	5.96%
6/27/2008	11.04%	4.54%	6.50%
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%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
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%	3.97%	6.53%
3/12/2009	11.50%	3.93%	7.57%
4/2/2009	11.10%	3.86%	7.24%
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%	3.75%	6.50%
5/28/2009	10.50%	3.75%	6.75%
6/22/2009	10.00%	3.77%	6.23%
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%	4.05%	6.83%
11/2/2009	10.70%	4.09%	6.61%
11/3/2009	10.70%	4.09%	6.61%
11/24/2009	10.25%	4.15%	6.10%
11/25/2009	10.75%	4.15%	6.60%
11/30/2009	10.35%	4.16%	6.19%
12/3/2009	10.50%	4.17%	6.33%
12/7/2009	10.70%	4.18%	6.52%
12/16/2009	10.90%	4.21%	6.69%
12/16/2009	11.00%	4.21%	6.79%
12/18/2009	10.40%	4.22%	6.18%
12/18/2009	10.40%	4.22%	6.18%
12/22/2009	10.20%	4.23%	5.97%
12/22/2009	10.40%	4.23%	6.17%
12/22/2009	10.40%	4.23%	6.17%
12/30/2009	10.00%	4.26%	5.74%
1/4/2010	10.80%	4.27%	6.53%
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%
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%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
3/11/2010	11.90%	4.42%	7.48%
3/17/2010	10.00%	4.42%	5.58%
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%	4.46%	5.84%
5/12/2010	10.30%	4.46%	5.84%
5/28/2010	10.10%	4.44%	5.66%
5/28/2010	10.20%	4.44%	5.76%
6/7/2010	10.30%	4.44%	5.86%
6/16/2010	10.00%	4.44%	5.56%
6/28/2010	9.67%	4.43%	5.24%
6/28/2010	10.50%	4.43%	6.07%
6/30/2010	9.40%	4.43%	4.97%
7/1/2010	10.25%	4.43%	5.82%
7/15/2010	10.53%	4.43%	6.10%
7/15/2010	10.70%	4.43%	6.27%
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%	4.29%	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%	4.16%	5.70%
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%	4.15%	6.15%
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%	4.13%	6.17%
1/13/2011	10.30%	4.13%	6.17%
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%	4.23%	6.17%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
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%	4.31%	4.89%
6/17/2011	9.95%	4.31%	5.64%
7/13/2011	10.20%	4.36%	5.84%
8/1/2011	9.20%	4.38%	4.82%
8/8/2011	10.00%	4.38%	5.62%
8/11/2011	10.00%	4.37%	5.63%
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%	3.88%	7.02%
11/30/2011	10.90%	3.88%	7.02%
12/14/2011	10.00%	3.80%	6.20%
12/14/2011	10.30%	3.80%	6.50%
12/20/2011	10.20%	3.77%	6.43%
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%	3.75%	6.44%
1/25/2012	10.50%	3.57%	6.93%
1/27/2012	10.50%	3.56%	6.94%
2/15/2012	10.20%	3.48%	6.72%
2/23/2012	9.90%	3.44%	6.46%
2/27/2012	10.25%	3.43%	6.82%
2/29/2012	10.40%	3.42%	6.98%
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%	3.19%	6.81%
5/7/2012	9.80%	3.17%	6.63%
5/15/2012	10.00%	3.15%	6.85%
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	9.31%	3.01%	6.30%
7/20/2012	9.81%	3.01%	6.80%
9/13/2012	9.80%	2.94%	6.86%
9/19/2012	9.80%	2.94%	6.86%
9/19/2012	10.05%	2.94%	7.11%
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	9.75%	2.90%	6.85%
11/29/2012	9.88%	2.90%	6.98%
12/5/2012	9.71%	2.89%	6.82%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
12/5/2012	10.40%	2.89%	7.51%
12/12/2012	9.80%	2.88%	6.92%
12/13/2012	9.50%	2.88%	6.62%
12/13/2012	10.50%	2.88%	7.62%
12/14/2012	10.40%	2.88%	7.52%
12/19/2012	9.71%	2.88%	6.83%
12/19/2012	10.25%	2.88%	7.37%
12/20/2012	9.50%	2.88%	6.62%
12/20/2012	9.80%	2.88%	6.92%
12/20/2012	10.25%	2.88%	7.37%
12/20/2012	10.25%	2.88%	7.37%
12/20/2012	10.30%	2.88%	7.42%
12/20/2012	10.40%	2.88%	7.52%
12/20/2012	10.45%	2.88%	7.57%
12/21/2012	10.20%	2.88%	7.32%
12/26/2012	9.80%	2.87%	6.93%
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%	2.85%	7.35%
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	10.20%	3.26%	6.94%
9/11/2013	10.25%	3.26%	6.99%
9/24/2013	10.20%	3.30%	6.90%
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%	3.47%	6.73%
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%	3.50%	6.00%
12/17/2013	10.95%	3.50%	7.45%
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%	6.06%
3/17/2014	9.55%	3.72%	5.83%

Bond Yield Plus Risk Premium

[6]	[7]	[8]	[9]
Date of Electric Rate Case	Return on Equity	Average 30-Year Treasury Yield	Risk Premium
3/26/2014	9.40%	3.72%	5.68%
3/26/2014	9.96%	3.72%	6.24%
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%	3.55%	6.25%
9/15/2014	10.25%	3.52%	6.73%
10/9/2014	9.80%	3.46%	6.34%
		Average	4.44%
		Count	1,430

Capital Structure Analysis

PNM Exhibit RBH-11

Is contained in the following 3 pages.

Proxy Group Capital Structure

Company	Ticker	% Long-Term Debt								
		2014Q2	2014Q1	2013Q4	2013Q3	2013Q2	2013Q1	2012Q4	2012Q3	Average
American Electric Power Company, Inc.	AEP	47.69%	47.66%	47.64%	46.49%	46.39%	46.29%	46.85%	47.17%	47.02%
Cleco Corporation	CNL	47.55%	46.16%	48.88%	48.56%	48.86%	49.10%	49.71%	50.23%	48.63%
Duke Energy Corporation	DUK	43.97%	44.75%	43.91%	44.17%	43.59%	44.05%	44.49%	44.23%	44.14%
Empire District Electric Company	EDE	47.18%	47.27%	47.70%	47.63%	48.48%	46.64%	46.85%	46.89%	47.33%
Great Plains Energy Inc.	GXP	47.33%	47.44%	47.51%	47.49%	47.06%	46.65%	44.88%	44.67%	46.63%
Hawaiian Electric Industries, Inc.	HE	46.30%	46.09%	46.36%	46.22%	46.69%	46.96%	47.17%	47.08%	46.61%
IDACORP, Inc.	IDA	47.97%	48.28%	48.39%	49.49%	50.26%	48.34%	48.61%	48.47%	48.73%
NextEra Energy, Inc.	NEE	38.96%	38.27%	39.06%	40.04%	39.46%	38.73%	39.81%	39.93%	39.28%
Northeast Utilities	NU	46.53%	47.48%	45.76%	44.83%	45.78%	45.95%	44.98%	45.83%	45.89%
Otter Tail Corporation	OTTR	52.40%	52.80%	46.28%	47.63%	47.65%	47.31%	48.02%	49.65%	48.97%
Pinnacle West Capital Corporation	PNW	42.68%	44.33%	42.61%	42.38%	44.06%	44.16%	43.54%	43.70%	43.43%
Portland General Electric Company	POR	53.36%	50.79%	51.30%	49.57%	49.63%	48.22%	48.63%	50.26%	50.22%
Southern Company	SO	49.71%	49.86%	48.15%	50.01%	51.96%	51.85%	50.19%	50.43%	50.27%
Westar Energy, Inc.	WR	33.38%	36.55%	36.78%	38.72%	38.13%	39.68%	38.29%	39.70%	37.65%
Mean		46.07%	46.27%	45.74%	45.94%	46.28%	46.00%	45.86%	46.30%	46.06%

Operating Company Capital Structure

Operating Company	Parent	% Long-Term Debt							
		2014Q2	2014Q1	2013Q4	2013Q3	2013Q2	2013Q1	2012Q4	2012Q3
AEP Texas Central Company	AEP	56.82%	52.44%	53.25%	53.38%	52.11%	48.74%	49.44%	49.95%
AEP Texas North Company	AEP	53.21%	53.18%	53.32%	53.97%	49.66%	50.11%	52.41%	52.45%
Appalachian Power Company	AEP	54.00%	55.87%	56.48%	52.61%	54.71%	54.63%	54.81%	55.18%
Indiana Michigan Power Company	AEP	48.61%	48.37%	49.20%	51.73%	52.23%	53.12%	50.41%	50.39%
Kentucky Power Company	AEP	51.77%	49.70%	47.17%	53.98%	52.82%	52.83%	53.38%	53.54%
Kingsport Power Company	AEP	39.09%	41.12%	39.15%	39.27%	39.67%	39.16%	40.04%	40.08%
Ohio Power Company	AEP	55.21%	57.46%	60.29%	42.99%	43.94%	43.91%	46.23%	45.62%
Public Service Company of Oklahoma	AEP	51.70%	52.49%	51.49%	49.54%	50.51%	50.91%	50.90%	50.31%
Southwestern Electric Power Company	AEP	48.74%	48.82%	48.79%	49.78%	49.48%	49.46%	49.20%	49.58%
Wheeling Power Company	AEP	17.73%	17.11%	17.21%	17.68%	18.74%	20.01%	21.72%	24.64%
Cleco Power LLC	CNL	47.55%	46.16%	48.88%	48.56%	48.86%	49.10%	49.71%	50.23%
Duke Energy Carolinas, LLC	DUK	44.10%	44.44%	44.82%	46.20%	46.43%	46.26%	46.87%	47.88%
Duke Energy Florida, Inc.	DUK	50.04%	50.78%	49.53%	49.39%	50.43%	48.94%	51.50%	47.88%
Duke Energy Indiana, Inc.	DUK	49.31%	48.43%	49.15%	49.69%	48.89%	49.43%	50.03%	50.40%
Duke Energy Kentucky, Inc.	DUK	45.64%	45.84%	46.77%	47.44%	45.44%	45.87%	47.10%	47.17%
Duke Energy Ohio, Inc.	DUK	25.45%	29.89%	25.73%	25.75%	20.94%	24.05%	23.98%	24.14%
Duke Energy Progress, Inc.	DUK	49.25%	49.15%	47.46%	46.57%	49.38%	49.75%	47.46%	47.89%
Empire District Electric Company	EDE	47.18%	47.27%	47.70%	47.63%	48.48%	46.64%	46.85%	46.89%
Kansas City Power & Light Company	GXP	51.33%	51.54%	51.54%	51.43%	52.30%	51.32%	47.63%	47.44%
KCP&L Greater Missouri Operations Company	GXP	43.32%	43.34%	43.48%	43.54%	41.82%	41.98%	42.13%	41.91%
Hawaiian Electric Company, Inc.	HE	46.30%	46.09%	46.36%	46.22%	46.69%	46.96%	47.17%	47.08%
Idaho Power Co.	IDA	47.97%	48.28%	48.39%	49.49%	50.26%	48.34%	48.61%	48.47%
Florida Power & Light Company	NEE	38.96%	38.27%	39.06%	40.04%	39.46%	38.73%	39.81%	39.93%
Connecticut Light and Power Company	NU	48.46%	46.63%	46.95%	47.49%	48.96%	49.23%	45.55%	47.76%
NSTAR Electric Company	NU	43.59%	48.07%	42.22%	42.77%	43.88%	41.01%	41.52%	41.60%
Public Service Company of New Hampshire	NU	47.56%	47.73%	48.10%	44.22%	44.48%	47.59%	47.88%	48.14%
Otter Tail Power Company	OTTR	52.40%	52.80%	46.28%	47.63%	47.65%	47.31%	48.02%	49.65%
Arizona Public Service Company	PNW	42.68%	44.33%	42.61%	42.38%	44.06%	44.16%	43.54%	43.70%
Portland General Electric Company	POR	53.36%	50.79%	51.30%	49.57%	49.63%	48.22%	48.63%	50.26%
Alabama Power Company	SO	49.72%	49.90%	50.14%	49.54%	50.09%	50.30%	50.37%	49.52%
Georgia Power Company	SO	48.90%	49.21%	46.58%	48.32%	50.07%	50.30%	50.22%	49.68%
Gulf Power Company	SO	46.31%	46.15%	47.16%	47.38%	49.42%	48.69%	49.35%	49.24%
Mississippi Power Company	SO	53.91%	54.18%	48.72%	54.81%	58.28%	58.13%	50.81%	53.28%
Kansas Gas and Electric Company	WR	22.33%	30.27%	30.46%	34.09%	34.92%	37.78%	37.98%	40.73%
Westar Energy (KPL)	WR	44.42%	42.83%	43.10%	43.34%	41.34%	41.59%	38.60%	38.68%

Source: SNL Financial

Proxy Group Capital Structure

Company	Ticker	% Common Equity								
		2014Q2	2014Q1	2013Q4	2013Q3	2013Q2	2013Q1	2012Q4	2012Q3	Average
American Electric Power Company, Inc.	AEP	52.31%	52.34%	52.36%	53.51%	53.61%	53.71%	53.15%	52.83%	52.98%
Cleco Corporation	CNL	52.45%	53.84%	51.12%	51.44%	51.14%	50.90%	50.29%	49.77%	51.37%
Duke Energy Corporation	DUK	56.03%	55.25%	56.09%	55.83%	56.41%	55.95%	55.35%	55.61%	55.82%
Empire District Electric Company	EDE	52.82%	52.73%	52.30%	52.37%	51.52%	53.36%	53.15%	53.11%	52.67%
Great Plains Energy Inc.	GXP	52.67%	52.56%	52.49%	52.51%	52.94%	53.35%	55.12%	55.33%	53.37%
Hawaiian Electric Industries, Inc.	HE	53.70%	53.91%	53.64%	53.78%	53.31%	53.04%	52.83%	52.92%	53.39%
IDACORP, Inc.	IDA	52.03%	51.72%	51.61%	50.51%	49.74%	51.66%	51.39%	51.53%	51.27%
NextEra Energy, Inc.	NEE	61.04%	61.73%	60.94%	59.96%	60.54%	61.27%	60.19%	60.07%	60.72%
Northeast Utilities	NU	52.43%	51.47%	53.18%	54.09%	53.15%	52.96%	53.85%	53.00%	53.02%
Otter Tail Corporation	OTTR	47.60%	47.20%	53.72%	52.37%	52.35%	52.69%	51.98%	50.35%	51.03%
Pinnacle West Capital Corporation	PNW	57.32%	55.67%	57.39%	57.62%	55.94%	55.84%	56.46%	56.30%	56.57%
Portland General Electric Company	POR	46.64%	49.21%	48.70%	50.43%	50.37%	51.78%	51.37%	49.74%	49.78%
Southern Company	SO	46.98%	46.80%	48.45%	46.59%	44.66%	45.18%	46.82%	46.57%	46.51%
Westar Energy, Inc.	WR	66.62%	63.45%	63.22%	61.28%	61.87%	60.32%	61.71%	60.30%	62.35%
Mean		53.62%	53.42%	53.94%	53.74%	53.40%	53.71%	53.83%	53.39%	53.63%

Operating Company Capital Structure

Operating Company	Parent	% Common Equity							
		2014Q2	2014Q1	2013Q4	2013Q3	2013Q2	2013Q1	2012Q4	2012Q3
AEP Texas Central Company	AEP	43.18%	47.56%	46.75%	46.62%	47.89%	51.26%	50.56%	50.05%
AEP Texas North Company	AEP	46.79%	46.82%	46.68%	46.03%	50.34%	49.89%	47.59%	47.55%
Appalachian Power Company	AEP	46.00%	44.13%	43.52%	47.39%	45.29%	45.37%	45.19%	44.82%
Indiana Michigan Power Company	AEP	51.39%	51.63%	50.80%	48.27%	47.77%	46.88%	49.59%	49.61%
Kentucky Power Company	AEP	48.23%	50.30%	52.83%	46.02%	47.18%	47.17%	46.62%	46.46%
Kingsport Power Company	AEP	60.91%	58.88%	60.85%	60.73%	60.33%	60.84%	59.96%	59.92%
Ohio Power Company	AEP	44.79%	42.54%	39.71%	57.01%	56.06%	56.09%	53.77%	54.38%
Public Service Company of Oklahoma	AEP	48.30%	47.51%	48.51%	50.46%	49.49%	49.09%	49.10%	49.69%
Southwestern Electric Power Company	AEP	51.26%	51.18%	51.21%	50.22%	50.52%	50.54%	50.80%	50.42%
Wheeling Power Company	AEP	82.27%	82.89%	82.79%	82.32%	81.26%	79.99%	78.28%	75.36%
Cleco Power LLC	CNL	52.45%	53.84%	51.12%	51.44%	51.14%	50.90%	50.29%	49.77%
Duke Energy Carolinas, LLC	DUK	55.90%	55.56%	55.18%	53.80%	53.57%	53.74%	53.13%	52.12%
Duke Energy Florida, Inc.	DUK	49.96%	49.22%	50.47%	50.61%	49.57%	51.06%	48.16%	51.76%
Duke Energy Indiana, Inc.	DUK	50.69%	51.57%	50.85%	50.31%	51.11%	50.57%	49.97%	49.60%
Duke Energy Kentucky, Inc.	DUK	54.36%	54.16%	53.23%	52.56%	54.56%	54.13%	52.90%	52.83%
Duke Energy Ohio, Inc.	DUK	74.55%	70.11%	74.27%	74.25%	79.06%	75.95%	76.02%	75.86%
Duke Energy Progress, Inc.	DUK	50.75%	50.85%	52.54%	53.43%	50.62%	50.25%	51.93%	51.50%
Empire District Electric Company	EDE	52.82%	52.73%	52.30%	52.37%	51.52%	53.36%	53.15%	53.11%
Kansas City Power & Light Company	GXP	48.67%	48.46%	48.46%	48.57%	47.70%	48.68%	52.37%	52.56%
KCP&L Greater Missouri Operations Company	GXP	56.68%	56.66%	56.52%	56.46%	58.18%	58.02%	57.87%	58.09%
Hawaiian Electric Company, Inc.	HE	53.70%	53.91%	53.64%	53.78%	53.31%	53.04%	52.83%	52.92%
Idaho Power Co.	IDA	52.03%	51.72%	51.61%	50.51%	49.74%	51.66%	51.39%	51.53%
Florida Power & Light Company	NEE	61.04%	61.73%	60.94%	59.96%	60.54%	61.27%	60.19%	60.07%
Connecticut Light and Power Company	NU	49.49%	51.20%	50.87%	50.29%	48.86%	48.59%	52.06%	49.86%
NSTAR Electric Company	NU	55.37%	50.94%	56.77%	56.20%	55.06%	57.88%	57.36%	57.28%
Public Service Company of New Hampshire	NU	52.44%	52.27%	51.90%	55.78%	55.52%	52.41%	52.12%	51.86%
Otter Tail Power Company	OTTR	47.60%	47.20%	53.72%	52.37%	52.35%	52.69%	51.98%	50.35%
Arizona Public Service Company	PNW	57.32%	55.67%	57.39%	57.62%	55.94%	55.84%	56.46%	56.30%
Portland General Electric Company	POR	46.64%	49.21%	48.70%	50.43%	50.37%	51.78%	51.37%	49.74%
Alabama Power Company	SO	44.71%	44.51%	44.24%	44.86%	44.25%	44.02%	43.94%	44.84%
Georgia Power Company	SO	49.72%	49.40%	51.96%	50.27%	48.52%	48.29%	48.37%	48.91%
Gulf Power Company	SO	48.11%	48.24%	47.10%	46.91%	45.03%	47.40%	46.69%	46.81%
Mississippi Power Company	SO	45.40%	45.04%	50.51%	44.33%	40.84%	40.99%	48.26%	45.71%
Kansas Gas and Electric Company	WR	77.67%	69.73%	69.54%	65.91%	65.08%	62.22%	62.02%	59.27%
Westar Energy (KPL)	WR	55.58%	57.17%	56.90%	56.66%	58.66%	58.41%	61.40%	61.32%

Source: SNL Financial

Proxy Group Capital Structure

Company	Ticker	% Preferred Equity								
		2014Q2	2014Q1	2013Q4	2013Q3	2013Q2	2013Q1	2012Q4	2012Q3	Average
American Electric Power Company, Inc.	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cleco Corporation	CNL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Duke Energy Corporation	DUK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.16%	0.16%	0.04%
Empire District Electric Company	EDE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Great Plains Energy Inc.	GXP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Hawaiian Electric Industries, Inc.	HE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
IDACORP, Inc.	IDA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NextEra Energy, Inc.	NEE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Northeast Utilities	NU	1.03%	1.05%	1.07%	1.08%	1.07%	1.10%	1.17%	1.17%	1.09%
Otter Tail Corporation	OTTR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Pinnacle West Capital Corporation	PNW	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Portland General Electric Company	POR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Southern Company	SO	3.31%	3.34%	3.40%	3.39%	3.37%	2.97%	3.00%	3.00%	3.22%
Westar Energy, Inc.	WR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Mean		0.31%	0.31%	0.32%	0.32%	0.32%	0.29%	0.31%	0.31%	0.31%

Operating Company Capital Structure

Operating Company	Parent	% Preferred Equity							
		2014Q2	2014Q1	2013Q4	2013Q3	2013Q2	2013Q1	2012Q4	2012Q3
AEP Texas Central Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AEP Texas North Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Appalachian Power Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Indiana Michigan Power Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Kentucky Power Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Kingsport Power Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Ohio Power Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Public Service Company of Oklahoma	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Southwestern Electric Power Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Wheeling Power Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cleco Power LLC	CNL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Duke Energy Carolinas, LLC	DUK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Duke Energy Florida, Inc.	DUK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.34%	0.36%
Duke Energy Indiana, Inc.	DUK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Duke Energy Kentucky, Inc.	DUK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Duke Energy Ohio, Inc.	DUK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Duke Energy Progress, Inc.	DUK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.60%	0.61%
Empire District Electric Company	EDE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Kansas City Power & Light Company	GXP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
KCP&L Greater Missouri Operations Company	GXP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Hawaiian Electric Company, Inc.	HE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Idaho Power Co.	IDA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Florida Power & Light Company	NEE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Connecticut Light and Power Company	NU	2.05%	2.17%	2.19%	2.21%	2.17%	2.18%	2.38%	2.37%
NSTAR Electric Company	NU	1.05%	0.99%	1.01%	1.02%	1.05%	1.11%	1.12%	1.12%
Public Service Company of New Hampshire	NU	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Otter Tail Power Company	OTTR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Arizona Public Service Company	PNW	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Portland General Electric Company	POR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Alabama Power Company	SO	5.57%	5.59%	5.62%	5.60%	5.66%	5.68%	5.69%	5.64%
Georgia Power Company	SO	1.38%	1.39%	1.46%	1.41%	1.41%	1.41%	1.41%	1.41%
Gulf Power Company	SO	5.57%	5.61%	5.74%	5.70%	5.55%	3.91%	3.96%	3.95%
Mississippi Power Company	SO	0.70%	0.77%	0.78%	0.86%	0.88%	0.88%	0.92%	1.01%
Kansas Gas and Electric Company	WR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Westar Energy (KPL)	WR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Source: SNL Financial

Recently Authorized ROEs for Vertically Integrated Electric Utilities

PNM Exhibit RBH-12

Is contained in the following page.

2013-2014 Reported Authorized Returns on Equity, Vertically Integrated Electric Utility Rate Cases

State	Utility	Parent Company Ticker	Case Identification	Date Authorized	Authorized ROE
Missouri	Kansas City Power & Light	GXP	C-ER-2012-0174	1/9/2013	9.70
Missouri	KCP&L Greater Missouri Op Co	GXP	C-ER-2012-0175 (MPS)	1/9/2013	9.70
Missouri	KCP&L Greater Missouri Op Co	GXP	C-ER-2012-0175 (L&P)	1/9/2013	9.70
Indiana	Indiana Michigan Power Co.	AEP	Ca-44075	2/13/2013	10.20
Louisiana	Southwestern Electric Power Co	AEP	D-U-32220	2/27/2013	10.00
Idaho	Avista Corp.	AVA	C-AVU-E-12-08	3/27/2013	9.80
Michigan	Consumers Energy Co.	CMS	C-U-17087	5/15/2013	10.30
North Carolina	Duke Energy Progress Inc.	DUK	D-E-2, Sub 1023	5/30/2013	10.20
Hawaii	Maui Electric Company Ltd	HE	D-2011-0092	5/31/2013	9.00
Arizona	Tucson Electric Power Co.	FTS	D-E-01933A-12-0291	6/11/2013	10.00
Washington	Puget Sound Energy Inc.	-	D-UE-130137	6/25/2013	9.80
Minnesota	Northern States Power Co. - MN	XEL	D-E-002/GR-12-961	8/8/2013	9.83
Connecticut	United Illuminating Co.	UIL	D-13-01-19	8/14/2013	9.15
South Carolina	Duke Energy Carolinas LLC	DUK	D-2013-59-E	9/11/2013	10.20
Florida	Tampa Electric Co.	TE	D-130040-EI	9/11/2013	10.25
North Carolina	Duke Energy Carolinas LLC	DUK	D-E-7, Sub 1026	9/24/2013	10.20
Texas	Southwestern Electric Power Co	AEP	D-40443	10/3/2013	9.65
Wisconsin	Wisconsin Public Service Corp.	TEG	D-6690-UR-122 (Elec)	11/6/2013	10.20
Kansas	Westar Energy Inc.	WR	D-13-WSEE-629-RTS	11/21/2013	10.00
Virginia	Virginia Electric & Power Co.	D	C-PUE-2013-00020	11/26/2013	10.00
Florida	Gulf Power Co.	SO	D-130140-EI	12/3/2013	10.25
Washington	PacifiCorp	BRK.A	D-UE-130043	12/4/2013	9.50
Wisconsin	Northern States Power Co - WI	XEL	D-4220-UR-119 (Elec)	12/5/2013	10.20
Oregon	Portland General Electric Co.	POR	D-UE-262	12/9/2013	9.75
Louisiana	Entergy Gulf States LA LLC	ETR	D-U-32707	12/16/2013	9.95
Louisiana	Entergy Louisiana LLC	ETR	D-U-32708	12/16/2013	9.95
Nevada	Sierra Pacific Power Co.	BRK.A	D-13-06002	12/16/2013	10.12
Arizona	UNS Electric Inc.	FTS	D-E-04204A-12-0504	12/17/2013	9.50
Georgia	Georgia Power Co.	SO	D-36989	12/17/2013	10.95
Oregon	PacifiCorp	BRK.A	D-UE-263	12/18/2013	9.80
Michigan	Upper Peninsula Power Co.	-	C-U-17274	12/19/2013	10.15
Arkansas	Entergy Arkansas Inc.	ETR	D-13-028-U ¹	12/30/2013	9.50
North Dakota	Northern States Power Co. - MN	XEL	C-PU-12-813	2/26/2014	9.75
New Mexico	Southwestern Public Service Co	XEL	C-12-00350-UT	3/26/2014	9.96
Texas	Entergy Texas Inc.	ETR	D-41791	5/16/2014	9.80
Wisconsin	Wisconsin Power and Light Co	LNT	D-6680-UR-119 (Elec)	6/6/2014	10.40
Louisiana	Entergy Louisiana LLC	ETR	D-UD-13-01	7/10/2014	9.95
Wyoming	Cheyenne Light Fuel Power Co.	BKH	D-20003-132-ER-13	7/31/2014	9.90
Vermont	Green Mountain Power Corp.	-	D-8190, 8191	8/25/2014	9.60
Utah	PacifiCorp	BRK.A	D-13-035-184	8/29/2014	9.80
Florida	Florida Public Utilities Co.	CPK	D-140025-EI	9/15/2014	10.25
Nevada	Nevada Power Co.	BRK.A	D-14-05004	10/9/2014	9.80

Source: SNL Financial

Average 9.92
Median 9.95
Minimum 9.00

Note:

1. In an Order on Rehearing issued Aug. 15, 2014, the Arkansas PSC amended its authorized ROE for Entergy to 9.5%, from 9.3%

Maximum 10.95

DuPont Analysis

PNM Exhibit RBH-13

Is contained in the following 9 pages.

DuPont Formula

Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Change in Revenue/Net Plant
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	17,000.00	43,450.00	39.13%	5.98%	4.45%
AEP	2015	17,000.00	45,750.00	37.16%	5.29%	-5.03%
AEP	2017-2019	19,650.00	51,000.00	38.53%	11.48%	3.69%
CNL	2002	\$ 721.20	\$ 1,566.20	46.05%		
CNL	2003	874.60	1,417.10	61.72%	-9.52%	34.03%
CNL	2004	745.80	1,060.00	70.36%	-25.20%	14.00%
CNL	2005	920.20	1,188.70	77.41%	12.14%	10.03%
CNL	2006	1,000.70	1,304.90	76.69%	9.78%	-0.94%
CNL	2007	1,030.60	1,725.90	59.71%	32.26%	-22.13%
CNL	2008	1,080.20	2,045.30	52.81%	18.51%	-11.56%
CNL	2009	853.80	2,247.00	38.00%	9.86%	-28.05%
CNL	2010	1,148.70	2,784.20	41.26%	23.91%	8.58%
CNL	2011	1,117.30	2,893.90	38.61%	3.94%	-6.42%
CNL	2012	993.70	3,009.50	33.02%	3.99%	-14.48%
CNL	2013	1,096.70	3,083.10	35.57%	2.45%	7.73%
CNL	2014	1,275.00	3,125.00	40.80%	1.36%	14.70%
CNL	2015	1,325.00	3,075.00	43.09%	-1.60%	5.61%
CNL	2017-2019	1,425.00	2,850.00	50.00%	-7.32%	16.04%
DUK	2002	NA	NA			
DUK	2003	NA	NA			
DUK	2004	NA	NA			
DUK	2005	NA	NA			
DUK	2006	\$ 10,607.00	\$ 41,447.00	25.59%		
DUK	2007	12,720.00	31,110.00	40.89%	-24.94%	59.77%
DUK	2008	13,207.00	34,036.00	38.80%	9.41%	-5.10%
DUK	2009	12,731.00	37,950.00	33.55%	11.50%	-13.55%
DUK	2010	14,272.00	40,344.00	35.38%	6.31%	5.45%
DUK	2011	14,529.00	42,661.00	34.06%	5.74%	-3.73%
DUK	2012	19,624.00	68,558.00	28.62%	60.70%	-15.95%
DUK	2013	24,598.00	69,490.00	35.40%	1.36%	23.67%
DUK	2014	25,900.00	70,775.00	36.59%	1.85%	3.38%
DUK	2015	25,100.00	74,875.00	33.52%	5.79%	-8.40%
DUK	2017-2019	28,300.00	88,400.00	32.01%	18.06%	-4.50%
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	650.00	1,895.00	34.30%	8.17%	1.11%
EDE	2015	670.00	1,985.00	33.75%	4.75%	-1.60%
EDE	2017-2019	790.00	2,000.00	39.50%	0.76%	17.03%
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%

DuPont Formula

Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Change in Revenue/Net Plant
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	2,600.00	8,120.00	32.02%	4.82%	1.39%
GXP	2015	2,700.00	8,390.00	32.18%	3.33%	0.50%
GXP	2017-2019	3,050.00	8,650.00	35.26%	3.10%	9.57%
HE	2002	\$ 1,653.70	\$ 2,079.30	79.53%		
HE	2003	1,781.30	2,311.90	77.05%	11.19%	-3.12%
HE	2004	1,924.10	2,422.30	79.43%	4.78%	3.09%
HE	2005	2,215.60	2,542.80	87.13%	4.97%	9.69%
HE	2006	2,460.90	2,647.50	92.95%	4.12%	6.68%
HE	2007	2,536.40	2,743.40	92.45%	3.62%	-0.53%
HE	2008	3,218.90	2,907.40	110.71%	5.98%	19.75%
HE	2009	2,309.60	3,088.60	74.78%	6.23%	-32.46%
HE	2010	2,665.00	3,165.90	84.18%	2.50%	12.57%
HE	2011	3,242.30	3,334.50	97.23%	5.33%	15.51%
HE	2012	3,375.00	3,594.80	93.89%	7.81%	-3.44%
HE	2013	3,238.50	3,858.90	83.92%	7.35%	-10.61%
HE	2014	3,275.00	4,045.00	80.96%	4.82%	-3.53%
HE	2015	3,450.00	4,220.00	81.75%	4.33%	0.98%
HE	2017-2019	4,150.00	4,950.00	83.84%	17.30%	2.55%
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	1,225.00	3,900.00	31.41%	6.41%	-7.62%
IDA	2015	1,255.00	4,095.00	30.65%	5.00%	-2.43%
IDA	2017-2019	1,360.00	4,740.00	28.69%	15.75%	-6.38%
NEE	2002	\$ 8,311.00	\$ 14,304.00	58.10%		
NEE	2003	9,630.00	20,297.00	47.45%	41.90%	-18.34%
NEE	2004	10,522.00	21,226.00	49.57%	4.58%	4.48%
NEE	2005	11,846.00	22,463.00	52.74%	5.83%	6.38%
NEE	2006	15,710.00	24,499.00	64.13%	9.06%	21.60%
NEE	2007	15,263.00	28,652.00	53.27%	16.95%	-16.93%
NEE	2008	16,410.00	32,411.00	50.63%	13.12%	-4.95%
NEE	2009	15,643.00	36,078.00	43.36%	11.31%	-14.36%
NEE	2010	15,317.00	39,075.00	39.20%	8.31%	-9.59%
NEE	2011	15,341.00	42,490.00	36.10%	8.74%	-7.89%
NEE	2012	14,256.00	49,413.00	28.85%	16.29%	-20.09%
NEE	2013	15,136.00	52,720.00	28.71%	6.69%	-0.49%
NEE	2014	15,950.00	55,725.00	28.62%	5.70%	-0.30%
NEE	2015	16,200.00	57,200.00	28.32%	2.65%	-1.05%
NEE	2017-2019	18,000.00	62,100.00	28.99%	8.57%	2.34%
NU	2002	\$ 5,216.30	\$ 4,728.40	110.32%		
NU	2003	6,069.20	5,429.90	111.77%	14.84%	1.32%
NU	2004	6,686.70	5,864.20	114.03%	8.00%	2.01%
NU	2005	5,507.30	6,417.20	85.82%	9.43%	-24.74%
NU	2006	6,884.40	6,242.20	110.29%	-2.73%	28.51%
NU	2007	5,822.20	7,229.90	80.53%	15.82%	-26.98%
NU	2008	5,800.10	8,207.90	70.66%	13.53%	-12.25%
NU	2009	5,439.40	8,840.00	61.53%	7.70%	-12.92%

DuPont Formula

Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Change in Revenue/Net Plant
NU	2010	4,898.20	9,567.70	51.20%	8.23%	-16.80%
NU	2011	4,465.70	10,403.00	42.93%	8.73%	-16.15%
NU	2012	6,273.80	16,605.00	37.78%	59.62%	-11.98%
NU	2013	7,301.20	17,576.00	41.54%	5.85%	9.95%
NU	2014	7,750.00	18,700.00	41.44%	6.40%	-0.23%
NU	2015	7,900.00	19,975.00	39.55%	6.82%	-4.57%
NU	2017-2019	8,650.00	23,900.00	36.19%	19.65%	-8.49%
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	955.00	1,250.00	76.40%	7.11%	-0.19%
OTTR	2015	985.00	1,325.00	74.34%	6.00%	-2.70%
OTTR	2017-2019	1,325.00	1,550.00	85.48%	16.98%	14.99%
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	3,600.00	11,380.00	31.63%	4.51%	-0.29%
PNW	2015	3,725.00	11,905.00	31.29%	4.61%	-1.09%
PNW	2017-2019	4,250.00	13,600.00	31.25%	14.24%	-0.13%
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	1,875.00	5,620.00	33.36%	15.16%	-10.05%
POR	2015	1,975.00	5,815.00	33.96%	3.47%	1.80%
POR	2017-2019	2,175.00	5,600.00	38.84%	-3.70%	14.35%
SO	2002	\$ 10,549.00	\$ 24,642.00	42.81%		
SO	2003	11,251.00	27,534.00	40.86%	11.74%	-4.55%
SO	2004	11,902.00	28,361.00	41.97%	3.00%	2.70%
SO	2005	13,554.00	29,480.00	45.98%	3.95%	9.56%
SO	2006	14,356.00	31,092.00	46.17%	5.47%	0.43%
SO	2007	15,353.00	33,327.00	46.07%	7.19%	-0.23%
SO	2008	17,127.00	35,878.00	47.74%	7.65%	3.62%
SO	2009	15,743.00	39,230.00	40.13%	9.34%	-15.93%
SO	2010	17,456.00	42,002.00	41.56%	7.07%	3.56%
SO	2011	17,657.00	45,010.00	39.23%	7.16%	-5.61%
SO	2012	16,537.00	48,390.00	34.17%	7.51%	-12.88%
SO	2013	17,087.00	51,208.00	33.37%	5.82%	-2.36%

DuPont Formula

Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Change in Revenue/Net Plant
SO	2014	18,600.00	54,875.00	33.90%	7.16%	1.58%
SO	2015	18,700.00	57,725.00	32.39%	5.19%	-4.43%
SO	2017-2019	21,250.00	66,200.00	32.10%	14.68%	-0.91%
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	2,525.00	8,000.00	31.56%	1.93%	4.49%
WR	2015	2,580.00	8,200.00	31.46%	2.50%	-0.31%
WR	2017-2019	2,800.00	9,200.00	30.43%	12.20%	-3.27%

DuPont Formula

Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Change in Revenue/Net Plant
				Average Revenue/Net Plant	Average Change in Net Plant	Cumulative Change in Net Plant
	2003			62.91%	9.25%	9.25%
	2004			65.58%	1.41%	10.79%
	2005			66.34%	4.92%	16.25%
	2006			65.78%	6.79%	24.14%
	2007			61.96%	11.00%	37.80%
	2008			54.73%	16.04%	59.90%
	2009			45.67%	8.19%	73.00%
	2010			46.08%	6.94%	85.01%
	2011			45.43%	4.86%	94.00%
	2012			41.13%	13.47%	120.13%
	2013			40.79%	5.95%	133.22%
	2014			40.87%	5.81%	146.78%
	2015			40.24%	4.15%	157.03%
	2017-2019			42.22%	10.12%	183.05%

Dupont Formula - Regression Analysis

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.583806125
R Square	0.340829591
Adjusted R Square	0.337323366
Standard Error	0.098792404
Observations	190

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.948734173	0.948734173	97.20697757	9.53859E-19
Residual	188	1.834868534	0.009759939		
Total	189	2.783602707			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0.037853997	0.009093599	4.162708086	4.78417E-05	0.019915394	0.0557926
Change in Net Plant	-0.702813739	0.071283912	-9.859359896	9.53859E-19	-0.843432852	-0.562194626

DuPont Formula - Regression Analysis

Ticker	Year	Change in	
		Change in Net Plant	Revenue/Net Plant
AEP	2003	1.59%	-1.63%
AEP	2004	3.50%	-6.63%
AEP	2005	6.50%	-19.11%
AEP	2006	10.28%	-5.50%
AEP	2007	11.53%	-4.96%
AEP	2008	10.44%	-2.28%
AEP	2009	4.11%	-10.28%
AEP	2010	3.87%	2.97%
AEP	2011	3.64%	1.10%
AEP	2012	4.85%	-5.70%
AEP	2013	5.76%	-2.84%
AEP	2014	5.98%	4.45%
AEP	2015	5.29%	-5.03%
AEP	2017-2019	11.48%	3.69%
CNL	2003	-9.52%	34.03%
CNL	2004	-25.20%	14.00%
CNL	2005	12.14%	10.03%
CNL	2006	9.78%	-0.94%
CNL	2007	32.26%	-22.13%
CNL	2008	18.51%	-11.56%
CNL	2009	9.86%	-28.05%
CNL	2010	23.91%	8.58%
CNL	2011	3.94%	-6.42%
CNL	2012	3.99%	-14.48%
CNL	2013	2.45%	7.73%
CNL	2014	1.36%	14.70%
CNL	2015	-1.60%	5.61%
CNL	2017-2019	-7.32%	16.04%
DUK	2007	-24.94%	59.77%
DUK	2008	9.41%	-5.10%
DUK	2009	11.50%	-13.55%
DUK	2010	6.31%	5.45%
DUK	2011	5.74%	-3.73%
DUK	2012	60.70%	-15.95%
DUK	2013	1.36%	23.67%
DUK	2014	1.85%	3.38%
DUK	2015	5.79%	-8.40%
DUK	2017-2019	18.06%	-4.50%
EDE	2003	5.01%	1.33%
EDE	2004	2.77%	-2.70%
EDE	2005	4.55%	13.48%
EDE	2006	15.07%	-6.95%
EDE	2007	14.35%	3.68%
EDE	2008	13.90%	-7.19%
EDE	2009	8.65%	-11.69%
EDE	2010	4.12%	4.56%
EDE	2011	2.94%	3.54%
EDE	2012	6.00%	-8.90%
EDE	2013	5.69%	0.94%
EDE	2014	8.17%	1.11%
EDE	2015	4.75%	-1.60%
EDE	2017-2019	0.76%	17.03%
GXP	2003	3.72%	11.31%
GXP	2004	1.24%	13.22%
GXP	2005	1.14%	4.53%
GXP	2006	10.87%	-7.37%
GXP	2007	12.34%	8.71%
GXP	2008	76.55%	-71.05%
GXP	2009	9.37%	7.58%
GXP	2010	3.63%	10.77%
GXP	2011	2.34%	0.42%
GXP	2012	4.94%	-5.04%
GXP	2013	4.65%	1.20%
GXP	2014	4.82%	1.39%
GXP	2015	3.33%	0.50%

DuPont Formula - Regression Analysis

Ticker	Year	Change in Net Plant	Change in Revenue/Net Plant
GXP	2017-2019	3.10%	9.57%
HE	2003	11.19%	-3.12%
HE	2004	4.78%	3.09%
HE	2005	4.97%	9.69%
HE	2006	4.12%	6.68%
HE	2007	3.62%	-0.53%
HE	2008	5.98%	19.75%
HE	2009	6.23%	-32.46%
HE	2010	2.50%	12.57%
HE	2011	5.33%	15.51%
HE	2012	7.81%	-3.44%
HE	2013	7.35%	-10.61%
HE	2014	4.82%	-3.53%
HE	2015	4.33%	0.98%
HE	2017-2019	17.30%	2.55%
IDA	2003	9.54%	-23.07%
IDA	2004	5.80%	1.98%
IDA	2005	4.74%	-2.83%
IDA	2006	4.53%	3.10%
IDA	2007	8.16%	-12.23%
IDA	2008	5.41%	3.60%
IDA	2009	5.76%	3.36%
IDA	2010	8.38%	-8.94%
IDA	2011	7.76%	-8.02%
IDA	2012	3.80%	1.40%
IDA	2013	3.65%	11.26%
IDA	2014	6.41%	-7.62%
IDA	2015	5.00%	-2.43%
IDA	2017-2019	15.75%	-6.38%
NEE	2003	41.90%	-18.34%
NEE	2004	4.58%	4.48%
NEE	2005	5.83%	6.38%
NEE	2006	9.06%	21.60%
NEE	2007	16.95%	-16.93%
NEE	2008	13.12%	-4.95%
NEE	2009	11.31%	-14.36%
NEE	2010	8.31%	-9.59%
NEE	2011	8.74%	-7.89%
NEE	2012	16.29%	-20.09%
NEE	2013	6.69%	-0.49%
NEE	2014	5.70%	-0.30%
NEE	2015	2.65%	-1.05%
NEE	2017-2019	8.57%	2.34%
NU	2003	14.84%	1.32%
NU	2004	8.00%	2.01%
NU	2005	9.43%	-24.74%
NU	2006	-2.73%	28.51%
NU	2007	15.82%	-26.98%
NU	2008	13.53%	-12.25%
NU	2009	7.70%	-12.92%
NU	2010	8.23%	-16.80%
NU	2011	8.73%	-16.15%
NU	2012	59.62%	-11.98%
NU	2013	5.85%	9.95%
NU	2014	6.40%	-0.23%
NU	2015	6.82%	-4.57%
NU	2017-2019	19.65%	-8.49%
OTTR	2003	7.72%	-1.53%
OTTR	2004	7.71%	8.76%
OTTR	2005	2.20%	16.05%
OTTR	2006	3.08%	2.44%
OTTR	2007	18.84%	-5.66%
OTTR	2008	21.50%	-12.89%
OTTR	2009	5.88%	-25.12%
OTTR	2010	0.92%	6.68%

DuPont Formula - Regression Analysis

Ticker	Year	Change in	
		Change in Net Plant	Revenue/Net Plant
OTTR	2011	-2.81%	-0.89%
OTTR	2012	-2.60%	-18.16%
OTTR	2013	11.20%	-6.50%
OTTR	2014	7.11%	-0.19%
OTTR	2015	6.00%	-2.70%
OTTR	2017-2019	16.98%	14.99%
PNW	2003	15.44%	-7.45%
PNW	2004	0.74%	2.15%
PNW	2005	0.55%	2.48%
PNW	2006	4.02%	9.44%
PNW	2007	7.04%	-3.22%
PNW	2008	5.69%	-9.59%
PNW	2009	3.83%	-5.69%
PNW	2010	3.47%	-4.33%
PNW	2011	4.00%	-4.50%
PNW	2012	4.35%	-2.39%
PNW	2013	4.74%	-0.11%
PNW	2014	4.51%	-0.29%
PNW	2015	4.61%	-1.09%
PNW	2017-2019	14.24%	-0.13%
POR	2005	7.08%	-7.12%
POR	2006	11.58%	-5.79%
POR	2007	12.80%	1.66%
POR	2008	7.66%	-7.01%
POR	2009	16.87%	-11.54%
POR	2010	7.13%	-7.74%
POR	2011	3.68%	-1.92%
POR	2012	2.50%	-2.87%
POR	2013	11.11%	-9.75%
POR	2014	15.16%	-10.05%
POR	2015	3.47%	1.80%
POR	2017-2019	-3.70%	14.35%
SO	2003	11.74%	-4.55%
SO	2004	3.00%	2.70%
SO	2005	3.95%	9.56%
SO	2006	5.47%	0.43%
SO	2007	7.19%	-0.23%
SO	2008	7.65%	3.62%
SO	2009	9.34%	-15.93%
SO	2010	7.07%	3.56%
SO	2011	7.16%	-5.61%
SO	2012	7.51%	-12.88%
SO	2013	5.82%	-2.36%
SO	2014	7.16%	1.58%
SO	2015	5.19%	-4.43%
SO	2017-2019	14.68%	-0.91%
WR	2003	-2.15%	-15.69%
WR	2004	0.04%	0.19%
WR	2005	0.94%	7.11%
WR	2006	3.14%	-1.67%
WR	2007	17.98%	-8.85%
WR	2008	15.19%	-7.55%
WR	2009	4.30%	-3.13%
WR	2010	9.32%	1.22%
WR	2011	6.91%	-1.24%
WR	2012	8.75%	-4.21%
WR	2013	6.99%	-2.02%
WR	2014	1.93%	4.49%
WR	2015	2.50%	-0.31%
WR	2017-2019	12.20%	-3.27%

Size Premium Analysis

PNM Exhibit RBH-14

Is contained in the following page.

Small Size Premium

	[1]	[2]
	Customers (Mil)	(\$Bil)
Public Service of New Mexico Equity	0.508	\$1.185
Median Market to Book for Comp Group		1.48
PNM Implied Market Cap		\$1.749

Company Name	Ticker	[3] Customers (Mil)	[4] Market Cap (\$Bil)	[5] Market to Book Ratio
American Electric Power Company, Inc.	AEP	5.3	\$25.98	1.56
Cleco Corp.	CNL	0.3	\$3.11	1.95
Duke Energy Corporation	DUK	7.2	\$53.18	1.30
Empire District Electric	EDE	0.2	\$1.08	1.41
Great Plains Energy Inc.	GXP	0.8	\$3.82	1.09
Hawaiian Electric Industries, Inc.	HE	0.5	\$2.69	1.52
IDACORP, Inc.	IDA	0.5	\$2.77	1.47
NextEra Energy, Inc.	NEE	4.6	\$41.13	2.23
Northeast Utilities	NU	3.1	\$14.42	1.48
Otter Tail Corporation	OTTR	0.1	\$1.01	1.83
Pinnacle West Capital Corp.	PNW	1.2	\$6.21	1.47
Portland General Electric Company	POR	0.8	\$2.59	1.38
Southern Company	SO	4.5	\$39.70	2.04
Westar Energy, Inc.	WR	0.7	\$4.53	1.45
MEDIAN		0.8	\$4.17	1.48
MEAN		2.1	\$14.44	1.58

Market Capitalization (\$Mil) [6]				
Decile	Low	High	Size Premium	
2	\$ 9,196.656	\$ 21,739.006	0.80%	
3	\$ 5,572.648	\$ 9,196.480	0.93%	
4	\$ 3,581.547	\$ 5,569.840	1.19%	
5	\$ 2,432.888	\$ 3,573.079	1.72%	
6	\$ 1,622.997	\$ 2,431.229	1.75%	
7	\$ 1,056.204	\$ 1,621.792	1.75%	
8	\$ 636.747	\$ 1,055.320	2.48%	
9	\$ 339.522	\$ 632.770	2.76%	
10	\$ 2.395	\$ 338.829	6.01%	

Notes:

[1] SEC Form 10-K for the fiscal year ended December 31, 2013, at 10

[2] Application for Increase in Rates, Testimony of Henry Monroy.

[3] Source: SNL Financial

[4] Source: Bloomberg, 30-day average

[5] Source: Bloomberg, 30-day average

[6] Source: Ibbotson Associates, 2014 Ibbotson SBBI Risk Premia Over Time Report

Capital Investment Recovery Mechanisms

PNM Exhibit RBH-15

Is contained in the following page.

Summary of Capital Investment Recovery Mechanisms

Company	Parent	State	Revenue Adjustmen Clauses for New Capital Investment	Alternative Regulation / Incentive Plan for Rate Base Additions
AEP Texas Central	AEP	Texas	✓	✓
AEP Texas North	AEP	Texas	✓	✓
Appalachian Power	AEP	Virginia	✓	✓
Appalachian Power	AEP	West Virginia		✓
Indiana Michigan Power	AEP	Indiana		✓
Indiana Michigan Power	AEP	Michigan		
Kentucky Power	AEP	Kentucky		✓
Public Service Oklahoma	AEP	Oklahoma	✓	✓
Southwestern Electric Power	AEP	Arkansas	✓	✓
Southwestern Electric Power	AEP	Louisiana		
Southwestern Electric Power	AEP	Texas	✓	✓
Kingsport Power	AEP	Tennessee		
Wheeling Power	AEP	West Virginia		✓
Ohio Power	AEP	Ohio	✓	✓
Cleco Power	CNL	Louisiana		
Duke Energy Florida	DUK	Florida	✓	✓
Duke Energy Indiana	DUK	Indiana	✓	✓
Duke Energy Kentucky	DUK	Kentucky		
Duke Energy Progress	DUK	North Carolina		
Duke Energy Carolinas	DUK	North Carolina		
Duke Energy Ohio	DUK	Ohio		
Carolina Power & Light	DUK	South Carolina		
Duke Energy Carolinas	DUK	South Carolina		
Empire District Electric	EDE	Kansas		✓
Empire District Electric	EDE	Missouri		
Kansas City Power & Light	GXP	Kansas		
Kansas City Power & Light	GXP	Missouri		
KCP&L Greater Missouri	GXP	Missouri		
Hawaiian Electric	HE	Hawaii	✓	✓
Hawaii Electric Light	HE	Hawaii	✓	✓
Maui Electric	HE	Hawaii	✓	✓
Idaho Power	IDA	Idaho		
Idaho Power	IDA	Oregon		✓
Florida Power & Light	NEE	Florida	✓	✓
Lone Star Transmission	NEE	Texas	✓	✓
Connecticut Light & Power	NU	Connecticut		
NSTAR Electric	NU	Massachusetts		
Western Massachusetts Electric	NU	Massachusetts	✓	
Public Service Co. of New Hampshire	NU	New Hampshire	✓	
Otter Tail Power	OTTR	Minnesota		
Otter Tail Power	OTTR	North Dakota	✓	
Arizona Public Service	PNW	Arizona		
Public Service Co. of New Mexico	PNM	New Mexico		
Texas-New Mexico Power	PNM	Texas	✓	✓
Portland General Electric	POR	Oregon		✓
Alabama Power	SO	Alabama	✓	✓
Gulf Power	SO	Florida	✓	
Georgia Power	SO	Georgia	✓	✓
Mississippi Power	SO	Mississippi		
Kansas Gas & Electric	WR	Kansas		✓
Westar Energy	WR	Kansas		✓

Sources:

Regulatory Research Associates, Regulatory Focus "Adjustment Clauses: A State-by-State Overview," July 1, 2014.

Regulatory Research Associates, Regulatory Focus "Alternative Regulation/Incentive Plans: A State-by-State Overview," November 19, 2013.

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

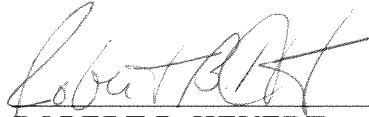
IN THE MATTER OF THE APPLICATION)	
OF PUBLIC SERVICE COMPANY OF NEW)	
MEXICO FOR REVISION OF ITS RETAIL)	
ELECTRIC RATES PURSUANT TO ADVICE)	Case No. 14-00332-UT
NOTICE NO. 507)	
)	
PUBLIC SERVICE COMPANY OF NEW MEXICO,)	
Applicant.)	
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AFFIDAVIT

COMMONWEALTH OF MASSACHUSETTS)	
) ss	
COUNTY OF MIDDLESEX)	

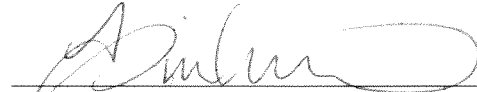
ROBERT B. HEVERT, Managing Partner of Sussex Economic Advisors, LLC, upon being duly sworn according to law, under oath, deposes and states: I have read the foregoing **Direct Testimony and Exhibits of Robert B. Hevert** and it is true and accurate based on my own personal knowledge and belief.

SIGNED this 2nd day of December, 2014.



ROBERT B. HEVERT

SUBSCRIBED AND SWORN to before me this 2nd day of December, 2014.



**NOTARY PUBLIC IN AND FOR
THE COMMONWEALTH OF
MASSACHUSETTS**

My Commission Expires:

April 16, 2015



KIMBERLY H. DAO
Notary Public
Commonwealth of Massachusetts
My Commission Expires
April 16, 2015

