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. 15-00261-UT
NOTICE NO. 513	
PUBLIC SERVICE COMPANY OF NEW MEXICO,)))
Applicant))

DIRECT TESTIMONY AND EXHIBITS OF ROBERT B. HEVERT

NMPRC CASE NO. 15-00261-UT INDEX TO THE DIRECT TESTIMONY OF ROBERT B. HEVERT WITNESS FOR

PUBLIC SERVICE COMPANY OF NEW MEXICO

I.	INTRODUCTION AND	PURPOSE	1
II.	SUMMARY OF KEY CO	ONCLUSIONS	3
III.	SUMMARY OF ISSUES IN REGULATORY PRO	SURROUNDING COST OF EQUITY ESTIN	1ATION 8
IV.	PROXY GROUP SELEC	TION	17
V.	DETERMINATION OF T	THE APPROPRIATE COST OF EQUITY	21
	A. Constant Growth D	iscounted Cash Flow Model	23
	B. Multi-Stage DCF M	lodel	35
	C. Capital Asset Pricir	g Model	44
	D. Bond Yield Plus Ri	sk Premium Approach	49
VI.	BUSINESS RISKS AND	OTHER CONSIDERATIONS	52
	A. Planned Capital Ex	penditures	53
	B. Small Size		56
VII.	REVENUE STABILIZAT	TION AND COST RECOVERY MECHANISM	[S 59
VIII.	CAPITAL MARKET EN	VIRONMENT	65
IX.	CAPITAL STRUCTURE		72
X.	CONCLUSIONS		74
PNM	EXHIBIT RBH-1	Résumé and Testimony Listing of Robert B	. Hevert
PNM	EXHIBIT RBH-2	Hope and Bluefield Decisions	
PNM	EXHIBIT RBH-3	Constant Growth DCF Analysis	
PNM	EXHIBIT RBH-4	Retention Growth Calculation	
PNM	EXHIBIT RBH-5	Multi-Stage DCF Analysis	

PNM EXHIBIT RBH-6	Ex-Ante Market Risk Premium
PNM EXHIBIT RBH-7	Bloomberg and Value Line Beta Coefficients
PNM EXHIBIT RBH-8	CAPM Analysis
PNM EXHIBIT RBH-9	Bond Yield Plus Risk Premium Analysis
PNM EXHIBIT RBH-10	Capital Structure Analysis
PNM EXHIBIT RBH-11	Recently Authorized ROEs for Vertically-Integrated Electric Utilities
PNM EXHIBIT RBH-12	DuPont Analysis
PNM EXHIBIT RBH-13	Size Premium Analysis
PNM EXHIBIT RBH-14	Capital Investment Recovery Mechanisms

AFFIDAVIT

I.

INTRODUCTION AND PURPOSE

2	Q.	PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.
3	A.	My name is Robert B. Hevert and my business address is Sussex Economic
4		Advisors, LLC, 161 Worcester Road, Suite 503, Framingham, MA 01701.
5		
6	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?
7	A.	I am employed by Sussex Economic Advisors, LLC. ("Sussex") as Managing
8		Partner.
9		
10	Q.	ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS DOCKET?
11	A.	I am submitting this testimony on behalf of Public Service Company of New Mexico
12		("PNM").
13		
14	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.
15	A.	I hold a Bachelor's degree in Business and Economics from the University of
16		Delaware, and an MBA with a concentration in Finance from the University of
17		Massachusetts. I also hold the Chartered Financial Analyst designation.
18		
19	Q.	PLEASE DESCRIBE YOUR EXPERIENCE IN THE ENERGY AND
20		UTILITY INDUSTRIES.
21	A.	I have worked in regulated industries for over twenty-five years, having served as
22		an executive and manager with consulting firms, a financial officer of a publicly-

traded natural gas utility (at the time, Bay State Gas Company), and an analyst at a telecommunications utility. In my role as a consultant, I have advised numerous energy and utility clients on a wide range of financial and economic issues, including corporate and asset-based transactions, asset and enterprise valuation, transaction due diligence, and strategic matters. As an expert witness, I have provided testimony in approximately 150 proceedings regarding various financial and regulatory matters before numerous state utility regulatory agencies and the Federal Energy Regulatory Commission. A summary of my professional and educational background, including a list of my testimony in prior proceedings, is included in PNM Exhibit RBH-1 attached to my Direct Testimony.

A.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

The purpose of my Direct Testimony is to present evidence and provide a recommendation regarding PNM's return on common equity ("ROE"), and to provide an assessment of the capital structure to be used for ratemaking purposes, as proposed in the Direct Testimony of PNM Witness Eden. My analyses and recommendations are supported by the data presented in PNM Exhibit RBH-3 through PNM Exhibit RBH-14.

1

II. SUMMARY OF KEY CONCLUSIONS

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 financial market's
11		expectations of increasing interest rates during the period in which the rates set in
12		this proceeding will be in effect, I believe that my 10.50 percent recommendation
13		is a reasonable, if not conservative estimate of the Company's Cost of Equity.
14		Lastly, I conclude that PNM's recommended capital structure, which includes
15		49.61 percent common equity, 0.39 percent preferred equity, and 50.00 percent
16		long-term debt, is reasonable and appropriate.
17		
18	Q.	PLEASE PROVIDE A BRIEF OVERVIEW OF THE ANALYSES THAT
19		LED TO YOUR CONCLUSIONS.
20	A.	As discussed in more detail in Section VIII, in light of recent market conditions,
21		and given the fact that equity analysts and investors tend to use multiple

Throughout my testimony I interchangeably use the terms "ROE" and "Cost of Equity".

methodologies to develop their return requirements, it is extremely important to consider the results of several analytical approaches. I therefore applied several widely accepted methods to develop my ROE recommendation: the Constant Growth Discounted Cash Flow ("DCF") model; the Multi-Stage DCF model; the Capital Asset Pricing Model ("CAPM"); and the Bond Yield Plus Risk Premium approach.

I recognize that in prior orders, the Commission has expressed a preference for the DCF approach, and has provided guidance as to certain aspects of the implementation of that model. Although I have followed that guidance and have included the Constant Growth DCF model in my analyses, I also have found the period over which my analyses were performed included market data that were highly unusual and inconsistent with that model's fundamental assumptions. In particular, the proxy group's average Price/Earnings ("P/E") ratio recently has significantly exceeded its long-term average. Of equal, if not greater, concern is that during the same period the proxy group P/E multiple actually exceeded the overall market P/E ratio. Please see Chart 1 in my testimony.

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

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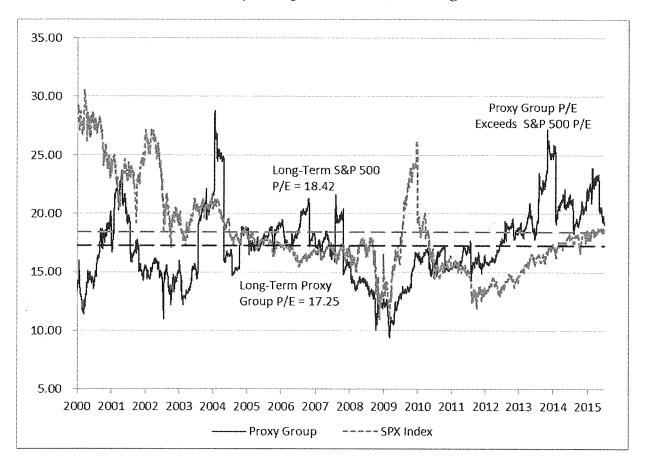
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As discussed later in my testimony, it is highly improbable that utility companies would trade at a premium to the market in perpetuity, yet that is what the Constant Growth Discounted Cash Flow model results assume. As a consequence, the mean Constant Growth DCF results are well below any reasonable estimate of the Company's Cost of Equity. To put the model's results in perspective, from January 1, 2013 through June 25, 2015, the average authorized ROE for vertically-integrated electric utilities³ was 9.90 percent⁴, 55 basis points above the

Proxy Group P/E ratio calculated as an index.

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

mean Constant Growth DCF estimate.⁵ From that perspective, it appears that regulatory commissions have not relied entirely on the Constant Growth DCF approach; that perspective also is consistent with two cases: (1) *Bluefield Water Works and Improvement Co. v. Public Service Comm'n of West Virginia*, 262 U.S. 679 (1923) ("*Bluefield*"); and (2) *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) ("*Hope*") (please refer to PNM Exhibit RBH-2), that it is the reasonableness of the result, rather than the method employed, that controls in arriving at ROE determinations. In light of that data, I believe that it is appropriate to consider the additional methods noted above, giving less weight to the Constant Growth DCF model results. To the extent any weight is given to the DCF estimates, the full range of results, in particular the mean high estimates, should be considered.

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

⁴ PNM Exhibit RBH-11

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-3.

1	Q.	HOW IS THE REMAINDER OF YOUR DIRECT TESTIMONY
2		ORGANIZED?
3	A.	The remainder of my Direct Testimony is organized as follows:
4		• Section III - Provides a summary of issues regarding Cost of Equity
5		estimation in regulatory proceedings and discusses the regulatory
6		guidelines pertinent to the development of the cost of capital;
7		• Section IV – Explains my selection of the proxy group used to develop my
8		analytical results;
9		• Section V – Explains my analyses and the analytical bases for my ROE
10		recommendation;
11		• Section VI - Provides a discussion of specific business risks and other
12		considerations that have a direct bearing on the Company's Cost of
13		Equity;
14		• Section VII - Discusses the effect, if any, of the Company's proposed
15		Revenue Balancing Account (or "RBA") Mechanism;
16		• Section VIII – Highlights the current capital market conditions and their
17		effect on the Company's Cost of Equity;
18		• Section IX – Provides my analyses of the Company's capital structure;
19		and
20		• Section X – Summarizes my conclusions and recommendations.
21		

III.

1 2		III. SUMMARY OF ISSUES SURROUNDING COST OF EQUITY ESTIMATION IN REGULATORY PROCEEDINGS
3	Q.	BEFORE ADDRESSING YOUR SPECIFIC ANALYSES IN THIS
4		PROCEEDING, PLEASE PROVIDE AN OVERVIEW OF THE ISSUES
5		SURROUNDING THE COST OF EQUITY IN REGULATORY
6		PROCEEDINGS, GENERALLY.
7	A.	In very general terms, the Cost of Equity is the return that investors require to
8		make an equity investment in a firm. That is, investors will only provide funds to
9		a firm if the return that they <i>expect</i> is equal to, or greater than, the return that they
10		require to accept the risk of providing funds to the firm. From the firm's
11		perspective, that required return, whether it is provided to debt or equity investors,
12		has a cost. Individually, we speak of the "Cost of Debt" and the "Cost of Equity;"
13		together, they are referred to as the "Cost of Capital."
14		
15		The Cost of Capital (including the costs of both debt and equity) is based on the
16		economic principle of "opportunity costs." Investing in any asset, whether debt or
17		equity securities, implies a forgone opportunity to invest in alternative assets. For
18		any investment to be sensible, its expected return must be at least equal to the
19		return expected on alternative, comparable investment opportunities. Because
20		investments with like risks should offer similar returns, the opportunity cost of an
21		investment should equal the return available on an investment of comparable risk.
22		

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. 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 are taking 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 and information that is not necessarily included in the models themselves. In the end, the estimated Cost of Equity should reflect the return that investors require in

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

1		light of the subject company's risks, and the returns available on comparable
2		investments.
3		
4	Q.	PLEASE DESCRIBE THE GUIDING PRINCIPLES TO BE USED IN
5		ESTABLISHING THE COST OF CAPITAL FOR A REGULATED
6		UTILITY.
7.	A.	The United States Supreme Court (the "Court") established the guiding principles
8		for establishing a fair return for capital in the Hope and Bluefield Cases. Among
9		the standards established by the Court in those cases are: (1) consistency with
10		other businesses having similar or comparable risks; and (2) adequacy of the
11		return to support credit quality and access to capital, while maintaining financial
12		soundness (please refer to PNM Exhibit RBH-2). It also is important to note that
13		in Hope, the Court found that under the statutory standard of "just and
14		reasonable" it is the result reached, as opposed to the method employed, which is
15		controlling. ⁷ Consequently, it is appropriate to consider a variety of approaches
16		and data sources when arriving at a recommended ROE.
17		
18		Based on those widely recognized standards, the consequence of the
19		Commission's order in this case should be to provide PNM with the opportunity
20		to earn a return on equity that is:

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.

1		• Adequate to attract capital on favorable terms, thereby enabling PNM to
2		provide safe, reliable service;
3		• Sufficient to ensure the financial soundness of PNM's operations; and
4		• Commensurate with returns on investments in enterprises having
5		comparable risks.
6		The allowed ROE therefore should enable PNM to finance capital expenditures
7		on favorable terms and optimize its financial flexibility over the period during
8		which rates are expected to remain in effect.
9		
10	Q.	DOES NEW MEXICO PRECEDENT PROVIDE SIMILAR GUIDANCE?
11	A.	Yes. The New Mexico Supreme Court has long followed the Hope and Bluefield
12		principle that utility investors are entitled to a fair and reasonable return:
13 14 15 16 17 18		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. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That
19 20		return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and

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").

1	Q.	WHY IS IT IMPORTANT FOR A UTILITY TO BE ALLOWED THE
2		OPPORTUNITY TO EARN A RETURN THAT IS ADEQUATE TO
3		ATTRACT CAPITAL ON FAVORABLE TERMS?
4	A.	There is a long history of precedent regarding the allowed return on equity, the
5		role of capital structure, and the resulting cost of capital in establishing just and
6		reasonable rates for utility services. Among the themes common to many federal
7		and state cases is the principle that a utility's cost of capital (including its capital
8		structure and allowed return on common equity) must be comparable to that of
9		other enterprises having similar risks, acting independently in the financial
10		markets. As noted elsewhere in my testimony, a return that is adequate to attract
11		capital on favorable terms enables the utility to provide safe and reliable service at
12		lower cost while maintaining an appropriate level of financial integrity. To the
13		extent PNM is provided the opportunity to earn its market-based cost of capital,
14		neither customers nor shareholders should be disadvantaged.
15		
16		Although the "capital attraction" and "financial integrity" standards are important
17		principles in normal economic conditions, the practical implications of those
18		standards are even more pronounced in the current financial environment. As
19		discussed in more detail in Section IV, those conditions have intensified the
20		importance of maintaining a strong financial profile. Consequently, the
21		Commission's order in this proceeding will have a significant effect on PNM's
22		ability to attract capital and maintain its financial integrity.

1	Q.	HOW DOES THE REGULATORY ENVIRONMENT IN WHICH A
2		UTILITY OPERATES AFFECT ITS ACCESS TO AND COST OF
3		CAPITAL?
4	A.	The regulatory environment can affect both the access to, and cost of capital in
5		several ways. There is little question that rating agencies consider the regulatory
6		environment, including the extent to which the presiding regulatory commission
7		is supportive of issues addressing credit quality, to be an important determinant of
8		the subject company's credit profile. As noted by Moody's," "[a]n over-arching
9		consideration for regulated utilities is the regulatory environment in which they
10		operate." ⁹ Moody's further noted that:
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26		A utility operating in a regulatory framework that is characterized by legislation that is credit supportive of utilities and eliminates doubt by prescribing many of the procedures that the regulators will use in determining fair rates (which legislation may show evidence of being responsive to the needs of the utility in general or specific ways), a long history of transparent rate-setting, and a judiciary that has provided ample precedent by impartially adjudicating disagreements in a manner that addresses ambiguities in the laws and rules will receive higher scores in the Legislative and Judicial Underpinnings sub-factor. A utility operating in a regulatory framework that, by statute or practice, allows the regulator to arbitrarily prevent the utility from recovering its costs or earning a reasonable return on prudently incurred investments, or where regulatory decisions may be reversed by politicians seeking to enhance their populist appeal will receive a much lower score. ¹⁰
27		In fact, fully 50.00 percent of Moody's credit rating determinations (for regulated
28		utilities) is made based on regulatory factors. Moody's notes that its assessment

Moody's Investors Service, Rating Methodology: Regulated Electric and Gas Utilities, December 23, 2013, at 3. *Ibid.*, at 10.

1 of the subject company's regulatory framework reflects 25.00 percent of the 2 rating, while the remaining 25.00 percent is determined by the utility's "ability to recover costs and earn returns."11 3 4 5 Similarly, in arriving at its rating determinations Standard & Poor's ("S&P") 6 includes an assessment of "capital support during construction to alleviate funding and cash flow pressure during periods of heavy investments". 12 Moody's agrees 7 8 that timely cost recovery is an important determinant of credit quality: 9 mechanisms that provide "full and highly timely recovery of all operating costs 10 and essentially contemporaneous return on all incremental capital investments" 11 allow for stronger credit ratings. ¹³ 12 13 It also is important to recognize that regulatory decisions regarding the ROE and 14 capital structure have direct consequences for the subject utility's internal cash 15 flow generation (sometimes referred to as "Funds from Operations," or "FFO"). Since credit ratings are intended to reflect the ability to meet financial obligations 16 17 as they come due, the ability to generate the cash flows required to meet those 18

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

19

20

obligations (and to provide an additional amount for unexpected events) is of

critical importance to debt investors. Two of the most important metrics used to

assess that ability are the ratios of FFO to debt and FFO to interest expense, both

Standard and Poor's, Utilities: Key Credit Factors For The Regulated Utilities Industry, November 19.

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

of which are directly affected by regulatory decisions regarding the appropriate rate of return, and capital structure.

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Q. HOW IS THE COST OF EQUITY ESTIMATED IN REGULATORY

PROCEEDINGS?

As noted earlier, and as discussed in more detail below, the Cost of Equity is estimated by the use of various financial models. By their very nature, those models produce a range of results from which the ROE is estimated. That estimate must be based on a comprehensive review of relevant data and information, and does not necessarily lend itself to a strict mathematical solution. The key consideration in determining the ROE is to ensure that the overall analysis reasonably reflects investors' view of the financial markets in general and the subject company (in the context of the proxy companies) in particular. Both practitioners and academics, however, recognize that financial models are tools to be used in the ROE estimation process, and that strict adherence to any single approach, or to the specific results of any single approach, can lead to flawed or misleading conclusions. That position is consistent with the Hope and Bluefield principle that it is the analytical result, as opposed to the methodology, that is controlling in arriving at ROE determinations. Thus, a reasonable ROE estimate appropriately considers alternative methodologies and the reasonableness of their individual and collective results in the context of observable, relevant market information.

1	Q.	WHAT ARE YOUR CONCLUSIONS REGARDING REGULATORY
2		GUIDELINES AND CAPITAL MARKET EXPECTATIONS?
3	A.	The ratemaking process is based on the principle that, in order for investors and
4		companies to commit the capital needed to provide safe and reliable utility
5		services, utilities must have the opportunity to recover the return of invested
6		capital and the market-required return on that capital. Regulatory commissions
7		recognize that because utility operations are capital intensive, regulatory decisions
8		should enable the subject company to attract capital at favorable terms; doing so
9		balances the long-term interests of investors and ratepayers. The financial
10		community carefully monitors the current and expected financial condition of
11		utility companies, as well as the regulatory processes to which they are subject.
12		In that respect, the regulatory environment is one of the most important factors
13		considered in both debt and equity investors' assessments of risk.
14		
15		It is important, therefore, for the ROE authorized in this proceeding to take into
16		consideration the capital market conditions with which PNM must contend, as
17		well as investors' expectations and requirements for both risks and returns.
18		Lastly, in light of recent capital market conditions and PNM's capital investment
19		plans, it is important that PNM be afforded the opportunity to maintain an

adequate financial profile, and earn a reasonable return on its capital investments.

20

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IV. PROXY GROUP SELECTION

2	Q.	AS A PRELIMINARY MATTER, WHY IS IT NECESSARY TO SELECT A
3		GROUP OF PROXY COMPANIES TO DETERMINE THE COST OF
4		EQUITY FOR THE COMPANY?
5	A.	Since the Cost of Equity is a market-based concept, and PNM is not a publicly traded
6		entity, it is necessary to establish a group of comparable, publicly traded companies to
7		serve as its "proxy." Even if the Company were publicly traded, short-term events
8		could bias its market value during a given period of time. A significant benefit of using
9		a proxy group is that it moderates the effects of anomalous, temporary events associated
10		with any one company.
11		
12	Q.	DOES THE SELECTION OF A PROXY GROUP SUGGEST THAT
13		ANALYTICAL RESULTS WILL BE TIGHTLY CLUSTERED AROUND
14		AVERAGE (I.E., MEAN) RESULTS?
15	A.	No. For example, the Constant Growth DCF approach defines the Cost of Equity
16		as the sum of the expected dividend yield and projected long-term growth.
17		Despite the care taken to ensure risk comparability, market expectations with
18		respect to future risks and growth opportunities will vary from company to
19		company. Therefore, even within a group of similarly-situated companies, it is
20		
20		common for analytical results to reflect a seemingly wide range. Consequently, at

PNM's parent company PNM Resources is listed on the New York Stock Exchange and is publicly traded.

1		determination necessarily must consider a wide range of both quantitative and
2		qualitative information.
3		
4	Q.	PLEASE PROVIDE A SUMMARY PROFILE OF PNM.
5	A.	PNM, which is a wholly owned subsidiary of PNM Resources, Inc., provides
6		electric service to approximately 511,000 customers in New Mexico. ¹⁵ PNM's
7		electric revenue accounted for approximately 79.95 percent of PNM Resources'
8		total revenue in 2014. ¹⁶ PNM's current long-term issuer credit rating issued by
9		Standard and Poor's ("S&P") is BBB (outlook: positive); Moody's Investor
10		Services ("Moody's") rates PNM Baa2 (outlook: stable). ¹⁷
11		
12	Q.	HOW DID YOU SELECT THE COMPANIES INCLUDED IN YOUR
13		PROXY GROUP?
14	A.	As a preliminary matter, I am aware of the Commission's position, in Case No.
15		07-00319-UT, regarding the use of several screening criteria for the purpose of
16		
		establishing a proxy group. Keeping in mind that my objective is to select a
17		establishing a proxy group. Keeping in mind that my objective is to select a proxy group that is highly representative of the risks and prospects faced by PNM,
17 18		
		proxy group that is highly representative of the risks and prospects faced by PNM,
18		proxy group that is highly representative of the risks and prospects faced by PNM, while observing the Commission's guidance with respect to certain screening

¹⁵ See, PNM Resources Inc., SEC Form 10-K, For the Fiscal Year December 31, 2014, at A-36.

¹⁶ *Ibid.*, at A-24 to A-25.

Source: SNL Financial.

1		 I excluded companies that do not consistently pay quarterly cash
2		dividends;
3		I excluded companies that were not covered by at least two utility industry
4		equity analysts;
5		I excluded companies that do not have investment grade senior unsecured
6		bond and/or corporate credit ratings from S&P
7		• I excluded any companies whose regulated operating income over the
8		three most recently reported fiscal years comprised less than 60.00 percent
9		of the respective totals for that company;
10		I excluded any companies whose regulated electric operating income over
11		the three most recently reported fiscal years represented less than 60.00
12		percent ¹⁸ of total regulated operating income; and
13		• I eliminated companies that are currently known to be party to a merger,
14		or other significant transaction.
15		
16	Q.	DID YOU INCLUDE PNM RESOURCES IN YOUR PROXY GROUP?
17	A.	No. In order to avoid the circular logic that would otherwise occur, it has been
18		my consistent practice to exclude the subject company (or its parent) from the
19		proxy group.

In my Direct Testimony in the Company's previous filing in Case No. 14-00332-UT, I excluded companies whose regulated electric operating income over the three most recently reported fiscal years represented less than 90.00 percent of total regulated operating income. However, due to recent consolidation in the industry, that threshold would produce a relative small group of proxy companies. As such, in this proceeding I have lowered the threshold to 60.00 percent. The 60.00 percent threshold is consistent with the initial regulated operations screening criteria, and balances the objective of developing a group of proxy companies that are primarily regulated electric utilities with the objective of producing a proxy group of sufficient size.

1 Q. WHAT COMPANIES MET YOUR SCREENING CRITERIA?

- 2 A. The criteria discussed above resulted in a proxy group of the following 27
- 3 companies in Table RBH-1:

4

Table RBH-1: Proxy Group Screening Results

Company	Ticker
ALLETE, Inc.	ALE
Alliant Energy Corporation	LNT
Ameren Corporation	AEE
American Electric Power Company, Inc.	AEP
Avista Corporation	AVA
Black Hills Corporation	BKH
CenterPoint Energy, Inc.	CNP
CMS Energy Corporation	CMS
Consolidated Edison, Inc.	ED
Dominion Resources, Inc.	D
DTE Energy Company	DTE
Duke Energy Corporation	DUK
Empire District Electric Company	EDE
Eversource Energy	ES
FirstEnergy Corp.	FE
Great Plains Energy Inc.	GXP
IDACORP, Inc.	IDA
Northwestern Corporation	NWE
OGE Energy Corp.	OGE
Otter Tail Corporation	OTTR
Pinnacle West Capital Corporation	PNW
Portland General Electric Company	POR
SCANA Corporation	SCG
Southern Company	SO
TECO Energy, Inc.	TE
Westar Energy, Inc.	WR
Xcel Energy Inc.	XEL

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
6		that regard, the 60.00 percent threshold is consistent with observations provided
7		by Moody's:
8 9 10 11 12		Since regulated utilities are a relatively low risk business compared to other corporate sectors, in most cases diversified non-utility operations increase the business risk profile of a utility. Reflecting this tendency, we note that assigned ratings are typically lower than grid-indicated ratings for such companies. ¹⁹
13		From the perspective of Moody's, therefore, the distinction between regulated and
14		non-regulated operating is an important consideration. In light of that concern, I
15		believe the 60.00 percent threshold used in my screening criteria reasonably
16		balances the need to exclude companies with significant unregulated operations
17		with the desire to have a sufficiently large proxy group.
18		
19		V. DETERMINATION OF THE APPROPRIATE COST OF EQUITY
20	Q.	PLEASE BRIEFLY DISCUSS THE ROE IN THE CONTEXT OF THE
21		REGULATED RATE OF RETURN.
22	A.	Regulated utilities primarily use common stock and long-term debt to finance
23		their capital investments. The Weighted Average Cost of Capital weights the

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

costs of the individual sources of capital by their respective book values. While the Cost of Debt can be directly observed, the Cost of Equity is market-based and, therefore, must be estimated based on observable market information.

A.

Q. HOW IS THE REQUIRED ROE DETERMINED?

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

Because the Cost of Equity is not directly observable, it must be estimated based on both quantitative and qualitative information. Although a number of empirical models have been developed for that purpose, all are subject to limiting assumptions or other constraints. Consequently, many finance texts recommend using multiple approaches to estimate the Cost of Equity.²⁰ When faced with the task of estimating the Cost of Equity, analysts and investors are inclined to gather

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.

1		and evaluate as much relevant data as reasonably can be analyzed and, therefore
2		rely on multiple analytical approaches.
3		
4		As a practical matter, no individual model is more reliable than all others under
5		all market conditions. Therefore, it is both prudent and appropriate to use
6		multiple methodologies in order to mitigate the effects of assumptions and inputs
7		associated with any single approach. As such, I have considered the results of the
8		Constant Growth and Multi-Stage forms of the DCF model, the Capital Asset
9		Pricing Model, and the Bond Yield Plus Risk Premium approach.
10		
11		A. Constant Growth Discounted Cash Flow Model
12	Q.	ARE DCF MODELS WIDELY USED TO DETERMINE THE ROE FOR
12 13	Q.	ARE DCF MODELS WIDELY USED TO DETERMINE THE ROE FOR REGULATED UTILITIES?
	Q.	
13		REGULATED UTILITIES?
13 14		REGULATED UTILITIES? Yes, DCF models are widely used in regulatory proceedings, although neither the
13 14 15		REGULATED UTILITIES? Yes, DCF models are widely used in regulatory proceedings, although neither the Constant Growth DCF model nor any other method should be applied without
13141516		REGULATED UTILITIES? Yes, DCF models are widely used in regulatory proceedings, although neither the Constant Growth DCF model nor any other method should be applied without considerable judgment in the selection of inputs and the interpretation of results.
1314151617		REGULATED UTILITIES? Yes, DCF models are widely used in regulatory proceedings, although neither the Constant Growth DCF model nor any other method should be applied without considerable judgment in the selection of inputs and the interpretation of results. In its simplest form, the DCF model expresses the Cost of Equity as the sum of

1 Q. PLEASE MORE FULLY DESCRIBE THE CONSTANT GROWTH DCF

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

7
$$P = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \dots + \frac{D_{\infty}}{(1+k)^{\infty}} \quad \text{Equation [1]}$$

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

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

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

- 17 Q. WHAT ASSUMPTIONS ARE INHERENT IN THE CONSTANT
- 18 GROWTH DCF MODEL?
- 19 A. The Constant Growth DCF model assumes: (1) a constant average annual growth
- rate for earnings and dividends; (2) a stable dividend payout ratio; (3) a constant
- 21 Price to Earnings multiple; and (4) a discount rate greater than the expected
- 22 growth rate.

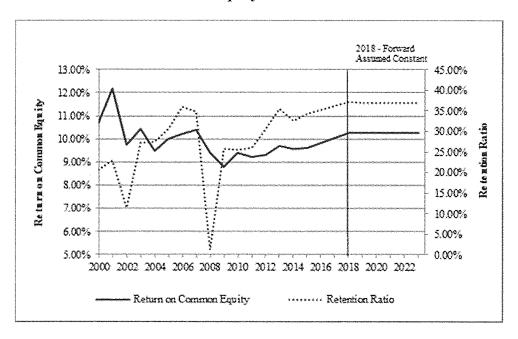
1	Q.	WHAT MARKET DATA DID YOU USE TO CALCULATE THE
2		DIVIDEND YIELD IN YOUR CONSTANT GROWTH DCF MODEL?
3	A.	The dividend yield is based on the proxy companies' current annualized dividend,
4		and average closing stock prices over the 30, 90, 180, and 360-trading day periods
5		as of June 25, 2015.
6		
7	Q.	WHY DID YOU USE FOUR AVERAGING PERIODS TO CALCULATE
8		AN AVERAGE STOCK PRICE?
9	A.	My practice has been to include 30, 90, 180-trading day average stock prices to
10		ensure that the model's results are not skewed by anomalous events that may
11		affect stock prices on any given trading day. However, I also am aware that in the
12		Recommended Decision in Case No. 07-00319-UT, the Hearing Examiner chose
13		to rely exclusively on a 360-trading day averaging period to arrive at his ROE
14		result, a position that the Commission affirmed in its final order in that case. ²¹
15		As such, I have included the 360-trading day averaging period in my DCF
16		analyses. As discussed later in my testimony, however, it is important to reflect
17		the current and expected capital market environment and its effect on the PNM's
18		Cost of Equity.

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

1	Q.	HAVE YOU ALSO CONSIDERED THE "SUSTAINABLE GROWTH"
2		METHOD?
3	A.	Yes, I have. The Sustainable Growth model (also referred to as the "Retention
4		Growth" model) is premised on the theory that a firm's growth is a function of its
5		expected earnings and the extent to which those earnings are retained and
6		reinvested in the enterprise. In its simplest form, the model represents long-term
7		growth as the product of the retention ratio (i.e., the percentage of earnings not
8		paid out as dividends, referred to below as ("b") and the expected return on book
9		equity (referred to below as "r"). Thus, the simple "b x r" form of the model
10		projects growth as a function of internally generated funds. That form of the
11		model is limiting, however, in that it does not provide for growth funded from
12		external equity.
13		
14		The "br + sv" form of the Sustainable Growth estimate is meant to reflect growth
15		from both internally generated funds (i.e., the "b x r" term) and from issuances of
16		equity (i.e., the "sv" term). The first term, which is the product of the retention
17		ratio (i.e., the portion of net income not paid in dividends) and the expected return
18		on equity (i.e., "r") represents the portion of net income that is "plowed back" into
19		the Company as a means of funding growth. The "sv" term is represented as:

1		$\left(\frac{m}{b}-1\right)$ x Growth rate in Common Shares Equation [3]
2		where $\frac{m}{b}$ is the Market-to-Book ratio.
3		In this form, the "sv" term reflects an element of growth as the product of (a) the
4		growth in shares outstanding, and (b) that portion of the market-to-book ratio that
5		exceeds unity. As shown in PNM Exhibit RBH-4, all of the components of the
6		Sustainable Growth model are derived from data provided by Value Line.
7		
8	Q.	HAVE THE RETURN ON EQUITY AND RETENTION RATIO
9		COMPONENTS OF THE SUSTAINABLE GROWTH MODEL BEEN
10		STABLE OVER TIME?
l 1	A	
L	A.	No, they have not. Chart 2 (below) demonstrates the historical fluctuation in the
12	A.	No, they have not. Chart 2 (below) demonstrates the historical fluctuation in the average Return on Equity, and Retention Ratio for the proxy group. As Chart 2
	A.	
12	A.	average Return on Equity, and Retention Ratio for the proxy group. As Chart 2

Chart 2: Return on Equity and Retention Ratio Over Time



Q. ARE THERE OTHER REASONS WHY THE SUSTAINABLE GROWTH CALCULATION MAY NOT REFLECT EXPECTED LONG-TERM

GROWTH RATES?

1

4

5

6

7

8

9

10

A.

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

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, to reduce
16		the long-term growth rate to a single measure, one must assume a fixed payout
17		ratio, and the same constant growth rate for earnings per share ("EPS"), dividends
18		per share, and book value per share. Since dividend growth can only be sustained
19		by earnings growth, the model should incorporate a variety of measures of long-
20		term earnings growth. That can be accomplished by averaging those measures of
21		long-term growth that tend to be least influenced by capital allocation decisions
22		that companies may make in response to near-term changes in the business
23		environment. Because such decisions may directly affect near-term dividend

1		payout ratios, estimates of earnings growth are more indicative of long-term
2		investor expectations than are dividend growth estimates. For the purposes of the
3		Constant Growth DCF model, therefore, growth in EPS represents the appropriate
4		measure of long-term growth.
5		
6	Q.	DID YOU MAKE ANY ADJUSTMENTS TO THE DIVIDEND YIELD TO
7		ACCOUNT FOR PERIODIC GROWTH IN DIVIDENDS?
8	A.	Yes, I did. Since utility companies tend to increase their quarterly dividends at
9		different times throughout the year, it is reasonable to assume that dividend
10		increases will be evenly distributed over calendar quarters. Given that
11		assumption, it is appropriate to calculate the expected dividend yield by applying
12		one-half of the long-term growth rate to the current dividend yield. That
13		adjustment ensures that the expected dividend yield is, on average, representative
14		of the coming twelve-month period, and does not overstate the dividends to be
15		paid during that time. Consequently, this convention yields more conservative
16		DCF results.

1	$\mathbf{Q}.$	ARE YOU AWARE THAT IN PRIOR CASES, THE COMMISSION HAS
2		USED A FULL YEAR GROWTH RATE TO CALCULATE THE
3		EXPECTED DIVIDEND YIELD?
4	A.	Yes, I am. It is my understanding that in Case Nos. 06-00210-UT, 07-00319-UT,
5		07-00077-UT, and more recently in Case No. 12-00350-UT ²² the Commission
6		adopted the use of the full year growth rate in calculating the expected dividend
7		yield component of the DCF model. For the reasons noted above, however, my
8		practice has been to use the one-half year adjustment. For the purposes of this
9		proceeding, therefore, I have presented my results using both the one-half and full
10		year growth rate adjustments.
11		
12	Q.	PLEASE SUMMARIZE THE FINDINGS OF ACADEMIC RESEARCH
13		ON THE APPROPRIATE MEASURE FOR ESTIMATING EQUITY
14		RETURNS USING THE DCF MODEL.
15	A.	The relationship between various growth rates and stock valuation metrics has
16		been the subject of much academic research. ²³ As noted over 40 years ago by
17.		Charles Phillips in <u>The Economics of Regulation</u> :
18 19 20		For many years, it was thought that investors bought utility stocks largely on the basis of dividends. More recently, however, studies indicate that the market is valuing utility stocks with reference to

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

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 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.

total per share earnings, so that the earnings-price ratio has assumed increased emphasis in rate cases.²⁴

Phillips' conclusion continues to hold true. Subsequent academic research has clearly and consistently indicated that measures of earnings and cash flow are strongly related to returns, and that analysts' forecasts of growth are superior to other measures of growth in predicting stock prices. For example, Vander Weide and Carleton state that, "[our] results ... are consistent with the hypothesis that investors use analysts' forecasts, rather than historically oriented growth calculations, in making stock buy-and-sell decisions." Other research specifically notes the importance of analysts' growth estimates in determining the Cost of Equity, and in the valuation of equity securities. Dr. Robert Harris noted that "a growing body of knowledge shows that analysts' earnings forecast are indeed reflected in stock prices." Citing Cragg and Malkiel, Dr. Harris notes that those authors "found that the evaluations of companies that analysts make are the sorts of ones on which market valuation is based." Similarly, Brigham, Shome and Vinson noted that "evidence in the current literature indicates that (i)

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

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

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

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).

1		analysts' forecasts are superior to forecasts based solely on time series data; and
2		(ii) investors do rely on analysts' forecasts."28
3		
4		To that point, the research of Carleton and Vander Weide demonstrates that
5		earnings growth projections have a statistically significant relationship to stock
6		valuation levels, while dividend growth rates do not.29 Those findings suggest
7		that investors form their investment decisions based on expectations of growth in
8		earnings, not dividends. Consequently, earnings growth, not dividend growth, is
9		the appropriate estimate for the purpose of the Constant Growth DCF model.
10		
11	Q.	PLEASE SUMMARIZE YOUR INPUTS TO THE CONSTANT GROWTH
12		DCF MODEL.
13	A.	I applied the DCF model to the proxy group of integrated electric utility
14		companies using the following inputs for the price and dividend terms:
15		• The average daily closing prices for the 30-, 90-, 180-, and 360-trading
16		day periods ended June 25, 2015, for the term P ₀ ; and
17		• The annualized dividend per share as of June 25, 2015, for the term D_0 .
18		I then calculated my DCF results using each of the following growth terms:
19		• The Zacks consensus long-term earnings growth estimates;
20		• The First Call consensus long-term earnings growth estimates; and

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).

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

1		• The Value Line long-term earnings growth estimates. ³⁰
2		
3	Q.	HOW DID YOU CALCULATE THE DCF RESULTS?
4	A.	For each proxy company, I calculated the mean, mean high, and mean low results.
5		For the mean result, I combined the average of the EPS growth rate estimates
6		reported by Value Line, Zacks, and First Call with the subject company's
7		dividend yield for each proxy company and then calculated the average result for
8		those estimates. I calculated the high DCF result by combining the maximum
9		EPS growth rate estimate as reported by Value Line, Zacks, and First Call with
10		the subject company's dividend yield. The mean high result simply is the average
11		of those estimates. I used the same approach to calculate the low DCF result,
12		using instead the minimum of the Value Line, Zacks, and First Call estimate for
13		each proxy company, and calculating the average result for those estimates.
14 15	Q.	WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF
16		ANALYSIS?
17	A.	My Constant Growth DCF results are summarized in Table RBH-2, below (see

also PNM Exhibit RBH-3).

18

³⁰ See, PNM Exhibit RBH-3.

Table RBH-2: Constant Growth DCF Results³¹

Half-Year Dividend Growth	Mean Low	Mean	Mean High
30-Day Average	8.64%	9.38%	10.22%
90-Day Average	8.49%	9.23%	10.07%
180-Day Average	8.37%	9.11%	9.94%
360-Day Average	8.51%	9.25%	10.08%
Full-Year Dividend Growth	Mean Low	Mean	Mean High
30-Day Average	8.73%	9.46%	10.34%
90-Day Average	8.58%	9.34%	10.18%
180-Day Average	8.45%	9.21%	10.05%
360-Day Average	8.60%	9.35%	10.20%
Half-Year, with Sustainable Growth	Mean Low	Mean	Mean High
30-Day Average	7.90%	9.09%	10.25%
90-Day Average	7.75%	8.94%	10.09%
180-Day Average	7.63%	8.81%	9.97%
360-Day Average	7.77%	8.95%	10.11%
Full-Year, with Sustainable Growth	Mean Low	Mean	Mean High
30-Day Average	7.98%	9.19%	10.37%
90-Day Average	7.83%	9.03%	10.21%
180-Day Average	7.70%	8.90%	10.08%
360-Day Average	7.84%	9.05%	10.23%

2 B. Multi-Stage DCF Model

1

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

4 A. In order to address certain limiting assumptions underlying the Constant Growth
5 form of the DCF model, I also considered the Multi-Stage (three-stage) DCF
6 Model. The Multi-Stage model, which is an extension of the Constant Growth

35

See, PNM Exhibit RBH-3.

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

A.

Q. PLEASE GENERALLY DESCRIBE THE STRUCTURE OF YOUR MULTI-STAGE DCF MODEL.

The Multi-Stage DCF model sets the subject company's stock price equal to the present value of future cash flows received over three "stages." In the first two stages, "cash flows" are defined as projected dividends. In the third stage, "cash flows" equal both dividends and the expected price at which the stock will be sold at the end of the period (*i.e.*, the "terminal price"). I calculated the terminal price based on the Gordon model,³² which defines the price as the expected dividend divided by the difference between the Cost of Equity (*i.e.*, the discount rate) and the long-term expected growth rate. In essence, the terminal price is defined by the present value of the remaining "cash flows" in perpetuity. In each of the three stages, the dividend is the product of the projected earnings per share and the expected dividend payout ratio. A summary description of the model is provided in Table RBH-3 (below).

³² See, Morningstar, Inc., 2013 Ibbotson Stocks, Bonds, Bills and Inflation Valuation Yearbook, at 48-50.

Table RBH-3: Multi-Stage DCF Structure

Stage	0	1	2	3	
Cash Flow	Initial Stock	Expected	Expected	Expected	
Component	Price	Dividend	Dividend	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	

2 Q. WHAT ARE THE ANALYTICAL BENEFITS OF YOUR THREE-STAGE

DCF MODEL?

A.

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

1		it is not limited to a single source, such as Value Line, for all inputs, and mitigates
2		the potential bias associated with relying on a single source of growth estimates. ³³
3		
4		The model also enables the analyst to assess the reasonableness of the inputs and
5		results by reference to certain market-based metrics. For example, the stock price
6		estimate can be divided by the expected earnings per share in the final year to
7		calculate an average Price to Earnings ("P/E") ratio. Similarly, the terminal P/E
8		ratio can be divided by the terminal growth rate to develop a Price to Earnings
9		Growth ("PEG") ratio. To the extent that either the projected P/E or PEG ratios
10		are inconsistent with either historical or expected levels, it may indicate incorrect
11		or inconsistent assumptions within the balance of the model.
12 13	Q.	PLEASE SUMMARIZE YOUR INPUTS TO THE MULTI-STAGE DCF
14		MODEL.
15	A.	I applied the Multi-Stage model to the proxy group described earlier in my Direct
16		Testimony. My assumptions with respect to the various model inputs are
17		described in Table RBH-4 (below).

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

Table RBH-4: Multi-Stage DCF Model Assumptions

1

Stage	Initial	First	Transition	Terminal
Stock Price	30-, 90-, 180- and 360-day average stock price as of June 25, 2015	First	Transition	Ter minar
Earnings Growth	2014 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

2 Q. HOW DID YOU CALCULATE THE TERMINAL GROWTH RATE?

A. Although it has generally been my practice to rely on expected Gross Domestic

Product ("GDP") growth as the long-term growth rate, I recognize that in prior

proceedings the Commission has expressed some concern with that approach.³⁴

For this proceeding I therefore developed the terminal growth rate by averaging a

range of estimates of expected long-term growth, including: (1) the proxy group

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

1	average of analysts' long-term earnings growth projections; (2) the long-term
2	growth rate implied by recently authorized ROEs; (3) the long-term growth rate
3	implied by the assumption that the average price-to-earnings ratio would revert
4	back to its long-term average; ³⁵ and (4) an estimate of GDP growth.
5	
6	The first growth rate estimate simply relies on the Zacks, First Call and Value
7	Line growth rates used in the Constant Growth DCF analyses. As shown in PNM
8	Exhibit RBH-5, the mean of the proxy group's analysts' long-term earnings
9	growth projections is 5.25 percent.
10	
11	The second growth rate estimate was derived from recently authorized returns for
12	vertically integrated electric utilities from January 1, 2013 through June 25, 2015.
13	In the context of the Constant Growth DCF model, returns include income from
14	dividends (i.e., the dividend yield) and expected growth (i.e., capital
15	appreciation). Assuming the SNL electric universe's average dividend yield since
16	the beginning of 2013 of 3.58 percent,36 the average reported authorized ROE of
17	9.90 percent provided in PNM Exhibit RBH-11 implies an expected long-term
18	growth rate of 6.10 percent (assuming the Commission's full-year growth rate
19	adjustment to the dividend yield portion of the Constant Growth DCF model). ³⁷
20	

Average from January 2000 through June 25, 2015. Source: SNL Financial, SNL Electric Company Index.

³⁶

Average dividend yield calculated on a weighted index basis. $0.0990 = (.0358 \times 1.0610) + .0610$.

The third growth rate estimate was determined by calculating (through an iterative process) the long-term growth rate that would imply a proxy group average terminal stage P/E ratio approximately equal to the proxy group's historical average P/E ratio of 17.25 (as reflected in Chart 1) since January 1, 2000.³⁸ As discussed in more detail in Section VIII below, that assumption implies a contraction in current P/E ratios. Using 30-day average stock prices and mean analyst growth estimates in the multi-stage DCF model, the resulting long-term growth rate is 5.94 percent.³⁹

The fourth growth rate estimate, 5.32 percent, is based on the historical average real GDP growth rate of 3.26 percent,⁴⁰ together with the expected inflation rate of 1.99 percent.⁴¹ The historical average real GDP growth rate is the compound growth rate in chain-weighted GDP from 1929 through 2014; the expected inflation rate is the compound annual forward rate beginning ten years from now (*i.e.*, 2025, which is the beginning of the terminal period) and is based on the 180-day average projected inflation based on the difference between yields on long-term nominal Treasury Securities, and long-term Treasury Inflation Protected Securities.⁴²

³⁸ Source: SNL Financial, calculated as an index. See Chart 1.

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 5.94 percent results in an average terminal P/E ratio of 17.25.

See, Bureau of Economic Analysis, "Current-Dollar and 'Real' Gross Domestic Product," May 29, 2015 update.

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

That difference is often referred to as the "TIPS spread."

1		I have used the average of those four estimates, 5.65 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. ⁴³ 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.44 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. ⁴⁵ In fact, Morningstar's long-term growth estimate of real
14		GDP growth (3.22 percent) is only four basis points different than the 3.26
15		percent 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
19		time real GDP growth will revert to its long-term mean. Moreover, since
20		estimating the Cost of Equity is a market-based exercise, it is important to reflect

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.

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

Implied Expected Nominal GDP = $((1 + \text{Historical Real GDP Growth}) \times (1 + \text{Implied Forward Inflation})) - 1$, or 5.32 percent = $((1 + 3.26 \text{ percent}) \times (1 + 1.995 \text{ percent})) - 1$.

1		the sentiments and expectations of investors to the extent possible. In that
2		important respect, the TIPS spread represents the collective views of investors
3		regarding long-term inflation expectations. Equally important, by using forward
4		yields we are able to infer the level of long-term inflation expected by investors as
5		of the terminal period of the Multi-Stage model (that is, ten years in the future).
6		
7		Nonetheless, in light of the Commission's concerns I have given long-term GDP
8		growth only one quarter weight in developing my long-term growth estimate.
9		
10	Q.	WHAT WERE YOUR SPECIFIC ASSUMPTIONS WITH RESPECT TO
11		THE PAYOUT RATIO?
12	A.	As noted in Table RBH-4, for the first two periods, I relied on the first year and
13		long-term projected payout ratios reported by Value Line ⁴⁶ for each of the proxy
14		companies. I then assumed that by the end of the second period (i.e., the end of
15		year 10), the payout ratio will converge to the historical industry average ratio of
16		67.30 percent. ⁴⁷
17		
18	Q.	WHAT ARE THE RESULTS OF YOUR MULTI-STAGE DCF
19		ANALYSIS?
20	A.	Table RBH-5 (see also PNM Exhibit RBH-5) presents the Multi-Stage DCF
21		analysis results. Using the Gordon model to calculate the terminal stock price, the

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

1 Multi-Stage DCF analysis produces a range of results from 9.42 percent to 10.36

2 percent.

3

7

Table RBH-5: Multi-Stage DCF Model Results⁴⁸

Without Sustainable Growth	Mean Low	Mean	Mean High
30-Day Average	9.88%	10.10%	10.35%
90-Day Average	9.71%	9.92%	10.16%
180-Day Average	9.59%	9.79%	10.02%
360-Day Average	9.73%	9.93%	10.17%
With Sustainable Growth	Mean Low	Mean	Mean High
30-Day Average	9.71%	10.02%	10.36%
90-Day Average	9.55%	9.85%	10.17%
180-Day Average	9.42%	9.72%	10.03%
360-Day Average	9.56%	9.86%	10.18%

4 Q. DID YOU UNDERTAKE ANY ADDITIONAL ANALYSES TO SUPPORT

5 YOUR RECOMMENDATION?

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

8 C. Capital Asset Pricing Model

9 Q. PLEASE BRIEFLY DESCRIBE THE GENERAL FORM OF THE CAPM.

10 **A.** The CAPM is a risk premium method that estimates the Cost of Equity for a given security as a function of a risk-free return plus a risk premium (to compensate investors for the non-diversifiable or "systematic" risk of that security). As

See, PNM Exhibit RBH-5. 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.

1 shown in Equation [4], the CAPM is defined by four components, each of which 2 theoretically must be a forward-looking estimate: $k = r_f + \beta(r_m - r_f)$ Equation [4] 3 4 where: 5 k = the required market ROE for a security; β = the Beta coefficient of that security; 6 7 r_f = the risk-free rate of return; and 8 r_m = the required return on the market as a whole. In Equation [4], the term $(r_m - r_f)$ represents the Market Risk Premium.⁴⁹ 9 10 According to the theory underlying the CAPM, since unsystematic risk can be diversified away by adding securities to investment portfolios, investors should be 11 12 concerned only with systematic or non-diversifiable risk. Non-diversifiable risk 13 is measured by the Beta coefficient, which is defined as: $\beta_j = \frac{\sigma_j}{\sigma_m} \times \rho_{j,m}$ Equation [5] 14 where σ_j is the standard deviation of returns for company "j," σ_m is the standard 15 16 deviation of returns for the broad market (as measured, for example, by the S&P 17 500 Index), and $\rho_{j,m}$ is the correlation of returns in between company j and the broad market. 18 19 20 The Beta coefficient therefore represents both relative volatility (i.e., the standard 21 deviation) of returns, and the correlation in returns between the subject company

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

1		and the overall market. Intuitively, higher Beta coefficients indicate that the
2		subject company's returns have been relatively volatile, and have moved in
3		tandem with the overall market. Consequently, if a company has a Beta
4		coefficient of 1.00, it is as risky as the market and does not provide any
5		diversification benefit.
6		
7	Q.	WHAT ASSUMPTIONS DID YOU INCLUDE IN YOUR CAPM
8		ANALYSIS?
9	A.	Since utility equity is a long-duration investment, I used two different measures of
10		the risk-free rate: (1) the current 30-day average yield on 30-year Treasury bonds
11		(i.e., 3.05 percent) ⁵⁰ ; and (2) the projected 30-year Treasury yield (i.e., 3.57
12		percent).51
13		
14	Q.	WHY HAVE YOU RELIED UPON THE 30-YEAR TREASURY YIELD
15		FOR YOUR CAPM ANALYSIS?
16	A.	In determining the security most relevant to the application of the CAPM, it is
17		important to select the term (or maturity) that best matches the life of the
18		underlying investment. Electric utilities typically are long-duration investments
19		and, as such, the 30-year Treasury yield is more suitable for the purpose of
20		calculating the Cost of Equity.
21		

Source: Bloomberg Professional. Blue Chip Financial Forecast, Vol. 34, No. 7, July 1, 2015, at 2.

. 1	Q.	PLEASE DESCRIBE YOUR EX-ANIE APPROACH TO ESTIMATING
2		THE MARKET RISK PREMIUM.
3	A.	The approach is based on the market required return, less the current 30-year
4		Treasury yield. To estimate the market required return, I calculated the market
5		capitalization weighted average ROE based on the Constant Growth DCF model.
6		To do so, I relied on data from two sources: (1) Bloomberg; and (2) Value Line. 52
7		With respect to Bloomberg-derived growth estimates, I calculated the expected
8		dividend yield (using the same one-half growth rate assumption described earlier),
9		and combined that amount with the projected earnings growth rate to arrive at the
10		market capitalization weighted average DCF result. I performed that calculation
11		for each of the S&P 500 companies for which Bloomberg provided consensus
12		growth rates. I then subtracted the current 30-year Treasury yield from that
13		amount to arrive at the market DCF-derived ex-ante market risk premium
14		estimate. In the case of Value Line, I performed the same calculation, again using
15		all companies for which five-year earnings growth rates were available. The
16		results of those calculations are provided in PNM Exhibit RBH-6.
17		
18	Q.	HOW DID YOU APPLY YOUR EXPECTED MARKET RISK PREMIUM
19		AND RISK-FREE RATE ESTIMATES?
20	A.	I relied on the ex-ante Market Risk Premium discussed above, together with the
21		current and near-term projected 30-year Treasury yields as inputs to my CAPM
22		analyses.

⁵² See, PNM Exhibit RBH-6.

1 Q. WHAT BETA COEFFICIENT DID YOU USE IN YOUR CAPM MODEL?

As shown in PNM Exhibit RBH-7, I considered the Beta coefficients for the proxy group reported by two sources: Bloomberg and Value Line. While both of those services adjust their calculated (or "raw") Beta coefficients to reflect the tendency of the Beta coefficient to regress to the market mean of 1.00, Value Line calculates the Beta coefficient over a five-year period, while Bloomberg's calculation is based on two years of data.

8

9

12

Q. WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

10 A. As shown in Table RBH-6 the CAPM analyses suggest an ROE range of 9.79

11 percent to 11.41 percent (*see* also PNM Exhibit RBH-8).

Table RBH-6: Summary of CAPM Results⁵³

	Bloomberg Derived Market Risk Premium	Value Line Derived Market Risk Premium
Average Bloomberg Bet	a Coefficient	
Current 30-Year Treasury (3.05%)	10.49%	9.79%
Near Term Projected 30-Year Treasury (3.57%)	11.01%	10.30%
Average Value Line Bet	a Coefficient	
Current 30-Year Treasury (3.05%)	10.90%	10.15%
Near Term Projected 30-Year Treasury (3.57%)	11.41%	10.66%

⁵³ See, PNM Exhibit RBH-8.

PLEASE GENERALLY DESCRIBE THE BOND YIELD PLUS RISK

D. Bond Yield Plus Risk Premium Approach

1

2

Q.

3		PREMIUM APPROACH.
4	A.	This approach is based on the basic financial tenet that equity investors bear the
5		residual risk associated with ownership and therefore require a premium over the
6		return they would have earned as a bondholder. That is, since returns to equity
7		holders are more risky than returns to bondholders, equity investors must be
8		compensated for bearing that additional risk. Risk premium approaches, therefore,
9		estimate the Cost of Equity as the sum of the equity risk premium and the yield on
10		a particular class of bonds. As noted in my discussion of the CAPM, since the
11		equity risk premium is not directly observable, it typically is estimated using a
12		variety of approaches, some of which incorporate ex-ante, or forward-looking
13		estimates of the Cost of Equity, and others that consider historical, or ex-post,
14		estimates. An alternative approach is to use actual authorized returns for electric
15		utilities to estimate the Equity Risk Premium.
16		
17	Q.	PLEASE EXPLAIN HOW YOU PERFORMED YOUR BOND YIELD
18		PLUS RISK PREMIUM ANALYSIS.
19	A.	As suggested above, I first defined the Risk Premium as the difference between
20		the authorized ROE and the then-prevailing level of long-term (i.e., 30-year)
21		Treasury yield. I then gathered data for over 1,454 electric utility rate
22		proceedings between January, 1980 and June 25, 2015. In addition to the

authorized ROE, I also calculated the average period between the filing of the case and the date of the final order (the "lag period"). In order to reflect the prevailing level of interest rates during the pendency of the proceedings, I calculated the average 30-year Treasury yield over the average lag period (approximately 201 days).

Because the data cover a number of economic cycles, the analysis also may be used to assess the stability of the Equity Risk Premium. Prior research, for example, has shown that the Equity Risk Premium is inversely related to the level of interest rates.⁵⁴ That analysis is particularly relevant given the relatively low, but increasing level of current Treasury yields.

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

A. The basic method used was regression analysis, in which the observed Equity Risk Premium is the dependent variable, and the average 30-year Treasury yield is the independent variable. Relative to the long-term historical average, the analytical period includes interest rates and authorized ROEs that are quite high during one period (*i.e.*, the 1980s) and that are quite low during another (*i.e.*, the post-Lehman Brothers bankruptcy period). To account for that variability, I used

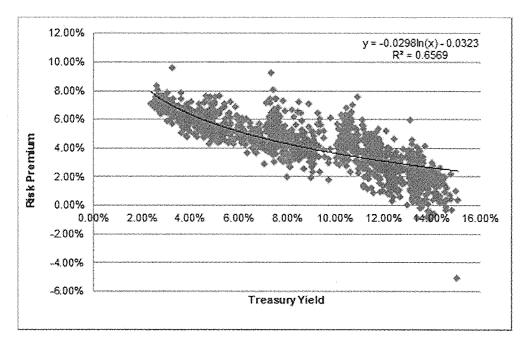
See, e.g., Robert S. Harris and Felicia C. Marston, The Market Risk Premium: Expectational Estimates Using Analysts' Forecasts, Journal of Applied Finance, Vol. 11, No. 1, 2001, at 11-12; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, The Risk Premium Approach to Measuring a Utility's Cost of Equity, Financial Management, Spring 1985, at 33-45; and Farris M. Maddox, Donna T. Pippert, and Rodney N. Sullivan, An Empirical Study of Ex Ante Risk Premiums for the Electric Utility Industry, Financial Management, Autumn 1995, at 89-95.

the semi-log regression, in which the Equity Risk Premium is expressed as a function of the natural log of the 30-year Treasury yield:

$$RP = \alpha + \beta(LN(T_{30}))$$
 Equation [6]

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

Chart 3: Equity Risk Premium



As Chart 3 demonstrates, over time there has been a statistically significant, negative relationship between the 30-year Treasury yield and the Equity Risk Premium. Consequently, simply applying the long-term average Equity Risk Premium of 4.52 percent would significantly understate the Cost of Equity and produce results well below any reasonable estimate. Based on the regression

1	coefficients in Chart 3, however, the implied ROE is between 10.24 percent and
2	10.67 percent (see Table RBH-7 and PNM Exhibit RBH-9).

Table RBH-7: Summary of Bond Yield Plus Risk Premium Results⁵⁵

	Return on Equity
Current 30-Year Treasury (3.05%)	10.24%
Near Term Projected 30-Year Treasury (3.57%)	10.29%
Long Term Projected 30-Year Treasury (4.90%)	10.67%

VI. **BUSINESS RISKS AND OTHER CONSIDERATIONS**

5	Q.	DO THE MEAN DCF, CAPM, AND RISK PREMIUM RESULTS FOR
6		THE PROXY GROUP PROVIDE AN APPROPRIATE ESTIMATE OF

7 THE COST OF EQUITY FOR PNM?

8 No, there are several additional factors that must be considered to develop a A. 9 meaningful and usable recommendation. These factors are associated with the 10 business risks faced by PNM.

12

Q. WHAT ARE THE PRIMARY **BUSINESS** RISKS **THAT**

13 **CURRENTLY FACES?**

14 A. The principal business risks facing PNM are: (1) the effect of PNM's substantial 15 capital expenditure plan; and (2) PNM's small size relative to its peers.

16

11

3

4

See, PNM Exhibit RBH-9.

A. Planned Capital Expenditures

1

2	Q.	PLEASE BRIEFLY SUMMARIZE THE COMPANY'S CAPITAL
3		INVESTMENT PLANS.
4	A.	In its Q2 2015 earnings presentation, the Company lists approximately \$1.60
5		billion in planned capital expenditures over the 2015 to 2019 timeframe; those
6		amounts relate to investments in the Company's generation, transmission and
7		distribution, and renewable generation assets. ⁵⁶ PNM Witness Olson, Johnson
8		and Mendez's testimony describe the Company's capital expenditure plans in
9		more detail. ⁵⁷ Because the Company will continue to make substantial
10		investments in its utility operations, it will require efficient access to capital
11		markets during the period that rates established in this proceeding will be in
12		effect.
13		
14	Q.	DO CREDIT RATING AGENCIES RECOGNIZE RISK ASSOCIATED
15		WITH INCREASED CAPITAL EXPENDITURES?
16	A.	Yes, they do. From the perspective of debt investors, the additional pressure on
17		cash flows associated with high levels of capital expenditures exerts
18		corresponding pressure on credit metrics and, therefore, credit ratings. S&P has
19		noted that:
20 21 22		The real challenge for the industry is the combination of slow growth and huge investment needs. We believe that for the remainder of 2012 and beyond, state regulation will continue to be

See, PNM Resources, Q2 2015 Earnings Presentation, July 31, 2015 at 17.

I note that Mr. Olson's testimony covers planned capital expenditures through the test period.

1 the single most influential factor for the sector's credit quality. Cost 2 increases, construction projects, environmental compliance, and 3 other public policy directives, together with lackluster growth, will necessitate continued reliance on rate relief requests.⁵⁸ 4 5 The rating agency views noted above also are consistent with certain observations 6 discussed earlier in my testimony: (1) the benefits of maintaining a strong 7 financial profile are significant when capital access is required, and become 8 particularly acute during periods of market instability; and (2) the Commission's 9 decision in this proceeding will have a direct bearing on the Company's credit 10 profile, and its ability to access the capital needed to fund its investments. 11 12 Q. HAVE YOU ALSO CONSIDERED THE RELATIONSHIP BETWEEN 13 CAPITAL EXPENDITURES AND THE EARNED RETURN ON 14 **COMMON EQUITY?** 15 A. Yes, I have. The "DuPont" formula decomposes the Return on Common Equity 16 into three components: (1) the Profit Margin (net income/revenues); (2) Asset 17 Turnover (revenues/net plant); and (3) the Equity Multiplier (net plant/equity).⁵⁹ 18 As PNM Exhibit RBH-12 demonstrates, based on the proxy companies, the Asset 19 Turnover rate declined from 2003 through 2014 (the historical period covered by 20 Value Line) and is expected to decline further through Value Line's 2018 – 2020 21 projection period. Over that same period, according to Value Line data, average

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).

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 = (earnings / revenue) x (revenue / assets) x (assets / equity). See, e.g., Eugene Brigham, Michael Ehrhardt, Financial Management: Theory and Practice, 12th Ed., 2008, at 140-141.

1		Net Plant is expected to experience a cumulative increase of approximately 201
2		percent. Since, as noted above, the utility industry is going through a period of
3		increased capital investment, the lag between the addition of net plant and
4		revenue generated by those investments dilute the Asset Turnover ratio, at least in
5		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-12, 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		
18	Q.	WHAT ARE YOUR CONCLUSIONS REGARDING THE EFFECT OF
19		THE COMPANY'S CAPITAL SPENDING PLANS ON ITS RISK
20		PROFILE?
21	A.	It is clear that PNM's capital expenditure program is significant. The financial
22		community recognizes the additional risks associated with substantial capital
23		expenditures and the financing, regulatory and operating risks associated with

1		those plans. The Company must have access to the capital markets on a timely
2		basis and at reasonable cost rates in order to fund those investments. In my view,
3		the Company's capital investment plan remains an important consideration in
4		establishing its ROE and overall rate of return.
5		
6		B. Small Size
7	Q.	PLEASE EXPLAIN THE RISK ASSOCIATED WITH SMALL SIZE.
8	A.	Both the financial and academic communities have long accepted the proposition
9		that the Cost of Equity for small firms is subject to a "size effect". 60 Although
10		empirical evidence of the size effect often is based on studies of industries beyond
11		regulated utilities, utility analysts also have noted the risks associated with small
12		market capitalizations. Specifically, Ibbotson Associates noted:
13 14 15 16		For small utilities, investors face additional obstacles, such as smaller customer base, limited financial resources, and a lack of diversification across customers, energy sources, and geography. These obstacles imply a higher investor return. ⁶¹
17		Small size, therefore, leads to two categories of increased risk for investors:
18		(1) liquidity risk (i.e., the risk of not being able to sell one's shares in a timely
19		manner due to the relatively thin market for the securities); and (2) fundamental
20		business risks.
21		

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

1 ()	HOW DOE	S PNM COMP	AREINS	IZE TO THE	PROXV	COMPANIES
. I	<i>y</i> •						CATART WILLIAM !

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-13 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 1.49 to the product of PNM's proposed rate base and equity ratio.⁶² The implied market capitalization based on that calculation is \$2.00 billion, which is below 24 of the 27 members of the proxy group and well below the proxy group median of \$7.05 billion.

A.

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

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 such as system maintenance and replacements will put proportionately greater pressure on customer costs, potentially leading to customer attrition or demand

⁶² See, Direct Testimony of PNM Witnesses Henry Monroy and Elisabeth A. Eden.

1		reduction. Taken together, these risks affect the return required by investors for
2		smaller companies.
3		
4	Q.	HAVE YOU CONSIDERED THE SMALLER SIZE OF PNM IN YOUR
5		RECOMMENDED RETURN ON EQUITY FOR THIS COMPANY?
6	A.	Yes. While I have quantified the small size effect, rather than proposing a
7		specific premium, I have considered the small size of PNM in my assessment of
8		business risks in order to determine where, within a reasonable range of returns
9		PNM's required ROE appropriately falls.
10		
11	Q.	HOW DID YOU ESTIMATE THE SIZE PREMIUM FOR PNM?
12	A.	In its 2015 Ibbotson SBBI Market Report, Morningstar Inc. ("Morningstar")
13		calculates the size premium for deciles of market capitalizations relative to the
14		S&P 500 Index. As shown on PNM Exhibit RBH-13, based on recent market
15		data, the average market capitalization of the proxy group is approximately
16		\$12.29 billion, and the median market capitalization of the proxy group is \$7.05
17		billion, which correspond to the second and third deciles, respectively, of
18		Morningstar's market capitalization data. Based on the Morningstar analysis, the
19		proxy group has a size premium of 0.65 percent to 0.94 percent. The implied
20		market capitalization for PNM is approximately \$2.00 billion, which falls within
21	,	the sixth decile and corresponds to a size premium of 1.63 percent (or 163 basis
22		points). The difference between those size premiums is as much as 98 basis

points (1.63 percent - 0.65 percent). However, rather than propose a specific

23

1		adjustment, I considered the effect of small size in determining where the
2		Company's ROE falls within the range of results.
3		
4	Q.	ARE THERE OTHER FACTORS THAT OFFSET THE EFFECT OF
5		SMALLER SIZE ON PNM?
6	A.	No, I do not believe so. I considered that possibility, but concluded that in light
7		of the risks discussed earlier, PNM does not have advantages on balance over the
8		proxy group that would offset the added risk of smaller size.
9		
10 11		VII. REVENUE STABILIZATION AND COST RECOVERY MECHANISMS
12	Q.	PLEASE BRIEFLY DESCRIBE THE COMPANY'S PROPOSED RBA
12 13	Q.	PLEASE BRIEFLY DESCRIBE THE COMPANY'S PROPOSED RBA MECHANISM.
	Q.	
13		MECHANISM.
13 14		MECHANISM. PNM is proposing a revenue-per-customer mechanism that reflects the difference
131415		MECHANISM. PNM is proposing a revenue-per-customer mechanism that reflects the difference between monthly allowed revenue and revenue actually billed under volumetric
13141516		MECHANISM. PNM is proposing a revenue-per-customer mechanism that reflects the difference between monthly allowed revenue and revenue actually billed under volumetric rates. As PNM Witness Hansen explains, monthly allowed revenue would
1314151617		MECHANISM. PNM is proposing a revenue-per-customer mechanism that reflects the difference between monthly allowed revenue and revenue actually billed under volumetric rates. As PNM Witness Hansen explains, monthly allowed revenue would reflect changes in customer counts, by customer category. PNM Witness Hansen
13 14 15 16 17 18		MECHANISM. PNM is proposing a revenue-per-customer mechanism that reflects the difference between monthly allowed revenue and revenue actually billed under volumetric rates. As PNM Witness Hansen explains, monthly allowed revenue would reflect changes in customer counts, by customer category. PNM Witness Hansen further explains that the cumulative difference between allowed and billed

The proposed RBA Tariff is more fully described in the Direct Testimony and Exhibits of PNM Witness Hansen.

1		proposed mechanism, there is no corresponding limit on the amount that revenues
2		can be decreased.
3		
4	Q.	HOW COMMON ARE REVENUE STABILIZATION MECHANISMS
5		SUCH AS THE COMPANY'S RBA PROPOSAL?
6	A.	There is little question that revenue stabilization structures have become
7		increasingly common. In that regard, PNM Witness Hansen reports 29 electric
8		utilities that have various forms of revenue decoupling mechanisms in place (or to
9		be in place pending approval). ⁶⁴ As discussed below, the implementation of
10		revenue stabilization mechanisms has become an increasingly visible issue to
11		investors.
12		
13		The increasing application of such mechanisms generally reflects increasing
14		interest in energy efficiency (which leads to flat or declining volume) generally.
15		In large measure, revenue stabilization mechanisms also reflect the effects of the
16		high degree of operating leverage that is typical of electric utilities such as PNM.
17		In essence, operating leverage reflects the proportion of a company's fixed costs
18		to its operating margin (that is, revenue less variable expenses), and measures the
19		sensitivity of earnings to a given change in revenue. As a capital-intensive
20		enterprise, PNM (like other utilities) has a relatively high proportion of fixed
21		costs to variable costs and as such, a given change in revenue would produce a
22		comparatively large change in earnings. Revenue stabilization mechanisms

⁶⁴ Direct Testimony and Exhibits of PNM Witness Hansen.

1		therefore address the very probable decline in revenue and earnings resulting from
2		energy efficiency initiatives.
3		
4	Q.	ARE REVENUE STABILIZATION AND COST RECOVERY
5		MECHANISMS COMMON AMONG THE PROXY COMPANIES?
6	A.	Yes, they are. I reviewed the mechanisms disclosed in annual SEC Form 10-K
7		filings for each of the proxy companies, and found a substantial number of
8		mechanisms in place. Those mechanisms include full decoupling, recovery of
9		lost revenue associated with energy efficiency and conservation efforts, recovery
10		of construction costs associated with significant new capital asset additions,
11		recovery of significant capital expenditures required to comply with
12		environmental mandates, fuel and purchased power adjustment clauses and
13		various other company-specific mechanisms. A number of companies also noted
14		that they have requested recovery mechanisms that are pending approval, or that
15		they plan to pursue additional cost recovery mechanisms in the future.
16		
17	Q.	WOULD THE PROPOSED RBA MECHANISM REDUCE PNM'S COST
18		OF EQUITY?
19	A.	No, it would not. The principal analytical issue is whether the Company would be
20		so less risky than its peers as a direct result of the proposed decoupling structure
21		that investors would specifically and measurably reduce their return requirements.
22		The fact that the proposed decoupling structure may stabilize the Company's
23		revenues would not affect its Cost of Equity unless it can be demonstrated that (1)

1	PNM would be materially less risky than the proxy group by virtue of the
2	decoupling mechanism; and (2) investors are likely to react to the incremental
3	effect of the mechanism. ⁶⁵ Because revenue stabilization mechanisms are
4	common among the proxy companies, there is no reason to assume that PNM
5	would be materially less risky, and that its Cost of Equity would be lower than its
6	peers' as a result of the proposed decoupling mechanism.
7	
8 Q.	HAVE YOU CONSIDERED PROCEEDINGS IN OTHER
9	JURISDICTIONS IN WHICH REVENUE STABILIZATION
10	MECHANISMS WERE APPROVED?
11 A.	Yes, I have. In the vast majority of cases, utility commissions have not made
12	explicit adjustments to the ROE in connection with such mechanisms. In fact,
13	only one of the 24 rate proceedings in which decoupling mechanisms were
14	authorized in the past two years included a specific adjustment to the
15	ROE. Undefined adjustments to the ROE were made in three jurisdictions
16	(Indiana, Connecticut, and Massachusetts); no adjustments were made in the
17	remaining twenty proceedings. It also is interesting to note that the Maryland
18	Public Service Commission has previously made specific adjustments to the ROE
19	in connection with revenue stabilization structures but no longer does so.
20	
21	Those findings, that the implementation of revenue stabilization structures does
22	not reduce the Cost of Equity, are consistent with the results of a study performed

The effect of revenue decoupling also can be considered in the context of non-diversifiable risk.

Ţ		by the Brattle Group (Brattle). In reviewing its results, Brattle concluded that
2		its empirical analyses "do not support the hypothesis that utilities with decoupling
3		have a lower cost of capital than utilities without decoupling."66
4		
5	Q.	ARE COST RECOVERY MECHANISMS SUCH AS FUEL ADJUSTMENT
6		CLAUSES ALSO COMMON AMONG UTILITIES?
7	A.	Yes, they are. As a general proposition, fuel costs are exogenous, variable, and
8		financially significant and, therefore, lend themselves to recovery via adjustment
9		clauses. As observed by Regulatory Research Associates:
10 11 12 13 14		Virtually all electric and gas utilities are permitted to adjust rates, outside of a base rate case, for variations in fuel/purchased power expenses, with the exceptions being Kansas City Power & Light (electric) in Missouri (subject to certain limitations) and PacifiCorp (electric) in Washington. ⁶⁷
15		Although PNM has a fuel adjustment clause, it lags behind many other states and
16		utilities in the number of authorized revenue stabilization mechanisms. For
17		example, seventeen jurisdictions, including the District of Columbia, have
18		authorized an expense tracker for pension and other post-employment benefits.
19		Similarly, 35 jurisdictions have authorized capital expense recovery mechanisms.
20		In that regard, Value Line specifically has noted recovery mechanisms for capital
21		expenditures, tracking mechanisms for certain kinds of expenses, and decoupling
22		mechanisms as methods to reduce regulatory lag and provide utilities the

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

opportunity to earn their authorized returns.⁶⁸ In fact, Value Line believes that the use of such mechanisms "is likely to increase as utilities request similar mechanisms in additional states."⁶⁹ Similarly, S&P has noted that it has "seen many state commissions approve alternative ratemaking techniques to traditional base rate case applications, which help utilities sustain cash flow measures, earning power, and ultimately, credit quality."⁷⁰

Q. HAVE YOU ALSO CONSIDERED THE EFFECT OF THE COMPANY'S

FUTURE TEST YEAR ON ITS COST OF EQUITY?

A. Yes, I have. As noted above, Value Line has observed that many regulatory commissions have put in place structures to address the negative consequences of regulatory lag; those structures include "recovery mechanisms for capital expenditures." PNM Exhibit RBH-14 demonstrates that a substantial majority of the proxy companies also have structures in place to address rate base additions. Moreover, a number of the proxy companies operate in jurisdictions that provide for future or partially forecast test years, or that permit Construction Work In Progress ("CWIP") to be included in rate base. Consequently, given their prevalence individually, those structures combined (that is, the use of forecast test years, capital addition adjustment mechanisms, allowing CWIP in rate base) do not reduce the company's risk relative to the proxy group.

⁷¹ Source: Regulatory Research Associates.

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

⁶⁹ Ihid

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

1	Q.	WHAT ARE YOUR CONCLUSIONS REGARDING THE EFFECT OF
2		REVENUE STABILIZATION AND COST RECOVERY MECHANISMS
3		ON PNM'S COST OF EQUITY?
4	A.	As noted above, decoupling mechanisms and fuel adjustment clauses have
5		become increasingly common for electric utility companies. Consequently,
6		PNM's proposed decoupling structure and cost recovery mechanisms would not
7		fundamentally alter its risk profile relative to its peers. Moreover, there is little
8		question that regulatory commissions continue to recognize that revenue
9		stabilization and cost recovery mechanisms are increasingly common and,
10		therefore, already are reflected in current market valuations. On balance, both
11		quantitative and qualitative data suggest that it would inappropriate to reduce
12		PNM's ROE in connection with its proposed revenue stabilization and cost
13		recovery structures.
14		
15		VIII. CAPITAL MARKET ENVIRONMENT
16	Q.	DO ECONOMIC CONDITIONS INFLUENCE THE REQUIRED COST OF
17		CAPITAL AND REQUIRED RETURN ON COMMON EQUITY?
18	A.	Yes. As discussed in Section V, the models used to estimate the Cost of Equity
19		are meant to reflect, and therefore are influenced by, current and expected capital
20		market conditions. As such, it is important to assess the reasonableness of any
21		financial model's results in the context of observable market data. To the extent
22		that certain ROE estimates are incompatible with such data or inconsistent with

1		basic financial principles, it is appropriate to consider whether alternative
2		estimation techniques are likely to provide more meaningful and reliable results.
3		
4	Q.	DO YOU HAVE ANY GENERAL OBSERVATIONS REGARDING THE
5		RELATIONSHIP BETWEEN CURRENT CAPITAL MARKET
6		CONDITIONS AND THE COMPANY'S COST OF EQUITY?
7	Α.	Yes, I do. Much has been reported about the Federal Reserve's Quantitative
8		Easing policy and its effect on interest rates. The issue as to how those policies
9		and the continuing level of interest rates affect utility stock prices is less clear.
10		An important question, then, is how investors will react when the Federal Reserve
11		completes its market intervention, and begins "normalizing" interest rates. A
12		viable outcome is that investors will perceive greater chances for economic
13		growth, which will increase the growth rates included in the Constant Growth
14		DCF model. At the same time, higher growth and the normalization of monetary
15		policy could provide the opportunity for interest rates to increase, thereby
16		increasing the dividend yield portion of the DCF model. In that case, both terms
17		of the Constant Growth DCF model would increase, producing increased ROE
18		estimates.
19		
20		From January 2000 through August 2012 (that is, immediately prior to the Federal
21		Reserve's third round of Quantitative Easing) the SNL Electric Company index
22		and the proxy group's P/E multiples traded at 13 percent and 9 percent discounts
23		to the market, respectively. During the pendency of the Federal Reserve's third

1 .	round of Quantitative Easing (September 2012 through October 2014) the proxy
2	group premium averaged 26 percent; from November 2014 through June 2015
3	that premium fell to approximately 17 percent. 72
4	
5	An important analytical question, then, is whether it is reasonable to expect those
6	high valuation levels (on both an absolute and relative basis) will persist. Because
7	it is unlikely that utility P/E ratios would exceed the market in perpetuity (as
8	noted above, the premium has begun to decline), and given that the Constant
9	Growth DCF model assumes that P/E ratios will remain constant in perpetuity, I
10	do not believe that it would be appropriate to give that model's results undue
11	weight in determining the Company's Cost of Equity. A more reasoned approach
12	is to understand the relationships among Federal Reserve policies, interest rates,
13	and risk, and to assess how those factors may affect different models and their
14	results.
15	
16 Q.	PLEASE SUMMARIZE THE EFFECT OF FEDERAL RESERVE
17	POLICIES ON INTEREST RATES.
18 A.	Beginning in 2008, the Federal Reserve proceeded on a steady path of initiatives
19	intended to lower long-term Treasury yields.73 The Federal Reserve policy
20	actions "were designed to put downward pressure on longer-term interest rates by
21	having the Federal Reserve take onto its balance sheet some of the duration and

Through June 25, 2015. P/E Ratio calculated as an index. *See*, Federal Reserve Press Release (June 19, 2013).

prepayment risks that would otherwise have been borne by private investors."

Under that policy, "Securities Held Outright" on the Federal Reserve's balance sheet increased from approximately \$490 billion at the beginning of October 2008 to approximately \$4.25 trillion by June 25, 2015. To put that increase in context, the securities held by the Federal Reserve represented approximately 3.30 percent of Gross Domestic Product ("GDP") at the end of September 2008, and increased to approximately 24.00 percent of GDP by the end of June 2015. The private investors in the securities held by the Federal Reserve represented approximately 3.30 percent of GDP by the end of June 2015.

Q. IS THE FEDERAL RESERVE EXPECTED TO MAINTAIN THESE

POLICIES?

As noted above, the Federal Reserve began its asset purchases in September 2012 and although the future pace of reductions to those purchases (then referred to as "tapering") was never on a preset course, the program was completed in October 2014.⁷⁵ In May 2015, Federal Reserve Chair Janet Yellen noted that if the broad economy continues to improve, it would be appropriate to begin the process of normalizing monetary policy by increasing the Federal Funds rate at some point in 2015. Similarly, the June 2015 Federal Open Market Committee ("FOMC") meeting minutes noted that its members "...saw economic conditions as continuing to approach those consistent with warranting a start to the normalization of the stance of monetary policy."⁷⁶ The June 2015 FOMC meeting minutes noted that policy decisions would be addressed on a meeting-by-

Federal Reserve Schedule H.4.1; Bureau of Economic Analysis, GDP data as of the first calendar quarter of 2015.

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

Minutes of the Federal Open Market Committee, June 16 - 17, 2015, at 9.

meeting bases. Additionally, market price data reported by the CME Group indicates that investors see a 98 percent probability of a Federal Funds rate increase within the coming year.⁷⁷

4

5

6

1

2

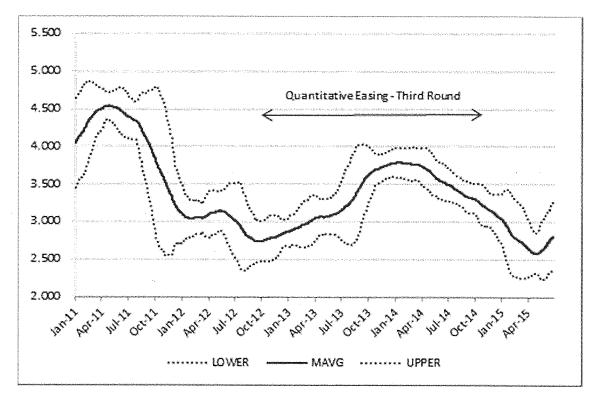
3

Q. DOES YOUR RECOMMENDATION ALSO CONSIDER THE INTEREST

RATE ENVIRONMENT?

Yes, it does. First, I note that August 2011 (the month during which the Company received its existing 10.00 percent ROE authorization) was a period of rather rapidly declining interest rates; that decline continued into June 2012 (see Chart 4, below).

11 Chart 4: 30-Year Treasury Yields Over Time⁷⁸



http://www.cmegroup.com/trading/interest-rates/fed-funds-flash.html

⁷⁸ 90-day Moving Average

Although the Federal Reserve's third round of Quantitative Easing was in place from September 2012 through October 2014, interest rates rose during much of that time. Nonetheless, because they reflect the effect of the Federal Reserve's market intervention, it would be inappropriate to compare current interest rates with those that prevailed in August 2011; it may well be the case that absent Federal market intervention, interest rates would have still been higher.

Because the Cost of Equity is forward-looking, the salient issue is whether investors see the likelihood of increased interest rates during the period in which the rates set in this proceeding will be in effect. As noted earlier, investors see a nearly 100 percent probability of an increase in the short-term Federal Funds rate within the coming year. As to long-term interest rates, the 50 economists surveyed by Blue Chip Financial Forecast see the 30-year Treasury yield as increasing to 4.30 percent by 2017.⁷⁹ Those projections are supported by the fact that investors currently are willing to pay about twice the premium for the option to sell long-term Government bonds in January 2017 (with an exercise price equal to the current price) than they are will to pay for the option to buy those bonds.⁸⁰ Because the prices of bonds moves inversely to interest rates,⁸¹ those option prices indicate that investors believe it is considerably more likely that interest rates will increase over the coming year, than it is likely that they will decrease.

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

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

Given that: (1) interest rates were declining when the Company received its currently authorized return of 10.00 percent; (2) Federal monetary policy is likely moving toward a process of "normalization"; and (3) economists and market data indicate expectations for increasing interest rates into 2017, I believe that my 10.50 percent ROE recommendation properly reflects the prevailing and expected interest rate environment.

A.

Q. WHAT CONCLUSIONS DO YOU DRAW FROM YOUR ANALYSES OF

CAPITAL MARKET CONDITIONS?

From an analytical perspective, it is important that the inputs and assumptions used to arrive at an ROE recommendation, including assessments of capital market conditions, are consistent with the recommendation itself. Although I appreciate that all analyses require an element of judgment, the application of that judgment must be made in the context of the quantitative and qualitative information available to the analyst and the capital market environment in which the analyses were undertaken. For example, because the utility sector (including the proxy companies) recently traded at a Price to Earnings multiple well in excess of its historical average – and in excess of the market – a reasonable question becomes whether those multiples will remain constant in perpetuity, as the Constant Growth DCF assumes will be the case. Given the inconsistency of market data with that assumption, the Constant Growth DCF estimates should be viewed with caution.

Similarly, the direction of change in long-term Treasury yields and the effect of Federal market intervention frustrate comparisons of current interest rates to those that prevailed when the Company received its existing ROE authorization. As such, it would be inappropriate to draw inferences or develop conclusions regarding the current Cost of Equity by comparing interest rates in June 2015 to those observed in August 2011. Looking forward, however, market data and economists' projections suggest that interest rates are expected to increase through 2017. My 10.50 percent ROE recommendation considers and properly reflects those factors.

IX. CAPITAL STRUCTURE

12 Q. WHAT IS PNM'S RECOMMENDED CAPITAL STRUCTURE?

A. As described in more detail in PNM Witness Eden's testimony, PNM's recommended capital structure consists of 50.00 percent long-term debt, 0.39 percent preferred equity, and 49.61 percent common equity.

Q. DOES PNM HAVE A SEPARATE CAPITAL STRUCTURE THAT IS

18 RECOGNIZED BY INVESTORS?

A. Yes. PNM is a separate corporate entity that has its own capital structure and issues its own debt. PNM's capital structure is reflected in registrations of its debt with the Securities Exchange Commission. It therefore is clear that PNM maintains a capital structure that is reported separately from its parent, PNM

Resources, Inc. and that is recognized by the investor community. In addition (and as discussed in more detail below), PNM's proposed capital structure is consistent with those in place at the utility operating companies held within the proxy groups. As such, I conclude that the Company's proposed capital structure is appropriate to use in determining its overall rate of return.

Α.

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

I reviewed the last eight quarters of long-term debt, preferred equity and common equity ratios of the operating utilities owned by each of my proxy companies. As shown in PNM Exhibit RBH-10, PNM's projected equity ratio of 49.61 percent is well within the range of equity ratios for that group, and is below the mean equity ratio of approximately 53.43 percent. Similarly, although some of the proxy group companies employ slightly higher amounts of preferred equity and slightly less long-term debt than PNM proposes, PNM's projected long-term debt ratio of 50.00 percent and preferred equity ratio of 0.39 percent are well within the range of respective ratios for the proxy group companies. It is my view, therefore, that the capital structure proposed by PNM Witness Eden is consistent with the proxy companies and reasonable for the purposes of determining PNM's rate of return.

1

X. CONCLUSIONS

2	Q.	PLEASE SUMMARIZE YOUR CALCULATED COST OF EQUITY,
3		TAKING INTO CONSIDERATION THE ISSUES DISCUSSED ABOVE.
4	A.	As discussed throughout my testimony, it is important to consider a variety of
5		empirical and qualitative information in reviewing analytical results and arriving
6		at ROE recommendations. Here, we have a situation in which the proxy
7		companies have traded at Price/Earnings ratios well in excess of their historical
8		average and for a time, in excess of the market. Because that condition is unlikely
9		to persist, it violates a principal assumption of the Constant Growth DCF model,
10		i.e., that the P/E ratio will not change, ever. As a practical matter, the Constant
11		Growth DCF results are well below a highly observable and relevant benchmark:
12		the returns authorized for vertically-integrated electric utilities. A more balanced
13		approach therefore would be to consider multiple methods, including the Multi-
14		Stage DCF model, the CAPM approach, and the Bond Yield Plus Risk Premium
15		model. Those results, along with the Constant Growth DCF model results, are
16		summarized below in Tables RBH-8A through RBH-8C.
17		
18		Reviewing those results, and taking into consideration the Company's capital
19		investment needs, its relatively small size, and the 2016 forecast test year used in
20		this proceeding indicates that the Company's Cost of Equity falls within a range
21		of 10.25 percent to 11.00 percent. Because several data points suggest that
22		interest rates are likely to increase through 2015 and into 2016, it would be

reasonable to set the Company's ROE at the upper end of that range. In that
regard, I believe my 10.50 percent ROE recommendation is a reasonable, if not
somewhat conservative estimate of the Company's Cost of Equity.

Table RBH-8A. Summary of Constant Growth DCF Results

4

Half-Year Dividend Growth	Mean Low	Mean	Mean High
30-Day Average	8.64%	9.38%	10.22%
90-Day Average	8.49%	9.23%	10.07%
180-Day Average	8.37%	9.11%	9.94%
360-Day Average	8.51%	9.25%	10.08%
Full-Year Dividend Growth	Mean Low	Mean	Mean High
30-Day Average	8.73%	9.46%	10.34%
90-Day Average	8.58%	9.34%	10.18%
180-Day Average	8.45%	9.21%	10.05%
360-Day Average	8.60%	9.35%	10.20%
Half-Year, with Sustainable Growth	Mean Low	Mean	Mean High
30-Day Average	7.90%	9.09%	10.25%
90-Day Average	7.75%	8.94%	10.09%
180-Day Average	7.63%	8.81%	9.97%
360-Day Average	7.77%	8.95%	10.11%
Full-Year, with Sustainable Growth	Mean Low	Mean	Mean High
30-Day Average	7.98%	9.19%	10.37%
90-Day Average	7.83%	9.03%	10.21%
180-Day Average	7.70%	8.90%	10.08%
360-Day Average	7.84%	9.05%	10.23%

Table RBH-8B: Summary of Multi-Stage DCF Results

Without Sustainable Growth	Mean Low	Mean	Mean High
30-Day Average	9.88%	10.10%	10.35%
90-Day Average	9.71%	9.92%	10.16%
180-Day Average	9.59%	9.79%	10.02%
360-Day Average	9.73%	9.93%	10.17%
With Sustainable Growth	Mean Low	Mean	Mean High
30-Day Average	9.71%	10.02%	10.36%
90-Day Average	9.55%	9.85%	10.17%
180-Day Average	9.42%	9.72%	10.03%
360-Day Average	9.56%	9.86%	10.18%

2 Table RBH-8C: Summary of Risk Premium and Other Analytical Results

CAPM	Results	Bloomberg Derived Market Risk Premium	Value Line Derived Market Risk Premium
	Average Bloomberg Be	ta Coefficient	
Current 30-Year Treasur	ry (3.05%)	10.49%	9.79%
Near Term Projected 30	-Year Treasury (3.57%)	11.01%	10.30%
	Average Value Line Be	ta Coefficient	
Current 30-Year Treasur	cy (3.05%)	10.90%	10.15%
Near Term Projected 30	-Year Treasury (3.57%)	11.41%	10.66%
			p
	Low	Mid	High
Bond Yield Plus Risk Premium	10.24%	10.29%	10.67%

3 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

4 A. Yes.

1

GCG#520317

Resume and Testimony Listing of Robert B. Hevert

PNM Exhibit RBH-1

Is contained in the following 17 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, negations, and regulatory approval process. Buy-side services have included comprehensive asset screening, selection, valuation and due diligence reviews. Both buy and sell-side services have included the use of sophisticated asset valuation techniques, and the development and delivery of fairness opinions.

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

Regulatory Analysis and Ratemaking

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

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

Energy Market Assessment

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

Resource Procurement, Contracting and Analysis

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

Business Strategy and Operations

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

PROFESSIONAL HISTORY

Sussex Economic Advisors, LLC (2012 - Present) Managing Partner

Concentric Energy Advisors, Inc. (2002 – 2012) President

Navigant Consulting, Inc. (1997 – 2001)

Managing Director (2000 – 2001)

Director (1998 – 2000)

Vice President, REED Consulting Group (1997 – 1998)

Bay State Gas Company (now Columbia Gas Company of Massachusetts) (1987 – 1997) Vice President and Assistant Treasurer

Boston College (1986 – 1987) Financial Analyst

General Telephone Company of the South (1984 – 1986)

Revenue Requirements Analyst

EDUCATION

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

DESIGNATIONS AND PROFESSIONAL AFFILIATIONS

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

PUBLICATIONS/PRESENTATIONS

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

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

AVAILABLE UPON REQUEST

Extensive client and project listings, and specific references.

Sponsor	DATE	CASE/APPLICANT	Docket No.	Subject
Regulatory Commission of Alaska				
ENSTAR Natural Gas Company	08/14	ENSTAR Natural Gas Company	Matter No. TA 262-4	Return on Equity
Arizona Corporation Commission				
Southwest Gas Corporation	11/10	Southwest Gas Corporation	Docket No. G-01551A-10- 0458	Return on Equity
Arkansas Public Service Commission	ion			
SourceGas Arkansas, Inc.	03/15	SourceGas Arkansas, Inc.	Docket No. 15-011-U	Return on Equity
CenterPoint Energy Resources	01/07	CenterPoint Energy Resources	Docket No. 06-161-U	Return on Equity
d/b/a CenterPoint Energy Arkansas		Corp. d/b/a CenterPoint Energy		
Gass		Arkansas Gas		
California Public Utilities Commission	lon			
Southwest Gas Corporation	12/12	Southwest Gas Corporation	Docket No. A-12-12-024	Return on Equity
Colorado Public Utilities Commission	ion			
Xcel Energy, Inc.	03/15	Public Service Company of	Docket No. 15AL-0135G	Return on Equity
		COIOI ado		(gas)
Xcel Energy, Inc.	06/14	Public Service Company of Colorado	Docket No. 14AL-0660E	Return on Equity (electric)
Xcel Energy, Inc.	12/12	Public Service Company of Colorado	Docket No. 12AL-1268G	Return on Equity (gas)
Xcel Energy, Inc.	11/11	Public Service Company of Colorado	Docket No. 11AL-947E	Return on Equity (electric)
Xcel Energy, Inc.	12/10	Public Service Company of Colorado	Docket No. 10AL-963G	Return on Equity (electric)
Atmos Energy Corporation	02/09	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)
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SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	Subject
Xcel Energy, Inc.	04/06	Public Service Company of Colorado	Docket No. 06S-234EG	Return on Equity (electric)
Xcel Energy, Inc.	90/80	Public Service Company of Colorado	Docket No. 05S-369ST	Return on Equity (steam)
Xcel Energy, Inc.	90/90	Public Service Company of Colorado	Docket No. 05S-246G	Return on Equity (gas)
Connecticut Public Utilities Regulatory Authori	atory Autho	rity		
Connecticut Light and Power Company	06/14	Connecticut Light and Power Company	Docket No. 14-05-06	Return on Equity
Southern Connecticut Gas Company	80/60	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	ion			
Delmarva Power & Light Company	03/13	Delmarva Power & Light Company	Case No. 13-115	Return on Equity
Delmarva Power & Light Company	12/12	Delmarva Power & Light Company	Case No. 12-546	Return on Equity
Delmarva Power & Light Company	03/12	Delmarva Power & Light Company	Case No. 11-528	Return on Equity
District of Columbia Public Service Commission	• Commissi	on		
Potomac Electric Power Company	03/13	Potomac Electric Power Company	Formal Case No. FC1103-2013-E	Return on Equity
Potomac Electric Power Company	07/11	Potomac Electric Power Company	Formal Case No. FC1087	Return on Equity
Federal Energy Regulatory Commission	ssion			
Public Service Company of New Mexico	12/12	Public Service Company of New Mexico	Docket No. ER13-685- 000	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	Docket No.	Subject
Public Service Company of New Mexico	10/10	Public Service Company of New Mexico	Docket No. ER11-1915- 000	Return on Equity
Portland Natural Gas Transmission System	05/10	Portland Natural Gas Transmission System	Docket No. RP10-729- 000	Return on Equity
Florida Gas Transmission Company, LLC	10/09	Florida Gas Transmission Company, LLC	Docket No. RP10-21-000	Return on Equity
Maritimes and Northeast Pipeline, LLC	60//0	Maritimes and Northeast Pipeline, LLC	Docket No. RP09-809- 000	Return on Equity
Spectra Energy	02/08	Saltville Gas Storage	Docket No. RP08-257- 000	Return on Equity
Panhandle Energy Pipelines	08/07	Panhandle Energy Pipelines	Docket No. PL07-2-000	Response to draft policy statement regarding inclusion of MLPs in proxy groups for determination of gas pipeline ROEs
Southwest Gas Storage Company	20/80	Southwest Gas Storage Company	Docket No. RP07-541- 000	Return on Equity
Southwest Gas Storage Company	20/90	Southwest Gas Storage Company	Docket No. RP07-34-000	Return on Equity
Sea Robin Pipeline LLC	20/90	Sea Robin Pipeline LLC	Docket No. RP07-513- 000	Return on Equity
Transwestern Pipeline Company	90/60	Transwestern Pipeline Company	Docket No. RP06-614- 000	Return on Equity
GPU International and Aquila	11/00	GPU International	Docket No. EC01-24-000	Market Power Study
Florida Public Service Commission	_			
Tampa Electric Company	04/13	Tampa Electric Company	Docket No. 130040-EI	Return on Equity
Georgia Public Service Commission	-			
Atlanta Gas Light Company	02/10	Atlanta Gas Light Company	Docket No. 31647-U	Return on Equity
Hawaii Public Utilities Commission				
Maui Electric Company, Limited	12/14	Maui Electric Company, Limited	Docket No. 2014-0318	Return on Equity
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Sussex Economic Advisors, LLC.

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	Subject
Hawaiian Electric Company	06/14	Hawaiian Electric Light Company	Docket No. 2013-0373	Return on Equity
Hawaii Electric Light Company	08/12	Hawaiian Electric Light Company	Docket No. 2012-0099	Return on Equity
Illinois Commerce Commission				
Ameren Illinois Company d/b/a Ameren Illinois	01/15	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 15-0142	Return on Equity
Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	03/14	Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	Docket No. 14-0371	Return on Equity
Ameren Illinois Company d/b/a Ameren Illinois	01/13	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 13-0192	Return on Equity
Ameren Illinois Company d/b/a Ameren Illinois	02/11	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 11-0279	Return on Equity (electric)
Ameren Illinois Company d/b/a Ameren Illinois	02/11	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 11-0282	Return on Equity (gas)
Indiana Utility Regulatory Commission	sion			
Duke Energy Indiana, Inc.	12/14	Duke Energy Indiana, Inc.	Cause No. 44526	Return on Equity
Northern Indiana Public Service Company	60/90	Northern Indiana Public Service Company	Cause No. 43894	Return on Equity
Kansas Corporation Commission				
Kansas City Power & Light Company	01/15	Kansas City Power & Light Company	Docket No. 15-KCPE- 116-RTS	Return on Equity
Maine Public Utilities Commission				
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	ion			
Potomac Electric Power Company	12/13	Potomac Electric Power Company	Case No. 9336	Return on Equity
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SPONSOR	DATE	CASE/APPLICANT	Docket No.	SUBJECT
Delmarva Power & Light Company	03/13	Delmarva Power & Light Company	Case No. 9317	Return on Equity
Potomac Electric Power Company	11/12	Potomac Electric Power Company	Case No. 9311	Return on Equity
Potomac Electric Power Company	12/11	Potomac Electric Power Company	Case No. 9286	Return on Equity
Delmarva Power & Light Company	12/11	Delmarva Power & Light Company	Case No. 9285	Return on Equity
Delmarva Power & Light Company	12/10	Delmarva Power & Light Company	Case No. 9249	Return on Equity
Massachusetts Department of Public Utilities	Ilc Utilities			
Fitchburg Gas and Electric Light Company d/b/a Unitil	06/15	Fitchburg Gas and Electric Light Company d/b/a Unitil	DPU 15-80	Return on Equity
NSTAR Gas Company	12/14	NSTAR Gas Company	DPU 14-150	Return on Equity
Fitchburg Gas and Electric Light Company d/b/a Unitil	07/13	Fitchburg Gas and Electric Light Company d/b/a Unitil	DPU 13-90	Return on Equity
Bay State Gas Company d/b/a Columbia Gas of Massachusetts	04/12	Bay State Gas Company d/b/a Columbia Gas of Massachusetts	DPU 12-25	Capital Cost Recovery
National Grid	60/80	Massachusetts Electric Company d/b/a National Grid	DPU 09-39	Revenue Decoupling and Return on Equity
National Grid	60/80	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 To Purchase Agreement

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

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SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	Subject
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	ssion			
CenterPoint Energy Resources, Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Mississippi Gas	60/20	CenterPoint Energy Mississippi Gas	Docket No. 09-UN-334	Return on Equity
Missouri Public Service Commission	on			
Kansas City Power & Light Company	10/14	Kansas City Power & Light Company	Case No. ER-2014-0370	Return on Equity (electric)
Union Electric Company d/b/a Ameren Missouri	07/14	Union Electric Company d/b/a Ameren Missouri	Case No. ER-2014-0258	Return on Equity (electric)
Union Electric Company d/b/a Ameren Missouri	06/14	Union Electric Company d/b/a Ameren Missouri	Case No. EC-2014-0223	Return on Equity (electric)
Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	02/14	Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	Case No. GR-2014-0152	Return on Equity
Laclede Gas Company	12/12	Laclede Gas Company	Case No. GR-2013-0171	Return on Equity
Union Electric Company d/b/a Ameren Missouri	02/12	Union Electric Company d/b/a Ameren Missouri	Case No. ER-2012-0166	Return on Equity (electric)
Union Electric Company d/b/a AmerenUE	09/10	Union Electric Company d/b/a AmerenUE	Case No. ER-2011-0028	Return on Equity (electric)
Union Electric Company d/b/a AmerenUE	06/10	Union Electric Company d/b/a AmerenUE	Case No. GR-2010-0363	Return on Equity (gas)
Montana Public Service Commission	on			
Northwestern Corporation	09/12	Northwestern Corporation d/b/a Northwestern Energy	Docket No. D2012.9.94	Return on Equity (gas)
Nevada Public Utilities Commission	n			
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

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SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
New Hampshire Public Utilities Commission	mmission			
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
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	80/80	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	Se			
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.	90/60	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	nnission			
Public Service Company of New Mexico	12/14	Public Service Company of New Mexico	Case No. 14-00332-UT	Return on Equity ab a a
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SPONSOR	DATE	CASE/APPLICANT	Docket No.	SUBJECT
Public Service Company of New Mexico	12/14	Public Service Company of New Mexico	Case No. 13-00390-UT	Cost of Capital and Financial Integrity
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	80/60	Public Service Company of New Mexico	Case No. 08-00273-UT	Return on Equity (electric)
Xcel Energy, Inc.	20/20	Southwestern Public Service Company	Case No. 07-00319-UT	Return on Equity (electric)
New York State Public Service Commission				
Consolidated Edison Company of New York, Inc.	01/15	Consolidated Edison Company of New York, Inc.	Case No. 15-E-0050	Return on Equity (electric)
Orange and Rockland Utilities, Inc.	11/14	Orange and Rockland Utilities, Inc.	Case Nos. 14-E-0493 and 14-G-0494	Return on Equity (electric and gas)
Consolidated Edison Company of New York, Inc.	01/13	Consolidated Edison Company of New York, Inc.	Case No. 13-E-0030	Return on Equity (electric)
Niagara Mohawk Corporation d/b/a National Grid for Electric Service	04/12	Niagara Mohawk Corporation d/b/a National Grid for Electric Service	Case No. 12-E-0201	Return on Equity (electric)
Niagara Mohawk Corporation d/b/a National Grid for Gas Service	04/12	Niagara Mohawk Corporation d/b/a National Grid for Gas Service	Case No. 12-G-0202	Return on Equity (gas)
Orange and Rockland Utilities, Inc.	07/11	Orange and Rockland Utilities, Inc.	Case No. 11-E-0408	Return on Equity (electric)
Orange and Rockland Utilities, Inc.	07/10	Orange and Rockland Utilities, Inc.	Case No. 10-E-0362	Return on Equity (electric)
Consolidated Edison Company of New York, Inc.	11/09	Consolidated Edison Company of New York, Inc.	Case No. 09-G-0795	Return on Equity (gas)

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Company		Company	2397237	(electric & gas)
Pike County Light & Power	01/14	Pike County Light & Power	Docket No. R-2013-	Return on Equity
Pennsylvania Public Utility Commission	ission			
Corp., d/b/a CenterPoint Energy Oklahoma Gas		Gas	PUD200900055	
		Company	PUD201100087	
Oklahoma Gas & Electric Company	07/11	Oklahoma Gas & Electric	Cause No.	Return on Equity
Oklahoma Corporation Commission	on			
Otter I all Power Company	11/08	Otter I all Power Company	Docket No. 08-862	Return on Equity (electric)
North Dakota Public Service Commission	mission			
Duke Energy Carolinas, LLC	07/11	Duke Energy Carolinas, LLC	Docket No. E-7, Sub 989	Return on Equity (electric)
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)
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
Duke Energy Carolinas, LLC	02/13	Duke Energy Carolinas, LLC	Docket No. E-7, Sub 1026	Return on Equity
North Carolina Utilities Commission	uo			
				Standard Offer Service Agreement
Niagara Mohawk Power Corporation	07/01	Niagara Mohawk Power Corporation	Case No. 01-E-1046	Power Purchase and Sale Agreement;
Consolidated Edison Company of New York, Inc.	11/09	Consolidated Edison Company of New York, Inc.	Case No. 09-S-0794	Return on Equity (steam)
SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	Subject

PAGE 13

Sussex Economic Advisors, LLC.

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	Subject
Oncor Electric Delivery Company, LLC	01/11	Oncor Electric Delivery Company, LLC	Docket No. 38929	Return on Equity
Texas-New Mexico Power Company	08/10	Texas-New Mexico Power Company	Docket No. 38480	Return on Equity (electric)
CenterPoint Energy Houston Electric LLC	06/10	CenterPoint Energy Houston Electric LLC	Docket No. 38339	Return on Equity
Xcel Energy, Inc.	05/10	Southwestern Public Service Company	Docket No. 38147	Return on Equity (electric)
Texas-New Mexico Power Company	80/80	Texas-New Mexico Power Company	Docket No. 36025	Return on Equity (electric)
Xcel Energy, Inc.	02/06	Southwestern Public Service Company	Docket No. 32766	Return on Equity (electric)
Texas Railroad Commission				
Centerpoint Energy Resources Corp. d/b/a Centerpoint Energy Entex and Centerpoint Energy Texas Gas	03/15	Centerpoint Energy Resources Corp. d/b/a Centerpoint Energy Entex and Centerpoint Energy Texas Gas	GUD 10432	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	07/12	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	GUD 10182	Return on Equity
Atmos Energy Corporation – West Texas Division	06/12	Atmos Energy Corporation – West Texas Division	GUD 10175	Return on Equity
Atmos Energy Corporation – Mid- Texas Division	06/12	Atmos Energy Corporation – Mid- Texas Division	GUD 10171	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	12/10	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	GUD 10038	Return on Equity
Atmos Pipeline – Texas	09/10	Atmos Pipeline - Texas	GUD 10000	Return on Equity
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SUSSEX ECONOMIC ADVISORS, LLC.

PAGE 16

Sponsor	DATE	CASE/APPLICANT	DOCKET NO.	Subject
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	60/20	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	GUD 9902	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Texas Gas	03/08	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Texas Gas	GUD 9791	Return on Equity
Utah Public Service Commission				
Questar Gas Company	12/07	Questar Gas Company	Docket No. 07-057-13	Return on Equity
Vermont Public Service Board				
Central Vermont Public Service Corporation; Green Mountain Power	02/12	Central Vermont Public Service Corporation; Green Mountain Power	Docket No. 7770	Merger Policy
Central Vermont Public Service Corporation	12/10	Central Vermont Public Service Corporation	Docket No. 7627	Return on Equity (electric)
Green Mountain Power	04/06	Green Mountain Power	Docket Nos. 7175 and 7176	Return on Equity (electric)
Vermont Gas Systems, Inc.	12/05	Vermont Gas Systems	Docket Nos. 7109 and 7160	Return on Equity (gas)
Virginia State Corporation Commission	sion			
Virginia Electric and Power Company	03/15	Virginia Electric and Power Company	Case No. PUE-2015- 00027	Return on Equity
Virginia Electric and Power Company	03/13	Virginia Electric and Power Company	Case No. PUE-2013- 00020	Return on Equity
Virginia Natural Gas, Inc.	02/11	Virginia Natural Gas, Inc.	Case No. PUE-2010- 00142	Capital Structure
Columbia Gas Of Virginia, Inc.	90/90	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

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

Hope and Bluefield Decisions

PNM Exhibit RBH-2

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

P

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 2120

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 (2)

190 Gas

<u>190k14</u> 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

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), <u>15 U.S.C.A.</u> § § <u>717c(a)</u>, 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,

§ § 4(a), 5(a), 6, 19(b), <u>15 U.S.C.A.</u> § § 717c(a), <u>717d(a)</u>, <u>717re</u>, <u>717r(b)</u>.

[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

<u>83II</u> 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 22.5(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

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

<u>83II</u> 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

 $\underline{170BVII(B)}$ Review of Decisions of Courts of Appeals

<u>170Bk452</u> k. Certiorari in General. <u>Most</u> <u>Cited Cases</u>

(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

<u>92III</u> Distribution of Governmental Powers and Functions

<u>92III(B)</u> 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

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)

1<u>90</u> 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. $\frac{F\overline{N1}}{I}$ 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 basic 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.

<u>FN1</u> Hope produces about one-third of its annual gas requirements and purchases the rest under some 300 contracts.

<u>FN2</u> These five companies are the East Ohio Gas Co., the Peoples Natural Gas Co., the

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)

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.
East Ohio.
Peoples.
River.
Fayette.
Manufacturers.

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 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

11,000,000 40,000,000 10,000,000 400,000 860,000 2,000,000

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. 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

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 Id., 44 P.U.R., N.S., at page 18. One \$46,000,000. 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.

<u>FN6</u> 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 \$69,735,000approximately \$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.' 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

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.

<u>FN7</u> 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 $\frac{\text{FNS}}{\text{FNS}}$ 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 naturalgas 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.

<u>FN9</u> 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

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

[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. **288Los 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. 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

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 industralized 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 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 wastingasset business of limited life shall receive at the end more than he has put into it.' 315 U.S. at page 593, 62 S.C. 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.

<u>FN12</u> It should be noted that the Act provides no specific rule governing depletion and depreciation. Sec. 9(a) merely states that the

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 naturalgas 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. Virginia contends Furthermore, West that 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. Virginia emphasizes, moreover, its deep interest in the conservation of its natural resources including its natural 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.

<u>FN15</u> 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

<u>FN16</u> 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

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 *610State 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 lands 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 <u>FN17</u> companies. 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.

<u>FN17</u> 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.

[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.

<u>FN21</u> 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). 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. $\frac{FN23}{2}$ 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.

<u>FN22</u> 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 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.'

[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 $\frac{\text{FN24}}{\text{V}}$ or to protect the interests of those who sell their gas to the interstate operator. $\frac{\text{FN25}}{\text{V}}$ The return which **294 the Commission*615 allowed was the net return after all such charges.

<u>FN24</u> 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 $\frac{FN27}{2}$ 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.

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.

<u>FN30</u> 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. $\frac{FN31}{2}$ 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 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 the several State commissions such information and reports as may be of assistance in State regulation of natural-gas companies.3 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

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. c/o., 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 fmdings 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 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.

<u>FN1</u> Natural Gas Act, s 4(a), 52 Stat. 821, 822, <u>15 U.S.C. s 717c(a)</u>, <u>15 U.S.C. A. s 717c(a)</u>.

<u>FN2</u> 52 Stat. 821, 824, <u>15 U.S.C. s 717e</u>, <u>15 U.S.C.A. s 717e</u>:

- '(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

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 Historical cost, prudent investment and L.Ed. 1180. 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. $\frac{FN4}{}$ 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.

<u>FN4</u> 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. <u>American T. & T. Co. v. United States</u>, 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. 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

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. 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. <u>Chicago, etc., R. Co. v. Minnesota</u>, 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 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

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 ratemaking to the fair-value-reproduction-cost formula should be overruled as in conflict with Federal Power Commission v. Natural Gas Pipeline Co. FNI 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. 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,

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

<u>FN3</u> 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.

<u>FN4</u> 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. $\frac{\text{FN7}}{\text{Since}}$ Since then, contrary to oil, which has become cheaper gas in this field has pretty steadily advanced in price.

<u>FN5</u> 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, $\frac{FN8}{}$ 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. $\frac{\text{FN9}}{\text{Soon}}$ Soon monopoly of production or markets developed. $\frac{\text{FN10}}{\text{TO}}$ 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. 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.

<u>FN9</u> 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.

<u>FN10</u> 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

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

<u>FN11</u> 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 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 injunction*633 from this Court. FNI5 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. 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

<u>FN14</u> 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.

<u>FN17</u> 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

that particular industry. Indeed, it has expressly excepted it from the operation of the Interstate Commissions Law Commerce (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

<u>FN22</u> Proclamation by the President of September 16, 1918; Rules and Regulations of H. A. Garfield, Fuel Administrator, September 24, 1918.

<u>FN23</u> 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.

<u>FN24</u> 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 15ϕ 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

<u>FN25</u> See Brief on Behalf jof 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

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)

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:

Domestic	
1.678	
59.7	
41.5	
59.7	
1.227	
1.043	

Π.

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. 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

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,' $\frac{FN35}{2}$ 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.'

<u>FN38</u> Sen. Rep. No. 1162, 75th Cong., 1st Sess.

*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 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

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

<u>FN39</u> 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 Conmission 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 \$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

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 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 * * * Its purpose determines the all men. 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 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 * * * A persistent and ingenious granted. 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,

*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

<u>FN41</u> 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.

<u>FN42</u> 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 intangiblesleaseholds 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

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}/₂ is not even **310 urged by the gas company for valuing its fields.

<u>FN43</u> '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 undiscriminatingly

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 secisions 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

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. 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

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?

<u>FN44</u> 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, **313Block 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.

<u>FN46</u> 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

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 service or transportation, communications 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? 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?

<u>FN47</u> 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 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)

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 It would only be necessary for the classifications. 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.

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.
Federal Power Commission v. Hope Natural Gas Co.
51 P.U.R.(NS) 193, 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed.
333

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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) Page 1

P

Supreme Court of the United States BLUEFIELD WATERWORKS & IMPROVEMENT

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 Municipal and

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

405<u>IX(A)</u> Domestic Municipal and

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

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

<u>170Bk504</u> 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 *684Oklahoma 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:

	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.	
	inaking 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

*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.

1.	Preliminary costs.
2.	Water rights.
3.	Cutting pavements over.
	mains.
4.	Pipe lines from gravity.
	springs.
5.	Laying cast iron street.
	mains.
6.	Reproducing Ada springs.
7.	Superintendence and.
	engineering.
8.	General contingent cost.

^{&#}x27;The books of the company show a total gross investment,

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. $\frac{FN3}{}$ 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	City
Engineer.	Engineer.
\$14,455	\$1,000
50,000	Nothing
27,744	233
22,072	15,442
19,252	15,212
18,558	13,027
20,515	13,621
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

\$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:

'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 **679 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 depeds 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

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 Willcox 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 ininimum-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 <u>Des Moines Gas Co. v. Des Moines, 238 U. S. 153, 172, 35 Sup. Ct. 811, 59 L. Ed. 1244</u>, 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. $\frac{\text{FN4}}{\text{Court}}$

<u>FN4</u> 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 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

Constant Growth DCF Analysis

PNM Exhibit RBH-3

Is contained in the following 16 pages.

Constant Growth Discounted Cash Flow Model with Half Year Growth Adjustment 30 Day Average Stock Price

ო			Ξ	[2]	ල	[4]	[5]	[6]	[2]	[8]	[6]	[10]	[12]
			Annualized	Average Stock	Dividend	Expected Dividend	Zacks Earnings	First Call Earnings	Value Line Earnings	Average Earnings	Low	Mean	High
4	Company	Ticker	Dividend	Price	Yield	Yield	Growth	Growth	Growth	Growth	ROE	ROE	RÕE
Ŋ	ALLETE, Inc.	ALE	\$2.02	\$48.97	4.13%	4.25%	Š	%00'9	6.50%	6.11%	10.25%	10.36%	10.76%
ဖ	Alliant Energy Corporation	LNI	\$2.20	\$59.59	3.69%	3.80%	5.30%	5.45%	%00.9	5.58%	%60'6	9.38%	%08'6
7	Ameren Corporation	AEE	\$1.64	\$39.13	4.19%	4.32%	808.9	5.85%	%00.9	6.22%	10.16%	10.54%	11.13%
œ	American Electric Power Company, Inc.	AEP	\$2.12	\$54.66	3,88%	3.98%	4.90%	5.08%	2.00%	4.99%	8.87%	8.97%	890.6
თ	Avista Corporation	AVA	\$1.32	\$31,45	4.20%	4.32%	Α̈́	2.00%	7.00%	6.00%	9.30%	10.32%	11.34%
9	Black Hills Corporation	BKH	\$1.62	\$46.14	3.51%	3.61%	Ϋ́	7.00%	4.50%	5.75%	8.09%	9.36%	10.63%
=	CenterPoint Energy, Inc.	CNP	\$0.99	\$19.77	5.01%	2.08%	2.70%	1.91%	1.00%	2.87%	6.03%	7.95%	10.85%
12	CMS Energy Corporation	CMS	\$1.16	\$32.93	3.52%	3.63%	6.20%	6.73%	5.50%	6.14%	9.12%	9.77%	10.37%
<u>ლ</u>	Consolidated Edison, Inc.	Е	\$2.60	\$59.64	4.36%	4.45%	2.70%	2.38%	3.00%	2.69%	6.79%	7.11%	7.42%
4	Dominion Resources, Inc.	Δ	\$2.59	\$69.20	3.74%	3.87%	6.30%	5.89%	8.00%	6.73%	9.74%	10.60%	11.89%
15	DTE Energy Company	DTE	\$2.92	\$76.77	3.80%	3.90%	2.00%	4.51%	2.00%	4.84%	8.40%	8.73%	8.90%
9	Duke Energy Corporation		\$3.18	\$74.10	4.29%	4.39%	4.70%	4.49%	8.00%	4.73%	8.88%	9.12%	9.40%
1	Empire District Electric Company	EDE	\$1.04	\$22.93	4.53%	4.63%	2.00%	8.00%	3.00%	4.33%	7.60%	8.97%	9.65%
<u>8</u>	Eversource Energy	ES	\$1.67	\$47.64	3.51%	3.63%	6.80%	%09.9	8.50%	7.30%	10.22%	10.93%	12.15%
9	FirstEnergy Corp.	Щ	\$1.44	\$34.60	4.16%	4.31%	¥ Z	Ϋ́	7.00%	2.00%	11.31%	11.31%	11.31%
20	Great Plains Energy Inc.	GXP	\$0.98	\$25.35	3.87%	3.98%	%00′9	6.37%	8.00%	2.79%	8.96%	9.77%	10.36%
7	IDACORP, Inc.	IDA	\$1.88	\$57.95	3.24%	3.29%	4.00%	4.00%	1.00%	3.00%	4.26%	6.29%	7.31%
22	NorthWestern Corporation	ПWП	\$1.92	\$51.02	3.76%	3.87%	2.00%	2.00%	6.50%	2.50%	8.86%	9.37%	10.39%
23	OGE Energy Corp.	OGE	\$1.00	\$30.33	3.30%	3.36%	2.00%	4.00%	3.00%	4.00%	6.35%	7.36%	8.38%
54	Otter Tail Corporation	OTTR	\$1.23	\$26.99	4.56%	4.73%	Å V	%00'9	%00.6	7.50%	10.69%	12.23%	13.76%
52	Pinnacle West Capital Corporation	PNW	\$2.38	\$58.80	4.05%	4.14%	4.60%	5.30%	4.00%	4.63%	8.13%	8.77%	9.45%
56	Portland General Electric Company	Por	\$1.20	\$34.24	3.50%	3.60%	5.20%	4.72%	%00.9	5.31%	8.31%	8.90%	9.61%
27	SCANA Corporation	SCG	\$2.18	\$51.78	4.21%	4.30%	4.20%	4.30%	4.50%	4.33%	8.50%	8.63%	8.80%
78	Southern Company	SO	\$2.17	\$42.94	5.05%	5.15%	3.50%	3.32%	4.50%	3.77%	8.46%	8.92%	9.67%
59	TECO Energy, Inc.	世	\$0.90	\$18.35	4.90%	2.09%	7.10%	9.20%	%00.9	7.43%	11.05%	12.52%	14.33%
30	Westar Energy, Inc.	N.	\$1.44	\$35.52	4.05%	4.14%	3.50%	3.40%	%00'9	4.30%	7.52%	8.44%	10.18%
3	Xcel Energy Inc.	ΧĒΓ	\$1.28	\$33.19	3.86%	3.95%	2.00%	4.58%	4.50%	4.69%	8.44%	8.64%	8.95%
32	Proxy Group Mean				4.03%	4.14%	5.11%	5.08%	5.22%	5.24%	8.64%	9.38%	10.22%
33	Proxy Group Median				4.05%	4.14%	2.00%	2.00%	5.00%	5.31%	8.86%	9.12%	10.18%

[3] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals indicated number of trading day average as of June 25, 2015
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.5 x [8])
[5] Source: Zacks
[6] Source: Value Line
[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 [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7]) 35 36 37 38 39 44 44 45 45 45

Constant Growth Discounted Cash Flow Model with Half Year Growth Adjustment 90 Day Average Stock Price

ო			[]	[2]	ව	[4]	[5]	[6]	[2]	[8]	[6]	[10]	[11]
~	Vienno	<u>ا</u> و	Annualized	Average Stock	Dividend	Expected Dividend	Zacks Earnings	First Call Earnings	Value Line Earnings	Average Earnings	Low	Mean	High
٢	V. 197	- ICAG		2	000	5	O CONST	D AND	O O O O	ii Moofi	202	102	ם
ເດ	ALLETE, Inc.	ALE	\$2.02	\$51.08	3.95%	4.08%	Α	%00.9	6.50%	6.25%	10.07%	10.33%	10.58%
9	Alliant Energy Corporation	Ľ	\$2.20	\$61.38	3.58%	3.68%	5.30%	5.45%	%00'9	5.58%	8.98%	9.27%	%69.6
7	Ameren Corporation	AEE	\$1.64	\$40.87	4.01%	4.14%	8.80%	5.85%	%00'9	6.22%	9.98%	10.35%	10.95%
∞	American Electric Power Company, Inc.	AEP	\$2.12	\$55.94	3.79%	3.88%	4.90%	5.08%	2.00%	4.99%	8.78%	8.88%	8.97%
6	Avista Corporation	AVA	\$1.32	\$32.71	4.04%	4.16%	Ϋ́	2.00%	7.00%	8.00.9	9.14%	10.16%	11.18%
9	Black Hills Corporation	BXT	\$1.62	\$48.78	3.32%	3.45%	Ϋ́	7.00%	4.50%	5.75%	7.90%	9.17%	10.44%
=	CenterPoint Energy, Inc.	CNP	\$0.99	\$20.49	4.83%	4.90%	2.70%	1.91%	1.00%	2.87%	5.85%	7.77%	10.67%
12	CMS Energy Corporation	CMS	\$1.16	\$34.02	3.41%	3.51%	6.20%	6.73%	5.50%	6.14%	%00.6	%99.6	10.25%
13	Consolidated Edison, Inc.	ED	\$2.60	\$60.91	4.27%	4.33%	2.70%	2.38%	3.00%	7.69%	6.70%	7.02%	7.33%
14	Dominion Resources, Inc.	۵	\$2.59	\$70.78	3.66%	3.78%	6.30%	5.89%	8.00%	6.73%	%99'6	10.51%	11.81%
15	DTE Energy Company	DTE	\$2.92	\$79.41	3.68%	3.77%	2.00%	4.51%	2.00%	4.84%	8.27%	8.60%	8.77%
16	Duke Energy Corporation	DČK	\$3.18	\$76.11	4.18%	4.28%	4.70%	4.49%	2.00%	4.73%	8.76%	9.01%	9.28%
17	Empire District Electric Company	EDE	\$1.04	\$24.01	4.33%	4.42%	2.00%	2.00%	3.00%	4.33%	7.40%	8.76%	9.44%
92	Eversource Energy	ES	\$1.67	\$49.32	3.39%	3.51%	6.80%	%09.9	8.50%	7.30%	10.10%	10.81%	12.03%
19	FirstEnergy Corp.	믭	\$1.44	\$35.13	4.10%	4.24%	Υ Y	Ϋ́	7.00%	7.00%	11.24%	11.24%	11.24%
2	Great Plains Energy Inc.	GXP	\$0.98	\$26.14	3.75%	3.86%	%00'9	6.37%	2.00%	2.79%	8.84%	9.65%	10.24%
21	IDACORP, Inc.	ΙDΑ	\$1.88	\$60.44	3.11%	3.16%	4.00%	4.00%	1.00%	3.00%	4.13%	6.16%	7.17%
22	NorthWestern Corporation	NWE	\$1.92	\$52.34	3.67%	3.77%	2.00%	2.00%	6.50%	2.50%	8.76%	9.27%	10.29%
23	OGE Energy Corp.	OGE	\$1.00	\$31.57	3.17%	3.23%	2.00%	4.00%	3.00%	4.00%	6.21%	7.23%	8.25%
54	Otter Tail Corporation	OTTR	\$1.23	\$29.98	4.10%	4.26%	∢ Z	%00'9	%00.6	7.50%	10.23%	11.76%	13.29%
52	Pinnacle West Capital Corporation	PNW	\$2.38	\$61.59	3.86%	3.95%	4.60%	2.30%	4.00%	4.63%	7.94%	8.59%	9.27%
56	Portland General Electric Company	POR	\$1.20	\$35.60	3.37%	3.46%	5.20%	4.72%	%00.9	5.31%	8.17%	8.77%	9.47%
27	SCANA Corporation	SCG	\$2.18	\$53.75	4.06%	4.14%	4.20%	4.30%	4.50%	4.33%	8.34%	8.48%	8.65%
28	Southern Company	SO	\$2.17	\$44.08	4.92%	5.02%	3.50%	3.32%	4.50%	3.77%	8.32%	8.79%	9.53%
59	TECO Energy, Inc.	믣	\$0.90	\$19.00	4.74%	4.91%	7.10%	9.20%	%00.9	7.43%	10.88%	12.35%	14.15%
30	Westar Energy, Inc.	WR	\$1.44	\$37.28	3.86%	3.95%	3.50%	3.40%	%00.9	4.30%	7.33%	8.25%	9.98%
31	Xcel Energy Inc.	XEL	\$1.28	\$34.08	3.76%	3.84%	2.00%	4.58%	4.50%	4.69%	8.34%	8.54%	8.85%
33	Proxy Group Mean				2 80%	3 00%	5 11%	7 UB%	£ 22%	£ 25%	A 400/	0 23%	40.07%
3 8	Proxy Group Median				3.86%	3 95%	5.00%	2.00%	5.22%	5.23%	0.49% 76%	9.23%	% /O.O.
)	المراجع المستعدد المس						2	200	2	2	2	2/1/2	9.00 %

³⁴ 35 36 37 37 40 40 44 44 45 45 45

Constant Growth Discounted Cash Flow Model with Half Year Growth Adjustment 180 Day Average Stock Price

[11]		RÕE	10.50%		Υ-	8.86%	_	10.32%																			. 0			9.94%	
[10]	Mean	ROE	10 24%	9.19%	10.22%	8.77%	10.01%	9.05%	7.44%	9.66%	6.88%	10.43%	8.50%	8.83%	8.39%	10.73%	11.09%	9.56%	6.08%	9.21%	7.04%	11.73%	8.48%	8.68%	8.32%	8.56%	12.22%	8.12%	8.50%	9.11%	
[6]	Low	ROE	%66 6	8.90%	9.85%	8.68%	9.00%	7.78%	5.53%	%00.6	6.56%	9.57%	8.16%	8.59%	7.03%	10.02%	11.09%	8.76%	4.05%	8.70%	6.02%	10.20%	7.83%	8.09%	8.18%	8.09%	10.76%	7.21%	8.30%	8.37%	
.8	Average Earnings	Growth	6.25%	5.58%	6.22%	4.99%	8.00.9	2.75%	2.87%	6.14%	2.69%	6.73%	4.84%	4.73%	4.33%	7.30%	7.00%	5.79%	3.00%	2.50%	4.00%	7.50%	4.63%	5.31%	4.33%	3.77%	7.43%	4.30%	4.69%	5.25%	1
Ε	Value Line Earnings	Growth	6.50%	%00.9	800.9	2.00%	7.00%	4.50%	1.00%	5.50%	3.00%	8.00%	2.00%	2.00%	3.00%	8.50%	7.00%	2.00%	1.00%	6.50%	3.00%	9.00%	4.00%	8.00.9	4.50%	4.50%	8.00.9	%00.9	4.50%	5.22%	
[9]	First Call Earnings	Growth	8.00%	5.45%	5.85%	5.08%	5.00%	7.00%	1.91%	6.73%	2.38%	5.89%	4.51%	4.49%	2.00%	%09'9	∢ Z	6.37%	4.00%	5.00%	4.00%	6.00%	5.30%	4.72%	4.30%	3.32%	9.20%	3.40%	4.58%	5.08%	
[9]	Zacks Earnings	Growth	Ϋ́	5.30%	6.80%	4.90%	Ν Α	Ϋ́	5.70%	6.20%	2.70%	6.30%	2.00%	4.70%	2.00%	6.80%	Ϋ́Z	8.00.9	4.00%	2.00%	5.00%	Z A	4.60%	5.20%	4.20%	3.50%	7.10%	3.50%	2.00%	5.11%	
[4]	Expected Dividend	Yield	3.99%	3.60%	4.01%	3.78%	4.01%	3.30%	4.57%	3.51%	4.19%	3.70%	3.66%	4.10%	4.05%	3.43%	4.09%	3.77%	3.08%	3.71%	3.04%	4.23%	3.84%	3.38%	3.99%	4.78%	4.79%	3.82%	3.80%	3.86%	
[3]	Dividend	Yield	3.87%	3.50%	3.89%	3.69%	3.90%	3.21%	4.51%	3.41%	4.14%	3.58%	3.57%	4.01%	3.97%	3.31%	3.95%	3.67%	3.03%	3.61%	2.98%	4.08%	3.76%	3.29%	3.90%	4.70%	4.62%	3.74%	3.72%	3.76%	
[2]	Average Stock	Price	\$52.15	\$62.78	\$42.21	\$57.48	\$33.86	\$50.52	\$21.96	\$34.05	\$62.87	\$72.44	\$81.72	\$79.36	\$26.21	\$50.51	\$36.48	\$26.74	\$62.00	\$53.21	\$33.59	\$30.14	\$63.34	\$36.46	\$55.87	\$46.21	\$19.49	\$38.47	\$34.44		
Ξ	Annualized	Dividend	\$2.02	\$2.20	\$1.64	\$2.12	\$1.32	\$1.62	\$0.99	\$1.16	\$2.60	\$2.59	\$2.92	\$3.18	\$1.04	\$1.67	\$1.44	\$0.98	\$1.88	\$1.92	\$1.00	\$1.23	\$2.38	\$1.20	\$2.18	\$2.17	\$0.90	\$1.44	\$1.28		
		Ticker	ALE	LNJ	AEE	AEP	AVA	BKH	CNP	CMS		۵	DTE	DCK DCK	EDE	ES	丑	GXP	IDA	NWE	OGE	OTTR	PNW	POR	SCG	SO	五	WR	XEL		
		Сотрапу	ALLETE Inc.	Alliant Energy Corporation	Ameren Corporation	American Electric Power Company, Inc.	Avista Corporation	Black Hills Corporation	CenterPoint Energy, Inc.	CMS Energy Corporation	Consolidated Edison, Inc.	Dominion Resources, Inc.	DTE Energy Company	Duke Energy Corporation	Empire District Electric Company	Eversource Energy	FirstEnergy Corp.	Great Plains Energy Inc.	IDACORP, Inc.	NorthWestern Corporation	OGE Energy Corp.	Otter Tail Corporation	Pinnacle West Capital Corporation	Portland General Electric Company	SCANA Corporation	Southern Company	TECO Energy, Inc.	Westar Energy, Inc.	Xcel Energy Inc.	Proxy Group Mean	: : : : : : : : : : : : : : : : : : : :
က		4	2	ဖ	7	œ	6	10	7	12	13	14	15	16	17	18	19	20	7	22	23	54	52	56	27	28	59	30	31	32	

Notes:
 Source: Bloomberg Professional
 [1] Source: Bloomberg Professional, equals indicated number of trading day average as of June 25, 2015
 [2] Source: Bloomberg Professional, equals indicated number of trading day average as of June 25, 2015
 [3] [4] Equals [3] / (1 + 0.5 x [8])
 [4] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7]) + Minimum([5], [6], [7])
 [5] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7]) + Maximum([5], [6], [7])
 [6] [1] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7]) + Maximum([5], [6], [7])

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Constant Growth Discounted Cash Flow Model with Half Year Growth Adjustment 360 Day Average Stock Price

က			[1]	[2]	[3]	[4]	[2]	[9]	[2]	8	<u>6</u>	[10]	[11]
4	Company	Ticker	Annualized	Average Stock Price	Dividend	Expected Dividend Vield	Zacks Earnings	First Call Earnings	Value Line Earnings	Average Earnings	Low Tow	Mean	High High
+	, and the second			2	5	200	E A	II A	D COMIT	GIOMII	2		102
S.	ALLETE, Inc.	ALE	\$2.02	\$50.73	3.98%	4.11%	Ϋ́	%00.9	6.50%	6.25%	10.10%	10.36%	10.61%
ဖ	Alliant Energy Corporation	ĽŊ	\$2.20	\$59.66	3.69%	3.79%	5.30%	5.45%	8.00.9	5.58%	%60'6	9.37%	9.80%
7	Ameren Corporation	AEE	\$1.64	\$40.80	4.02%	4.14%	%08.9	5.85%	6.00%	6.22%	9.99%	10.36%	10.96%
œ	American Electric Power Company, Inc.	AEP	\$2.12	\$54.66	3.88%	3.98%	4.90%	5.08%	2.00%	4.99%	8.87%	8.97%	9.06%
თ	Avista Corporation	AVA	\$1.32	\$32.48	4.06%	4.19%	Ϋ́	5.00%	7.00%	6.00%	9.17%	10.19%	11.21%
10	Black Hills Corporation	BKH	\$1.62	\$53.06	3.05%	3.14%	₹ Z	7.00%	4.50%	5.75%	7.62%	8.89%	10.16%
7	CenterPoint Energy, Inc.	CNP	\$0.99	\$23.08	4.29%	4.35%	5.70%	1.91%	1.00%	2.87%	5.31%	7.22%	10.11%
12	CMS Energy Corporation	CMS	\$1.16	\$31.69	3.66%	3.77%	6.20%	6.73%	5.50%	6.14%	9.26%	9.95%	10.51%
5	Consolidated Edison, Inc.		\$2.60	\$59.34	4.38%	4.44%	2.70%	2.38%	3.00%	2.69%	6.81%	7.13%	7.45%
4	Dominion Resources, Inc.	۵	\$2.59	\$70.94	3.65%	3.77%	6.30%	5.89%	8.00%	6.73%	9.65%	10.50%	11.80%
15	DTE Energy Company	DTE	\$2.92	\$78.15	3.74%	3.83%	2.00%	4.51%	5.00%	4.84%	8.33%	8.66%	8.83%
16	Duke Energy Corporation	PČK	\$3.18	\$75.64	4.20%	4.30%	4.70%	4.49%	5.00%	4.73%	8.79%	9.03%	9.31%
17	Empire District Electric Company	EDE	\$1.04	\$25.27	4.12%	4.20%	5.00%	2.00%	3.00%	4.33%	7.18%	8.54%	9.22%
19	Eversource Energy	ES	\$1.67	\$47.78	3.50%	3.62%	6.80%	%09'9	8.50%	7.30%	10.21%	10.92%	12.14%
19	FirstEnergy Corp.	Щ	\$1.44	\$34.67	4.15%	4.30%	Å V	Ą	7.00%	7.00%	11.30%	11.30%	11.30%
20	Great Plains Energy Inc.	GXP	\$0.98	\$26.21	3.74%	3.85%	%00.9	6.37%	2.00%	5.79%	8.83%	9.64%	10.23%
73	IDACORP, Inc.	IDA	\$1.88	\$58.41	3.22%	3.27%	4.00%	4.00%	1.00%	3.00%	4.23%	6.27%	7.28%
22	NorthWestern Corporation	NWE	\$1.92	\$50.29	3.82%	3.92%	2.00%	2.00%	6.50%	2.50%	8.91%	9.45%	10.44%
23	OGE Energy Corp.	OGE	\$1.00	\$34.96	2.86%	2.92%	2.00%	4.00%	3.00%	4.00%	2.90%	6.92%	7.93%
54	Otter Tail Corporation	OTTR	\$1.23	\$29.53	4.16%	4.32%	Ϋ́	%00.9	%00.6	7.50%	10.29%	11.82%	13.35%
52	Pinnacle West Capital Corporation	N N N	\$2.38	\$59.20	4.02%	4.11%	4.60%	5.30%	4.00%	4.63%	8.10%	8.75%	9.43%
56	Portland General Electric Company	POR	\$1.20	\$34.50	3.48%	3.57%	5.20%	4.72%	6.00%	5.31%	8.28%	8.88%	9.58%
27	SCANA Corporation	SCG	\$2.18	\$53.30	4.09%	4.18%	4.20%	4.30%	4.50%	4.33%	8.38%	8.51%	8.68%
28	Southern Company	SO	\$2.17	\$44.89	4.83%	4.93%	3.50%	3.32%	4.50%	3.77%	8.23%	8.70%	9.44%
59	TECO Energy, Inc.	끄	\$0.90	\$18.43	4.88%	2.06%	7.10%	9.20%	%00'9	7.43%	11.03%	12.50%	14.31%
30	Westar Energy, Inc.	WR	\$1.44	\$36.94	3.90%	3.98%	3.50%	3.40%	%00.9	4.30%	7.36%	8.28%	10.02%
31	Xcel Energy Inc.	Ä	\$1.28	\$32.56	3.93%	4.02%	2.00%	4.58%	4.50%	4.69%	8.52%	8.72%	9.03%
32	Proxy Group Mean				3.90%	4.00%	5.11%	5.08%	5.22%	5.25%	8.51%	9.25%	10.08%
33	Proxy Group Median				3.93%	4.02%	2.00%	5.00%	5.00%	5.31%	8.79%	8.97%	10.02%
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Constant Growth Discounted Cash Flow Model with Full Year Growth Adjustment 30 Day Average Stock Price

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ო			[5]	[2]	ල	[4]	[2]	[9]	E	[8]	<u>e</u>	[10]	111
4	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	ROE ROE	Mean ROE	High ROE
ц		ш -	\$2.02	4.4B 0.7	7 130/	2 KB0/.	S Z	, 000	2002	7000	7028.04	7000	7000
ာဖ	Attent, IIIC. Alliant Energy Corporation	 	\$2.20	\$59.59	3.69%	3.90%	5.30%	5.45%	%00.9 %00.9	5.58%	9.19%	9.90%	9 9 1%
7	Ameren Corporation	AEE	\$1.64	\$39.13	4.19%	4.45%	6.80%	5.85%	8.00.9	6.22%	10.29%	10.67%	11.28%
80	American Electric Power Company, Inc.	AEP	\$2.12	\$54.66	3.88%	4.07%	4.90%	2.08%	2.00%	4.99%	8.97%	9.02%	9.16%
თ	Avista Corporation	AVA	\$1.32	\$31.45	4.20%	4.45%	¥	2.00%	7.00%	8.00%	9.41%	10.45%	11.49%
9	Black Hills Corporation	BKH	\$1.62	\$46.14	3.51%	3.71%	¥	7.00%	4.50%	5.75%	8.17%	9.46%	10.76%
7	CenterPoint Energy, Inc.	CNP	\$0.99	\$19.77	5.01%	5.15%	2.70%	1.91%	1.00%	2.87%	%90'9	8.02%	10.99%
12	CMS Energy Corporation	CMS	\$1.16	\$32.93	3.52%	3.74%	6.20%	6.73%	2.50%	6.14%	9.22%	9.88%	10.49%
5	Consolidated Edison, Inc.		\$2.60	\$59.64	4.36%	4.48%	2.70%	2.38%	3.00%	2.69%	6.84%	7.17%	7.49%
14	Dominion Resources, Inc.	Δ	\$2.59	\$69.20	3.74%	3.99%	6.30%	5.89%	8.00%	6.73%	%58'6	10.72%	12.04%
15	DTE Energy Company	DTE	\$2.92	\$76.77	3.80%	3.99%	2.00%	4.51%	2.00%	4.84%	8.49%	8.82%	8.99%
16	Duke Energy Corporation	S S	\$3.18	\$74.10	4.29%	4.49%	4.70%	4.49%	2.00%	4.73%	8.97%	9.22%	9.51%
17	Empire District Electric Company	EDE	\$1.04	\$22.93	4.53%	4.73%	2.00%	2.00%	3.00%	4.33%	%29'2	9.06%	9.76%
9	Eversource Energy	ES	\$1.67	\$47.64	3.51%	3.75%	Ϋ́	Ϋ́	7.00%	7.00%	10,75%	10.75%	10.75%
19	FirstEnergy Corp.	出	\$1.44	\$34.60	4.16%	4.40%	%00'9	6.37%	2.00%	2.79%	9.37%	10.19%	10.80%
20	Great Plains Energy Inc.	GXP	\$0.98	\$25.35	3.87%	3.98%	4.00%	4.00%	1.00%	3.00%	4.90%	6.98%	8.02%
21	IDACORP, Inc.	DΑ	\$1.88	\$57.95	3.24%	3.48%	6.80%	%09'9	8.50%	7.30%	10.06%	10.78%	12.02%
52	NorthWestern Corporation	NWE	\$1.92	\$51.02	3.76%	3.97%	2.00%	2.00%	6.50%	2.50%	8.95%	9.47%	10.51%
23	OGE Energy Corp.	OGE	\$1.00	\$30.33	3.30%	3.43%	2.00%	4.00%	3.00%	4.00%	6.40%	7.43%	8.46%
54	Otter Tail Corporation	OTTR	\$1.23	\$26.99	4.56%	4.90%	Ϋ́	%00'9	%00.6	7.50%	10.83%	12.40%	13.97%
25	Pinnacle West Capital Corporation	PNW	\$2.38	\$58.80	4.05%	4.23%	4.60%	5.30%	4.00%	4.63%	8.21%	8.87%	8.56%
56	Portland General Electric Company	POR	\$1.20	\$34.24	3.50%	3.69%	5.20%	4.72%	%00.9	5.31%	8.39%	8.00.6	9.71%
27	SCANA Corporation	SCG	\$2.18	\$51.78	4.21%	4.39%	4.20%	4.30%	4.50%	4.33%	8.59%	8.73%	8.90%
28	Southern Company	SO	\$2.17	\$42.94	5.05%	5.24%	3.50%	3.32%	4.50%	3.77%	8.54%	9.05%	9.78%
58	TECO Energy, Inc.	世	\$0.90	\$18.35	4.90%	5.27%	7.10%	9.20%	%00.9	7.43%	11.20%	12.70%	14.56%
30	Westar Energy, Inc.	W.	\$1.44	\$35.52	4.05%	4.23%	3.50%	3.40%	%00'9	4.30%	7.59%	8.53%	10.30%
31	Xcel Energy Inc.	Ä	\$1.28	\$33.19	3.86%	4.04%	2.00%	4.58%	4.50%	4.69%	8.53%	8.73%	9.05%
32	Proxy Group Mean				4.03%	4.21%	5.11%	5.08%	5.22%	5.25%	8.73%	9.46%	10.34%
33	Proxy Group Median				4.05%	4.07%	9.00%	2.00%	2.00%	5.31%	8.95%	9.22%	10.30%
34	Notes:												
35	[1] Source: Bloomberg Professional												
36	[2] Source: Bloomberg Professional, equals indicated number of trading day average as of June 25, 2015	indicated nu	mber of trading	day averaç	ge as of Jun	ie 25, 2015							
37	[3] Equals [1] / [2]												
ж б Ж	[4] Equals [3] x (1 + [8]) [5] Source: Zacks												
9 6	[6] Source: Yahool Finance												
41	[7] Source: Value Line												
2 4 4	[8] Equals Average([5], [6], [7]) [9] Equals [3] v (1 + Minimum([5] [6] [7])) + Minimum([5] [6] [7])	Minimum(15	(171)										
4	[10] Equals [4] + [8]		7.1.51.9										
45	[11] Equals [3] x (1 + Maximum([5], [6], [7])) + Maximum([5], [6], [7])	+ Maximum	([5], [6], [7])										

^{7 (3)} Equals (1) / [2] 8 (4) Equals (3) x (1 + [8]) 9 [5] Source: Zacks 10 [5] Source: Yalue Linece 11 [5] Equals Average([5], [6], [7]) 12 [6] Equals (3] x (1 + Minimum([5], [6], [7]) + Minimum([5], [6], [7]) 13 [9] Equals (3] x (1 + Minimum([5], [6], [7]) + Maximum([5], [6], [7]) 14 [10] Equals [3] x (1 + Maximum([5], [6], [7]) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model with Full Year Growth Adjustment 90 Day Average Stock Price

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က			[1]	[2]	[3]	[4]	[5]	[9]		<u>@</u>	6	[10]	[14]
				Average	- -	Expected	Zacks	First Call	Value Line	Average	- -		
4	Company	Ticker	Annualized Dividend	Stock Price	Dividend Yield	Dividend Yield	Earnings Growth	Earnings Growth	Earnings Growth	Earnings Growth	Z €	Mean ROE	Hgh ROE ROE
ω	ALLETE, Inc.	ALE	\$2.02	\$51.08	3.95%	4.20%	Υ V	%00'9	6.50%	6.25%	10.19%	10.45%	10.71%
9	Alliant Energy Corporation	ĽN	\$2.20	\$61.38	3.58%	3.78%	5.30%	5.45%	%00'9	2.58%	9.07%	9.37%	9.80%
7	Ameren Corporation	AEE	\$1.64	\$40.87	4.01%	4.26%	6.80%	5.85%	%00.9	6.22%	10.10%	10.48%	11.09%
œ	American Electric Power Company, Inc.	AEP	\$2.12	\$55,94	3.79%	3.98%	4.90%	5.08%	5.00%	4.99%	8.88%	8.97%	%90.6
თ	Avísta Corporation	AVA	\$1.32	\$32.71	4.04%	4.28%	Ϋ́	2.00%	7.00%	%00.9	9.24%	10.28%	11.32%
9	Black Hills Corporation	BKH	\$1.62	\$48.78	3.32%	3.51%	Ϋ́	7.00%	4.50%	2.75%	7.97%	9.26%	10.55%
Ξ	CenterPoint Energy, Inc.	CNP	\$0.99	\$20.49	4.83%	4.97%	2.70%	1.91%	1.00%	2.87%	5.88%	7.84%	10.81%
7	CMS Energy Corporation	CMS	\$1.16	\$34.02	3.41%	3.62%	6.20%	6.73%	5.50%	6.14%	9.10%	9.76%	10.37%
13	Consolidated Edison, Inc.		\$2.60	\$60.91	4.27%	4.38%	2.70%	2.38%	3.00%	2.69%	6.75%	7.08%	7.40%
4	Dominion Resources, Inc.	۵	\$2.59	\$70.78	3.66%	3.91%	6.30%	6.89%	8.00%	6.73%	%97.6	10.64%	11.95%
15	DTE Energy Company	DTE	\$2.92	\$79.41	3.68%	3.86%	2.00%	4.51%	2.00%	4.84%	8.35%	8.69%	8.86%
16	Duke Energy Corporation	DCK	\$3.18	\$76.11	4.18%	4.38%	4.70%	4.49%	2.00%	4.73%	8.86%	9.11%	9.39%
17	Empire District Electric Company	EDE	\$1.04	\$24.01	4.33%	4.52%	2.00%	2.00%	3.00%	4.33%	7.46%	8.85%	9.55%
9	Eversource Energy	ES	\$1.67	\$49.32	3.39%	3.62%	Υ V	Ϋ́	7.00%	7.00%	10.62%	10.62%	10.62%
9	FirstEnergy Corp.	밆	\$1.44	\$35.13	4.10%	4.34%	%00′9	6.37%	5.00%	2.79%	9.30%	10.13%	10.73%
20	Great Plains Energy Inc.	GXP	\$0.98	\$26.14	3.75%	3.86%	4.00%	4.00%	1.00%	3.00%	4.79%	898.9	7.90%
7	IDACORP, Inc.	ΙDΑ	\$1.88	\$60.44	3.11%	3.34%	6.80%	%09'9	8.50%	7.30%	9.92%	10.64%	11.87%
22	NorthWestern Corporation	NWE	\$1.92	\$52.34	3.67%	3.87%	2.00%	2.00%	6.50%	2.50%	8.85%	9.37%	10.41%
23	OGE Energy Corp.	OGE	\$1.00	\$31.57	3.17%	3.29%	2.00%	4.00%	3.00%	4.00%	6.26%	7.29%	8.33%
54	Otter Tail Corporation	OTTR	\$1.23	\$29.98	4.10%	4.41%	Ϋ́	%00'9	%00.6	7.50%	10.35%	11.91%	13.47%
22	Pinnacle West Capital Corporation	PNW	\$2.38	\$61.59	3.86%	4.04%	4.60%	5.30%	4.00%	4.63%	8.02%	8.68%	9.37%
56	Portland General Electric Company	POR	\$1.20	\$35.60	3.37%	3.55%	5.20%	4.72%	%00'9	5.31%	8.25%	8.86%	9.57%
27	SCANA Corporation	SCG	\$2.18	\$53.75	4.06%	4.23%	4.20%	4.30%	4.50%	4.33%	8.43%	8.56%	8.74%
28	Southern Company	SO	\$2.17	\$44.08	4.92%	5.11%	3.50%	3.32%	4.50%	3.77%	8.41%	8.88%	9.64%
53	TECO Energy, Inc.	世	\$0.90	\$19.00	4.74%	2.09%	7.10%	9.20%	%00'9	7.43%	11.02%	12.52%	14.37%
30	Westar Energy, Inc.	WR	\$1.44	\$37.28	3.86%	4.03%	3.50%	3.40%	%00.9	4.30%	7.39%	8.33%	10.09%
3	Xcel Energy Inc.	XEL	\$1.28	\$34.08	3.76%	3.93%	9.00%	4.58%	4.50%	4.69%	8.42%	8.63%	8.94%
32	Proxy Group Mean				3.89%	4.09%	5.11%	5.08%	5.22%	5.25%	8.58%	9.34%	10.18%
33	Proxy Group Median				3.86%	4.03%	2.00%	5.00%	5.00%	5.31%	8.85%	9.11%	10.09%

Constant Growth Discounted Cash Flow Model with Full Year Growth Adjustment 180 Day Average Stock Price

- 0		Ö	Constant Growth Discounted Cash Flow Model with Full Year Growth Adjustment 180 Day Average Stock Price	Discounted 180	Cash Flow Day Avera	ted Cash Flow Model with Full 180 Day Average Stock Price	-ull Year Gro ice	wth Adjustm	ent				
ო			[1]	[2]	[3]	[4]	[5]	[9]		[8]	6	[10]	[41]
4	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
40	AFIETE Inc	<u>а</u>	\$2.02	\$52.15	3.87%	4 12%	42	%UU 9	8 50%	A 25%	10 11%.	10 3707	10.63%
ာဖ	Aliant Energy Corporation	Į Į	\$2.20	\$62.78	3.50%	3.70%	5.30%	5.45%	%00.9 9.00%	5.58%	% - 1.0.1 8 89%	9.28%	9.71%
7	Ameren Corporation	AEE	\$1.64	\$42.21	3.89%	4.13%	6.80%	5.85%	6.00%	6.22%	9.96%	10.34%	10.95%
∞	American Electric Power Company, Inc.	AEP	\$2.12	\$57.48	3.69%	3.87%	4.90%	5.08%	2.00%	4.99%	8.77%	8.87%	8.96%
თ	Avista Corporation	AVA	\$1.32	\$33.86	3.90%	4.13%	ž	2.00%	7.00%	%00.9	%60'6	10.13%	11.17%
9	Black Hills Corporation	BKI	\$1.62	\$50.52	3.21%	3.39%	ž	7.00%	4.50%	2.75%	7.85%	9.14%	10.43%
7	CenterPoint Energy, Inc.	CNP	\$0.99	\$21.96	4.51%	4.64%	5.70%	1.91%	1.00%	2.87%	5.55%	7.51%	10.46%
12	CMS Energy Corporation	CMS	\$1.16	\$34.05	3.41%	3.62%	6.20%	6.73%	5.50%	6.14%	%60'6	9.76%	10.37%
13	Consolidated Edison, Inc.		\$2.60	\$62.87	4.14%	4.25%	2.70%	2.38%	3.00%	2.69%	6.61%	6.94%	7.26%
7	Dominion Resources, Inc.	۵	\$2.59	\$72.44	3.58%	3.82%	8.30%	2.89%	8.00%	6.73%	%89.6	10.55%	11.86%
15	DTE Energy Company	DTE	\$2.92	\$81.72	3.57%	3.75%	2.00%	4.51%	2.00%	4.84%	8.24%	8.58%	8.75%
16	Duke Energy Corporation	DČ K	\$3.18	\$79.36	4.01%	4.20%	4.70%	4.49%	5.00%	4.73%	8.68%	8.93%	9.21%
17	Empire District Electric Company	EDE	\$1.04	\$26.21	3.97%	4.14%	5.00%	2.00%	3.00%	4.33%	7.09%	8.47%	9.17%
18	Eversource Energy	ES	\$1.67	\$50.51	3.31%	3.54%	₹ Z	∢ Z	7.00%	7.00%	10.54%	10.54%	10.54%
19	FirstEnergy Corp.	끮	\$1.44	\$36.48	3.95%	4.18%	%00.9	6.37%	5.00%	2.79%	9.14%	9.97%	10.57%
20	Great Plains Energy Inc.	GXP	\$0.98	\$26.74	3.67%	3.78%	4.00%	4.00%	1.00%	3.00%	4.70%	6.78%	7.81%
2	IDACORP, Inc.	IDA	\$1.88	\$62.00	3.03%	3.25%	6.80%	8.60%	8.50%	7.30%	9.83%	10.55%	11.79%
22	NorthWestern Corporation	NWE	\$1.92	\$53.21	3.61%	3.81%	2.00%	2.00%	6.50%	2.50%	8.79%	9.31%	10.34%
23	OGE Energy Corp.	OGE	\$1.00	\$33.59	2.98%	3.10%	2.00%	4.00%	3.00%	4.00%	6.07%	7.10%	8.13%
24	Otter Tail Corporation	OTTR	\$1.23	\$30.14	4.08%	4.39%	₹ Z	6.00%	9.00%	7.50%	10.33%	11.89%	13.45%
52	Pinnacle West Capital Corporation	PNW W	\$2.38	\$63.34	3.76%	3.93%	4.60%	5.30%	4.00%	4.63%	7.91%	8.57%	9.26%
56	Portland General Electric Company	POR	\$1.20	\$36.46	3.29%	3.47%	5.20%	4.72%	%00.9	5.31%	8.17%	8.77%	9.49%
27	SCANA Corporation	SCG	\$2.18	\$55.87	3.90%	4.07%	4.20%	4.30%	4.50%	4.33%	8.27%	8.40%	8.58%
78	Southern Company	SO	\$2.17	\$46.21	4.70%	4.87%	3.50%	3.32%	4.50%	3.77%	8.17%	8.65%	9.41%
58	TECO Energy, Inc.	里	\$0.90	\$19.49	4.62%	4.96%	7.10%	9.20%	%00'9	7.43%	10.90%	12.40%	14.24%
30	Westar Energy, Inc.	WR	\$1.44	\$38.47	3.74%	3.90%	3.50%	3.40%	%00'9	4.30%	7.27%	8.20%	9.97%
31	Xcel Energy Inc.	XEL	\$1.28	\$34.44	3.72%	3.89%	2.00%	4.58%	4.50%	4.69%	8.38%	8.58%	8.90%
32	Proxy Group Mean				3.76%	3.96%	5.11%	5.08%	5.22%	5.25%	8.45%	9.21%	10.05%
33	Proxy Group Median				3.74%	3.90%	5.00%	2.00%	2.00%	5.31%	8.68%	8.93%	9.97%

| Notes:
13	Source: Bloomberg Professional	
14	Source: Bloomberg Professional	
15	Source: Bloomberg Professional	
16	Source: Bloomberg Professional	
17	Source: Zacks	
18	Source: Yahoo	Finance
19	Source: Value Line	
10	Source: Value Line	
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Constant Growth Discounted Cash Flow Model with Full Year Growth Adjustment 360 Day Average Stock Price

ო			[1]	[2]	[3]	[4]	[5]	[6]		[8]	[6]	[10]	[11]
			Annualized	Average Stock	Dividend	Expected Dividend	Zacks Earnings	First Call Earnings	Value Line Earnings	Average Earnings	Low	Mean	High
4	Company	Ticker	Dividend	Price	Yield	Yield	Growth	Growth	Growth	Growth	ROE	ROE	RÕE
ĸ	ALLETE Inc	<u>Т</u>	\$2.02	\$50.73	%86.8	4 23%	47	%00.9	A 50%	A 25%	10.22%	10.48%	10 74%
ω (Alliant Energy Corporation	I Z	\$2.20	\$59.66	3.69%	3.89%	5.30%	5.45%	800.9	5.58%	9.18%	9.48%	9.91%
7	Ameren Corporation	AEE	\$1.64	\$40.80	4.02%	4.27%	6.80%	5.85%	800.9	6.22%	10,10%	10.49%	11.09%
œ	American Electric Power Company, Inc.	AEP	\$2.12	\$54.66	3.88%	4.07%	4.90%	5.08%	2.00%	4.99%	8.97%	9.07%	9.16%
თ	Avista Corporation	AVA	\$1.32	\$32.48	4.06%	4.31%	Ϋ́Z	5.00%	7.00%	%00.9	9.27%	10.31%	11.35%
1	Black Hills Corporation	BKI	\$1.62	\$53.06	3.05%	3.23%	Ą	7.00%	4.50%	5.75%	%69′2	8.98%	10.27%
7	CenterPoint Energy, Inc.	OND	\$0.99	\$23.08	4.29%	4.41%	5.70%	1.91%	1.00%	2.87%	5.33%	7.28%	10.23%
12	CMS Energy Corporation	CMS	\$1.16	\$31.69	3.66%	3.89%	6.20%	6.73%	2.50%	6.14%	%98.6	10.03%	10.64%
13	Consolidated Edison, Inc.	G	\$2.60	\$59.34	4.38%	4.50%	2.70%	2.38%	3.00%	2.69%	6.87%	7.19%	7.51%
4	Dominion Resources, Inc.	۵	\$2.59	\$70.94	3.65%	3.90%	6.30%	5.89%	8.00%	6.73%	%92.6	10.63%	11.94%
15	DTE Energy Company	DTE	\$2.92	\$78.15	3.74%	3.92%	2.00%	4.51%	2.00%	4.84%	8.42%	8.75%	8.92%
16	Duke Energy Corporation	S S	\$3.18	\$75.64	4.20%	4.40%	4.70%	4.49%	2.00%	4.73%	8.88%	9.13%	9.41%
17	Empire District Electric Company	EDE	\$1.04	\$25.27	4.12%	4.29%	2.00%	2.00%	3.00%	4.33%	7.24%	8.63%	9.35%
9	Eversource Energy	ES	\$1.67	\$47.78	3.50%	3.74%	Ϋ́Z	₹ Z	7.00%	7.00%	10.74%	10.74%	10.74%
19	FirstEnergy Corp.	出	\$1.44	\$34.67	4.15%	4.39%	%00'9	6.37%	2.00%	2.79%	9.36%	10.18%	10.79%
20	Great Plains Energy Inc.	GXP	\$0.98	\$26.21	3.74%	3.85%	4.00%	4.00%	1.00%	3.00%	4.78%	6.85%	7.89%
7	IDACORP, Inc.	DA	\$1.88	\$58.41	3.22%	3.45%	6.80%	%09.9	8.50%	7.30%	10.03%	10.75%	11.99%
22	NorthWestern Corporation	NWE	\$1.92	\$50.29	3.82%	4.03%	2.00%	2.00%	6.50%	2.50%	9.01%	9.53%	10.57%
23	OGE Energy Corp.	OGE	\$1.00	\$34.96	2.86%	2.97%	2.00%	4.00%	3.00%	4.00%	5.95%	6.97%	8.00%
54	Otter Tail Corporation	OTTR	\$1.23	\$29.53	4.16%	4.48%	∢ Z	8.00.9	%00.6	7.50%	10.41%	11.98%	13.54%
22	Pinnacle West Capital Corporation	PNW	\$2.38	\$59.20	4.02%	4.21%	4.60%	5.30%	4.00%	4.63%	8.18%	8.84%	9.53%
56	Portland General Electric Company	POR	\$1.20	\$34.50	3.48%	3.66%	5.20%	4.72%	%00'9	5.31%	8.36%	8.97%	%69.6
27	SCANA Corporation	SCG	\$2.18	\$53.30	4.09%	4.27%	4.20%	4.30%	4.50%	4.33%	8.46%	8.60%	8.77%
28	Southern Company	SO	\$2.17	\$44.89	4.83%	5.02%	3.50%	3.32%	4.50%	3.77%	8.31%	8.79%	9.55%
58	TECO Energy, Inc.	里	\$0.90	\$18.43	4.88%	5.25%	7.10%	9.20%	%00'9	7.43%	11.18%	12.68%	14.53%
30	Westar Energy, Inc.	WR	\$1.44	\$36.94	3.90%	4.07%	3.50%	3.40%	%00'9	4.30%	7.43%	8.37%	10.13%
31	Xcel Energy Inc.	XEL	\$1.28	\$32.56	3.93%	4.12%	9.00%	4.58%	4.50%	4.69%	8.61%	8.81%	9.13%
32	Proxy Group Mean				3.90%	4.10%	5.11%	5.08%	5.22%	5.25%	8.60%	9.35%	10.20%
33	Proxy Group Median				3.93%	4.12%	2.00%	2.00%	2.00%	5.31%	8.88%	9.07%	10.13%

Notes:
 [1] Source: Bloomberg Professional
 [2] Source: Bloomberg Professional, equals indicated number of trading day average as of June 25, 2015
 [3] Equals (1) (2)
 [4] Equals (3) x (1 + [8])
 [5] Source: Zacks
 [6] Source: Yahool Finance
 [7] Source: Value Line
 [8] Equals Average([5], [6], [7])
 [9] Equals (3] x (1 + Minimum([5], [6], [7])
 [10] Equals (4] + [8]
 [11] Equals (3] x (1 + Maximum([5], [6], [7]))
 [12] Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model with Sustainable Growth and Half Year Growth Adjustment 30 Day Average Stock Price

က			Ξ	[2]	[5]	[4]	[2]	[9]	[2]	8	6	[10]	Ξ	[12]
			Annualized	Average Stock	Dividend	Expected Dividend	Zacks Earníngs	First Call Earnings	Value Line Earnings	Retention	Average Earnings	Low	Mean	High
4	Сотрапу	Ticker	Dividend	Price	Yield	Yield	Growth	Growth	Growth	Growth	Growth	ROE	ROE	ROE
Ŋ	ALLETE, Inc.	ALE	\$2.02	\$48.97	4.13%	4.24%	₹ Z	6.00%	6.50%	3.97%	5.49%	8.17%	9.73%	10.76%
9	Alliant Energy Corporation	LN	\$2.20	\$59.59	3.69%	3.80%	5.30%	5.45%	%00.9	2.66%	2.60%	9.09%	9.40%	9.80%
7	Ameren Corporation	AEE	\$1.64	\$39.13	4.19%	4.31%	6.80%	5.85%	%00.9	4.56%	2.80%	8.85%	10.12%	11.13%
œ	American Electric Power Company, Inc.	AEP	\$2.12	\$54.66	3.88%	3.97%	4.90%	2.08%	2.00%	4.07%	4.76%	8.03%	8.73%	%90'6
თ	Avista Corporation	AVA	\$1.32	\$31.45	4.20%	4.31%	ΑZ	2.00%	7.00%	3.80%	5.27%	8.07%	9.57%	11.34%
9	Black Hills Corporation	BKH	\$1.62	\$46.14	3.51%	3.60%	ž	7.00%	4.50%	4.02%	5.17%	7.60%	8.77%	10.63%
7	CenterPoint Energy, Inc.	CNP	\$0.99	\$19.77	5.01%	5.08%	5.70%	1.91%	1.00%	3.19%	2.95%	6.03%	8.03%	10.85%
12	CMS Energy Corporation	CMS	\$1.16	\$32.93	3.52%	3.63%	6.20%	6.73%	2.50%	5.27%	5.92%	8.88%	9.55%	10.37%
13	Consolidated Edison, Inc.		\$2.60	\$59.64	4.36%	4.42%	2.70%	2.38%	3.00%	3.15%	2.81%	6.79%	7.23%	7.58%
4	Dominion Resources, Inc.	Δ	\$2.59	\$69.20	3.74%	3.87%	6.30%	5.89%	8.00%	%00.9	6.55%	9.74%	10.41%	11.89%
15	DTE Energy Company	DTE	\$2.92	\$76.77	3.80%	3.90%	2.00%	4.51%	2.00%	4.88%	4.85%	8.40%	8.74%	8.90%
16	Duke Energy Corporation	DOK DOK	\$3.18	\$74.10	4.29%	4.38%	4.70%	4.49%	%00.9	2.67%	4.22%	7.02%	8.60%	9.40%
17	Empire District Electric Company		\$1.04	\$22.93	4.53%	4.63%	2.00%	2.00%	3.00%	3.25%	4.06%	%09.2	8.69%	9.65%
18	Eversource Energy	ES	\$1.67	\$47.64	3.51%	3.62%	6.80%	%09'9	8.50%	4.50%	%09.9	8.08%	10.22%	12.15%
19	FirstEnergy Corp.	빞	\$1.44	\$34.60	4.16%	4.28%	Ϋ́	A A	7.00%	4.09%	5.54%	8.34%	9.82%	11.31%
20	Great Plains Energy Inc.	GXP	\$0.98	\$25.35	3.87%	3.96%	%00.9	6.37%	2.00%	3.02%	5.10%	6.94%	9.06%	10.36%
7	IDACORP, Inc.	IDA	\$1.88	\$57.95	3.24%	3.29%	4.00%	4.00%	1.00%	3.51%	3.13%	4.26%	6.42%	7.31%
22	NorthWestern Corporation	NWE	\$1.92	\$51.02	3.76%	3.86%	2.00%	2.00%	8.50%	3.90%	5.10%	7.73%	8.96%	10.39%
23	OGE Energy Corp.	OGE	\$1.00	\$30.33	3.30%	3.36%	2.00%	4.00%	3.00%	3.68%	3.92%	6.35%	7.28%	8.38%
24	Otter Tail Corporation	OTTR	\$1.23	\$26.99	4.56%	4.73%	Υ Υ	%00.9	%00.6	7.25%	7.42%	10.69%	12.14%	13.76%
22	Pinnacle West Capital Corporation	PNW	\$2.38	\$58.80	4.05%	4.14%	4.60%	5.30%	4.00%	4.52%	4.60%	8.13%	8.74%	9.45%
56	Portland General Electric Company	POR	\$1.20	\$34.24	3.50%	3.59%	5.20%	4.72%	%00.9	4.04%	4.99%	7.61%	8.58%	9.61%
27	SCANA Corporation	SCG	\$2.18	\$51.78	4.21%	4.31%	4.20%	4.30%	4.50%	5.13%	4.53%	8.50%	8.84%	9.45%
28	Southern Company	SO	\$2.17	\$42.94	5.05%	5.15%	3.50%	3.32%	4.50%	4.40%	3.93%	8.46%	9.08%	9.67%
53	TECO Energy, Inc.	世	\$0.90	\$18.35	4.90%	2.06%	7.10%	9.20%	%00'9	3.60%	6.48%	8.59%	11.54%	14.33%
30	Westar Energy, Inc.	WR	\$1.44	\$35.52	4.05%	4.15%	3.50%	3.40%	%00.9	5.25%	4.54%	7.52%	8.68%	10.18%
33	Xcel Energy Inc.	XEL	\$1.28	\$33.19	3.86%	3.94%	5.00%	4.58%	4.50%	3.95%	4.51%	7.88%	8.45%	8.95%
32	Proxy Group Mean				4.03%	4.13%	5.11%	5.08%	5.22%	4.27%	4.96%	7.90%	9.09%	10.25%
33	Proxy Group Median				4.05%	4.14%	2.00%	2.00%	5.00%	4.04%	4.99%	8.07%	8.84%	10.18%

1 (1) Source: Bloomberg Professional
36 [1] Source: Bloomberg Professional, equals indicated number of trading day average as of June 25, 2015
37 [3] Equals [1] / [2]
38 [4] Equals [1] × (1 + 0.5 x [9])
39 [5] Source: Sacks
40 [6] Source: Yahoof Finance
41 [7] Source: Yahoof Finance
42 [8] Source: PNM Exhibit RBH-4
43 [9] Equals Average([5], [6], [7], [8])
44 [10] Equals [3] × (1 + 0.5 x Maximum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])
45 [11] Equals [3] × (1 + 0.5 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8]) 335 337 337 337 339 44 44 45 45 46 46

Constant Growth Discounted Cash Flow Model with Sustainable Growth and Half Year Growth Adjustment 90 Day Average Stock Price

က			Ξ	[2]	<u></u>	4	[9]	[9]	· [2]	[8]	6	[10]	[11]	[12]
			Corilogad	Average	و و و در در در	Expected	Zacks	First Call	Value Line	o to to to	Average	- -	Q Q	, (c)
4	Сотрапу	Ticker	Dividend	Price	Yield	Yield	Growth	Growth	Growth	Growth	Growth	ROE	ROE	ROE
ω	ALLETE, Inc.	ALE	\$2.02	\$51.08	3.95%	4.06%	Ϋ́	%00'9	6.50%	3.97%	5.49%	8.00%	9.55%	10.58%
9	Alliant Energy Corporation	LNT	\$2.20	\$61.38	3.58%	3.68%	5.30%	5.45%	%00.9	2.66%	2.60%	8.98%	9.29%	8.69%
^	Ameren Corporation	AEE	\$1.64	\$40.87	4.01%	4.13%	6.80%	5.85%	%00.9	4.56%	2.80%	8.67%	9.93%	10.95%
∞	American Electric Power Company, Inc.	AEP	\$2.12	\$55.94	3.79%	3.88%	4.90%	5.08%	2.00%	4.07%	4.76%	7.94%	8.64%	8.97%
თ	Avista Corporation	AVA	\$1.32	\$32.71	4.04%	4.14%	¥	2.00%	7.00%	3.80%	5.27%	7.91%	9.41%	11.18%
9	Black Hills Corporation	BKT	\$1.62	\$48.78	3.32%	3.41%	¥	7.00%	4.50%	4.02%	5.17%	7.41%	8.58%	10.44%
7	CenterPoint Energy, Inc.	SNP	\$0.99	\$20.49	4.83%	4.90%	2.70%	1.91%	1.00%	3.19%	2.95%	5.85%	7.85%	10.67%
12	CMS Energy Corporation	CMS	\$1.16	\$34.02	3.41%	3.51%	6.20%	6.73%	2.50%	5.27%	5.92%	8.77%	9.43%	10.25%
13	Consolidated Edison, Inc.		\$2.60	\$60.91	4.27%	4.33%	2.70%	2.38%	3.00%	3.15%	2.81%	%02'9	7.14%	7.49%
4	Dominion Resources, Inc.	Ω	\$2.59	\$70.78	3.66%	3.78%	6.30%	5.89%	8.00%	%00'9	6.55%	%99'6	10.33%	11.81%
15	DTE Energy Company	DTE	\$2.92	\$79.41	3.68%	3.77%	2.00%	4.51%	2.00%	4.88%	4.85%	8.27%	8.61%	8.77%
16	Duke Energy Corporation	Š	\$3.18	\$76.11	4.18%	4.27%	4.70%	4.49%	2,00%	2.67%	4.22%	6.91%	8.48%	9.28%
17	Empire District Electric Company		\$1.04	\$24.01	4.33%	4.42%	2.00%	5.00%	3.00%	3.25%	4.06%	7.40%	8.48%	9.44%
9	Eversource Energy	ES	\$1.67	\$49.32	3.39%	3.50%	6.80%	%09'9	8.50%	4.50%	%09.9	7.96%	10.10%	12.03%
9	FirstEnergy Corp.	Ⅱ	\$1.44	\$35.13	4.10%	4.21%	A A	Ϋ́	7.00%	4.09%	5.54%	8.27%	9.76%	11.24%
20	Great Plains Energy Inc.	GXP	\$0.98	\$26.14	3.75%	3.84%	%00.9	6.37%	2.00%	3.02%	2.10%	6.82%	8.94%	10.24%
71	IDACORP, Inc.	DΑ	\$1.88	\$60.44	3.11%	3.16%	4.00%	4.00%	1.00%	3.51%	3.13%	4.13%	6.29%	7.17%
22	NorthWestern Corporation	NWE	\$1.92	\$52.34	3.67%	3.76%	2.00%	2.00%	6.50%	3.90%	5.10%	7.64%	8.86%	10.29%
23	OGE Energy Corp.	OGE	\$1.00	\$31.57	3.17%	3.23%	5.00%	4.00%	3.00%	3.68%	3.92%	6.21%	7.15%	8.25%
24	Otter Tail Corporation	OTTR	\$1.23	\$29.98	4.10%	4.25%	Ą Z	%00.9	%00.6	7.25%	7.42%	10.23%	11.67%	13.29%
22	Pinnacle West Capital Corporation	PNV	\$2.38	\$61.59	3.86%	3.95%	4.60%	5.30%	4.00%	4.52%	4.60%	7.94%	8.56%	9.27%
56	Portland General Electric Company	POR	\$1.20	\$35.60	3.37%	3.46%	5.20%	4.72%	%00.9	4.04%	4.99%	7.48%	8.44%	9.47%
27	SCANA Corporation	SCG	\$2.18	\$53.75	4.06%	4.15%	4.20%	4.30%	4.50%	5.13%	4.53%	8.34%	8.68%	9.29%
28	Southern Company	SO	\$2.17	\$44.08	4.92%	5.02%	3.50%	3.32%	4.50%	4.40%	3.93%	8.32%	8.95%	9.53%
59	TECO Energy, Inc.	旦	\$0.90	\$19.00	4.74%	4.89%	7.10%	9.20%	%00.9	3.60%	6.48%	8.42%	11.36%	14.15%
30	Westar Energy, Inc.	WR	\$1.44	\$37.28	3.86%	3.95%	3.50%	3.40%	%00'9	5.25%	4.54%	7.33%	8.49%	9.98%
31	Xcel Energy Inc.	XEL	\$1.28	\$34.08	3.76%	3.84%	2.00%	4.58%	4.50%	3.95%	4.51%	7.78%	8.35%	8.85%
32	Proxy Group Mean				3.89%	3.98%	5.11%	5.08%	5.22%	4.27%	4.96%	7.75%	8.94%	10.09%
33	Proxy Group Median				3.86%	3.95%	5.00%	5.00%	5.00%	4.04%	4.99%	7.94%	8.68%	%86.6
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Notes:
 11 Source: Bloomberg Professional
 [2] Source: Bloomberg Professional, equals indicated number of trading day average as of June 25, 2015
 [3] Equals [1] / [2]
 [4] Equals [3] x (1 + 0.5 x [9])
 [5] Source: Zacks
 [6] Source: Yahool Finance
 [7] Source: Value Line
 [8] Source: PNM Exhibit RBH-4
 [8] Source: PNM Exhibit RBH-4
 [9] Equals Average([5], [6], [7], [8])
 [10] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])
 [12] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7], [8]))

Constant Growth Discounted Cash Flow Model with Sustainable Growth and Half Year Growth Adjustment 180 Day Average Stock Price

[12]	ij	ROE	10.50%	9.61%	10.82%	8.86%	11.03%	10.32%	10.34%	10.25%	7.35%	11.72%	8.66%	9.11%	9.07%	11.95%	11.09%	10.15%	7.09%	10.23%	8.05%	13.26%	9.16%	9.39%	9.13%	9.30%	14.03%	9.86%	8.81%	9.97%	9.86%
[11]	Mean	ROE	9.47%	9.21%	9.80%	8.54%	9.27%	8.46%	7.52%	9.43%	7.00%	10.24%	8.51%	8.31%	8.11%	10.01%	9.60%	8.86%	6.21%	8.80%	6.96%	11.65%	8.45%	8.36%	8.52%	8.72%	11.24%	8.37%	8.31%	8.81%	8.54%
[10]	Pow	ROE	7.92%	8.90%	8.54%	7.83%	7.77%	7.29%	5.53%	8.76%	6.56%	9.57%	8.16%	6.73%	7.03%	7.88%	8.12%	6.74%	4.05%	7.57%	6.02%	10.20%	7.83%	7.40%	8.18%	8.09%	8.30%	7.21%	7.74%	7.63%	7.83%
[6]	Average Earnings	Growth	5.49%	2.60%	5.80%	4.76%	5.27%	5.17%	2.95%	5.92%	2.81%	6.55%	4.85%	4.22%	4.06%	%09'9	5.54%	5.10%	3.13%	5.10%	3.92%	7.42%	4.60%	4.99%	4.53%	3.93%	6.48%	4.54%	4.51%	4.96%	4.99%
[8]	Retention	Growth	3.97%	2.66%	4.56%	4.07%	3.80%	4.02%	3.19%	5.27%	3.15%	%00.9	4.88%	2.67%	3.25%	4.50%	4.09%	3.02%	3.51%	3.90%	3.68%	7.25%	4.52%	4.04%	5.13%	4.40%	3.60%	5.25%	3.95%	4.27%	4.04%
	Value Line Earnings	Growth	6.50%	%00.9	%00'9	5.00%	7.00%	4.50%	1.00%	5.50%	3.00%	8.00%	2.00%	5.00%	3.00%	8.50%	7.00%	2.00%	1.00%	6.50%	3.00%	%00.6	4.00%	%00.9	4.50%	4.50%	%00.9	8.00.9	4.50%	5.22%	2.00%
[6]	First Call Earnings	Growth	%00'9	5.45%	5.85%	5.08%	2.00%	7.00%	1.91%	6.73%	2.38%	5.89%	4.51%	4.49%	2.00%	%09.9	A A	6.37%	4.00%	2.00%	4.00%	%00'9	5.30%	4.72%	4.30%	3.32%	9.20%	3.40%	4.58%	5.08%	2.00%
[5]	Zacks	Growth	Ą	5.30%	808.9	4.90%	Ϋ́	Ϋ́	2.70%	6.20%	2.70%	6.30%	2.00%	4.70%	2.00%	%08.9	A A	%00.9	4.00%	2.00%	2.00%	A A	4.60%	5.20%	4.20%	3.50%	7.10%	3.50%	2.00%	5.11%	2.00%
[4]	Expected Dividend	Yield	3.98%	3.60%	4.00%	3.78%	4.00%	3.29%	4.57%	3.51%	4.19%	3.69%	3.66%	4.09%	4.05%	3.42%	4.06%	3.76%	3.08%	3.70%	3.04%	4.23%	3.84%	3.37%	3.99%	4.79%	4.77%	3.83%	3.80%	3.85%	3.83%
[3]	Dividend	Yield	3.87%	3.50%	3.89%	3.69%	3.90%	3.21%	4.51%	3.41%	4.14%	3.58%	3.57%	4.01%	3.97%	3.31%	3.95%	3.67%	3.03%	3.61%	2.98%	4.08%	3.76%	3.29%	3.90%	4.70%	4.62%	3.74%	3.72%	3.76%	3.74%
[2]	Average Stock	Price	\$52.15	\$62.78	\$42.21	\$57.48	\$33.86	\$50.52	\$21.96	\$34.05	\$62.87	\$72.44	\$81.72	\$79.36	\$26.21	\$50.51	\$36.48	\$26.74	\$62.00	\$53.21	\$33.59	\$30.14	\$63.34	\$36.46	\$55.87	\$46.21	\$19.49	\$38.47	\$34.44		
[7]	Annualized	Dividend	\$2.02	\$2.20	\$1.64	\$2.12	\$1.32	\$1.62	\$0.99	\$1.16	\$2.60	\$2.59	\$2.92	\$3.18	\$1.04	\$1.67	\$1.44	\$0.98	\$1.88	\$1.92	\$1.00	\$1.23	\$2.38	\$1.20	\$2.18	\$2.17	\$0.90	\$1.44	\$1.28		
		Ticker	ALE	F _N	AEE	AEP	AVA	BKH	CNP	CMS		Δ	DTE	S S	EDE	ES	뿐	GXP	ΙDΑ	NWE	OGE	OTTR	PNW	POR	SCG	SO	世	WR	XEL		
		Company	ALLETE, Inc.	Alliant Energy Corporation	Ameren Corporation	American Electric Power Company, Inc.	Avista Corporation	Black Hills Corporation	CenterPoint Energy, Inc.	CMS Energy Corporation	Consolidated Edison, Inc.	Dominion Resources, Inc.	DTE Energy Company	Duke Energy Corporation	Empire District Electric Company	Eversource Energy	FirstEnergy Corp.	Great Plains Energy Inc.	Eversource Energy	NorthWestern Corporation	OGE Energy Corp.	Otter Tail Corporation	Pinnacle West Capital Corporation	Portland General Electric Company	SCANA Corporation	Southern Company	TECO Energy, Inc.	Westar Energy, Inc.	Xcel Energy inc.	Proxy Group Mean	Proxy Group Median
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Notes:
 [1] Source: Bloomberg Professional
 [2] Source: Bloomberg Professional, equals indicated number of trading day average as of June 25, 2015
 [3] Equals [1] / [2]
 [4] Equals [3] x (1 + 0.5 x [9])
 [5] Source: Zacks
 [6] Source: Value Line
 [7] Source: Value Line
 [8] Source: PNM Exhibit RBH-4
 [9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7], [8])
 [10] Equals [4] + [9]
 [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 with Sustainable Growth and Half Year Growth Adjustment 360 Day Average Stock Price

[12]	High	ROE	10.61%	9.80%	10.96%	%90'6	11.21%	10.16%	10.11%	10.51%	7.60%	11.80%	8.83%	9.31%	9.25%	12.14%	11.30%	10.23%	7.28%	10.44%	7.93%	13.35%	9.43%	9.58%	9.32%	9.44%	14.31%	10.02%	9.03%	10.11%	10.02%
[11]	Mean	ROE	9.58%	9.39%	9.94%	8.73%	9.44%	8.31%	7.30%	9.69%	7.25%	10.32%	8.67%	8.51%	8.26%	10.21%	9.81%	8.93%	6.40%	9.01%	6.84%	11.74%	8.72%	8.55%	8.71%	8.86%	11.52%	8.52%	8.53%	8.95%	8.73%
[10]	Low	ROE	8.03%	9.09%	8.67%	8.03%	7.94%	7.13%	5.31%	9.05%	6.81%	9.65%	8.33%	6.93%	7.18%	8.07%	8.33%	6.81%	4.23%	7.79%	2.90%	10.29%	8.10%	7.59%	8.38%	8.23%	8.57%	7.36%	7.96%	7.77%	8.03%
[6]	Average Earnings	Growth	5.49%	2.60%	2.80%	4.76%	5.27%	5.17%	2.95%	5.92%	2.81%	6.55%	4.85%	4.22%	4.06%	8.60%	5.54%	5.10%	3.13%	5.10%	3.92%	7.42%	4.60%	4.99%	4.53%	3.93%	6.48%	4.54%	4.51%	4.96%	4.99%
[8]	Retention	Growth	3.97%	2.66%	4.56%	4.07%	3.80%	4.02%	3.19%	5.27%	3.15%	8.00.9	4.88%	2.67%	3.25%	4.50%	4.09%	3.02%	3.51%	3.90%	3.68%	7.25%	4.52%	4.04%	5.13%	4.40%	3.60%	5.25%	3.95%	4.27%	4.04%
[7]	Value Line Earnings	Growth	6.50%	8.00%	8.00%	2.00%	7.00%	4.50%	1.00%	5.50%	3.00%	8.00%	2.00%	2.00%	3.00%	8.50%	7.00%	2.00%	1.00%	6.50%	3.00%	%00.6	4.00%	%00'9	4.50%	4.50%	%00'9	%00'9	4.50%	5.22%	2.00%
[9]	First Call Earnings	Growth	8.00%	5.45%	5.85%	5.08%	2.00%	7.00%	1.91%	6.73%	2.38%	5.89%	4.51%	4.49%	2.00%	%09.9	Ϋ́	6.37%	4.00%	2.00%	4.00%	8.00.9	5.30%	4.72%	4.30%	3.32%	9.20%	3.40%	4.58%	5.08%	2.00%
[9]	Zacks Earnings	Growth	₹	5.30%	8.80%	4.90%	Ϋ́	Ϋ́	2.70%	6.20%	2.70%	6.30%	2.00%	4.70%	5.00%	808.9	Ϋ́	%00.9	4.00%	2.00%	2.00%	A A	4.60%	5.20%	4.20%	3.50%	7.10%	3.50%	2.00%	5.11%	2.00%
[4]	Expected Dividend	Yield	4.09%	3.79%	4.14%	3.97%	4.17%	3.13%	4.35%	3.77%	4.44%	3.77%	3.83%	4.29%	4.20%	3.61%	4.27%	3.83%	3.27%	3.91%	2.92%	4.32%	4.11%	3.57%	4.18%	4.93%	5.04%	3.99%	4.02%	4.00%	4.02%
<u>E</u>	Dividend	Yield	3.98%	3.69%	4.02%	3.88%	4.06%	3.05%	4.29%	3.66%	4.38%	3.65%	3.74%	4.20%	4.12%	3.50%	4.15%	3.74%	3.22%	3.82%	2.86%	4.16%	4.02%	3.48%	4.09%	4.83%	4.88%	3.90%	3.93%	3.90%	3.93%
[2]	Average Stock	Price	\$50.73	\$59.66	\$40.80	\$54.66	\$32.48	\$53.06	\$23.08	\$31.69	\$59.34	\$70.94	\$78.15	\$75.64	\$25.27	\$47.78	\$34.67	\$26.21	\$58.41	\$50.29	\$34.96	\$29.53	\$59,20	\$34.50	\$53.30	\$44.89	\$18.43	\$36.94	\$32.56		
Ξ	Annualized	Dividend	\$2.02	\$2.20	\$1.64	\$2.12	\$1.32	\$1,62	\$0.99	\$1.16	\$2,60	\$2.59	\$2.92	\$3.18	\$1.04	\$1.67	\$1.44	\$0.98	\$1.88	\$1.92	\$1.00	\$1.23	\$2.38	\$1.20	\$2.18	\$2.17	\$0.90	\$1.44	\$1.28		
		Ticker	ALE	LNT	AEE	AEP	AVA	BKH	CNP	CMS		Δ	DTE	DCK CK	EDE	ES	丑	GXP	ЮA	NWE	OGE	OTTR	PNW	PoR	SCG	SO	世	WR	XEL		
		Company	ALLETE, Inc.	Alliant Energy Corporation	Ameren Corporation	American Electric Power Company, Inc.	Avista Corporation	Black Hills Corporation	CenterPoint Energy, Inc.	CMS Energy Corporation	Consolidated Edison, Inc.	Dominion Resources, Inc.	DTE Energy Company	Duke Energy Corporation	Empire District Electric Company	Eversource Energy	FirstEnergy Corp.	Great Plains Energy Inc.	Eversource Energy	NorthWestern Corporation	OGE Energy Corp.	Otter Tail Corporation	Pinnacle West Capital Corporation	Portland General Electric Company	SCANA Corporation	Southern Company	TECO Energy, Inc.	Westar Energy, Inc.	Xcel Energy Inc.	Proxy Group Mean	Proxy Group Median
ო		4	3	9	7	80	თ	10	7	12	13	4	15	16	17	18	19	20	7	22	23	24	25	56	27	28	29	30	31	32	33

Notes:
 13 Source: Bloomberg Professional
 [1] Source: Bloomberg Professional
 [2] Source: Bloomberg Professional, equals indicated number of trading day average as of June 25, 2015
 [3] Equals [1] / [2]
 [4] Equals [3] x (1 + 0.5 x [9])
 [5] Source: Zacks
 [6] Source: Yahool Finance
 [7] Source: Yahool Finance
 [8] Source: PNM Exhibit RBH-4
 [8] Source: PNM Exhibit RBH-4
 [9] Equals Average([5], [6], [7], [8])
 [44] [10] Equals [3] x (1 + 0.5 x Manimum([5], [6], [7], [8]) + Minimum([5], [6], [7], [8])
 [12] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7], [8])) 33 33 33 33 33 33 44 44 44 45 45 46 46

Constant Growth Discounted Cash Flow Model with Sustainable Growth and Full Year Growth Adjustment 30 Day Average Stock Price

Yield Yield Growth Growth Growth Growth Growth 4.13% 4.35% NA 6.00% 6.50% 3.97% 5.49% 3.69% 3.90% 5.30% 5.45% 6.00% 5.66% 5.60% 3.89% 4.13% 6.00% 5.85% 6.00% 4.56% 5.60% 3.88% 4.06% 4.00% 6.00% 4.76% 7.75%
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Constant Growth Discounted Cash Flow Model with Sustainable Growth and Full Year Growth Adjustment 90 Day Average Stock Price

[12]	High	Z L	10.71%	%08'6	11.09%	%90.6	11.32%	10.55%	10.81%	10.37%	7.56%	11.95%	8.86%	9.39%	9.55%	12.17%	11.39%	10.36%	7.23%	10.41%	8.33%	13.47%	9.37%	9.57%	9.39%	9.64%	14.37%	10.09%	8.94%	10.21%	10.09%
[11]	Mean	ACE.	%99.6	9.39%	10.05%	8.73%	9.51%	8.67%	7.92%	9.54%	7.20%	10.45%	8.70%	8.57%	8.57%	10.21%	9.87%	9.04%	6.33%	8.95%	7.21%	11.82%	8.65%	8.53%	8.77%	9.05%	11.52%	8.58%	8.43%	9.03%	8.77%
[10]	Lo N	у П	8.08%	9.07%	8.76%	8.02%	7.99%	7.47%	5.88%	8.86%	6.75%	9.76%	8.35%	%96.9	7.46%	8.04%	8.36%	6.88%	4.14%	7.71%	6.26%	10.35%	8.02%	7.55%	8.43%	8.41%	8.51%	7.39%	7.86%	7.83%	8.02%
[6]	Average Earnings	Growth	5.49%	2.60%	5.80%	4.76%	5.27%	5.17%	2.95%	5.92%	2.81%	6.55%	4.85%	4.22%	4.06%	9.60%	5.54%	5.10%	3.13%	5.10%	3.92%	7.42%	4.60%	4.99%	4.53%	3.93%	6.48%	4.54%	4.51%	4.96%	4.99%
[8]	Retention	Growin	3.97%	2.66%	4.56%	4.07%	3.80%	4.02%	3.19%	5.27%	3.15%	%00.9	4.88%	2.67%	3.25%	4.50%	4.09%	3.02%	3.51%	3.90%	3.68%	7.25%	4.52%	4.04%	5.13%	4.40%	3.60%	5.25%	3.95%	4.27%	4.04%
	Value Line Earnings	Growin	6.50%	%00.9	6.00%	2.00%	7.00%	4.50%	1.00%	5.50%	3.00%	8.00%	2.00%	5.00%	3.00%	8.50%	7.00%	2.00%	1.00%	6.50%	3.00%	9.00%	4.00%	%00.9	4.50%	4.50%	%00.9	%00'9	4.50%	5.22%	2.00%
[9]	40	Growin	%00.9	5.45%	5.85%	5.08%	2.00%	7.00%	1.91%	6.73%	2.38%	5.89%	4.51%	4.49%	5.00%	%09.9	N A	6.37%	4.00%	2.00%	4.00%	8.00%	5.30%	4.72%	4.30%	3.32%	9.20%	3.40%	4.58%	5.08%	2.00%
[5]	Zacks Earnings	Growin	Ą	2.30%	8.80%	4.90%	A A	Ϋ́	2.70%	6.20%	2.70%	6.30%	2.00%	4.70%	2.00%	%08.9	A A	%00.9	4.00%	2.00%	2.00%	A A	4.60%	5.20%	4.20%	3.50%	7.10%	3.50%	2.00%	5.11%	2.00%
[4]	Expected Dividend	Yield	4.17%	3.78%	4.25%	3.97%	4.25%	3.49%	4.97%	3.61%	4.39%	3.90%	3.86%	4.35%	4.51%	3.61%	4.33%	3.94%	3.21%	3.86%	3.29%	4.41%	4.04%	3.54%	4.24%	5.12%	5.04%	4.04%	3.92%	4.08%	4.04%
[3]	Dividend	Y leid	3.95%	3.58%	4.01%	3.79%	4.04%	3.32%	4.83%	3.41%	4.27%	3.66%	3.68%	4.18%	4.33%	3.39%	4.10%	3.75%	3.11%	3.67%	3.17%	4.10%	3.86%	3.37%	4.06%	4.92%	4.74%	3.86%	3.76%	3.89%	3.86%
[2]	Average Stock	200	\$51.08	\$61.38	\$40.87	\$55.94	\$32.71	\$48.78	\$20.49	\$34.02	\$60.91	\$70.78	\$79.41	\$76.11	\$24.01	\$49.32	\$35.13	\$26.14	\$60.44	\$52.34	\$31.57	\$29.98	\$61.59	\$35.60	\$53.75	\$44.08	\$19.00	\$37.28	\$34.08		
Ξ	Annualized	Dividend	\$2.02	\$2.20	\$1.64	\$2.12	\$1.32	\$1.62	\$0.99	\$1.16	\$2.60	\$2.59	\$2.92	\$3.18	\$1.04	\$1.67	\$1.44	\$0.98	\$1.88	\$1.92	\$1.00	\$1.23	\$2.38	\$1.20	\$2.18	\$2.17	\$0.90	\$1.44	\$1.28		
	i S E	licker	ALE	LN	AEE	AEP	AVA	BKH	CNP	CMS		Δ	DTE	DUK	EDE	ES	出	GXP	IDA	NWE	OGE	OTTR	PNW	Por	SCG	SO	旦	WR	XEL		
		Company	ALLETE, Inc.	Alliant Energy Corporation	Ameren Corporation	American Electric Power Company, Inc.	Avista Corporation	Black Hills Corporation	CenterPoint Energy, Inc.	CMS Energy Corporation	Consolidated Edison, Inc.	Dominion Resources, Inc.	DTE Energy Company	Duke Energy Corporation	Empire District Electric Company	Eversource Energy	FirstEnergy Corp.	Great Plains Energy Inc.	IDACORP, Inc.	NorthWestern Corporation	OGE Energy Corp.	Otter Tail Corporation	Pinnacle West Capital Corporation	Portland General Electric Company	SCANA Corporation	Southern Company	TECO Energy, Inc.	Westar Energy, Inc.	Xcel Energy Inc.	Proxy Group Mean	Proxy Group Median
ო	•	4	s.	9	7	œ	ი ი	9	7	12	13	14	15	16	17	18	19	50	21	22	53	54	52	56	27	28	. 62	30	31	32	33

Constant Growth Discounted Cash Flow Model with Sustainable Growth and Full Year Growth Adjustment 180 Day Average Stock Price

ო			Ξ	[2]	[6]	4	[2]	9	E	<u>@</u>	6	[10]	. [1]	[12]
				Average		Expected	Zacks	First Call	Value Line		Average	to review		
			Annualized	Stock	Dividend	Dividend	Earnings	Earnings	Earnings	Retention	Earnings	Low	Mean	High
4	Company	Ticker	Dividend	Price	Yield	Yield	Growth	Growth	Growth	Growth	Growth	ROE	ROE	ROE
		:	;		,		:			Ī		35000		
2	ALLETE, Inc.	ALE	\$2.02	\$52.15	3.87%	4.09%	₹ Z	%00.9	6.50%	3.97%	5.49%	8.00%	9.58%	10.63%
9	Alliant Energy Corporation	LNI	\$2.20	\$62.78	3.50%	3.70%	5.30%	5.45%	%00.9	2.66%	2.60%	8.99%	9.30%	9.71%
7	Ameren Corporation	AEE	\$1.64	\$42.21	3.89%	4.11%	%08'9	5.85%	%00.9	4.56%	2.80%	8.62%	9.91%	10.95%
œ	American Electric Power Company, Inc.	AEP	\$2.12	\$57.48	3.69%	3.86%	4.90%	5.08%	5.00%	4.07%	4.76%	7.91%	8.63%	8.96%
თ	Avista Corporation	AVA	\$1.32	\$33.86	3.90%	4.10%	Ϋ́	2.00%	7.00%	3.80%	5.27%	7.84%	9.37%	11.17%
10	Black Hills Corporation	BKT	\$1.62	\$50.52	3.21%	3.37%	Ϋ́	7.00%	4.50%	4.02%	5.17%	7.35%	8.55%	10.43%
7	CenterPoint Energy, Inc.	CNP	\$0.99	\$21.96	4.51%	4.64%	2.70%	1.91%	1.00%	3.19%	2.95%	5.55%	7.59%	10.46%
12	CMS Energy Corporation	CMS	\$1.16	\$34.05	3.41%	3.61%	6.20%	6.73%	2.50%	5.27%	5.92%	8.85%	9.53%	10.37%
13	Consolidated Edison, Inc.		\$2.60	\$62.87	4.14%	4.25%	2.70%	2.38%	3.00%	3.15%	2.81%	6.61%	7.06%	7.42%
14	Dominion Resources, Inc.	۵	\$2.59	\$72.44	3.58%	3.81%	6.30%	2.89%	8.00%	%00.9	6.55%	89.6	10.36%	11.86%
15	DTE Energy Company	DTE	\$2.92	\$81.72	3.57%	3.75%	2.00%	4.51%	2.00%	4.88%	4.85%	8.24%	8.59%	8.75%
16	Duke Energy Corporation	DUK	\$3.18	\$79.36	4.01%	4.18%	4.70%	4.49%	2.00%	2.67%	4.22%	6.79%	8.39%	9.21%
17	Empire District Electric Company	EDE	\$1.04	\$26.21	3.97%	4.13%	2.00%	2.00%	3.00%	3.25%	4.06%	7.09%	8.19%	9.17%
18	Eversource Energy	ES	\$1.67	\$50.51	3.31%	3.52%	80%	%09'9	8.50%	4.50%	%09.9	7.95%	10.12%	12.09%
19	FirstEnergy Corp.	밆	\$1.44	\$36.48	3.95%	4.17%	Υ V	ΑN	7.00%	4.09%	5.54%	8.20%	9.71%	11.22%
20	Great Plains Energy Inc.	GXP	\$0.98	\$26.74	3.67%	3.85%	%00.9	6.37%	2.00%	3.02%	5.10%	6.79%	8.95%	10.27%
7	IDACORP, Inc.	IDА	\$1.88	\$62.00	3.03%	3.13%	4.00%	4.00%	1.00%	3.51%	3.13%	4.06%	6.25%	7.15%
22	NorthWestern Corporation	NWE	\$1.92	\$53.21	3.61%	3.79%	2.00%	2.00%	6.50%	3.90%	5.10%	7.65%	8.89%	10.34%
23	OGE Energy Corp.	OGE	\$1.00	\$33.59	2.98%	3.09%	2.00%	4.00%	3.00%	3.68%	3.92%	6.07%	7.01%	8.13%
24	Otter Tail Corporation	OTTR	\$1.23	\$30.14	4.08%	4.38%	Ϋ́	800.9	%00.6	7.25%	7.42%	10.33%	11.80%	13.45%
25	Pinnacle West Capital Corporation	PNW	\$2.38	\$63.34	3.76%	3.93%	4.60%	5.30%	4.00%	4.52%	4.60%	7.91%	8.53%	9.26%
56	Portland General Electric Company	POR	\$1.20	\$36.46	3.29%	3.46%	5.20%	4.72%	%00.9	4.04%	4.99%	7.46%	8.44%	9.49%
27	SCANA Corporation	SCG	\$2.18	\$55.87	3.90%	4.08%	4.20%	4.30%	4.50%	5.13%	4.53%	8.27%	8.61%	9.23%
28	Southern Company	SO	\$2.17	\$46.21	4.70%	4.88%	3.50%	3.32%	4.50%	4.40%	3.93%	8.17%	8.81%	9.41%
58	TECO Energy, Inc.	믣	\$0.90	\$19.49	4.62%	4.92%	7.10%	9.20%	%00'9	3.60%	6.48%	8.39%	11.39%	14.24%
30	Westar Energy, Inc.	WR	\$1.44	\$38.47	3.74%	3.91%	3.50%	3.40%	%00'9	5.25%	4.54%	7.27%	8.45%	9.97%
31	Xcel Energy inc.	XEL	\$1.28	\$34.44	3.72%	3.88%	2.00%	4.58%	4.50%	3.95%	4.51%	7.81%	8.39%	8.90%
32	Proxy Group Mean				3.76%	3.95%	5.11%	2.08%	5.22%	4.27%	4.96%	7.70%	8.90%	10.08%
33	Proxy Group Median				3.74%	3.91%	5.00%	2.00%	2.00%	4.04%	4.99%	7.91%	8.63%	9.97%

¹¹ Source: Bloomberg Professional
36 [1] Source: Bloomberg Professional, equals indicated number of trading day average as of June 25, 2015
37 [3] Equals [1] / [2]
38 [4] Equals [1] / [2]
39 [5] Source: Sacks
40 [6] Source: Yahool Finance
41 [7] Source: Yalue Linance
42 [8] Source: PNM Exhibit RBH-4
43 [9] Equals Average([5], [6], [7], [8])
44 [10] Equals [3] x (1 + Minimum([5], [6], [7], [8])
45 [11] Equals [3] x (1 + Maximum([5], [6], [7], [8])
46 [12] Equals [3] x (1 + Maximum([5], [6], [7], [8])
47 [12] Equals [3] x (1 + Maximum([5], [6], [7], [8])
48 [12] Equals [3] x (1 + Maximum([5], [6], [7], [8])
49 [12] Equals [3] x (1 + Maximum([5], [6], [7], [8])
40 [13] Equals [3] x (1 + Maximum([5], [6], [7], [8]) 34 35 36 37 37 38 39 44 44 44 45 45 46

Constant Growth Discounted Cash Flow Model with Sustainable Growth and Full Year Growth Adjustment 360 Day Average Stock Price

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			Annualized	Average Stock	Dividend	Expected Dividend	Zacks Earnings	First Call Earnings	Value Line Earnings	Retention	Average	NO.	Mean	High
4	Company	Ticker	Dividend	Price	Yield	Yield	Growth	Growth	Growth	Growth	Growth	ROE	ROE	RÕE
L	1 H L	L	ć	1	ò	ì	<u> </u>	ò	ò	1	i de la constanta	2-000-00 7-0	ò	9
n	ALLEIE, INC.	ALE	\$2.02	\$20.73	3.86%	4.20%	<u>{</u>	6.00%	%nc.a	3.87%	0.48%	ς - - -	9.69%	10.74%
9	Alliant Energy Corporation	LN1	\$2.20	\$59.66	3.69%	3.89%	5.30%	5.45%	%00.9	2.66%	2.60%	9.18%	9.50%	9.91%
7	Ameren Corporation	AEE	\$1.64	\$40.80	4.02%	4.25%	%08'9	5.85%	%00'9	4.56%	2.80%	8.76%	10.06%	11.09%
8	American Electric Power Company, Inc.	AEP	\$2.12	\$54.66	3.88%	4.06%	4.90%	5.08%	2.00%	4.07%	4.76%	8.11%	8.83%	9.16%
6	Avista Corporation	AVA	\$1.32	\$32.48	4.06%	4.28%	₹ Z	2.00%	7.00%	3.80%	5.27%	8.02%	9.54%	11.35%
9	Black Hills Corporation	BKH	\$1.62	\$53,06	3.05%	3.21%	₹Z	7.00%	4.50%	4.02%	5.17%	7.19%	8.38%	10.27%
7	CenterPoint Energy, Inc.	CNP	\$0.99	\$23.08	4.29%	4.42%	2.70%	1.91%	1.00%	3.19%	2.95%	5.33%	7.36%	10.23%
12	CMS Energy Corporation	CMS	\$1.16	\$31.69	3.66%	3.88%	6.20%	6.73%	5.50%	5.27%	5.92%	9.12%	9.80%	10.64%
13	Consolidated Edison, Inc.	ED	\$2.60	\$59.34	4.38%	4.50%	2.70%	2.38%	3.00%	3.15%	2.81%	6.87%	7.31%	7.67%
4	Dominion Resources, Inc.	Ω	\$2.59	\$70.94	3.65%	3.89%	6.30%	5.89%	8.00%	%00.9	6.55%	9.76%	10.44%	11.94%
15	DTE Energy Company	DTE	\$2.92	\$78.15	3.74%	3.92%	2.00%	4.51%	2.00%	4.88%	4.85%	8.42%	8.76%	8.92%
16	Duke Energy Corporation	S S	\$3.18	\$75.64	4.20%	4.38%	4.70%	4.49%	2.00%	2.67%	4.22%	%66'9	8.60%	9.41%
17	Empire District Electric Company	EDE	\$1.04	\$25.27	4.12%	4.28%	2.00%	2.00%	3.00%	3.25%	4.06%	7.24%	8.34%	9.32%
18	Eversource Energy	S	\$1.67	\$47.78	3.50%	3.73%	808.9	%09.9	8.50%	4.50%	%09'9	8.15%	10.33%	12.29%
9	FirstEnergy Corp.	믣	\$1.44	\$34.67	4.15%	4.38%	Ϋ́	Ϋ́	7.00%	4.09%	5.54%	8.41%	9.93%	11.44%
20	Great Plains Energy Inc.	GXP	\$0.98	\$26.21	3.74%	3.93%	%00'9	6.37%	2.00%	3.02%	5.10%	6.87%	9.03%	10.35%
7	IDACORP, Inc.	IDA	\$1.88	\$58.41	3.22%	3.32%	4.00%	4.00%	1.00%	3.51%	3.13%	4.25%	6.45%	7.35%
22	NorthWestern Corporation	NWE	\$1.92	\$50.29	3.82%	4.01%	2.00%	2.00%	6.50%	3.90%	5.10%	%98'.	9.11%	10.57%
23	OGE Energy Corp.	OGE	\$1.00	\$34.96	2.86%	2.97%	5.00%	4.00%	3.00%	3.68%	3.92%	2.95%	6.89%	8.00%
54	Otter Tail Corporation	OTTR	\$1.23	\$29.53	4.16%	4.47%	₹ Z	%00.9	%00.6	7.25%	7.42%	10.41%	11.89%	13.54%
25	Pinnacle West Capital Corporation	PNW	\$2.38	\$59.20	4.02%	4.21%	4.60%	5.30%	4.00%	4.52%	4.60%	8.18%	8.81%	9.53%
56	Portland General Electric Company	POR	\$1.20	\$34.50	3.48%	3.65%	5.20%	4.72%	%00.9	4.04%	4.99%	7.66%	8.64%	%69.6
27	SCANA Corporation	SCG	\$2.18	\$53.30	4.09%	4.28%	4.20%	4.30%	4.50%	5.13%	4.53%	8.46%	8.81%	9.43%
28	Southern Company	SO	\$2.17	\$44.89	4.83%	5.02%	3.50%	3.32%	4.50%	4.40%	3.93%	8.31%	8.95%	9.55%
59	TECO Energy, Inc.	旦	\$0.90	\$18.43	4.88%	5.20%	7.10%	9.20%	%00.9	3.60%	6.48%	8.66%	11.68%	14.53%
30	Westar Energy, Inc.	ΧR	\$1.44	\$36.94	3.90%	4.08%	3.50%	3.40%	%00.9	5.25%	4.54%	7.43%	8.61%	10.13%
33	Xcel Energy Inc.	XEL	\$1.28	\$32.56	3.93%	4.11%	2.00%	4.58%	4.50%	3.95%	4.51%	8.04%	8.62%	9.13%
32	Proxy Group Mean				3.90%	4.09%	5.11%	5.08%	5.22%	4.27%	4.96%	7.84%	9.05%	10.23%
33	Proxy Group Median				3.93%	4.11%	2.00%	2.00%	5.00%	4.04%	4.99%	8.11%	8.83%	10.13%

^{| 13} Source: Bloomberg Professional | 13 Source: Bloomberg Professional | 14 Source: Bloomberg Professional | 15 Source: Bloomberg Professional, equals indicated number of trading day average as of June 25, 2015 | 15 Source: Bloomberg Professional, equals indicated number of trading day average as of June 25, 2015 | 18 Source: Sacks | 19 Source: Value Linace | 19 Source: Value Linace | 19 Source: PNM Exhibit RBH-4 | 17 Source: PNM Exhibit RBH-4 | 19 Source: PNM Exhibit RBH-4 | 10 Source: PNM 33 33 33 33 33 33 34 44 44 45 45 46 46

Retention Growth Calculation

PNM Exhibit RBH-4

Is contained in the following 2 pages.

Retention Growth Estimate

		Ξ	[2]	[3]	[4]	[2]	[9]	[2]	[8]	[6]	[10]	[11]	[12]	[13]	[14]
			Projected Dividend Declared per		Projected Book Value	Return		Projected Common Shares	Projected Common Shares	Common	2015	2015	2015	Projected Book Value per	Market/
2 Company	Ticker	per snare 2018-20	snare 2018- 20	Retention Ratio (B)	per Share 2018-20	on Book Value (R)	B X R	Outstanding 2016	Outstanding 2018-20	Growth	High Price	Low Price	price midpoint	Share 2015	Book Ratio
3 ALLETE, Inc.	ALE	4.00	2.40	40.00%	42.75	9.36%	3.74%	49.25	50.00	0.50%	\$59.70	\$47.80	\$ 53.75	37.05	1.45
4 Alliant Energy Corporation	Ρ̈́	4.50	2.85	36.67%	34.65	12.99%	4.76%	112.00	115.00	0.88%	\$70.80	\$57.80	\$ 64.30	31.75	2.03
5 Ameren Corporation	AEE	3.25	1.85	43.08%	34.25	9.49%	4.09%	242.65	250.00	0.99%		\$37.80	\$ 42.30	28.60	1.48
5 American Electric Power Company, Inc.	AEP	4.25	2.65	37.65%	42.00	10.12%	3.81%	494.00	500.00	0.40%	٠,	\$53.10	\$ 59.25	35.75	1.66
	AVA	2.50	1.55	38.00%	27.50	9.09%		62.50	64.00	0.79%	\$38.30	\$32.10	\$ 35.20	24.50	1.44
	EX.	3.25	1.90	41.54%	36.50	8.90%	3.70%	45.25	46.00	0.54%	\$53.40	\$47.90	\$ 50.65	31.90	1.59
	CNP	1.40	1.15	17.86%	11.75	11.91%	2.13%	436.00	450.00	1.05%	\$23.70	\$19.10	\$ 21.40	10.65	2.01
	CMS	2.25	1.50	33.33%	17.75	12.68%		279.00	285.00	0.70%	\$38.70	\$31.40	\$ 35.05	14.15	2.48
		4.50	2.90	35.56%	50.75	8.87%	3.15%	293.00	293.00	0.00%	\$72.30	\$58.70	\$ 65.50	44.35	1.48
	Δ	4.75	3.50	26.32%	28.00	16.96%	4.46%	618.00	630.00	0.64%	\$79.90	\$68.30	\$ 74.10	21.70	3.41
	DTE	5.75	3.50	39.13%	58.75	9.79%		183,50	192.00	1.51%	\$92.30	\$74.30	\$ 83.30	49.15	1.69
	DQ.	5.25	3.55	32.38%	65.00	8.08%		00'689	692.00	0.14%	\$90.00	\$73.60	\$ 81.80	58.65	1,39
	EDE	1.75	1.20	31.43%	20.00	8.75%		46.00	47.50	1.06%	\$31.50	\$22.30	\$ 26.90	18.30	1.47
	ES	3.75	2.10	44.00%	38.25	9.80%		319.00	322.00	0.31%	\$56.80	\$47.30	\$ 52.05	32.60	1.60
	世	3.00	1.60	46.67%	35.50	8.45%	3.94%	427.00	435.00	0.61%	\$41.70	\$33.80	\$ 37.75	30.55	1.24
	GXP	2.00	1.20	40.00%	26.75	7.48%	2.99%	154.75	155.50	0.16%	\$30.30	\$24.70	\$ 27.50	23.70	1.16
	IDΑ	3.90	2.25	42.31%	47.05	8.29%	3.51%	50.30	50.30	0.00%	\$70.50	\$59.20	\$ 64.85	40.70	1,59
20 NorthWestern Corporation	NVE	3.75	2.25	40.00%	38.50	9.74%	3.90%	47.00	47,00	0.00%	\$59.70	\$50.80	\$ 55.25	32.65	1.69
	OGE	2.25	1.55	31.11%	20.25	11.11%	3.46%	200.50	202.00	0.25%		\$29.10	\$ 32.80	17.10	1.92
	OTTR	2.25	1.32	41.33%	18.10	12.43%	5.14%	39.00	42.00	2.48%	\$33.40	\$26.10	\$ 29.75	16.05	1.85
3 Pinnacle West Capital Corporation	PNW	4.50	2.95	34.44%	47.00	9.57%	3.30%	111.50	118.00	1.89%	\$73.30	\$61.50	\$ 67.40	40.95	1.65
	POR	2.75	1.55	43.64%	30.50	9.05%	3.93%	88.90	89.50	0.22%	\$41.00	\$34.70	\$ 37.85	25.80	1.47
5 SCANA Corporation	SCG	4.50	2.50	44.44%	45.50	9.89%	4.40%	143.00	149.00	1.37%	\$65.60	\$51.30	\$ 58.45	38.05	1.54
26 Southern Company	SO	3.50	2.43	30.57%	25.75	13.59%	4.16%	913.00	919.00	0.22%	\$53.20	\$43.10	\$ 48,15	22.60	2.13
	世	1.40	1.00	28.57%	12.25	11.43%	3.27%	237.00	240.00	0.42%	\$22.00	\$18.20	\$ 20.10	11.10	1.81
8 Westar Energy, Inc.	Ν	3.00	1.65	45.00%	29.25	10.26%	4.62%	135.00	140.00	1.21%	\$44.00	\$34.20	\$ 39.10	25.60	1.53
9 Xeel Energy Inc.	XEI	2.50	1.60	36.00%	24.50	10 20%	7025	510.00	516.00	/0000	0000	07 00 6			1

30 32 33 33 33 33 34 44 44 45 45 46 47 47 48

[1] Source: Value Line
[2] Source: Value Line
[3] Equals 1 - [2] / [1]
[4] Source: Value Line
[5] Equals [1] / [4]
[6] Equals [1] / [4]
[6] Equals [1] / [4]
[7] Source: Value Line
[8] Source: Value Line
[9] Equals ([8] / [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 [12] / [13]
[16] Equals [16] / [14]
[17] Equals [16] × [14]
[18] Equals [16] × [14]

(((((((((((((((((((((((((((((((((((((((7	Company	Ticker	ญ	-	S×S	BR + SV
	(:	i		6	Ì
(((((((((((((((((((((((((((((((((((((((n	ALLETE, Inc.	ALE	0.73%	31.07%	0.23%	3.97%
(((111111111111111111111111111111111111	4	Alliant Energy Corporation	L N	1.77%	50.62%	0.90%	2.66%
(10000000000000000000000000000000000000	2	Ameren Corporation	AEE	1.46%	32.39%	0.47%	4.56%
	9	American Electric Power Company, Inc.	AEP	%99.0	39.66%	0.26%	4.07%
	7	Avista Corporation	AVA	1.13%	30.40%	0.34%	3.80%
	æ	Black Hills Corporation	BKH	0.86%	37.02%	0.32%	4.02%
	თ	CenterPoint Energy, Inc.	CNP	2.11%	50.23%	1.06%	3.19%
	9	CMS Energy Corporation	CMS	1.75%	59.63%	1.04%	5.27%
	Ξ	Consolidated Edison, Inc.		0.00%	32.29%	0.00%	3.15%
	12	Dominion Resources, Inc.	Δ	2.17%	70.72%	1.54%	6.00%
	5	DTE Energy Company	DTE	2.55%	41.00%	1.05%	4.88%
	4	Duke Energy Corporation	ΣĚ	0.20%	28.30%	0.06%	2.67%
	15	Empire District Electric Company	EDE	1.56%	31.97%	0.50%	3.25%
	16	Eversource Energy	S	0.49%	37.37%	0.18%	4.50%
	17	FirstEnergy Corp.	믵	0.76%	19.07%	0.14%	4.09%
	9	Great Plains Energy Inc.	бХР	0.19%	13.82%	0.03%	3.02%
	6	IDACORP, Inc.	Δ	%00.0	37.24%	0.00%	3.51%
	20	NorthWestern Corporation	NWE	0.00%	40.90%	0.00%	3.90%
	7	OGE Energy Corp.	OGE	0.47%	47.87%	0.23%	3.68%
	22	Otter Tail Corporation	OTTR	4.59%	46.05%	2.11%	7.25%
	23	Pinnacle West Capital Corporation	PNW	3.11%	39.24%	1.22%	4.52%
	54	Portland General Electric Company	POR	0.33%	31.84%	0.10%	4.04%
	52	SCANA Corporation	SCG	2.10%	34.90%	0.73%	5.13%
	56	Southern Company	SO	0.46%	53.06%	0.24%	4.40%
-	27	TECO Energy, Inc.	世	0.75%	44.78%	0.34%	3.60%
	28	Westar Energy, Inc.	N N	1.84%	34.53%	0.64%	5.25%
•	59	Xcel Energy Inc.	XEL	0.66%	41.84%	0.28%	3.95%

[15] [16] [17] [18]

Multi-Stage DCF Analysis

PNM Exhibit RBH-5

Is contained in the following 122 pages.

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

4	Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[2]	8	<u></u>	[10]	[11]	[12]	[13]
2			Stock	EP	EPS Growth Rate Estimates	ate Estima	ates		P	Payout Ratio		Iterative	terative Solution	Terminal	Terminal
						Value		Long-Term						P/E	PEG
9	Company	Ticker	Price	Zacks	First Call	Line	Average	Growth	2015	2019	2025	Proof	RR	Ratio	Ratio
7	ALLETE, Inc.	ALE	\$48.97	N A	%00'9	6.50%	6.25%	5.65%	86.00%	61.00%	67.30%	\$0.00	10.27%	15.38	2.72
œ	Alliant Energy Corporation	۲	\$59.59	5.30%	5,45%	%00'9	5.58%	2.65%	61.00%	63.00%	67.30%	\$0.00	10.01%	16.30	2.88
6	Ameren Corporation	AEE	\$39.13	6.80%	5.85%	%00.9	6.22%	2.65%	65.00%	25.00%	67.30%	\$0.00	10.35%	15.14	2.68
6	American Electric Power Company, Inc.	AEP	\$54.66	4.90%	2.08%	2.00%	4.99%	2.65%	65.00%	64.00%	67.30%	\$0.00	10.08%	16.05	2.84
Ξ	Avista Corporation	AVA	\$31.45	Ϋ́	2.00%	7.00%	%00'9	5.65%	67.00%	64.00%	67.30%	\$0.00	10.19%	15.68	2.77
12	Black Hills Corporation	BKH	\$46.14	Ν V	7.00%	4.50%	5.75%	2.65%	22.00%	29.00%	67.30%	\$0.00	10.31%	15.27	2.70
13	CenterPoint Energy, Inc.	SNP	\$19.77	5.70%	1.91%	1.00%	2.87%	5.65%	93.00%	80.00%	67.30%	\$0.00	10.63%	14.29	2.53
14	CMS Energy Corporation	CMS	\$32.93	6.20%	6.73%	2.50%	6.14%	5.65%	61.00%	62.00%	67.30%	\$0.00	9.73%	17.42	3.08
15	Consolidated Edison, Inc.		\$59.64	2.70%	2.38%	3.00%	2.69%	2.65%	65.00%	63.00%	67.30%	\$0.00	9.43%	18.82	3.33
9	Dominion Resources, Inc.	۵	\$69.20	6.30%	2.89%	8.00%	6.73%	5.65%	72.00%	72.00%	67.30%	\$0.00	9.30%	19.49	3,45
17	DTE Energy Company	DTE	\$76.77	2.00%	4.51%	2.00%	4.84%	5.65%	62.00%	%00.09	67.30%	\$0.00	10.36%	15.11	2.67
8	Duke Energy Corporation	PQ.	\$74.10	4.70%	4.49%	2.00%	4.73%	2.65%	72.00%	%00.99	67.30%	\$0.00	%29.6	17.68	3.13
19	Empire District Electric Company	EDE	\$22.93	2.00%	2.00%	3.00%	4.33%	2.65%		%00.69	67.30%	\$0.00	10.50%	14.67	2.59
20	Eversource Energy	ES	\$47.64	6.80%	6.60%	8.50%	7.30%	2.65%	29.00%		67.30%	\$0.00	10.08%	16.08	2.84
7	FirstEnergy Corp.	H H	\$34.60	Ϋ́	Ϋ́	7.00%	7.00%	2.65%	28.00%	24.00%	67.30%	\$0.00	7.64%	35.70	6.32
73	Great Plains Energy Inc.	бХР	\$25.35	8.00%	6.37%	2.00%	5.79%	2.65%	70.00%	61.00%	67.30%	\$0.00	10.37%	15.06	2.66
23	IDACORP, Inc.	Δ	\$57.95	4.00%	4.00%	1.00%	3.00%	2.65%	49.00%	28.00%	67.30%	\$0.00	9.74%	17.41	3.08
54	NorthWestern Corporation	NWE	\$51.02	2.00%	2.00%	6.50%	5.50%	5.65%		%00.69	67.30%	\$0.00	8.55%	24.54	4.34
52	OGE Energy Corp.	OGE	\$30.33	2.00%	4.00%	3.00%	4.00%	2.65%		29.00%	67.30%	\$0.00	9.16%	20.25	3.58
56	Otter Tail Corporation	OTTR	\$26.99	Š	8.00%	%00.6	7.50%	2.65%	%00.02	26.00%	67.30%	\$0.00	15.07%	7.55	1.34
27	Pinnacle West Capital Corporation	PNW	\$58.80	4.60%	5.30%	4.00%	4.63%	2.65%	63.00%	64.00%	67.30%	\$0.00	9.95%	16.53	2.92
28	Portland General Electric Company	POR	\$34.24	5.20%	4.72%	%00'9	5.31%	2.65%	20.00%	26.00%	67.30%	\$0.00	10.17%	15.72	2.78
53	SCANA Corporation	SCG	\$51.78	4.20%	4.30%	4.50%	4.33%	2.65%	27.00%	26.00%	67.30%	\$0.00	10.58%	14.42	2.55
30	Southern Company	SO	\$42.94	3.50%	3.32%	4.50%	3.77%	2.65%	76.00%	71.00%	67.30%	\$0.00	10.13%	15.89	2.81
31	TECO Energy, Inc.	끧	\$18.35	7.10%	9.20%	%00'9	7.43%	2.65%	83.00%	72.00%	67.30%	\$0.00	10.21%	15.60	2.76
32	Westar Energy, Inc.	WR	\$35.52	3.50%	3.40%	%00.9	4.30%	2.65%	61.00%	25.00%	67.30%	\$0.00	10.12%	15.93	2.82
33	Xcel Energy Inc.	Ä	\$33.19	5.00%	4.58%	4.50%	4.69%	5.65%	63.00%	64.00%	67.30%	\$0.00	8.66.6	16.39	2.90
34							5.25%						10.10%	16.98	
32													15.07%		
36												Ξ	7.64%		

က						-	4verage EF	Average EPS Growth Rate Estimate in First Stage	Rate Estin	nate in Fir	st Stage								
4	Projected Annual																		
2	Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[59]	[30]
œ	Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
_	ALLETE, Inc.	ALE	\$2.90	\$3.08	\$3.27	\$3.48	\$3.70	\$3.93	\$4.17	\$4.42	\$4,68	\$4.96	\$5.24	\$5.54	\$5.85	\$6.18	\$6.53	\$6.90	\$7.29
80	Alliant Energy Corporation	Ę	\$3.48	\$3.67	\$3.88	\$4.10	\$4.32	\$4.57	\$4.82	\$5.09	\$5.38	\$5.68	\$6.00	\$6.34	\$6.70	\$7.08	\$7.48	\$7.90	\$8.35
თ	Ameren Corporation	AEE	\$2.40	\$2.55	\$2.71	\$2.88	\$3.05	\$3.24	\$3.44	\$3.65	\$3.87	\$4.09	\$4.33	\$4.57	\$4.83	\$5.10	\$5.39	\$5.70	\$6.02
6	American Electric Power Company, Inc.	AEP	\$3.34	\$3.51	\$3.68	\$3.87	\$4.06	\$4.26	\$4.48	\$4.71	\$4.96	\$5.23	\$5.52	\$5.83	\$6.16	\$6.51	\$6.88	\$7.27	\$7.68
=	Avista Corporation	AVA	\$1.84	\$1.95	\$2.07	\$2.19	\$2.32	\$2.46	\$2.61	\$2.76	\$2.92	\$3.09	\$3.27	\$3.45	\$3.65	\$3.85	\$4.07	\$4.30	\$4.55
12	Black Hills Corporation	BKH H	\$2.89	\$3.06	\$3.23	\$3.42	\$3.61	\$3.82	\$4.04	\$4.27	\$4.52	\$4.77	\$5.04	\$5.33	\$5.63	\$5.95	\$6.28	\$6.64	\$7.01
13	CenterPoint Energy, Inc.	CNP	\$1.42	\$1.46	\$1.50	\$1.55	\$1.59	\$1.64	\$1.69	\$1.75	\$1.83	\$1.92	\$2.02	\$2.13	\$2.25	\$2.38	\$2.51	\$2.65	\$2.80
4	CMS Energy Corporation	CMS	\$1.74	\$1.85	\$1.96	\$2.08	\$2.21	\$2.34	\$2.49	\$2.64	\$2.79	\$2.95	\$3.12	\$3.30	\$3.48	\$3.68	\$3.89	\$4.11	\$4.34
15	Consolidated Edison, Inc.		\$3.62	\$3.72	\$3.82	\$3.92	\$4.03	\$4.13	\$4.27	\$4.42	\$4.61	\$4.82	\$5.07	\$5.36	\$5.66	\$5.98	\$6.32	\$6.68	\$7.05
16	Dominion Resources, Inc.	Δ	\$3.05	\$3.26	\$3.47	\$3,71	\$3.96	\$4.22	\$4.50	\$4.79	\$5.08	\$5.39	\$5.70	\$6.03	\$6.37	\$6.73	\$7.11	\$7.51	\$7.93
17	DTE Energy Company	DTE	\$5.10	\$5.35	\$5.61	\$5.88	\$6.16	\$6.46	\$6.78	\$7.13	\$7.50	\$7.90	\$8.34	\$8.81	\$9.31	\$9.83	\$10.39	\$10.98	\$11.60
18	Duke Energy Corporation	Š	\$4.13	\$4.33	\$4.53	\$4.74	\$4.97	\$5.20	\$5.46	\$5.73	\$6.03	\$6.35	\$6.70	\$7.08	\$7.48	\$7.90	\$8.35	\$8.82	\$9.32
19	Empire District Electric Company	EDE	\$1.55	\$1.62	\$1.69	\$1.76	\$1.84	\$1.92	\$2.00	\$2.10	\$2.20	\$2.32	\$2.44	\$2.58	\$2.73	\$2.88	\$3.05	\$3.22	\$3.40
8	Eversource Energy	8	\$2.58	\$2.77	\$2.97	\$3.19	\$3.42	\$3.67	\$3.93	\$4.19	\$4.46	\$4.74	\$5.02	\$5.31	\$5.61	\$5.92	\$6.26	\$6.61	\$6.98
21	FirstEnergy Corp.	빞	\$0.85	\$0.91	\$0.97	\$1.04	\$1.11	\$1.19	\$1.27	\$1.36	\$1.44	\$1.53	\$1.62	\$1.71	\$1.81	\$1.91	\$2.02	\$2.13	\$2.25
22	Great Plains Energy Inc.	GXP	\$1.57	\$1.66	\$1.76	\$1.86	\$1.97	\$2.08	\$2.20	\$2,33	\$2.46	\$2.60	\$2.75	\$2.90	\$3.07	\$3.24	\$3.42	\$3.62	\$3.82
23	IDACORP, Inc.	ΔĀ	\$3.85	\$3.97	\$4.08	\$4.21	\$4.33	\$4.46	\$4.62	\$4.80	\$5.00	\$5.24	\$5.52	\$5.83	\$6.16	\$6.50	\$6.87	\$7.26	\$7.67
54	NorthWestern Corporation	N N N	\$1.98	\$2.09	\$2.20	\$2.32	\$2.45	\$2.59	\$2.73	\$2.88	\$3.04	\$3.21	\$3.39	\$3.59	\$3.79	\$4.00	\$4.23	\$4.47	\$4.72
25	OGE Energy Corp.	OGE	\$1.55	\$1.61	\$1.68	\$1.74	\$1.81	\$1.89	\$1.97	\$2.06	\$2.16	\$2.27	\$2,39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.14	\$3.32
56	Otter Tail Corporation	OTTR	\$3.06	\$3.29	\$3.54	\$3.80	\$4.09	\$4.39	\$4.71	\$5.03	\$5.36	\$5.70	\$6.04	\$6.38	\$6.74	\$7.12	\$7.53	\$7.95	\$8.40
27	Pinnacle West Capital Corporation	₽N≪	\$3.58	\$3.75	\$3.92	\$4.10	\$4.29	\$4.49	\$4.71	\$4.94	\$5.19	\$5.47	\$5.77	\$6.10	\$6.44	\$6.80	\$7.19	\$7.59	\$8.02
28	Portland General Electric Company	Por	\$2.18	\$2.30	\$2.42	\$2.55	\$2.68	\$2.82	\$2.97	\$3.14	\$3.31	\$3.49	\$3.69	\$3.89	\$4.11	\$4.35	\$4.59	\$4.85	\$5.13
59	SCANA Corporation	SCG	\$3.79	\$3.95	\$4.13	\$4.30	\$4.49	\$4.69	\$4.90	\$5.13	\$5.39	\$5.67	\$5.98	\$6.32	\$6.67	\$7.05	\$7.45	\$7.87	\$8.31
30	Southern Company	S	\$2.77	\$2.87	\$2.98	\$3.10	\$3.21	\$3.33	\$3.47	\$3.62	\$3.79	\$3.98	\$4.20	\$4.43	\$4.68	\$4.95	\$5.23	\$5.52	\$5.84
31	TECO Energy, Inc.	世	\$0.95	\$1.02	\$1.10	\$1.18	\$1.27	\$1.36	\$1.46	\$1.56	\$1.66	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.33	\$2.46	\$2.60
32	Westar Energy, Inc.	ΜK	\$2.35	\$2.45	\$2.56	\$2.67	\$2.78	\$2.90	\$3.03	\$3.18	\$3.33	\$3.51	\$3.70	\$3.91	\$4.13	\$4.36	\$4.61	\$4.87	\$5.14
33	Xcel Energy Inc.	XEL	\$2.03	\$2.13	\$2.23	\$2.33	\$2.44	\$2.55	\$2.68	\$2.81	\$2.96	\$3.11	\$3.29	\$3.47	\$3.67	\$3.87	\$4.09	\$4.33	\$4.57

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4 v	Projected Annual Dividend Pavout Ratio			1311	[32]	[33]	[34]	[35]	(36)	1371	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
,																			
9	Company	Ticker		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
7	ALLETE, Inc.	ALE		%00.99	64.75%	63.50%	62.25%	61.00%	62.05%	63.10%	64.15%	65.20% (66.25% €	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
80	Alliant Energy Corporation	Ę		61.00%	61.50%	62.00%	62.50%	63.00%		64.43%	65.15%	65.87% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
6	Ameren Corporation	AEE		65.00%	62.50%	%00.09	27.50%	25.00%	57.05%	59.10%	61.15%	63.20% (65.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
10	American Electric Power Company, Inc.	AEP		65.00%	64.75%	64.50%	64.25%	64.00%	64.55%	65.10%	65.65%	66.20%	66.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
7	Avista Corporation	AVA		67.00%	66.25%	65.50%	64.75%	64.00%	64.55%	65.10%	65.65%	66.20% (66.75% 6	67.30%	67.30%	%06.79	67.30%	67.30%	67.30%
12	Black Hills Corporation	BKH		27.00%	57.50%	28.00%	28.50%	29.00%	60.38%	61.77%	63.15%	64.54% (65.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
13	CenterPoint Energy, Inc.	SNP		93.00%	89.75%	86.50%	83.25%	80.00%	77.88%	75.77%	73.65%	71.54% (69.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
14	CMS Energy Corporation	CMS		61.00%	61.25%	61.50%	61.75%	62.00%	62.88%	63.77%	64.65%	65.54% (66.42% 6	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
15	Consolidated Edison, Inc.	딦		65.00%	64.50%	64.00%	63.50%	63.00%	63.72%	64.43%	65.15%	65.87%	66.59%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
16	Dominion Resources, Inc.	Δ		72.00%	72.00%	72.00%	72.00%	72.00%	71.22%	70.43%	69.65%	68.87%	9 %60'89	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
17	DTE Energy Company	DTE		62.00%	61.50%	61.00%	80.50%	%00.09	61.22%	62.43%	63.65%	64.87% (9 %60.99	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
18	Duke Energy Corporation	줊		72.00%	70.50%	69.00%	67.50%	%00.99		66.43%	66.65%					67.30%	67.30%	67.30%	67.30%
19	Empire District Electric Company	EDE		76.00%	74.25%	72.50%	70.75%	%00.69	68.72%	68.43%	68.15%			67.30%		67.30%	67.30%	67.30%	67.30%
20	Eversource Energy	S		29.00%	58.25%	57.50%	56.75%	26.00%								67.30%	67.30%	67.30%	67.30%
21	FirstEnergy Corp.	世		28.00%	57.00%	26.00%	25.00%	24.00%	56.22%	58.43%	60.65%	62.87% (65.09%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
22	Great Plains Energy Inc.	GXP		%00.02	67.75%	65.50%	63.25%	61.00%	62.05%	63.10%	64.15%	65.20% (66.25% 6	67.30%		67.30%	%06.79	67.30%	67.30%
23	IDACORP, Inc.	Δ		49.00%	51.25%	53.50%	25.75%	28.00%	29.55%	61.10%	62.65%	64.20% (65.75%	67.30%	67.30%	67.30%	%06.79	67.30%	67.30%
54	NorthWestern Corporation	NWE		26.00%	59.25%	62.50%	65.75%	%00.69	68.72%	68.43%	68.15%	67.87%	67.59%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
25	OGE Energy Corp.	OGE		86.00%	79.25%	72.50%	65.75%	29.00%		61.77%	63.15%	64.54% (65.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
56	Otter Tail Corporation	OTTR		%00.02	86.50%	63.00%	29.50%	26.00%	57.88%	29.77%	61.65%	63.54% (65.42% 6	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
27	Pinnacle West Capital Corporation	PNW		63.00%	63.25%	63.50%	63.75%	64.00%	64.55%	65.10%	65.65%	66.20% (66.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
28	Portland General Electric Company	Por		20.00%	51.50%	53.00%	54.50%	26.00%	57.88%	59.77%	61.65%	63.54% (65.42% 6	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
59	SCANA Corporation	SCG		27.00%	56.75%	26.50%	56.25%	26.00%	57.88%	29.77%	61.65%	63.54% (65.42% 6	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
30	Southern Company	SO		%00'9/	74.75%	73.50%	72.25%	71.00%	70.38%	69.77%	69.15%	68.54% (67.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
31	TECO Energy, Inc.	Щ	_	83.00%	80.25%	77.50%	74.75%	72.00%	71.22%	70.43%	69.65%	68.87%	9 %60.89	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
35	Westar Energy, Inc.	ΧX		61.00%	29.50%	58.00%	26.50%	25.00%	57.05%	59.10%	61.15%	63.20% (65.25% 6	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
33	Xcel Energy Inc.	XEL		63.00%	63.25%	63.50%	63.75%	64.00%	64.55%	65.10%	65.65%	66.20% (66.75% 6	37.30%	67.30%	67.30%	67.30%	67.30%	67.30%

ო						4	\verage E⊦	Average EPS Growth Rate Estimate in First Stage	Rate Estin	nate in Fir	st Stage									
4 v	Projected Annual Cash Flows			[47]	[48]	[49]	[20]	[51]	[52]	[53]	[54]	[55]	[99]	[57]	[58]	[69]	[60]	[61]	[62]	[63]
																				erminal
9	Company	Ticker		2015	2016	2017	2018	2019	2020	2021						2027	2028	2029	2030	Value
7	ALLETE, Inc.	ALE	3	\$2.03	\$2.12	\$2.21	\$2.30	\$2.40	\$2,59	\$2.79	\$3.00	\$3.23		\$3.73	\$3.94	\$4.16	\$4.40	\$4.65	\$4.91	112.18
æ	Alliant Energy Corporation	톰	<i>3</i>	\$2.24	\$2.39	\$2.54	\$2.70	\$2.88	\$3.07	\$3.28			_			\$4.76	\$5.03	\$5.32		\$136.04
თ	Ameren Corporation	AEE		\$1.66	\$1.69	\$1.73	\$1.76	\$1.78	\$1.96	\$2.16						\$3.44	\$3.63	\$3.84		\$91.13
10	American Electric Power Company, Inc.	AEP	<i>.</i> ,		\$2.38	\$2.49	\$2.61	\$2.73	\$2.89	\$3.07						\$4.38	\$4.63	\$4.89		\$123.25
11	Avista Corporation	AVA		\$1.31	\$1.37	\$1.44	\$1.50	\$1.58	\$1.68	\$1.80						\$2.59	\$2.74	\$2.90		\$71.29
12	Black Hills Corporation	BKH	,	\$1.74	\$1.86	\$1.98	\$2.11	\$2.26	\$2.44	\$2.64						\$4.00	\$4.23	\$4.47		\$107.14
13	CenterPoint Energy, Inc.	SNP		\$1.36	\$1.35	\$1.34	\$1.32	\$1.31	\$1.32	\$1.33						\$1.60	\$1.69	\$1.79		\$40.04
14	CMS Energy Corporation	CMS	,	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.56	\$1.68						\$2.48	\$2.62	\$2.77		\$75.65
15	Consolidated Edison, Inc.	믑		\$2.42	\$2.46	\$2.51	\$2.56	\$2.60	\$2.72	\$2.85						\$4.03	\$4.25	\$4.49		\$132.78
16	Dominion Resources, Inc.	_		\$2.34	\$2.50	\$2.67	\$2.85	\$3.04	\$3.21	\$3.37						\$4.53	\$4.78	\$5.05		154.57
17	DTE Energy Company	DTE		\$3.31	\$3.45	\$3.58	\$3.73	\$3.88	\$4.15	\$4.45						\$6.62	\$6.99	\$7.39		175.26
18	Duke Energy Corporation	ž		\$3.11	\$3.19	\$3.27	\$3,35	\$3.43	\$3.61	\$3.81						\$5.32	\$5.62	\$5.94		164.79
19	Empire District Electric Company		,	\$1.23	\$1.25	\$1.28	\$1.30	\$1.32	\$1.38	\$1.44						\$1.94	\$2.05	\$2.17		\$49.86
20	Eversource Energy	S	37	\$1.63	\$1.73	\$1.83	\$1.94	\$2.05	\$2.27	\$2.51						\$3.99	\$4.21	\$4.45		112.28
21	FirstEnergy Corp.	벁	-	\$0.53	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79						\$1.29	\$1.36	\$1.44		\$80.44
22	Great Plains Energy Inc.	GXP	5	\$1.16	\$1.19	\$1.22	\$1.24	\$1.27	\$1.37	\$1.47						\$2.18	\$2.30	\$2.43		\$57.54
23	IDACORP, Inc.	IDA		\$1.94	\$2.09	\$2.25	\$2.42	\$2.59	\$2.75	\$2.93						\$4.38	\$4.63	\$4.89		133.57
24	NorthWestern Corporation	NWE		\$1.17	\$1.31	\$1.45	\$1.61	\$1.79	\$1.88	\$1.97						\$2.69	\$2.85	\$3.01		115.84
52	OGE Energy Corp.	OGE		\$1.39	\$1.33	\$1.26	\$1.19	\$1.11	\$1.19	\$1.27						\$1.89	\$2.00	\$2.11		\$67.22
56	Otter Tail Corporation	OTTR		\$2.30	\$2.35	\$2.39	\$2.43	\$2.46	\$2.73	\$3.01						\$4.79	\$5.07	\$5.35		\$63,44
27	Pinnacle West Capital Corporation	MN≪		\$2.36	\$2.48	\$2.60	\$2.74	\$2.87	\$3.04	\$3.22						\$4.58	\$4.84	\$5.11		132.62
28	Portland General Electric Company	POR		\$1.15	\$1.25	\$1.35	\$1.46	\$1.58	\$1.72	\$1.87						\$2.93	\$3.09	\$3.27		\$80.61
58	SCANA Corporation	SCG		\$2.25	\$2.34	\$2.43	\$2.53	\$2.62	\$2.84	\$3.07						\$4.74	\$5.01	\$5.30		119.90
30	Southern Company	SO		\$2.18	\$2.23	\$2.28	\$2.32	\$2.37	\$2.44	\$2.53						\$3.33	\$3.52	\$3.72		\$92.74
31	TECO Energy, Inc.	끧		\$0.85	\$0.88	\$0.91	\$0.95	\$0.98	\$1.04	\$1.10						\$1.48	\$1.57	\$1.65		\$40.49
35	Westar Energy, Inc.	N'R		\$1.50	\$1.52	\$1.55	\$1.57	\$1.60	\$1.73	\$1.88		\$2.22	\$2.41			\$2.93	\$3.10	\$3.28	\$3.46	\$81.91
33	Xcel Energy Inc.	XEL	-	\$1.34	\$1.41	\$1.48	\$1.55	\$1.63	\$1.73	\$1.83			\$2.19	Ì		\$2.61	\$2.76	\$2.91	\$3.08	\$74.88

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

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4 0	Projected Annual Data Investor Cash Flows		[64]	[65]	[66]	[67]	[68]	[69]	[02]	[71]	[72]	[73]	[74]	[75]	[42]	[77]	[82]	[62]	[80]	[81]
			Initial												the control of the co					
9	Company	Ticker	Outflow	6/25/15	12/31/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	a	6/30/23	6/30/24 (6/30/25	6/30/26	6/30/27	6/30/28	6/30/59	6/30/30
7	ALLETE, Inc.	ALE	(\$48.97)	\$0.00	\$1.05	\$2.10	\$2.21	\$2,30	\$2.40	\$2.59	\$2.79	\$3.00		\$3.47	\$3.73	\$3.94	\$4.16	\$4.40	\$4.65	\$117.08
ω	Alliant Energy Corporation	ΓN	(\$29.59)	\$0.00	\$1.16	\$2.30	\$2.54	\$2.70	\$2.88	\$3.07	\$3.28	\$3.50		\$4.00	\$4.27	\$4.51	\$4.76	\$5.03		\$141.65
6	Ameren Corporation	AEE	(\$39.13)	\$0.00	\$0.86	\$1.71	\$1.73	\$1.76	\$1.78	\$1.96	\$2.16	\$2.37		\$2.82	\$3.08	\$3.25	\$3.44	\$3.63		\$95.18
9	American Electric Power Company, Inc.	AEP	(\$54.66)	\$0.00	\$1.18	\$2.34	\$2.49	\$2.61	\$2.73	\$2.89	\$3.07	\$3.26		\$3.69	\$3.93	\$4.15	\$4.38	\$4.63		\$128.42
7	Avista Corporation	AVA	(\$31.45)	\$0.00	\$0.68	\$1.35	\$1.44	\$1.50	\$1.58	\$1.68	\$1.80	\$1.92	\$2.05	\$2.18	\$2.32	\$2.46	\$2.59	\$2.74	\$2.90	\$74.35
12	Black Hills Corporation	BKH	(\$46.14)	\$0.00	\$0.90	\$1.79	\$1.98	\$2.11	\$2.26	\$2.44	\$2.64	\$2.85		\$3.32	\$3.59	\$3.79	\$4.00	\$4.23		\$111.86
13	CenterPoint Energy, Inc.	CNP	(\$19.77)	\$0.00	\$0.70	\$1.38	\$1.34	\$1.32	\$1.31	\$1.32	\$1.33	\$1.35		\$1.40	\$1.43	\$1.51	\$1.60	\$1.69		\$41.92
14	CMS Energy Corporation	CMS	(\$32.93)	\$0.00	\$0.58	\$1.16	\$1.28	\$1.36	\$1.45	\$1.56	\$1.68	\$1.80		\$2.07	\$2.22	\$2.35	\$2.48	\$2.62		\$78.57
15	Consolidated Edison, Inc.		(\$59.64)	\$0.00	\$1.25	\$2.45	\$2.51	\$2.56	\$2.60	\$2.72	\$2.85	\$3.00		\$3.38	\$3.61	\$3.81	\$4.03	\$4.25		\$137.53
16	Dominion Resources, Inc.	Δ	(\$69.20)	\$0.00	\$1.21	\$2.42	\$2.67	\$2.85	\$3.04	\$3.21	\$3.37	\$3.54		\$3.88	\$4.06	\$4.29	\$4.53	\$4.78		\$159.91
17	DTE Energy Company	DTE	(\$76.77)	\$0.00	\$1.72	\$3.40	\$3.58	\$3.73	\$3.88	\$4.15	\$4.45	\$4.77		\$5.51	\$5.93	\$6.26	\$6.62	\$6.99		\$183.07
18	Duke Energy Corporation	DCK	(\$74.10)	\$0.00	\$1.61	\$3.19	\$3.27	\$3.35	\$3.43	\$3.61	\$3.81	\$4.02		\$4.50	\$4.77	\$5.03	\$5.32	\$5.62		\$171.06
19	Empire District Electric Company	EDE	(\$22.93)	\$0.00	\$0.64	\$1.26	\$1.28	\$1.30	\$1.32	\$1.38	\$1.44	\$1.50		\$1.65	\$1.74	\$1.84	\$1.94	\$2.05		\$52.15
20	Eversource Energy	ES	(\$47.64)	\$0.00	\$0.85	\$1.69	\$1.83	\$1.94	\$2.05	\$2.27	\$2.51	\$2.75		\$3.29	\$3.57	\$3.77	\$3.99	\$4.21		\$116.98
7	FirstEnergy Corp.	띺	(\$34.60)	\$0.00	\$0.27	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87		\$1.05	\$1.15	\$1.22	\$1.29	\$1.36		\$81.96
22	Great Plains Energy Inc.	дХБ	(\$25.35)	\$0.00	\$0.60	\$1.20	\$1.22	\$1.24	\$1.27	\$1.37	\$1.47	\$1.58		\$1.82	\$1.95	\$2.06	\$2.18	\$2.30		\$60,11
23	IDACORP, Inc.	ΙDΑ	(\$57.95)	\$0.00	\$1.01	\$1.97	\$2.25	\$2.42	\$2.59	\$2.75	\$2.93	\$3.13		\$3.63	\$3.92	\$4.14	\$4.38	\$4.63		\$138.73
54	NorthWestern Corporation	NWE	(\$51.02)	\$0.00	\$0.61	\$1.20	\$1.45	\$1.61	\$1.79	\$1.88	\$1.97	\$2.07		\$2.29	\$2.41	\$2.55	\$2.69	\$2.85		\$119.01
25	OGE Energy Corp.	OGE	(\$30.33)	\$0.00	\$0.72	\$1.41	\$1.26	\$1.19	\$1.11	\$1.19	\$1.27	\$1.36		\$1.57	\$1.70	\$1.79	\$1.89	\$2.00		\$69.45
56	Otter Tail Corporation	OTTR	(\$26.99)	\$0.00	\$1.19	\$2.39	\$2.39	\$2.43	\$2.46	\$2.73	\$3.01	\$3.31		\$3,95	\$4.29	\$4.54	\$4.79	\$5.07		\$69.09
27	Pinnacle West Capital Corporation	PNW	(\$58.80)	\$0.00	\$1.22	\$2.41	\$2.60	\$2.74	\$2.87	\$3.04	\$3.22	\$3.41		\$3.85	\$4.10	\$4.33	\$4.58	\$4.84		\$138.02
28	Portland General Electric Company	POR	(\$34.24)	\$0.00	\$0.59	\$1.18	\$1.35	\$1.46	\$1.58	\$1.72	\$1.87	\$2.04		\$2.41	\$2.62	\$2.77	\$2.93	\$3.09		\$84.06
59	SCANA Corporation	SCG	(\$51.78)	\$0.00	\$1.17	\$2.30	\$2.43	\$2.53	\$2.62	\$2.84	\$3.07	\$3.32		\$3.91	\$4.25	\$4.49	\$4.74	\$5.01		\$125.50
30	Southern Company	SO	(\$42.94)	\$0.00	\$1.13	\$2.23	\$2.28	\$2.32	\$2.37	\$2.44	\$2.53	\$2.62		\$2.85	\$2.98	\$3.15	\$3.33	\$3.52		\$96.67
31	TECO Energy, Inc.	旦	(\$18.35)	\$0.00	\$0.44	\$0.88	\$0.91	\$0.95	\$0.98	\$1.04	\$1.10	\$1.15		\$1.27	\$1.33	\$1.40	\$1.48	\$1.57		\$42.23
32	Westar Energy, Inc.	WR	(\$35.52)	\$0.00	\$0.77	\$1.53	\$1.55	\$1.57	\$1.60	\$1.73	\$1.88	\$2.04		\$2.41	\$2.63	\$2.78	\$2.93	\$3.10		\$85.37
33	Xcel Energy Inc.	XEL	(\$33.19)	\$0.00	\$0.69	\$1.37	\$1.48	\$1.55	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.19	\$2.34	\$2.47	\$2.61	\$2.76		\$77.96

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

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4 1	Inputs		[1]	[2]	[3] [4] [6]	[4]	[5]	[6]	E	[8]	6	[10]		[12]	[13]
ი			Since	<u> </u>	S GIOWIII S	Value	High		ĭ	rayout Katlo	-	itel ative Solution		P/E	PEG
9	Company	Ticker	Price	Zacks.	First Call	Line	Growth	Growth	2015	2019	2025	Proof	IRR	Ratio	Ratio
7	ALLETE, Inc.	ALE	\$48.97	₹	%00'9	6.50%	6.50%	5.65%	%00.99	61.00%	67.30%	\$0.00	10.35%	15.15	2.68
œ	Alliant Energy Corporation	Ŗ	\$59.59	5.30%	5.45%	8.00.9	%00.9	5.65%	61.00%	63.00%	67.30%	\$0.00	10.13%	15.87	2.81
6	Ameren Corporation	AEE	\$39.13	6.80%	2.85%	%00.9	6.80%	5.65%	65.00%	55.00%	67.30%	\$0.00	10.52%	14.60	2.58
6	American Electric Power Company, Inc.	AEP	\$54.66	4.90%	2.08%	2.00%	2.08%	5.65%	65.00%	64.00%	67.30%	\$0.00	10.11%	15.96	2.82
7	Avista Corporation	AVA	\$31.45	ž	2.00%	7.00%	7.00%	5.65%	67.00%	64.00%	67.30%	\$0.00	10.48%	14.73	2.61
12	Black Hills Corporation	BKH	\$46.14	ž	7.00%	4.50%	7.00%	5.65%	57.00%	29.00%	67.30%	\$0.00	10.68%	14.14	2.50
13	CenterPoint Energy, Inc.	CNP	\$19.77	5.70%	1.91%	1.00%	5.70%	5.65%	93.00%	80.00%	67.30%	\$0.00	11.65%	11.86	2.10
14	CMS Energy Corporation	CMS	\$32.93	6.20%	6.73%	5.50%	6.73%	5.65%	61.00%	62.00%	67.30%	\$0.00	9.89%	16.79	2.97
15	Consolidated Edison, Inc.		\$59.64	2.70%	2.38%	3.00%	3.00%	5.65%	65.00%	63.00%	67.30%	\$0.00	9.51%	18.44	3.26
16	Dominion Resources, Inc.	Ω	\$69.20	6.30%	2.89%	8.00%	8.00%	5.65%	72.00%	72.00%	67.30%	\$0.00	9.61%	17.96	3.18
17	DTE Energy Company	DTE	\$76.77	2.00%	4.51%	2.00%	2.00%	5.65%	62.00%	%00'09	67.30%	\$0.00	10.41%	14.96	2.65
18	Duke Energy Corporation	Σ	\$74.10	4.70%	4.49%	2.00%	2.00%	2.65%	72.00%	%00.99	67.30%	\$0.00	9.75%	17.37	3.07
19	Empire District Electric Company	EDE	\$22.93	2.00%	2.00%	3.00%	2.00%	2.65%	76.00%	%00'69	67.30%	\$0.00	10.71%	14.05	2.49
20	Eversource Energy	ES	\$47.64	6.80%	6.60%	8.50%	8.50%	2.65%	29.00%	26.00%	67.30%	\$0.00	10.41%	14.94	2.64
2	FirstEnergy Corp.	뿐	\$34.60	¥	¥	7.00%	7.00%	2.65%	58.00%	54.00%	67.30%	\$0.00	7.64%	35,70	6.32
22	Great Plains Energy Inc.	GX P	\$25.35	%00'9	6.37%	2.00%	6.37%	5.65%	70.00%	61.00%	67.30%	\$0.00	10.55%	14.52	2.57
23	IDACORP, Inc.	ΙDΑ	\$57.95	4.00%	4.00%	1.00%	4.00%	2.65%	49.00%	28.00%	67.30%	\$0.00	10.01%	16.32	2.89
24	NorthWestern Corporation	NWE	\$51.02	2.00%	2.00%	6.50%	6.50%	2.65%	26.00%	%00'69	67.30%	\$0.00	8,75%	22.97	4.06
25	OGE Energy Corp.	OGE	\$30.33	2.00%	4.00%	3.00%	2.00%	2.65%	86.00%	29.00%	67.30%	\$0.00	9.40%	18.96	3,35
56	Otter Tail Corporation	OTTR	\$26.99	¥	%00'9	%00.6	%00'6	2.65%	70.00%	26.00%	67.30%	\$0.00	15.87%	96.9	1.23
27	Pinnacle West Capital Corporation	PNW	\$58.80	4.60%	5.30%	4.00%	5.30%	5.65%	63.00%		67.30%	\$0.00	10.14%	15.84	2.80
58	Portland General Electric Company	POR	\$34.24	5.20%	4.72%	%00'9	%00'9	2.65%	20.00%	26.00%	67.30%	\$0.00	10.37%	15.06	2.66
53	SCANA Corporation	SCG	\$51.78	4.20%	4.30%	4.50%	4.50%	5.65%	27.00%	26.00%	67.30%	\$0.00	10.63%	14.27	2.53
စ္က	Southern Company	SO	\$42.94	3.50%	3.32%	4.50%	4.50%	5.65%	76.00%	71.00%	67.30%	\$0.00	10.35%	15.15	2.68
3	TECO Energy, Inc.	끧	\$18.35	7.10%	9.20%	%00'9	9.20%	2.65%	83.00%	72.00%	67.30%	\$0.00	10.74%	13.97	2.47
32	Westar Energy, Inc.	WR	\$35,52	3.50%	3,40%	%00'9	%00'9	5.65%	61.00%	25.00%	67.30%	\$0.00	10.62%	14.32	2.53
33	Xcel Energy Inc.	XEL	\$33.19	5.00%	4.58%	4.50%	5.00%	5.65%	63.00%	64.00%	67.30%	\$0.00	10.08%	16.07	2.84
8 8												Mean	10.35%		:
8 8												Max	15.87%		
8													/.b4%		

ო							High E	High EPS Growth Rate Estimate in First Stage	Rate Estin	nate in Fi	rst Stage								
4	Projected Annual																		
ß	Earnings per Share	[14]		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[59]	[30]
œ	Company	Ticker 2014		2015 2		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
^	ALLETE, Inc.	ALE \$2.90			\$3.29	\$3.50	\$3.73	\$3.97	\$4.23	\$4.49	\$4.76	\$5.04	\$5.34	\$5.64	\$5.96	\$6.29	\$6.65	\$7.02	\$7.42
ω	Alliant Energy Corporation	LNT \$3.4	83	\$3.69 \$3		4.14	\$4.39	\$4.66	\$4.93	\$5.22	\$5.53	\$5.85	\$6.18	\$6.53	\$6.90	\$7.29	\$7.70	\$8.14	\$8.60
6	Ameren Corporation	AEE \$2.4	0 \$2	\$2.56 \$2		2.95	\$3.12	\$3.33	\$3.56	\$3.78	\$4.02	\$4.26	\$4.51	\$4.77	\$5.03	\$5.32	\$5.62	\$5.94	\$6.27
5) American Electric Power Company, Inc.	AEP \$3.3	53	\$3.51 \$3		3.88	\$4.07	\$4.28	\$4.50	\$4.74	\$4.99	\$5.26	\$5.56	\$5.87	\$6.20	\$6.55	\$6.92	\$7.32	\$7.73
1	1 Avista Corporation	AVA \$1.8	4 \$1	\$1.97 \$2		2.25	\$2.41	\$2.58	\$2.76	\$2.94	\$3.12	\$3.31	\$3.51	\$3.71	\$3.91	\$4.14	\$4.37	\$4.62	\$4.88
12	2 Black Hills Corporation	BKH \$2.8	69	\$3.09		3.54	\$3.79	\$4.05	\$4.33	\$4.61	\$4.90	\$5.20	\$5.51	\$5.82	\$6.15	\$6.50	\$6.86	\$7.25	\$7.66
13	3 CenterPoint Energy, Inc.	CNP \$1.42		\$1.50 \$		1.68	\$1.77	\$1.87	\$1.98	\$2.09	\$2.21	\$2.34	\$2.47	\$2.61	\$2.76	\$2.91	\$3.08	\$3.25	\$3.43
7	4 CMS Energy Corporation	CMS \$1.7	4 \$1	\$1.86 \$		2.12	\$2.26	\$2.41	\$2.57	\$2.73	\$2.90	\$3.07	\$3,25	\$3.44	\$3.63	\$3.84	\$4.05	\$4.28	\$4.53
15			¥1	\$3.73 \$3		3.96	\$4.07	\$4.20	\$4.34	\$4.51	\$4.70	\$4.93	\$5.19	\$5.48	\$5.79	\$6.12	\$6.46	\$6.83	\$7.21
16	 Dominion Resources, Inc. 	D \$3.05		\$3.29		3.84	\$4.15	\$4.48	\$4.82	\$5.17	\$5.52	\$5.88	\$6.23	\$6.59	\$6.96	\$7.35	\$7.77	\$8.21	\$8.67
17	7 DTE Energy Company	DTE \$5.10	38	\$5.36 \$8		5.90	\$6.20	\$6.51	\$6.84	\$7.20	\$7.58	\$7.99	\$8.44	\$8.91	\$9.42	\$9.95	\$10.51	\$11.11	\$11.73
18		DUK \$4.13		\$4.34 \$4		4.78	\$5.02	\$5.27	\$5.54	\$5.83	\$6.14	\$6.47	\$6.83	\$7.22	\$7.63	\$8.06	\$8.51	\$8.99	\$9.50
19		CFS)		\$1.63 \$		1.79	\$1.88	\$1.98	\$2.08	\$2.19	\$2.30	\$2.43	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.38	\$3.57
2) Eversource Energy	ES \$2.58		\$2.80		3.30	\$3.58	\$3.88	\$4.19	\$4.51	\$4.83	\$5.14	\$5.46	\$5.77	\$6.09	\$6.44	\$6.80	\$7.19	\$7.59
21	 FirstEnergy Corp. 	FE \$0.85		\$0.91		1.04	\$1.11	\$1.19	\$1.27	\$1.36	\$1.44	\$1.53	\$1.62	\$1.71	\$1.81	\$1.91	\$2.02	\$2.13	\$2.25
22	2 Great Plains Energy Inc.	GXP \$1.57		\$1.67 \$		1.89	\$2.01	\$2.14	\$2.27	\$2.41	\$2.56	\$2.71	\$2.86	\$3.02	\$3.20	\$3.38	\$3.57	\$3.77	\$3.98
23	3 IDACORP, Inc.	IDA \$3.85		\$4.00 \$2		4.33	\$4.50	\$4.68	\$4.88	\$5.11	\$5.35	\$5.63	\$5.93	\$6.26	\$6.62	\$6.99	\$7.39	\$7.80	\$8.25
24	4 NorthWestern Corporation	NWE \$1.98	#3	\$2.11 \$2		2.39	\$2.55	\$2.71	\$2.89	\$3.06	\$3.25	\$3.44	\$3.64	\$3.85	\$4.07	\$4.30	\$4.54	\$4.80	\$5.07
25	5 OGE Energy Corp.	OGE \$1.55	;	\$1.63 \$		1.79	\$1.88	\$1.98	\$2.08	\$2.19	\$2.30	\$2.43	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.38	\$3.57
56	S Otter Tail Corporation	OTTR \$3.06				3.96	\$4.32	\$4.71	\$5.11	\$5.51	\$5.91	\$6.31	\$6.70	\$7.08	\$7.48	\$7.91	\$8,35	\$8.82	\$9.32
27	7 Pinnacle West Capital Corporation	PNW \$3.58	53	\$3.77 \$3		4.18	\$4.40	\$4.63	\$4.88	\$5.15	\$5.43	\$5.73	\$6.05	\$6.39	\$6.75	\$7.14	\$7.54	\$7.96	\$8.42
28	3 Portland General Electric Company		300	\$2.31 \$2		2.60	\$2.75	\$2.92	\$3.09	\$3.27	\$3.46	\$3.66	\$3.87	\$4.09	\$4.32	\$4.57	\$4.82	\$5.10	\$5.39
59	9 SCANA Corporation	SCG \$3,79	735	\$3.96 \$4		4.33	\$4.52	\$4.72	\$4.94	\$5.19	\$5.45	\$5.74	\$6,05	\$6.39	\$6.75	\$7.13	\$7,54	\$7.96	\$8.41
8	 Southern Company 	SO \$2.77	145	\$2.89		3.16	\$3.30	\$3.45	\$3.61	\$3.79	\$3.98	\$4.19	\$4.42	\$4.67	\$4.94	\$5.21	\$5.51	\$5.82	\$6.15
3	1 TECO Energy, Inc.	TE \$0.95		\$1.04 \$		1.24	\$1.35	\$1.48	\$1.60	\$1.73	\$1.86	\$1.99	\$2.11	\$2.23	\$2.36	\$2.49	\$2.63	\$2.78	\$2.93
32	2 Westar Energy, Inc.	WR \$2.35		\$2.49 \$2		52.80	\$2.97	\$3.14	\$3.33	\$3.53	\$3.73	\$3.95	\$4.17	\$4.41	\$4.66	\$4.92	\$5.20	\$5,49	\$5.81
83	3 Xcel Energy Inc.	XEL \$2.03	43	\$2.13 \$2		2.35	\$2.47	\$2.59	\$2.72	\$2.87	\$3.02	\$3.18	\$3.36	\$3.55	\$3.75	\$3.96	\$4.18	\$4.42	\$4.67

- 0 0						Multi-Stag High EP	Multi-Stage Growth Discounted Cash Flow Model 30 Day Average Stock Price High EPS Growth Rate Estimate in First Stage	e Growth Discounted Cash F 30 Day Average Stock Price 3 Growth Rate Estimate in Fii	I Cash Fl ck Price ate in Fir	ow Mode st Stage	_							
4 Projected Annual 5 Dividend Payout Ratio			[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
6 Company	Ticker		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
7 ALLETE, Inc.	ALE	9	9 %00.99	64.75% 6	63.50%	62.25%	61.00%	62.05%	63.10%	64.15%	65.20% (66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
8 Alliant Energy Corporation	LNI	9	61.00% 6	61.50% 6	62.00% 6	62.50%	63.00%	63.72% (64.43% (65.15%	65.87%	66.59%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
9 Ameren Corporation	AEE	G	65.00% 6	62.50% 6	60.00% 5	27.50%	55.00%	57.05%	59.10% (61.15%	63.20% (65.25% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
10 American Electric Power Company, Inc.	ic. AEP	©	65.00% 6	64.75% 6	64.50% €	64.25%	64.00%	64.55%	65.10%	65.65%	66.20%	66.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
11 Avista Corporation	AVA	G	67.00% 6	66.25% 6	65.50% 6	64.75%	64.00%	64.55% (65.10%	65.65%	66.20%	66.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
12 Black Hills Corporation	BKH	S	57.00% 5	57.50% 5	58.00% 5	28.50%	29.00%	60.38%	61.77% (63.15%	64.54% (65.92% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
13 CenterPoint Energy, Inc.	ON D	6	93.00% 8	89.75% 8	86.50%	83.25%	80.00%	. %88.//	75.77%	. %59.82	71.54% (69.42% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
14 CMS Energy Corporation	CMS	9	61.00% 6	61.25% 6	61.50% 6	61.75%	62.00%	62.88%	63.77% (64.65%	65.54% (66.42% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
15 Consolidated Edison, Inc.		O	65.00% 6	64.50% 6	64.00% 6	63.50%	63.00%	63.72% (64.43% (65.15%	65.87% (9 %65.99	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
16 Dominion Resources, Inc.	Δ	2	72.00% 7	72.00% 7	72.00% 7	72.00%	72.00%	71.22%	70.43% (69.65%	68.87% (9 %60.89	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
17 DTE Energy Company	DTE	ဖ	62.00% 6		61.00% 6	%05.09	%00'09	61.22% (62.43% (63.65%	64.87% (9 %60.99	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
18 Duke Energy Corporation	DOK	2	72.00% 7		9 %00.69	%05'29	%00.99	66.22% (66.43% (96.65%	98.87%	67.09%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
19 Empire District Electric Company	EDE	7	76.00% 7	74.25% 7		70.75%	%00.69	68.72% (68.43% (68.15%		67.59%		67.30%	67.30%	67.30%	67.30%	67.30%
20 Eversource Energy	ES	ß	59.00% 5		57.50% 5	56.75%	26.00%	57.88%	59.77% (61.65%	63.54% (65.42% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
21 FirstEnergy Corp.	H H	2	58.00% 5		56.00% 5	22.00%	54.00%	56.22%	58.43% (60.65%	62.87% (9 %60.59	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
22 Great Plains Energy Inc.	GXP	7	.0.00% 6	67.75% 6	65.50% 6	63.25%	61.00%	62.05% (63.10% (64.15%	65.20% (66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
23 IDACORP, inc.	ΙDΑ	4	49.00% 5	51.25% 5	53.50% 5	55.75%	58.00%	59.55%	61.10%	62.65%	64.20% (65.75% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
24 NorthWestern Corporation	NWE	ū	56.00% 5	59.25% 6	62.50% 6	65.75%	%00'69	68.72% (68.43% (68.15%	67.87% (67.59% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
25 OGE Energy Corp.	0GE	80	36.00% 7	79.25% 7	72.50% E	65.75%	29.00%	60.38%	61.77% (63.15%	64.54% (65.92% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
26 Otter Tail Corporation	OTTR	7	70.00% 6	66.50% 6	63.00% 5	29.50%	26.00%	57.88%	59.77% (61.65%	63.54% (65.42% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
27 Pinnacle West Capital Corporation	NA W	ဖ	63.00% 6	63.25% 6	63.50% 6	63.75%	64.00%	64.55% (65.10% (65.65%	66.20%	66.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
28 Portland General Electric Company	POR	G.	50.00% 5	51.50% 5	53.00% 5	54.50%	26.00%	57.88%	59.77% (61.65%	63.54% (65.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
29 SCANA Corporation	SCG	9	57.00% 5	56.75% 5	56.50% 5	56.25%	26.00%	57.88%	59.77% (61.65%	63.54% (65.42% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
30 Southern Company	S	1	76.00% 7	74.75% 7	•	72.25%	71.00%	70.38% (69.77% (69.15%	68.54% (67.92% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
31 TECO Energy, Inc.	쁘	80	33.00% 8	80.25% 7	77,50% 7	74.75%	72.00%	71.22%	70.43% (69.65%	68.87%	9 %60'89	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
32 Westar Energy, Inc.	WR	9	61.00% 5!	59.50% 5	58.00% 5	26.50%	55.00%	57.05%	59.10% (61.15%	63.20% (65.25% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
33 Xcel Energy Inc.	XEL	9	63.00% 6	63.25% 6	63.50%	63.75%	64.00%	64.55%	65.10% (65.65%	66.20%	66.75% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%

4 Projected Annual 5 Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[69]	[60]	[61]	[62]	[63]
																		Terminal
6 Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Value
7 ALLETE, Inc.	ALE	\$2.04	\$2.13	\$2.22	\$2.32	\$2.42	\$2.62	\$2.83	\$3.05		\$3.54	\$3.79	\$4.01	\$4.24	\$4.47	\$4.73	\$4.99	\$112.40
8 Alliant Energy Corporation	LN	\$2.25	\$2.40	\$2.57	\$2.75	\$2.93	\$3.14	\$3.37	\$3.60		\$4.12	\$4.40	\$4.64	\$4.91	\$5.18	\$5,48	\$5.79	\$136.46
9 Ameren Corporation	AEE	\$1.67	\$1.71	\$1.75	\$1.80	\$1.83	\$2.03	\$2.24	\$2.46		\$2.94	\$3.21	\$3.39	\$3.58	\$3.78	\$4.00	\$4.22	\$91.59
 American Electric Power Company, Inc. 	AEP	\$2.28	\$2.39	\$2.50	\$2.62	\$2.74	\$2.91	\$3.08	\$3.28	\$3.49	\$3.71	\$3.95	\$4.17	\$4.41	\$4.66	\$4.92	\$5.20	\$123.32
11 Avista Corporation	AVA	\$1.32	\$1.40	\$1.48	\$1.56	\$1.65	\$1.78	\$1.91	\$2.05		\$2.34	\$2.49	\$2.63	\$2.78	\$2.94	\$3.11	\$3.28	\$71.84
12 Black Hills Corporation	BKH	\$1.76	\$1.90	\$2.05	\$2.22	\$2.39	\$2.61	\$2.85	\$3.10		\$3.63	\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$5.16	\$108.30
 CenterPoint Energy, Inc. 	CNP	\$1.40	\$1.42	\$1.45	\$1.48	\$1.50	\$1.54	\$1.59	\$1.63		\$1.71	\$1.76	\$1.85	\$1.96	\$2.07	\$2.19	\$2.31	\$40.74
14 CMS Energy Corporation	CMS	\$1.13	\$1.21	\$1.30	\$1.39	\$1.49	\$1.61	\$1.74	\$1.88		\$2.16	\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$3.05	\$75.97
15 Consolidated Edison, Inc.		\$2,42	\$2.48	\$2.53	\$2.59	\$2.64	\$2.77	\$2.91	\$3.07		\$3,45	\$3.69	\$3.90	\$4.12	\$4.35	\$4.59	\$4.85	\$133,03
16 Dominion Resources, Inc.	Δ	\$2.37	\$2.56	\$2.77	\$2.99	\$3.23	\$3.43	\$3.64	\$3.85		\$4.24	\$4.43	\$4.68	\$4.95	\$5.23	\$5.52	\$5.84	\$155.72
17 DTE Energy Company	DTE	\$3.32	\$3.46	\$3.60	\$3.75	\$3.91	\$4.19	\$4.49	\$4.83		\$5.58	\$6.00	\$6.34	\$6.70	\$7.08	\$7.48	\$7.90	\$175.49
18 Duke Energy Corporation	PUK	\$3.12	\$3.21	\$3.30	\$3.39	\$3.48	\$3.67	\$3.87	\$4.09		\$4.58	\$4.86	\$5.13	\$5.42	\$5.73	\$6.05	\$6.40	\$165.07
19 Empire District Electric Company	EDE	\$1.24	\$1.27	\$1.30	\$1.33	\$1.36	\$1,43	\$1.50	\$1.57		\$1.73	\$1.82	\$1.93	\$2.04	\$2.15	\$2.27	\$2.40	\$50.10
20 Eversource Energy	ES	\$1.65	\$1.77	\$1.89	\$2.03	\$2.17	\$2.43	\$2.69	\$2.98		\$3.57	\$3.88	\$4.10	\$4.33	\$4.58	\$4.84	\$5.11	\$113.45
21 FirstEnergy Corp.	丑	\$0.53	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87		\$1.05	\$1.15	\$1.22	\$1.29	\$1.36	\$1.44	\$1.52	\$80.44
22 Great Plains Energy Inc.	GXP	\$1.17	\$1.20	\$1.24	\$1.27	\$1.30	\$1.41	\$1.52	\$1.64		\$1.90	\$2.04	\$2.15	\$2.27	\$2.40	\$2.54	\$2.68	\$57.81
23 IDACORP, Inc.	Δ	\$1.96	\$2.13	\$2.32	\$2.51	\$2.72	\$2.91	\$3.12	\$3.35		\$3.90	\$4.22	\$4,45	\$4.71	\$4.97	\$5.25	\$5.55	\$134.59
24 NorthWestern Corporation	NWE	\$1.18	\$1.33	\$1.49	\$1.67	\$1.87	\$1.98	\$2.10	\$2.22		\$2.46	\$2.59	\$2.74	\$2.89	\$3.06	\$3.23	\$3.41	\$116.41
25 OGE Energy Corp.	OGE	\$1.40	\$1.35	\$1.30	\$1.24	\$1.17	\$1.26	\$1.35	\$1.46	\$1.57	\$1.69	\$1.82	\$1.93	\$2.04	\$2.15	\$2.27	\$2.40	\$67.63
26 Otter Tail Corporation	OTTR	\$2.33	\$2.42	\$2.50	\$2.57	\$2.64	\$2.96	\$3.29	\$3.64	\$4.01	\$4.39	\$4.77	\$5.04	\$5.32	\$5.62	\$5.94	\$6.28	\$64.90
27 Pinnacle West Capital Corporation	NN N	\$2.37	\$2.51	\$2.65	\$2.81	\$2.97	\$3.15	\$3.35	\$3.56	\$3.79	\$4.04	\$4.30	\$4.55	\$4.80	\$5.07	\$5.36	\$5.66	\$133.26
28 Portland General Electric Company	POR	\$1.16	\$1.26	\$1.38	\$1.50	\$1.63	\$1.79	\$1.96	\$2.14	\$2.33	\$2.53	\$2.75	\$2.91	\$3.07	\$3.25	\$3.43	\$3.62	\$81.09
29 SCANA Corporation	SCG	\$2.26	\$2.35	\$2.44	\$2.54	\$2.64	\$2.86	\$3.10	\$3.36	\$3.64	\$3.96	\$4.30	\$4.54	\$4.80	\$5.07	\$5.36	\$5.66	\$120.08
30 Southern Company	SO	\$2.20	\$2.26	\$2.32	\$2.39	\$2.45	\$2.54	\$2.64	\$2.75	\$2.87	\$3.00	\$3.14	\$3,32	\$3.51	\$3.71	\$3.92	\$4.14	\$93.17
31 TECO Energy, Inc.	世	\$0.86	\$0.91	\$0.96	\$1.01	\$1.06	\$1.14	\$1.22	\$1.29	\$1.37	\$1.44	\$1.50	\$1.59	\$1.67	\$1.77	\$1.87	\$1.98	\$41.00
32 Westar Energy, Inc.	N.	\$1.52	\$1.57	\$1.62	\$1.68	\$1.73	\$1.90	\$2.08	\$2.28	\$2.50	\$2.72	\$2.97	\$3.14	\$3.31	\$3.50	\$3.70	\$3.91	\$83.12
33 Xcel Energy Inc.	Ä	\$1.34	\$1.42	\$1.49	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98	\$2.11	\$2.24	\$2.39	\$2.52	\$2.67	\$2.82	\$2.98	\$3.14	\$75.05

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4 3	Projected Annual Data Investor Cash Flows		[64]	[65]	[99]	[67]	[68]	[69]	[70]	[71]	[72]	[23]	[74]	[75]	[92]	[77]	[78]	[79]	[80]	[81]
			Initial																	
9	Company	Ticker	Outflow	6/25/15	12/31/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21 6	6/30/22 6	6/30/23 6	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/59	06/36/9
7	ALLETE, Inc.	ALE ((\$48.97)	\$0.00	\$1.06	\$2.10	\$2.22	\$2.32	\$2.42	\$2.62			\$3.29	\$3.54	\$3.79	\$4.01	\$4.24	\$4.47	\$4.73	\$117.40
ထ	Alliant Energy Corporation	Ę	(\$29.29)	\$0.00	\$1.17	\$2.32	\$2.57	\$2.75	\$2.93	\$3.14			\$3.85	\$4.12	\$4.40	\$4.64	\$4.91	\$5.18	\$5.48	\$142.25
6	Ameren Corporation	AEE ((\$39.13)	\$0.00	\$0.86	\$1.72	\$1.75	\$1.80	\$1.83	\$2.03	\$2.24	٠,	32.69	\$2.94	\$3.21	\$3.39	\$3.58	\$3.78	\$4.00	\$95.81
9	American Electric Power Company, Inc.	AEP ((\$54.66)	\$0.00	\$1.18	\$2.34	\$2.50	\$2.62	\$2.74	\$2.91		\$3.28	\$3.49	\$3.71	\$3.95	\$4.17	\$4.41	\$4.66	\$4.92	\$128.53
Ξ	Avista Corporation	AVA ((\$31.45)	\$0.00	\$0.68	\$1.37	\$1.48	\$1.56	\$1.65	\$1.78	\$1.91	٠,	\$2.19	\$2.34	\$2.49	\$2.63	\$2.78	\$2.94	\$3.11	\$75.12
12	Black Hills Corporation	BKH ((\$46.14)	\$0.00	\$0.91	\$1.82	\$2.05	\$2.22	\$2.39	\$2.61		_	33.36	\$3.63	\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$113.45
5	CenterPoint Energy, Inc.	CNP CNP	(\$19.77)	\$0.00	\$0.72	\$1.44	\$1.45	\$1.48	\$1.50	\$1.54		\$1.63	\$1.67	\$1.71	\$1.76	\$1.85	\$1.96	\$2.07	\$2.19	\$43.05
14	CMS Energy Corporation	CMS ((\$32.93)	\$0.00	\$0.59	\$1.17	\$1.30	\$1.39	\$1.49	\$1.61			\$2.01	\$2.16	\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$79.02
15	Consolidated Edison, Inc.		(\$59.64)	\$0.00	\$1.25	\$2.46	\$2.53	\$2.59	\$2.64	\$2.77	\$2.91		\$3.25	\$3.45	\$3.69	\$3.90	\$4.12	\$4.35	\$4.59	\$137.88
16	Dominion Resources, Inc.		(\$69.20)	\$0.00	\$1.23	\$2.47	\$2.77	\$2.99	\$3.23	\$3.43	\$3.64		\$4.05	\$4.24	\$4.43	\$4.68	\$4.95	\$5.23	\$5.52	\$161.55
17	DTE Energy Company	DTE ((\$76.77)	\$0.00	\$1.72	\$3.40	\$3.60	\$3.75	\$3.91	\$4.19		\$4.83	55,19	\$5.58	\$6.00	\$6.34	\$6.70	\$7.08	\$7.48	\$183.39
19	Duke Energy Corporation		(\$74.10)	\$0.00	\$1.62	\$3.20	\$3.30	\$3.39	\$3.48	\$3.67			34.33	\$4.58	\$4.86	\$5.13	\$5.42	\$5.73	\$6.05	\$171.46
19	Empire District Electric Company		(\$22.93)	\$0.00	\$0.64	\$1.27	\$1.30	\$1.33	\$1.36	\$1.43		\$1.57	31.65	\$1.73	\$1.82	\$1.93	\$2.04	\$2.15	\$2.27	\$52.50
8	Eversource Energy	ES ES	(\$47.64)	\$0.00	\$0.86	\$1.72	\$1.89	\$2.03	\$2.17	\$2.43			33.27	\$3.57	\$3.88	\$4.10	\$4.33	\$4.58	\$4.84	\$118.56
21	FirstEnergy Corp.	_	(\$34.60)	\$0.00	\$0.27	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72			96'0	\$1.05	\$1.15	\$1.22	\$1.29	\$1.36	\$1.44	\$81.96
22	Great Plains Energy Inc.	-	(\$25.35)	\$0.00	\$0.61	\$1.21	\$1.24	\$1.27	\$1.30	\$1.41			31.76	\$1.90	\$2.04	\$2.15	\$2.27	\$2.40	\$2.54	\$60.49
23	IDACORP, Inc.	ΘĀ	(\$67.95)	\$0.00	\$1.02	\$2.00	\$2.32	\$2.51	\$2.72	\$2.91			33.61	\$3.90	\$4.22	\$4.45	\$4.71	\$4.97	\$5.25	\$140.14
24	NorthWestern Corporation		(\$51.02)	\$0.00	\$0.61	\$1.22	\$1.49	\$1.67	\$1.87	\$1.98		\$2.22	32.34	\$2.46	\$2.59	\$2.74	\$2.89	\$3.06	\$3.23	\$119.82
52	OGE Energy Corp.		(\$30.33)	\$0.00	\$0.72	\$1.43	\$1.30	\$1.24	\$1.17	\$1.26	\$1.35		1.57	\$1.69	\$1.82	\$1.93	\$2.04	\$2.15	\$2.27	\$70.03
56	Otter Tail Corporation	OTTR ((\$26.99)	\$0.00	\$1.21	\$2.44	\$2.50	\$2.57	\$2.64	\$2.96			\$4.01	\$4.39	\$4.77	\$5.04	\$5.32	\$5.62	\$5.94	\$71.18
27	Pinnacle West Capital Corporation) MNd	(\$58.80)	\$0.00	\$1.23	\$2.44	\$2.65	\$2.81	\$2.97	\$3.15	\$3.35	\$3.56	33.79	\$4.04	\$4.30	\$4.55	\$4.80	\$5.07	\$5.36	\$138.92
28	Portland General Electric Company	POR ((\$34.24)	\$0.00	\$0,60	\$1.19	\$1.38	\$1.50	\$1.63	\$1.79	-		52.33	\$2.53	\$2.75	\$2.91	\$3.07	\$3.25	\$3.43	\$84.72
59	SCANA Corporation	SCG ((\$51.78)	\$0.00	\$1.17	\$2.31	\$2.44	\$2.54	\$2.64	\$2.86	\$3.10		\$3.64	\$3.96	\$4.30	\$4.54	\$4.80	\$5.07	\$5.36	\$125.74
30	Southern Company	os So	(\$42.94)	\$0.00	\$1.14	\$2.25	\$2.32	\$2.39	\$2.45	\$2.54	\$2.64		\$2.87	\$3.00	\$3.14	\$3.32	\$3.51	\$3.71	\$3.92	\$97.31
31	TECO Energy, Inc.		(\$18.35)	\$0.00	\$0.45	\$0.90	\$0.96	\$1.01	\$1.06	\$1.14	\$1.22		1.37	\$1.44	\$1.50	\$1.59	\$1.67	\$1.77	\$1.87	\$42.97
32	Westar Energy, Inc.		(\$35.52)	\$0.00	\$0.79	\$1.57	\$1.62	\$1.68	\$1.73	\$1.90	\$2.08	\$2.28	32.50	\$2.72	\$2.97	\$3.14	\$3.31	\$3.50	\$3.70	\$87.02
ဗ္ဗ	Xcel Energy Inc.	Ä H	(\$33.19)	\$0,00	\$0,70	\$1.38	\$1.49	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98	32.11	\$2.24	\$2.39	\$2.52	\$2.67	\$2.82	\$2.98	\$78.19

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

			200	į	EPS Growth Rate Estimates	ate Estim	ates	Long-Term	בֿ	Payout Rati	유	Iterative	terative Solution Terminal		Terminal
			•		i	Value	Low							P/E	PEG
ပ	Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	2015	2019	2025	Proof	IRR	Ratio	Ratio
Ą	ALLETE, Inc.	ALE	\$48.97	Α̈́	%00.9	6.50%	%00.9	2.65%	%00'99	61.00%	67.30%	\$0.00	10.20%	15.63	2.77
₹	Alliant Energy Corporation	Ľ	\$59.59	5.30%	5.45%	6.00%	5.30%	2.65%	61.00%	63.00%	67.30%	\$0.00	9.94%	16.60	2.94
Ł	neren Corporation	AEE	\$39.13	6.80%	5.85%	%00.9	5.85%	2.65%	65.00%	55.00%	67.30%	\$0.00	10.24%	15.49	2.74
٩	American Electric Power Company, Inc.	AEP	\$54.66	4.90%	5.08%	2.00%	4.90%	5.65%	65.00%	64.00%	67.30%	\$0.00	10.06%	16.14	2.86
¥	Avista Corporation	AVA	\$31.45	Ā	5.00%	7.00%	2.00%	5.65%	67.00%	64.00%	67.30%	\$0.00	9.91%	16.72	2.96
ä	Black Hills Corporation	BKH	\$46,14	Ϋ́	7.00%	4.50%	4.50%	2.65%	57.00%	59.00%	67.30%	\$0.00	9.95%	16.53	2.93
ပ္ပ	CenterPoint Energy, Inc.	CNP	\$19.77	5.70%	1.91%	1.00%	1.00%	2.65%	93.00%	80.00%	67.30%	\$0.00	10.03%	16.24	2.87
ర్	AS Energy Corporation	CMS	\$32.93	6.20%	6.73%	5.50%	2.50%	2.65%	61.00%	62.00%	67.30%	\$0.00	9.57%	18.15	3.21
ပိ	Consolidated Edison, Inc.	읍	\$59.64	2.70%	2.38%	3.00%	2.38%	2.65%	65.00%	63.00%	67.30%	\$0.00	9.35%	19.22	3.40
ದ	Dominion Resources, Inc.	Δ	\$69.20	6.30%	2.89%	8.00%	2.89%	2.65%	72.00%	72.00%	67.30%	\$0.00	9.11%	20.58	3.64
5	DTE Energy Company	DTE	\$76.77	2.00%	4.51%	2.00%	4.51%	2.65%	62.00%	60.00%	67.30%	\$0.00	10.26%	15.43	2.73
Ճ	Duke Energy Corporation	5 S	\$74.10	4.70%	4.49%	2.00%	4.49%	2.65%	72.00%	66.00%	67.30%	\$0.00	9.61%	17.96	3.18
匝	Empire District Electric Company	EDE	\$22.93	2.00%	2.00%	3.00%	3.00%	2.65%	76.00%	69.00%	67.30%	\$0.00	10.09%	16.01	2.83
ш	Eversource Energy	ES	\$47.64	6.80%	%09'9	8.50%	%09'9	2.65%	29.00%	26.00%	67.30%	\$0.00	9.89%	16.79	2.97
芷	FirstEnergy Corp.	표	\$34.60	Ϋ́	ž	7.00%	7.00%	5.65%	58.00%	54.00%	67.30%	\$0.00	7.64%	35.70	6.32
Ö	Great Plains Energy Inc.	дХБ	\$25.35	%00.9	6.37%	2.00%	2.00%	2.65%	70.00%	61.00%	67.30%	\$0.00	10.14%	15.83	2.80
≙	IDACORP, Inc.	ΔĀ	\$57.95	4.00%	4.00%	1.00%	1.00%	2.65%	49.00%	58.00%	67.30%	\$0.00	9.23%	19.88	3.52
ž	NorthWestern Corporation	NWE	\$51.02	2.00%	2.00%	6.50%	2.00%	5.65%	26.00%	%00.69	67.30%	\$0.00	8.45%	25.37	4.49
ŏ	OGE Energy Corp.	OGE	\$30.33	2.00%	4.00%	3.00%	3.00%	5.65%	86.00%	29.00%	67.30%	\$0.00	8.94%	21.65	3.83
ŏ		OTTR	\$26.99	ž	%00'9	%00'6	%00'9	2.65%	70.00%	26.00%	67.30%	\$0.00	14.31%	8.22	1.45
듄		PNW	\$58.80	4.60%	5.30%	4.00%	4.00%	5.65%	63.00%	64.00%	67.30%	\$0.00	9.78%	17.22	3.05
В	Portland General Electric Company	POR	\$34.24	5.20%	4.72%	%00'9	4.72%	2.65%	50.00%	56.00%	67.30%	\$0.00	10.01%	16.32	2.89
ပ္ပ	SCANA Corporation	SCG	\$51.78	4.20%	4.30%	4.50%	4.20%	2.65%	57,00%	26.00%	67.30%	\$0.00	10.54%	14.54	2.57
လွ	Southern Company	SO	\$42.94	3.50%	3.32%	4.50%	3.32%	2.65%	76.00%	71.00%	67.30%	\$0.00	8.99%	16.37	2.90
世	ECO Energy, Inc.	旦	\$18.35	7.10%	9.20%	6.00%	%00.9	5.65%	83.00%	72.00%	67.30%	\$0.00	9.81%	17.10	3.02
≶	Westar Energy, Inc.	N N	\$35.52	3.50%	3.40%	6.00%	3.40%	2.65%	61.00%	55.00%	67.30%	\$0.00	9.87%	16.87	2.99
위	Xcel Energy Inc.	XEL	\$33.19	2.00%	4.58%	4.50%	4.50%	5.65%	63.00%	64.00%	67.30%	\$0.00	9.94%	16.59	2.94
												Mean	9.88%		
												Max	14.31%		
												Ξ	7.64%		

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4	Projected Annual)									
2	Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[59]	[30]	
ď	Company	Tícker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2006	7007	3006	2006	7606	acoc	9000	000	
1 ((LHL - I	2	100	2007	200	1100	0107	2003	2,1,0	1707	2022	2020	2027	20.50	2020	2021	2020	2023	2030	
_	ALLE I E, INC.	АLП	\$2.90	#3.U.	\$3.26	\$3.45	\$3.66	\$3.88	\$4.11	\$4.35	\$4.61	\$4.87	\$5.15	\$5.44	\$5.75	\$6.07	\$6.42	\$6.78	\$7.16	
œ	Alliant Energy Corporation	Ę	\$3.48	\$3.66	\$3.86	\$4.06	\$4.28	\$4.51	\$4.75	\$5.00	\$5.28	\$5.57	\$5.88	\$6.21	\$6.57	\$6.94	\$7.33	\$7.74	\$8.18	
თ	Ameren Corporation	AEE	\$2.40	\$2.54	\$2.69	\$2.85	\$3.01	\$3.19	\$3.37	\$3.57	\$3.78	\$3.99	\$4.22	\$4.46	\$4.71	\$4.97	\$5.26	\$5.55	\$5.87	
9	American Electric Power Company, Inc.	AEP	\$3.34	\$3.50	\$3.68	\$3.86	\$4.04	\$4.24	\$4.46	\$4.69	\$4.93	\$5.20	\$5.49	\$5.80	\$6.12	\$6.47	\$6.84	\$7.22	\$7.63	
Ξ	Avista Corporation	AVA	\$1.84	\$1.93	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.60	\$2.74	\$2.88	\$3.04	\$3.22	\$3.40	\$3.59	\$3.79	\$4.01	\$4.23	
12	Black Hills Corporation	BKH	\$2.89	\$3.02	\$3.16	\$3.30	\$3.45	\$3.60	\$3.77	\$3.95	\$4.16	\$4.37	\$4.61	\$4.87	\$5.15	\$5.44	\$5.75	\$6.07	\$6.42	
<u>რ</u>	CenterPoint Energy, Inc.	CNP	\$1.42	\$1.43	\$1.45	\$1.46	\$1.48	\$1.49	\$1.52	\$1.56	\$1.61	\$1.68	\$1.76	\$1.86	\$1,96	\$2.07	\$2.19	\$2.31	\$2.44	
14	CMS Energy Corporation	CMS	\$1.74	\$1.84	\$1.94	\$2.04	\$2.16	\$2.27	\$2.40	\$2.53	\$2.67	\$2.82	\$2.98	\$3.15	\$3.33	\$3.52	\$3.72	\$3.93	\$4.15	
5	Consolidated Edison, Inc.	В	\$3.62	\$3.71	\$3.79	\$3.88	\$3.98	\$4.07	\$4.19	\$4.34	\$4.51	\$4.72	\$4.96	\$5.24	\$5.53	\$5.85	\$6.18	\$6.53	\$6.89	
16			\$3.05	\$3.23	\$3.42	\$3.62	\$3.83	\$4.06	\$4.30	\$4.55	\$4.81	\$5.09	\$5.38	\$5.68	\$6.00	\$6.34	\$6.70	\$7.08	\$7.48	
17	DTE Energy Company	DTE	\$5.10	\$5.33	\$5.57	\$5.82	\$6.08	\$6.36	\$6.66	\$6.98	\$7.34	\$7.72	\$8.15	\$8.61	\$9.09	\$9.61	\$10.15	\$10.72	\$11.33	
9	Duke Energy Corporation	Š	\$4.13	\$4.32	\$4.51	\$4.71	\$4.92	\$5.14	\$5.39	\$5.65	\$5.93	\$6.25	\$6.59	\$6.96	\$7.35	\$7.77	\$8.21	\$8.67	\$9.16	
19		EDE	\$1.55	\$1.60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.11	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$2.92	\$3.09	
2	Eversource Energy	S	\$2.58	\$2.75	\$2.93	\$3.13	\$3.33	\$3.55	\$3.78	\$4.02	\$4.26	\$4.52	\$4.78	\$5.05	\$5.34	\$5.64	\$5.96	\$6.29	\$6.65	
21	FirstEnergy Corp.	Щ	\$0.85	\$0.91	\$0.97	\$1.04	\$1.11	\$1.19	\$1.27	\$1.36	\$1.44	\$1.53	\$1.62	\$1.71	\$1.81	\$1.91	\$2.02	\$2.13	\$2.25	
22	Great Plains Energy Inc.	ΘXΒ	\$1.57	\$1.65	\$1.73	\$1.82	\$1.91	\$2.00	\$2.11	\$2.22	\$2.33	\$2.46	\$2.60	\$2.74	\$2.90	\$3.06	\$3.24	\$3.42	\$3.61	
23	IDACORP, Inc.	Δ	\$3.85	\$3.89	\$3.93	\$3.97	\$4.01	\$4.05	\$4.12	\$4.22	\$4.36	\$4.54	\$4.76	\$5.03	\$5.32	\$5.62	\$5.94	\$6.27	\$6.63	
54		NWE	\$1,98	\$2.08	\$2.18	\$2.29	\$2.41	\$2.53	\$2.66	\$2.79	\$2.94	\$3.10	\$3.28	\$3.46	\$3.66	\$3.86	\$4.08	\$4.31	\$4.56	
22	OGE Energy Corp.	OGE	\$1.55	\$1.60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.11	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$2.92	\$3.09	
56	Otter Tail Corporation	OTTR	\$3.06	\$3.24	\$3.44	\$3.64	\$3.86	\$4.09	\$4.34	\$4.59	\$4.86	\$5.14	\$5.44	\$5.74	\$6.07	\$6.41	\$6.77	\$7.15	\$7.56	
27	Pinnacle West Capital Corporation	PNW	\$3.58	\$3.72	\$3.87	\$4.03	\$4.19	\$4.36	\$4,54	\$4.75	\$4.98	\$5.23	\$5.51	\$5.82	\$6.15	\$6.50	\$6.87	\$7.26	\$7.67	
78		POR	\$2,18	\$2.28	\$2.39	\$2.50	\$2.62	\$2.75	\$2.88	\$3.02	\$3.18	\$3,35	\$3.53	\$3.73	\$3.95	\$4.17	\$4.40	\$4.65	\$4.92	
53		SCG	\$3.79	\$3.95	\$4.12	\$4.29	\$4.47	\$4.66	\$4.86	\$5.09	\$5.34	\$5.62	\$5.92	\$6.26	\$6.61	\$6.98	\$7,38	\$7.79	\$8.23	
စ္က		SO	\$2.77	\$2.86	\$2.96	\$3.06	\$3.16	\$3.26	\$3.38	\$3.52	\$3.68	\$3.86	\$4.06	\$4.29	\$4.53	\$4.79	\$5.06	\$5.35	\$5.65	
93		世	\$0.95	\$1.01	\$1.07	\$1.13	\$1.20	\$1.27	\$1.35	\$1.43	\$1.51	\$1.60	\$1.69	\$1.78	\$1.88	\$1.99	\$2.10	\$2.22	\$2.35	
32	Westar Energy, Inc.	X K	\$2.35	\$2.43	\$2.51	\$2.60	\$2.69	\$2.78	\$2.88	\$3.00	\$3.14	\$3.29	\$3.47	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$4.82	
ဗ္ဗ	Xcel Energy Inc.	¥	\$2.03	\$2.12	\$2.22	\$2.32	\$2.42	\$2.53	\$2.65	\$2,78	\$2.92	\$3.07	\$3.24	\$3.42	\$3.62	\$3.82	\$4.04	\$4.27	\$4.51	

- 26

4 το	Projected Annual Dividend Payout Ratio		22	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
9	Company	Ticker	20	2015 20	2016 2	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
7	ALLETE, Inc.	ALE	.99	66.00% 64.	64.75% 63	63.50% 6	2.25%	61.00%	62.05% (63.10%	64.15%	65.20%	66.25%	67.30% 6	١.,	67.30%	67.30%	67.30%	67.30%	
ω	Alliant Energy Corporation	LN1	61.	61.00% 61.	61.50% 62	62.00% 6		63.00%	63.72% (64.43%	65.15%	65.87%	%65.99	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
<u>ග</u>	Ameren Corporation	AEE	65.	65.00% 62.	62.50% 60	60.00% 5	27.50%	55.00%	57.05%	59.10%	61.15%	63.20%		67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
9	American Electric Power Company, Inc.	AEP	65.	65.00% 64.		64.50% 6	64.25%	64.00%	64.55%	65.10%	65.65%	66.20%	66.75%	67.30% 6		67.30%	67.30%	67.30%	67.30%	
Ξ	Avista Corporation	AVA	67.	67.00% 66.	66.25% 65	65.50% 6	64.75%	64.00%	64.55%	65.10%	65.65%	66.20%	66.75%	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
12	Black Hills Corporation	WKH	57.	57.00% 57.	57.50% 58	58.00% 5	58.50%	29.00%	60.38%	61.77%	63.15%	64.54%	65.92%	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
13	CenterPoint Energy, Inc.	CNP	93.	93.00% 89.		86.50% 8	83.25%	80.00%	77.88%	75.77%	73.65%	71.54%	69.42%	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
4	CMS Energy Corporation	CMS	61.	61.00% 61.	61.25% 61	61.50% 6	61.75%	62.00%	62.88%	63.77%	64.65%	65.54%	66.42%	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
15	Consolidated Edison, Inc.	9	.65	65.00% 64.		64.00% 6	63.50%	63.00%	63.72% (64.43%	65.15%	65.87%	%65'99	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
16	Dominion Resources, Inc.	۵	72.	72.00% 72.	72.00% 72	72.00% 7	72.00%	72.00%	71.22%	70.43%	69.65%	68.87%	%60.89	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
17	DTE Energy Company	DTE	62.	62.00% 61.	61.50% 61	61.00% 6	%05.09	%00.09	61.22% (62.43%	63.65%	64.87%	%60.99	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
8	Duke Energy Corporation	DUK	72.	72.00% 70.3	70.50% 69		67.50%	%00.99	66.22% (66.43%	%59.99	66.87%	%60.79	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
9	Empire District Electric Company	EDE	76.	76.00% 74.		72.50% 7	70.75%	%00'69	68.72% (68.43%	68.15%	67.87%	67.59%	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
20	Eversource Energy	ES	59.	59.00% 58.		57.50% 5		26.00%	57.88%	29.77%	61.65%	63.54%	65.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%	
21	FirstEnergy Corp.	Ш	. 58	58.00% 57.	57.00% 56	56.00% 5	25.00%	54.00%	56.22%	58.43%	89.09	62.87%	%60.59	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
22	Great Plains Energy Inc.	GXP	6	70.00% 67.	67.75% 65	65.50% 6	63,25%	61.00%	62.05% (63.10%	64.15%	65.20%	66.25%	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
23	IDACORP, Inc.	ΙDΑ	49.	49.00% 51.	51.25% 53	53,50% 5	55.75%	28.00%	59.55%	61.10%	62.65%	64.20%	65.75%	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
24	NorthWestern Corporation	NWE	- 56.	56.00% 59.	59.25% 62	62,50% 6	65.75%	%00.69	68.72% (68.43%	68.15%	67.87%	67.59%	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
52	OGE Energy Corp.	OGE	.98	86.00% 79.	79.25% 72	72.50% 6	65.75%	29.00%	60.38%	61.77%	63.15%	64.54%	65.92%	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
56	Otter Tail Corporation	OTTR	ē	70.00% 66.	66,50% 63	63.00% 5	29.50%	26.00%	57.88%	59.77%	61.65%	63.54%	65.42%	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
27	Pinnacle West Capital Corporation	PNW	.83	63.00% 63.	63.25% 63	63.50% 6	63.75%	64.00%	64.55% 6	65.10%	65.65%	66.20%	66.75%	67.30% €	67.30%	67.30%	67.30%	67.30%	67.30%	
78	Portland General Electric Company	POR	20.	50.00% 51.3	51.50% 53	53.00% 5	54.50%	26.00%	57.88%	59.77%	61.65%	63.54%	65.42%	67.30% €	67.30%	67.30%	67.30%	67.30%	67.30%	
59	SCANA Corporation	ഉറദ	57.	57.00% 56.	56.75% 56	56.50% 5	56.25%	26.00%	57.88%	59.77%	61.65%	63.54%	65.42%	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
30	Southern Company	SO	76.	76.00% 74.	74.75% 73	73.50% 7	72.25%	71.00%	70.38%	69.77%	69.15%	68.54%	67.92%	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
31	TECO Energy, Inc.	坦	.83.	83.00% 80.	80.25% 77	77.50% 7	74.75%	72.00%	71.22%	70.43%	69.65%	68.87%	68.09%	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
35	Westar Energy, Inc.	WR	61.	61.00% 59.	59.50% 58	58.00% 5	26.50%	25.00%	57.05%	59.10%	61.15%	63.20%	65.25%	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%	
33	Xcel Energy Inc.	XEL	63.	63.00% 63.	63.25% 63	63.50% 6	63.75%	64.00%	64.55%	65.10%	65.65%	66.20%	66.75% 67.30%		67.30%	67.30%	67.30%	67.30%	67.30%	

					Low E	ow EPS Growin Kate Estimate in First Stage	кате Еѕпп	ate in Fig	st Stage									
4 Projected Annual 5 Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[29]	[60]	[61]	[62]	[63]
										Manager Street, and the street					مندون والمتعادد والمتعاد والمتعادد والمتعادد والمتعادد والمتعادد والمتعادد والمتعادد و			Terminal
6 Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022				2026	2027	2028	2029	2030	Value
7 ALLETE, Inc.	ALE	\$2.03	\$2.11	\$2.19	\$2.28	\$2.37	\$2.55	\$2.75	\$2.96				\$3.87	\$4.09	\$4.32	\$4.56	\$4.82	\$111.96
8 Alliant Energy Corporation	Ŋ	\$2.24	\$2.37	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22	\$3.44	\$3.67	٠.		\$4.42	\$4.67	\$4.93	\$5.21	\$5.51	\$135.76
9 Ameren Corporation	AEE	\$1.65	\$1.68	\$1.71	\$1.73	\$1.75	\$1.93	\$2.11	\$2.31	\$2.52	\$2.75		\$3.17	\$3.35	\$3.54	\$3.74	\$3.95	\$90.84
10 American Electric Power Company, Inc.	AEP	\$2.28	\$2.38	\$2.49	\$2.60	\$2.72	\$2.88	\$3.05	\$3.24	\$3.44			\$4.12	\$4.35	\$4.60	\$4.86	\$5.14	\$123.16
11 Avista Corporation	AVA	\$1.29	\$1.34	\$1.40	\$1.45	\$1.50	\$1,59	\$1.69	\$1.80	\$1.91	~		\$2.29	\$2.42	\$2.55	\$2.70	\$2.85	\$70.78
12 Black Hills Corporation	BKH	\$1.72	\$1.81	\$1.91	\$2.02	\$2.12	\$2.28	\$2.44	\$2.62	\$2.82	_		\$3.47	\$3.66	\$3.87	\$4.09	\$4.32	\$106.08
13 CenterPoint Energy, Inc.	CNP	\$1.33	\$1.30	\$1.27	\$1.23	\$1.19	\$1.18	\$1.18	\$1.19	\$1.20	۰.		\$1.32	\$1.39	\$1.47	\$1.56	\$1.64	\$39.69
14 CMS Energy Corporation	CMS	\$1.12	\$1.19	\$1.26	\$1,33	\$1.41	\$1.51	\$1.62	\$1.73	\$1.85		\$2.12	\$2.24	\$2.37	\$2,50	\$2.64	\$2.79	\$75.31
15 Consolidated Edison, Inc.	요	\$2.41	\$2.45	\$2.49	\$2.53	\$2.57	\$2.67	\$2.79	\$2.94		_		\$3.72	\$3.93	\$4.16	\$4.39	\$4.64	\$132.53
16 Dominion Resources, Inc.	Δ	\$2.33	\$2.46	\$2.61	\$2.76	\$2.92	\$3.06	\$3.20	\$3.35				\$4.04	\$4.27	\$4.51	\$4.76	\$5.03	\$153.89
17 DTE Energy Company	OTE	\$3.30	\$3.43	\$3.55	\$3.68	\$3.82	\$4.08	\$4.36	\$4.67				\$6.12	\$6.47	\$6.83	\$7.22	\$7.63	\$174.81
18 Duke Energy Corporation	PUK	\$3.11	\$3.18	\$3.25	\$3.32	\$3.40	\$3.57	\$3.75	\$3.96				\$4.95	\$5.23	\$5.52	\$5.84	\$6.17	\$164.54
19 Empire District Electric Company	EDE	\$1.21	\$1.22	\$1.23	\$1.23	\$1.24	\$1.28	\$1.32	\$1.37				\$1.67	\$1.76	\$1.86	\$1.97	\$2.08	\$49.43
20 Eversource Energy	ES	\$1.62	\$1.71	\$1.80	\$1.89	\$1.99	\$2.19	\$2.40	\$2.63				\$3.59	\$3.79	\$4.01	\$4.24	\$4.48	\$111.64
21 FirstEnergy Corp.	Н	\$0,53	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87				\$1.22	\$1.29	\$1.36	\$1.44	\$1.52	\$80.44
22 Great Plains Energy Inc.	GXD	\$1.15	\$1.17	\$1.19	\$1.21	\$1.22	\$1.31	\$1.40	\$1.50				\$1.95	\$2.06	\$2.18	\$2.30	\$2.43	\$57.19
23 IDACORP, Inc.	ΔA	\$1.91	\$2.01	\$2.12	\$2.23	\$2.35	\$2.45	\$2.58	\$2.73		\$3.13		\$3.58	\$3.78	\$4.00	\$4.22	\$4.46	\$131.76
24 NorthWestern Corporation	NWE	\$1.16	\$1.29	\$1.43	\$1.58	\$1.74	\$1.83	\$1.91	\$2.01				\$2.46	\$2.60	\$2.75	\$2.90	\$3.07	\$115.57
25 OGE Energy Corp.	OGE	\$1.37	\$1.30	\$1.23	\$1.15	\$1.06	\$1.12	\$1.19	\$1.27		\$1.46		\$1.67	\$1.76	\$1.86	\$1.97	\$2.08	\$66.85
26 Otter Tail Corporation	OTTR	\$2.27	\$2.29	\$2.30	\$2.30	\$2.29	\$2.51	\$2.75	\$3.00	\$3.27	\$3.56		\$4.08	\$4.31	\$4.56	\$4.82	\$5.09	\$62.11
27 Pinnacle West Capital Corporation	PNS	\$2.35	\$2.45	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09	\$3.27	\$3.46			\$4.14	\$4.38	\$4.62	\$4.88	\$5.16	\$132.04
28 Portland General Electric Company	POR	\$1.14	\$1.23	\$1.33	\$1.43	\$1.54	\$1.67	\$1.81	\$1.96	\$2.13			\$2.66	\$2.81	\$2.96	\$3.13	\$3.31	\$80.22
29 SCANA Corporation	SCG	\$2.25	\$2.34	\$2.42	\$2.51	\$2.61	\$2.81	\$3.04	\$3.29	\$3.57	\$3.87		\$4.45	\$4.70	\$4.97	\$5.25	\$5.54	\$119.76
30 Southern Company	S	\$2.18	\$2.21	\$2.25	\$2.28	\$2,32	\$2.38	\$2.46	\$2.54	\$2.64			\$3.05	\$3.22	\$3.41	\$3.60	\$3.80	\$92.49
31 TECO Energy, Inc.	里	\$0.84	\$0.86	\$0.88	\$0.90	\$0.92	\$0.96	\$1.00	\$1.05	\$1.10	\$1.15	1.20	\$1.27	\$1.34	\$1.42	\$1.49	\$1.58	\$40.12
32 Westar Energy, Inc.	×	\$1.48	\$1.49	\$1.51	\$1.52	\$1.53	\$1.64	\$1.77	\$1.92	\$2.08	\$2.26	32.46	\$2.60	\$2.75	\$2.91	\$3.07	\$3.24	\$81.33
33 Xcel Energy Inc.	XEL	\$1.34	\$1.40	\$1.47	\$1.54	\$1.62	\$1.71	\$1.81	\$1.92	\$2.03	\$2.16	_	\$2.43	\$2.57	\$2.72	\$2.87	\$3.03	\$74.78

⊢ 0							Multi-Sta	Multi-Stage Growth Discounted Cash Flow Model 30 Day Average Stock Price	e Growth Discounted Cash F 30 Day Average Stock Price	d Cash Fl.	ow Model									
က							Low EF	Low EPS Growth Rate Estimate in First Stage	Rate Estim	ate in Fir	st Stage									
4	Projected Annual Data																			
Ω	Investor Cash Flows		[64]	[65]	[99]	[67]	[68]	[69]	[0/]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[87]	[79]	[80]	[81]
			nitia																	
9	Company	Ticker	Outflow	6/25/15	12/31/15	- 1	6/30/17	6/30/18	6	പ	-	ᆈ	പ	6/30/24 6	S.	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
7	ALLETE, Inc.	ALE	(\$48.97)	\$0.00	\$1,05	\$2.09	\$2.19	\$2.28	\$2.37		\$2.75	\$2.96		\$3.41		\$3.87	\$4.09	\$4.32	\$4.56	\$116.78
80	Alliant Energy Corporation	۲	(\$29.59)	\$0.00	\$1.16	\$2.29	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22	\$3.44	\$3.67	\$3.92	\$4.18	\$4.42	\$4.67	\$4.93	\$5.21	\$141.26
6	Ameren Corporation	AEE	(\$39.13)	\$0.00	\$0.86	\$1.70	\$1.71	\$1.73	\$1.75	\$1.93	\$2.11	\$2.31	\$2.52	\$2.75	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$94.79
9	American Electric Power Company, Inc.	AEP	(\$54.66)	\$0.00	\$1.18	\$2.33	\$2.49	\$2.60	\$2.72	\$2.88	\$3.05	\$3.24	\$3.44	\$3.66	\$3.90	\$4.12	\$4,35	\$4.60	\$4.86	\$128.30
Ξ	Avista Corporation	AVA	(\$31.45)	\$0.00	\$0.67	\$1.33	\$1.40	\$1.45	\$1.50	\$1.59	\$1.69	\$1.80		\$2.03	\$2.16	\$2.29	\$2.42	\$2.55	\$2.70	\$73.63
12	Black Hills Corporation	BKT	(\$46.14)	\$0.00	\$0.89	\$1.76	\$1.91	\$2.02	\$2.12	\$2.28	\$2.44	\$2.62		\$3.04	\$3.28	\$3.47	\$3.66	\$3.87	\$4.09	\$110.40
13	CenterPoint Energy, Inc.	CNP	(\$19.77)	\$0.00	\$0.69	\$1.34	\$1.27	\$1.23	\$1.19	\$1.18	\$1.18	\$1.19	\$1.20	\$1.22	\$1.25	\$1.32	\$1.39	\$1.47	\$1.56	\$41.33
7	CMS Energy Corporation	CMS	(\$32.93)	\$0.00	\$0.58	\$1.15	\$1.26	\$1.33	\$1.41	\$1.51	\$1.62	\$1.73		\$1.98	\$2.12	\$2.24	\$2.37	\$2.50	\$2.64	\$78.10
15		입	(\$59.64)	\$0.00	\$1.25	\$2.44	\$2.49	\$2.53	\$2.57	\$2.67	\$2.79	\$2.94	\$3.11	\$3.30	\$3.52	\$3.72	\$3.93	\$4.16	\$4.39	\$137.17
16	Dominion Resources, Inc.	۵	(\$69.20)	\$0.00	\$1.20	\$2.39	\$2.61	\$2.76	\$2.92	\$3.06	\$3.20	\$3.35	_	\$3.66	\$3.82	\$4.04	\$4.27	\$4.51	\$4.76	\$158.92
17	DTE Energy Company	DTE	(\$76.77)	\$0.00	\$1.71	\$3.38	\$3.55	\$3.68	\$3.82			\$4.67		-		\$6.12	\$6.47	\$6.83	\$7.22	\$182.43
18	Duke Energy Corporation	S S	(\$74.10)	\$0.00	\$1.61	\$3.18	\$3.25	\$3.32	\$3.40	\$3.57	\$3.75	\$3.96	\$4.18	\$4.42	\$4.68	\$4.95	\$5.23	\$5.52	\$5.84	\$170.71
19	Empire District Electric Company	EDE	(\$22.93)		\$0.63	\$1.23	\$1.23	\$1.23	\$1.24							\$1.67	\$1.76	\$1.86	\$1.97	\$51.51
20	Eversource Energy	S	(\$47.64)	\$0.00	\$0.84	\$1.68	\$1.80	\$1.89	\$1.99			\$2.63		\$3.13		\$3.59	\$3.79	\$4.01	\$4.24	\$116.12
7	FirstEnergy Corp.	빞	(\$34.60)	\$0.00	\$0.27	\$0.55	\$0.58	\$0.61	\$0.64		\$0.79	\$0.87	\$0.96	\$1.05		\$1.22	\$1.29	\$1,36	\$1.44	\$81.96
22	-	ΘXĐ	(\$25.35)	\$0.00	\$0.60	\$1.18	\$1.19	\$1.21	\$1.22							\$1.95	\$2.06	\$2.18	\$2.30	\$59.62
23	IDACORP, Inc.	ΔA	(\$57.95)	\$0.00	\$0.99	\$1.91	\$2.12	\$2.23	\$2.35	\$2.45	\$2.58	\$2.73		\$3.13	3.39	\$3.58	\$3.78	\$4.00	\$4.22	\$136.22
24		NWE	(\$51.02)	\$0.00	\$0.60	\$1.19	\$1.43	\$1.58	\$1.74	\$1.83		\$2.01	\$2.11	\$2.21	\$2.33	\$2.46	\$2.60	\$2.75	\$2.90	\$118.63
25	OGE Energy Corp.	OGE	(\$30.33)	\$0.00	\$0.71	\$1.39	\$1.23	\$1.15	\$1.06	\$1.12		\$1.27				\$1.67	\$1.76	\$1.86	\$1.97	\$68.93
56	Otter Tail Corporation	OTTR	(\$26.99)	\$0.00	\$1.18	\$2.34	\$2.30	\$2.30	\$2.29		\$2.75	\$3.00				\$4.08	\$4.31	\$4.56	\$4.82	\$67.19
27	Pinnacle West Capital Corporation	PNW	(\$58.80)	\$0.00	\$1.21	\$2.39	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09	\$3.27	\$3.46	\$3.68		\$4.14	\$4.38	\$4.62	\$4.88	\$137.21
78		POR	(\$34.24)	\$0.00	\$0.59	\$1.17	\$1.33	\$1.43	\$1.54						\$2.51	\$2.66	\$2.81	\$2.96	\$3.13	\$83.53
59	SCANA Corporation	SCG	(\$51.78)	\$0.00	\$1.17	\$2.30	\$2.42	\$2.51	\$2.61		\$3.04	\$3.29			\$4.21	\$4.45	\$4.70	\$4.97	\$5.25	\$125.30
8	Southern Company	SO	(\$42.94)	\$0.00	\$1.13	\$2.21	\$2.25	\$2.28	\$2.32	\$2.38	\$2.46	\$2.54	\$2.64	\$2.76	\$2.89	\$3.05	\$3.22	\$3.41	\$3.60	\$96.29
31	TECO Energy, Inc.	世	(\$18.35)	\$0.00	\$0.43	\$0.86	\$0.88	\$0.90	\$0.92	\$0.96	\$1.00				\$1.20	\$1.27	\$1.34	\$1.42	\$1.49	\$41.70
32		WR	(\$35.52)	\$0.00	\$0.77	\$1.51	\$1.51	\$1.52	\$1.53	\$1.64	\$1.77	\$1.92	\$2.08	52.26	\$2.46	\$2.60	\$2.75	\$2.91	\$3.07	\$84.58
33	Xcel Energy Inc.	XEL	(\$33.19)	\$0.00	\$0.69	\$1.37	\$1.47	\$1.54	\$1.62	\$1.71	\$1.81	\$1.92	\$2.03	\$2.16	\$2.30	\$2.43	\$2.57	\$2.72	\$2.87	\$77.81

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

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4	Inputs		[]	[2]	[8]	4	[2]	[9]	[7]	[8]	6	[10]	1111	[12]	[13]
2			Stock	EP	EPS Growth Rate Estimates	ate Estim		Long-Term	ă.	Payout Ratio	0	terative Solution		Terminal	Terminal
						value								P/E	PEG
9	Company	Ticker	Price	Zacks	First Call	Line	Average	Growth	2015	2019	2025	Proof	IRR	Ratio	Ratio
7	ALLETE, Inc.	ALE	\$51.08	ΑN	%00'9	6.50%	6.25%	2.65%	%00.99	61.00%	67.30%	\$0.00	10.08%	16.05	2.84
œ	Alliant Energy Corporation	Ę	\$61,38	5.30%	5.45%	%00'9	5.58%	2.65%	61.00%	63.00%	67.30%	\$0.00	8.89%	16.79	2.97
თ	Ameren Corporation	AEE	\$40.87	6.80%	5.85%	%00.9	6.22%	2.65%	65.00%	25.00%	67.30%	\$0.00	10.15%	15.80	2.80
9	 American Electric Power Company, Inc. 	AEP	\$55.94	4.90%	2.08%	2.00%	4.99%	2.65%	65.00%	64.00%	67.30%	\$0.00	9.98%	16.42	2.91
7	Avista Corporation	AVA	\$32.71	ž	2.00%	7.00%	%00.9	2.65%	67.00%	64.00%	67.30%	\$0.00	10.01%	16.32	2.89
12	Black Hills Corporation	BKH	\$48.78	ž	7.00%	4.50%	5.75%	2.65%	57.00%	59.00%	67.30%	\$0.00	10.06%	16.14	2.86
13	: CenterPoint Energy, Inc.	CNP	\$20.49	5.70%	1.91%	1.00%	2.87%	2.65%	93.00%	80.00%	67.30%	\$0.00	10.43%	14.87	2.63
14	 CMS Energy Corporation 	CMS	\$34.02	6.20%	6.73%	5.50%	6.14%	2.65%	61.00%	62.00%	67.30%	\$0.00	%09.6	18.00	3.18
15		П	\$60.91	2.70%	2.38%	3.00%	2.69%	2.65%	65.00%	63.00%	67.30%	\$0.00	9.35%	19.24	3.40
16	Dominion Resources, Inc.	Δ	\$70.78	6.30%	5.89%	8.00%	6.73%	2.65%	72.00%	72.00%	67.30%	\$0.00	9.22%	19.94	3.53
17	DTE Energy Company	DTE	\$79.41	2.00%	4.51%	2.00%	4.84%	2,65%	62.00%	60.00%	67.30%	\$0.00	10.20%	15.63	2.77
18	Duke Energy Corporation	S	\$76.11	4.70%	4.49%	2.00%	4.73%	2,65%	72.00%	%00.99	67.30%	\$0.00	8.56%	18.17	3.22
19		EDE	\$24.01	2.00%	2.00%	3.00%	4.33%	2.65%	76.00%	%00.69	67.30%	\$0.00	10.27%	15,39	2.72
8		ES	\$49.32	6.80%	%09.9	8.50%	7.30%	2.65%	29.00%	26.00%	67.30%	\$0.00	9.93%	16.63	2.94
7		Ш	\$35.13	ž	¥	7.00%	7.00%	2.65%	28.00%	54.00%	67.30%	\$0.00	7.61%	36.24	6.41
22	Great Plains Energy Inc.	GΧΡ	\$26.14	%00'9	6.37%	2.00%	2.79%	2.65%	70.00%	61.00%	67.30%	\$0.00	10.23%	15.53	2.75
33		ĎΑ	\$60.44	4.00%	4.00%	1.00%	3.00%	2.65%	49.00%	58.00%	67.30%	\$0.00	9.57%	18.16	3.21
24		NWE	\$52.34	5.00%	2.00%	6.50%	5.50%	2.65%	26.00%	%00.69	67.30%	\$0.00	8.48%	25.17	4.45
25	OGE Energy Corp.	OGE	\$31.57	2.00%	4.00%	3.00%	4.00%	2.65%	86.00%	29.00%	67.30%	\$0.00	9.05%	21.10	3.73
56		OTTR	\$29.98	¥	%00.9	%00'6	7.50%	2.65%	70.00%	26.00%	67.30%	\$0.00	14.14%	8.38	1.48
27	Pinnacle West Capital Corporation	ΡΝΥ	\$61.59	4.60%	5.30%	4.00%	4.63%	2.65%	63.00%	64.00%	67.30%	\$0.00	9.76%	17.32	3.06
28	Portland General Electric Company	POR	\$35.60	5.20%	4.72%	%00'9	5.31%	2.65%	20.00%	26.00%	67.30%	\$0.00	10.01%	16.33	2.89
3	SCANA Corporation	SCG	\$53.75	4.20%	4.30%	4.50%	4.33%	2.65%	27.00%	26.00%	67.30%	\$0.00	10.40%	14.97	2.65
ဗ္ဂ	Southern Company	SO	\$44.08	3.50%	3.32%	4.50%	3.77%	2.65%	76.00%	71.00%	67.30%	\$0.00	10.01%	16.33	2.89
9		旦	\$19.00	7.10%	9.20%	%00.9	7.43%	2.65%	83.00%	72.00%	67.30%	\$0.00	10.05%	16.17	2.86
32	Westar Energy, Inc.	ΧR	\$37.28	3.50%	3.40%	%00.9	4.30%	2.65%	61.00%	25.00%	67.30%	\$0.00	9.91%	16.71	2.96
33	Xcel Energy Inc.	Ä	\$34.08	5.00%	4.58%	4.50%	4.69%	2.65%	63.00%	64.00%	67.30%	\$0.00	9.88%	16.83	2.98
34												Mean	9.92%		
8 8												Max	14.14%		
3												Σ	7.61%		

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- 0 6							Average	<u>Б</u>	e Growin Discounted Casil r 90 Day Average Stock Price PS Growth Rate Estimate in	ted Casil Stock Pric. stimate in	riow Mot e Pirst Sta	g g					•			
4 r.	Projected Annual Famings per Share		141	151	1461	7	181	[6]	[02]	1241	[22]	23	[24]	1251	[36]	1261	1381	20	2	
)									22	1 -	1	3	123	3	2	1,51	[50]	65		
9	Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
7	ALLETE, Inc.	ALE	\$2.90	\$3.08	\$3.27	\$3.48	\$3.70	\$3.93	\$4.17	\$4.42	\$4.68	\$4.96	\$5.24	\$5.54	\$5.85	\$6.18	\$6.53	\$6.90	\$7.29	
æ	Alliant Energy Corporation	ΙΝ	\$3.48	\$3.67	\$3.88	\$4.10	\$4.32	\$4.57	\$4.82	\$5.09	\$5.38	\$5.68	\$6.00	\$6.34	\$6.70	\$7.08	\$7.48	\$7.90	\$8,35	
တ	Ameren Corporation	AEE	\$2.40	\$2.55	\$2.71	\$2.88	\$3.05	\$3.24	\$3.44	\$3.65	\$3.87	\$4.09	\$4.33	\$4.57	\$4.83	\$5,10	\$5.39	\$5.70	\$6.02	
9	American Electric Power Company, Inc.	AEP	\$3.34	\$3.51	\$3.68	\$3.87	\$4.06	\$4.26	\$4.48	\$4.71	\$4.96	\$5.23	\$5.52	\$5.83	\$6.16	\$6.51	\$6.88	\$7.27	\$7.68	
7	Avista Corporation	AVA	\$1.84	\$1.95	\$2.07	\$2.19	\$2.32	\$2.46	\$2.61	\$2.76	\$2.92	\$3.09	\$3.27	\$3.45	\$3.65	\$3.85	\$4.07	\$4.30	\$4.55	
12		BKH	\$2.89	\$3.06	\$3.23	\$3.42	\$3.61	\$3.82	\$4.04	\$4.27	\$4.52	\$4.77	\$5.04	\$5.33	\$5.63	\$5.95	\$6.28	\$6.64	\$7.01	
13		CNP	\$1.42	\$1.46	\$1.50	\$1.55	\$1.59	\$1.64	\$1.69	\$1.75	\$1.83	\$1.92	\$2.02	\$2.13	\$2.25	\$2.38	\$2.51	\$2.65	\$2.80	
4	CMS Energy Corporation	CMS	\$1.74	\$1.85	\$1.96	\$2.08	\$2.21	\$2.34	\$2.49	\$2.64	\$2.79	\$2.95	\$3.12	\$3.30	\$3.48	\$3.68	\$3.89	\$4.11	\$4.34	
15	Consolidated Edison, Inc.	品	\$3.62	\$3.72	\$3.82	\$3.92	\$4.03	\$4.13	\$4.27	\$4.42	\$4.61	\$4.82	\$5.07	\$5,36	\$5.66	\$5.98	\$6.32	\$6.68	\$7.05	
16		Δ	\$3.05	\$3.26	\$3.47	\$3.71	\$3.96	\$4.22	\$4.50	\$4.79	\$5.08	\$5.39	\$5.70	\$6.03	\$6.37	\$6.73	\$7.11	\$7.51	\$7.93	
17	DTE Energy Company	DTE	\$5.10	\$5.35	\$5.61	\$5.88	\$6.16	\$6.46	\$6.78	\$7.13	\$7.50	\$7.90	\$8.34	\$8.81	\$9.31	\$9.83	\$10.39	\$10.98	\$11.60	
9		ΔK	\$4.13	\$4.33	\$4.53	\$4.74	\$4.97	\$5.20	\$5.46	\$5.73	\$6.03	\$6.35	\$6.70	\$7.08	\$7.48	\$7.90	\$8.35	\$8.82	\$9.32	
19		EDE	\$1,55	\$1.62	\$1.69	\$1.76	\$1.84	\$1.92	\$2.00	\$2.10	\$2.20	\$2.32	\$2.44	\$2.58	\$2.73	\$2.88	\$3.05	\$3.22	\$3.40	
20	Eversource Energy	S	\$2.58	\$2.77	\$2.97	\$3.19	\$3.42	\$3.67	\$3.93	\$4.19	\$4.46	\$4.74	\$5.02	\$5.31	\$5.61	\$5.92	\$6.26	\$6.61	\$6.98	
21	FirstEnergy Corp.	丑	\$0,85	\$0.91	\$0.97	\$1.04	\$1.11	\$1.19	\$1.27	\$1.36	\$1.44	\$1.53	\$1.62	\$1.71	\$1.81	\$1.91	\$2.02	\$2.13	\$2.25	
22	Great Plains Energy Inc.	GXP	\$1.57	\$1.66	\$1.76	\$1.86	\$1.97	\$2.08	\$2.20	\$2.33	\$2.46	\$2.60	\$2.75	\$2.90	\$3.07	\$3.24	\$3.42	\$3.62	\$3.82	
33		Ճ	\$3.85	\$3.97	\$4.08	\$4.21	\$4.33	\$4.46	\$4.62	\$4.80	\$5.00	\$5.24	\$5.52	\$5.83	\$6.16	\$6.50	\$6.87	\$7.26	\$7.67	
24		NWE	\$1.98	\$2.09	\$2.20	\$2.32	\$2.45	\$2.59	\$2.73	\$2.88	\$3.04	\$3.21	\$3.39	\$3.59	\$3.79	\$4.00	\$4.23	\$4.47	\$4.72	
22	_	OGE	\$1.55	\$1.61	\$1.68	\$1.74	\$1.81	\$1.89	\$1.97	\$2.06	\$2.16	\$2.27	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.14	\$3.32	
56		OTTR	\$3.06	\$3.29	\$3.54	\$3.80	\$4.09	\$4.39	\$4.71	\$5.03	\$5,36	\$5.70	\$6.04	\$6.38	\$6.74	\$7.12	\$7.53	\$7.95	\$8.40	
27	Pinnacle West Capital Corporation	MNA	\$3.58	\$3.75	\$3.92	\$4.10	\$4.29	\$4.49	\$4.71	\$4.94	\$5.19	\$5.47	\$5.77	\$6.10	\$6.44	\$6.80	\$7.19	\$7.59	\$8.02	
78		POR	\$2.18	\$2.30	\$2.42	\$2.55	\$2.68	\$2.82	\$2.97	\$3.14	\$3.31	\$3.49	\$3,69	\$3.89	\$4.11	\$4.35	\$4.59	\$4.85	\$5.13	
59	SCANA Corporation	908	\$3.79	\$3.95	\$4.13	\$4.30	\$4.49	\$4.69	\$4.90	\$5.13	\$5.39	\$5.67	\$5.98	\$6.32	\$6.67	\$7.05	\$7.45	\$7.87	\$8.31	
္က	Southern Company	SO	\$2.77	\$2.87	\$2.98	\$3.10	\$3.21	\$3.33	\$3.47	\$3.62	\$3.79	\$3.98	\$4.20	\$4.43	\$4.68	\$4.95	\$5.23	\$5.52	\$5.84	
3	TECO Energy, Inc.	<u> </u>	\$0.95	\$1.02	\$1.10	\$1.18	\$1.27	\$1.36	\$1.46	\$1.56	\$1.66	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.33	\$2.46	\$2.60	
32	Westar Energy, Inc.	X R	\$2.35	\$2.45	\$2.56	\$2.67	\$2.78	\$2.90	\$3.03	\$3.18	\$3.33	\$3.51	\$3.70	\$3.91	\$4.13	\$4.36	\$4.61	\$4.87	\$5.14	
33	Xcel Energy Inc.	Ξ×	\$2.03	\$2.13	\$2.23	\$2.33	\$2.44	\$2.55	\$2 68	82.81	\$2.96	\$3.11	83.29	\$3.47	\$3.67	43.87	\$4.09	\$4 33	47 57	

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4 v	Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	28]	[39] [40]	[41]	[42]	[43]	[44]	[45]	[46]
Q		Tiologi	2000	9700	7,000	0.00	0.00							1	000	0	
٥	Company	lckei	C107	2010	/ 07	2018	8107	- 1	- 1	- 1	- 1	- 1	H	١	2028	5058	2030
7	ALLETE, inc.	ALE	%00.99	64.75%	63.50%	62.25%	61.00%	62.05% 6		64.15% 65.	65.20% 66.25%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
æ	Alliant Energy Corporation	Ę	61.00%	61.50%	62.00%	62.50%	63.00%	63.72% 6	64.43% 65	65.15% 65.	65.87% 66.59%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
6	Ameren Corporation	AEE	%00'59	62.50%	%00.09	27.50%	22.00%	57.05% 5!	59.10% 61	61,15% 63.	63.20% 65.25%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
6	American Electric Power Company, Inc.	AEP	65.00%	64.75%	64.50%	64.25%	64.00%	64.55% 6	65.10% 65	65.65% 66.	66.20% 66.75%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
Ξ	Avista Corporation	AVA	67.00%	66.25%	65.50%	64.75%	64.00%	64.55% 6	65.10% 65	65.65% 66.	66.20% 66.75%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
12	Black Hills Corporation	BKH	27.00%	27.50%	58.00%	58.50%	29.00%	60.38% 6	61.77% 63	63,15% 64.	64.54% 65.92%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
13	CenterPoint Energy, Inc.	CNP	83.00%	89.75%	86.50%	83.25%	80.00%	77.88% 7	75.77% 73	73.65% 71.	71.54% 69.42%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
14	CMS Energy Corporation	CMS	61.00%	61.25%	61.50%	61.75%	62.00%	62.88% 6	63.77% 64	64.65% 65.	65.54% 66.42%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
15	Consolidated Edison, Inc.		65.00%	64.50%	64.00%	63.50%	63.00%	63.72% 6	64.43% 65	65.15% 65.	65.87% 66.59%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
16	Dominion Resources, Inc.	۵	72.00%	72.00%	72.00%	72.00%	72.00%	71.22% 7(70.43% 69	69.65% 68.	68.87% 68.09%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
17	DTE Energy Company	DTE	62.00%	61.50%	61.00%	60.50%	%00.09	61.22% 6	62.43% 63	63.65% 64.	64.87% 66.09%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
8	Duke Energy Corporation	DUK	72.00%	70.50%	%00'69	67.50%	%00.99	66.22% 6	66.43% 66	66,65% 66.	%60.73 %78.99	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
19	Empire District Electric Company	EDE	%00.92	74.25%	72.50%	70.75%	%00.69	68.72% 68	68.43% 68	68.15% 67.	67.87% 67.59%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
20	Eversource Energy	ES	29.00%	58.25%	57.50%	56.75%	26.00%	57.88% 5!	59.77% 61	61.65% 63.	63.54% 65.42%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
7	FirstEnergy Corp.	믭	28.00%	22.00%	26.00%	25.00%	54.00%	56.22% 58	58.43% 60	60.65% 62.1	62.87% 65.09%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
22	Great Plains Energy Inc.	GXP	%00.02	67.75%	65.50%	63.25%	61.00%	62.05% 63	63.10% 64	64.15% 65.	65.20% 66.25%	% 67.30%	% 67.30%	, 67,30%	67.30%	67.30%	67.30%
23	IDACORP, Inc.	DA	49.00%	51.25%	53.50%	55.75%	28.00%	9 %55.69	61.10% 62	62.65% 64.	64.20% 65.75%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
54	NorthWestern Corporation	NWE	26.00%	59.25%	62.50%	65.75%	%00.69	68.72% 68	68.43% 68	68.15% 67.	67.87% 67.59%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
52	OGE Energy Corp.	990 1	86.00%	79.25%	72.50%	65.75%	29.00%	9 %86.09	61.77% 63	63.15% 64.	64.54% 65.92%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
56	Otter Tail Corporation	OTTR	%00.07	%05'99	63.00%	29.50%	26.00%	57.88% 59	59.77% 61	61.65% 63.1	63.54% 65.42%	% 67.30%	% 67.30%	, 67.30%	67.30%	67.30%	67.30%
27	Pinnacle West Capital Corporation	₽N≪	63.00%	63.25%	63.50%	63.75%	64.00%	64.55% 6		65.65% 66.3	66.20% 66.75%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
28		Por	20.00%	51.50%	53.00%	54.50%	26.00%	57.88% 59	59.77% 61	61.65% 63.1	63.54% 65.42%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	%0£.79
59		SCG	27.00%	26.75%	26.50%	56.25%	26.00%	57.88% 59	59.77% 61	61.65% 63.1	63.54% 65.42%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
8	Southern Company	000	%00.92	74.75%	73.50%	72.25%	71.00%	70.38% 69	69.77% 69	69.15% 68.	68.54% 67.92%	% 67.30%	% 67.30%	, 67.30%	67.30%	67.30%	67.30%
ઝ	TECO Energy, Inc.	Ш	83.00%	80.25%	77.50%	74.75%	72.00%	71.22% 7(70.43% 69	69.65% 68.8	68.87% 68.09%	% 67.30%	% 67.30%	67.30%	67.30%	67.30%	67.30%
35	Westar Energy, Inc.	ΧX	61.00%	29.50%	28.00%	26.50%	22.00%	57.05% 58	59.10% 61	61.15% 63.	63.20% 65.25%	% 67.30%	% 67.30%	, 67.30%	67.30%	67.30%	67.30%
33	Xcel Energy Inc.	XEL	63.00%	63.25%	63.50%	63.75%	64.00%	64.55% 6	65.10% 65	65.65% 66.	20% 66.75%	% 67.30%	% 67.30%	, 67.30%	67.30%	67.30%	67.30%

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4 Projected Annual 5 Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]
																		Terminal
6 Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Value
7 ALLETE, Inc.	ALE	\$2.03	\$2.12	\$2.21	\$2.30	\$2.40	\$2.59	\$2.79	\$3.00	\$3.23	\$3.47	\$3.73	\$3.94	\$4.16	\$4.40	\$4.65	\$4.91	\$117.02
8 Alliant Energy Corporation	LNI	\$2.24	\$2.39	\$2.54	\$2.70	\$2.88	\$3.07	\$3.28	\$3.50	\$3.74	\$4.00	\$4.27	\$4.51	\$4.76	\$5.03	\$5.32	\$5.62	\$140.15
9 Ameren Corporation	AEE	\$1.66	\$1.69	\$1.73	\$1.76	\$1.78	\$1.96	\$2.16	\$2.37	\$2.59	\$2.82	\$3.08	\$3.25	\$3.44	\$3.63	\$3.84	\$4.05	\$95.12
10 American Electric Power Company, Inc.	AEP	\$2.28	\$2.38	\$2.49	\$2.61	\$2.73	\$2.89	\$3.07	\$3.26	\$3.46	\$3.69	\$3.93	\$4.15	\$4.38	\$4.63	\$4.89	\$5.17	\$126.16
11 Avista Corporation	AVA	\$1.31	\$1.37	\$1.44	\$1.50	\$1.58	\$1.68	\$1.80	\$1.92	\$2.05	\$2.18	\$2.32	\$2.46	\$2.59	\$2.74	\$2.90	\$3.06	\$74.17
12 Black Hills Corporation	BKH	\$1.74	\$1.86	\$1.98	\$2.11	\$2.26	\$2.44	\$2.64	\$2.85	\$3.08	\$3.32	\$3.59	\$3.79	\$4.00	\$4.23	\$4.47	\$4.72	\$113.18
13 CenterPoint Energy, Inc.	CNP	\$1.36	\$1.35	\$1.34	\$1.32	\$1.31	\$1.32	\$1.33	\$1.35	\$1.37	\$1.40	\$1.43	\$1.51	\$1.60	\$1.69	\$1.79	\$1.89	\$41.67
14 CMS Energy Corporation	CMS	\$1.13	\$1.20	\$1.28	\$1.36	\$1,45	\$1.56	\$1.68	\$1.80		\$2.07	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$2.92	\$78.15
15 Consolidated Edison, Inc.	ЕО	\$2.42	\$2.46	\$2.51	\$2.56	\$2.60	\$2.72	\$2.85	\$3.00		\$3.38	\$3.61	\$3.81	\$4.03	\$4.25	\$4.49	\$4.75	\$135.68
16 Dominion Resources, Inc.	۵	\$2.34	\$2.50	\$2.67	\$2.85	\$3.04	\$3.21	\$3.37	\$3.54		\$3.88	\$4.06	\$4.29	\$4.53	\$4.78	\$5.05	\$5.34	\$158.18
17 DTE Energy Company	DTE	\$3.31	\$3.45	\$3.58	\$3.73	\$3.88	\$4.15	\$4.45	\$4.77		\$5.51	\$5.93	\$6.26	\$6.62	\$6.99	\$7.39	\$7.81	\$181.31
18 Duke Energy Corporation	S S	\$3.11	\$3.19	\$3.27	\$3.35	\$3.43	\$3.61	\$3.81	\$4.02		\$4.50	\$4.77	\$5.03	\$5.32	\$5.62	\$5.94	\$6.27	\$169.39
19 Empire District Electric Company	EDE	\$1.23	\$1.25	\$1.28	\$1.30	\$1.32	\$1.38	\$1.44	\$1.50		\$1.65	\$1.74	\$1.84	\$1.94	\$2.05	\$2.17	\$2.29	\$52.32
20 Eversource Energy	ES	\$1.63	\$1.73	\$1.83	\$1.94	\$2.05	\$2.27	\$2.51	\$2.75		\$3.29	\$3.57	\$3.77	\$3.99	\$4.21	\$4.45	\$4.70	\$116.14
21 FirstEnergy Corp.	Ш	\$0.53	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87		\$1.05	\$1.15	\$1.22	\$1.29	\$1.36	\$1.44	\$1.52	\$81.66
22 Great Plains Energy Inc.	ΘXĐ	\$1.16	\$1.19	\$1.22	\$1.24	\$1.27	\$1.37	\$1.47	\$1.58		\$1.82	\$1.95	\$2.06	\$2.18	\$2.30	\$2.43	\$2.57	\$59,35
23 IDACORP, Inc.	ΔQ	\$1.94	\$2.09	\$2.25	\$2.42	\$2.59	\$2.75	\$2.93	\$3.13		\$3.63	\$3.92	\$4.14	\$4.38	\$4.63	\$4.89	\$5.16	\$139.27
24 NorthWestern Corporation	NWE	\$1.17	\$1.31	\$1.45	\$1.61	\$1,79	\$1.88	\$1.97	\$2.07		\$2.29	\$2.41	\$2.55	\$2.69	\$2.85	\$3.01	\$3.18	\$118.84
25 OGE Energy Corp.	OGE	\$1.39	\$1.33	\$1.26	\$1.19	\$1.11	\$1.19	\$1.27	\$1.36	\$1.46	\$1.57	\$1.70	\$1.79	\$1.89	\$2.00	\$2.11	\$2.23	\$70.06
26 Otter Tail Corporation	OTTR	\$2.30	\$2.35	\$2.39	\$2.43	\$2.46	\$2.73	\$3.01	\$3.31	\$3.62	\$3.95	\$4.29	\$4.54	\$4.79	\$5.07	\$5.35	\$5.65	\$70.39
27 Pinnacle West Capital Corporation	MNA	\$2.36	\$2.48	\$2.60	\$2.74	\$2.87	\$3.04	\$3.22	\$3.41	\$3.62	\$3.85	\$4.10	\$4.33	\$4.58	\$4.84	\$5.11	\$5.40	\$138.98
28 Portland General Electric Company	Por	\$1.15	\$1.25	\$1.35	\$1,46	\$1,58	\$1.72	\$1.87	\$2.04	\$2.22	\$2.41	\$2.62	\$2.77	\$2.93	\$3.09	\$3.27	\$3,45	\$83.72
29 SCANA Corporation	SCG	\$2.25	\$2.34	\$2.43	\$2.53	\$2.62	\$2.84	\$3.07	\$3.32	\$3.60	\$3.91	\$4.25	\$4.49	\$4.74	\$5.01	\$5.30	\$5.60	\$124.44
30 Southern Company	SO	\$2.18	\$2.23	\$2.28	\$2.32	\$2.37	\$2.44	\$2.53	\$2.62	\$2.73	\$2.85	\$2.98	\$3.15	\$3.33	\$3.52	\$3.72	\$3,93	\$95.34
31 TECO Energy, Inc.	4	\$0.85	\$0.88	\$0.91	\$0.95	\$0.98	\$1.04	\$1.10	\$1.15	\$1.21	\$1.27	\$1.33	\$1.40	\$1.48	\$1.57	\$1.65	\$1.75	\$41.97
	××	\$1.50	\$1.52	\$1.55	\$1.57	\$1.60	\$1.73	\$1.88	\$2.04	\$2.22	\$2.41	\$2.63	\$2.78	\$2.93	\$3.10	\$3.28	\$3.46	\$85.95
33 Xcel Energy Inc.	XEL	\$1.34	\$1.41	\$1.48	\$1.55	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.19	\$2.34	\$2.47	\$2.61	\$2.76	\$2.91	\$3.08	\$76.92

[75] [76] [77] [78] [79] [80] [81] 50.024 6/30/26 6/30/26 6/30/29 6/30/29 53.47 53.73 53.94 54.16 54.40 54.65 5121.93 54.00 54.27 54.51 54.76 55.03 55.32 5145.77 52.82 53.38 53.25 53.44 53.63 53.84 599.17 52.85 53.39 54.15 54.76 55.03 55.32 5145.77 52.85 53.39 54.15 54.63 54.89 57.123 53.26 53.39 54.15 54.63 54.89 57.123 53.38 53.41 54.63 54.63 54.89 57.123 53.38 53.61 53.81 54.03 54.25 54.49 57.404 53.38 53.61 53.81 54.03 54.25 54.49 57.004 53.38 53.61 53.81 54.03 54.25 54.49 57.004 54.61 55.03 55.25 55.62 55.94 57.50 55.03 55.04 55.03 55.32 55.65 57.94 55.04 55.05 52.17 55.41 55.05 51.77 55.03 55.25 55.65 57.94 55.05 51.77 51.23 51.29 51.36 51.44 55.05 51.15 51.22 51.28 51.36 51.44 55.05 52.41 52.55 52.69 52.43 57.29 55.04 52.55 52.69 52.43 57.29 55.05 54.10 54.73 55.03 52.85 55.05 54.10 54.73 55.03 52.85 55.05 54.10 54.73 55.04 55.04 55.05 54.10 54.13 54.43 57.29 55.05 54.10 54.13 54.43 57.04 55.05 54.10 54.13 54.43 54.14 55.05 54.14 54.78 55.07 55.36 57.04 55.05 54.14 54.78 55.07 55.36 57.04 55.05 54.14 54.78 55.07 55.36 57.04 55.05 54.14 54.75 55.03 52.95 57.04 55.05 54.14 54.15 54.14 54.10 55.05 54.14 54.15 54.14 54.10 55.05 54.14 54.15 54.14 54.10 55.05 54.14 54.15 54.14 54.10 55.05 54.14 54.15 54.14 54.10 55.05 54.14 54.15 54.14 54.10 55.05 54.14 54.15 54.14 54.10 55.05 54.14 54.15 54.14 54.10 55.05 54.14 54.15 54.14 54.10 55.05 54.14 54.15 54.14 54.10 55.05 55.04 55.05 55.05 55.05 55.04 55.05 55.05 55.05 55.04 55.05 55.05 55.05 55.04 55.05	\$99.26 \$43.72 \$89.41 \$80.00
6/30/25 6/30/26 6/30/27 6/30/28 53.73 53.94 54.16 54.40 54.27 54.51 54.65 55.03 53.69 52.22 52.25 52.24 54.00 54.23 54.43 54.06 54.09 54.23 54.43 54.06 54.09 54.23 54.09 54.23 54.09 54.23 54.09 54.23 54.09 54.23 54.09 54.23 54.09 54.23 54.09 54.23 54.09 54.23 54.09 54.23 54.09 54.23 54.09 54.23 54.09 54.23 55.03 55.32 55.62 56.23 54.09 54.24 54.24 54.29 54.2	3 00 4 8 8 8
6/30/25 6/30/26 6/30/27 83.73 \$3.94 \$4.16 \$4.27 \$3.08 \$3.25 \$3.44 \$4.27 \$3.08 \$3.25 \$3.49 \$4.16 \$3.39 \$4.16 \$3.39 \$4.16 \$3.39 \$4.10 \$1.43 \$1.51 \$1.60 \$2.22 \$2.35 \$2.48 \$3.40 \$3.41 \$3.41 \$3.41 \$3.41 \$3.41 \$3.41 \$3.41 \$3.42 \$3.57 \$3.39 \$3.40 \$3.57 \$3.59 \$3.40 \$3.57 \$3.59 \$3.40 \$3.57 \$3.59 \$3.40 \$3.57 \$3.59 \$3.40 \$3.57 \$3.59 \$3.57 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.59 \$3.57 \$3.50 \$3.57 \$3.59 \$3.57 \$3.50 \$3.57 \$3.50 \$3.57 \$3.50 \$3.57 \$3.50 \$3.57 \$3.50	\$3.72 \$1.65 \$3.28 \$2.91
(76] [77] (77] (630025 63073 83.94 84.27 84.27 84.15 83.28 83.28 83.29 83.79 82.22 82.35 83.69 84.06 84.29 85.77 85.03 81.74 81.84 82.41 82.24 82.44 82.41 82.55 81.70 81.70 81.79 84.54 82.55 84.05 84.29 84.54 82.55 81.70 81.79 84.54 82.55 84.05 84.55 84.29 84.54 82.55 84.00 84.33 82.65 84.00 84.33 82.65 84.00 84.33 82.65 84.00 84.33 82.65 84.00 84.33 82.65 84.00 84.33 82.65 84.00 84.33 82.65 84.00 84.33 82.65 84.00 84.33 82.65 84.00 84.33 82.65 84.00 84.33 82.65 84.00 84.33 82.65 84.00 84.33 82.65 84.00 84.33 82.65 82.00 82.00 8	\$3.52 \$1.57 \$3.10 \$2.76
6/30/25	\$3.33 \$1.48 \$2.93 \$2.61
	\$3.15 \$1.40 \$2.78 \$2.47
(75] (75] (75] (75] (75] (75] (75] (75]	\$2.98 \$1.33 \$2.63 \$2.34
1 -1	\$2.85 \$1.27 \$2.41 \$2.19
[74] 663023 53.23 53.23 53.23 53.26 53.26 53.37 51.37	\$2.73 \$1.21 \$2.22 \$2.06
[73] 300/22 3300 3350 3350 1.92 1.92 1.93 1.58 1.158 1.	\$2.62 \$1.15 \$2.04 \$1.94
First Stag [72] [72] [72] 83.28 83.27 83.07 81.80 81.80 81.44 82.16 83.37 81.83 81.84 81.45 83.37 81.44 82.51 83.64 81.47 81.67 81.97 81.97 81.97 81.97 81.97 81.97	\$2.53 \$1.10 \$1.88 \$1.83
ad Cash F (71) (\$2.44 \$1.04 \$1.73 \$1.73
Discounte Verage St Verage St Verage St Verage St (70] [70] [70] 52.40 \$2.32 \$2.73 \$1.78 \$1.58 \$1.45 \$1.32 \$2.60 \$1.31 \$1.45 \$1.32 \$1.32 \$1.31 \$1.45 \$1.32 \$	\$2.37 \$2.37 \$0.98 \$1.60
Multi-Stage Growth Discounted Cash Flow Model 90 Day Average Stock Price 90 Day Average Stock Price 168] [69] [70] [71] [72] 130/17 6/30/18 6/30/19 6/30/20 6/30/21 6/ 2.21 \$2.30 \$2.40 \$2.59 \$2.79 \$2.54 \$2.70 \$3.28 \$3.07 \$3.28 \$3.07 \$3.28 \$3.07 \$3.28 \$3.07 \$3.28 \$3.07 \$3.28 \$3.07 \$3.28 \$3.07 \$3.28 \$3.07 \$3.28 \$3.07 \$3.28 \$3.07 \$3.28 \$3.07 \$3.28 \$3.07 \$3.28 \$3.07 \$3.28 \$3.07 \$3.28 \$3.07 \$3.08 \$3.07 \$3.08 \$3.07 \$3.08 \$3.08 \$3.07 \$3.08 \$3.08 \$3.08 \$3.08 \$3.09 \$3	\$2.32 \$0.95 \$1.57
Average B Average B [68] [68] [68] [68] [68] 82.21 82.54 81.73 81.28 81.28 81.28 83.2.7 81.28	\$2.28 \$0.91 \$1.55
677] 6630/16 6730/16 6	
i l	
[65] [66]	\$0.00 \$0.00 \$0.00 \$0.00
[64] Outflow (\$61.08) (\$61.08) (\$640.87) (\$62.49) (\$70.78) (
ALE (1) CONS	
4 Projected Annual Data 5 Investor Cash Flows 6 Company 7 ALLETE, Inc. 8 Alliant Energy Corporation 10 American Electric Power Company, Inc. 11 Avista Corporation 12 Black Hills Corporation 13 CenterPoint Energy, Inc. 14 CMS Energy Corporation 15 Consolidated Edison, Inc. 16 Dominion Resources, Inc. 17 DTE Energy Corporation 18 Duke Energy Corporation 19 Empire District Electric Company 20 Eversource Energy 21 FirstEnergy Corp. 22 Great Plains Energy Inc. 23 IDACORP, Inc. 24 NorthWestern Corporation 25 GE Energy Corp. 26 Cetter Tail Corporation 27 Pinnacle West Capital Corporation 28 Portland General Electric Company 29 SCANA Corporation	

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

- 0 0

4	Inputs		Ξ	[2]	(3	[4]	[9]	[9]	Ε	8	6	[10]	[11]	[12]	[13]
2			Stock	EPS	EPS Growth Rate Estimates	ate Estin	nates	Long-Term	Pe	Payout Ratio	0	terative Solution		Terminal 7	Terminal
						Value	High							P/E	PEG
9	Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	2015	2019	2025	Proof	IRR	Ratio	Ratio
7	ALLETE, Inc.	ALE	\$51.08	ΑN	%00'9	6.50%	6.50%	5.65%	%00.99	61.00%	67.30%	\$0.00	10.15%	15.80	2.80
œ	Alliant Energy Corporation	Ę	\$61.38	5.30%	5.45%	%00'9	%00'9	2.65%	61.00%	63.00%	67.30%	\$0.00	10.00%	16.35	2.89
6	Ameren Corporation	AEE	\$40.87	80%	5.85%	%00'9	%08.9	2.65%	%00'59	25.00%	67.30%	\$0.00	10.32%	15.24	2.70
10) American Electric Power Company, Inc.	AEP	\$55.94	4.90%	5.08%	2.00%	2.08%	5.65%	65.00%	64.00%	67.30%	\$0.00	10.01%	16.33	2.89
-	Avista Corporation	AVA	\$32.71	Ϋ́	2.00%	7.00%	7.00%	5.65%	%00.29	64.00%	67.30%	\$0.00	10.29%	15.32	2.71
12	Black Hills Corporation	BKH	\$48.78	ž	7.00%	4.50%	7.00%	5.65%	57.00%	59.00%	67.30%	\$0.00	10.42%	14.93	2.64
13		CNP	\$20.49	5.70%	1.91%	1.00%	5.70%	5.65%	93.00%	80.00%	67.30%	\$0.00	11.42%	12.34	2.18
14		CMS	\$34.02	6.20%	6.73%	2.50%	6.73%	5.65%	61.00%	62.00%	67.30%	\$0.00	9.75%	17.34	3.07
15	Consolidated Edison, Inc.	囧	\$60.91	2.70%	2.38%	3.00%	3.00%	2.65%	82.00%	63.00%	67.30%	\$0.00	9.43%	18.85	3.33
16	Dominion Resources, Inc.	۵	\$70.78	6.30%	2.89%	8.00%	8.00%	2.65%	72.00%	72.00%	67.30%	\$0.00	9.52%	18.38	3.25
17	' DTE Energy Company	DTE	\$79.41	2.00%	4.51%	2.00%	2.00%	5.65%	62.00%	80.00%	67.30%	\$0.00	10.25%	15.47	2.74
18		DΩ	\$76.11	4.70%	4.49%	2.00%	2.00%	9.65%	72.00%	%00.99	67.30%	\$0.00	9.63%	17.86	3.16
9		EDE	\$24.01	2.00%	2.00%	3.00%	2.00%	2.65%	%00'92		67.30%	\$0.00	10.48%	14.74	2.61
20	Eversource Energy	ES	\$49,32	6.80%	%09'9	8.50%	8.50%	9.65%	29.00%	26.00%	67.30%	\$0.00	10.25%	15,45	2.73
21	FirstEnergy Corp.	Щ	\$35,13	ΑĀ	¥	7.00%	7.00%	2.65%	28.00%	54.00%	67.30%	\$0.00	7.61%	36.24	6.41
22	: Great Plains Energy Inc.	GXP	\$26.14	%00.9	6.37%	2.00%	6.37%	5.65%	70.00%	61.00%	67.30%	\$0.00	10.40%	14.98	2.65
23		DΑ	\$60.44	4.00%	4.00%	1.00%	4.00%	5.65%	49.00%		67.30%	\$0.00	9.83%	17.01	3.01
24		NWE	\$52.34	2.00%	2.00%	6.50%	6.50%	2.65%	26.00%	%00.69	67.30%	\$0.00	8.67%	23.57	4.17
52	OGE Energy Corp.	OGE	\$31.57	2.00%	4.00%	3.00%	5.00%	5.65%	86.00%	29.00%	67.30%	\$0.00	9.25%	19.76	3.50
56	_	OTTR	\$29.98	Ϋ́	%00'9	%00.6	%00.6	5.65%	70.00%		67.30%	\$0.00	14.87%	7.71	1.36
27		ΡΝΥ	\$61.59	4.60%	5.30%	4.00%	5.30%	2.65%	63.00%	64.00%	67.30%	\$0.00	9.94%	16.59	2.94
28		POR	\$35.60	5.20%	4.72%	%00'9	%00'9	2.65%	20.00%	26.00%	67.30%	\$0.00	10.20%	15.64	2.77
29	SCANA Corporation	SCG	\$53.75	4.20%	4.30%	4.50%	4.50%	2.65%	27.00%	26.00%	67.30%	\$0.00	10.45%	14.81	2.62
8	0,	SO	\$44.08	3.50%	3.32%	4.50%	4.50%	5.65%	%00'92	71.00%	67.30%	\$0.00	10.22%	15.57	2.76
3	TECO Energy, Inc.	Щ	\$19.00	7.10%	9.20%	%00'9	9.20%	5.65%	83.00%	72.00%	67.30%	\$0.00	10.56%	14.48	2.56
32	. Westar Energy, Inc.	WR	\$37.28	3.50%	3.40%	%00'9	%00'9	2.65%	61.00%	25.00%	67.30%	\$0.00	10.39%	15.01	2.66
33	Xcel Energy Inc.	XEL	\$34.08	2.00%	4.58%	4.50%	2.00%	2.65%	63.00%	64.00%	67.30%	\$0.00	9.96%	16.50	2.92
34													10.16%		
8 8													14.87%		
S S												2	%19./		

. C.							High	High EPS Growth Kate Estimate in First Stage	Kate Est	mate in F	ırst Stage	as.							
4	Projected Annual																		
2	Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
9	Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
7	ALLETE, Inc.	ALE	\$2.90	\$3.09	\$3.29	\$3.50	\$3.73	\$3.97	\$4.23	\$4.49	\$4.76	\$5.04	\$5.34	\$5.64	\$5.96	\$6.29	\$6.65	\$7.02	\$7.42
œ	Alliant Energy Corporation	Ä	\$3.48	\$3.69	\$3.91	\$4.14	\$4.39	\$4.66	\$4.93	\$5.22	\$5.53	\$5.85	\$6.18	\$6.53	\$6.90	\$7.29	\$7.70	\$8.14	\$8.60
თ	Ameren Corporation	AEE	\$2.40	\$2.56	\$2.74	\$2.92	\$3.12	\$3.33	\$3.56	\$3.78	\$4.02	\$4.26	\$4.51	\$4.77	\$5.03	\$5.32	\$5.62	\$5.94	\$6.27
10	 American Electric Power Company, Inc. 	AEP	\$3.34	\$3.51	\$3.69	\$3.88	\$4.07	\$4.28	\$4.50	\$4.74	\$4.99	\$5.26	\$5.56	\$5.87	\$6.20	\$6.55	\$6.92	\$7.32	\$7.73
7	Avista Corporation	AVA	\$1.84	\$1.97	\$2.11	\$2.25	\$2.41	\$2.58	\$2.76	\$2.94	\$3.12	\$3.31	\$3.51	\$3.71	\$3.91	\$4.14	\$4.37	\$4.62	\$4.88
12	Black Hills Corporation	BKH	\$2.89	\$3.09	\$3.31	\$3.54	\$3.79	\$4.05	\$4.33	\$4.61	\$4.90	\$5.20	\$5.51	\$5.82	\$6.15	\$6.50	\$6.86	\$7.25	\$7.66
13	: CenterPoint Energy, Inc.	CNP	\$1,42	\$1.50	\$1.59	\$1.68	\$1.77	\$1.87	\$1,98	\$2.09	\$2.21	\$2.34	\$2.47	\$2.61	\$2.76	\$2.91	\$3.08	\$3.25	\$3.43
14	 CMS Energy Corporation 	CMS	\$1.74	\$1.86	\$1.98	\$2.12	\$2.26	\$2.41	\$2.57	\$2.73	\$2.90	\$3.07	\$3.25	\$3.44	\$3.63	\$3.84	\$4.05	\$4.28	\$4.53
15	Consolidated Edison, Inc.	В	\$3.62	\$3.73	\$3.84	\$3.96	\$4.07	\$4.20	\$4.34	\$4.51	\$4.70	\$4.93	\$5.19	\$5.48	\$5.79	\$6.12	\$6.46	\$6.83	\$7.21
16	Dominion Resources, Inc.	Δ	\$3.05	\$3.29	\$3.56	\$3.84	\$4.15	\$4.48	\$4.82	\$5.17	\$5.52	\$5.88	\$6.23	\$6.59	\$6.96	\$7.35	\$7.77	\$8.21	\$8.67
17	DTE Energy Company	DTE	\$5.10	\$5.36	\$5.62	\$5.90	\$6.20	\$6.51	\$6.84	\$7.20	\$7.58	\$7.99	\$8.44	\$8.91	\$9.42	\$9.95	\$10.51	\$11.11	\$11.73
9	Duke Energy Corporation	ž	\$4.13	\$4.34	\$4.55	\$4.78	\$5.02	\$5.27	\$5.54	\$5.83	\$6.14	\$6.47	\$6.83	\$7.22	\$7.63	\$8.06	\$8.51	\$8.99	\$9.50
9	 Empire District Electric Company 	EDE	\$1.55	\$1.63	\$1.71	\$1.79	\$1.88	\$1.98	\$2.08	\$2.19	\$2.30	\$2.43	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.38	\$3.57
2	Eversource Energy	S	\$2.58	\$2.80	\$3.04	\$3.30	\$3.58	\$3.88	\$4.19	\$4.51	\$4.83	\$5.14	\$5.46	\$5.77	\$6.09	\$6.44	\$6.80	\$7.19	\$7.59
7	FirstEnergy Corp.	빞	\$0.85	\$0.91	\$0.97	\$1.04	\$1.11	\$1.19	\$1.27	\$1.36	\$1.44	\$1.53	\$1.62	\$1.71	\$1.81	\$1.91	\$2.02	\$2.13	\$2.25
22	Great Plains Energy Inc.	дХЭ	\$1.57	\$1.67	\$1.78	\$1.89	\$2.01	\$2.14	\$2.27	\$2.41	\$2.56	\$2.71	\$2.86	\$3.02	\$3.20	\$3.38	\$3.57	\$3.77	\$3.98
23	IDACORP, Inc.	Δ	\$3.85	\$4.00	\$4.16	\$4.33	\$4.50	\$4.68	\$4.88	\$5.11	\$5.35	\$5.63	\$5.93	\$6.26	\$6.62	\$6.99	\$7.39	\$7.80	\$8.25
24		N	\$1.98	\$2.11	\$2.25	\$2.39	\$2.55	\$2.71	\$2.89	\$3.06	\$3.25	\$3.44	\$3.64	\$3.85	\$4.07	\$4.30	\$4.54	\$4.80	\$5.07
52	OGE Energy Corp.	0GE	\$1,55	\$1.63	\$1.71	\$1.79	\$1.88	\$1.98	\$2.08	\$2.19	\$2.30	\$2.43	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.38	\$3.57
56	_	OTTR	\$3.06	\$3.34	\$3.64	\$3.96	\$4.32	\$4.71	\$5.11	\$5.51	\$5.91	\$6.31	\$6.70	\$7.08	\$7.48	\$7.91	\$8.35	\$8.82	\$9.32
27	 Pinnacle West Capital Corporation 	PNW	\$3.58	\$3.77	\$3.97	\$4.18	\$4.40	\$4.63	\$4.88	\$5.15	\$5.43	\$5.73	\$6.05	\$6.39	\$6.75	\$7.14	\$7.54	\$7.96	\$8.42
28		POR	\$2.18	\$2.31	\$2.45	\$2.60	\$2.75	\$2.92	\$3.09	\$3.27	\$3.46	\$3.66	\$3.87	\$4.09	\$4.32	\$4.57	\$4.82	\$5.10	\$5.39
29	SCANA Corporation	SCG	\$3.79	\$3.96	\$4.14	\$4.33	\$4.52	\$4.72	\$4.94	\$5.19	\$5.45	\$5.74	\$6.05	\$6.39	\$6.75	\$7.13	\$7.54	\$7.96	\$8.41
8	_	SO	\$2.77	\$2.89	\$3.02	\$3.16	\$3.30	\$3.45	\$3.61	\$3.79	\$3.98	\$4.19	\$4.42	\$4.67	\$4.94	\$5.21	\$5.51	\$5.82	\$6.15
31		世	\$0.95	\$1.04	\$1.13	\$1.24	\$1.35	\$1.48	\$1.60	\$1.73	\$1.86	\$1.99	\$2.11	\$2.23	\$2.36	\$2.49	\$2.63	\$2.78	\$2.93
32	Westar Energy, Inc.	Ν×	\$2.35	\$2.49	\$2.64	\$2.80	\$2.97	\$3.14	\$3.33	\$3.53	\$3.73	\$3.95	\$4.17	\$4.41	\$4.66	\$4.92	\$5.20	\$5.49	\$5.81
33	Xcel Energy Inc.	XEL	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	\$2.87	\$3.02	\$3.18	\$3.36	\$3.55	\$3.75	\$3.96	\$4.18	\$4.42	\$4.67

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4 τυ	Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39] [40]	[41]	[42]	[43]	[44]	[45]	[46]
ú		Tiokor	7,00	2016	7,700	0.00	200		,				000	0000	8000	000	000
0		ICKE	0107	2010	ı	2010	1	- 1	- 1	- 1		- 1	2707	7707	2020	5059	2030
_	ALLETE, Inc.	ALE	%00'99	64.75%		62.25%		62.05% 6					67.30%	67.30%	67.30%	67.30%	67.30%
œ	Alliant Energy Corporation	LN-	61.00%	61.50%	62.00%	62.50%	63.00%	53.72% 6	64.43% 65	65.15% 65.8	65.87% 66.59%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
თ	Ameren Corporation	AEE	65.00%	62.50%	%00.09	57.50%	22.00%	57.05% 5	59.10% 61	61.15% 63.2	63.20% 65.25%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
10	 American Electric Power Company, Inc. 	AEP	65.00%	64.75%	64.50%	64.25%	64.00%	64.55% 6	65.10% 6E	65.65% 66.20%	20% 66.75%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
7	Avista Corporation	AVA	%00'.29	66.25%	65.50%	64.75%	64.00%	64.55% 6	65.10% 65	65.65% 66.20%	20% 66.75%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
12	Black Hills Corporation	BKH	57.00%	57.50%	28.00%	58.50%	29.00%	60.38% 6	61.77% 63	63.15% 64.5	64.54% 65.92%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
13	CenterPoint Energy, Inc.	CNP	93.00%	89.75%	86.50%	83.25%	80.08	77.88% 7	75.77% 73	73.65% 71.5	71.54% 69.42%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
14	CMS Energy Corporation	CMS	61.00%	61.25%	61.50%	61.75%	62.00%	62.88% 6	63.77% 64	64.65% 65.5	65.54% 66.42%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
15	Consolidated Edison, Inc.	日	65.00%	64.50%	64.00%	63.50%	63.00%	63.72% 6		65.15% 65.87%	37% 66.59%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
16	Dominion Resources, Inc.	_	72.00%	72.00%	72.00%	72.00%	72.00%	71.22% 7	70.43% 69	69.65% 68.87%	37% 68.09%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
17	DTE Energy Company	OTE	62.00%	61.50%	61.00%	%05.09	%00.09	61.22% 6	62.43% 63	63.65% 64.8	64.87% 66.09%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
18	Duke Energy Corporation	ž	72.00%	70.50%	%00'69	67.50%	%00'99	66.22% 6	66.43% 66	66.65% 66.87%	37% 67.09%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
19		EDE	76.00%	74.25%	72.50%	70.75%				68.15% 67.8	67.87% 67.59%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
2	Eversource Energy	ES	29.00%	58.25%		26.75%		57.88% 5	59.77% 61	61.65% 63.5	63.54% 65.42%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
2	FirstEnergy Corp.	丑	28.00%	21.00%		55.00%			58.43% 6C	60.65% 62.87%	37% 65.09%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
22	Great Plains Energy Inc.	GXP	70.00%	67.75%		63.25%	61.00%		63.10% 64	64.15% 65.20%	10% 66.25%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
23	IDACORP, Inc.	IDA	49.00%	51.25%	53.50%	55.75%	28.00%	59.55% 6	61.10% 62	62.65% 64.20%	10% 65.75%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
54	NorthWestern Corporation	NWE	26.00%	59.25%	62.50%	65.75%	%00.69	68.72% 6		68.15% 67.87%	37% 67.59%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
52	OGE Energy Corp.	990 9	86.00%	79.25%	72.50%	65.75%	29.00%	9 %86.09	61.77% 63	63.15% 64.5	64.54% 65.92%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
56	Otter Tail Corporation	OTTR	70.00%	66.50%	63.00%	29.50%	26.00%	57.88% 5	59.77% 61	61.65% 63.54%	4% 65.42%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
27	Pinnacle West Capital Corporation	PNW	63.00%	63.25%	63.50%	63.75%	64.00%	64.55% 6	65.10% 65	65.65% 66.20%	10% 66.75%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
28	Portland General Electric Company	POR	20.00%	51.50%	53.00%	54.50%	26.00%	57.88% 5	59.77% 61	61.65% 63.54%	4% 65.42%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
23	SCANA Corporation	908	27.00%	56.75%	56.50%	56.25%	26.00%	57.88% 5	59.77% 61	61.65% 63.54%	4% 65.42%	% 67.30%	67.30%	67.30%	%08.79	67.30%	67.30%
99		SO	76.00%	74.75%	73.50%	72.25%	71.00%	70.38% 6	69.77% 69	69.15% 68.54%	4% 67.92%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
31	TECO Energy, Inc.	里	83.00%	80.25%	77.50%	74.75%	72.00%	71.22% 7	70.43% 69	69.65% 68.87%	%60.89 %21	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
32		۸×	61.00%	29.50%	28.00%	26.50%		57.05% 5	59.10% 61	61.15% 63.20%	10% 65.25%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
33	Xcel Energy Inc.	ΧEL	63,00%	63.25%	63.50%	63.75%	64.00%	64.55% 6	65.10% 65	65.65% 66.20%	0% 66.75%	% 67.30%	67.30%	67.30%	67.30%	67.30%	67.30%

4 Projected Annual 5 Cash Flows		[47]	[48]	[49]	[20]	[51]	[52]	[23]	[54]	[55]	[99]	[22]	[58]	[29]	[69]	[61]	[62]	[63]
																		Terminal
6 Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Value
7 ALLETE, Inc.	ALE	\$2.04	\$2.13	\$2.22	\$2.32	\$2.42	\$2.62	\$2.83	\$3.05	\$3.29	\$3.54	\$3.79	\$4.01	\$4.24	\$4.47	\$4.73	\$4.99	\$117.25
8 Alliant Energy Corporation	Ä	\$2.25	\$2.40	\$2.57	\$2.75	\$2.93	\$3.14	\$3.37	\$3,60	\$3.85	\$4.12	\$4.40	\$4.64	\$4.91	\$5.18	\$5.48	\$5.79	\$140.58
9 Ameren Corporation	AEE	\$1.67	\$1.71	\$1.75	\$1.80	\$1.83	\$2.03	\$2.24	\$2.46	\$2.69	\$2.94	\$3.21	\$3.39	\$3.58	\$3.78	\$4.00	\$4.22	\$95.59
 American Electric Power Company, Inc. 	AEP	\$2.28	\$2.39	\$2.50	\$2.62	\$2.74	\$2.91	\$3.08	\$3.28	\$3.49	\$3.71	\$3.95	\$4.17	\$4.41	\$4.66	\$4.92	\$5.20	\$126.24
11 Avista Corporation	AVA	\$1.32	\$1.40	\$1.48	\$1.56	\$1.65	\$1.78	\$1.91	\$2.05	\$2.19	\$2.34	\$2.49	\$2.63	\$2.78	\$2.94	\$3.11	\$3.28	\$74.72
12 Black Hills Corporation	¥	\$1.76	\$1.90	\$2.05	\$2.22	\$2.39	\$2.61	\$2.85	\$3.10	\$3.36	\$3.63	\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$5.16	\$114.35
 CenterPoint Energy, Inc. 	CNP	\$1.40	\$1.42	\$1.45	\$1.48	\$1.50	\$1.54	\$1.59	\$1.63	\$1.67	\$1.71	\$1.76	\$1.85	\$1.96	\$2.07	\$2.19	\$2.31	\$42.37
14 CMS Energy Corporation	CMS	\$1.13	\$1.21	\$1.30	\$1.39	\$1.49	\$1.61	\$1.74	\$1.88	\$2.01	\$2.16	\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$3.05	\$78.47
15 Consolidated Edison, Inc.		\$2.42	\$2.48	\$2.53	\$2.59	\$2.64	\$2.77	\$2.91	\$3.07	\$3.25	\$3.45	\$3.69	\$3.90	\$4.12	\$4.35	\$4.59	\$4.85	\$135.93
 Dominion Resources, Inc. 	Δ	\$2.37	\$2.56	\$2.77	\$2.99	\$3.23	\$3.43	\$3.64	\$3.85	\$4.05	\$4.24	\$4.43	\$4.68	\$4.95	\$5.23	\$5.52	\$5.84	\$159.32
17 DTE Energy Company	OTE	\$3.32	\$3.46	\$3.60	\$3.75	\$3.91	\$4.19	\$4.49	\$4.83	\$5.19	\$5.58	\$6.00	\$6.34	\$6.70	\$7.08	\$7.48	\$7.90	\$181.55
18 Duke Energy Corporation	ž	\$3,12	\$3.21	\$3.30	\$3.39	\$3.48	\$3.67	\$3.87	\$4.09	\$4.33	\$4.58	\$4.86	\$5.13	\$5.42	\$5.73	\$6.05	\$6.40	\$169.67
19 Empire District Electric Company	EDE	\$1.24	\$1.27	\$1.30	\$1.33	\$1.36	\$1.43	\$1.50	\$1.57	\$1.65	\$1.73	\$1.82	\$1.93	\$2.04	\$2.15	\$2.27	\$2.40	\$52.56
20 Eversource Energy	ន	\$1.65	\$1.77	\$1.89	\$2.03	\$2.17	\$2.43	\$2.69	\$2.98	\$3.27	\$3.57	\$3.88	\$4.10	\$4.33	\$4.58	\$4.84	\$5.11	\$117.31
21 FirstEnergy Corp.	받	\$0.53	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87	\$0.96	\$1.05	\$1.15	\$1.22	\$1.29	\$1.36	\$1.44	\$1.52	\$81.66
22 Great Plains Energy Inc.	GXP	\$1.17	\$1.20	\$1.24	\$1.27	\$1.30	\$1.41	\$1.52	\$1.64	\$1.76	\$1.90	\$2.04	\$2.15	\$2.27	\$2.40	\$2.54	\$2.68	\$59.62
23 IDACORP, Inc.	ΙDΑ	\$1.96	\$2.13	\$2.32	\$2.51	\$2.72	\$2.91	\$3.12	\$3.35	\$3.61	\$3.90	\$4.22	\$4.45	\$4.71	\$4.97	\$5.25	\$5.55	\$140.30
24 NorthWestern Corporation	NWE	\$1.18	\$1.33	\$1.49	\$1.67	\$1.87	\$1.98	\$2.10	\$2.22	\$2.34	\$2.46	\$2.59	\$2.74	\$2.89	\$3.06	\$3.23	\$3.41	\$119.42
25 OGE Energy Corp.	OGE	\$1.40	\$1.35	\$1.30	\$1.24	\$1.17	\$1.26	\$1.35	\$1.46	\$1.57	\$1.69	\$1.82	\$1.93	\$2.04	\$2.15	\$2.27	\$2.40	\$70.47
26 Otter Tail Corporation	OTTR	\$2.33	\$2.42	\$2.50	\$2.57	\$2.64	\$2.96	\$3.29	\$3.64	\$4.01	\$4.39	\$4.77	\$5.04	\$5.32	\$5.62	\$5.94	\$6.28	\$71.90
27 Pinnacle West Capital Corporation	PNW	\$2.37	\$2.51	\$2.65	\$2.81	\$2.97	\$3.15	\$3.35	\$3.56	\$3.79	\$4.04	\$4.30	\$4,55	\$4.80	\$5.07	\$5.36	\$5.66	\$139.62
28 Portland General Electric Company	POR	\$1.16	\$1.26	\$1.38	\$1.50	\$1.63	\$1.79	\$1.96	\$2.14	\$2.33	\$2.53	\$2.75	\$2.91	\$3.07	\$3.25	\$3.43	\$3.62	\$84.20
29 SCANA Corporation	SCG	\$2.26	\$2.35	\$2.44	\$2.54	\$2.64	\$2.86	\$3.10	\$3.36	\$3.64	\$3.96	\$4.30	\$4.54	\$4.80	\$5.07	\$5.36	\$5.66	\$124.61
30 Southern Company	So	\$2.20	\$2.26	\$2.32	\$2.39	\$2.45	\$2.54	\$2.64	\$2.75	\$2.87	\$3.00	\$3.14	\$3.32	\$3.51	\$3.71	\$3.92	\$4.14	\$95.77
31 TECO Energy, Inc.	"	\$0.86	\$0.91	\$0.96	\$1.01	\$1.06	\$1.14	\$1.22	\$1.29	\$1.37	\$1.44	\$1.50	\$1.59	\$1.67	\$1.77	\$1.87	\$1,98	\$42.48
32 Westar Energy, Inc.	¥ K	\$1.52	\$1.57	\$1.62	\$1.68	\$1.73	\$1.90	\$2.08	\$2.28	\$2.50	\$2.72	\$2.97	\$3.14	\$3.31	\$3.50	\$3.70	\$3.91	\$87.16
33 Xcel Energy Inc.	XEL	\$1.34	\$1.42	\$1.49	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98	\$2.11	\$2.24	\$2.39	\$2.52	\$2.67	\$2.82	\$2.98	\$3.14	\$77.09

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e						High E	EPS Growth Rate Estimate in First Stage	Rate Esti	mate in Fi	rst Stage									
4 Projected Annual Data																			
5 Investor Cash Flows		[64]	[65]	[99]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[92]	[77]	[78]	[62]	[80]	[81]
		Initial																	
6 Company	Ticker	 Outflow 		6/25/15 12/31/15	_	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21 6	6/30/22 6	6/30/23 6	6/30/24 6	6/30/25	6/30/26	6/30/27	6/30/28	6/30/59	6/30/30
7 ALLETE, Inc.	ALE	(\$51.08)	\$0.00	\$1.06	\$2.10	\$2.22	\$2.32	\$2.42	\$2.62	\$2.83	\$3.05	\$3.29	\$3.54	\$3.79	\$4.01	\$4.24	\$4.47	\$4.73	\$122.24
8 Alliant Energy Corporation	Ŗ	(\$61.38)	\$0.00	\$1.17	\$2.32	\$2.57	\$2.75	\$2.93	\$3.14	\$3.37	\$3.60	3.85	4.12	\$4.40	\$4.64	\$4.91	\$5.18	\$5.48	\$146.36
9 Ameren Corporation	AEE	(\$40.87)	\$0.00	\$0.86	\$1.72	\$1.75	\$1.80	\$1.83	\$2.03		\$2.46	32.69	2.94	\$3.21	\$3,39	\$3.58	\$3.78	\$4.00	\$99.81
10 American Electric Power Company, Inc.	Inc. AEP	(\$25.93)	\$0.00	\$1.18	\$2.34	\$2.50	\$2.62	\$2.74	\$2.91		\$3.28		\$3.71	\$3.95	\$4.17	\$4.41	\$4.66	\$4.92	\$131.44
11 Avista Corporation	AVA	(\$32.71)	\$0.00	\$0.68	\$1.37	\$1.48	\$1.56	\$1.65	\$1.78	\$1.91	\$2.05		2.34	\$2.49	\$2.63	\$2.78	\$2.94	\$3.11	\$78.01
12 Black Hills Corporation	BKH	(\$48.78)	\$0.00	\$0.91	\$1.82	\$2.05	\$2.22	\$2.39	\$2.61	\$2.85	٠,		\$3.63	\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$119.51
13 CenterPoint Energy, Inc.	CNP	-		\$0.72	\$1.44	\$1.45	\$1.48	\$1.50	\$1.54	\$1.59	\$1.63			\$1.76	\$1.85	\$1.96	\$2.07	\$2.19	\$44.68
14 CMS Energy Corporation	CMS		\$0.00	\$0.59	\$1.17	\$1.30	\$1.39	\$1.49	\$1.61					\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$81.52
15 Consolidated Edison, Inc.		(\$60.91)	\$0.00	\$1.25	\$2.46	\$2.53	\$2.59	\$2.64	\$2.77		\$3.07			\$3.69	\$3.90	\$4.12	\$4.35	\$4.59	\$140.78
16 Dominion Resources, Inc.	۵	(\$70.78)	\$0.00	\$1.23	\$2.47	\$2.77	\$2.99	\$3.23	\$3.43					\$4.43	\$4.68	\$4.95	\$5.23	\$5.52	\$165.16
17 DTE Energy Company	DTE	(\$79.41)	_	\$1.72	\$3.40	\$3.60	\$3.75	\$3.91	\$4.19					\$6.00	\$6.34	\$6.70	\$7.08	\$7.48	\$189.44
18 Duke Energy Corporation	DCK DCK	(\$76.11)		\$1.62	\$3.20	\$3.30	\$3.39	\$3.48	\$3.67	\$3.87	\$4.09	\$4.33	\$4.58	\$4.86	\$5.13	\$5.42	\$5.73	\$6.05	\$176.06
19 Empire District Electric Company	EDE	(\$24.01)		\$0.64	\$1.27	\$1.30	\$1.33	\$1.36	\$1.43					\$1.82	\$1.93	\$2.04	\$2.15	\$2.27	\$54.96
20 Eversource Energy	ES	(\$49.32)		\$0.86	\$1.72	\$1.89	\$2.03	\$2.17	\$2.43					\$3.88	\$4.10	\$4.33	\$4.58	\$4.84	\$122.42
21 FirstEnergy Corp.	밆	(\$35.13)		\$0.27	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72					\$1.15	\$1.22	\$1.29	\$1.36	\$1.44	\$83.18
22 Great Plains Energy Inc.	GXP	(\$26.14)		\$0.61	\$1.21	\$1.24	\$1.27	\$1.30	\$1.41					\$2.04	\$2.15	\$2.27	\$2.40	\$2.54	\$62.30
23 IDACORP, Inc.	IDA	(\$60.44)		\$1.02	\$2.00	\$2.32	\$2.51	\$2.72	\$2.91					\$4.22	\$4.45	\$4.71	\$4.97	\$5.25	\$145.85
24 NorthWestern Corporation	NWE	_		\$0.61	\$1.22	\$1.49	\$1.67	\$1.87	\$1.98					\$2.59	\$2.74	\$2.89	\$3.06	\$3.23	\$122.83
25 OGE Energy Corp.	OGE			\$0.72	\$1.43	\$1.30	\$1.24	\$1.17	\$1.26					\$1.82	\$1.93	\$2.04	\$2.15	\$2.27	\$72.87
26 Otter Tail Corporation	OTTR	_		\$1.21	\$2.44	\$2.50	\$2.57	\$2.64	\$2.96	\$3.29				\$4.77	\$5.04	\$5.32	\$5.62	\$5.94	\$78.17
27 Pinnacle West Capital Corporation	PNS		_	\$1.23	\$2.44	\$2.65	\$2.81	\$2.97	\$3.15			\$3.79		\$4.30	\$4.55	\$4.80	\$5.07	\$5.36	\$145.29
28 Portland General Electric Company	POR	_		\$0.60	\$1.19	\$1.38	\$1.50	\$1.63	\$1.79				2.53	\$2.75	\$2.91	\$3.07	\$3.25	\$3.43	\$87.83
29 SCANA Corporation	SCG		\$0.00	\$1.17	\$2.31	\$2.44	\$2.54	\$2.64	\$2.86	\$3.10			\$3.96	\$4.30	\$4.54	\$4.80	\$5.07	\$5.36	\$130.28
30 Southern Company	SO	(\$44.08)	\$0.00	\$1.14	\$2.25	\$2.32	\$2.39	\$2.45	\$2.54	\$2.64	\$2.75	,	\$3.00	\$3.14	\$3,32	\$3.51	\$3.71	\$3.92	\$99.91
31 TECO Energy, Inc.	끧	(\$19.00)	\$0.00	\$0.45	\$0.90	\$0.96	\$1.01	\$1.06	\$1.14	\$1.22	1.29	1,37 · 8	1.44	\$1.50	\$1.59	\$1.67	\$1.77	\$1.87	\$44.46
32 Westar Energy, Inc.	WR	(\$37.28)	\$0.00	\$0.79	\$1.57	\$1.62	\$1.68	\$1.73	\$1.90	\$2.08	\$2.28	32.50	2.72	\$2.97	\$3.14	\$3.31	\$3.50	\$3.70	\$91.07
33 Xcel Energy Inc.	Ä	(\$34.08)	\$0.00	\$0.70	\$1.38	\$1.49	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98	32.11	2.24	\$2.39	\$2.52	\$2.67	\$2.82	\$2.98	\$80.23

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

ო							Low EF	Low EPS Growth Rate Estimate in First Stage	Rate Estim	ate in Fir	st Stage								
4 r	Projected Annual		3	2	2	F	3	2	Š	5	Š	Š	Ş	į	S	į	Š	č	ā
٠ م	Earnings per Share		14)	13	116		[18]	[18]	[20]	[21]	[22]	[23]	[24]	52	[56]	[27]	[28]	[29]	[30]
ဖ	Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
7	ALLETE, Inc.	ALE	\$2.90	\$3.07	\$3.26	\$3.45	\$3.66	\$3.88	\$4.11	\$4.35	\$4.61	\$4.87	\$5.15	\$5.44	\$5.75	\$6.07	\$6.42	\$6.78	\$7.16
ω	Alliant Energy Corporation	F	\$3.48	\$3.66	\$3.86	\$4.06	\$4.28	\$4.51	\$4.75	\$5.00	\$5.28	\$5.57	\$5.88	\$6.21	\$6.57	\$6.94	\$7.33	\$7.74	\$8.18
6	Ameren Corporation	AEE	\$2.40	\$2.54	\$2.69	\$2.85	\$3.01	\$3.19	\$3.37	\$3.57	\$3.78	\$3.99	\$4.22	\$4.46	\$4.71	\$4.97	\$5.26	\$5.55	\$5.87
9	American Electric Power Company, Inc.	AEP	\$3,34	\$3.50	\$3.68	\$3.86	\$4.04	\$4.24	\$4.46	\$4.69	\$4.93	\$5.20	\$5.49	\$5.80	\$6.12	\$6.47	\$6.84	\$7.22	\$7.63
=	Avista Corporation	AVA AVA	\$1.84	\$1.93	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.60	\$2.74	\$2.88	\$3.04	\$3.22	\$3.40	\$3.59	\$3.79	\$4.01	\$4.23
12	Black Hills Corporation	BKH	\$2.89	\$3.02	\$3.16	\$3.30	\$3.45	\$3.60	\$3.77	\$3.95	\$4.16	\$4.37	\$4.61	\$4.87	\$5.15	\$5.44	\$5.75	\$6.07	\$6.42
5	CenterPoint Energy, Inc.	CNP	\$1.42	\$1.43	\$1.45	\$1.46	\$1.48	\$1.49	\$1.52	\$1.56	\$1.61	\$1.68	\$1.76	\$1.86	\$1.96	\$2.07	\$2.19	\$2.31	\$2.44
4	CMS Energy Corporation	CMS	\$1.74	\$1.84	\$1.94	\$2.04	\$2.16	\$2.27	\$2.40	\$2.53	\$2.67	\$2.82	\$2.98	\$3.15	\$3.33	\$3.52	\$3.72	\$3.93	\$4.15
15	Consolidated Edison, Inc.		\$3.62	\$3.71	\$3.79	\$3.88	\$3.98	\$4.07	\$4.19	\$4.34	\$4.51	\$4.72	\$4.96	\$5.24	\$5.53	\$5.85	\$6.18	\$6.53	\$6.89
16	Dominion Resources, Inc.	Δ	\$3.05	\$3.23	\$3.42	\$3.62	\$3.83	\$4.06	\$4.30	\$4.55	\$4.81	\$5.09	\$5.38	\$5.68	\$6.00	\$6.34	\$6.70	\$7.08	\$7.48
17	DTE Energy Company	DTE	\$5.10	\$5.33	\$5.57	\$5.82	\$6.08	\$6.36	\$6.66	\$6.98	\$7.34	\$7.72	\$8.15	\$8.61	\$9.09	\$9.61	\$10.15	\$10.72	\$11.33
18	Duke Energy Corporation	ž	\$4.13	\$4.32	\$4.51	\$4.71	\$4.92	\$5.14	\$5.39	\$5.65	\$5.93	\$6.25	\$6.59	\$6.96	\$7.35	\$7.77	\$8.21	\$8.67	\$9.16
19	Empire District Electric Company	EDE	\$1.55	\$1.60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.11	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$2.92	\$3.09
20	Eversource Energy	S	\$2.58	\$2.75	\$2.93	\$3.13	\$3.33	\$3.55	\$3.78	\$4.02	\$4.26	\$4.52	\$4.78	\$5.05	\$5.34	\$5.64	\$5.96	\$6.29	\$6.65
21	FirstEnergy Corp.	밆	\$0.85	\$0.91	\$0.97	\$1.04	\$1.11	\$1.19	\$1.27	\$1.36	\$1.44	\$1.53	\$1.62	\$1.71	\$1.81	\$1.91	\$2.02	\$2.13	\$2.25
22	Great Plains Energy Inc.	GXD	\$1.57	\$1,65	\$1.73	\$1.82	\$1.91	\$2.00	\$2.11	\$2.22	\$2.33	\$2,46	\$2.60	\$2.74	\$2.90	\$3.06	\$3.24	\$3.42	\$3.61
23	IDACORP, Inc.	ΔĀ	\$3.85	\$3.89	\$3.93	\$3.97	\$4.01	\$4.05	\$4.12	\$4.22	\$4.36	\$4.54	\$4.76	\$5.03	\$5.32	\$5.62	\$5.94	\$6.27	\$6.63
24	NorthWestern Corporation	NWE	\$1.98	\$2.08	\$2.18	\$2.29	\$2.41	\$2.53	\$2.66	\$2.79	\$2.94	\$3.10	\$3.28	\$3.46	\$3.66	\$3.86	\$4.08	\$4.31	\$4.56
25	OGE Energy Corp.	0GE	\$1.55	\$1.60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.11	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$2.92	\$3.09
56	Otter Tail Corporation	OTTR	\$3.06	\$3.24	\$3.44	\$3.64	\$3.86	\$4.09	\$4.34	\$4.59	\$4.86	\$5.14	\$5.44	\$5.74	\$6.07	\$6.41	\$6.77	\$7.15	\$7.56
27	Pinnacle West Capital Corporation	MM	\$3.58	\$3.72	\$3.87	\$4.03	\$4.19	\$4.36	\$4.54	\$4.75	\$4.98	\$5.23	\$5.51	\$5.82	\$6.15	\$6.50	\$6.87	\$7.26	\$7.67
28	Portland General Electric Company	Por	\$2.18	\$2.28	\$2.39	\$2.50	\$2.62	\$2.75	\$2.88	\$3.02	\$3.18	\$3.35	\$3.53	\$3.73	\$3.95	\$4.17	\$4.40	\$4.65	\$4.92
59	SCANA Corporation	908	\$3.79	\$3.95	\$4.12	\$4.29	\$4.47	\$4.66	\$4.86	\$5.09	\$5.34	\$5.62	\$5.92	\$6.26	\$6.61	\$6.98	\$7.38	\$7.79	\$8.23
30	Southern Company	S	\$2.77	\$2.86	\$2.96	\$3.06	\$3.16	\$3.26	\$3.38	\$3.52	\$3.68	\$3.86	\$4.06	\$4.29	\$4.53	\$4.79	\$5.06	\$5.35	\$5.65
31	TECO Energy, Inc.	핃	\$0.95	\$1.01	\$1.07	\$1.13	\$1.20	\$1.27	\$1.35	\$1.43	\$1.51	\$1.60	\$1.69	\$1.78	\$1.88	\$1.99	\$2.10	\$2.22	\$2.35
32	Westar Energy, Inc.	X R	\$2.35	\$2.43	\$2.51	\$2.60	\$2.69	\$2.78	\$2.88	\$3.00	\$3.14	\$3.29	\$3.47	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$4.82
င္တ	Xcel Energy Inc.	ΧĒΓ	\$2.03	\$2.12	\$2.22	\$2.32	\$2.42	\$2.53	\$2.65	\$2.78	\$2.92	\$3.07	\$3.24	\$3.42	\$3.62	\$3.82	\$4.04	\$4.27	\$4.51

က							Low EP	Low EPS Growth Rate Estimate in First Stage	Rate Estim	ate in Firs	t Stage								
4 ro	Projected Annual Dividend Pavout Ratio		92	1311	[32]	[33]	[34]	[32]	[36]	[37]	[38]	[38]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
	BANKAMAN MAKENTER KATERIA K							ameninia minima mana	TOTAL SERVICE STATE SERVICE STATE SERVICE STATE SERVICE STATE SERVICE SERVICE STATE SERVICE STATE SERVICE STATE SERVICE SERVIC										
9	Company	Ticker	20	2015 20		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
7	ALLETE, Inc.	ALE	. 66.	66.00% 64.	64.75% 63	63.50%	62.25%	61.00%	62.05%	63.10% (64.15% (65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
œ	Alliant Energy Corporation	Ν̈́	61.	61.00% 61.	61.50% 62	62.00%	62.50%	63.00%	63.72%	64.43%	65.15% (65.87%	%65.99	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
ത	Ameren Corporation	AEE	65.	65.00% 62.	62.50% 60	%00.09	27.50%	25.00%	27.05%	59.10%	61.15% (63.20%	65.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
9	American Electric Power Company, Inc.	AEP	65.	65.00% 64.	64.75% 64	64.50%	64.25%	64.00%	64.55%	65.10% (65.65% (66.20%	66.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
=	Avista Corporation	AVA	. 67.	67.00% 66.	66.25% 65	65.50%	64.75%	64.00%	64.55%	65.10% (65.65% (66.20%	66.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
12	Black Hills Corporation	BKH	57.	57.00% 57.	57.50% 58	28.00%	58.50%	29.00%	60.38%	61.77% (63.15% (64.54%	65.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
13	CenterPoint Energy, Inc.	SNP	8	93.00% 89.		86.50%	83.25%	80.00%	77.88%	. %21.51	73.65%	71.54%	69.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
14	CMS Energy Corporation	CMS	61.	61.00% 61.	-	61.50%	61.75%	62.00%	62.88%	63.77% (64.65% (65.54%	66.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
15	Consolidated Edison, Inc.			65,00% 64.		64.00%	63.50%	63.00%	63.72%	64.43% (65.15% (65.87%	%69.99	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
16		_	72.	72.00% 72.		72.00%	72.00%	72.00%	71.22%	70.43% (69.65%	68.87%	%60'89	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
17	DTE Energy Company	품	62.	62.00% 61.		61.00%	%05.09	%00.09	61.22%	62.43% (63.65% (64.87%	%60'99	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
18	Duke Energy Corporation	ž	72.	72.00% 70.		%00.69	67.50%	%00'99	66.22%	66.43% (96.65%	66.87%	%60'.29	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
19	Empire District Electric Company	EDE	76.	76.00% 74.	74.25% 72		70.75%	%00'69		68.43% (68.15% (67.59%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
20	Eversource Energy	ES	. 59.				56.75%	26.00%					65.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
21	FirstEnergy Corp.	빞	. 58.	58.00% 57.		26.00%	25.00%	54.00%	56.22%	58.43% (60.65%	62.87%	65.09%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
22	Great Plains Energy Inc.	СХР	Š	70.00% 67.		65.50%	63.25%	61.00%	62.05%	63.10% (64.15% (65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
23	IDACORP, Inc.	ΙDΑ	49.	_	51.25% 53		55.75%	28.00%		61.10%	62.65% (65.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
24		NVE	. 56.				65.75%	%00.69			68.15% (67.59%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
22	OGE Energy Corp.	99e	98	86.00% 79.			65.75%	29.00%			63.15% (65.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
56	Otter Tail Corporation	OTTR	Š	70.00% 66.		63.00%	29.50%	26.00%	27.88%	59.77% (61.65% (63.54%	65.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
27	Pinnacle West Capital Corporation	PNW	83	63.00% 63.	63.25% 63	63.50%	63.75%	64.00%	64.55%	65.10% (65.65% (66.20%	66.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
78	Portland General Electric Company	POR	35			23.00%	54.50%	26.00%	57.88%	59.77% (61.65% (63.54%	65.42%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
29	SCANA Corporation	ഉറ്റ	57.			26.50%	56.25%	26.00%		59.77% (61.65%	63.54%		67.30%	%06.79	67.30%	67.30%	67.30%	67.30%
8	٠,	တ္တ	.92				72.25%	71.00%		69.77% (69.15% (68.54%	67.92%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
93		끧	83.				74.75%	72.00%					%60'89	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
35		×κ	61.				26.50%	22.00%			61.15% (63.20%	65.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
33	Xcel Energy Inc.	ΧĒĻ	.63	63.00% 63.	63.25% 63	63.50%	63,75%	64.00%	64.55%	65.10% (65.65%	66.20%	66.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%

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

- 2 c

4 Projected Annual 5 Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]
																		Terminal
6 Сотрапу	Ticker	2015	2016		2018	2019	2020	2021	2022				2026	2027	2028	2029	2030	Value
7 ALLETE, Inc.	ALE	\$2.03	\$2.11	\$2.19	\$2.28	\$2.37	\$2.55	\$2.75	\$2.96				\$3.87	\$4.09	\$4.32	\$4.56	\$4.82	\$116.80
8 Alliant Energy Corporation	Ŗ	\$2.24	\$2.37	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22	\$3.44				\$4.42	\$4.67	\$4.93	\$5.21	\$5.51	\$139.87
9 Ameren Corporation	AEE	\$1.65	\$1.68	\$1.71	\$1.73	\$1.75	\$1.93	\$2.11	\$2.31	\$2.52	\$2.75		\$3.17	\$3.35	\$3.54	\$3.74	\$3.95	\$94.84
10 American Electric Power Company, Inc.		\$2.28	\$2.38	\$2.49	\$2.60	\$2.72	\$2.88	\$3.05	\$3.24		\$3.66	\$3.90	\$4.12	\$4.35	\$4.60	\$4.86	\$5.14	\$126,08
11 Avista Corporation	AVA	\$1,29	\$1.34	\$1.40	\$1.45	\$1.50	\$1.59	\$1.69	\$1.80	\$1.91	\$2.03		\$2.29	\$2.42	\$2.55	\$2.70	\$2.85	\$73.66
12 Black Hills Corporation	BKH	\$1.72	\$1.81	\$1.91	\$2.02	\$2.12	\$2.28	\$2.44	\$2.62	٠,			\$3.47	\$3.66	\$3.87	\$4.09	\$4.32	\$112.11
13 CenterPoint Energy, inc.	CNP	\$1.33	\$1.30	\$1.27	\$1.23	\$1.19	\$1.18	\$1.18	\$1.19	٠,			\$1.32	\$1.39	\$1,47	\$1.56	\$1.64	\$41.32
14 CMS Energy Corporation	CMS	\$1.12	\$1,19	\$1.26	\$1.33	\$1.41	\$1.51	\$1.62	\$1.73	\$1.85	\$1.98	\$2.12	\$2.24	\$2.37	\$2.50	\$2.64	\$2.79	\$77.81
15 Consolidated Edison, Inc.		\$2.41		\$2.49	\$2.53	\$2.57	\$2.67	\$2.79	\$2.94				\$3.72	\$3.93	\$4.16	\$4.39	\$4.64	\$135.43
16 Dominion Resources, Inc.	Δ	\$2.33	\$2.46	\$2.61	\$2.76	\$2.92	\$3.06	\$3.20	\$3.35		\$3.66		\$4.04	\$4.27	\$4.51	\$4.76	\$5.03	\$157.49
17 DTE Energy Company	DTE	\$3.30	\$3.43	\$3.55	\$3.68	\$3.82	\$4.08	\$4.36	\$4.67				\$6.12	\$6.47	\$6.83	\$7.22	\$7.63	\$180.86
18 Duke Energy Corporation	PUK PUK	\$3.11		\$3.25	\$3.32	\$3.40	\$3.57	\$3.75	\$3.96				\$4.95	\$5.23	\$5.52	\$5.84	\$6.17	\$169.14
19 Empire District Electric Company	EDE	\$1.21		\$1.23	\$1.23	\$1.24	\$1.28	\$1.32	\$1.37				\$1.67	\$1.76	\$1.86	\$1.97	\$2.08	\$51.89
20 Eversource Energy	SE	\$1.62		\$1.80	\$1.89	\$1.99	\$2.19	\$2.40	\$2.63				\$3.59	\$3.79	\$4.01	\$4.24	\$4.48	\$115.50
21 FirstEnergy Corp.	Щ	\$0.53		\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87				\$1.22	\$1.29	\$1.36	\$1.44	\$1.52	\$81.66
22 Great Plains Energy Inc.	GXP	\$1.15		\$1.19	\$1.21	\$1.22	\$1.31	\$1.40	\$1.50				\$1.95	\$2.06	\$2.18	\$2.30	\$2.43	\$59.00
23 IDACORP, Inc.	PΑ	\$1.91		\$2.12	\$2.23	\$2.35	\$2.45	\$2.58	\$2.73				\$3.58	\$3.78	\$4.00	\$4.22	\$4.46	\$137.45
24 NorthWestern Corporation	NWE	\$1.16		\$1.43	\$1.58	\$1.74	\$1.83	\$1.91	\$2.01				\$2.46	\$2.60	\$2.75	\$2.90	\$3.07	\$118.57
25 OGE Energy Corp.	990 0	\$1.37	\$1.30	\$1.23	\$1.15	\$1.06	\$1.12	\$1.19	\$1.27		\$1.46		\$1.67	\$1.76	\$1.86	\$1.97	\$2.08	\$69.69
26 Otter Tail Corporation	OTTR	\$2.27	\$2.29	\$2.30	\$2.30	\$2.29	\$2.51	\$2.75	\$3.00				\$4.08	\$4.31	\$4.56	\$4.82	\$5.09	\$69.02
27 Pinnacle West Capital Corporation	PNW	\$2.35	\$2.45	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09	\$3.27			•	\$4.14	\$4.38	\$4.62	\$4.88	\$5.16	\$138.41
28 Portland General Electric Company	POR	\$1.14	\$1.23	\$1.33	\$1.43	\$1.54	\$1.67	\$1.81	\$1.96			٠,	\$2.66	\$2.81	\$2.96	\$3.13	\$3.31	\$83.32
29 SCANA Corporation	SCG	\$2.25	\$2.34	\$2.42	\$2.51	\$2.61	\$2.81	\$3.04	\$3.29			•	\$4.45	\$4.70	\$4.97	\$5.25	\$5.54	\$124.29
30 Southern Company	SO	\$2.18		\$2.25	\$2.28	\$2.32	\$2.38	\$2.46	\$2.54		\$2.76	_	\$3.05	\$3.22	\$3.41	\$3.60	\$3.80	\$95.08
31 TECO Energy, Inc.	쁘	\$0.84	\$0.86	\$0.88	\$0.90	\$0.92	\$0.96	\$1.00	\$1.05	\$1.10	\$1.15	1.20	\$1.27	\$1.34	\$1.42	\$1.49	\$1.58	\$41.61
32 Westar Energy, Inc.	WR	\$1.48	\$1.49	\$1.51	\$1.52	\$1.53	\$1.64	\$1.77	\$1.92		\$2.26	\$2.46	\$2.60	\$2.75	\$2.91	\$3.07	\$3.24	\$85.36
33 Xcel Energy Inc.	XEL	\$1.34	\$1.40	\$1.47	\$1.54	\$1.62	\$1.71	\$1.81	\$1.92	\$2.03	\$2.16	\$2.30	\$2.43	\$2.57	\$2.72	\$2.87	\$3.03	\$76.82

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4	Projected Annual Data										1									
s,	Investor Cash Flows		[64]	[65]	[99]	[67]	[68]	[69]	[0]	[71]	[72]	[73]	[74]	[75]	[9/]	[77]	[78]	[42]	[80]	[81]
			Initial																	
9	Company	Ticker	Outflow	6/25/15	12/31/15	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	6/30/59	6/30/30
7	ALLETE, Inc.	ALE	(\$51.08)	\$0.00	\$1.05	\$2.09	\$2.19	\$2.28	\$2.37	\$2.55	\$2.75	\$2.96	\$3.18	\$3.41	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$121.62
æ	Alliant Energy Corporation	LN	(\$61.38)	\$0.00	\$1.16	\$2.29	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22	\$3.44	\$3.67	\$3.92	\$4.18	\$4.42	\$4.67	\$4.93	\$5.21	\$145.37
თ	Ameren Corporation	AEE	(\$40.87)	\$0.00	\$0.86	\$1.70	\$1.71	\$1.73	\$1.75	\$1.93	\$2.11	\$2.31	\$2.52	\$2.75	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$98.78
10	American Electric Power Company, Inc.	AEP	(\$55.93)	\$0.00	\$1.18	\$2.33	\$2.49	\$2.60	\$2.72	\$2.88	\$3.05	\$3.24	\$3.44	\$3.66	\$3.90	\$4.12	\$4.35	\$4.60	\$4.86	\$131.22
7	Avista Corporation	AVA	(\$32.71)	\$0.00	\$0.67	\$1.33	\$1.40	\$1.45	\$1.50	\$1.59	\$1.69	\$1.80	\$1.91	\$2.03	\$2.16	\$2.29	\$2.42	\$2.55	\$2.70	\$76.51
12	Black Hills Corporation	BKH	(\$48.78)	\$0.00	\$0.89	\$1.76	\$1.91	\$2.02	\$2.12	\$2.28	\$2.44	\$2.62	\$2.82	\$3.04	\$3.28	\$3.47	\$3.66	\$3.87	\$4.09	\$116.43
13	CenterPoint Energy, Inc.	CNP	(\$20.49)	\$0.00	\$0.69	\$1,34	\$1.27	\$1.23	\$1.19	\$1.18	\$1.18	\$1.19	\$1.20	\$1.22	\$1.25	\$1.32	\$1.39	\$1.47	\$1.56	\$42.97
4	CMS Energy Corporation	CMS	(\$34.02)	\$0.00	\$0.58	\$1.15	\$1.26	\$1.33	\$1.41	\$1.51	\$1.62	\$1.73	\$1.85	\$1.98	\$2.12	\$2.24	\$2.37	\$2.50	\$2.64	\$80.60
15	Consolidated Edison, Inc.		(\$60.91)	\$0.00	\$1.25	\$2.44	\$2.49	\$2.53	\$2.57	\$2.67	\$2.79	\$2.94	\$3.11	\$3.30	\$3.52	\$3.72	\$3.93	\$4.16	\$4.39	\$140.07
16	Dominion Resources, Inc.	۵	(\$70.78)	\$0.00	\$1.20	\$2.39	\$2.61	\$2.76	\$2.92	\$3.06	\$3.20	\$3.35	\$3.50	\$3.66	\$3.82	\$4.04	\$4.27	\$4.51	\$4.76	\$162.52
17	DTE Energy Company	DTE	(\$79.41)	\$0.00	\$1.71	\$3.38	\$3.55	\$3.68	\$3.82	\$4.08	\$4.36	\$4.67	\$5.01	\$5.38	\$5.79	\$6.12	\$6.47	\$6.83	\$7.22	\$188.48
	Duke Energy Corporation	S S	(\$76.11)	\$0.00	\$1.61	\$3.18	\$3.25	\$3.32	\$3.40	\$3.57	\$3.75	\$3.96	\$4.18	\$4.42	\$4.68	\$4.95	\$5.23	\$5.52	\$5.84	\$175.31
19	Empire District Electric Company	EDE	(\$24.01)	\$0.00	\$0.63	\$1.23	\$1.23	\$1.23	\$1.24	\$1.28	\$1.32	\$1.37	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.86	\$1.97	\$53.96
20	Eversource Energy	ES	(\$49.32)		\$0.84	\$1.68	\$1.80	\$1.89	\$1.99	\$2.19	\$2.40	\$2.63	\$2.87	\$3.13	\$3.40	\$3.59	\$3.79	\$4.01	\$4.24	\$119.97
2	FirstEnergy Corp.	Щ	(\$35.13)	\$0.00	\$0.27	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87	\$0.96	\$1.05	\$1.15	\$1.22	\$1.29	\$1.36	\$1.44	\$83.18
22	Great Plains Energy Inc.	GXP	(\$26.14)	\$0.00	\$0.60	\$1.18	\$1.19	\$1.21	\$1.22	\$1.31	\$1.40	\$1.50	\$1.60	\$1.72	\$1.85	\$1.95	\$2.06	\$2.18	\$2.30	\$61.43
23	IDACORP, Inc.	Δ	(\$60.44)	\$0.00	\$0.99	\$1.91	\$2.12	\$2.23	\$2.35	\$2.45	\$2.58	\$2.73	\$2.92	\$3.13	\$3.39	\$3.58	\$3.78	\$4.00	\$4.22	\$141.91
24	NorthWestern Corporation	NWE	(\$52.34)	\$0,00	\$0.60	\$1.19	\$1.43	\$1.58	\$1.74	\$1.83	\$1.91	\$2.01	\$2.11	\$2.21	\$2.33	\$2.46	\$2.60	\$2.75	\$2.90	\$121.64
52	OGE Energy Corp.	OGE	(\$31.57)	\$0.00	\$0.71	\$1.39	\$1.23	\$1.15	\$1.06	\$1.12	\$1.19	\$1.27	\$1.36	\$1.46	\$1.58	\$1.67	\$1.76	\$1.86	\$1.97	\$71.76
56	Otter Tail Corporation	OTTR	(\$29.98)	\$0.00	\$1.18	\$2.34	\$2.30	\$2.30	\$2.29	\$2.51	\$2.75	\$3.00	\$3.27	\$3.56	\$3.86	\$4.08	\$4.31	\$4.56	\$4.82	\$74.11
27	Pinnacle West Capital Corporation	PNW	(\$61.59)	\$0.00	\$1.21	\$2.39	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09	\$3.27	\$3.46	\$3.68	\$3.92	\$4.14	\$4.38	\$4.62	\$4.88	\$143.57
28	Portland General Electric Company	POR	(\$35.60)		\$0.59	\$1.17	\$1.33	\$1.43	\$1.54	\$1.67	\$1.81	\$1.96	\$2.13	\$2.31	\$2.51	\$2.66	\$2.81	\$2.96	\$3.13	\$86.63
59	SCANA Corporation	SCG	(\$53.75)	\$0.00	\$1.17	\$2.30	\$2.42	\$2.51	\$2.61	\$2.81	\$3.04	\$3.29	\$3.57	\$3.87	\$4.21	\$4.45	\$4.70	\$4.97	\$5.25	\$129.84
9	Southern Company	SO	(\$44.08)	\$0.00	\$1.13	\$2.21	\$2.25	\$2.28	\$2.32	\$2.38	\$2.46	\$2.54	\$2.64	\$2.76	\$2.89	\$3.05	\$3.22	\$3.41	\$3.60	\$98.88
31	TECO Energy, Inc.	밀	(\$19.00)	\$0.00	\$0.43	\$0.86	\$0.88	\$0.90	\$0.92	\$0.96	\$1.00	\$1.05	\$1.10	\$1.15	\$1.20	\$1.27	\$1.34	\$1.42	\$1.49	\$43.19
	Westar Energy, Inc.	WR	(\$37.28)	\$0.00	\$0.77	\$1.51	\$1.51	\$1.52	\$1.53	\$1.64	\$1.77	\$1.92	\$2.08	\$2.26	\$2.46	\$2.60	\$2.75	\$2.91	\$3.07	\$88.61
33	Xcel Energy Inc.	Ä	(\$34.08)	\$0.00	\$0.69	\$1.37	\$1.47	\$1.54	\$1.62	\$1.71	\$1.81	\$1.92	\$2.03	\$2.16	\$2,30	\$2.43	\$2.57	\$2.72	\$2.87	\$79.85

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

4	Inputs		Ξ	[2]	[3]	4	[2]	[9]		8	6	[10]	111	[12]	[13]
5			Stock	EPS	তি	ite Estima		Long-Term	Pa	Payout Ratio	_	terative S	terative Solution Terminal	erminal 1	erminal
			ı			Value								P/E	PEG
ဖ	Company	Ticker	Price	Zacks	First Call	Line ,	Average	Growth	2015	2019	2025	Proof	IRR	Ratio	Ratio
7	ALLETE, Inc.	ALE	\$52.15	A A	%00.9	6.50%	6.25%	2.65%	900.99		67.30%	\$0.00	9.99%	16.38	2.90
œ	Alliant Energy Corporation	Ľ	\$62.78	5.30%	5.45%	%00.9	2.58%	2.65%		63.00%	67.30%	\$0.00	9.79%	17.17	3.04
တ	Ameren Corporation	AEE	\$42.21	6.80%	5.85%	%00.9	6.22%	2.65%	65.00%	25.00%	67.30%	\$0.00	10.01%	16.31	2.89
6	American Electric Power Company, Inc.	AEP	\$57.48	4.90%	2.08%	2.00%	4.99%	2.65%	65.00%	64.00%	67.30%	\$0.00	9.86%	16.89	2.99
7	Avista Corporation	AVA	\$33.86	ΑĀ	2.00%	7.00%	%00'9	2.65%		64.00%	67.30%	\$0.00	9.86%	16.90	2.99
12		BKH	\$50.52	ΑĀ	7.00%	4.50%	5.75%	5.65%		29.00%	67.30%	\$0.00	9.91%	16.71	2.96
13		CNP	\$21.96	5.70%	1.91%	1.00%	2.87%	2.65%	93.00%	80.00%	67.30%	\$0.00	10.08%	16.05	2.84
4		CMS	\$34.05	6.20%	6.73%	2.50%	6.14%	5.65%	61.00%	62.00%	67.30%	\$0.00	8.60%	18.01	3.19
15		E	\$62.87	2.70%	2.38%	3.00%	2.69%	2.65%	65.00%	63.00%	67.30%	\$0.00	9.23%	19.87	3.52
16	Dominion Resources, Inc.	Δ	\$72.44	6.30%	2.89%	8.00%	6.73%	2.65%	72.00%	72.00%	67.30%	\$0.00	9.13%	20.42	3.61
17		DTE	\$81.72	2.00%	4.51%	2.00%	4.84%	2.65%	62.00%	%00.09	67.30%	\$0.00	10.07%	16.09	2.85
8	ion	ρČΚ	\$79.36	4.70%	4.49%	2.00%	4.73%	2.65%	72.00%	%00.99	67.30%	\$0.00	9.40%	18.97	3.36
9	ompany	EDE	\$26.21	2.00%	2.00%	3.00%	4.33%	2.65%	76.00%	%00.69	67.30%	\$0.00	9.87%	16.86	2.98
20	^	ES	\$50.51	6.80%	%09'9	8.50%	7.30%	2.65%	29.00%	26.00%	67.30%	\$0.00	9.83%	17.02	3.01
21		Щ	\$36,48	Ϋ́	ž	7.00%	7.00%	2.65%		24.00%	67.30%	\$0.00	7.54%	37.61	99.9
52	ergy Inc.	GXP	\$26.74	%00.9	6.37%	2.00%	5.79%	2.65%		61.00%	67.30%	\$0.00	10.13%	15.89	2.81
23		Δ	\$62.00	4.00%	4.00%	1.00%	3.00%	2.65%		28.00%	67.30%	\$0.00	9.47%	18.62	3.29
24	oration	NWE	\$53.21	2.00%	2.00%	6.50%	2.50%	5,65%	26.00%	%00.69	67.30%	\$0.00	8.43%	25.60	4.53
52		OGE	\$33.59	2.00%	4.00%	3.00%	4.00%	2.65%		29.00%	67.30%	\$0.00	8.81%	22.49	3.98
56	uo	OTTR	\$30.14	Ϋ́	%00'9	8.00%	7.50%	5.65%	70.00%	26.00%	67.30%	\$0.00	14.09%	8.42	1.49
27	rporation	PNW	\$63.34	4.60%	5.30%	4.00%	4.63%	2.65%		64.00%	67.30%	\$0.00	9.64%	17.82	3.15
28	ectric Company	POR	\$36.46	5.20%	4.72%	%00'9	5.31%	2.65%		26.00%	67.30%	\$0.00	9.91%	16.72	2.96
59	SCANA Corporation	SCG	\$55.87	4.20%	4.30%	4.50%	4.33%	2.65%	57.00%	26.00%	67.30%	\$0.00	10.22%	15.55	2.75
စ္က	Southern Company	SO	\$46.21	3.50%	3.32%	4.50%	3.77%	2.65%	76.00%		67.30%	\$0.00	9.79%	17.17	3.04
31	TECO Energy, Inc.	世	\$19.49	7.10%	9.20%	%00'9	7.43%	2.65%	83.00%	72.00%	67.30%	\$0.00	9.94%	16.59	2.94
35	Westar Energy, Inc.	Χĸ	\$38.47	3.50%	3.40%	%00'9	4.30%	2.65%	61.00%	22.00%	67.30%	\$0.00	9.78%	17.24	3.05
33	Xcel Energy Inc.	XEL	\$34.44	2.00%	4.58%	4.50%	4.69%	2.65%	63.00% 6	64.00%	67.30%	\$0.00	9.83%	17.01	3.01
34													9.79%		
32													14.09%		
36												⊑ X	7.54%		

- 2							Multi-Staç	Multi-Stage Growth Discounted Cash Flow Model 180 Day Average Stock Price	Discounted Perage Sto	Cash Flo	ow Model								
ო -							Average E	Average EPS Growth Rate Estimate in First Stage	Rate Esti	mate in F	irst Stage								
4 1	Projected Annual		:	:	3	i	3		Š	;	3	3	:	į	Š	į		3	i
2	Earnings per Share		[14]	[15]	[16]	11/1	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[59]	30
ဖ	Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
7	ALLETE, Inc.	ALE	\$2.90	\$3.08	\$3.27	\$3.48	\$3.70	\$3.93	\$4.17	\$4.42	\$4.68	\$4.96	\$5.24	\$5.54	\$5.85	\$6.18	\$6.53	\$6.90	\$7.29
œ	Alliant Energy Corporation	LN.	\$3.48	\$3.67	\$3.88	\$4.10	\$4.32	\$4.57	\$4.82	\$5.09	\$5.38	\$5.68	\$6.00	\$6.34	\$6.70	\$7.08	\$7.48	\$7.90	\$8.35
6	Ameren Corporation	AEE	\$2.40	\$2.55	\$2.71	\$2.88	\$3.05	\$3.24	\$3.44	\$3.65	\$3.87	\$4.09	\$4.33	\$4.57	\$4.83	\$5.10	\$5.39	\$5.70	\$6.02
10	American Electric Power Company, Inc.	AEP	\$3.34	\$3.51	\$3.68	\$3.87	\$4.06	\$4.26	\$4.48	\$4.71	\$4.96	\$5.23	\$5.52	\$5.83	\$6.16	\$6.51	\$6.88	\$7.27	\$7.68
1	Avista Corporation	AVA	\$1.84	\$1.95	\$2.07	\$2.19	\$2.32	\$2.46	\$2.61	\$2.76	\$2.92	\$3.09	\$3.27	\$3.45	\$3.65	\$3.85	\$4.07	\$4.30	\$4.55
12	Black Hills Corporation	BKH	\$2.89	\$3.06	\$3.23	\$3.42	\$3.61	\$3.82	\$4.04	\$4.27	\$4.52	\$4.77	\$5.04	\$5.33	\$5.63	\$5.95	\$6.28	\$6.64	\$7.01
13	CenterPoint Energy, Inc.	CNP	\$1,42	\$1.46	\$1.50	\$1.55	\$1.59	\$1.64	\$1.69	\$1.75	\$1.83	\$1.92	\$2.02	\$2.13	\$2.25	\$2.38	\$2.51	\$2.65	\$2.80
4	CMS Energy Corporation	CMS	\$1.74	\$1.85	\$1.96	\$2.08	\$2.21	\$2.34	\$2.49	\$2.64	\$2.79	\$2.95	\$3.12	\$3.30	\$3.48	\$3.68	\$3.89	\$4.11	\$4.34
15	Consolidated Edison, Inc.		\$3.62	\$3.72	\$3.82	\$3.92	\$4.03	\$4.13	\$4.27	\$4.42	\$4.61	\$4.82	\$5.07	\$5.36	\$5.66	\$5.98	\$6.32	\$6.68	\$7.05
16	Dominion Resources, Inc.	Δ	\$3.05	\$3.26	\$3.47	\$3.71	\$3.96	\$4.22	\$4.50	\$4.79	\$5.08	\$5.39	\$5.70		\$6.37	\$6.73	\$7.11	\$7.51	\$7.93
17	DTE Energy Company	DTE	\$5.10	\$5.35	\$5.61	\$5.88	\$6.16	\$6.46	\$6.78	\$7.13	\$7.50	\$7.90	\$8.34		\$9.31	\$9.83	\$10.39	\$10.98	\$11.60
18	Duke Energy Corporation	DQ.	\$4.13	\$4.33	\$4.53	\$4.74	\$4.97	\$5.20	\$5.46	\$5.73	\$6.03	\$6.35	\$6.70		\$7.48	\$7.90	\$8.35	\$8.82	\$9.32
9	Empire District Electric Company	EDE	\$1.55	\$1.62	\$1.69	\$1.76	\$1.84	\$1.92	\$2.00	\$2.10	\$2.20	\$2.32	\$2.44	\$2.58	\$2.73	\$2.88	\$3.05	\$3.22	\$3.40
20	Eversource Energy	S	\$2.58	\$2.77	\$2.97	\$3.19	\$3.42	\$3.67	\$3.93	\$4.19	\$4.46	\$4.74	\$5.02		\$5.61	\$5.92	\$6.26	\$6.61	\$6.98
21	FirstEnergy Corp.	出	\$0,85	\$0.91	\$0.97	\$1.04	\$1.11	\$1.19	\$1.27	\$1.36	\$1.44	\$1.53	\$1.62		\$1.81	\$1.91	\$2.02	\$2.13	\$2.25
22	Great Plains Energy Inc.	GXP	\$1.57	\$1.66	\$1.76	\$1.86	\$1.97	\$2.08	\$2.20	\$2.33	\$2.46	\$2.60	\$2.75		\$3.07	\$3.24	\$3.42	\$3.62	\$3.82
23	IDACORP, Inc.	ĕ	\$3.85	\$3.97	\$4.08	\$4.21	\$4.33	\$4.46	\$4.62	\$4.80	\$5.00	\$5.24	\$5.52		\$6.16	\$6.50	\$6.87	\$7.26	\$7.67
54	NorthWestern Corporation	NWE	\$1.98	\$2.09	\$2.20	\$2.32	\$2.45	\$2.59	\$2.73	\$2.88	\$3.04	\$3.21	\$3.39		\$3.79	\$4.00	\$4.23	\$4.47	\$4.72
52	OGE Energy Corp.	OGE	\$1.55	\$1.61	\$1.68	\$1.74	\$1.81	\$1.89	\$1.97	\$2.06	\$2.16	\$2.27	\$2.39		\$2.66	\$2.81	\$2.97	\$3.14	\$3.32
56	Otter Tail Corporation	OTTR	\$3.06	\$3.29	\$3.54	\$3.80	\$4.09	\$4.39	\$4.71	\$5.03	\$5.36	\$5.70	\$6.04		\$6.74	\$7.12	\$7.53	\$7.95	\$8.40
27	Pinnacle West Capital Corporation	MNA	\$3.58	\$3.75	\$3.92	\$4.10	\$4.29	\$4.49	\$4.71	\$4.94	\$5.19	\$5.47	\$5.77		\$6.44	\$6.80	\$7.19	\$7.59	\$8.02
28	Portland General Electric Company	POR	\$2.18	\$2.30	\$2.42	\$2.55	\$2.68	\$2.82	\$2.97	\$3.14	\$3.31	\$3.49	\$3.69		\$4.11	\$4.35	\$4.59	\$4.85	\$5.13
59	SCANA Corporation	SCG	\$3.79	\$3.95	\$4.13	\$4.30	\$4.49	\$4.69	\$4.90	\$5.13	\$5.39	\$5.67	\$5.98	\$6.32	\$6.67	\$7.05	\$7.45	\$7.87	\$8.31
30	Southern Company	SO	\$2.77	\$2.87	\$2.98	\$3.10	\$3.21	\$3.33	\$3.47	\$3.62	\$3.79	\$3.98	\$4.20	\$4.43	\$4.68	\$4.95	\$5.23	\$5.52	\$5.84
33	TECO Energy, Inc.	世	\$0,95	\$1.02	\$1.10	\$1.18	\$1.27	\$1.36	\$1.46	\$1.56	\$1.66	\$1.76	\$1.87	\$1.97	\$2.08	\$2.20	\$2.33	\$2.46	\$2.60
35		Μĸ	\$2.35	\$2.45	\$2.56	\$2.67	\$2.78	\$2.90	\$3.03	\$3.18	\$3.33	\$3.51	\$3.70	\$3.91	\$4.13	\$4.36	\$4.61	\$4.87	\$5.14
33	Xcel Energy Inc.	XEL	\$2.03	\$2.13	\$2.23	\$2.33	\$2.44	\$2.55	\$2.68	\$2.81	\$2.96	\$3.11	\$3.29	\$3.47	\$3.67	\$3.87	\$4.09	\$4.33	\$4.57

- 0 €						Multi-Stag Average E	Multi-Stage Growth Discounted Cash Flow Model 180 Day Average Stock Price Average EPS Growth Rate Estimate in First Stage	e Growth Discounted Cash Fl 180 Day Average Stock Price PS Growth Rate Estimate in F	Cash Flook Revice Trace Thate in Fire	w Model								
4 %	Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
9	Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025 2	2026	2027	2028	2029	2030
, ,	ALLETE, Inc.	ALE	%00'99	64.75%	63.50%	62.25%	61.00%	62.05%	63.10% 6	64.15% 6	65.20% 6	۰	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
8	Alliant Energy Corporation	LY.	61.00%	61.50%	62.00%	62.50%	63.00%		64.43% 6	65.15% 6	65.87% 6	9 %65.99	67.30% 67	67.30% 6		67.30%	67.30%	67.30%
6	Ameren Corporation	AEE	%00.59	62.50%	%00'09	%05'.29	22.00%	27.05%	59.10% 6	61.15% 6	63.20% 6	65.25% 67	67.30% 67	67.30% 6		67.30%	67.30%	67.30%
10 /	American Electric Power Company, Inc.	AEP	65.00%	64.75%	64.50%	64.25%	64.00%	64.55% (65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
7	Avista Corporation	AVA	%00′29	66.25%	65.50%	64.75%	64.00%	64.55%		65.65% 6	66.20% 6	66.75% 6	67.30% 67	67.30% 6		67.30%	67.30%	67.30%
12 E	Black Hills Corporation	BKH	27.00%	57.50%	58.00%	58.50%	29.00%	_		63.15% 6	64.54% 6	65.92% 6	67.30% 67	67.30% 6		67.30%	67.30%	67.30%
13	CenterPoint Energy, Inc.	CNP	93.00%	89.75%	86.50%	83.25%	80.00%	77.88%	75.77% 7	73.65% 7	71.54% 6	69.42% 6	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
14	CMS Energy Corporation	CMS	61.00%	61.25%	61.50%	61.75%	62.00%	62.88%	63.77% 6	64.65% 6	65.54% 6	66.42% 6	67.30% 67	67.30% 6		67.30%	67.30%	67.30%
15 (Consolidated Edison, Inc.	G	65.00%	64.50%	64.00%	63.50%	63.00%	63.72% (64.43%	65.15% 6	65.87% 6	9 %65.99	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
16	Dominion Resources, Inc.	0	72.00%	72.00%	72.00%	72.00%	72.00%	71.22%	70.43%	69.65%	68.87% 6	9 %60.89	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
17.	DTE Energy Company	DTE	62.00%	61.50%	61.00%	60.50%	%00.09	61.22% (62.43%	63.65% 6	64.87% 6	9 %60.99	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
18	Duke Energy Corporation	DOK DOK	72.00%	70.50%	%00.69	67.50%	%00'99	66.22% (66.43%	9 %59.99	66.87% 6	9 %60.79	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
19	Empire District Electric Company	BDE	76.00%	74.25%	72.50%	70.75%	%00'69			68.15% 6		67.59% 6		67.30% 6	67.30%	67.30%	67.30%	67.30%
20	Eversource Energy	ES	59.00%	58.25%	57.50%	56.75%	26.00%		59.77% 6					67.30% 6	67.30%	67.30%	67.30%	67.30%
21 F	FirstEnergy Corp.	Ш	58.00%	57.00%	26.00%	22.00%	24.00%	56.22%	58.43% 6	60.65% 6	62.87% 6	65.09% 67	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
	Great Plains Energy Inc.	GXP	70.00%	67.75%	65.50%	63.25%	61.00%	62.05% (63.10% 6	64.15% 6	65.20% 6	66.25% 6	67.30% 67	67.30% 6		67.30%	67.30%	67.30%
_	IDACORP, Inc.	ΙDΑ	49.00%	51.25%	53.50%	55.75%	28.00%		61.10% 6	62.65% 6		65.75% 6	67.30% 67	67.30% 6		67.30%	67.30%	67.30%
_	NorthWestern Corporation	NWE	26.00%	59.25%	62,50%	65.75%	%00'69		68.43% 6	68.15% 6	67.87% 6	67.59% 6	67.30% 67			67.30%	67.30%	67.30%
_	OGE Energy Corp.	OGE	86.00%	79.25%	72.50%	65.75%	29.00%		61.77% 6	63.15% 6	64.54% 6	65.92% 6	67.30% 67	67.30% 6		67.30%	67.30%	67.30%
_	Otter Tail Corporation	OTTR	70.00%	86.50%	63.00%	29.50%	26.00%	57.88%	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
27 F	Pinnacle West Capital Corporation	PNW	%00.69	63.25%	63.50%	63.75%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
	Portland General Electric Company	POR	20.00%	51.50%	53.00%	54.50%	26.00%	57.88%	59.77% E	61.65% 6	63.54% 6	65.42% 6	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
53	SCANA Corporation	SCG	%00.73	56.75%	26.50%	56.25%	26.00%	57.88%	59.77%	61.65% 6	63,54% 6	65.42% 6	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
	Southern Company	SO	76.00%	74.75%	73.50%	72.25%	71.00%	70.38%	69.77% 6	69.15% 6	68.54% 6	67.92% 67	67.30% 67	67.30% 6		67.30%	67.30%	67.30%
31	TECO Energy, Inc.	<u>1</u> E	83.00%	80.25%	77.50%	74.75%	72.00%	71.22%	70.43% 6	69.65% 6	68.87% 6	68.09% 67	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
32 \	Westar Energy, Inc.	ΜW	61.00%	29.50%	58.00%	26.50%	25.00%	%50	59.10% 6	61.15% 6		65.25% 67	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
33	Xcel Energy Inc.	XEL	63.00%	63.25%	63.50%	63.75%	64.00%	64.55% (65.10% 6	65.65% 6	66.20% 6	66.75% 67.	.30% 67	30%	67.30%	67.30%	67.30%	67.30%

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4 Projected Annual 5 Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]
																	•	[erminal
6 Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023			2026	2027	2028	2029	2030	Value
7 ALLETE, Inc.	ALE	\$2.03	\$2.12	\$2.21	\$2.30	\$2.40	\$2.59	\$2.79	\$3.00						\$4.40	\$4.65	\$4.91	\$119.46
8 Alliant Energy Corporation	ΓN	\$2.24	\$2.39	\$2.54	\$2.70	\$2.88	\$3.07	\$3.28	\$3.50		_				\$5.03	\$5.32	\$5.62	\$143.34
9 Ameren Corporation	AEE	\$1.66	\$1.69	\$1.73	\$1.76	\$1.78	\$1.96	\$2.16	\$2.37	_					\$3.63	\$3.84	\$4.05	\$98.20
 American Electric Power Company, Inc. 	Inc. AEP	\$2.28	\$2.38	\$2.49	\$2.61	\$2.73	\$2.89	\$3.07	\$3.26		\$3.69	\$3.93 \$	\$4.15	\$4.38	\$4.63	\$4.89	\$5.17	\$129.71
11 Avista Corporation	AVA	\$1.31	\$1.37	\$1.44	\$1.50	\$1.58	\$1.68	\$1.80	\$1.92	\$2.05	•,				\$2.74	\$2.90	\$3.06	\$76.81
12 Black Hills Corporation	BKH	\$1.74	\$1.86	\$1.98	\$2.11	\$2.26	\$2.44	\$2.64	\$2.85						\$4.23	\$4.47	\$4.72	\$117.17
13 CenterPoint Energy, Inc.	CNP	\$1.36	\$1.35	\$1.34	\$1.32	\$1.31	\$1.32	\$1.33	\$1.35	\$1.37	_				\$1.69	\$1.79	\$1.89	\$44.99
14 CMS Energy Corporation	CMS	\$1.13	\$1.20	\$1.28	\$1.36	\$1.45	\$1.56	\$1.68							\$2.62	\$2.77	\$2.92	\$78.21
15 Consolidated Edison, Inc.		\$2.42	\$2.46	\$2.51	\$2.56	\$2.60	\$2.72	\$2.85							\$4.25	\$4.49	\$4.75	\$140.16
16 Dominion Resources, Inc.	۵	\$2.34	\$2.50	\$2.67	\$2.85	\$3.04	\$3.21	\$3.37							\$4.78	\$5.05	\$5.34	\$161.97
17 DTE Energy Company	DTE	\$3.31	\$3.45	\$3.58	\$3.73	\$3.88	\$4.15	\$4.45	\$4.77	\$5.13	-				\$6.99	\$7.39	\$7.81	\$186.61
18 Duke Energy Corporation	aCK D	\$3.11	\$3.19	\$3.27	\$3.35	\$3.43	\$3.61	\$3.81			_				\$5.62	\$5.94	\$6.27	\$176.80
19 Empire District Electric Company	EDE	\$1.23	\$1.25	\$1.28	\$1.30	\$1.32	\$1.38	\$1.44							\$2.05	\$2.17	\$2.29	\$57.33
20 Eversource Energy	ES	\$1.63	\$1.73	\$1.83	\$1.94	\$2.05	\$2.27	\$2.51	\$2.75		-				\$4.21	\$4.45	\$4.70	\$118.88
21 FirstEnergy Corp.	믭	\$0.53	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79							\$1.36	\$1.44	\$1.52	\$84.75
22 Great Plains Energy Inc.	GXP	\$1.16	\$1.19	\$1.22	\$1.24	\$1.27	\$1.37	\$1.47							\$2.30	\$2.43	\$2.57	\$60.71
23 IDACORP, Inc.	IDA	\$1.94	\$2.09	\$2.25	\$2.42	\$2.59	\$2.75	\$2.93							\$4.63	\$4.89	\$5.16	\$142.84
24 NorthWestern Corporation	NWE	\$1.17	\$1.31	\$1.45	\$1.61	\$1.79	\$1.88	\$1.97			_				\$2.85	\$3.01	\$3.18	\$120.83
25 OGE Energy Corp.	OGE	\$1.39	\$1.33	\$1.26	\$1.19	\$1.11	\$1.19	\$1.27							\$2.00	\$2.11	\$2.23	\$74.66
26 Otter Tail Corporation	OTTR	\$2.30	\$2.35	\$2.39	\$2.43	\$2.46	\$2.73	\$3.01							\$5.07	\$5.35	\$5.65	\$70.76
27 Pinnacle West Capital Corporation	PNW	\$2.36	\$2.48	\$2.60	\$2.74	\$2.87	\$3.04	\$3.22							\$4.84	\$5.11	\$5.40	\$142.98
28 Portland General Electric Company	POR	\$1.15	\$1.25	\$1,35	\$1.46	\$1.58	\$1.72	\$1.87							\$3.09	\$3.27	\$3.45	\$85.71
29 SCANA Corporation	SCG	\$2.25	\$2.34	\$2.43	\$2.53	\$2.62	\$2.84	\$3.07			•				\$5.01	\$5.30	\$5.60	\$129.31
30 Southern Company	SO	\$2.18	\$2.23	\$2.28	\$2.32	\$2.37	\$2.44	\$2.53	\$2.62			0,			\$3.52	\$3.72	\$3.93	\$100.20
31 TECO Energy, Inc.	표	\$0.85	\$0.88	\$0.91	\$0.95	\$0.98	\$1.04	\$1.10	\$1.15	\$1.21		0,	_		\$1.57	\$1.65	\$1.75	\$43.07
32 Westar Energy, Inc.	WR	\$1.50	\$1.52	\$1.55	\$1.57	\$1.60	\$1.73	\$1.88	\$2.04	\$2.22		0,	52.78	\$2.93	\$3.10	\$3.28	\$3.46	\$88.68
33 Xcel Energy Inc.	XEL	\$1.34	\$1.41	\$1.48	\$1.55	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06		"			\$2.76	\$2.91	\$3.08	\$77.74

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9] [80] [81]	/28 6/30/29 6/30/30	_	3 \$5.32 \$148.95	\$3.84	\$4.89	\$2.90		\$1.79	\$2.77		\$4.49	\$4.49 \$5.05	\$4.49 \$5.05 \$7.39	\$4.49 \$5.05 \$7.39 \$5.94	\$4.49 \$5.05 \$7.39 \$5.94 \$2.17	\$4.49 \$5.05 \$7.39 \$5.94 \$2.17 \$4.45	\$4.49 \$5.05 \$7.39 \$5.94 \$2.17 \$4.45	\$4.49 \$5.05 \$7.39 \$2.17 \$4.45 \$2.43	\$4,49 \$5.05 \$7.39 \$2.17 \$4,45 \$7.44 \$7.43 \$89	\$4.49 \$5.05 \$5.39 \$2.17 \$4.45 \$4.89 \$3.01	\$ 4.49 \$ 5.05 \$ 5.39 \$ 5.34 \$ 4.45 \$ 1.44 \$ 5.43 \$ 5.43 \$ 5.43	\$4.49 \$5.05 \$5.05 \$5.39 \$5.94 \$1.44 \$5.24 \$5.20 \$5.35 \$5.35	\$ 4.49 \$ 5.05 \$ 5.39 \$ 5.94 \$ 4.45 \$ 7.44 \$ 8.2.43 \$ 5.11 \$ 5.11 \$ 5.11	\$4.49 \$5.05 \$5.04 \$5.04 \$5.04 \$1.44 \$2.43 \$2.43 \$5.01 \$5.01 \$5.03 \$5.03 \$5.03 \$5.03 \$5.03 \$5.03	\$4.49 \$5.05 \$5.05 \$5.04 \$5.04 \$1.44 \$5.17 \$5.43 \$5.35 \$5.30	\$4.49 \$5.05 \$7.39 \$2.17 \$2.17 \$2.43 \$2.43 \$2.43 \$2.43 \$5.35 \$5.35 \$5.35 \$5.30 \$5.30	\$ 4.49 \$ 5.05 \$ 5.39 \$ 5.34 \$ 4.45 \$ 1.44 \$ 5.35 \$	\$ 4.49 \$ 5.05 \$ 5.39 \$ 5.94 \$ 4.45 \$ 5.34 \$ 5.01 \$ 5.01 \$ 5.30 \$
[78] [79]	6/30/27 6/30/28	0,	\$4.76 \$5.03			.59 \$2.74		.60 \$1.69																				
7] [77]	6/30/26 6/30	\$3.94 \$4.16	0,	0,		.46 \$2.59																					\$5.81 \$4.03 \$6.26 \$6.26 \$5.03 \$5.32 \$1.84 \$1.94 \$3.77 \$3.99 \$1.22 \$1.28 \$1.22 \$1.28 \$2.06 \$2.18 \$2.16 \$2.18 \$2.17 \$4.38 \$4.54 \$4.79 \$4.33 \$4.58 \$3.33 \$4.58 \$3.45 \$2.93 \$4.64 \$4.79 \$4.64 \$4.79	
[92]	6/30/25 6/3	\$3.73 \$3	1.27 \$4	\$3.08 \$3	\$3.93 \$4																							
[75]	6/30/24 6/3	\$3.47 \$3	\$4.00 \$4	\$2.82 \$3	_					\$3.38 \$3																		
[74]	6/30/23 6		\$3.74	\$2.59	\$3.46	\$2.05	\$3.08		\$1.94				\$3.71															
[73]	6/30/22	\$3.00	\$3.50	\$2.37	\$3.26	\$1.92	\$2.85	\$1.35	\$1.80	\$3.00		\$3.54	\$3.54	\$3.54 \$4.77 \$4.02	\$3.54 \$4.77 \$4.02 \$1.50	\$3.54 \$4.77 \$4.02 \$1.50 \$2.75	\$3.54 \$4.77 \$4.02 \$1.50 \$2.75 \$0.87	\$3.54 \$4.77 \$4.02 \$1.50 \$2.75 \$0.87 \$1.58	\$3.54 \$4.77 \$4.02 \$1.50 \$2.75 \$0.87 \$3.13	\$3.54 \$4.77 \$4.02 \$1.50 \$2.75 \$0.87 \$1.58 \$3.13	\$3.54 \$4.77 \$4.02 \$1.50 \$2.75 \$0.87 \$1.58 \$3.13 \$2.07 \$1.36	\$3.54 \$4.77 \$4.02 \$1.50 \$2.75 \$0.87 \$1.58 \$3.13 \$2.07 \$1.36	\$3.54 \$4.77 \$4.02 \$1.50 \$2.75 \$0.87 \$1.58 \$3.13 \$1.36 \$3.31 \$3.31	\$3.54 \$4.77 \$1.50 \$2.75 \$0.87 \$1.58 \$3.13 \$3.31 \$3.31 \$2.07	\$3.54 \$4.77 \$4.02 \$1.50 \$0.87 \$0.87 \$1.58 \$3.13 \$1.36 \$3.31 \$2.07 \$1.36 \$3.31 \$2.07 \$1.36 \$3.31 \$2.07	\$3.54 \$4.77 \$4.02 \$1.50 \$2.75 \$0.87 \$1.68 \$3.13 \$3.31 \$3.31 \$3.34 \$2.07 \$3.31 \$3.34 \$3.34 \$3.35 \$3.34 \$3.35 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55	\$3.54 \$4.77 \$4.02 \$1.50 \$1.58 \$3.13 \$2.07 \$1.38 \$3.31 \$3.34 \$3.34 \$3.34 \$3.35 \$3.34 \$3.35 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55 \$3.55	\$3.54 \$4.77 \$4.02 \$1.50 \$2.75 \$0.87 \$1.58 \$3.13 \$2.07 \$1.36 \$3.13 \$2.04 \$2.04 \$3.32 \$2.04 \$3.32 \$3.32 \$3.32 \$3.32 \$3.32 \$3.41
[72]	0 6/30/21	\$2.79		\$2.16		\$1.80		\$1.33	\$1.68	\$2.85		\$3.37																
[71]	19 6/30/20	3 \$2.59	3 \$3.07	3 \$1.96	3 \$2.89								3 \$4.15															
[07]	8 6/30/19		\$2.88			\$1.56																						
[69]	6/30/18	\$2.30	\$2.70	\$1.76	\$2.61	\$1.50	\$2.11	\$1.32	\$1.36	\$2.56	\$2.85		\$3.73	\$3.73	\$3.73 \$3.35 \$1.30	\$3.73 \$3.35 \$1.30 \$1.94	\$3.73 \$3.35 \$1.30 \$1.94 \$0.61	\$3.73 \$3.35 \$1.30 \$1.94 \$0.61	\$3.73 \$3.35 \$1.30 \$1.94 \$0.61 \$1.24	\$3.73 \$3.35 \$1.30 \$1.24 \$2.42 \$1.24	\$3.73 \$3.35 \$1.30 \$1.94 \$0.61 \$0.61 \$1.24 \$1.19	\$3.73 \$3.35 \$1.30 \$1.94 \$0.61 \$1.24 \$2.42 \$1.19 \$2.43	\$3.73 \$1.30 \$1.94 \$0.61 \$1.24 \$2.42 \$1.19 \$1.19 \$2.42 \$1.19	\$3.73 \$1.30 \$1.30 \$1.24 \$0.61 \$1.24 \$1.19 \$1.10	\$3.73 \$3.35 \$1.30 \$1.94 \$0.61 \$0.61 \$2.42 \$1.61 \$1.61 \$2.74 \$2.53	\$3.73 \$1.80 \$1.80 \$1.80 \$1.80 \$1.80 \$1.80 \$1.61 \$1.61 \$1.62 \$1.63 \$1.63 \$1.64 \$1.65	\$3.73 \$1.30 \$1.24 \$1.24 \$1.24 \$1.40	\$3.35 \$3.35 \$1.30 \$1.24 \$1.24 \$1.24 \$1.40 \$1.40 \$1.40 \$1.57 \$1.57
[68]	6/30/17	\$2.21	\$2.54	\$1.73	\$2.49	\$1.44	\$1.98	\$1.34	\$1.28	\$2.51	\$2.67		\$3.58	\$3.58	\$3.58 \$3.27 \$1.28	\$3.58 \$3.27 \$1.28 \$1.83	\$3.58 \$3.27 \$1.28 \$1.83 \$0.58	\$3.58 \$3.27 \$1.28 \$1.83 \$0.58	\$3.58 \$3.27 \$1.28 \$0.58 \$1.22 \$2.25	\$3.58 \$1.28 \$1.28 \$0.58 \$1.22 \$2.25 \$1.45	\$3.58 \$3.27 \$1.28 \$1.83 \$0.58 \$1.22 \$2.25 \$1.45	\$3.58 \$3.27 \$1.28 \$0.58 \$1.22 \$2.25 \$1.45 \$1.26 \$2.39	\$3.58 \$3.27 \$1.28 \$0.58 \$1.22 \$1.22 \$2.25 \$1.45 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.27	\$3.58 \$3.27 \$1.28 \$1.83 \$0.58 \$1.22 \$2.25 \$1.45 \$1.26 \$1.26 \$1.26 \$1.36 \$2.39 \$2.39	\$3.58 \$3.27 \$1.28 \$1.28 \$1.22 \$2.25 \$1.45 \$1.45 \$1.26 \$1.36 \$2.43	\$3.58 \$3.27 \$1.28 \$1.22 \$2.25 \$1.45 \$1.45 \$1.26	\$3.58 \$3.27 \$1.28 \$1.28 \$1.25 \$1.25 \$1.26 \$1.26 \$1.35	\$3.58 \$3.27 \$1.28 \$0.58 \$1.22 \$1.22 \$1.22 \$1.26 \$1.26 \$2.39 \$2.39 \$2.39 \$2.39 \$2.39 \$2.39 \$2.39 \$2.39 \$2.39 \$2.39 \$2.39 \$2.30
[67]	6/30/16	\$2.10	\$2.30	\$1.71	\$2.34	\$1.35	\$1.79	\$1.38	\$1.16	\$2.45	\$2.42		\$3.40	\$3.40 \$3.19	\$3.40 \$3.19 \$1.26	\$3.40 \$3.19 \$1.26 \$1.69	\$3.40 \$3.19 \$1.26 \$1.69 \$0.55	\$3.40 \$3.19 \$1.26 \$1.69 \$0.55 \$1.20	\$3.40 \$3.19 \$1.26 \$1.69 \$0.55 \$1.20	\$3.40 \$3.19 \$1.26 \$1.69 \$0.55 \$1.20 \$1.20	\$3.40 \$3.19 \$1.26 \$1.69 \$0.55 \$1.20 \$1.20 \$1.20	\$3.40 \$3.19 \$1.26 \$0.55 \$1.20 \$1.20 \$1.20 \$1.41 \$2.39	\$3.40 \$3.19 \$1.26 \$1.69 \$0.55 \$1.20 \$1.97 \$1.20 \$1.41 \$2.39	\$3.40 \$3.19 \$1.26 \$1.69 \$1.20 \$1.97 \$1.20 \$1.41 \$2.39 \$1.41 \$1.41	\$3.40 \$3.19 \$1.26 \$1.69 \$1.20 \$1.20 \$1.20 \$1.44 \$2.39 \$2.30	\$3.40 \$1.26 \$1.26 \$1.26 \$1.20 \$1.20 \$1.20 \$1.20 \$1.20 \$1.20 \$1.20 \$2.39 \$2.23	\$3.40 \$1.26 \$1.69 \$1.69 \$1.20 \$1.20 \$1.20 \$1.20 \$1.41 \$1.18 \$1.39 \$2.39 \$2.39 \$2.39 \$2.30 \$2.00	\$3.40 \$1.26 \$1.26 \$1.20
[99]	12/31/15	\$1.05	\$1.16	\$0.86	\$1.18	\$0.68	\$0.90	\$0.70	\$0.58	\$1.25	\$1.21		\$1.72	\$1.72 \$1.61	\$1.72 \$1.61 \$0.64	\$1.72 \$1.61 \$0.64 \$0.85	\$1.72 \$1.61 \$0.64 \$0.85 \$0.27	\$1.72 \$1.61 \$0.64 \$0.27 \$0.27	\$1.72 \$1.61 \$0.64 \$0.85 \$0.27 \$0.60 \$1.01	\$1.72 \$1.61 \$0.64 \$0.85 \$0.27 \$0.60 \$1.01	\$1.72 \$1.64 \$0.64 \$0.85 \$0.27 \$0.60 \$1.01 \$0.61	\$1.72 \$1.61 \$0.64 \$0.85 \$0.27 \$0.60 \$1.01 \$0.72 \$0.72	\$1.72 \$1.64 \$0.64 \$0.85 \$0.27 \$0.60 \$1.01 \$0.72 \$0.72 \$1.19	\$1.72 \$0.64 \$0.85 \$0.27 \$0.07 \$1.01 \$0.72 \$0.72 \$0.72 \$0.72 \$0.72	\$1.72 \$0.64 \$0.85 \$0.27 \$0.07 \$1.01 \$0.72 \$0.61 \$1.19 \$0.59	\$1.72 \$0.64 \$0.85 \$0.27 \$0.00 \$1.01 \$0.72 \$0.72 \$1.19 \$1.13	\$1.72 \$0.64 \$0.85 \$0.85 \$0.00 \$1.01 \$0.72 \$0.72 \$1.19 \$1.17 \$0.59 \$0.59 \$0.59	\$1,72 \$0.64 \$0.08 \$0.08 \$0.07 \$0.07 \$1,12 \$1,12 \$0.59 \$0.59 \$0.59 \$0.59 \$0.59 \$0.59 \$0.59 \$0.50
[65]	6/25/15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	000	\$0.00 \$	\$0.00	\$0.00 \$0.00 \$0.00	\$0.00	\$0.00 \$0.00 \$0.00 \$0.00	00.03	00.00 00.00 00.00 00.00 00.00 00.00 00.00 00.00	00.00 00	\$ \$ 0000000000000000000000000000000000	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6				
[64]	Initial Outflow	(\$52.15)	(\$62.78)	(\$42.21)	(\$57.48)	(\$33.86)	(\$50.52)	(\$21.96)	(\$34.05)	(\$62.87)	(\$72.44)	(01)	(\$61.72)	(\$81.72) (\$79.36)	(\$81.72) (\$79.36) (\$26.21)	(\$79.36) (\$26.21) (\$50.51)	(\$79.36) (\$79.36) (\$26.21) (\$50.51) (\$36.48)	(\$81.72) (\$79.36) (\$26.21) (\$50.51) (\$36.48) (\$26.74)	(\$81.72) (\$79.36) (\$26.21) (\$50.51) (\$36.48) (\$26.74) (\$62.00)	(\$81.72) (\$79.36) (\$26.21) (\$50.51) (\$36.48) (\$26.74) (\$62.00) (\$53.21)	(\$81.72) (\$79.36) (\$26.21) (\$50.51) (\$36.48) (\$26.74) (\$62.00) (\$53.21) (\$33.59)	(\$81.72) (\$79.36) (\$26.21) (\$50.51) (\$26.74) (\$62.00) (\$53.21) (\$33.59) (\$30.14)	(\$81.72) (\$79.36) (\$26.21) (\$50.51) (\$26.74) (\$62.00) (\$53.21) (\$33.59) (\$30.14) (\$63.34)	(\$81.72) (\$79.36) (\$26.21) (\$50.51) (\$36.48) (\$26.74) (\$63.21) (\$33.29) (\$33.29) (\$33.24) (\$33.34)	(\$81.72) (\$79.36) (\$26.21) (\$50.51) (\$36.48) (\$26.00) (\$53.21) (\$33.29) (\$33.29) (\$33.24) (\$53.34) (\$53.34)	(\$61.72) (\$79.36) (\$79.36) (\$50.51) (\$26.74) (\$26.74) (\$62.00) (\$53.21) (\$33.59) (\$33.24) (\$3	(\$76.76) (\$76.36) (\$26.21) (\$26.21) (\$26.74) (\$62.00) (\$53.21) (\$33.59) (\$33.59) (\$53.34) (\$5	(\$61.72) (\$79.36) (\$79.36) (\$79.36) (\$26.51) (\$26.74) (\$63.21) (\$6
	Ticker	ALE	FN-	AEE	AEP	AVA	BKH	CNP	CMS		Δ	E	<u>П</u>	교 중 교			DUK BDE ES	DUK EDE ES ES GXP	DUK EDE ES RE GXP	DUK EDE ES ES GXP OXP	DUK EDE ES GXP IDA OGE	DUK EDE ES GXP OGE OGE	DUK EDE GXP GXP OTTR OGE	ESE	DUK EDE ES GXP IDA IDA OGE OTTR POR SCG	COURT OOGE OOR SCG SCG	DUK EDE ES GXP GXP IDA OOGE OOTR PNW POR SGG SG	D D D D D D D D D D D D D D D D D D D
Projected Annual Data Investor Cash Flows	Company	ALLETE, Inc.	Alliant Energy Corporation	Ameren Corporation	American Electric Power Company, Inc.	Avista Corporation	Black Hills Corporation	CenterPoint Energy, Inc.	CMS Energy Corporation	Consolidated Edison, Inc.	Dominion Resources, inc.	DTF Frierdy Company	indicated formation	uke Energy Corporation	Duke Energy Corporation Empire District Electric Company	Duke Energy Corporation Empire District Electric Company Eversource Energy	uke Energy Corporation mpire District Electric Company versource Energy irstEnergy Corp.	uke Energy Corporation mpire District Electric Company versource Energy irstEnergy Corp.	ute Energy Corporation mpire District Electric Company versource Energy instEnergy Corp. PACORP, Inc.	Duke Energy Corporation Empire District Electric Company Eversource Energy FirstEnergy Corp. Great Plains Energy Inc. IDACORP. Inc. NorthWestern Corporation	Duke Energy Corporation Empire District Electric Company Eversource Energy Eversource Energy Great Plains Energy Inc. Great Plains Energy Inc. NorthWestern Corporation OGE Energy Corp.	uke Energy Corporation mpire District Electric Company versource Energy irstEnergy Corp. ACORP, Inc. OrthWestern Corporation GE Energy Corp. tter Tail Corporation	uke Energy Corporation mpire District Electric Company versource Energy irstEnergy Corp. ACORP, Inc. orthWestern Corporation GE Energy Corp. tter Tail Corporation innacle West Capital Corporation	uke Energy Corporation mpire District Electric Company versource Energy irstEnergy Corp. reat Plains Energy inc. AACORP, inc. OAHWestern Corporation GE Energy Corp. rtter Tail Corporation innacle West Capital Corporation	uke Energy Corporation mpire District Electric Company versource Energy irstEnergy Corp. reat Plains Energy inc. AACORP, inc. contribuses or Corporation GE Energy Corp. tter Tail Corporation innacle West Capital Corporation ortland General Electric Company CANA Corporation	uke Energy Corporation mpire District Electric Company versource Energy ACORP, inc. orthWestern Corporation GE Energy Corp. tter Tail Corporation innacle West Capital Corporation orthand General Electric Company CANA Corporation outhern Corporaty	uke Energy Corporation mpire District Electric Company versource Energy irstEnergy Corp. ACORP, inc. OrthWestern Corporation GE Energy Corp. tter Tail Corporation ortland General Electric Company CANA Corporation outhern Company CANA Corporation outhern Company ECO Energy, inc.	Duke Energy Corporation Empire District Electric Company Eversource Energy Eversource Energy Great Plains Energy Inc. IDACORP, Inc. IDACORP, Inc. OGE Energy Corp. Otter Tail Corporation Prinnacle West Capital Corporation Portland General Electric Company SCANA Corporation Southern Company TECC Energy, Inc. Westar Energy, Inc.

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

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4 4	Inputs		Ξ	[2]	[3]	[4]	[5]	[6]	E	[8]	<u>6</u>	[10]		[12]	[13]
o			STOCK	i	EPS Growin	Kate Estimates Value H	High	Long-1erm	ĭ	rayout Katio	_	terative	terative solution	erminai P/E	lerminai PEG
9	Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	2015	2019	2025	Proof	IRR	Ratio	Ratio
7	ALLETE, Inc.	ALE	\$52.15	ΑĀ	%00'9	6.50%	%05'9	2.65%	%00'99	61.00%	67.30%	\$0.00	10.06%	16.13	2.85
œ	Alliant Energy Corporation	Ŗ	\$62.78	5.30%	5.45%	%00'9	%00'9	2.65%	61.00%	63.00%	67.30%	\$0.00	%06.6	16.72	2.96
တ	Ameren Corporation	AEE	\$42.21	6.80%	5.85%	%00'9	%08'9	2.65%	%00'59	25.00%	67.30%	\$0.00	10.17%	15.73	2.78
6	American Electric Power Company, Inc.	AEP	\$57.48	4.90%	2.08%	2.00%	2.08%	5.65%	%00'59	64.00%	67.30%	\$0.00	9.89%	16.79	2.97
=	Avista Corporation	AVA	\$33.86	¥	2.00%	7.00%	7.00%	5.65%	67.00%	64.00%	67.30%	\$0.00	10.13%	15.86	2.81
12	Black Hills Corporation	BK.	\$50.52	¥	7.00%	4.50%	7.00%	5.65%	27.00%	29.00%	67.30%	\$0.00	10.25%	15.45	2.73
73	CenterPoint Energy, Inc.	CNP	\$21.96	5.70%	1.91%	1.00%	2.70%	5.65%	93.00%	80.00%	67.30%	\$0.00	11.00%	13.30	2.35
14	CMS Energy Corporation	CMS	\$34.05	6.20%	6.73%	5.50%	6.73%	2.65%	61.00%	62.00%	67.30%	\$0.00	9.75%	17.35	3.07
15	Consolidated Edison, Inc.		\$62.87	2.70%	2.38%	3.00%	3.00%	2.65%	%00'59	63.00%	67.30%	\$0.00	9.30%	19.47	3.44
16	Dominion Resources, Inc.	۵	\$72.44	6.30%	5.89%	8.00%	8.00%	2.65%	72.00%	72.00%	67.30%	\$0.00	9.43%	18.81	3.33
17	DTE Energy Company	DTE	\$81.72	5.00%	4.51%	2.00%	2.00%	5.65%	62.00%	80.00	67.30%	\$0.00	10.12%	15.92	2.82
8	Duke Energy Corporation	Σ	\$79.36	4.70%	4.49%	2.00%	2.00%	5.65%	72.00%	%00'99	67.30%	\$0.00	9.47%	18.64	3.30
6	Empire District Electric Company	EDE	\$26.21	2.00%	2.00%	3.00%	2.00%	5.65%	%00'92	%00.69	67.30%	\$0.00	10.06%	16.14	2.86
20	Eversource Energy	ES	\$50.51	6.80%	%09.9	8.50%	8.50%	2.65%		26.00%	67.30%	\$0.00	10.15%	15.81	2.80
21	FirstEnergy Corp.	밀	\$36.48	¥	¥	7.00%	7.00%	2.65%		54.00%	67.30%	\$0.00	7.54%	37.61	99'9
22	Great Plains Energy Inc.	GXP	\$26.74	%00'9	6.37%	2.00%	6.37%	2.65%	70.00%	61.00%	67.30%	\$0.00	10.29%	15.32	2.71
23	IDACORP, Inc.	Δ	\$62.00	4.00%	4.00%	1.00%	4.00%	5.65%	49.00%	28.00%	67.30%	\$0.00	9.73%	17.45	3.09
24	NorthWestern Corporation	NWE	\$53.21	2.00%	2.00%	6.50%	6.50%	2.65%	26.00%	%00.69	67.30%	\$0.00	8.62%	23.96	4.24
52	OGE Energy Corp.	OGE	\$33,59	2.00%	4.00%	3.00%	2.00%	2.65%	86.00%	29.00%	67.30%	\$0.00	9.03%	21.05	3.72
56	Otter Tail Corporation	OTTR	\$30.14	Ϋ́	%00'9	%00.6	%00.6	2.65%	70.00%	26.00%	67.30%	\$0.00	14.83%	7.75	1.37
27	Pinnacle West Capital Corporation	PNW	\$63.34	4.60%	2.30%	4.00%	2.30%	9.65%	63.00%	64.00%	67.30%	\$0.00	9.82%	17.07	3.02
28	Portland General Electric Company	POR	\$36.46	5.20%	4.72%	%00'9	%00.9	5.65%	20.00%	26.00%	67.30%	\$0.00	10.09%	16.01	2.83
58	SCANA Corporation	SCG	\$55.87	4.20%	4.30%	4.50%	4.50%	5.65%	57.00%	26.00%	67.30%	\$0.00	10.27%	15.39	2.72
30	Southern Company	SO	\$46.21	3.50%	3.32%	4.50%	4.50%	2.65%	76.00%	71.00%	67.30%	\$0.00	10.00%	16.36	2.90
33	TECO Energy, Inc.	Щ	\$19.49	7.10%	9.20%	%00'9	9.20%	2.65%	83,00%	72.00%	67.30%	\$0.00	10.44%	14.85	2.63
32	Westar Energy, Inc.	Ν	\$38.47	3.50%	3.40%	%00'9	%00'9	5.65%	61.00%	55.00%	67.30%	\$0.00	10.24%	15.49	2.74
33	Xcel Energy Inc.	XEL	\$34.44	5.00%	4.58%	4.50%	2.00%	5.65%	63.00%	64.00%	67.30%	\$0.00	9.91%	16.68	2.95
34												Mean	10.02%		
33												Max :	14.83%		
કુ												Ξ	7.54%		

က							High EF	High EPS Growth Rate Estimate in First Stage	Rate Estim	ate in Firs	t Stage								
4	Projected Annual																		
ß	Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[59]	[30]
ď	videomo)	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	202	2003	2024	2025	2026	2027	2028	2029	2030
^	ALLETE: Inc.	ALE	\$2.90	\$3.09	\$3.29	\$3.50	\$3.73	\$3.97	\$4.23	\$4.49	\$4.76	\$5.04	\$5.34	\$5.64	\$5,96	\$6.29	\$6.65	\$7.02	\$7.42
ω	Alliant Energy Corporation	ΙΝ	\$3,48	\$3.69	\$3.91	\$4.14	\$4.39	\$4.66	\$4.93	\$5.22	\$5.53	\$5.85	\$6.18	\$6,53	\$6.90	\$7.29	\$7.70	\$8.14	\$8.60
6	Ameren Corporation	AEE	\$2.40	\$2.56	\$2.74	\$2.92	\$3.12	\$3.33	\$3.56	\$3.78	\$4.02	\$4.26	\$4.51	\$4.77	\$5.03	\$5.32	\$5.62	\$5.94	\$6.27
10	American Electric Power Company, Inc.	AEP	\$3.34	\$3.51	\$3.69	\$3.88	\$4.07	\$4.28	\$4.50	\$4.74	\$4.99	\$5.26	\$5.56	\$5.87	\$6.20	\$6.55	\$6.92	\$7.32	\$7.73
7	Avista Corporation	AVA	\$1.84	\$1.97	\$2.11	\$2.25	\$2.41	\$2.58	\$2.76	\$2.94	\$3.12	\$3.31	\$3.51	\$3.71	\$3.91	\$4.14	\$4.37	\$4.62	\$4.88
12	Black Hills Corporation	BKH	\$2.89	\$3.09	\$3.31	\$3.54	\$3.79	\$4.05	\$4.33	\$4.61	\$4.90	\$5.20	\$5.51	\$5.82	\$6.15	\$6.50	\$6.86	\$7.25	\$7.66
13	CenterPoint Energy, Inc.	SNP	\$1.42	\$1.50	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98	\$2.09	\$2.21	\$2.34	\$2.47	\$2.61	\$2.76	\$2.91	\$3.08	\$3.25	\$3.43
4	CMS Energy Corporation	CMS	\$1,74	\$1.86	\$1.98	\$2.12	\$2.26	\$2.41	\$2.57	\$2.73	\$2.90	\$3.07	\$3.25	\$3.44	\$3.63	\$3.84	\$4.05	\$4.28	\$4.53
15	Consolidated Edison, Inc.		\$3.62	\$3.73	\$3.84	\$3.96	\$4.07	\$4.20	\$4.34	\$4.51	\$4.70	\$4.93	\$5.19	\$5.48	\$5.79	\$6.12	\$6.46	\$6.83	\$7.21
16	Dominion Resources, Inc.	Δ	\$3.05	\$3.29	\$3.56	\$3.84	\$4.15	\$4.48	\$4.82	\$5.17	\$5.52	\$5.88	\$6.23	\$6.59	\$6.96	\$7.35	\$7.77	\$8.21	\$8.67
17	DTE Energy Company	PTE	\$5.10	\$5.36	\$5.62	\$5.90	\$6.20	\$6.51	\$6.84	\$7.20	\$7.58	\$7.99	\$8.44	\$8.91	\$9.42	\$9.95	\$10.51	\$11.11	\$11.73
18	Duke Energy Corporation	PUK	\$4.13	\$4.34	\$4.55	\$4.78	\$5.02	\$5.27	\$5.54	\$5.83	\$6.14	\$6.47	\$6.83	\$7.22	\$7.63	\$8.06	\$8.51	\$8.99	\$9.50
9	Empire District Electric Company	EDE	\$1.55	\$1.63	\$1.71	\$1.79	\$1.88	\$1.98	\$2.08	\$2.19	\$2.30	\$2.43	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.38	\$3.57
20	Eversource Energy	SI	\$2.58	\$2.80	\$3.04	\$3.30	\$3.58	\$3.88	\$4.19	\$4.51	\$4.83	\$5.14	\$5.46	\$5.77	\$6.09	\$6.44	\$6.80	\$7.19	\$7.59
21	FirstEnergy Corp.	出	\$0.85	\$0.91	\$0.97	\$1.04	\$1.11	\$1.19	\$1.27	\$1.36	\$1.44	\$1.53	\$1.62	\$1.71	\$1.81	\$1.91	\$2.02	\$2.13	\$2.25
22	Great Plains Energy Inc.	GXP	\$1.57	\$1.67	\$1.78	\$1.89	\$2.01	\$2.14	\$2.27	\$2.41	\$2.56	\$2.71	\$2.86	\$3.02	\$3.20	\$3.38	\$3.57	\$3.77	\$3.98
23	IDACORP, Inc.	ΙDΑ	\$3.85	\$4.00	\$4.16	\$4.33	\$4.50	\$4.68	\$4.88	\$5.11	\$5.35	\$5.63	\$5.93	\$6.26	\$6.62	\$6.99	\$7.39	\$7.80	\$8.25
54	NorthWestern Corporation	NWE	\$1.98	\$2.11	\$2.25	\$2.39	\$2.55	\$2.71	\$2.89	\$3.06	\$3.25	\$3.44	\$3.64	\$3.85	\$4.07	\$4.30	\$4.54	\$4.80	\$5.07
25	OGE Energy Corp.	OGE	\$1.55	\$1.63	\$1.71	\$1.79	\$1.88	\$1.98	\$2.08	\$2.19	\$2.30	\$2.43	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.38	\$3.57
56	Otter Tail Corporation	OTTR	\$3.06	\$3.34	\$3.64	\$3.96	\$4.32	\$4.71	\$5.11	\$5.51	\$5.91	\$6.31	\$6.70	\$7.08	\$7.48	\$7.91	\$8.35	\$8.82	\$9.32
27	Pinnacle West Capital Corporation	PN W	\$3.58	\$3.77	\$3.97	\$4.18	\$4.40	\$4.63	\$4.88	\$5.15	\$5.43	\$5.73	\$6.05	\$6.39	\$6.75	\$7.14	\$7.54	\$7.96	\$8.42
28	Portland General Electric Company	POR	\$2.18	\$2.31	\$2.45	\$2.60	\$2.75	\$2.92	\$3.09	\$3.27	\$3,46	\$3.66	\$3.87	\$4.09	\$4.32	\$4.57	\$4.82	\$5.10	\$5.39
59	SCANA Corporation	SCG	\$3.79	\$3.96	\$4.14	\$4.33	\$4.52	\$4.72	\$4.94	\$5.19	\$5.45	\$5.74	\$6.05	\$6.39	\$6.75	\$7.13	\$7.54	\$7.96	\$8.41
30	Southern Company	S	\$2.77	\$2.89	\$3.02	\$3.16	\$3.30	\$3.45	\$3.61	\$3.79	\$3.98	\$4.19	\$4.42	\$4.67	\$4.94	\$5.21	\$5.51	\$5.82	\$6.15
31	TECO Energy, Inc.	Щ	\$0.95	\$1.04	\$1.13	\$1.24	\$1.35	\$1.48	\$1.60	\$1.73	\$1.86	\$1.99	\$2.11	\$2.23	\$2.36	\$2.49	\$2.63	\$2.78	\$2.93
32	Westar Energy, Inc.	¥	\$2.35	\$2.49	\$2.64	\$2.80	\$2.97	\$3.14	\$3.33	\$3.53	\$3.73	\$3.95	\$4.17	\$4.41	\$4.66	\$4.92	\$5.20	\$5.49	\$5.81
33	Xcel Energy Inc.	XEL	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	\$2.87	\$3.02	\$3.18	\$3.36	\$3.55	\$3.75	\$3.96	\$4.18	\$4.42	\$4.67

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

2 8 7					E I	Multi-Stage Growth Discounted Cash Flow Model 180 Day Average Stock Price High EPS Growth Rate Estimate in First Stage	Growth Discounted Cash Fl80 Day Average Stock PriceGrowth Rate Estimate in Fir	ed Cash F Stock Price mate in Fi	low Model								
4 Projected Annual 5 Dividend Payout Ratio		[31]	1] [32]		[33] [34]	4] [35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
S Company	Ticker	2015	15 2016		2017 2018	2019	3 2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
•	AIF	86.00%	۳	1	9	9	9	မ	9	l.	l,	l.。	67.30%	67.30%	67.30%	67.30%	67.30%
8 Alliant Energy Corporation		61.00%			_	•							67.30%	67.30%	67.30%	67.30%	67.30%
9 Ameren Corporation	AEE	65.00%			_				_				67.30%	67.30%	67.30%	67.30%	67.30%
10 American Electric Power Company, Inc.		65.00%				5% 64.00%	% 64.55%	% 65.10%	65.65%	66.20%	66.75%		67.30%	67.30%	67.30%	67.30%	67.30%
-		67.00%	0% 66.25%	65	.50% 64.75%	5% 64.00%	% 64.55%	65.10%	65.65%	66.20%	66.75%	67.30%	67.30%	67.30%	%08'.29	67.30%	67,30%
12 Black Hills Corporation	вкн	57.00%	0% 57.50%		58.00% 58.50%	.0% 59.00%	% 60.38%	6 61.77%	63.15%	64.54%	65.92% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
13 CenterPoint Energy, Inc.	CNP	93.00%	0% 89.75%	_	86.50% 83.25%	80.00%	% 77.88%	% 75.77%	73.65%	71.54%	69.42% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
14 CMS Energy Corporation	CMS	61.00%	0% 61.25%		61.50% 61.75%	5% 62.00%	% 62.88%	% 63.77%	64.65%	65.54%	66.42% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
15 Consolidated Edison, Inc.	9	65.00%	0% 64.50%		64.00% 63.50%	%00:69 %0	% 63.72%	6 64.43%	65.15%	65.87%	66.59%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
16 Dominion Resources, Inc.		72.00%	0% 72.00%		72.00% 72.00%	0% 72.00%	% 71.22%	% 70.43%	69.65%	68.87%	9 %60.89	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
17 DTE Energy Company	DTE	62.00%	0% 61.50%		61.00% 60.50%	%00.09 %0	% 61.22%	6 62.43%	63.65%	64.87%	66.09%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
18 Duke Energy Corporation	PUK	72.0	72.00% 70.50%		69.00% 67.50%	%00'99 %0	% 66.22%	6 66.43%	66.65%	9, %2, 99	67.09%	67.30%	67.30%	67.30%	%06.79	67.30%	67.30%
19 Empire District Electric Company	EDE	76.0	76.00% 74.25%		72.50% 70.75%	.2% 69.00%			68.15%		67.59% (67.30%	67.30%	67.30%	67.30%	67.30%
20 Eversource Energy	ES	29.00%			57.50% 56.75%	2% 56.00%	% 57.88%	% 29.77%	61.65%	63.54%	65.42% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
 21 FirstEnergy Corp. 	Ш	28.00%	%00.73 %0		56.00% 55.00%	0% 54.00%	% 56.22%	6 58.43%	60.65%	62.87%	65.09%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
22 Great Plains Energy Inc.	GXP	70.00%	0% 67.75%		65.50% 63.25%	5% 61.00%	% 62.05%	63.10%	64.15%	65.20%	66.25%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
23 IDACORP, Inc.	IDA	49.00%	0% 51.25%		53.50% 55.75%	.5% 58.00%	% 59.55%	6 61.10%	62.65%	64.20% (65.75% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
24 NorthWestern Corporation	NWE	26.00%	0% 59.25%		62.50% 65.75%	%00.69 %5	% 68.72%	68.43%	68.15%	67.87%	67.59%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
25 OGE Energy Corp.	OGE	86.00%	0% 79.25%	•	72.50% 65.75%	2% 59.00%	% 60.38%	6 61.77%	63.15%	64.54%	65.92% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
26 Otter Tail Corporation	OTTR	70.00%	0% 66.50%		63.00% 59.50%	%00.95 %0	% 57.88%	% 59.77%	61.65%	63.54%	65.42% (67.30%	%06.79	67.30%	67.30%	67.30%	67.30%
27 Pinnacle West Capital Corporation		63.00%	0% 63.25%		63.50% 63.75%	5% 64.00%	% 64.55%	% 65.10%	65.65%	66.20%	96.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
28 Portland General Electric Company	iny POR	\$00.00%	0% 51.50%		53.00% 54.50%	%00.95 %0	% 57.88%	% 29.77%	61.65%	63.54%	65.42% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
29 SCANA Corporation	೮೦೪	22.00%	0% 56.75%		56.50% 56.25%	2% 56.00%	% 57.88%	% 59.77%	61.65%	63.54%	65.42% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
30 Southern Company	SO	76.0	76.00% 74.75%		73.50% 72.2	72.25% 71.00%	% 70.38%	% 69.77%	69.15%	68.54%	67.92% (67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
31 TECO Energy, Inc.	<u></u>	83.00%	0% 80.25%		77.50% 74.75%	5% 72.00%	% 71.22%	6 70.43%	69.65%		68.09%	67.30%	%06.79	67.30%	67.30%	67.30%	67.30%
32 Westar Energy, Inc.	WR	61.00%	0% 59.50%		58.00% 56.50%	0% 55.00%	% 57.05%	% 59.10%	61.15%	63.20%	65.25% (67.30%	67.30%	%0£'.29	67.30%	67.30%	67.30%
33 Xcel Energy Inc.	XEL	63.00%	0% 63.25%		63.50% 63.75%	5% 64.00%	% 64.55%	% 65.10%	65.65%	66.20%	66.75%	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%

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

7 0 0

4 Projected Annual 5 Cash Flows		[47]	[48]	[49]	[20]	[51]	[52]	[53]	[54]	[55]	[26]	[57]	[58]	[69]	[60]	[61]	[62]	[63]
																		Terminal
6 Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Value
7 ALLETE, Inc.	ALE	\$2.04	\$2.13	\$2.22	\$2.32	\$2.42	\$2.62	\$2.83	\$3.05	\$3.29		3.79	\$4.01	\$4.24	\$4.47	\$4.73	\$4.99	\$119.69
8 Alliant Energy Corporation	LN1	\$2.25	\$2.40	\$2.57	\$2.75	\$2.93	\$3.14	\$3.37	\$3.60	\$3.85			\$4.64	\$4.91	\$5.18	\$5.48	\$5.79	\$143.76
9 Ameren Corporation	AEE	\$1.67	\$1.71	\$1.75	\$1.80	\$1.83	\$2.03	\$2.24	\$2.46	\$2.69			\$3.39	\$3.58	\$3.78	\$4.00	\$4.22	\$98.67
10 American Electric Power Company, Inc.	AEP	\$2.28	\$2.39	\$2.50	\$2.62	\$2.74	\$2.91	\$3.08		\$3.49			\$4.17	\$4.41	\$4.66	\$4.92	\$5.20	\$129.78
11 Avista Corporation	AVA	\$1.32	\$1.40	\$1.48	\$1.56	\$1.65	\$1.78	\$1.91	\$2.05	\$2.19	_		\$2.63	\$2.78	\$2.94	\$3.11	\$3.28	\$77.36
12 Black Hills Corporation	BKH	\$1.76	\$1.90	\$2.05	\$2.22	\$2.39	\$2.61	\$2.85			m		\$4.14	\$4.37	\$4.62	\$4.88	\$5.16	\$118.35
13 CenterPoint Energy, Inc.	CNP	\$1.40	\$1.42	\$1.45	\$1.48	\$1.50	\$1.54	\$1.59		_			\$1.85	\$1.96	\$2.07	\$2.19	\$2.31	\$45.69
14 CMS Energy Corporation	CMS	\$1.13	\$1.21	\$1.30	\$1.39	\$1.49	\$1.61	\$1.74					\$2.44	\$2.58	\$2.73	\$2.88	\$3.05	\$78.54
15 Consolidated Edison, Inc.		\$2.42	\$2.48	\$2.53	\$2.59	\$2.64	\$2.77	\$2.91					\$3.90	\$4.12	\$4,35	\$4.59	\$4.85	\$140.41
16 Dominion Resources, Inc.		\$2.37	\$2.56	\$2.77	\$2.99	\$3.23	\$3.43	\$3.64					\$4.68	\$4.95	\$5.23	\$5.52	\$5.84	\$163,11
17 DTE Energy Company	DTE	\$3.32	\$3.46	\$3.60	\$3.75	\$3.91	\$4.19	\$4.49			\$5.58	\$6.00	\$6.34	\$6.70	\$7,08	\$7.48	\$7.90	\$186.85
18 Duke Energy Corporation	DO.	\$3.12	\$3.21	\$3.30	\$3.39	\$3.48	\$3.67	\$3.87		\$4.33			\$5.13	\$5.42	\$5.73	\$6.05	\$6.40	\$177.08
19 Empire District Electric Company	EDE	\$1.24	\$1.27	\$1.30	\$1.33	\$1.36	\$1.43	\$1.50					\$1.93	\$2.04	\$2.15	\$2.27	\$2.40	\$57.57
20 Eversource Energy	ES	\$1.65	\$1.77	\$1.89	\$2.03	\$2.17	\$2.43	\$2.69	\$2.98		\$3.57		\$4.10	\$4.33	\$4.58	\$4.84	\$5.11	\$120.06
21 FirstEnergy Corp.	Ш	\$0.53	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79					\$1.22	\$1.29	\$1.36	\$1.44	\$1.52	\$84.75
22 Great Plains Energy Inc.	GXP	\$1.17	\$1.20	\$1.24	\$1.27	\$1.30	\$1.41	\$1.52					\$2.15	\$2.27	\$2.40	\$2.54	\$2.68	\$60.98
23 IDACORP, Inc.	IDA	\$1.96	\$2.13	\$2.32	\$2.51	\$2.72	\$2.91	\$3.12	\$3.35	\$3.61	\$3.90		\$4.45	\$4.71	\$4.97	\$5.25	\$5.55	\$143.87
24 NorthWestern Corporation	NWE	\$1.18	\$1.33	\$1.49	\$1.67	\$1.87	\$1.98	\$2.10					\$2.74	\$2.89	\$3.06	\$3.23	\$3.41	\$121.40
25 OGE Energy Corp.	OGE	\$1.40	\$1.35	\$1.30	\$1.24	\$1.17	\$1.26	\$1.35	\$1.46	\$1.57	\$1.69		\$1.93	\$2.04	\$2.15	\$2.27	\$2.40	\$75.07
26 Otter Tail Corporation	OTTR	\$2.33	\$2.42	\$2.50	\$2.57	\$2.64	\$2.96	\$3.29					\$5.04	\$5.32	\$5.62	\$5.94	\$6.28	\$72.27
27 Pinnacle West Capital Corporation	PNW	\$2.37	\$2.51	\$2.65	\$2.81	\$2.97	\$3.15	\$3.35	\$3.56		\$4.04		\$4.55	\$4.80	\$5.07	\$5.36	\$5.66	\$143.62
28 Portland General Electric Company	POR	\$1.16	\$1.26	\$1.38	\$1.50	\$1.63	\$1.79	\$1.96		\$2.33			\$2.91	\$3.07	\$3.25	\$3,43	\$3,62	\$86.20
29 SCANA Corporation	SCG	\$2.26	\$2.35	\$2.44	\$2.54	\$2.64	\$2.86	\$3.10	\$3.36	\$3.64			\$4.54	\$4.80	\$5.07	\$5.36	\$5.66	\$129.49
30 Southern Company	SO	\$2.20	\$2.26	\$2.32	\$2.39	\$2.45	\$2.54	\$2.64		\$2.87	3.00		\$3.32	\$3.51	\$3.71	\$3.92	\$4.14	\$100.63
31 TECO Energy, Inc.	"	\$0.86	\$0.91	\$0.96	\$1.01	\$1.06	\$1.14	\$1.22	\$1.29	\$1.37	\$1.44	1.50	\$1.59	\$1.67	\$1.77	\$1.87	\$1.98	\$43.58
32 Westar Energy, Inc.	WR	\$1.52	\$1.57	\$1.62	\$1.68	\$1.73	\$1.90	\$2.08	\$2.28	\$2.50	32.72	2.97	\$3.14	\$3.31	\$3.50	\$3.70	\$3.91	\$89.90
33 Xcel Energy Inc.	XEL	\$1.34	\$1.42	\$1.49	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98	\$2.11	\$2.24	2.39	\$2.52	\$2.67	\$2.82	\$2.98	\$3.14	\$77.91

						Multi-Stag	Multi-Stage Growth Discounted Cash Flow Model 180 Day Average Stock Price High EPS Growth Rate Estimate in First Stage	e Growth Discounted Cash Fl 80 Day Average Stock Price Growth Rate Estimate in Fir	Cash Floo Ck Price Ite in First	w Model									
		[64]	[65]	[99]	[67]	[68]	[69]	[70]	[71]	1721	[73]	[74]	[75]	1921	[77]	[78]	[79]	[80]	[81]
		Initial							,	1									
	Ticker	Outflow	6/25/15	12/31/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21 6	6/30/22 6/	6/30/23 6	6/30/24 6/	6/30/25 6,	9/30/56	6/30/27	6/30/28	6/30/59	6/30/30
	ALE	(\$52.15)	\$0.00	\$1.06	\$2.10	\$2.22	\$2.32	\$2.42	\$2.62	\$2.83	\$3.05	\$3.29	\$3.54 \$	\$3.79	\$4.01	\$4.24	\$4.47	\$4.73	\$124.68
	LN	(\$62.78)	\$0.00	\$1.17	\$2.32	\$2.57	\$2.75	\$2.93	\$3.14	\$3.37 \$	\$3.60 \$	\$3.85	\$4.12	\$4.40 \$	\$4.64	\$4.91	\$5.18	\$5.48	\$149.55
	AEE	(\$42.21)	\$0.00	\$0.86	\$1.72	\$1.75	\$1.80	\$1.83	\$2.03	\$2.24	\$2.46 \$	\$2.69	\$2.94	\$3.21	\$3.39	\$3.58	\$3.78	\$4.00	\$102.89
American Electric Power Company, Inc.	AEP	(\$57.48)	\$0.00	\$1.18	\$2.34	\$2.50	\$2.62	\$2.74	\$2.91	\$3.08	\$3.28 \$	\$3.49	\$3.71	\$3.95	\$4.17	\$4.41	\$4.66	\$4.92	\$134.98
	AVA	(\$33.86)	\$0.00	\$0.68	\$1.37	\$1.48	\$1.56	\$1.65	\$1.78	\$1.91	\$2.05		\$2.34	\$2.49	\$2.63	\$2.78	\$2.94	\$3.11	\$80.65
	BKH	(\$50.52)	\$0.00	\$0.91	\$1.82	\$2.05	\$2.22	\$2.39	\$2.61	\$2.85	\$3.10 \$	\$3.36 \$	\$3.63	\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$123.51
	CNP	(\$21.96)	\$0.00	\$0.72	\$1.44	\$1.45	\$1.48	\$1.50	\$1.54	\$1.59	\$1.63 \$	\$1.67	\$1.71	\$1.76 \$	\$1.85	\$1.96	\$2.07	\$2.19	\$48.00
	CMS	(\$34.05)	\$0.00	\$0.59	\$1.17	\$1.30	\$1.39	\$1.49	\$1.61	\$1.74	\$1.88	\$2.01	\$2.16	\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$81.58
		(\$62.87)	\$0.00	\$1.25	\$2.46	\$2.53	\$2.59	\$2.64	\$2.77	\$2.91	\$3.07	\$3.25	\$3.45	\$3.69	\$3.90	\$4.12	\$4.35	\$4.59	\$145.27
	Δ	(\$72.44)	\$0.00	\$1.23	\$2.47	\$2.77	\$2.99	\$3.23	\$3.43	\$3.64	\$3.85	\$4.05	\$4.24	\$4.43	\$4.68	\$4.95	\$5.23	\$5.52	\$168.95
	DTE	(\$81.72)	\$0.00	\$1.72	\$3.40	\$3.60	\$3.75	\$3.91	\$4.19	\$4.49	\$4.83	\$5.19 \$	\$5.58	\$6.00	\$6.34	\$6.70	\$7.08	\$7.48	\$194.74
	S	(\$2.36)	\$0.00	\$1.62	\$3.20	\$3.30	\$3.39	\$3.48	\$3.67		\$4.09	\$4.33	\$4.58 \$	\$4.86		\$5.42	\$5.73	\$6.05	\$183.47
Empire District Electric Company		(\$26.21)	\$0.00	\$0.64	\$1.27	\$1.30	\$1.33	\$1.36							\$1.93	\$2.04	\$2.15	\$2.27	\$59.97
	ES	(\$50.51)	\$0.00	\$0.86	\$1.72	\$1.89	\$2.03	\$2.17			\$2.98				\$4.10	\$4.33	\$4.58	\$4.84	\$125.17
	벁	(\$36.48)	\$0.00	\$0.27	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87	\$ 96.0\$	\$1.05 \$	\$1.15	\$1.22	\$1.29	\$1.36	\$1.44	\$86.27
	GXP	(\$26.74)	\$0.00	\$0.61	\$1.21	\$1.24	\$1.27	\$1.30				\$1.76	\$1.90 \$	\$2.04	\$2.15	\$2.27	\$2.40	\$2.54	\$63.66
	Δ	(\$62.00)	\$0.00	\$1.02	\$2.00	\$2.32	\$2.51	\$2.72	\$2.91	\$3.12 \$	\$3.35	\$3.61	\$3.90 \$	\$4.22 \$	\$4.45	\$4.71	\$4.97	\$5.25	\$149.42
	NWE	(\$53.21)	\$0.00	\$0.61	\$1.22	\$1.49	\$1.67	\$1.87	\$1.98	\$2.10	\$2.22	\$2.34	\$2.46	\$2.59	\$2.74	\$2.89	\$3.06	\$3.23	\$124.82
	OGE	(\$33.59)	\$0.00	\$0.72	\$1.43	\$1.30	\$1.24	\$1.17	\$1.26	\$1.35	\$1.46 \$	\$1.57	\$1.69 \$	\$1.82	\$1.93	\$2.04	\$2.15	\$2.27	\$77.47
	OTTR	(\$30.14)	\$0.00	\$1.21	\$2.44	\$2.50	\$2.57	\$2.64	\$2.96	\$3.29	\$3.64	\$4.01			\$5.04	\$5.32	\$5.62	\$5.94	\$78.55
Pinnacle West Capital Corporation	PNW	(\$63.34)	\$0.00	\$1.23	\$2.44	\$2.65	\$2.81	\$2.97	\$3.15	\$3.35 \$	\$3.56 \$	\$3.79	\$4.04	\$4.30 \$	\$4.55	\$4.80	\$5.07	\$5.36	\$149.28
Portland General Electric Company	POR	(\$36.46)	\$0.00	\$0.60	\$1.19	\$1.38	\$1.50	\$1.63	\$1.79	\$1.96 \$		\$2.33	\$2.53	\$2.75	\$2.91	\$3.07	\$3.25	\$3.43	\$89.82
	SCG	(\$55.87)	\$0.00	\$1.17	\$2.31	\$2.44	\$2.54	\$2.64	\$2.86	\$3.10		\$3.64	\$3.96 \$	\$4.30	\$4.54	\$4.80	\$5.07	\$5.36	\$135.15
	SO	(\$46.21)	\$0.00	\$1.14	\$2.25	\$2.32	\$2.39	\$2.45	\$2.54		\$2.75				\$3.32	\$3.51	\$3.71	\$3.92	\$104.77
	世	(\$19.48)	\$0.00	\$0.45	\$0.90	\$0.96	\$1.01	\$1.06	\$1.14	\$1.22		\$1.37	\$1.44	\$1.50 \$	\$1.59	\$1.67	\$1.77	\$1.87	\$45.56
	WR	(\$38.47)	\$0.00	\$0.79	\$1.57	\$1.62	\$1.68	\$1.73	\$1.90	\$2.08	2.28 \$			0,	53.14	\$3.31	\$3.50	\$3.70	\$93.80
	XEL	(\$34.44)	\$0.00	\$0.70	\$1.38	\$1.49	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98 \$	\$2.11	\$2.24	-	\$2.52	\$2.67	\$2.82	\$2.98	\$81.05

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

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4	Inputs		[1]	[2]	[3]	[4]	[2]	[9]	[]	[8]	[6]	[10]	[11]	[12]	[13]
2			Stock	EP(EPS Growth Rate Estimates	ate Estim	ates	Long-Term	9	Payout Ratio	0	terative .	terative Solution Terminal	erminal	Terminal
			-			Value	Low							P/E	PEG
9	Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	2015	2019	2025	Proof	RR	Ratio	Ratio
7	ALLETE, Inc.	ALE	\$52.15	Ϋ́	%00'9	6.50%	%00.9	5.65%	%00.99	61.00%	67.30%	\$0.00	9.92%	16.64	2.94
ထ	Alliant Energy Corporation	Ľ	\$62.78	2.30%	5.45%	%00.9	5.30%	5.65%	61.00%	63.00%	67.30%	\$0.00	9.72%	17.49	3.09
თ	Ameren Corporation	AEE	\$42.21	808.9	5.85%	%00'9	5.85%	5.65%	65.00%	55.00%	67.30%	\$0.00	9.91%	16.69	2.95
10	American Electric Power Company, Inc.	AEP	\$57.48	4.90%	5.08%	2.00%	4.90%	5.65%	65.00%	64.00%	67.30%	\$0.00	9.84%	16.99	3.01
Ξ	Avista Corporation	AVA	\$33.86	¥	2.00%	7.00%	2.00%	5.65%	67.00%	64.00%	67.30%	\$0.00	%09.6	18.02	3.19
12	Black Hills Corporation	BKH	\$50.52	¥	7.00%	4.50%	4.50%	5.65%	57.00%	29.00%	67.30%	\$0.00	9.58%	18.10	3.20
13	CenterPoint Energy, Inc.	CNP	\$21.96	5.70%	1.91%	1.00%	1.00%	5.65%	93.00%	80.00%	67.30%	\$0.00	9.54%	18.27	3.23
14	CMS Energy Corporation	CMS	\$34.05	6.20%	6.73%	2.50%	2.50%	5.65%	61.00%	62.00%	67.30%	\$0.00	9.44%	18.77	3.32
15	Consolidated Edison, Inc.		\$62.87	2.70%	2.38%	3.00%	2.38%	5.65%	65.00%	63.00%	67.30%	\$0.00	9.16%	20.29	3.59
16		Ω	\$72.44	6.30%	2.89%	8.00%	5.89%	5.65%	72.00%	72.00%	67.30%	\$0.00	8.95%	21.57	3.82
17	DTE Energy Company	DTE	\$81.72	2.00%	4.51%	2.00%	4.51%	5.65%	62.00%	%00.09	67.30%	\$0.00	9.98%	16.43	2.91
18		PČK	\$79.36	4.70%	4.49%	2.00%	4.49%	5.65%		%00'99	67.30%	\$0.00	9.34%	19.27	3.41
19		EDE	\$26.21	2.00%	2.00%	3.00%	3.00%	5.65%	%00'92	%00'69	67.30%	\$0.00	9.51%	18.42	3.26
20	Eversource Energy	S	\$50.51	6.80%	%09'9	8.50%	%09.9	5.65%			67.30%	\$0.00	9.65%	17.78	3.15
7	FirstEnergy Corp.	出	\$36.48	¥	¥	7.00%	7.00%	5.65%			67.30%	\$0.00	7.54%	37.61	99.9
22	Great Plains Energy Inc.	GХР	\$26.74	%00'9	6.37%	2.00%	2.00%	5.65%	70.00%	61.00%	67.30%	\$0.00	9.91%	16.71	2.96
33	IDACORP, Inc.	ΙDΑ	\$62.00	4.00%	4.00%	1.00%	1.00%	2.65%	49.00%	28.00%	67.30%	\$0.00	8.99%	21.28	3.77
54	NorthWestern Corporation	NWE	\$53.21	2.00%	2.00%	6.50%	2.00%	5.65%	26.00%	%00.69	67.30%	\$0.00	8.34%	26.46	4.68
22	OGE Energy Corp.	OGE	\$33.59	2.00%	4.00%	3.00%	3.00%	5.65%			67.30%	\$0.00	8.61%	24.06	4.26
56	Otter Tail Corporation	OTTR	\$30.14	Ϋ́	%00'9	%00.6	%00'9	5.65%	70.00%	26.00%	67.30%	\$0.00	13.40%	9.18	1.62
27	Pinnacle West Capital Corporation	PNW	\$63.34	4.60%	2.30%	4.00%	4.00%	5.65%	63.00%	64.00%	67.30%	\$0.00	9.48%	18.57	3.29
78		POR	\$36.46	5.20%	4.72%	%00.9	4.72%	5.65%	50.00%	26.00%	67.30%	\$0.00	9.75%	17,35	3.07
59	SCANA Corporation	SCG	\$55.87	4.20%	4.30%	4.50%	4.20%	2.65%	27.00%	56.00%	67.30%	\$0.00	10.19%	15.69	2.78
റ്റ	0,	SO	\$46.21	3.50%	3.32%	4.50%	3.32%	5.65%	%00'92	71.00%	67.30%	\$0.00	%29.6	17.69	3.13
33	TECO Energy, Inc.	世	\$19.49	7.10%	9.20%	%00'9	%00'9	5.65%	83.00%	72.00%	67.30%	\$0.00	9.56%	18.20	3.22
32		Ν	\$38.47	3.50%	3.40%	%00'9	3.40%	5.65%	61.00%	25.00%	67.30%	\$0.00	9.54%	18.28	3.23
33	Xcel Energy Inc.	ΧĒΓ	\$34.44	2.00%	4.58%	4.50%	4.50%	5.65%	63.00%	64.00%	67.30%	\$0.00	9.78%	17.23	3.05
34													9.59%		
32													13.40%		
36												Min	7.54%		

A A A B B B B B B B B B B B B B B B B B	Multi-Stage Growth Discounted Cash Flow Model 180 Day Average Stock Price Low EPS Growth Rate Estimate in First Stage	[14] [15] [16] [17] [18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [29] [30]	2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028	\$3.26 \$3.45 \$3.66 \$3.88 \$4.11 \$4.35 \$4.61 \$4.87 \$5.15 \$5.44 \$5.75 \$6.07 \$6.42 \$6.78	53.48 \$3.66 \$3.86 \$4.06 \$4.28 \$4.51 \$4.75	\$2.40 \$2.54 \$2.69 \$2.85 \$3.01 \$3.19 \$3.37 \$3.57 \$3.78 \$3.39 \$4.22 \$4.46 \$4.71 \$4.97 \$5.26 \$5.55	83.34 \$3.50 \$3.68 \$3.86 \$4.04 \$4.24 \$4.46 \$4.69 \$4.93 \$5.20 \$5.49 \$5.80 \$6.12 \$6.47 \$6.84 \$7.22	. \$1.84 \$1.93 \$2.03 \$2.13 \$2.24 \$2.35 \$2.47 \$2.60 \$2.74 \$2.88 \$3.04 \$3.22 \$3.40 \$3.59 \$3.79 \$4.01	\$2.89 \$3.02 \$3.16 \$3.30 \$3.45 \$3.60 \$3.77 \$3.95 \$4.16 \$4.37 \$4.61 \$4.87 \$5.15 \$5.44 \$5.75 \$6.07	\$1.42 \$1.43 \$1.45 \$1.46 \$1.48 \$1.49 \$1.52 \$1.56 \$1.61 \$1.68 \$1.76 \$1.86 \$1.96 \$2.07 \$2.19 \$2.31	\$1.74 \$1.84 \$1.94 \$2.04 \$2.16 \$2.27 \$2.40 \$2.53 \$2.67 \$2.82 \$2.98 \$3.15 \$3.33 \$3.52 \$3.72 \$3.93	\$3.62 \$3.71 \$3.79 \$3.88 \$3.98 \$4.07 \$4.19 \$4.34 \$4.51 \$4.72 \$4.96 \$5.24 \$5.53 \$5.85 \$6.18 \$6.53	\$3.05 \$3.23 \$3.42 \$3.62 \$3.83 \$4.06 \$4.30 \$4.55 \$4.81 \$5.09 \$5.38 \$5.68 \$6.00 \$6.34 \$6.70 \$7.08	\$5.10 \$5.33 \$5.57 \$5.82 \$6.08 \$6.36 \$6.66 \$6.98 \$7.34 \$7.72 \$8.15 \$8.61 \$9.09 \$9.61 \$10.15 \$10.72	\$4,13 \$4.32 \$4.51 \$4.71 \$4.92 \$5.14 \$5.39 \$5.65 \$5.93 \$6.25 \$6.59 \$6.96 \$7.35 \$7.77 \$8.21 \$8.67	\$1.55 \$1.60 \$1.64 \$1.69 \$1.74 \$1.80 \$1.86 \$1.93 \$2.01 \$2.11 \$2.22 \$2.35 \$2.48 \$2.62 \$2.77 \$2.92	\$2.58; \$2.75 \$2.93 \$3.13 \$3.33 \$3.55 \$3.76 \$4.02 \$4.26 \$4.52 \$4.78 \$5.05 \$5.34 \$5.64 \$5.96 \$6.29	\$0.85 \$0.91 \$0.97 \$1.04 \$1.11 \$1.19 \$1.27 \$1.36 \$1.44 \$1.53 \$1.62 \$1.71 \$1.81 \$1.91 \$2.02 \$2.13	\$1.57 \$1.65 \$1.73 \$1.82 \$1.91 \$2.00 \$2.11 \$2.22 \$2.33 \$2.46 \$2.60 \$2.74 \$2.90 \$3.06 \$3.24 \$3.42	\$3.85 \$3.89 \$3.93 \$3.97 \$4.01 \$4.05 \$4.12 \$4.22 \$4.36 \$4.54 \$4.76 \$5.03 \$5.32 \$5.62 \$5.94 \$6.27	\$1.98 \$2.08 \$2.18 \$2.29 \$2.41 \$2.53 \$2.66 \$2.79 \$2.94 \$3.10 \$3.28 \$3.46 \$3.66 \$3.86 \$4.08 \$4.31	\$1.55 \$1.60 \$1.64 \$1.69 \$1.74 \$1.80 \$1.86 \$1.93 \$2.01 \$2.11 \$2.22 \$2.35 \$2.48 \$2.62 \$2.77 \$2.92	\$3.06 \$3.24 \$3.44 \$3.64 \$3.86 \$4.09 \$4.34 \$4.59 \$4.86 \$5.14 \$5.74 \$5.74 \$6.07 \$6.41 \$6.77 \$7.15	\$3.58 \$3.72 \$3.87 \$4.03 \$4.19 \$4.36 \$4.54 \$4.75 \$4.98 \$5.23 \$5.51 \$5.82 \$6.15 \$6.50 \$6.87 \$7.26	\$2.18 \$2.28 \$2.39 \$2.50 \$2.60 \$2.75 \$2.88 \$3.02 \$3.18 \$3.35 \$3.53 \$3.73 \$3.95 \$4.17 \$4.40 \$4.65	\$3.79 \$3.95 \$4.12 \$4.29 \$4.47 \$4.66 \$4.86 \$5.09 \$5.34 \$5.62 \$5.95 \$6.26 \$6.61 \$6.98 \$7.38 \$7.79	\$2.77 \$2.86 \$2.96 \$3.06 \$3.16 \$3.26 \$3.38 \$3.52 \$3.68 \$3.86 \$4.06 \$4.29 \$4.53 \$4.79 \$5.06 \$5.35	\$0.95 \$1.01 \$1.07 \$1.13 \$1.20 \$1.27 \$1.35 \$1.43 \$1.51 \$1.60 \$1.69 \$1.78 \$1.88 \$1.99 \$2.10 \$2.22	\$2.35 \$2.43 \$2.51 \$2.60 \$2.69 \$2.78 \$2.88 \$3.00 \$3.14 \$3.29 \$3.47 \$3.66 \$3.87 \$4.09 \$4.32 \$4.56	
l l		[15]	2015	\$3.07	\$3.66	\$2.54	\$3.50	\$1.93	\$3.02	\$1.43	\$1.84	\$3.71	\$3.23	\$5.33	\$4.32	\$1.60	\$2.75	\$0.91	\$1.65	\$3.89	\$2.08	\$1.60	\$3.24	\$3.72	\$2.28	\$3.95	\$2.86	\$1.01	\$2.43	200

က						LowE	Low EPS Growth Rate Estimate in First Stage	Rate Estima	ite in First	Stage								
4 ro	Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[32]	[36]	[37]	[38]	[38]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
9	Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
7	ALLETE, Inc.	ALE	%00.99	64.75%	% 63.50%	62.25%	61.00%	62.05%	63.10%	64.15%	65.20% 6	66.25% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%
œ	Alliant Energy Corporation	Ä	61.00%	61.50%	% 62.00%	62.50%	63.00%	63.72%	64.43% (65.15% 6	65.87% 6	9 %65.99	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
6	Ameren Corporation	AEE	65.00%	62.50%	%00.09 %	57.50%	25.00%	57,05%	59.10% (61.15% 6	63.20% e	65.25% 6	67.30% 6	67.30% (67.30%	67.30%	67.30%	67.30%
10) American Electric Power Company, Inc.	AEP	65.00%	64.75%	% 64.50%	64.25%	64.00%	64.55%	65.10% (65.65%	66.20% 6	66.75% 6	67.30% 6	67.30% (67.30%	67.30%	67.30%	67.30%
7	Avista Corporation	AVA	%00'.29	66.25%	% 65.50%	64.75%	64.00%	64.55%	65.10% (65.65%	66.20% 6	66.75% 6	67.30% 6	67.30% (67.30%	67.30%	67.30%	67.30%
12	2 Black Hills Corporation	BKH	67.00%	% 57.50%	% 58.00%	58.50%	29.00%	60.38%	61.77%	63.15% 6	64.54%	65.92% 6	67.30% 6	67.30% (67.30%	67.30%	67.30%	67.30%
13	3 CenterPoint Energy, Inc.	S N	93.00%	89.75%	% 86.50%	83.25%	80.00%	77.88%	. %21.91	73.65% 7	71.54%	69.42% 6	67.30% 6	67.30% (67.30%	67.30%	67.30%	67.30%
14	t CMS Energy Corporation	CMS	61.00%		% 61.50%						65.54%		67.30% 6			67.30%		67.30%
15	5 Consolidated Edison, Inc.		65.00%	64.50%	% 64.00%	63.50%	63.00%	63.72%	64.43% (65.15% 6	65.87%	9 %65'99	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%
16	S Dominion Resources, Inc.	Δ	72.00%	% 72.00%	% 72.00%			71.22%		69.65%	68.87%	68.09% 6		67.30%	67.30%	67.30%	67.30%	67.30%
17	7 DTE Energy Company	DTE	62.00%		% 61.00%	60.50%	%00.09	61.22%	62.43% (63.65% 6	64.87%	9 %60.99	67.30% 6	67.30% 6	67.30%	%06.79	67.30%	67.30%
18	3 Duke Energy Corporation	M M	72.00%	% 05.0%	%00.69 %	67.50%	%00′99	66.22%	66.43% (66.65%	66.87%	67.09% 6	67.30% 6	67.30% 6	%06.79	%06.79	67.30%	67.30%
19	_		76.00%		% 72.50%	5 70.75%				68.15% 6		67.59% 6	67.30% 6	67.30%	67.30%	%06.79	67.30%	67.30%
20) Eversource Energy	S	29,00%		% 57.50%			57.88%	59.77% (61.65% 6		65.42% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
7	I FirstEnergy Corp.	世				. 55.00%	54.00%	56.22%	58.43% (60.65%	62.87% 6	9 %60'59	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
22	2 Great Plains Energy Inc.	GXP	70.00%	67.75%	% 65.50%	63.25%	61.00%	62.05%	63.10% (64.15% 6	65.20% 6	66.25% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%
23	3 IDACORP, Inc.	₫	49.00%	51.25%			58.00%	29.55%	61.10% (64.20% E	65.75% 6		67.30%	67.30%	%06.79	67.30%	67.30%
24	1 NorthWestern Corporation	NWE	26.00%					68.72%	68.43% (68.15% 6	67.87%	67.59% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
25	5 OGE Energy Corp.	OGE	86.00%		% 72.50%				61.77% (63.15% 6		65.92% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
26	S Otter Tail Corporation	OTTR	70.00%					57.88%	29.77% (61.65% 6	63.54% 6	65.42% 6		67.30%	67.30%	67.30%	67.30%	67.30%
27	7 Pinnacle West Capital Corporation	≷ Nd	83.00%	63.25%	% 63.50%	63.75%	64.00%	64.55%	65.10% (65.65% 6	66.20% 6		67.30% 6		67.30%	67.30%	67.30%	%06.79
28	3 Portland General Electric Company	POR	20.00%	51.50%	% 23.00%	54.50%	26.00%	57.88%	59.77% (61.65% 6	63.54% 6	65.42% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%
59	SCANA Corporation	ဗ္ဗင္ဗ	82.00%	6 56.75%	% 26.50%	56.25%	26.00%	57.88%	59.77% (61.65% 6	63.54% 6	65.42% 6	67.30% 6	67.30% (67.30%	67.30%	67.30%	67.30%
8	Southern Company	SO	76.00%				71.00%	70.38%		69.15%	68.54% 6	67.92% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
31	i TECO Energy, Inc.	里	83.00%	80.25%	% 77.50%	74.75%		71.22%	70.43% (69.65%	68.87% 6	9 %60.89	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%
32	Westar Energy, Inc.	×	61.00%	% 29.50%	28	. 56.50%	22.00%	27.05%	59.10% (61.15% 6	63.20% 6	65.25% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
33	3 Xcel Energy Inc.	XEL	63.00%	6 63.25%	% 63.50%	63.75%	64.00%	64.55%	65.10%	65.65%	66.20% 6	66.75% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%

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4 Projected Annual 5 Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]
																		Terminal
6 Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022					2027	2028	2029	2030	Value
7 ALLETE, Inc.	ALE	\$2.03	\$2.11	\$2.19	\$2.28	\$2.37	\$2,55	\$2.75	\$2.96					\$4.09	\$4.32	\$4.56	\$4.82	\$119.24
8 Alliant Energy Corporation	LNT	\$2.24	\$2.37	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22	\$3.44					\$4.67	\$4.93	\$5.21	\$5.51	\$143.06
9 Ameren Corporation	AEE	\$1.65	\$1.68	\$1.71	\$1.73	\$1,75	\$1.93	\$2.11	\$2.31	\$2.52		\$3.00 \$	\$3.17	\$3.35	\$3.54	\$3.74	\$3.95	\$97.91
10 American Electric Power Company, Inc.	AEP	\$2.28	\$2.38	\$2.49	\$2.60	\$2.72	\$2.88	\$3.05	\$3.24	_				\$4.35	\$4.60	\$4.86	\$5.14	\$129.62
11 Avista Corporation	AVA	\$1.29	\$1.34	\$1.40	\$1.45	\$1.50	\$1.59	\$1.69	\$1.80					\$2.42	\$2.55	\$2.70	\$2.85	\$76.29
12 Black Hills Corporation	BKH	\$1.72	\$1.81	\$1.91	\$2.02	\$2.12	\$2.28	\$2.44	\$2.62					\$3.66	\$3.87	\$4.09	\$4.32	\$116.10
13 CenterPoint Energy, Inc.	CNP	\$1.33	\$1.30	\$1.27	\$1.23	\$1.19	\$1.18	\$1.18						\$1.39	\$1.47	\$1.56	\$1.64	\$44.64
14 CMS Energy Corporation	CMS	\$1.12	\$1.19	\$1.26	\$1.33	\$1.41	\$1.51	\$1.62				-		\$2.37	\$2.50	\$2.64	\$2.79	\$77.88
15 Consolidated Edison, Inc.		\$2.41	\$2.45	\$2.49	\$2.53	\$2.57	\$2.67	\$2.79		-	_			\$3.93	\$4.16	\$4.39	\$4.64	\$139.92
16 Domínion Resources, Inc.	٥	\$2.33	\$2.46	\$2.61	\$2.76	\$2.92	\$3.06	\$3.20		\$3.50	\$3.66			\$4.27	\$4.51	\$4.76	\$5.03	\$161.28
17 DTE Energy Company	DTE	\$3.30	\$3.43	\$3.55	\$3.68	\$3.82	\$4.08	\$4.36						\$6.47	\$6.83	\$7.22	\$7.63	\$186.16
18 Duke Energy Corporation	DOK POK	\$3.11	\$3.18	\$3.25	\$3.32	\$3.40	\$3.57	\$3.75						\$5.23	\$5.52	\$5.84	\$6.17	\$176.55
19 Empire District Electric Company	EDE	\$1.21	\$1.22	\$1.23	\$1.23	\$1.24	\$1.28	\$1.32	\$1.37	_	_	-		\$1.76	\$1.86	\$1.97	\$2.08	\$56.89
20 Eversource Energy	ES	\$1.62	\$1.71	\$1.80	\$1.89	\$1.99	\$2.19	\$2.40		\$2.87		_		\$3.79	\$4.01	\$4.24	\$4.48	\$118.24
21 FirstEnergy Corp.	Ш	\$0.53	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79						\$1.29	\$1.36	\$1.44	\$1.52	\$84.75
22 Great Plains Energy Inc.	GXP	\$1.15	\$1.17	\$1.19	\$1.21	\$1.22	\$1.31	\$1.40			\$1.72			\$2.06	\$2.18	\$2.30	\$2.43	\$60.36
23 IDACORP, Inc.	ЮA	\$1.91	\$2.01	\$2.12	\$2.23	\$2.35	\$2.45	\$2.58						\$3.78	\$4.00	\$4.22	\$4.46	\$141.01
24 NorthWestern Corporation	NWE	\$1.16	\$1.29	\$1.43	\$1.58	\$1.74	\$1.83	\$1.91						\$2.60	\$2.75	\$2.90	\$3.07	\$120.56
25 OGE Energy Corp.	0GE	\$1.37	\$1.30	\$1.23	\$1.15	\$1.06	\$1.12	\$1.19						\$1.76	\$1.86	\$1.97	\$2.08	\$74.29
26 Otter Tail Corporation	OTTR	\$2.27	\$2.29	\$2.30	\$2.30	\$2.29	\$2.51	\$2.75			\$3.56			\$4.31	\$4.56	\$4.82	\$5.09	\$69.39
27 Pinnacle West Capital Corporation	PNW	\$2.35	\$2.45	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09						\$4.38	\$4.62	\$4.88	\$5.16	\$142.40
28 Portland General Electric Company	POR	\$1.14	\$1.23	\$1.33	\$1.43	\$1.54	\$1.67	\$1.81						\$2.81	\$2.96	\$3.13	\$3.31	\$85.31
29 SCANA Corporation	SCG	\$2.25	\$2.34	\$2.42	\$2.51	\$2.61	\$2.81	\$3.04	\$3.29	\$3.57				\$4.70	\$4.97	\$5.25	\$5.54	\$129.16
30 Southern Company	SO	\$2.18	\$2.21	\$2.25	\$2.28	\$2.32	\$2.38	\$2.46	\$2.54	\$2.64				\$3.22	\$3.41	\$3.60	\$3.80	\$99.95
31 TECO Energy, Inc.	坦	\$0.84	\$0.86	\$0.88	\$0.90	\$0.92	\$0.96	\$1.00	\$1.05	\$1.10				\$1.34	\$1.42	\$1.49	\$1.58	\$42.70
32 Westar Energy, Inc.	WR	\$1.48	\$1.49	\$1.51	\$1.52	\$1.53	\$1.64	\$1.77	\$1.92	\$2.08				\$2.75	\$2.91	\$3.07	\$3.24	\$88.09
33 Xcel Energy Inc.	XEL	\$1.34	\$1.40	\$1.47	\$1.54	\$1.62	\$1.71	\$1.81	\$1.92	\$2.03	\$2.16	2.30	52.43	\$2.57	\$2.72	\$2.87	\$3.03	\$77.64

			•			Multi-Stag	Multi-Stage Growth Discounted Cash Flow Model	iscounted erage Stor	Cash Flor ck Price	w Model									
Projected Applied Data						Low EPS	Low EPS Growth Rate Estimate in First Stage	ate Estima	ite in First	Stage									
Investor Cash Flows		[64]	[65]	[66]	[67]	[88]	[69]	[10]	[71]	[72]	[73]	[74]	[75]	[9/]	[77]	[8]	[6/]	[80]	[81]
		Initial																	
	Ticker	Outflow	6/25/15	12/31/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22 6	6/30/23 6	6/30/24 6	2	6/30/26	6/30/27	6/30/28	6/30/59	6/30/30
	ALE	(\$52.15)	\$0.00	\$1.05	\$2.09	\$2.19	\$2.28	\$2.37	\$2.55	\$2.75	\$2.96		\$3.41		\$3.87	\$4.09	\$4.32	\$4.56	\$124.06
Alliant Energy Corporation	Γ	(\$62.78)	\$0.00	\$1.16	\$2.29	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22	\$3.44	\$3.67			\$4.42	\$4.67	\$4.93	\$5.21	\$148.56
Ameren Corporation	AEE	(\$42.21)	\$0.00	\$0.86	\$1.70	\$1.71	\$1.73	\$1.75	\$1.93		\$2.31	\$2.52	\$2.75		\$3.17	\$3.35	\$3.54	\$3.74	\$101.86
American Electric Power Company, Inc.	AEP	(\$57.48)	\$0.00	\$1.18	\$2.33	\$2.49	\$2.60	\$2.72	\$2.88	\$3.05	\$3.24	\$3.44	\$3.66	3.90	\$4.12	\$4.35	\$4.60	\$4.86	\$134.76
Avista Corporation	AVA	(\$33.86)	\$0.00	\$0.67	\$1.33	\$1.40	\$1,45	\$1.50	\$1.59	\$1.69		\$1.91	\$2.03		\$2.29	\$2.42	\$2.55	\$2.70	\$79.14
Black Hills Corporation	BKI	(\$50.52)	\$0.00	\$0.89	\$1.76	\$1.91	\$2.02	\$2.12	\$2.28	\$2.44	\$2.62	\$2.82	\$3.04		\$3.47	\$3.66	\$3.87	\$4.09	\$120.42
CenterPoint Energy, Inc.	CNP	(\$21.96)	\$0.00	\$0.69	\$1.34	\$1.27	\$1.23	\$1.19	\$1.18	\$1.18	\$1.19	\$1.20	\$1.22		\$1.32	\$1.39	\$1.47	\$1.56	\$46.29
CMS Energy Corporation	CMS	(\$34.05)	\$0.00	\$0.58	\$1.15	\$1.26	\$1.33	\$1.41	\$1.51		\$1.73	\$1.85	\$1.98		\$2.24	\$2.37	\$2.50	\$2.64	\$80.67
Consolidated Edison, Inc.	입	(\$62.87)	\$0.00	\$1.25	\$2.44	\$2.49	\$2.53	\$2.57	\$2.67	\$2.79	\$2.94		\$3.30	\$3.52	\$3.72	\$3.93	\$4.16	\$4.39	\$144.56
Dominion Resources, Inc.	۵	(\$72.44)	\$0,00	\$1.20	\$2.39	\$2.61	\$2.76	\$2.92	\$3.06		\$3.35				\$4.04	\$4.27	\$4.51	\$4.76	\$166.31
DTE Energy Company	DTE	(\$81,72)	\$0.00	\$1.71	\$3.38	\$3.55	\$3.68	\$3.82			\$4.67	\$5.01			\$6.12	\$6.47	\$6.83	\$7.22	\$193.78
Duke Energy Corporation	S S	(\$2.67\$)	\$0.00	\$1.61	\$3.18	\$3.25	\$3.32	\$3.40		\$3.75	\$3.96	\$4.18			\$4.95	\$5.23	\$5.52	\$5.84	\$182.72
Empire District Electric Company	EDE	(\$26.21)	\$0.00	\$0.63	\$1,23	\$1.23	\$1.23	\$1.24	\$1.28		\$1.37		\$1.50 \$		\$1.67	\$1.76	\$1.86	\$1.97	\$58.97
Eversource Energy	S	(\$50.51)	\$0.00	\$0.84	\$1.68	\$1.80	\$1.89	\$1.99			\$2.63		\$3.13 \$		\$3.59	\$3.79	\$4.01	\$4.24	\$122.71
FirstEnergy Corp.	밆	(\$36.48)	\$0.00	\$0.27	\$0.55	\$0.58	\$0.61	\$0.64	٠.				\$1,05		\$1.22	\$1.29	\$1.36	\$1.44	\$86.27
Great Plains Energy Inc.	GXP	(\$26.74)	\$0.00	\$0.60	\$1.18	\$1.19	\$1.21	\$1.22	\$1.31			\$1.60			\$1.95	\$2.06	\$2.18	\$2.30	\$62.79
DACORP, Inc.	ΙDΑ	(\$62.00)	\$0.00	\$0.99	\$1.91	\$2.12	\$2.23	\$2.35	\$2.45		_		\$3.13 \$		\$3.58	\$3.78	\$4.00	\$4.22	\$145.47
NorthWestern Corporation	NWE	(\$53.21)	\$0.00	\$0.60	\$1.19	\$1.43	\$1.58	\$1.74	\$1.83	\$1.91			\$2.21	\$2.33	\$2.46	\$2.60	\$2.75	\$2.90	\$123.63
OGE Energy Corp.	OGE	(\$33.59)	\$0.00	\$0.71	\$1.39	\$1.23	\$1.15	\$1.06	\$1.12		\$1.27				\$1.67	\$1.76	\$1.86	\$1.97	\$76.37
Otter Tail Corporation	OTTR	(\$30.14)	\$0.00	\$1.18	\$2.34	\$2.30	\$2.30	\$2.29	\$2.51	\$2.75	\$3.00	\$3.27	\$3.56		\$4.08	\$4.31	\$4.56	\$4.82	\$74.48
Pinnacle West Capital Corporation	PNW	(\$63.34)	\$0.00	\$1.21	\$2.39	\$2.56	\$2.67	\$2.79	\$2.93		\$3.27	\$3.46			\$4.14	\$4.38	\$4.62	\$4.88	\$147.56
Portland General Electric Company	POR	(\$36.46)	\$0.00	\$0.59	\$1.17	\$1.33	\$1.43	\$1.54	\$1.67	\$1.81	\$1.96	\$2.13	\$2.31		\$2.66	\$2.81	\$2.96	\$3.13	\$88.62
SCANA Corporation	SCG	(\$55.87)	\$0.00	\$1.17	\$2.30	\$2.42	\$2.51	\$2.61	\$2.81	\$3.04					\$4.45	\$4.70	\$4.97	\$5.25	\$134.71
Southern Company	S	(\$46.21)	\$0.00	\$1.13	\$2.21	\$2.25	\$2.28	\$2.32	\$2.38	\$2.46	\$2.54		\$2.76		\$3.05	\$3.22	\$3.41	\$3.60	\$103.75
TECO Energy, Inc.	世	(\$19.48)	\$0.00	\$0.43	\$0.86	\$0.88	\$0.90	\$0.92	\$0.96	\$1.00		_		_	\$1.27	\$1,34	\$1.42	\$1.49	\$44.28
Westar Energy, Inc.	WR	(\$38.47)	\$0.00	\$0.77	\$1.51	\$1.51	\$1.52	\$1,53	\$1.64	\$1.77	\$1.92	\$2.08			\$2.60	\$2.75	\$2.91	\$3.07	\$91,33
Xcel Energy Inc.	χĒ	(\$34.44)	\$0.00	\$0.69	\$1,37	\$1.47	\$1.54	\$1.62	\$1.71	\$1.81	\$1.92		\$2.16		\$2.43	\$2.57	\$2.72	\$2.87	\$80.67

Multi-Stage Growth Discounted Cash Flow Model 360 Day Average Stock Price Average EPS Growth Rate Estimate in First Stage

4	Inputs		[1]	[2]	[3]	4	[5]	[9]		[8]	6	10	[11]	[12]	[13]
ω			Stock	EPS	EPS Growth Rate Estimates	ate Estima		Long-Term	Pg	Payout Ratio		terative S	terative Solution Terminal Termina	erminalT	erminal
C		i di	ć	700	Eirot Call	Value		4	5	2		,	ğ	구/년 1945년	PEG Patro
0 1	Company	icker :	al C	Lachs	I I St Call	2020	Average	Growin	CI 07	- 1	2707	Froor	ָב ב	יייייי	Callo
_	ALLETE, Inc.	ALE	\$50,73	¥ V	6.00%	6.50%	6.25%	2.65%	%00.99		67.30%	\$0.00	10.11%	15.94	2.82
ω	Alliant Energy Corporation	Ę.	\$59.66	2.30%	5.45%	%00.9	2.58%	2.65%	61.00%		67.30%	\$0.00	10.01%	16.32	2.89
თ	Ameren Corporation	AEE	\$40.80	6.80%	5.85%	%00'9	6.22%	2.65%	65.00%	55.00% (67.30%	\$0.00	10.16%	15.77	2.79
7	 American Electric Power Company, Inc. 	AEP	\$54.66	4.90%	2.08%	2.00%	4.99%	2.65%	65.00%	64.00%	67.30%	\$0.00	10.08%	16.05	2.84
7	1 Avista Corporation	AVA	\$32.48	A A	2.00%	7.00%	%00.9	2.65%	67.00%	64.00%	67.30%	\$0.00	10.04%	16.20	2.87
1,7	2 Black Hills Corporation	BKT	\$53.06	Ϋ́	7.00%	4.50%	5.75%	2.65%	57.00%	29.00%	67.30%	\$0.00	9.71%	17.54	3,10
13	3 CenterPoint Energy, Inc.	CNP	\$23.08	5.70%	1.91%	1.00%	2.87%	5.65%	93.00%	80.00%	67.30%	\$0.00	9.85%	16.95	3.00
14	4 CMS Energy Corporation	CMS	\$31.69	6.20%	6.73%	2.50%	6.14%	2.65%	61.00%	62.00%	67.30%	\$0.00	9.89%	16.77	2.97
15			\$59.34	2.70%	2.38%	3.00%	2.69%	2.65%	65.00%		67.30%	\$0.00	9.45%	18.73	3.31
16		۵	\$70.94	6.30%	2.89%	8.00%	6.73%	2.65%	72.00%	72.00%	67.30%	\$0.00	9.21%	19.98	3.54
17	7 DTE Energy Company	DTE	\$78.15	2.00%	4.51%	2.00%	4.84%	2.65%	62.00%	%00.09	67.30%	\$0.00	10.27%	15.38	2.72
18		ρÇ	\$75.64	4.70%	4.49%	2.00%	4.73%	2.65%	72.00%	%00.99	67.30%	\$0.00	9.59%	18.06	3.19
19		EDE	\$25.27	2.00%	2.00%	3.00%	4.33%	2.65%	%00.97		67.30%	\$0.00	10.03%	16.23	2.87
20		ES	\$47.78	6.80%	%09.9	8.50%	7.30%	2.65%	29.00%	26.00%	67.30%	\$0.00	10.06%	16.12	2.85
21		밆	\$34.67	Ϋ́	Ā	7.00%	7.00%	2.65%	58.00%	54.00% (67.30%	\$0.00	7.64%	35.78	6.33
22		GXP	\$26.21	%00'9	6.37%	2.00%	5.79%	2.65%	70.00%		67.30%	\$0.00	10.22%	15.57	2.75
23	_	Δ	\$58.41	4.00%	4.00%	1.00%	3.00%	2.65%	49.00%	58.00% (67.30%	\$0.00	9.70%	17.55	3.10
24		NWE	\$50.29	2.00%	2.00%	6.50%	5.50%	2.65%	26.00%		67.30%	\$0.00	8.59%	24.18	4.28
25		OGE	\$34.96	2.00%	4.00%	3.00%	4.00%	2.65%	86.00%		67.30%	\$0.00	8.69%	23.44	4.15
56		OTTR	\$29.53	¥	%00.9	%00.6	7.50%	2.65%	70.00%	26.00%	67.30%	\$0.00	14.27%	8.26	1.46
27	7 Pinnacle West Capital Corporation	PNW	\$59.20	4.60%	5.30%	4.00%	4.63%	2.65%	63.00%		%08.79	\$0.00	9.92%	16.64	2.94
28		POR	\$34.50	5.20%	4.72%	%00'9	5.31%	2.65%	20.00%		67.30%	\$0.00	10.14%	15.84	2.80
58	SCANA Corporation	SCG	\$53,30	4.20%	4.30%	4.50%	4.33%	5.65%	22.00%	26.00%	67.30%	\$0.00	10.44%	14.84	2.63
30	0,	SO	\$44.89	3.50%	3.32%	4.50%	3.77%	2.65%	%00'92	71.00%	67.30%	\$0.00	9.92%	16.65	2.95
31	1 TECO Energy, Inc.	世	\$18.43	7.10%	9.20%	%00.9	7.43%	2.65%	83.00%	72.00% (67.30%	\$0.00	10.19%	15.66	2.77
32		X R	\$36.94	3.50%	3.40%	%00'9	4.30%	2.65%	61.00%	55.00%	67.30%	\$0.00	9.95%	16.56	2.93
33	Xcel Energy Inc.	ΧEL	\$32.56	5.00%	4.58%	4.50%	4.69%	2.65%	63.00%	64.00% (37.30%	\$0.00	10.08%	16.07	2.84
34													9.93%		
36	10												14.27%		
36												Μij	7.64%		

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4	Projected Annual																		
· w	Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
9	Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023			2026	2027	2028	2029	2030
7	ALLETE, Inc.	ALE	\$2.90	\$3.08	\$3.27	\$3.48	\$3.70	\$3.93	\$4.17	\$4.42	\$4.68	\$4.96			\$5.85	\$6.18	\$6.53	\$6.90	\$7.29
æ	Alliant Energy Corporation	FN-	\$3.48	\$3.67	\$3.88	\$4.10	\$4.32	\$4.57	\$4.82	\$5.09	\$5.38	\$5.68			\$6.70	\$7.08	\$7.48	\$7.90	\$8.35
တ	Ameren Corporation	AEE	\$2.40	\$2.55	\$2.71	\$2.88	\$3.05	\$3.24	\$3.44	\$3.65	\$3.87	\$4.09			\$4.83	\$5.10	\$5.39	\$5.70	\$6.02
9	American Electric Power Company, Inc.	AEP	\$3.34	\$3.51	\$3.68	\$3.87	\$4.06	\$4.26	\$4.48	\$4.71	\$4.96	\$5.23	\$5.52	\$5.83	\$6.16	\$6.51	\$6.88	\$7.27	\$7.68
Ξ	Avista Corporation	AVA	\$1.84	\$1.95	\$2.07	\$2.19	\$2.32	\$2.46	\$2.61	\$2.76	\$2.92	\$3.09			\$3.65	\$3.85	\$4.07	\$4.30	\$4.55
12	Black Hills Corporation	BKH		\$3.06	\$3.23	\$3.42	\$3.61	\$3.82	\$4.04	\$4.27	\$4.52	\$4.77			\$5.63	\$5.95	\$6.28	\$6.64	\$7.01
13	CenterPoint Energy, Inc.	CNP		\$1.46	\$1.50	\$1.55	\$1.59	\$1.64	\$1.69	\$1.75	\$1.83	\$1.92			\$2.25	\$2.38	\$2.51	\$2.65	\$2.80
14	CMS Energy Corporation	CMS	\$1.74	\$1.85	\$1.96	\$2.08	\$2.21	\$2.34	\$2.49	\$2.64	\$2.79	\$2.95			\$3.48	\$3.68	\$3.89	\$4.11	\$4.34
15	Consolidated Edison, Inc.			\$3.72	\$3.82	\$3.92	\$4,03	\$4.13	\$4.27	\$4.42	\$4.61	\$4.82			\$5.66	\$5.98	\$6.32	\$6.68	\$7.05
16	Dominion Resources, Inc.	<u> </u>	\$3.05	\$3.26	\$3.47	\$3.71	\$3.96	\$4.22	\$4.50	\$4.79	\$5.08	\$5.39			\$6.37	\$6.73	\$7.11	\$7.51	\$7.93
17	DTE Energy Company		YES!	\$5,35	\$5.61	\$5.88	\$6.16	\$6.46	\$6.78	\$7.13	\$7.50	\$7.90			\$9.31	\$9.83	\$10.39	\$10.98	\$11.60
18	Duke Energy Corporation	M.	\$4.13	\$4.33	\$4.53	\$4.74	\$4.97	\$5.20	\$5.46	\$5.73	\$6.03	\$6.35			\$7.48	\$7.90	\$8.35	\$8:82	\$9.32
19	Empire District Electric Company			\$1.62	\$1.69	\$1.76	\$1.84	\$1.92	\$2.00	\$2.10	\$2.20	\$2.32			\$2.73	\$2.88	\$3.05	\$3.22	\$3.40
50	Eversource Energy	ន		\$2.77	\$2.97	\$3.19	\$3.42	\$3.67	\$3.93	\$4.19	\$4.46	\$4.74			\$5.61	\$5.92	\$6.26	\$6.61	\$6.98
21	FirstEnergy Corp.		106	\$0.91	\$0.97	\$1.04	\$1.11	\$1.19	\$1.27	\$1.36	\$1.44	\$1.53			\$1.81	\$1.91	\$2.02	\$2.13	\$2.25
22	Great Plains Energy Inc.	COOK		\$1.66	\$1.76	\$1.86	\$1.97	\$2.08	\$2.20	\$2.33	\$2.46	\$2.60			\$3.07	\$3.24	\$3.42	\$3.62	\$3.82
23	IDACORP, Inc.	545	\$3,85	\$3.97	\$4.08	\$4.21	\$4.33	\$4.46	\$4.62	\$4.80	\$5.00	\$5.24			\$6.16	\$6.50	\$6.87	\$7.26	\$7.67
24	NorthWestern Corporation			\$2.09	\$2.20	\$2.32	\$2.45	\$2.59	\$2.73	\$2.88	\$3.04	\$3.21			\$3.79	\$4.00	\$4.23	\$4.47	\$4.72
52	OGE Energy Corp.		300	\$1.61	\$1.68	\$1.74	\$1.81	\$1.89	\$1.97	\$2.06	\$2.16	\$2.27			\$2.66	\$2.81	\$2.97	\$3.14	\$3.32
56	Otter Tall Corporation	ini.		\$3.29	\$3.54	\$3.80	\$4.09	\$4.39	\$4.71	\$5.03	\$5.36	\$5.70			\$6.74	\$7.12	\$7.53	\$7.95	\$8.40
27	Pinnacle West Capital Corporation			\$3.75	\$3.92	\$4.10	\$4.29	\$4.49	\$4.71	\$4.94	\$5.19	\$5.47			\$6.44	\$6.80	\$7.19	\$7.59	\$8.02
28	Portland General Electric Company	3817	\$2.18	\$2.30	\$2.42	\$2.55	\$2.68	\$2.82	\$2.97	\$3.14	\$3.31	\$3.49			\$4.11	\$4.35	\$4.59	\$4.85	\$5.13
59	SCANA Corporation		##X	\$3.95	\$4.13	\$4.30	\$4.49	\$4.69	\$4.90	\$5.13	\$5.39	\$5.67			\$6.67	\$7.05	\$7.45	\$7.87	\$8.31
30	Southern Company	SO		\$2.87	\$2.98	\$3.10	\$3.21	\$3.33	\$3.47	\$3.62	\$3.79	\$3.98			\$4.68	\$4.95	\$5.23	\$5.52	\$5.84
31	TECO Energy, Inc.	" 世		\$1.02	\$1.10	\$1.18	\$1.27	\$1.36	\$1.46	\$1.56	\$1.66	\$1.76			\$2.08	\$2.20	\$2.33	\$2.46	\$2.60
35	Westar Energy, Inc.	WR	\$2.35	\$2.45	\$2.56	\$2.67	\$2.78	\$2.90	\$3.03	\$3.18	\$3.33	\$3.51			\$4.13	\$4.36	\$4.61	\$4.87	\$5.14
8	Xcel Energy Inc.	XEL	\$2.03	\$2.13	\$2.23	\$2.33	\$2.44	\$2.55	\$2.68	\$2.81	\$2.96	\$3.11			\$3.67	\$3.87	\$4.09	\$4.33	\$4.57

- 0 B					Multi-Stag S Average El	Multi-Stage Growth Discounted Cash Flow Model 360 Day Average Stock Price Average EPS Growth Rate Estimate in First Stage	iscounted rerage Stoc Rate Estin	Cash Flov sk Price nate in Fin	v Model st Stage								
4 Projected Annual 5 Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
6 Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025 2	2026	2027	2028	2029	2030
7 ALLETE, Inc.	ALE	%00'99	64.75%	63.50%	62.25%	61.00%	62.05%	63.10% 6	64.15% 6	65.20% 6	66.25% 6	67.30% 67	67.30% 67	67.30%	67.30%	67.30%	67.30%
8 Alliant Energy Corporation	LNI	61.00%	61.50%	62.00%	62.50%	%00.69	63.72% 6	64.43% 6	65.15% 6	65.87% 6	.9 %65'99	67.30% 67	67.30% 67	67.30%	67.30%	67.30%	67.30%
9 Ameren Corporation	AEE	65.00%	62.50%	%00'09	57.50%	25.00%	57.05%	59.10% 6	61.15% 6	63.20% 6	65.25% 6	67.30% 67	67.30% 6	67.30% (67.30%	67.30%	67.30%
10 American Electric Power Company, Inc.	AEP	65.00%	64.75%	64.50%	64.25%	64.00%	64.55% (65.10% 6	65.65% 6	66.20% 6	.9 %51.99	67.30% 67	67.30% 67		67.30%	67.30%	%0£.79
11 Avista Corporation	AVA	%00'.29		65.50%	64.75%	64.00%	64.55% (65.65% 6		.9 %52.99	67.30% 67			67.30%	67.30%	%0£.79
12 Black Hills Corporation	BKH	57.00%		28.00%	58.50%	29.00%		61.77% 6	63.15% 6	64.54% 6	65.92% 6	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
 CenterPoint Energy, Inc. 	CNP	93.00%	89.75%	86.50%	83.25%	80.00%	77.88%	75.77% 7	73.65% 7	71.54% 6	69.42% 6	67.30% 67	67.30% 6	67.30% (67.30%	67.30%	67.30%
14 CMS Energy Corporation	CMS	61.00%	61.25%	61.50%	61.75%	62.00%		63.77% 6	64.65% 6						67.30%	67.30%	67.30%
15 Consolidated Edison, Inc.		65.00%	64.50%	64.00%	63.50%	63.00%	63.72% (64.43% 6	65.15% 6	65.87% 6	9 %65.99	67.30% 67	67.30% 67	67.30% (67.30%	67.30%	67.30%
16 Dominion Resources, Inc.	Δ	72.00%		72.00%	72.00%	72.00%	71.22%	70.43% 6	69.65% 6	68.87% 6	.9 %60.89	67.30% 67	67.30% 67	67.30% (67.30%	67.30%	67.30%
17 DTE Energy Company	DTE	62.00%		61.00%	%05.09	%00.09	61.22% (62.43% 6		64.87% 6	.9 %60.99	67.30% 67	67.30% 6		67.30%	67.30%	%0£.79
18 Duke Energy Corporation	DUK	72.00%		%00'69	67.50%	%00.99			66.65% 6		.9 %60'.29	67.30% 67	67.30% 67		67.30%	67.30%	%0£.79
19 Empire District Electric Company	EDE	76.00%		72.50%	70.75%	%00.69										67.30%	67.30%
20 Eversource Energy	ES	29.00%	58.25%	57.50%	56.75%	26.00%										67.30%	67.30%
21 FirstEnergy Corp.	Ш	28.00%		26.00%	25.00%	54.00%		58.43% 6		62.87% 6		67.30% 67	67.30% 67	67.30% (67.30%	67.30%	%0£'.29
22 Great Plains Energy Inc.	GXP	70.00%		65.50%	63.25%	61.00%		63.10% 6	64.15% 6	65.20% 6	66.25% 6	67.30% 67			67.30%	67.30%	67.30%
23 IDACORP, Inc.	ΔO	49.00%	51.25%	53.50%	55.75%	28.00%	29.55% (61.10% 6	62.65% 6	64.20% 6	65.75% 6	67.30% 67	67.30% 67	67.30% (67.30%	67.30%	67.30%
24 NorthWestern Corporation	NWE	26.00%		62.50%	65.75%	%00'69	68.72% (68.43% 6	68.15% 6	67.87% 6	67.59% 6	67.30% 67	67.30% 67		67.30%	67.30%	67.30%
25 OGE Energy Corp.	990	86.00%	79.25%	72.50%	65.75%	29.00%	60.38%	61.77% 6	63.15% 6	64.54% 6	65.92% 67	67.30% 67	67.30% 67	67.30%	67.30%	67.30%	67.30%
26 Otter Tail Corporation	OTTR	70,00%	%05.99	63.00%	29.50%	26.00%	27.88%	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% 67	67.30% 6	67.30%	67.30%	67.30%	67.30%
27 Pinnacle West Capital Corporation	PNW	63.00%	63.25%	63.50%	63.75%	64.00%	64.55% (65.10% 6	65.65% 6	66.20% 6	.9 %51.99	67.30% 67	67.30% 6	67.30% (67.30%	67.30%	67.30%
28 Portland General Electric Company	POR	20.00%	51.50%	23.00%	54.50%	26.00%	57.88%	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% 67	67.30% 67	67.30%	67.30%	67.30%	67.30%
29 SCANA Corporation	SCG	57.00%	56.75%	26.50%	56.25%	26.00%	57.88%	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% 67	67.30% 67	67.30%	67.30%	67.30%	67.30%
30 Southern Company	SO	%00'92	74.75%	73.50%	72.25%	71.00%		69.77% 6	69.15% 6	68.54% 6	67.92% 6	67.30% 67	67.30% 67	67.30%	67.30%	67.30%	67.30%
31 TECO Energy, Inc.	J E	83.00%	80.25%	77.50%	74.75%	72.00%	71.22%	70.43% 6	69.65% 6	68.87% 6	68.09% 67	67.30% 67	67.30% 67		67.30%	67.30%	67.30%
32 Westar Energy, Inc.	WR	61.00%	29.50%	28.00%	26.50%	22.00%						.30% 67	30%	30%	67.30%	67.30%	67.30%
33 Xcel Energy Inc.	XEL	63.00%	63.25%	63.50%	63.75%	64.00%	64.55% 6	65.10% 6	65.65% 6	66.20% 6	66.75% 67	.30% 67	30% 67	7.30%	67.30%	67.30%	67.30%

Multi-Stage Growth Discounted Cash Flow Model 360 Day Average Stock Price Average EPS Growth Rate Estimate in First Stage

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4 rð <u>C</u> Ω	Projected Annual Cash Flows		<u>ت</u>	[47]	[48]	[49]	[20]	[51]	[52]	[53]	[54]	[55]	[56]	[21]	[58]	[69]	[09]	[61]	[62]	[63]
																				Ferminal
ن 9	Company	Ticker	2	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Value
~ Y	ALLETE, Inc.	ALE	\$2	\$2.03	\$2.12	\$2.21	\$2.30	\$2.40	\$2.59	\$2.79	\$3.00	\$3.23		\$3.73	\$3.94	\$4.16	\$4.40	\$4.65	\$4.91	\$116.22
8 A	Alliant Energy Corporation	Ę	\$2		\$2.39	\$2.54	\$2.70	\$2.88	\$3.07	\$3.28	\$3.50	\$3.74	_	\$4.27	\$4.51	\$4.76	\$5.03	\$5.32	\$5.62	\$136.21
9 P	Ameren Corporation	AEE	æ	\$1.66	\$1.69	\$1.73	\$1.76	\$1.78	\$1.96	\$2.16	\$2.37	\$2.59	\$2.82	\$3.08	\$3.25	\$3.44	\$3.63	\$3.84	\$4.05	\$94.95
10 Aı	American Electric Power Company, Inc.	AEP	\$2		\$2.38	\$2.49	\$2.61	\$2.73	\$2.89	\$3.07	\$3.26	\$3.46	_	\$3.93	\$4.15	\$4.38	\$4.63	\$4.89	\$5.17	\$123.25
11 A	Avista Corporation	AVA	8		\$1.37	\$1.44	\$1.50	\$1.58	\$1.68	\$1.80	\$1.92	\$2.05	\$2.18	\$2.32	\$2.46	\$2.59	\$2.74	\$2.90	\$3.06	\$73.65
12 BI	Black Hills Corporation	KT T	₩		\$1.86	\$1.98	\$2.11	\$2.26	\$2.44	\$2.64	\$2.85	\$3.08	\$3.32	\$3.59	\$3.79	\$4.00	\$4.23	\$4.47	\$4.72	\$123.00
ე ე	CenterPoint Energy, Inc.	SNP	2		\$1.35	\$1.34	\$1.32	\$1.31	\$1.32	\$1.33	\$1,35	\$1.37	\$1.40	\$1.43		\$1.60	\$1.69	\$1.79	\$1.89	\$47.52
14 Q	CMS Energy Corporation	CMS	5		\$1.20	\$1.28	\$1.36	\$1.45	\$1.56	\$1.68	\$1.80	\$1.94	\$2.07	\$2.22		\$2.48	\$2.62	\$2.77	\$2.92	\$72.82
15 C	Consolidated Edison, Inc.	Э	\$2		\$2.46	\$2.51	\$2.56	\$2.60	\$2.72	\$2.85	\$3.00	\$3.18	\$3.38	\$3.61		\$4.03	\$4.25	\$4.49	\$4.75	\$132.08
16 D	Dominion Resources, inc.	۵	\$2		\$2.50	\$2.67	\$2.85	\$3.04	\$3.21	\$3.37	\$3.54	\$3.71	\$3.88	\$4.06		\$4.53	\$4.78	\$5.05	\$5.34	\$158.53
17 D	OTE Energy Company	PTE	೮		\$3.45	\$3.58	\$3.73	\$3.88	\$4.15	\$4.45	\$4.77	\$5.13	\$5.51	\$5.93		\$6.62	\$6.99	\$7.39	\$7.81	\$178.42
18 D	Duke Energy Corporation	ž	6		\$3.19	\$3.27	\$3.35	\$3.43	\$3.61	\$3.81	\$4.02	\$4.25	\$4.50	\$4.77		\$5.32	\$5.62	\$5.94	\$6.27	\$168.31
19 Ē	Empire District Electric Company	EDE	8		\$1.25	\$1.28	\$1.30	\$1.32	\$1.38	\$1.44	\$1.50	\$1.57	\$1.65	\$1.74		\$1.94	\$2.05	\$2.17	\$2.29	\$55,19
20 E	Eversource Energy	ES	2	\$1.63	\$1.73	\$1.83	\$1.94	\$2.05	\$2.27	\$2.51	\$2.75	\$3.01	\$3.29	\$3.57		\$3.99	\$4.21	\$4,45	\$4.70	\$112.61
21 FI	FirstEnergy Corp.	뿐	ာမှ		\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87	\$0.96	\$1.05	\$1.15		\$1.29	\$1.36	\$1.44	\$1.52	\$80.62
22 G	Great Plains Energy inc.	GX B			\$1.19	\$1.22	\$1.24	\$1.27	\$1.37	\$1.47	\$1.58	\$1.70	\$1.82	\$1.95		\$2.18	\$2.30	\$2.43	\$2.57	\$59.49
23 ID	IDACORP, Inc.	ΔA	\$		\$2.09	\$2.25	\$2.42	\$2.59	\$2.75	\$2.93	\$3.13	\$3.37	\$3.63	\$3.92		\$4.38	\$4.63	\$4.89	\$5.16	\$134.61
24 N	VorthWestern Corporation	NWE	€		\$1,31	\$1.45	\$1.61	\$1.79	\$1.88	\$1.97	\$2.07	\$2.18	\$2.29	\$2.41		\$2.69	\$2.85	\$3.01	\$3.18	\$114.17
25 0	OGE Energy Corp.	OGE	6		\$1.33	\$1.26	\$1.19	\$1.11	\$1.19	\$1.27	\$1.36	\$1.46	\$1.57	\$1.70		\$1.89	\$2.00	\$2.11	\$2.23	\$77.81
26 0	Otter Tail Corporation	OTTR	\$2		\$2.35	\$2.39	\$2.43	\$2.46	\$2.73	\$3.01	\$3.31	\$3.62	\$3.95	\$4.29		\$4.79	\$5.07	\$5.35	\$5.65	\$69.35
27 Pi	Pinnacle West Capital Corporation	PNW	\$2	\$2.36	\$2.48	\$2.60	\$2.74	\$2.87	\$3.04	\$3.22	\$3.41	\$3.62	\$3.85	\$4.10		\$4.58	\$4.84	\$5.11	\$5.40	\$133.53
28 Pc	Portland General Electric Company	POR	5		\$1.25	\$1.35	\$1.46	\$1.58	\$1.72	\$1.87	\$2.04	\$2.22	\$2.41	\$2.62		\$2.93	\$3.09	\$3.27	\$3.45	\$81.20
29 S(SCANA Corporation	SCG	\$2	\$2.25	\$2.34	\$2.43	\$2.53	\$2.62	\$2.84	\$3.07	\$3.32	\$3.60	\$3.91	\$4.25	\$4.49	\$4.74	\$5.01	\$5.30	\$5.60	\$123.40
30 Sč	Southern Company	SO	\$2		\$2.23	\$2.28	\$2.32	\$2.37	\$2.44	\$2.53	\$2.62	\$2.73	\$2.85	\$2.98	\$3.15	\$3.33	\$3.52	\$3.72	\$3.93	\$97.19
31 1.	TECO Energy, Inc.	世	90	\$0.85	\$0.88	\$0.91	\$0.95	\$0.98	\$1.04	\$1.10	\$1.15	\$1.21	\$1.27	\$1.33	\$1.40	\$1.48	\$1.57	\$1.65	\$1.75	\$40.66
	Westar Energy, Inc.	×	₩	\$1.50	\$1.52	\$1.55	\$1.57	\$1.60	\$1.73	\$1.88	\$2.04	\$2.22	\$2.41	\$2.63	\$2.78	\$2.93	\$3.10	\$3.28	\$3.46	\$85.16
33 X	Xcel Energy Inc.	XEL	\$1	\$1.34	\$1.41	\$1.48	\$1.55	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.19	\$2.34	\$2.47	\$2.61	\$2.76	\$2.91	\$3.08	\$73.45

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						Average E	Average EPS Growth Rate Estimate in First Stage	Rate Estil	nate in Fi	rst Stage									
Projected Annual Data																			
		[64]	[65]	[99]	[67]	[68]	[69]	[02]	[71]	[72]	[73]	[74]	[75]	[9/]	[77]	[78]	[62]	[80]	[81]
		Initia																	
	Ticker	Outflow	6/25/15	12/31/15	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	6/30/24 6	6/30/25	6/30/26	6/30/27	6/30/28	6/30/59	6/30/30
	ALE	(\$50.73)	\$0.00	\$1.05	\$2.10	\$2.21	\$2.30	\$2.40	\$2.59	\$2.79			\$3.47	\$3.73	\$3.94	\$4.16	\$4.40	\$4.65	\$121.12
Alliant Energy Corporation	Ŗ	(\$59.66)	\$0.00	\$1.16	\$2.30	\$2.54	\$2.70	\$2.88	\$3.07	\$3.28		\$3.74	\$4.00	54.27	\$4.51	\$4.76	\$5.03	\$5.32	\$141.83
	AEE	(\$40.80)	\$0.00	\$0.86	\$1.71	\$1.73	\$1.76	\$1.78	\$1.96	\$2.16	\$2.37	\$2.59	\$2.82	\$3.08	\$3.25	\$3.44	\$3.63	\$3.84	\$99.00
American Electric Power Company, Inc.	AEP	(\$54.66)	\$0.00	\$1.18	\$2.34	\$2.49	\$2.61	\$2.73	\$2.89	\$3.07	\$3.26	\$3.46	3.69	\$3.93	\$4.15	\$4.38	\$4.63	\$4.89	\$128.42
	AVA	(\$32.48)	\$0.00	\$0.68	\$1.35	\$1.44	\$1.50	\$1.58	\$1.68	\$1.80		\$2.05	\$2.18	\$2.32	\$2.46	\$2.59	\$2.74	\$2.90	\$76.70
	BKH	(\$53.06)	\$0.00	\$0.90	\$1.79	\$1.98	\$2.11	\$2.26	\$2.44	\$2.64	\$2.85	\$3.08	\$3.32	\$3.59	\$3.79	\$4.00	\$4.23	\$4.47	\$127.72
CenterPoint Energy, Inc.	CNP	(\$23.08)	\$0.00	\$0.70	\$1.38	\$1.34	\$1.32	\$1.31	\$1.32	\$1.33	\$1.35	\$1.37	\$1.40	\$1.43	\$1.51	\$1.60	\$1.69	\$1.79	\$49.40
CMS Energy Corporation	CMS	(\$31.69)	\$0.00	\$0.58	\$1.16	\$1.28	\$1.36	\$1.45	\$1.56	\$1.68		\$1.94			\$2.35	\$2.48	\$2.62	\$2.77	\$75.74
Consolidated Edison, Inc.		(\$59.34)	\$0.00	\$1.25	\$2.45	\$2.51	\$2.56	\$2.60	\$2.72	\$2.85	\$3.00	\$3.18	\$3.38	\$3.61	\$3.81	\$4.03	\$4.25	\$4.49	\$136.83
Dominion Resources, Inc.	۵	(\$70.94)	\$0.00	\$1.21	\$2.42	\$2.67	\$2.85	\$3.04	\$3.21	\$3.37					\$4.29	\$4.53	\$4.78	\$5.05	\$163.87
	DTE	(\$78.15)	\$0.00	\$1.72	\$3.40	\$3.58	\$3.73	\$3.88	\$4.15	\$4.45	\$4.77	\$5.13			\$6.26	\$6.62	\$6.99	\$7.39	\$186.23
Duke Energy Corporation	DÜK	(\$75.64)	\$0.00	\$1.61	\$3.19	\$3.27	\$3.35	\$3.43	\$3.61	\$3.81	\$4.02	\$4.25	\$4.50	\$4.77	\$5.03	\$5.32	\$5.62	\$5.94	\$174.58
Empire District Electric Company	EDE	(\$25.27)	\$0.00	\$0.64	\$1.26	\$1.28	\$1.30	\$1.32	\$1.38	\$1.44		\$1.57			\$1.84	\$1.94	\$2.05	\$2.17	\$57.48
	S	(\$47.78)	\$0.00	\$0.85	\$1.69	\$1.83	\$1.94	\$2.05	\$2.27	\$2.51					\$3.77	\$3.99	\$4.21	\$4.45	\$117.31
	빞	(\$34.67)	\$0.00	\$0.27	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79		\$0.96		\$1.15	\$1.22	\$1.29	\$1.36	\$1.44	\$82,13
Great Plains Energy Inc.	GXP	(\$26.21)	\$0.00	\$0.60	\$1.20	\$1.22	\$1.24	\$1.27	\$1.37	\$1.47			\$1.82		\$2.06	\$2.18	\$2.30	\$2.43	\$62.07
	Δ	(\$58.41)	\$0.00	\$1.01	\$1.97	\$2.25	\$2.42	\$2.59	\$2.75	\$2.93					\$4.14	\$4.38	\$4.63	\$4.89	\$139.77
NorthWestern Corporation	NWE	(\$50.29)	\$0.00	\$0.61	\$1.20	\$1.45	\$1.61	\$1.79	\$1.88			\$2.18			\$2.55	\$2.69	\$2,85	\$3.01	\$117.35
	OGE	(\$34.96)	\$0.00	\$0.72	\$1.41	\$1.26	\$1.19	\$1.11	\$1.19	\$1.27					\$1.79	\$1.89	\$2.00	\$2.11	\$80.05
	OTTR	(\$29.53)	\$0.00	\$1.19	\$2.39	\$2.39	\$2.43	\$2.46	\$2.73			\$3.62			\$4.54	\$4.79	\$5.07	\$5.35	\$75.00
Pinnacle West Capital Corporation	PNW	(\$59.20)	\$0.00	\$1.22	\$2.41	\$2.60	\$2.74	\$2.87	\$3.04	\$3.22	\$3.41	\$3.62	\$3.85		\$4.33	\$4.58	\$4.84	\$5.11	\$138.93
Portland General Electric Company	POR	(\$34.50)	\$0.00	\$0.59	\$1.18	\$1.35	\$1.46	\$1.58	\$1.72	\$1.87	\$2.04	\$2.22		52.62	\$2.77	\$2.93	\$3.09	\$3.27	\$84.65
	SCG	(\$53.30)	\$0.00	\$1.17	\$2.30	\$2.43	\$2,53	\$2.62	\$2.84	\$3.07	\$3.32	\$3.60	\$3.91	\$4.25	\$4.49	\$4.74	\$5.01	\$5.30	\$128.99
	SO	(\$44.89)	\$0.00	\$1.13	\$2.23	\$2.28	\$2.32	\$2.37	\$2.44	\$2.53	\$2.62	\$2.73	\$2.85	\$2.98	\$3.15	\$3.33	\$3.52	\$3.72	\$101.12
	끧	(\$18.43)	\$0.00	\$0.44	\$0.88	\$0.91	\$0.95	\$0.98	\$1.04	\$1.10	\$1.15	\$1.21	1.27	51.33	\$1.40	\$1.48	\$1.57	\$1.65	\$42.41
	WR	(\$36.94)	\$0.00	\$0.77	\$1.53	\$1.55	\$1.57	\$1,60	\$1.73	\$1.88	\$2.04	\$2.22	52.41	\$2.63	\$2.78	\$2.93	\$3.10	\$3.28	\$88.62
	ΧEΓ	(\$32.56)	\$0.00	\$0.69	\$1.37	\$1.48	\$1,55	\$1.63	\$1.73	\$1.83	\$1.94	\$2.06	\$2.19	\$2.34	\$2.47	\$2.61	\$2.76	\$2.91	\$76.52

Multi-Stage Growth Discounted Cash Flow Model 360 Day Average Stock Price High EPS Growth Rate Estimate in First Stage

- α ω

	Inputs		[]	[2]	[3]	[4]	[5]	[9]	Ē	<u>8</u>	6	[10]	[11]	[12]	[13]
			Stock	EPS	EPS Growth Rate Estimates	ate Estima	ates	Long-Term	ď	Payout Ratio	ō	Iterative	terative Solution 1	Terminal Termina	Ferminal
					i i	Value	E							۲ ا	PEG
O	Company	icker	Price	Zacks	First Call	Line	Growth	Growth	2015	2019	2025	Proof	IRR	Ratio	Ratio
∢	ALLETE, Inc.	٩LE	\$50.73	NA	%00'9	6.50%	6.50%	2.65%	%00.99	61.00%	67.30%	\$0.00	10.18%	15.69	2.78
∢	Alliant Energy Corporation	Ę	\$59.66	5.30%	5.45%	%00'9	%00'9	2.65%	61.00%	63.00%	67.30%	\$0.00	10.13%	15.89	2.81
∢	Ameren Corporation	AEE	\$40.80	6.80%	5.85%	%00'9	6.80%	2.65%	65.00%	25.00%	67.30%	\$0.00	10.33%	15.21	2.69
⋖	American Electric Power Company, Inc. 🔑	٩EP	\$54.66	4.90%	2.08%	2.00%	5.08%	5.65%	65.00%	64.00%	67.30%	\$0.00	10.11%	15.96	2.82
⋖	Avista Corporation	AVA	\$32.48	Ϋ́	2.00%	7.00%	7.00%	2.65%	67.00%	64.00%	67.30%	\$0.00	10.33%	15.21	2.69
m	Black Hills Corporation	BKT	\$53.06	¥	7.00%	4.50%	7.00%	2.65%	57.00%	29.00%	67.30%	\$0.00	10.04%	16.21	2.87
\circ	CenterPoint Energy, Inc.	CNP	\$23.08	5.70%	1.91%	1.00%	5.70%	2.65%	93.00%	80.00%	67,30%	\$0.00	10.72%	14.04	2.48
O	_	CMS	\$31.69	6.20%	6.73%	2.50%	6.73%	2.65%	61.00%	62.00%	67.30%	\$0.00	10.05%	16.16	2.86
\circ		딥	\$59.34	2.70%	2.38%	3.00%	3.00%	2.65%	65.00%	63.00%	67.30%	\$0.00	9.53%	18.35	3.25
ப	nc.	۵	\$70.94	6.30%	2.89%	8.00%	8.00%	2.65%	72.00%	72.00%	67.30%	\$0.00	9.51%	18.42	3.26
\Box		DTE	\$78.15	2.00%	4.51%	2.00%	2.00%	2.65%	62.00%	%00.09	67.30%	\$0.00	10.32%	15.23	2.69
\Box	lon	ŠČ	\$75.64	4.70%	4.49%	2.00%	2.00%	2.65%	72.00%	%00.99	67.30%	\$0.00	%99.6	17.74	3.14
ш	stric Company	EDE	\$25.27	2.00%	2.00%	3.00%	2.00%	2.65%	%00.92	%00'69	67.30%	\$0.00	10.23%	15.54	2.75
ш	,	ES	\$47.78	6.80%	9.60%	8.50%	8.50%	2.65%	29.00%	26.00%	67.30%	\$0.00	10.40%	14.98	2.65
щ		밆	\$34.67	¥	₹	7.00%	7.00%	2.65%	58.00%	54.00%	67.30%	\$0.00	7.64%	35.78	6.33
ത	nergy Inc.	ЗХР	\$26.21	%00.9	6.37%	2.00%	6.37%	2.65%	70.00%	61.00%	67.30%	\$0.00	10.39%	15.01	2.66
브		ΙDΑ	\$58.41	4.00%	4.00%	1.00%	4.00%	2.65%	49.00%	28.00%	67.30%	\$0.00	9.97%	16.45	2.91
z	oration	JWE	\$50.29	2.00%	2.00%	6.50%	6.50%	2.65%	26.00%	%00'69	67.30%	\$0.00	8.79%	22.65	4.01
0		GE	\$34.96	2.00%	4.00%	3.00%	2.00%	2.65%	86.00%	29.00%	67.30%	\$0.00	8.89%	21.93	3.88
Ó		ŢR	\$29.53	Ϋ́	9.00%	%00.6	9.00%	2.65%	70.00%	26.00%	67.30%	\$0.00	15.01%	7.60	1.34
ā	oration	PNW	\$59.20	4.60%	5.30%	4.00%	5,30%	2.65%	63.00%	64.00%	67.30%	\$0.00	10.11%	15.94	2.82
Ō.	ectric Company	POR	\$34.50	5.20%	4.72%	%00'9	6.00%	2.65%	20.00%	26.00%	67.30%	\$0.00	10.34%	15.17	2.68
Ō	_	SCG	\$53.30	4.20%	4.30%	4.50%	4.50%	2.65%	27.00%	26.00%	67.30%	\$0.00	10.49%	14.69	2.60
Ō	Southern Company	SO	\$44.89	3.50%	3.32%	4.50%	4.50%	2.65%	76.00%	71.00%	67.30%	\$0.00	10.13%	15.87	2.81
F	TECO Energy, Inc.	世	\$18.43	7.10%	9.20%	%00'9	9.20%	2.65%	83.00%	72.00%	67.30%	\$0.00	10.72%	14.03	2.48
S	Westar Energy, Inc.	VR.	\$36.94	3.50%	3.40%	%00'9	%00.9	2.65%	61.00%	25.00%	67.30%	\$0.00	10.43%	14.88	2.63
ΧI	Xcel Energy Inc.	Ä	\$32.56	2.00%	4.58%	4.50%	5.00%	5.65%	63.00%	64.00%	67.30%	\$0.00	10.16%	15.76	2.79
												Mean	10.17%		
												Max	15.01%		
												Ē	7.64%		

							Multi-Stag	Multi-Stage Growth Discounted Cash Flow Model 360 Day Average Stock Price	Discounted rerage Sto	Cash Flo	w Model								
							High EP	High EPS Growth Rate Estimate in First	ate Estim	ate in Firs	st Stage								
互叫	Projected Annual Earnings per Share		[41]	[15]	[16]	[17]	[18]	[6]	[20]	[21]	[22]	[23]	[24]	[25]	[56]	[27]	[28]	[29]	[30]
ΙČ		ا م	2014	2015	2016	2017	2018	2018	2020	2021	2002	2003	2004	2025	2006	7000	8000	9000	0000
SI	ייייייייייייייייייייייייייייייייייייייי	2 2	100	2122	200	107	2123	200	2707	1707	2772	202	1707	277	0707	2021	2020	6707	2007
<i>=</i> '	ALLE I E, Inc.	ALE	%Z,9O	\$3.09	\$3.29	\$3.50	\$3.73	43.97	\$4.23	\$4.49	\$4.76	\$5.04	\$5.34	\$5.64	\$5.96	\$6.29	\$6.65	\$7.02	\$7.42
ã	Alliant Energy Corporation	Ę	\$3.48	\$3.69	\$3.91	\$4.14	\$4.39	\$4.66	\$4.93	\$5.22	\$5.53	\$5.85	\$6.18	\$6.53	\$6.90	\$7,29	\$7.70	\$8.14	\$8.60
7	Ameren Corporation	AEE	\$2.40	\$2.56	\$2.74	\$2.92	\$3.12	\$3,33	\$3.56	\$3.78	\$4.02	\$4.26	\$4.51	\$4.77	\$5.03	\$5.32	\$5.62	\$5.94	\$6.27
7	American Electric Power Company, Inc.	AEP	\$3.34	\$3.51	\$3.69	\$3.88	\$4.07	\$4.28	\$4.50	\$4.74	\$4.99	\$5.26	\$5.56	\$5.87	\$6.20	\$6.55	\$6.92	\$7.32	\$7.73
7	Avista Corporation	AVA	\$1.84	\$1.97	\$2.11	\$2.25	\$2.41	\$2.58	\$2.76	\$2.94	\$3.12	\$3.31	\$3.51	\$3.71	\$3.91	\$4.14	\$4.37	\$4.62	\$4.88
m	Black Hills Corporation	BKH	\$2.89	\$3.09	\$3.31	\$3.54	\$3.79	\$4.05	\$4.33	\$4.61	\$4.90	\$5.20	\$5.51	\$5.82	\$6.15	\$6.50	\$6.86	\$7.25	\$7.66
ñ	CenterPoint Energy, Inc.	CNP	\$1.42	\$1.50	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98	\$2.09	\$2.21	\$2.34	\$2.47	\$2.61	\$2.76	\$2.91	\$3.08	\$3.25	\$3.43
()	CMS Energy Corporation	CMS	\$1.74	\$1.86	\$1.98	\$2.12	\$2.26	\$2.41	\$2.57	\$2.73	\$2.90	\$3.07	\$3.25	\$3.44	\$3.63	\$3.84	\$4.05	\$4.28	\$4.53
バ	Consolidated Edison, Inc.		\$3.62	\$3.73	\$3.84	\$3.96	\$4.07	\$4.20	\$4.34	\$4.51	\$4.70	\$4.93	\$5.19	\$5.48	\$5.79	\$6.12	\$6.46	\$6.83	\$7.21
Ã	Dominion Resources, Inc.	△	\$3.05	\$3.29	\$3.56	\$3.84	\$4.15	\$4.48	\$4.82	\$5.17	\$5.52	\$5.88	\$6.23	\$6.59	\$6.96	\$7.35	\$7.77	\$8.21	\$8.67
_	DTE Energy Company	DTE	\$5.10	\$5.36	\$5.62	\$5.90	\$6.20	\$6.51	\$6.84	\$7.20	\$7.58	\$7.99	\$8.44	\$8.91	\$9.42	\$9.95	\$10.51	\$11.11	\$11.73
~	Duke Energy Corporation	PÜK	\$4.13	\$4.34	\$4.55	\$4.78	\$5.02	\$5.27	\$5.54	\$5.83	\$6.14	\$6.47	\$6.83	\$7.22	\$7.63	\$8.06	\$8.51	\$8.99	\$9.50
	Empire District Electric Company	EDE	\$1.55	\$1.63	\$1.71	\$1.79	\$1.88	\$1.98	\$2.08	\$2.19	\$2.30	\$2.43	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.38	\$3.57
	Eversource Energy	S	\$2.58	\$2.80	\$3.04	\$3.30	\$3.58	\$3.88	\$4.19	\$4.51	\$4.83	\$5.14	\$5.46	\$5.77	\$6.09	\$6.44	\$6.80	\$7.19	\$7,59
:	FirstEnergy Corp.	밆	\$0.85	\$0.91	\$0.97	\$1.04	\$1.11	\$1.19	\$1.27	\$1.36	\$1.44	\$1.53	\$1.62	\$1.71	\$1.81	\$1.91	\$2.02	\$2.13	\$2.25
r F	Great Plains Energy Inc.	GXP	\$1.57	\$1.67	\$1.78	\$1.89	\$2.01	\$2.14	\$2.27	\$2.41	\$2.56	\$2.71	\$2.86	\$3.02	\$3.20	\$3.38	\$3.57	\$3.77	\$3.98
(1)	DACORP, Inc.	Δ	\$3.85	\$4.00	\$4.16	\$4.33	\$4.50	\$4.68	\$4.88	\$5.11	\$5.35	\$5.63	\$5.93	\$6.26	\$6.62	\$6.99	\$7.39	\$7.80	\$8.25
_	NorthWestern Corporation	NWE	\$1.98	\$2.11	\$2.25	\$2.39	\$2.55	\$2.71	\$2.89	\$3.06	\$3.25	\$3.44	\$3.64	\$3.85	\$4.07	\$4.30	\$4.54	\$4.80	\$5.07
_	OGE Energy Corp.	OGE	\$1.55	\$1.63	\$1.71	\$1.79	\$1.88	\$1.98	\$2.08	\$2.19	\$2.30	\$2.43	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.38	\$3.57
$\dot{\sim}$	Otter Tail Corporation	OTTR	\$3.06	\$3.34	\$3.64	\$3.96	\$4.32	\$4.71	\$5.11	\$5.51	\$5.91	\$6.31	\$6.70	\$7.08	\$7.48	\$7.91	\$8.35	\$8.82	\$9.32
~	Pinnacle West Capital Corporation	PNW	\$3,58	\$3.77	\$3.97	\$4.18	\$4.40	\$4.63	\$4.88	\$5.15	\$5.43	\$5.73	\$6.05	\$6.39	\$6.75	\$7.14	\$7.54	\$7.96	\$8.42
	Portland General Electric Company	POR	\$2.18	\$2.31	\$2.45	\$2.60	\$2.75	\$2.92	\$3.09	\$3.27	\$3.46	\$3.66	\$3.87	\$4.09	\$4.32	\$4.57	\$4.82	\$5.10	\$5.39
~	SCANA Corporation	SCG	\$3.79	\$3.96	\$4.14	\$4.33	\$4.52	\$4.72	\$4.94	\$5.19	\$5.45	\$5.74	\$6.05	\$6.39	\$6.75	\$7.13	\$7.54	\$7.96	\$8.41
.~	Southern Company	S	\$2.77	\$2.89	\$3.02	\$3.16	\$3.30	\$3.45	\$3.61	\$3.79	\$3.98	\$4.19	\$4.42	\$4.67	\$4.94	\$5.21	\$5.51	\$5.82	\$6.15
	TECO Energy, Inc.	里	\$0.95	\$1.04	\$1.13	\$1.24	\$1.35	\$1.48	\$1.60	\$1.73	\$1.86	\$1.99	\$2.11	\$2.23	\$2.36	\$2.49	\$2.63	\$2.78	\$2.93
2	Westar Energy, Inc.	WR	\$2,35	\$2.49	\$2.64	\$2.80	\$2.97	\$3.14	\$3.33	\$3.53	\$3.73	\$3,95	\$4.17	\$4.41	\$4.66	\$4.92	\$5.20	\$5.49	\$5.81
ತ	Xcel Energy Inc.	XEL	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	£2 87	\$3.02	43 18	38.8	\$3.55	23 75	83 96	47 78	CV V&	\$4 67

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4 Projected Annual			5	5	5	5	5	2	5	200	2	3	5			3	i i	2
Dividend Payout Natio			2	[26]	2	5	(2)	[00]	2	[00]	[60]	(1	[+1]	17	5	[##]	(42)	[0+]
6 Company	Ticker		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026 2	2027	2028	2029	2030
7 ALLETE, Inc.	ALE			64.75%	63.50%	62.25%	61.00%	62.05%	63.10% 6	l.	65.20% 6	66.25% 6			~	9	Į,	67.30%
8 Alliant Energy Corporation	LNT			61.50%	62.00%	62.50%	63.00%	63.72% 6	34.43% E	65.15% 6	65.87% 6	66.59% 6	67.30% 6	67.30% 67	.30% 67	67.30% 6	7.30% 6	67.30%
9 Ameren Corporation	AEE		82.00%	62.50%	%00.09	27.50%	25.00%	57.05%	59.10% 6	61.15% 6	63.20% 6	65.25% 6	67.30% 6	67.30% 67	67.30% 67			67.30%
10 American Electric Power Company, Inc.	AEP		85.00%	64.75%	64.50%	64.25%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30% 6	67.30% 67	67.30% 67		67.30% 6	67.30%
11 Avista Corporation	AVA		67.00%	66.25%	65.50%	64.75%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30% 6	67.30% 67	67.30% 67	.9 %06.79		67.30%
12 Black Hills Corporation	BKH		27.00%	57.50%	58.00%	58.50%	29.00%	60.38%	61.77% 6	63.15% 6	64.54% 6	65.92% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
13 CenterPoint Energy, Inc.	CNP		93.00%	89.75%	86.50%	83.25%	80.00%	77.88% 7	75.77% 7	73.65% 7	71.54% 6	69.42% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
14 CMS Energy Corporation	CMS		61.00%	61.25%	61.50%	61.75%	62.00%	62.88%	63.77% 6	64.65% 6	65.54% 6	66.42% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
15 Consolidated Edison, Inc.			85.00%	64.50%	64.00%	63.50%	63.00%	63.72% 6	64.43% E	65.15% 6	65.87% 6	66.59% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
16 Dominion Resources, Inc.	۵			72.00%	72.00%	72.00%	72.00%	71.22% 7	70.43% E	69.65% 6	68.87% 6	68.09% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
17 DTE Energy Company	DTE			61.50%	61.00%	%05.09	%00'09	61.22% 6	62.43% 6	63.65% 6	64.87% 6	9 %60.99	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
18 Duke Energy Corporation	PČK		72.00%	70.50%	69.00%	67.50%	%00'99	66.22% 6	66.43%	66.65% 6	66.87% 6	67.09% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
19 Empire District Electric Company	EDE		76.00%	74.25%	72.50%	70.75%	%00.69		68.43% 6	68.15% 6	67.87% 6	67.59% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
20 Eversource Energy	ES		29.00%	58.25%	57.50%	56.75%	26.00%		59.77% 6	61.65% 6		65.42% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6		67.30%
21 FirstEnergy Corp.	띮	Ĭ	28.00%	27.00%	26.00%	25.00%	54.00%		58.43% E	60.65% 6	62.87% 6	65.09% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% e	67.30%
22 Great Plains Energy Inc.	GXP		%00.07	67.75%	65.50%	63.25%	61.00%	62.05% 6	63.10% 6	64.15% 6	65.20% 6	66.25% 6	67,30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
23 IDACORP, Inc.	DΑ		49.00%	51.25%	53.50%	55.75%	28.00%	29.55%	61.10% 6	62,65% 6	64.20% 6	65.75% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
24 NorthWestern Corporation	NWE		26.00%	59.25%	62.50%	65.75%	%00'69	68.72%	68.43% 6	68.15% 6	67.87% 6	67.59% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
25 OGE Energy Corp.	OGE		%00 [.] 98	79.25%	72.50%	65.75%	29.00%	60.38%	61.77% 6	63.15% 6	64.54% 6	65.92% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
26 Otter Tail Corporation	OTTR		%00.07	66.50%	63.00%	29.50%	26.00%		59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
27 Pinnacle West Capital Corporation	PNW		63.00%	63.25%	63.50%	63.75%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
28 Portland General Electric Company	POR		20.00%	51.50%	53.00%	54.50%	26.00%	57.88% 5	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
29 SCANA Corporation	SCG		27.00%	26.75%	26.50%	56.25%	26.00%	57.88% 5	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
_	SO		%00.9/	74.75%	73.50%	72.25%	71.00%	70.38%	69.77% 6	69.15% 6	68.54% 6	67.92% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
31 TECO Energy, Inc.	世		83.00%	80.25%	77.50%	74.75%	72.00%	71.22% 7	70.43% 6	69.65% 6	68.87% 6	68.09% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
32 Westar Energy, Inc.	×		61.00%	29.50%	28.00%	56.50%	22.00%			61.15% 6	63.20% 6	65.25% 6	67.30% 6		67.30% 67	67.30% 6	67.30% 6	67.30%
33 Xcel Energy Inc.	XEL		63.00%	63.25%	63.50%	63.75%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%

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4 %	Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]
																			erminal
9	Company	Ticker	2015	2016	2017	2018	2019	2020	2021		-					2028	2029	2030	Value
7	ALLETE, Inc.	ALE	\$2.04	\$2.13	\$2.22	\$2.32	\$2.42	\$2.62	\$2.83		-		-			\$4.47	\$4.73	\$4.99	\$116.44
ω	Alliant Energy Corporation	LN	\$2.25	\$2.40	\$2.57	\$2.75	\$2.93	\$3.14	\$3.37	\$3.60	-					\$5.18	\$5.48	\$5.79	\$136.64
თ	Ameren Corporation	AEE	\$1.67	\$1.71	\$1.75	\$1.80	\$1.83	\$2.03	\$2.24				٠,	\$3.39		\$3.78	\$4.00	\$4.22	\$95.42
9	American Electric Power Company, Inc.	AEP	\$2.28	\$2.39	\$2.50	\$2.62	\$2.74	\$2.91	\$3.08	\$3.28	-					\$4.66	\$4.92	\$5.20	\$123.32
7	Avista Corporation	AVA	\$1.32	\$1.40	\$1.48	\$1.56	\$1.65	\$1.78	\$1.91					_		\$2.94	\$3.11	\$3.28	\$74.20
12	Black Hills Corporation	BKH	\$1.76	\$1.90	\$2.05	\$2.22	\$2.39	\$2.61	\$2.85	_				_		\$4.62	\$4.88	\$5.16	\$124.18
13	CenterPoint Energy, Inc.	CNP	\$1.40	\$1.42	\$1.45	\$1.48	\$1.50	\$1.54	\$1.59	\$1.63	-		٠,	\$1.85 \$		\$2.07	\$2.19	\$2.31	\$48.22
14	CMS Energy Corporation	CMS	\$1.13	\$1.21	\$1.30	\$1.39	\$1.49	\$1.61	\$1.74		\$2.01	\$2.16	\$2.31		\$2.58	\$2.73	\$2.88	\$3.05	\$73.14
15	Consolidated Edison, Inc.	읍	\$2.42	\$2.48	\$2.53	\$2.59	\$2.64	\$2.77	\$2.91					\$3.90		\$4.35	\$4.59	\$4.85	\$132.33
16	Dominion Resources, Inc.	□	\$2.37	\$2.56	\$2.77	\$2.99	\$3.23	\$3.43	\$3.64		-					\$5.23	\$5.52	\$5.84	\$159.68
17	DTE Energy Company	DTE	\$3.32	\$3.46	\$3.60	\$3.75	\$3.91	\$4.19	\$4.49	\$4.83						\$7.08	\$7.48	\$7.90	\$178.66
18	Duke Energy Corporation	Z	\$3.12	\$3.21	\$3.30	\$3.39	\$3.48	\$3.67	\$3.87							\$5.73	\$6.05	\$6.40	\$168.59
19	Empire District Electric Company	EDE	\$1.24	\$1.27	\$1.30	\$1.33	\$1.36	\$1.43	\$1.50							\$2.15	\$2.27	\$2.40	\$55.43
20	Eversource Energy	S	\$1.65	\$1.77	\$1.89	\$2.03	\$2.17	\$2.43	\$2.69							\$4.58	\$4.84	\$5.11	\$113.78
21	FirstEnergy Corp.	出	\$0.53	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87			-			\$1.36	\$1.44	\$1.52	\$80.62
55	Great Plains Energy Inc.	бХР	\$1.17	\$1.20	\$1.24	\$1.27	\$1.30	\$1.41	\$1.52							\$2.40	\$2.54	\$2.68	\$59.77
23	IDACORP, Inc.	ď	\$1.96	\$2.13	\$2.32	\$2.51	\$2.72	\$2.91	\$3.12	\$3.35						\$4.97	\$5.25	\$5.55	\$135.63
54	NorthWestern Corporation	NWE	\$1.18	\$1.33	\$1.49	\$1.67	\$1.87	\$1.98	\$2.10							\$3.06	\$3.23	\$3.41	\$114.75
25	OGE Energy Corp.	OGE	\$1.40	\$1.35	\$1.30	\$1.24	\$1.17	\$1.26	\$1.35	\$1.46			-			\$2.15	\$2.27	\$2.40	\$78.22
56	Otter Tall Corporation	OTTR	\$2.33	\$2.42	\$2.50	\$2.57	\$2.64	\$2.96	\$3.29	\$3.64		٠,	•			\$5.62	\$5.94	\$6.28	\$70.85
	Pinnacle West Capital Corporation	NN≪	\$2.37	\$2.51	\$2.65	\$2.81	\$2.97	\$3.15	\$3.35			٠,	\$4.30 \$4			\$5.07	\$5.36	\$5.66	\$134.17
28	Portland General Electric Company	POR	\$1.16	\$1.26	\$1.38	\$1.50	\$1.63	\$1.79	\$1.96	_		٠,				\$3.25	\$3.43	\$3.62	\$81.68
59	SCANA Corporation	SCG	\$2.26	\$2.35	\$2.44	\$2.54	\$2.64	\$2.86	\$3.10			٠,				\$5.07	\$5.36	\$5.66	\$123.57
	Southern Company	SO	\$2.20	\$2.26	\$2.32	\$2.39	\$2.45	\$2.54	\$2.64			٠,		\$3.32 \$		\$3.71	\$3.92	\$4.14	\$97.62
33	TECO Energy, Inc.	ு. பூ	\$0.86	\$0.91	\$0.96	\$1.01	\$1.06	\$1.14	\$1.22	\$1.29		٠,	1.50 \$1	1.59 \$		\$1.77	\$1.87	\$1.98	\$41.17
35	Westar Energy, Inc.	× K	\$1.52	\$1.57	\$1.62	\$1.68	\$1.73	\$1.90	\$2.08	\$2.28		0,	\$2.97	53.14 \$	53.31	\$3.50	\$3.70	\$3.91	\$86.37
ဗ္ဗ	Xcel Energy Inc.	XEL	\$1.34	\$1.42	\$1.49	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98		٦	\$2.39 \$2	\$2.52		\$2.82	\$2.98	\$3.14	\$73.61

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[77] [87] [77]	A CONTRACTOR SERVICE CONTRACTOR AND A CO	6/30/25 6/30/26 6/30/27 6/30/28 6/30/29	\$4.01 \$4.24 \$4.47 \$4.73	\$4.91 \$5.18 \$5.48	\$3.78	\$4.66 \$4.92			\$2.19	\$2.88	4.59	22																	
[78]	NAME - LANGUAGE - COLOR DAVID A STOCK OF THE	6/30/26 6/30/27	_	\$4.91 \$5.18		\$4.66	\$2.94	.62			↔	\$5.6	\$7.48	\$6.05	\$2.27	\$4.84	\$1.44	\$2.54	\$5.25	\$3.23	\$2.27	\$5.94	\$5.36	\$3.43	\$5.36	\$3.92	\$1.87	\$3.70	\$2.98
		6/30/26	_	\$4.91	3.58			\$4	\$2.07	\$2.73	\$4.35	\$5.23	\$7.08	\$5.73	\$2.15	\$4.58	\$1.36	\$2.40	\$4.97	\$3.06	\$2.15	\$5.62	\$5.07	\$3.25	\$5.07	\$3.71	\$1.77	\$3.50	\$2.82
[77]			1.01		છ	\$4.41	\$2.78	\$4.37	\$1.96	\$2.58	\$4.12	\$4.95	\$6.70	\$5.42	\$2.04	\$4.33	\$1.29	\$2.27	\$4.71	\$2.89	\$2.04	\$5.32	\$4.80	\$3.07	\$4.80	\$3.51	\$1.67	\$3.31	\$2.67
		5/30/25	85	\$4.64	\$3.39	\$4.17	\$2.63	\$4.14	\$1.85	\$2.44	\$3.90	\$4.68	\$6.34	\$5.13	\$1.93	\$4.10	\$1.22	\$2.15	\$4.45	\$2.74	\$1.93	\$5.04	\$4.55	\$2.91	\$4.54	\$3.32	\$1.59	\$3.14	\$2.52
[42]		_	\$3.79	\$4.40	\$3.21	\$3.95	\$2.49	\$3.92	\$1.76	\$2.31	\$3.69	\$4.43	\$6.00	\$4.86	\$1.82	\$3.88	\$1.15	\$2.04	\$4.22	\$2.59	\$1.82	\$4.77	\$4.30	\$2.75	\$4.30	\$3.14	\$1.50	\$2.97	\$2.39
[75]		6/30/24	\$3.54	\$4.12	\$2.94	\$3.71	\$2.34	\$3.63	\$1.71	\$2.16	\$3.45	\$4.24	\$5.58	\$4.58	\$1.73	\$3.57	\$1.05	\$1.90	\$3.90	\$2.46	\$1.69	\$4.39	\$4.04	\$2.53	\$3.96	\$3.00	\$1.44	\$2.72	\$2.24
[74]		6/30/23	\$3.29	\$3.85	\$2.69	\$3.49	\$2.19	\$3.36	\$1.67	\$2.01	\$3.25	\$4.05	\$5.19	\$4.33	\$1.65	\$3.27	\$0.96	\$1.76	\$3.61	\$2.34	\$1.57	\$4.01	\$3.79	\$2.33	\$3.64	\$2.87	\$1.37	\$2.50	\$2.11
[73]		6/30/22	\$3.05	\$3.60	\$2.46	\$3.28	\$2.05	\$3.10	\$1.63	\$1.88	\$3.07	\$3.85	\$4.83	\$4.09	\$1.57	\$2.98	\$0.87	\$1.64	\$3.35	\$2.22	\$1.46	\$3.64	\$3.56	\$2.14	\$3.36	\$2.75	\$1.29	\$2.28	\$1.98
[72]		5 6/30/21	\$2.83	\$3.37	\$2.24	\$3.08	\$1.91	\$2.85	\$1.59	\$1.74	\$2.91	\$3.64	\$4.49	\$3.87	\$1.50	\$2.69	\$0.79	\$1.52				\$3.29	\$3.35	\$1.96	\$3.10	\$2.64	\$1.22	\$2.08	\$1.87
[71]		9 6/30/20	\$2.62	\$3.14	\$2.03	\$2.91	\$1.78	\$2.61	\$1.54	\$1.61	\$2.77	\$3.43		\$3.67			\$0.72	\$1,41	\$2.91	\$1.98	\$1.26	\$2.96	\$3.15	\$1.79	\$2.86	\$2.54	\$1.14	\$1.90	\$1.76
[70]		6/30/19	\$2,42	\$2.93	\$1.83	\$2.74	\$1.65	\$2.39	\$1.50	\$1.49	\$2.64	\$3.23	\$3.91	\$3.48	\$1.36	\$2.17	\$0.64	\$1.30	\$2.72	\$1.87	\$1.17	\$2.64	\$2.97	\$1.63	\$2.64	\$2.45	\$1.06	\$1.73	\$1.66
[69]		6/30/18	\$2,32	\$2.75	\$1.80	\$2.62	\$1.56	\$2.22	\$1.48	\$1.39	\$2.59	\$2.99	\$3.75	\$3.39	\$1.33	\$2.03	\$0.61	\$1.27	\$2.51	\$1.67	\$1.24	\$2.57	\$2.81	\$1.50	\$2.54	\$2.39	\$1.01	\$1.68	\$1.57
[68]		6/30/17	\$2.22	\$2.57	\$1.75	\$2.50	\$1.48	\$2.05	\$1,45	\$1.30	\$2.53	\$2.77	\$3.60	\$3.30	\$1.30	\$1.89	\$0.58	\$1.24	\$2.32	\$1.49	\$1.30	\$2.50	\$2.65	\$1.38	\$2.44	\$2.32	\$0.96	\$1.62	\$1.49
[67]		6/30/16	\$2.10	\$2.32	\$1.72	\$2.34	\$1.37	\$1.82	\$1.44	\$1.17	\$2.46	\$2.47	\$3.40	\$3.20	\$1.27	\$1.72	\$0.55	\$1.21	\$2.00	\$1.22	\$1.43	\$2.44	\$2.44	\$1.19	\$2.31	\$2.25	\$0.90	\$1.57	\$1.38
[99]		12/31/15	\$1.06	\$1.17	\$0.86	\$1.18	\$0.68	\$0.91	\$0.72	\$0.59	\$1.25	\$1.23	\$1.72	\$1.62	\$0.64	\$0.86	\$0.27	\$0.61	\$1.02	\$0.61	\$0.72	\$1.21	\$1.23	\$0.60	\$1.17	\$1.14	\$0.45	\$0.79	\$0.70
[65]		6/25/15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
[64]	Initial	Outflow	(\$50.73)	\$59.66)	(\$40.80)	(\$54.66)	(\$32,48)	(\$53.06)	(\$23.08)	(\$31.69)	(\$59.34)	(\$70.94)	(\$78.15)	(\$75.64)	(\$25.27)	(\$47.78)	(\$34.67)	(\$26.21)	(\$58.41)	(\$50.29)	(\$34.96)	(\$29.53)	(\$59.20)	(\$34.50)	(\$53.30)	(\$44.89)	(\$18.43)	(\$36.94)	(\$32.56)
		Ticker	ALE (-N	AEE (AEP	_	_			_			EĞK		S							_		908	os S			XEL XEL
5 Investor Cash Flows		6 Company	ALLETE, Inc.	8 Alliant Energy Corporation	9 Ameren Corporation	 American Electric Power Company, Inc. 	1 Avista Corporation	2 Black Hills Corporation	CenterPoint Energy, Inc.	14 CMS Energy Corporation	15 Consolidated Edison, Inc.	16 Dominion Resources, Inc.	7 DTE Energy Company	18 Duke Energy Corporation	19 Empire District Electric Company	0 Eversource Energy	 FirstEnergy Corp. 	Great Plains Energy Inc.	3 IDACORP, Inc.	24 NorthWestern Corporation	5 OGE Energy Corp.			28 Portland General Electric Company	29 SCANA Corporation	 Southern Company 	1 TECO Energy, Inc.	Westar Energy, Inc.	Xcel Energy Inc.

Multi-Stage Growth Discounted Cash Flow Model 360 Day Average Stock Price Low EPS Growth Rate Estimate in First Stage

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4 ω	Inputs		Stock	[2] EP	[3] EPS Growth F	[4] Rate Estimates	[5] ates	[6] Long-Term		[8] Payout Ratio	[6]	[10] Iterative	[10] [11] [12] [13] terrative Solution Terminal Termina	[12] erminal	[13] erminal
						Value	Low	•						P/E	PEG
9	Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	2015	2019	2025	Proof	IRR	Ratio	Ratio
7	ALLETE, Inc.	ALE	\$50.73	Ϋ́	%00.9	6.50%	%00'9	2.65%	%00'99	61.00%	67.30%	\$0.00	10,04%	16.19	2.86
ω	Alliant Energy Corporation	Ę	\$59.66	5.30%	5.45%	%00'9	5.30%	2.65%	61.00%	63.00%	67.30%	\$0.00	9.93%	16.62	2.94
თ	Ameren Corporation	AEE	\$40.80	6.80%	5.85%	%00.9	5.85%	2.65%	65.00%	55.00%	67.30%	\$0.00	10.06%	16.14	2.86
9	American Electric Power Company, Inc.	AEP	\$54.66	4.90%	2.08%	2.00%	4.90%	2.65%	65.00%	64.00%	67.30%	\$0.00	10.06%	16.14	2.86
7	Avista Corporation	AVA	\$32.48	¥	2.00%	7.00%	2.00%	2.65%	67.00%	64.00%	67.30%	\$0.00	9.77%	17.27	3.06
12	Black Hills Corporation	BKI	\$53.06	Ž	7.00%	4.50%	4.50%	2.65%	57.00%	29.00%	67.30%	\$0.00	9.39%	19.00	3.36
5	CenterPoint Energy, Inc.	CNP	\$23.08	5.70%	1.91%	1.00%	1.00%	2.65%	93.00%	80.00%	67.30%	\$0.00	9.34%	19.30	3.42
14	CMS Energy Corporation	CMS	\$31.69	6.20%	6.73%	2.50%	2.50%	2.65%	61.00%	62.00%	67.30%	\$0.00	9.72%	17.47	3.09
15	Consolidated Edison, Inc.	П	\$59.34	2.70%	2.38%	3.00%	2.38%	2.65%	65.00%	63.00%	67.30%	\$0.00	9.37%	19.12	3.38
16	Dominion Resources, Inc.	۵	\$70.94	6.30%	2.89%	8.00%	2.89%	2.65%	72.00%	72.00%	67.30%	\$0.00	9.05%	21.11	3.74
17	DTE Energy Company	DTE	\$78.15	2.00%	4.51%	2.00%	4.51%	2.65%	62.00%	80.00%	67.30%	\$0.00	10.18%	15.71	2.78
9	Duke Energy Corporation	ΡŪΚ	\$75.64	4.70%	4.49%	2.00%	4.49%	5.65%	72.00%	%00.99	67.30%	\$0.00	9.53%	18.34	3.25
19	Empire District Electric Company	EDE	\$25.27	2.00%	2.00%	3.00%	3.00%	2.65%	76.00%	%00.69	67.30%	\$0.00	9.66%	17.73	3.14
2	Eversource Energy	ES	\$47.78	6.80%	%09'9	8.50%	%09'9	2.65%	29.00%	26.00%	67.30%	\$0.00	9.87%	16.84	2.98
77	FirstEnergy Corp.	빞	\$34.67	¥	Ϋ́	7.00%	7.00%	2.65%	58.00%	54.00%	67.30%	\$0.00	7.64%	35.78	6.33
22	Great Plains Energy Inc.	ΩXD	\$26.21	%00.9	6.37%	2.00%	2.00%	2.65%	70.00%	61.00%	67.30%	\$0.00	%66'6	16.37	2.90
23	IDACORP, Inc.	ΙDΑ	\$58.41	4.00%	4.00%	1.00%	1.00%	2.65%	49.00%	58.00%	67.30%	\$0.00	9.20%	20.04	3.55
24	NorthWestern Corporation	NWE	\$50.29	2.00%	2.00%	9.50%	2.00%	2.65%	26.00%	%00.69	67.30%	\$0.00	8.50%	25.00	4.42
25	OGE Energy Corp.	OGE	\$34.96	2.00%	4.00%	3.00%	3.00%	2.65%	86.00%	29.00%	67.30%	\$0.00	8.49%	25.07	4.44
56	Otter Tail Corporation	OTTR	\$29.53	Ϋ́	%00.9	%00.6	%00'9	5.65%	70.00%	26.00%	67.30%	\$0.00	13.56%	8.99	1.59
27	Pinnacle West Capital Corporation	ΡNΥ	\$59.20	4.60%	2.30%	4.00%	4.00%	2.65%	63.00%	64.00%	67.30%	\$0.00	9.75%	17.34	3.07
28	Portland General Electric Company	POR	\$34.50	5.20%	4.72%	%00.9	4.72%	2.65%	20.00%	26.00%	67.30%	\$0.00	86.6	16.44	2.91
53	SCANA Corporation	SCG	\$53.30	4.20%	4.30%	4.50%	4.20%	2.65%	57.00%	56.00%	67.30%	\$0.00	10.40%	14.97	2.65
30	Southern Company	SO	\$44.89	3.50%	3.32%	4.50%	3.32%	2.65%	76.00%	71.00%	67.30%	\$0.00	9.80%	17.16	3.04
9	TECO Energy, Inc.	Щ	\$18.43	7.10%	9.20%	%00'9	%00'9	2.65%	83.00%	72.00%	67.30%	\$0.00	9.79%	17.17	3.04
35	Westar Energy, Inc.	X R	\$36.94	3.50%	3.40%	%00'9	3.40%	2.65%	61.00%	25.00%	67.30%	\$0.00	9.70%	17.55	3.10
33	Xcel Energy Inc.	XEL	\$32.56	2.00%	4.58%	4.50%	4.50%	2.65%	63.00%	64.00%	67.30%	\$0.00	10.02%	16.28	2.88
34												Mean	9.73%		
35												Max	13.56%		
36												Κ	7.64%		

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4 Projected Annual																		
5 Earnings per Share		[14]	[15]	[16]	[11]	[18]	[19]	[50]	[21]	[22]	[23]	[24]	[52]	[56]	[27]	[28]	[59]	[30]
6 Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
7 ALLETE, Inc.	ALE	\$2,90	\$3.07	\$3.26	\$3.45	\$3.66	\$3.88	\$4.11	\$4.35	\$4.61	\$4.87	\$5.15	\$5.44	\$5.75	\$6.07	\$6.42	\$6.78	\$7.16
8 Alliant Energy Corporation	L N	\$3.48	\$3.66	\$3.86	\$4.06	\$4.28	\$4.51	\$4.75	\$5.00	\$5.28	\$5.57	\$5.88	\$6.21	\$6.57	\$6.94	\$7.33	\$7.74	\$8.18
9 Ameren Corporation	AEE	\$2.40	\$2.54	\$2.69	\$2.85	\$3.01	\$3.19	\$3.37	\$3.57	\$3.78	\$3.99	\$4.22	\$4.46	\$4.71	\$4.97	\$5.26	\$5.55	\$5.87
10 American Electric Power Company, Inc.	AEP	\$3,34	\$3.50	\$3.68	\$3.86	\$4.04	\$4.24	\$4.46	\$4.69	\$4.93	\$5.20	\$5.49	\$5.80	\$6.12	\$6.47	\$6.84	\$7.22	\$7.63
11 Avista Corporation	AVA	\$1.84	\$1.93	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.60	\$2.74	\$2.88	\$3.04	\$3.22	\$3.40	\$3,59	\$3.79	\$4.01	\$4.23
12 Black Hills Corporation	KH	\$2.89	\$3.02	\$3.16	\$3.30	\$3.45	\$3.60	\$3.77	\$3.95	\$4.16	\$4.37	\$4.61	\$4.87	\$5.15	\$5.44	\$5.75	\$6.07	\$6.42
13 CenterPoint Energy, Inc.	CNP	\$1,42	\$1.43	\$1.45	\$1.46	\$1.48	\$1.49	\$1.52	\$1.56	\$1.61	\$1.68	\$1.76	\$1.86	\$1.96	\$2.07	\$2.19	\$2.31	\$2.44
14 CMS Energy Corporation	CMS	\$1.74	\$1.84	\$1.94	\$2.04	\$2.16	\$2.27	\$2.40	\$2.53	\$2.67	\$2.82	\$2.98	\$3.15	\$3.33	\$3.52	\$3.72	\$3.93	\$4.15
15 Consolidated Edison, Inc.		\$3.62	\$3.71	\$3.79	\$3.88	\$3.98	\$4.07	\$4.19	\$4.34	\$4.51	\$4.72	\$4.96	\$5.24	\$5.53	\$5.85	\$6.18	\$6.53	\$6.89
16 Dominion Resources, Inc.	Ω	\$3.05	\$3.23	\$3.42	\$3.62	\$3.83	\$4.06	\$4.30	\$4.55	\$4.81	\$5.09	\$5.38	\$5.68	\$6.00	\$6.34	\$6.70	\$7.08	\$7.48
17 DTE Energy Company	DTE	\$5.10	\$5.33	\$5.57	\$5.82	\$6.08	\$6.36	\$6.66	\$6.98	\$7.34	\$7.72	\$8.15	\$8.61	\$9.09	\$9.61	\$10.15	\$10.72	\$11.33
18 Duke Energy Corporation	PUK	\$4.13	\$4.32	\$4.51	\$4.71	\$4.92	\$5.14	\$5.39	\$5.65	\$5.93	\$6.25	\$6.59	\$6.96	\$7.35	\$7.77	\$8.21	\$8.67	\$9.16
19 Empire District Electric Company	EDE	\$1.55	\$1.60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.11	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$2.92	\$3.09
20 Eversource Energy	ES	\$2.58	\$2.75	\$2.93	\$3.13	\$3.33	\$3.55	\$3.78	\$4.02	\$4.26	\$4.52	\$4.78	\$5.05	\$5.34	\$5.64	\$5.96	\$6.29	\$6.65
21 FirstEnergy Corp.	Ш	\$0,85	\$0.91	\$0.97	\$1.04	\$1.11	\$1.19	\$1.27	\$1,36	\$1.44	\$1.53	\$1.62	\$1.71	\$1.81	\$1.91	\$2.02	\$2.13	\$2.25
22 Great Plains Energy Inc.	GXP	\$1,57	\$1.65	\$1.73	\$1.82	\$1.91	\$2.00	\$2.11	\$2.22	\$2.33	\$2.46	\$2.60	\$2.74	\$2.90	\$3.06	\$3.24	\$3.42	\$3.61
23 IDACORP, Inc.	ΙDΑ	\$3,85	\$3.89	\$3.93	\$3.97	\$4.01	\$4.05	\$4.12	\$4.22	\$4.36	\$4.54	\$4.76	\$5.03	\$5.32	\$5.62	\$5.94	\$6.27	\$6.63
24 NorthWestern Corporation	NWE	\$1.98	\$2.08	\$2.18	\$2.29	\$2.41	\$2.53	\$2.66	\$2.79	\$2.94	\$3.10	\$3.28	\$3.46	\$3.66	\$3.86	\$4.08	\$4.31	\$4.56
25 OGE Energy Corp.	OGE	\$1,55	\$1,60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.11	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$2.92	\$3.09
26 Otter Tail Corporation	OTTR	\$3.06	\$3.24	\$3.44	\$3.64	\$3.86	\$4.09	\$4.34	\$4.59	\$4.86	\$5.14	\$5.44	\$5.74	\$6.07	\$6.41	\$6.77	\$7.15	\$7.56
27 Pinnacle West Capital Corporation	PNW	\$3,58	\$3.72	\$3.87	\$4.03	\$4.19	\$4.36	\$4.54	\$4.75	\$4.98	\$5.23	\$5.51	\$5.82	\$6.15	\$6.50	\$6.87	\$7.26	\$7.67
28 Portland General Electric Company	POR	\$2,18	\$2.28	\$2.39	\$2.50	\$2.62	\$2.75	\$2.88	\$3.02	\$3.18	\$3.35	\$3.53	\$3.73	\$3.95	\$4.17	\$4.40	\$4.65	\$4.92
29 SCANA Corporation	SCG	\$3,79	\$3,95	\$4.12	\$4.29	\$4.47	\$4.66	\$4.86	\$5.09	\$5.34	\$5.62	\$5.92	\$6.26	\$6.61	\$6.98	\$7.38	\$7.79	\$8.23
30 Southern Company	S	\$2.77	\$2.86	\$2,96	\$3.06	\$3.16	\$3.26	\$3.38	\$3.52	\$3.68	\$3.86	\$4.06	\$4.29	\$4.53	\$4.79	\$5.06	\$5.35	\$5.65
31 TECO Energy, Inc.	世	\$0.95	\$1.01	\$1.07	\$1.13	\$1.20	\$1.27	\$1.35	\$1.43	\$1.51	\$1.60	\$1.69	\$1.78	\$1.88	\$1.99	\$2.10	\$2.22	\$2.35
32 Westar Energy, Inc.	Ν	\$2.35	\$2.43	\$2.51	\$2.60	\$2.69	\$2.78	\$2.88	\$3.00	\$3.14	\$3.29	\$3.47	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$4.82
33 Xcel Energy Inc.	XEL	\$2.03	\$2.12	\$2.22	\$2.32	\$2.42	\$2.53	\$2.65	\$2.78	\$2.92	\$3.07	\$3.24	\$3.42	\$3.62	\$3.82	\$4.04	\$4.27	\$4.51

Multi-Stage Growth Discounted Cash Flow Model 360 Day Average Stock Price Low EPS Growth Rate Estimate in First Stage

4 &	Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
ပိ	Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
7 AL	ALLETE, Inc.	ALE	%00.99	64.75%	63.50%	62.25%	61.00%	62.05% 6	63.10% 6	64.15% 6	65.20% 6	66.25% 6	67.30% 6	67.30% 67	,e	67.30% 6	Ļ	67.30%
8 All	Alliant Energy Corporation	ĽN	61.00%	61.50%	62.00%	62.50%	63.00%	63.72% 6	64.43% 6	65.15% 6	65.87% 6	66.59% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
9 An	Ameren Corporation	AEE	%00.59	62.50%	%00.09	27.50%	25.00%	57.05% 5	59.10% 6	61.15% 6	63.20% 6	65.25% 6	67.30% 67	67.30% 67	67.30% 67		67.30%	67.30%
10 An	American Electric Power Company, Inc.	AEP	%00'59	64.75%	64.50%	64.25%	64.00%	64.55% 6	65.10% 6	65.65% 6	66.20% 6	66.75% 6			67.30% 67			67.30%
11 Av	Avista Corporation	AVA	%00.79	66.25%	65.50%	64.75%	64.00%	64.55% 6	65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
12 Bl	Black Hills Corporation	BKT	27.00%	27.50%	28.00%	28.50%	29.00%	60.38% 6	61.77% 6	63.15% 6	64.54% 6	65.92% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
13 Ce	CenterPoint Energy, Inc.	CNP	93.00%	89.75%	86.50%	83.25%	80.00%	77.88% 7	75.77% 7	73.65% 7	71.54% 6	69.42% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
14 CA	CMS Energy Corporation	CMS	61.00%	61.25%	61.50%	61.75%	62.00%	62.88% 6	63.77% 6	64.65% 6	65.54% 6	66.42% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
15 Cc	Consolidated Edison, Inc.		%00'59	64.50%	64.00%	63.50%	83.00%	63.72% 6	64.43% 6	65.15% 6	65.87% 6	9 %65.99	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
16 Do	Dominion Resources, Inc.	۵		72.00%	72.00%	72.00%	72.00%	71.22% 7	70.43% 6	69.65% 6	68.87% 6	68.09% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
17 DI	DTE Energy Company	DTE		61.50%	61.00%	60.50%	%00.09	61.22% 6	62.43% 6	63,65% 6	64.87% 6	66.09% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
18 Du	Duke Energy Corporation	DČ E	72.00%	70.50%	%00.69	67.50%	%00.99	66.22% 6	66.43% 6	66.65% 6	66.87% 6	67.09% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
19 En	Empire District Electric Company	EDE	%00'92	74.25%	72.50%	70.75%	%00.69	68.72% 6	68.43% 6	68.15% 6	67.87% 6	67.59% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
20 Ev	Eversource Energy	ES	29.00%		27.50%	56.75%	26.00%	57.88% 5	59.77% 6	61.65% 6		65.42% 6	67.30% 67	67.30% 67	67.30% 67		67.30%	67.30%
21 Fir	FirstEnergy Corp.	Щ	28.00%	27.00%	26.00%	22.00%	54.00%	56.22% 5	58.43% 6	60.65% 6	62.87% 6	65.09% 6	67.30% 67	67.30% 67	67.30% 67		67.30%	67.30%
22 Gr	Great Plains Energy Inc.	дХО	70.00%	67.75%	65.50%	63.25%	61.00%	62.05% 6	63.10% 6	64.15% 6	65.20% 6	66.25% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
23 10/	DACORP, Inc.	ΙĎΑ	49.00%	51.25%	53.50%	55.75%	58.00%	59.55% 6	61.10% 6	62.65% 6	64.20% 6	65.75% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
24 No	NorthWestern Corporation	NWE	26.00%	59.25%	62.50%	65.75%	%00.69	68.72% 6	68.43% 6	68.15% 6	67.87% 6	9 %65'19	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
25 00	OGE Energy Corp.	OGE	86.00%	79.25%	72.50%	65.75%	29.00%	60.38% 6	61.77% 6	63.15% 6	64.54% 6	65.92% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
	Otter Tail Corporation	OTTR	70.00%	66.50%	63.00%	29.50%	26.00%	57.88% 5	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
27 Pir	Pinnacle West Capital Corporation	PNW	63.00%	63.25%	63.50%	63.75%	64.00%	64.55% 6	65.10% 6	65.65% 6	66.20% 6	9 %52.99	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
28 Po	Portland General Electric Company	POR	20.00%	51.50%	53.00%	54.50%	26.00%	57.88% 5	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
29 SC	SCANA Corporation	SCG	22.00%	56.75%	26.50%	56.25%	26.00%	57.88% 5	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	87.30%
30 So	Southern Company	S	76.00%	74.75%	73.50%	72.25%	71.00%	70.38% 6	69.77% 6	69.15% 6	68.54% 6	67.92% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
	TECO Energy, Inc.	旦	83.00%	80.25%	77.50%	74.75%	72.00%	71.22% 7	70.43% 6	69.65% 6	68.87% 6	9 %60.89	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
32 WE	Westar Energy, Inc.	N N	61.00%	29.50%	58.00%	26.50%	25.00%	57.05% 5	59.10% 6	61.15% 6	63.20% 6	65.25% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%
33 Xc	Xcel Energy Inc.	XEL	63.00%	63.25%	63.50%	63.75%	64.00%	64.55% 6	65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30%	67.30%

Multi-Stage Growth Discounted Cash Flow Model 360 Day Average Stock Price Low EPS Growth Rate Estimate in First Stage

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4 Projected Annual 5 Cash Flows		[47]	[48]	[49]	[20]	[51]	[52]	[53]	[54]	[55]	[26]	[57]	[58]	[29]	[60]	[61]	[62]	[63]
																		Terminal
6 Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Value
7 ALLETE, Inc.	ALE	\$2.03	\$2.11	\$2.19	\$2.28	\$2.37	\$2.55	\$2.75	\$2.96	\$3.18	\$3.41	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$4.82	\$116.00
8 Alliant Energy Corporation	R	\$2.24	\$2.37	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22	\$3.44	\$3.67	\$3.92	\$4.18	\$4.42	\$4.67	\$4.93	\$5.21	\$5.51	\$135.93
9 Ameren Corporation	AEE	\$1,65	\$1.68	\$1.71	\$1.73	\$1.75	\$1.93	\$2.11	\$2.31	\$2.52	\$2.75	\$3.00	\$3.17	\$3.35	\$3.54	\$3.74	\$3.95	\$94.66
10 American Electric Power Company, Inc.	AEP	\$2.28	\$2.38	\$2.49	\$2.60	\$2.72	\$2.88	\$3.05	\$3.24	\$3.44	\$3.66	\$3.90	\$4.12	\$4.35	\$4.60	\$4.86	\$5.14	\$123.16
11 Avista Corporation	AVA	\$1.29	\$1.34	\$1.40	\$1.45	\$1.50	\$1.59	\$1.69	\$1.80	\$1.91	\$2.03	\$2.16	\$2.29	\$2.42	\$2.55	\$2.70	\$2.85	\$73.13
12 Black Hills Corporation	BKH	\$1.72	\$1.81	\$1.91	\$2.02	\$2.12	\$2.28	\$2.44	\$2.62	\$2.82	\$3.04	\$3.28	\$3.47	\$3.66	\$3.87	\$4.09	\$4.32	\$121.92
 CenterPoint Energy, Inc. 	CNP	\$1.33	\$1.30	\$1.27	\$1.23	\$1.19	\$1.18	\$1.18		\$1.20	\$1.22	\$1.25	\$1.32	\$1.39	\$1.47	\$1.56	\$1.64	\$47.17
14 CMS Energy Corporation	CMS	\$1.12	\$1.19	\$1.26	\$1.33	\$1.41	\$1.51	\$1.62		\$1.85	\$1.98	\$2.12	\$2.24	\$2.37	\$2.50	\$2.64	\$2.79	\$72.49
15 Consolidated Edison, Inc.		\$2.41	\$2.45	\$2.49	\$2.53	\$2.57	\$2.67	\$2.79		\$3.11	\$3.30	\$3.52	\$3.72	\$3.93	\$4.16	\$4.39	\$4.64	\$131.84
16 Dominion Resources, Inc.	Δ	\$2.33	\$2.46	\$2.61	\$2.76	\$2.92	\$3.06	\$3.20	\$3.35	\$3.50	\$3.66	\$3.82	\$4.04	\$4.27	\$4.51	\$4.76	\$5.03	\$157.85
17 DTE Energy Company	DTE	\$3.30	\$3.43	\$3.55	\$3.68	\$3.82	\$4.08	\$4.36		\$5.01	\$5.38	\$5.79	\$6.12	\$6.47	\$6.83	\$7.22	\$7.63	\$177.97
18 Duke Energy Corporation	SE	\$3.11	\$3.18	\$3.25	\$3.32	\$3,40	\$3.57	\$3.75			\$4.42	\$4.68	\$4.95	\$5.23	\$5.52	\$5.84	\$6.17	\$168.06
19 Empire District Electric Company	EDE	\$1.21	\$1.22	\$1.23	\$1.23	\$1.24	\$1.28	\$1.32	\$1.37	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.86	\$1.97	\$2.08	\$54.75
20 Eversource Energy	B	\$1.62	\$1.71	\$1.80	\$1.89	\$1.99	\$2.19	\$2.40		\$2.87	\$3.13	\$3.40	\$3.59	\$3.79	\$4.01	\$4.24	\$4.48	\$111.97
21 FirstEnergy Corp.	Щ	\$0.53	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79		\$0.96	\$1.05	\$1.15	\$1.22	\$1.29	\$1.36	\$1.44	\$1.52	\$80.62
22 Great Plains Energy Inc.	GXP	\$1.15	\$1.17	\$1.19	\$1.21	\$1.22	\$1.31	\$1.40	\$1.50	\$1.60	\$1.72	\$1.85	\$1.95	\$2.06	\$2.18	\$2.30	\$2.43	\$59.14
23 IDACORP, Inc.	IDA	\$1.91	\$2.01	\$2.12	\$2.23	\$2.35	\$2.45	\$2.58		\$2.92	\$3.13	\$3.39	\$3.58	\$3.78	\$4.00	\$4.22	\$4.46	\$132.80
24 NorthWestern Corporation	NWE	\$1.16	\$1.29	\$1.43	\$1.58	\$1.74	\$1.83	\$1.91		\$2.11	\$2.21	\$2.33	\$2.46	\$2.60	\$2.75	\$2.90	\$3.07	\$113.91
25 OGE Energy Corp.	0GE	\$1.37	\$1.30	\$1.23	\$1.15	\$1.06	\$1.12	\$1.19	\$1.27	\$1.36	\$1.46	\$1.58	\$1.67	\$1.76	\$1.86	\$1.97	\$2.08	\$77.44
26 Otter Tail Corporation	OTTR	\$2.27	\$2.29	\$2.30	\$2.30	\$2.29	\$2.51	\$2.75		\$3.27	\$3.56	\$3.86	\$4.08	\$4.31	\$4.56	\$4.82	\$5.09	\$67.99
27 Pinnacle West Capital Corporation	₽N≷	\$2.35	\$2.45	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09	\$3.27	\$3.46	\$3.68	\$3.92	\$4.14	\$4.38	\$4.62	\$4.88	\$5.16	\$132.96
28 Portland General Electric Company	POR	\$1.14	\$1.23	\$1.33	\$1.43	\$1.54	\$1.67	\$1.81	\$1.96	\$2.13	\$2.31	\$2.51	\$2.66	\$2.81	\$2.96	\$3.13	\$3.31	\$80.80
29 SCANA Corporation	SCG	\$2.25	\$2.34	\$2.42	\$2.51	\$2.61	\$2.81	\$3.04	\$3.29	\$3.57	\$3.87	54.21	\$4.45	\$4.70	\$4.97	\$5.25	\$5.54	\$123.25
30 Southern Company	SO	\$2.18	\$2.21	\$2.25	\$2.28	\$2.32	\$2.38	\$2.46	\$2.54	\$2.64	\$2.76	\$2.89	\$3.05	\$3.22	\$3.41	\$3.60	\$3.80	\$96.93
31 TECO Energy, Inc.	世	\$0.84	\$0.86	\$0.88	\$0.90	\$0.92	\$0.96	\$1.00	\$1.05	\$1.10	\$1.15	1.20	\$1.27	\$1.34	\$1.42	\$1.49	\$1.58	\$40.30
32 Westar Energy, Inc.	۸×	\$1.48	\$1.49	\$1.51	\$1.52	\$1.53	\$1.64	\$1.77	\$1.92	\$2.08	\$2.26	\$2.46	\$2.60	\$2.75	\$2.91	\$3.07	\$3.24	\$84.58
33 Xcel Energy Inc.	XEL	\$1.34	\$1.40	\$1.47	\$1.54	\$1.62	\$1.71	\$1.81	\$1.92	\$2.03	\$2.16	\$2.30	\$2.43	\$2.57	\$2.72	\$2.87	\$3.03	\$73.35

Multi-Stage Growth Discounted Cash Flow Model 360 Day Average Stock Price Low EPS Growth Rate Estimate in First Stage

4 亿	Projected Annual Data Investor Cash Flows		[64]	[65]	[99]	[67]	[68]	[69]	1701	[71]	[72]	[73]	[74]	1221	[76]	1771	[78]	1621	[80]	1811
	Announcement of the state of th		Initial	and a second second													NAME AND ADDRESS OF THE OWNER, WHEN PERSON O		•	
9	Company	Ticker C	Outflow (6/25/15	12/31/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21 6	6/30/22 6	6/30/23 6/	6/30/24 6/3	6/30/25 6/	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
7	ALLETE, Inc.	ALE (\$	(\$50.73)	\$0.00	\$1.05	\$2.09	\$2.19	\$2.28	\$2.37	\$2.55	\$2.75	\$2.96	\$3.18	\$3.41 \$3	3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$120.82
æ	Alliant Energy Corporation	tN1 (\$	\$59.66)	\$0.00	\$1.16	\$2.29	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22	\$3.44	07	3.92	34.18	4.42	\$4.67	\$4.93	\$5.21	\$141.44
6	Ameren Corporation	AEE (\$	(\$40.80)	\$0.00	\$0.86	\$1.70	\$1.71	\$1.73	\$1.75	\$1.93	\$2.11	\$2.31	\$2.52	32.75	3.00 \$	3.17	\$3.35	\$3.54	\$3.74	\$98.61
5	American Electric Power Company, Inc.	AEP (\$	(\$54.66)	\$0.00	\$1.18	\$2.33	\$2.49	\$2.60	\$2.72	\$2.88	\$3.05	\$3.24	\$3.44 \$		\$3.90	\$4.12	\$4.35	\$4.60	\$4.86	\$128.30
11	Avista Corporation	AVA (\$		\$0.00	\$0.67	\$1.33	\$1.40	\$1.45	\$1.50	\$1.59	\$1.69	\$1.80	\$1.91	\$2.03 \$2	\$2.16		\$2.42	\$2.55	\$2.70	\$75.98
12	Black Hills Corporation	BKH (\$	(\$53.06)	\$0.00	\$0.89	\$1.76	\$1.91	\$2.02	\$2.12	\$2.28	\$2.44	\$2.62					\$3.66	\$3.87	\$4.09	\$126.24
13	CenterPoint Energy, Inc.	_		\$0.00	\$0.69	\$1.34	\$1.27	\$1.23	\$1.19	\$1.18	\$1.18	\$1.19	\$1.20 \$	\$1.22 \$			\$1.39	\$1.47	\$1.56	\$48.82
4	CMS Energy Corporation	٠,		\$0.00	\$0.58	\$1.15	\$1.26	\$1.33	\$1.41	\$1.51							\$2.37	\$2.50	\$2.64	\$75.28
15	Consolidated Edison, Inc.			\$0.00	\$1.25	\$2.44	\$2.49	\$2.53	\$2.57	\$2.67	\$2.79			\$3.30 \$3			\$3.93	\$4.16	\$4.39	\$136.48
16	Dominion Resources, Inc.	<u>⊕</u>		\$0.00	\$1.20	\$2.39	\$2.61	\$2.76	\$2.92	\$3.06	\$3.20	\$3.35	\$3.50 \$		\$3.82		\$4.27	\$4.51	\$4.76	\$162.88
17	DTE Energy Company	DTE (\$		\$0.00	\$1.71	\$3.38	\$3.55	\$3.68	\$3.82	\$4.08	\$4.36	\$4.67	\$5.01				\$6.47	\$6.83		\$185.59
48	Duke Energy Corporation	DUK (♣	(\$75.64)	\$0.00	\$1.61	\$3.18	\$3.25	\$3.32	\$3.40	\$3.57	\$3.75	\$3.96					\$5.23	\$5.52		\$174.23
19	Empire District Electric Company			\$0.00	\$0.63	\$1.23	\$1.23	\$1.23	\$1.24	\$1.28			\$1.43 \$				\$1.76	\$1.86		\$56.83
20	Eversource Energy	ES (\$		\$0.00	\$0.84	\$1.68	\$1.80	\$1.89	\$1.99	\$2.19		\$2.63					\$3.79	\$4.01	\$4.24	\$116.44
21	FirstEnergy Corp.			\$0.00	\$0.27	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72			\$ 96.0\$				\$1.29	\$1.36	\$1,44	\$82,13
22	Great Plains Energy Inc.	GXP (\$		\$0.00	\$0.60	\$1.18	\$1.19	\$1.21	\$1.22	\$1.31	\$1.40	\$1.50		\$1.72 \$	\$1.85		\$2.06	\$2.18	\$2.30	\$61.57
23	IDACORP, Inc.	_		\$0.00	\$0.99	\$1.91	\$2.12	\$2.23	\$2.35	\$2.45							\$3.78	\$4.00	\$4.22	\$137.26
24	NorthWestern Corporation	NWE (\$	(\$50.29)	\$0.00	\$0.60	\$1.19	\$1.43	\$1.58	\$1.74	\$1.83	\$1.91	\$2.01	\$2.11 \$	\$2.21	\$2.33		\$2.60	\$2.75	\$2.90	\$116.97
25	OGE Energy Corp.			\$0.00	\$0.71	\$1,39	\$1.23	\$1.15	\$1.06	\$1.12							\$1.76	\$1.86	\$1.97	\$79.51
56	Otter Tail Corporation	OTTR (\$		\$0.00	\$1.18	\$2.34	\$2.30	\$2.30	\$2.29	\$2.51	\$2.75	\$3.00	\$3.27 \$	\$3.56 \$3			\$4.31	\$4.56	\$4.82	\$73.08
27	Pinnacle West Capital Corporation	PNW (\$		\$0.00	\$1.21	\$2.39	\$2.56	\$2.67	\$2.79	\$2.93	_		٠,	\$3.68	\$3.92		\$4.38	\$4.62	\$4.88	\$138.12
28	Portland General Electric Company	POR (\$		\$0.00	\$0.59	\$1.17	\$1.33	\$1.43	\$1.54	\$1.67	\$1.81	\$1.96					\$2.81	\$2.96	\$3.13	\$84.11
59	SCANA Corporation	SCG (\$		\$0.00	\$1.17	\$2.30	\$2.42	\$2.51	\$2.61	\$2.81	\$3.04	\$3.29	\$3.57 \$	\$3.87 \$4	\$4.21	\$4.45	\$4.70	\$4.97	\$5.25	\$128.80
30	Southern Company			\$0.00	\$1.13	\$2.21	\$2.25	\$2.28	\$2.32	\$2.38	\$2.46	\$2.54	\$2.64 \$	3.76 \$		3.05	\$3.22	\$3.41	\$3.60	\$100.74
31	TECO Energy, Inc.	£) ⊒		\$0.00	\$0.43	\$0.86	\$0.88	\$0.90	\$0.92	\$0.96	\$1.00	\$1.05	\$1.10 \$	1.15 \$	\$1.20	1.27	\$1.34	\$1.42	\$1.49	\$41.88
32	Westar Energy, Inc.	WR (\$		\$0.00	\$0.77	\$1.51	\$1.51	\$1.52	\$1.53	\$1.64	\$1.77	\$1.92	63)	2.26 \$2	\$2.46 \$	2.60	\$2.75	\$2.91	\$3.07	\$87.82
33	Xcel Energy Inc.	XEL (\$	(\$32.56)	\$0.00	\$0.69	\$1.37	\$1.47	\$1.54	\$1.62	\$1.71	\$1.81	\$1.92	\$2.03 \$	2.16 \$2	\$2.30	\$2.43	\$2.57	\$2.72	\$2.87	\$76.38

```
Multi-Stage DCF Notes:
          [1] Source: Bloomberg; based on 30-, 90-, 180, and 360-day historical average as of June 25, 2015
3
          [2] Source: Zacks
4
              Source: Yahoo! Finance
              Source: Value Line
6
          [5] Equals indicated value (average, minimum, maximum) from Columns [2], [3], [4]
              Source: Average of 5.25%, 6.10%, 5.94%, 5.32%
8
              Source: Value Line
          [7]
              Source: Value Line
10
              Source: Bloomberg Professional
         [10] Equals Column [1] + Column [64]
11
         [11] Equals result of Excel Solver function; goal: Column [10] equals $0.00
12
13
         [12] Equals Column [63] / Column [30]
14
         [13] Equals Column [12] / (Column [6] x 100)
15
         [14] Source: Value Line
         [15] Equals Column [14] x (1 + Column [5])
16
         [16] Equals Column [15] x (1 + Column [5])
17
18
              Equals Column [16] x (1 + Column [5])
19
         [18] Equals Column [17] x (1 + Column [5])
20
         [19] Equals Column [18] x (1 + Column [5])
         [20] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2025 - 2020 + 1)) x (2020 - 2019)))) x Column [19]
21
              Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2025 - 2020 + 1)) x (2021 - 2019)))) x Column [20]
22
              Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2025 - 2020 + 1)) x (2022 - 2019)))) x Column [21]
23
              Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2025 - 2020 + 1)) x (2023 - 2019)))) x Column [22]
24
25
         [24] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2025 - 2020 + 1)) x (2024 - 2019)))) x Column [23]
26
              Equals Column [24] x (1 + Column [6])
              Equals Column [25] x (1 + Column [6])
27
28
              Equals Column [26] x (1 + column [6])
29
         [28] Equals Column [27] x (1 + column [6])
         [29] Equals Column [28] x (1 + column [6])
30
         [30] Equals Column [29] x (1 + column [6])
31
32
         [31] Equals Column [7]
         [32] Equals Column [31] + ((Column [35] - Column [31]) / 4)
33
34
         [33] Equals Column [32] + ((Column [35] - Column [31]) / 4)
35
         [34] Equals Column [33] + ((Column [35] - Column [31]) / 4)
36
         [35] Equals Column [8]
37
         [36] Equals Column [35] + ((Column [41] - Column [35]) / 6)
         [37] Equals Column [36] + ((Column [41] - Column [35]) / 6)
         [38] Equals Column [37] + ((Column [41] - Column [35]) / 6)
39
40
         [39] Equals Column [38] + ((Column [41] - Column [35]) / 6)
41
         [40] Equals Column [39] + ((Column [41] - Column [35]) / 6)
42
         [41] Equals Column [9]
43
         [42] Equals Column [9]
44
         [43] Equals Column [9]
45
         [44] Equals Column [9]
46
         [45] Equals Column [9]
47
         [46] Equals Column [9]
48
         [47] Equals Column [15] x Column [31]
49
         [48] Equals Column [16] x Column [32]
         [49] Equals Column [17] x Column [33]
51
         [50] Equals Column [18] x Column [34]
52
         [51] Equals Column [19] x Column [35]
         [52] Equals Column [20] x Column [36]
53
54
         [53] Equals Column [21] x Column [37]
55
         [54] Equals Column [22] x Column [38]
56
         [55] Equals Column [23] x Column [39]
57
         [56] Equals Column [24] x Column [40]
58
         [57] Equals Column [25] x Column [41]
59
         [58] Equals Column [26] x Column [42]
         [59] Equals Column [27] x Column [43]
61
         [60] Equals Column [28] x Column [44]
62
         [61] Equals Column [29] x Column [45]
         [62] Equals Column [30] x Column [46]
63
64
         [63] Equals (Column [62] x (1 + Column [6])) / (Column [11] - Column [6])
65
         [64] Equals negative net present value; discount rate equals Column [11], cash flows equal Column [65] through Column [81]
         [65] Equals $0.00
66
         [66] Equals Column [47] x (12/31/2015 - 6/25/2015) / 365
67
68
         [67] Equals Column [47] x (1 + (0.5 x Column [5]))
69
         [68] Equals Column [49]
70
         [69] Equals Column [50]
71
         [70] Equals Column [51]
72
         [71] Equals Column [52]
73
         [72] Equals Column [53]
74
         [73] Equals Column [54]
75
         [74] Equals Column [55]
         [75] Equals Column [56]
76
77
         [76] Equals Column [57]
         [77] Equals Column [58]
78
79
         [78] Equals Column [59]
80
         [79] Equals Column [60]
         [80] Equals Column [61]
81
         [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 (with Sustainable Growth)

− α ∞

Inputs			[2]	[2]	4	[2]	[9]	E	Θ	6	[10]	<u>=</u>	- 1	[13]	[14]
		Stock		EPS Gro	EPS Growth Rate Estimates Value Retention	Estimates Retention		Long-Term		Payout Ratio	0	Iterative	terative Solution	Terminal Termina P/E PEG	erminal
Company	Ticker	Price	Zacks	First Call	Line	Growth	Average	Growth	2015	2019	2025	Proof	RR	Ratio	Ratio
ALLETE, Inc.	ALE	\$48.97	Ϋ́	9.00%	6.50%	3.97%	5.49%	5.65%	66.00%	61.00%	67.30%	\$0.00	10.06%	16.14	2.86
Alliant Energy Corporation	LN	\$59.59	5.30%	5.45%	%00.9	2.66%	2.60%	2.65%	61.00%	63.00%	67.30%	\$0.00	10.02%	16.28	2.88
Ameren Corporation	AEE	\$39.13	6.80%	5.85%	%00.9	4.56%	5.80%	5.65%	65.00%	55.00%	67.30%	\$0.00	10.23%	15.53	2.75
American Electric Power Company, Inc.		\$54.66	4.90%	5.08%	2.00%	4.07%	4.76%	5.65%	65.00%	64.00%	67.30%	\$0.00	10.02%	16.28	2.88
Avista Corporation		\$31.45	Ϋ́	2.00%	7.00%	3.80%	5.27%	5.65%	67.00%	64.00%	67.30%	\$0.00	9.98%	16.43	2.91
Black Hills Corporation	BKT	\$46.14	Ϋ́	7.00%	4.50%	4.02%	5.17%	2.65%	27.00%	29.00%	67.30%	\$0.00	10.14%	15.84	2.80
CenterPoint Energy, Inc.	CNP	\$19.77	5.70%	1.91%	1.00%	3.19%	2.95%	2.65%	93.00%	80.00%	67.30%	\$0.00	10.66%	14.21	2.51
CMS Energy Corporation	CMS	\$32.93	6.20%	6.73%	2.50%	5.27%	5.92%	2.65%	61.00%	62.00%	67.30%	\$0.00	9.68%	17.67	3.13
Consolidated Edison, Inc.		\$59.64	2.70%	2.38%	3.00%	3.15%	2.81%	2.65%	65.00%	63.00%	67.30%	\$0.00	9.46%	18.68	3.31
Dominion Resources, Inc.	Ω	\$69.20	6.30%	2.89%	8.00%	8.00.9	6.55%	2.65%	72.00%	72.00%	67.30%	\$0.00	9.26%	19.72	3.49
DTE Energy Company	DTE	\$76.77	2.00%	4.51%	2.00%	4.88%	4.85%	5.65%	62.00%	%00.09	67.30%	\$0.00	10.36%	15.10	2.67
Duke Energy Corporation	₽UK	\$74.10	4.70%	4.49%	2.00%	2.67%	4.22%	2.65%	72.00%	%00.99	67.30%	\$0.00	9.54%	18.29	3.24
Empire District Electric Company	EDE	\$22.93	2.00%	2.00%	3.00%	3.25%	4.06%	2.65%	%00'92	%00.69	67.30%	\$0.00	10.42%	14.93	2.64
Eversource Energy	S	\$47.64	6.80%	%09.9	8.50%	4.50%	%09.9	2.65%	29.00%	26.00%	67.30%	\$0.00	8.89%	16.79	2.97
FirstEnergy Corp.	밆	\$34.60	Ž	Ϋ́	7.00%	4.09%	5.54%	2.65%	28.00%	54.00%	67.30%	\$0.00	7.46%	39.34	96.9
Great Plains Energy Inc.	GXP	\$25.35	6.00%	6.37%	2,00%	3.02%	5.10%	2.65%	70.00%	61.00%	67.30%	\$0.00	10.17%	15.73	2.78
IDACORP, Inc.	DΑ	\$57.95	4.00%	4.00%	1.00%	3.51%	3.13%	5.65%	49.00%	58.00%	67.30%	\$0.00	9.77%	17.27	3.06
NorthWestern Corporation	NWE	\$51.02	2.00%	2.00%	6.50%	3.90%	5.10%	2.65%	26.00%	%00.69	67.30%	\$0.00	8.47%	25.20	4.46
OGE Energy Corp.	OGE	\$30.33	2.00%	4.00%	3.00%	3,68%	3.95%	2.65%	86.00%	29.00%	67.30%	\$0.00	9.15%	20.36	3.60
Otter Tail Corporation	OTTR	\$26.99	¥	9.00%	800.6	7.25%	7.42%	5.65%	70.00%	26.00%	67.30%	\$0.00	15.03%	7.59	1.34
Pinnacle West Capital Corporation	PNW	\$58.80	4.60%	5.30%	4.00%	4.52%	4.60%	2.65%	63.00%	64.00%	67.30%	\$0.00	9.95%	16.56	2.93
Portland General Electric Company	POR	\$34.24	5.20%	4.72%	%00.9	4.04%	4.99%	2.65%	20.00%	26.00%	67.30%	\$0.00	10.08%	16.04	2.84
SCANA Corporation	SCG	\$51.78	4.20%	4.30%	4.50%	5.13%	4.53%	2.65%	27.00%	26.00%	67.30%	\$0.00	10.64%	14.24	2,52
Southern Company	SO	\$42.94	3.50%	3.32%	4.50%	4.40%	3.93%	2.65%	76.00%	71.00%	67.30%	\$0.00	10.17%	15.73	2.78
TECO Energy, Inc.	世	\$18.35	7.10%	9.20%	%00.9	3.60%	6.48%	2.65%	83.00%	72.00%	67.30%	\$0.00	9.94%	16.58	2.93
Westar Energy, Inc.	WR	\$35.52	3.50%	3.40%	%00.9	5.25%	4.54%	2.65%	61.00%	55.00%	67.30%	\$0.00	10.18%	15.69	2.78
Xcel Energy Inc.	XEL	\$33.19	2.00%	4.58%	4.50%	3.95%	4.51%	2.65%	63.00%	64.00%	67.30%	\$0.00	9.94%	16.58	2.93
												Mean	10.02%		
												Max	15.03%		
												Z Z	7.46%		

\$11.61 \$8.98 \$3.33 \$6.65 \$2.03 \$3.64 \$7.74 \$7.74 \$7.74 \$3.30 \$3.80 \$7.56 \$4.31 \$6.73 \$2.82 \$4.28 \$2.43 \$5.23 \$4.51 \$8.43 \$5.90 [31] \$7.41 \$4.05 \$3.16 \$6.29 \$1.92 \$3.44 \$7.33 \$5.53 \$7.15 \$4.08 \$6.37 \$8.50 \$3.12 \$7.91 \$7.58 \$4.74 \$5.59 \$2.30 \$4.95 \$4.27 \$2.67 \$7.98 [30] \$6.19 \$7.49 \$6.24 \$6.03 \$2.53 \$2.53 \$3.87 \$2.53 \$3.83 \$6.37 \$7.02 \$1.02 \$5.99 \$5.96 \$5.96 \$5.96 \$6.94 \$7.17 [29] \$4.96 \$6.41 \$5.71 \$5.71 \$5.39 \$6.03 \$6.64 \$9.84 \$5.64 \$1.72 \$3.08 \$6.56 \$3.89 \$2.80 \$7.08 \$4.25 \$7.15 \$5.01 \$2.06 \$4.44 \$3.82 \$2.83 [28] \$4.69 \$5.06 \$5.40 \$5.40 \$5.40 \$5.71 \$5.71 \$5.23 \$7.21 \$5.34 \$6.29 \$7.21 \$5.34 \$6.29 \$5.34 \$6.29 \$6.29 \$6.29 \$2.65 \$6.43 [27] \$5.25 \$6.35 \$5.24 \$5.44 \$5.44 \$5.32 \$5.32 \$5.32 \$5.34 \$5.54 \$5.55 \$5.65 \$6.34 \$6.08 \$3.81 \$6.41 \$4.48 \$1.84 \$3.97 \$3.43 [56] \$4.20 \$5.43 \$3.10 \$4.84 \$2.03 \$3.07 \$5.63 \$8.35 \$6.46 \$4.78 \$1.46 \$2.62 \$5.57 \$3.30 \$2.37 \$5.76 \$4.24 \$1.75 \$3.76 \$3.24 \$5.11 \$2.40 \$6.01 \$6.06 [25] \$5.46 \$5.15 \$2.94 \$4.58 \$1.93 \$2.91 \$5.32 \$7.91 \$6.13 \$2.28 \$4.52 \$1.38 \$2.48 \$5.29 \$2.25 \$3.41 \$4.86 \$3.13 \$4.03 \$1.65 \$3.57 \$3.07 [24] \$4.45 \$5.38 \$3.76 \$4.89 \$2.78 \$4.35 \$1.84 \$2.75 \$2.75 \$2.75 \$3.75 \$2.75 \$2.75 \$2.16 \$4.26 \$1.31 \$2.35 \$5.05 \$2.96 \$5.34 \$5.18 \$3.24 \$5.46 \$3.83 \$1.56 \$3.39 \$2.92 [23] \$4.22 \$5.10 \$3.56 \$4.65 \$2.64 \$4.12 \$1.76 \$2.60 \$4.46 \$4.73 \$7.13 \$5.55 \$2.06 \$4.02 \$1.24 \$2.23 \$4.83 \$4.93 \$5.20 [22] \$2.81 \$5.01 \$4.00 \$4.83 \$3.37 \$4.42 \$2.51 \$3.91 \$1.70 \$4.29 \$6.78 \$6.78 \$1.97 \$1.18 \$2.12 \$2.67 \$1.96 \$4.69 \$4.70 \$2.92 \$4.95 \$3.50 \$1.38 \$3.07 \$2.65 [21] 53.79 54.57 55.42 57.42 57.42 57.42 57.43 \$3.36 \$1.30 \$2.93 \$2.53 [20] \$3.59 \$4.33 \$3.01 \$4.02 \$2.26 \$3.54 \$1.60 \$2.19 \$4.04 \$3.93 \$6.16 \$4.87 \$1.82 \$3.33 \$1.05 \$1.92 \$4.35 \$4.29 \$2.65 \$4.53 \$1.81 \$3.23 \$1.22 \$2.81 \$2.42 [19] \$3.40 \$4.10 \$2.84 \$3.84 \$2.15 \$3.36 \$1.55 \$3.93 \$5.88 \$5.88 \$5.88 \$5.88 \$1.75 \$1.00 \$1.75 \$5.18 \$2.30 \$1.74 \$3.79 \$6.40 \$3.11 \$1.15 \$2.68 \$2.32 [18] \$3.23 \$3.88 \$3.69 \$3.04 \$1.95 \$1.95 \$3.20 \$1.95 \$3.83 \$3.83 \$3.83 \$3.83 \$3.83 \$3.83 \$3.83 \$3.83 \$3.83 \$3.83 \$3.93 \$3.195 \$3.53 \$3.92 \$2.40 \$2.99 \$1.08 \$2.57 \$2.22 [17] \$4.14 \$3.06 \$3.57 \$3.50 \$3.50 \$3.50 \$3.30 \$3.30 \$3.25 \$3.32 \$3.32 \$3.32 \$3.32 \$3.32 \$3.32 \$3.32 \$3.33 \$3.29 \$3.74 \$2.29 \$3.96 \$2.88 \$1.01 \$2.46 \$2.12 [16] \$3.48 \$2.40 \$3.34 \$1.84 \$2.89 \$1.42 \$1.74 \$3.62 \$3.05 \$5.10 \$4.13 \$1.55 \$2.58 \$0.85 \$1.57 \$3.06 \$2.18 \$3.79 \$1.98 [15] American Electric Power Company, Inc. Portland General Electric Company Pinnacle West Capital Corporation Empire District Electric Company Alliant Energy Corporation NorthWestern Corporation Consolidated Edison, Inc. Dominion Resources, Inc. **Duke Energy Corporation** CMS Energy Corporation CenterPoint Energy, Inc. Great Plains Energy Inc. Black Hills Corporation DTE Energy Company Otter Tail Corporation Ameren Corporation SCANA Corporation Westar Energy, Inc. Southern Company TECO Energy, Inc. Earnings per Share Eversource Energy OGE Energy Corp. Avista Corporation FirstEnergy Corp. Projected Annual Xcel Energy Inc IDACORP, Inc. ALLETE, Inc. 4 ro 9 1

4	Projected Annual				,				1									
2	Dividend Payout Ratio		[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]
			!	!	!		:											
ဖ		Ticker	2015	2016	2017	2018	2019	2020	2021		2023	2024	2025	2026	2027	2028	2029	2030
7	ALLETE, Inc.	ALE	%00.99	64.75%	63.50%	62.25%	61.00%	62.05%	63.10% 6	64.15% 6	65.20% 66	66.25% 6	67.30% 6	37.30% 6	67.30% 6	67.30%	67.30%	67.30%
ω	Alliant Energy Corporation	Ę	61.00%	61.50%	62.00%	62.50%	63.00%	63.72%	64.43% 6	65.15% 6	65.87% 66	9 %65.99	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%
6	Ameren Corporation	AEE	%00'59	62.50%	%00'09	27.50%	22.00%	57.05%	59.10% 6	61.15% 6	63.20% 6€	65.25% 6	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%
6	American Electric Power Company, Inc.	AEP	%00'59	64.75%	64.50%	64.25%	64.00%	64.55%	65.10% 6	65,65% 6	66.20% 66	66.75% 6	67.30% 6	67,30% 6	67.30% 6	67.30%	67.30%	67.30%
7	Avista Corporation	AVA	%00''29	66.25%	65.50%	64.75%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 66	9 %51.99	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%
12	Black Hills Corporation	BKH	27.00%	27.50%	28.00%	28.50%	29.00%	60.38%	61.77% 6	63.15% 6	64.54% 65	65.92% 6	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%
13		CNP	93.00%	89.75%	86.50%	83.25%	80.00%	77.88%	75.77% 7	73.65% 7	71.54% 65	69.42% 6	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%
4	CMS Energy Corporation	CMS	_	61.25%	61.50%	61.75%	62.00%	62.88%	63.77% 6	64.65% 6	65.54% 66	66.42% 6	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%
15	Consolidated Edison, Inc.		65.00%	64.50%	64.00%	63.50%	63.00%	63.72%	64.43% 6	65.15% 6	65.87% 66	.9 %65.99	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%
16	nc.	Δ	72.00%	72.00%	72.00%	72.00%	72.00%	71.22%	70.43% 6	69.65% 6	68.87% 68	.9 %60.89	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
17	DTE Energy Company	OTE	62.00%	61.50%	61.00%	%05.09	%00.09	61.22%	62.43% 6	63.65% 6	64.87% 66	.9 %60.99	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%
18	ion	E E	72.00%	70.50%	%00'69	67.50%	%00'99	66.22%	66.43% 6	66.65% 61	66.87% 67	.9 %60.79	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%
19	ctric Company	EDE	%00'92	74.25%	72.50%		%00.69	68.72%	68.43% 6	68.15% 6		.9 %65.79	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%
20	Áf	ES	29.00%	58.25%	27.50%	26.75%	26.00%	57.88%	59.77% 6	61.65% 6	63.54% 65	65.42% 6	67.30% 6	9 %06.79	67.30% 6	67.30%	67.30%	67.30%
21		## #	28.00%	22.00%	26.00%		54.00%	56.22%		60.65% 6			67.30% 6		67.30%	67.30%	67.30%	67.30%
22	nergy Inc.	GXP		67.75%	65.50%		61.00%	62.05%	63.10% 6		65.20% 66	66.25% 6	67.30% 6			67.30%	67.30%	67.30%
23		DΑ	_	51.25%	53.50%	_	28.00%	29.55%	61,10% 6	62.65% 6	64.20% 65	65.75% 6	67.30% 6		67.30%	67.30%	67.30%	67.30%
54	ooration	NWE		59.25%	62.50%	65.75%	%00.69	68.72%		68.15% 6		67.59% 6	67.30% 6		67.30% 6	67.30%	67.30%	67.30%
25		0GE	86.00%	79.25%	72.50%	65.75%	29.00%	60.38%	61.77% 6	63.15% 6		65.92% 6	67.30% 6	.9 %06.79	67.30%	67.30%	67.30%	67.30%
56	Otter Tail Corporation	OTTR	%00.02	%05.99	63.00%	29.50%	26.00%	57.88%	59.77% 6	61.65% 6:	63.54% 65	65,42% 6	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%
27	Pinnacle West Capital Corporation	PNW	63.00%	63.25%	63.50%	63.75%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 66	66.75% 6	67.30% 6		67.30% 6	67.30%	67.30%	67.30%
28	ectric Company	POR	20.00%	51.50%	53.00%	54.50%	26.00%	57.88%	59.77% 6	61.65% 6:	63.54% 65	65.42% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
29	SCANA Corporation	SCG	27.00%	26.75%	26.50%	56.25%	26.00%	57.88%	59.77% 6	61.65% 63	63.54% 65	65.42% 6	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67,30%
30	Southern Company	S	%00.92	74.75%	73.50%	72.25%	71.00%	70.38%	69.77% 6	69.15% 6	68.54% 67	67.92% 6	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%
31	TECO Energy, Inc.	里	83.00%	80.25%	77.50%	74.75%	72.00%	71.22%	70.43% 6	69.65% 6	68.87% 68	9 %60.89	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%
32	Westar Energy, Inc.	¥.	61.00%	29.50%	28.00%	26.50%	25.00%	57.05%	59.10% 6	61.15% 6	63.20% 65	65.25% 6	67.30% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%
33	Xcel Energy Inc.	XEL	63.00%	63.25%	63.50%	63.75%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 66	66.75% 6	67.30% 6	7.30% 6	67.30% 6	67.30%	67.30%	67.30%
																		Ī

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

4 Projected Annual 5 Cash Flows		[48]	[49]	[50]	[51]	[52]	[23]	[54]	[55]	[26]	[57]	[58]	[69]	[60]	[61]	[62]	<u>83</u>	[64]
	·														The same of the sa			[erminal
6 Company	Ticker	2015	5 2016	-	2018	2019	2020	2021							2028	2029	2030	Value
7 ALLETE, Inc.	ALE	\$2.02	2 \$2.09		\$2.24	\$2.31	\$2.48	\$2.66							\$4.17	\$4.40	\$4.65	\$111.52
8 Alliant Energy Corporation	FN'	\$2.2	4 \$2.39		\$2.70	\$2.88	\$3.08	\$3.28							\$5.04	\$5.32	\$5.63	\$136.06
9 Ameren Corporation	AEE	\$1.65	5 \$1.68		\$1.73	\$1.75	\$1.92	\$2.10							\$3.53	\$3.72	\$3.93	\$90.81
10 American Electric Power Company, Inc.	c. AEP	\$2.27	7 \$2.37		\$2,58	\$2.70	\$2.85	\$3.02							\$4.56	\$4.81	\$5.09	\$123.04
11 Avista Corporation	AVA	\$1,30	31.35		\$1.46	\$1.52	\$1.62	\$1.72							\$2.60	\$2.75	\$2.90	\$70.91
12 Black Hills Corporation	MKH MKH	\$1.73	3 \$1.84		\$2.07	\$2.19	\$2.36	\$2.55							\$4.06	\$4.29	\$4.53	\$106.63
 CenterPoint Energy, Inc. 	CNP	\$1.36	5 \$1.35		\$1.33	\$1.31	\$1.32	\$1.34							\$1.70	\$1.80	\$1.90	\$40.05
14 CMS Energy Corporation	CMS	\$1.12			\$1.35	\$1.44	\$1.54	\$1.66							\$2.58	\$2.72	\$2.88	\$75.53
15 Consolidated Edison, Inc.	9	\$2.42	2 \$2.47		\$2.57	\$2.62	\$2.74	\$2.87							\$4.29	\$4.53	\$4.79	\$132.87
16 Dominion Resources, Inc.	۵	\$2.34	4 \$2:49		\$2.83	\$3.02	\$3.17	\$3.33							\$4.72	\$4.99	\$5.27	\$154.42
17 DTE Energy Company	DTE	\$3.32	2 \$3.45		\$3.73	\$3.88	\$4.15	\$4.45							\$7.00	\$7.39	\$7.81	\$175.28
18 Duke Energy Corporation	Š	\$3.10			\$3.29	\$3.35	\$3.51	\$3.69							\$5.42	\$5.72	\$6.05	\$164.27
19 Empire District Electric Company		\$1.23			\$1.29	\$1.31	\$1.36	\$1.41							\$2.01	\$2.12	\$2.24	\$49.77
20 Eversource Energy	S	\$1.62			\$1.89	\$1.99	\$2.19	\$2.40							\$4.01	\$4.24	\$4.48	\$111.64
21 FirstEnergy Corp.	띺	\$0.52	2 \$0.54	\$0.56	\$0.58	\$0.60	\$0.66	\$0.73	\$0.79	\$0.87	\$0.95	\$1.04	\$1.10	\$1.16	\$1.23	\$1.30	\$1.37	\$79.98
22 Great Plains Energy Inc.	GXP	\$1.16			\$1.21	\$1.23	\$1.31	\$1.41							\$2.19	\$2.32	\$2.45	\$57.23
23 IDACORP, Inc.	Δ	\$1.95	5 \$2.10		\$2.43	\$2.60	\$2.77	\$2.95							\$4.67	\$4.93	\$5.21	\$133.69
24 NorthWestern Corporation	NWE	\$1.17	7 \$1.30		\$1.59	\$1.75	\$1.84	\$1.92							\$2.77	\$2.92	\$3.09	\$115.62
25 OGE Energy Corp.	OGE	\$1.39			\$1.19	\$1.11	\$1.18	\$1.26							\$1.99	\$2.10	\$2.22	\$67.19
26 Otter Tail Corporation	OTTR	\$2,30	3 \$2.35		\$2.42	\$2.45	\$2.71	\$2.99							\$5.04	\$5.32	\$5.62	\$63.36
27 Pinnacle West Capital Corporation	PNW	\$2.36	\$ \$2.48		\$2.73	\$2.87	\$3.03	\$3.21							\$4.83	\$5.10	\$5.39	\$132.59
28 Portland General Electric Company	POR	\$1.14	\$1.24		\$1.44	\$1.56	\$1.69	\$1.84							\$3.02	\$3.19	\$3.37	\$80.40
29 SCANA Corporation	SCG	\$2.26	\$ \$2.35		\$2.55	\$2.65	\$2.87	\$3.11							\$5.08	\$5.37	\$5.68	\$120.11
30 Southern Company	SO	\$2.19	3 \$2.24		\$2.33	\$2.38	\$2.46	\$2.55							\$3.56	\$3.76	\$3.97	\$92.83
31 TECO Energy, Inc.	世	\$0.84			\$0.91	\$0.94	\$0.98	\$1.03							\$1.46	\$1.55	\$1.63	\$40.24
32 Westar Energy, Inc.	WR	\$1.50			\$1.59	\$1.61	\$1.75	\$1.90							\$3.15	\$3,33	\$3.52	\$82.07
33 Xcel Energy Inc.	XEL	\$1.34	\$1.40		\$1.54	\$1.62	\$1.71	\$1.81							\$2.72	\$2.87	\$3.03	\$74.78

- 0.0					() () () () () () () () () ()	Mu	Iti-Stage G 30	Multi-Stage Growth Discounted Cash Flow Model 30 Day Average Stock Price	unted Cas Stock Pr	h Flow Mic ice	del	4							
5 4 Projected Annual Data					מ ט ע	ם סרון הע	סיאווו יאמים	Average ETS Growin Rate Estimate in Filst Stage (With Sustainable Growin)	list olay	(will ou	stall lable	GIOWIII)							
5 Investor Cash Flows		[65]	[99]	[67]	[68]	[69]	[10]	[71]	[72]	[73]	[74]	[75]	[16]	[77]	[78]	[67]	[80]	[81]	[82]
		Initial																	MEDinoshummanan
6 Company	Ticker	Outflow	6/25/15	12/31/15	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	6/30/59	6/30/30
7 ALLETE, Inc.	ALE	(\$48.97)	\$0.00	\$1.05	1	\$2.16	\$2.24	\$2.31	\$2.48	\$2.66	\$2.86	\$3.07	\$3.29	\$3.53	\$3.73	\$3.94	\$4.17	\$4.40	\$116.17
8 Alliant Energy Corporation	ĽN	(\$59.59)	\$0.00	\$1.16	\$2.30	\$2.54	\$2.70	\$2.88	\$3.08	\$3.28	\$3.51	\$3.75	\$4.00	\$4.27	\$4.51	\$4.77	\$5.04	\$5.32	\$141.68
9 Ameren Corporation	AEE	(\$39.13)	\$0.00	\$0.85	\$1.70	\$1.71	\$1.73	\$1.75	\$1.92	\$2.10	\$2.30	\$2.51	\$2.74	\$2.99	\$3.16	\$3.34	\$3.53	\$3.72	\$94.74
10 American Electric Power Company, Inc.	AEP	(\$54.66)	\$0.00	\$1.18	\$2.33	\$2.48	\$2.58	\$2.70	\$2.85	\$3.02	\$3.21	\$3.41	\$3.63	\$3.86	\$4.08	\$4.31	\$4.56	\$4.81	\$128.13
11 Avista Corporation	AVA	(\$31.45)	\$0.00	\$0.67	\$1.33	\$1.41	\$1.46	\$1.52	\$1.62	\$1.72	\$1.83	\$1.95	\$2.07	\$2.21	\$2.33	\$2.46	\$2.60	\$2.75	\$73.81
12 Black Hills Corporation	BKH	(\$46.14)	\$0.00	\$0.90	\$1.78	\$1.95	\$2.07	\$2.19	\$2.36	\$2.55	\$2.74	\$2.96	\$3,19	\$3.44	\$3.64	\$3.84	\$4.06	\$4.29	\$111.17
 CenterPoint Energy, Inc. 	CNP	(\$19.77)	\$0.00	\$0.70	\$1.38	\$1.34	\$1.33	\$1.31	\$1.32	\$1.34	\$1.35	\$1.38	\$1.41	\$1.44	\$1.52	\$1.61	\$1.70	\$1.80	\$41.95
14 CMS Energy Corporation	CMS	(\$32.93)	\$0.00	\$0.58	\$1.16	\$1.27	\$1.35	\$1.44	\$1.54	\$1.66	\$1.78	\$1.91	\$2.04	\$2.19	\$2.31	\$2.44	\$2.58	\$2.72	\$78.41
15 Consolidated Edison, Inc.		(\$59.64)	\$0.00	\$1.25	\$2.45	\$2.52	\$2.57	\$2.62	\$2.74	\$2.87	\$3.03	\$3.20	\$3.41	\$3.64	\$3.84	\$4.06	\$4.29	\$4.53	\$137.66
16 Dominion Resources, Inc.	Δ	(\$69.20)	\$0.00	\$1.21	\$2.42	\$2.66	\$2.83	\$3.02	\$3.17	\$3.33	\$3.50	\$3.67	\$3.83	\$4.00	\$4.23	\$4.47	\$4.72	\$4.99	\$159.69
17 DTE Energy Company	DTE	(\$76.77)	\$0.00	\$1.72	\$3.40	\$3.59	\$3.73	\$3.88	\$4.15	\$4.45	\$4.78	\$5.13	\$5.51	\$5.93	\$6.27	\$6.62	\$7.00	\$7.39	\$183.09
18 Duke Energy Corporation	5 S	(\$74.10)	\$0.00	\$1.60	\$3.16	\$3.23	\$3.29	\$3.35	\$3.51	\$3.69	\$3.88	\$4.10	\$4.33	\$4.59	\$4.85	\$5.13	\$5.42	\$5.72	\$170.31
19 Empire District Electric Company	EDE	(\$22.93)	\$0.00	\$0.63	\$1.25	\$1.27	\$1.29	\$1.31	\$1,36	\$1.41	\$1.47	\$1.54	\$1.62	\$1.70	\$1.80	\$1.90	\$2.01	\$2.12	\$52.02
20 Eversource Energy	S	(\$47.64)	\$0.00	\$0.84	\$1.68	\$1.80	\$1.89	\$1.99	\$2.19	\$2.40	\$2.63	\$2.87	\$3.13	\$3,40	\$3.59	\$3.79	\$4.01	\$4.24	\$116.12
21 FirstEnergy Corp.	띮	(\$34.60)	\$0.00	\$0.27	\$0.53	\$0.56	\$0.58	\$0.60	\$0.66	\$0.73	\$0.79	\$0.87	\$0.95	\$1.04	\$1.10	\$1.16	\$1.23	\$1.30	\$81,34
22 Great Plains Energy Inc.	GXP	(\$25.35)	\$0.00	\$0.60	\$1.18	\$1.19	\$1.21	\$1.23	\$1.31	\$1.41	\$1.51	\$1.62	\$1.73	\$1.86	\$1.96	\$2.08	\$2.19	\$2.32	\$59.68
23 IDACORP, Inc.	IDA	(\$57.95)	\$0.00	\$1.01	\$1.98	\$2.26	\$2.43	\$2.60	\$2.77	\$2.95	\$3.16	\$3.40	\$3.66	\$3.96	\$4.18	\$4.42	\$4.67	\$4.93	\$138.90
24 NorthWestern Corporation	NWE	(\$51.02)	\$0.00	\$0.60	\$1.20	\$1.44	\$1.59	\$1.75	\$1.84	\$1.92	\$2.02	\$2.12	\$2.23	\$2.35	\$2.48	\$2.62	\$2.77	\$2.92	\$118.71
25 OGE Energy Corp.	OGE	(\$30.33)	\$0.00	\$0.72	\$1.41	\$1.26	\$1.19	\$1.11	\$1.18	\$1.26	\$1.35	\$1.45	\$1.56	\$1.69	\$1.78	\$1.88	\$1.99	\$2.10	\$69.41
26 Otter Tail Corporation	OTTR	(\$26.99)	\$0.00	\$1.19	\$2.39	\$2.39	\$2.42	\$2.45	\$2.71	\$2.99	\$3.29	\$3.60	\$3.93	\$4.27	\$4.51	\$4.77	\$5.04	\$5.32	\$68.98
27 Pinnacle West Capital Corporation	PNW	(\$58.80)	\$0.00	\$1.22	\$2.41	\$2,60	\$2.73	\$2.87	\$3.03	\$3.21	\$3.40	\$3.61	\$3.84	\$4.09	\$4.33	\$4.57	\$4.83	\$5.10	\$137.98
28 Portland General Electric Company	POR	(\$34.24)	\$0.00	\$0.59	\$1.17	\$1.34	\$1.44	\$1.56	\$1.69	\$1.84	\$2.00	\$2.17	\$2.36	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$83.77
29 SCANA Corporation	SCG	(\$51.78)	\$0.00	\$1.17	\$2.31	\$2.45	\$2.55	\$2.65	\$2.87	\$3.11	\$3.37	\$3.65	\$3.97	\$4.31	\$4.56	\$4.81	\$5.08	\$5.37	\$125.79
30 Southern Company	S	(\$42.94)	\$0.00	\$1.13	\$2.23	\$2.29	\$2.33	\$2.38	\$2.46	\$2.55	\$2.65	\$2.76	\$2.88	\$3.02	\$3.19	\$3.37	\$3.56	\$3.76	\$96.81
31 TECO Energy, Inc.	Щ	(\$18.35)	\$0.00	\$0.43	\$0.87	\$0.89	\$0.91	\$0.94	\$0.98	\$1.03	\$1.08	\$1.14	\$1.19	\$1.24	\$1.31	\$1,39	\$1.46	\$1.55	\$41.87
32 Westar Energy, Inc.	N N	(\$35.52)		\$0.78	\$1.53	\$1.56	\$1.59	\$1.61	\$1.75	\$1.90	\$2.07	\$2.25	\$2.45	\$2.67	\$2.83	\$2.99	\$3.15	\$3,33	\$85.59
33 Xcel Energy Inc.	XEL	(\$33.19)	\$0.00	\$0.69	\$1.37	\$1.47	\$1.54	\$1.62	\$1.71	\$1.81	\$1.92	\$2.04	\$2.16	\$2.31	\$2.44	\$2.57	\$2.72	\$2.87	\$77.82

Multi-Stage Growth Discounted Cash Flow Model 30 Day Average Stock Price High EPS Growth Rate Estirnate in First Stage (with Sustainable Growth)

4	Inputs		[1]	[2]	[3]	[4]	[5]	[9]	[7]	[8]	[6]	[10]	[11]	[12]	[13]	[14]
ß			Stock		EPS Gr	EPS Growth Rate	Estimates		Long-Term	ď	Payout Ratio	0	Iterative Solution		Terminal '	Terminal
						Value	Retention	High							P/E	PEG
9	Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	Growth	2015	2019	2025	Proof	IR R	Ratio	Ratio
7	ALLETE, Inc.	ALE	\$48.97	ΑĀ	6.00%	6.50%	3.97%	6.50%	5.65%	%00.99	61,00%	67.30%	\$0.00	10.35%	15.15	2.68
œ	Alliant Energy Corporation	Ľ	\$59.59	5.30%	5.45%	%00.9	2.66%	8.00.9	5.65%	61.00%	63.00%	67.30%	\$0.00	10.13%	15.87	2.81
o	Ameren Corporation	AEE	\$39.13	8.80%	5.85%	8.00.9	4.56%	808.9	5.65%	65.00%	55.00%	67.30%	\$0.00	10.52%	14.60	2.58
6	American Electric Power Company, Inc.	AEP	\$54.66	4.90%	5.08%	2.00%	4.07%	2.08%	2.65%	65.00%	64.00%	67.30%	\$0.00	10.11%	15.96	2.82
Ξ	Avista Corporation	AVA	\$31.45	ž	2.00%	7.00%	3.80%	7.00%	5.65%	67.00%	64.00%	67.30%	\$0.00	10.48%	14.73	2.61
12	Black Hills Corporation	BKH	\$46.14	ž	7.00%	4.50%	4.02%	7.00%	5.65%	57.00%	59.00%	67.30%	\$0.00	10.68%	14.14	2.50
5	CenterPoint Energy, Inc.	CNP	\$19.77	5.70%	1.91%	1.00%	3.19%	2.70%	2.65%	93.00%	80.00%	67.30%	\$0.00	11.65%	11.86	2.10
4	CMS Energy Corporation	CMS	\$32.93	6.20%	6.73%	2.50%	5.27%	6.73%	2.65%	61.00%	62.00%	67.30%	\$0.00	9.89%	16.79	2.97
15	Consolidated Edison, Inc.	囧	\$59.64	2.70%	2.38%	3.00%	3.15%	3.15%	2.65%	82.00%	63.00%	67.30%	\$0.00	9.55%	18.26	3.23
16	Dominion Resources, Inc.	۵	\$69.20	6.30%	5.89%	8.00%	%00.9	8.00%	2.65%	72.00%	72.00%	67.30%	\$0.00	9.61%	17.96	3.18
17	DTE Energy Company	DTE	\$76.77	2.00%	4.51%	2.00%	4.88%	5.00%	5.65%	62.00%	%00.09	67.30%	\$0.00	10.41%	14.96	2.65
9	Duke Energy Corporation	PČK	\$74.10	4.70%	4.49%	2.00%	2.67%	2.00%	2.65%	72.00%	%00.99	67.30%	\$0.00	9.75%	17.37	3.07
9	Empire District Electric Company	EDE	\$22.93	2.00%	2.00%	3.00%	3.25%	2.00%	2.65%	76.00%	%00.69	67.30%	\$0.00	10.71%	14.05	2.49
20	Eversource Energy	ES	\$47.64	8.80%	%09.9	8.50%	4.50%	8.50%	2.65%	29.00%	26.00%	67.30%	\$0.00	10.41%	14.94	2.64
7	FirstEnergy Corp.	밆	\$34.60	Ϋ́	Š	7.00%	4.09%	7.00%	5.65%	58.00%	54.00%	67.30%	\$0.00	7.64%	35.70	6.32
22	Great Plains Energy Inc.	GXD	\$25.35	6.00%	6.37%	2.00%	3.02%	6.37%	2.65%	70.00%	61.00%	67.30%	\$0.00	10.55%	14.52	2.57
ຊ	IDACORP, Inc.	₫	\$57.95	4.00%	4.00%	1.00%	3.51%	4.00%	2.65%	49.00%	28.00%	67.30%	\$0.00	10.01%	16.32	2.89
54	NorthWestern Corporation	NWE	\$51.02	2,00%	2.00%	6.50%	3.90%	6.50%	2.65%	26.00%	%00.69	67.30%	\$0.00	8.75%	22.97	4.06
52		OGE	\$30.33	2.00%	4.00%	3.00%	3.68%	2.00%	5.65%	86.00%	29.00%	67.30%	\$0.00	9.40%	18.96	3.35
92		OTTR	\$26.99	ž	8.00.9	%00.6	7.25%	%00.6	2.65%	70.00%	26.00%	67.30%	\$0.00	15.87%	96.9	1.23
27	Pinnacle West Capital Corporation	PNW	\$58.80	4.60%	5.30%	4.00%	4.52%	5.30%	5.65%	63.00%	64.00%	67.30%	\$0.00	10.14%	15.84	2.80
28	Portland General Electric Company	POR	\$34.24	5.20%	4.72%	%00.9	4.04%	%00'9	2.65%	20.00%	26.00%	67.30%	\$0.00	10.37%	15.06	2.66
33	SCANA Corporation	SCG	\$51.78	4.20%	4.30%	4.50%	5.13%	5.13%	5.65%	27.00%	26.00%	67.30%	\$0.00	10.83%	13.72	2.43
8	Southern Company	SO	\$42.94	3.50%	3.32%	4.50%	4.40%	4.50%	2.65%	76.00%	71.00%	67.30%	\$0.00	10.35%	15.15	2.68
33	TECO Energy, Inc.	旦	\$18.35	7.10%	9.20%	%00.9	3.60%	9.20%	2.65%	83.00%	72.00%	67.30%	\$0.00	10.74%	13.97	2.47
32	Westar Energy, Inc.	Νĸ	\$35.52	3.50%	3.40%	%00′9	5.25%	%00'9	5.65%	61.00%	25.00%	67.30%	\$0.00	10.62%	14.32	2.53
£.	Xcel Energy Inc.	XEL	\$33.19	5.00%	4.58%	4.50%	3.95%	5.00%	2.65%	63.00%	64.00%	67.30%	\$0.00	10.08%	16.07	2.84
34													Mean	10.36%		
32													Max	15.87%		
36													Ĕ	7.64%		

\$8.42 \$5.39 \$8.80 \$6.15 \$2.93 \$5.81 \$4.67 \$11.73 \$9.50 \$3.57 \$7.59 \$2.25 \$3.98 \$8.25 \$5.07 \$5.07 \$8.60 \$6.27 \$7.73 \$4.88 \$7.66 \$3.43 \$4.53 \$7.29 \$8.67 [31] \$11.11 \$8.99 \$3.38 \$7.19 \$3.77 \$7.80 \$4.80 \$3.38 \$8.14 \$5.94 \$7.32 \$4.62 \$7.25 \$7.25 \$3.25 \$4.28 \$4.28 \$5.10 \$8.33 \$5.82 \$7.96 [30] \$5.51 \$2.63 \$5.20 \$4.18 \$656 \$5.70 \$5.65 \$5.62 \$5.95 \$5.95 \$5.95 \$5.10 \$ [29] \$6.55 \$6.50 \$3.84 \$6.18 \$6.99 \$4.30 \$3.02 \$7.91 \$8.06 \$3.02 \$6.44 \$1.91 \$3.38 \$9.95 \$4.57 \$5.21 [28] \$6.15 \$2.76 \$3.63 \$5.85 \$6.62 \$4.07 \$2.86 \$7.48 \$6.09 \$7.63 \$2.86 \$6.96 \$9.42 \$1.81 \$3.20 \$6.75 \$2.36 \$3.91 [27] \$5.64 \$6.53 \$4.77 \$5.87 \$8.91 \$2.71 \$3.85 \$7.08 \$5.82 \$2.61 \$3.44 \$5.54 \$6.59 \$6.26 \$4.09 \$3.02 \$6.68 \$4.67 [26] \$1.71 \$5.46 \$3.25 \$5.24 \$6.23 \$2.56 \$2.86 \$3.64 \$2.56 \$6.70 \$2.47 \$8.44 \$6.83 \$1.62 \$5.93 \$6.05 [25] \$5.51 High EPS Growth Rate Estimate in First Stage (with Sustainable Growth) \$2.34 \$3.07 \$4.98 \$7.99 \$5.14 \$3.44 \$2.43 \$6.31 \$5.99 \$5.20 \$5.88 \$2.43 \$5.63 \$3.66 \$3.31 \$6.47 \$5.73 \$2.71 24 \$4.90 \$2.21 \$2.90 \$4.75 \$5.52 \$6.14 \$2.30 \$4.83 \$1.44 \$2.56 \$3.25 \$2.30 \$5.91 \$5.43 \$3.46 \$3.98 \$7.58 \$5.68 23 \$2.19 \$4.61 \$2.09 \$2.73 \$4.55 \$5.17 \$7.20 \$5.83 \$1.36 \$5.11 \$3.06 \$2.19 \$4.49 \$5.22 \$3.78 \$4.74 \$2.94 \$2.41 \$5.51 [22] \$4.23 \$4.93 \$4.93 \$5.76 \$2.76 \$4.33 \$1.98 \$4.38 \$4.82 \$5.44 \$5.68 \$4.19 \$5.68 \$4.19 \$5.68 \$4.19 \$5.68 \$4.19 \$5.68 \$6.84 \$2.89 \$2.08 \$5.11 \$3.09 \$5.12 \$3.61 \$4.88 [21] \$5.27 \$1.98 \$3.88 \$1.19 \$2.14 \$3.45 \$1.48 \$3.14 \$2.59 \$4.66 \$3.33 \$4.28 \$2.58 \$4.05 \$1.87 \$2.41 \$2.41 \$4.23 \$4.23 \$4.68 \$2.71 \$1.98 \$4.71 \$4.63 \$2.92 \$4.87 図 \$2.41 \$3.79 \$1.77 \$6.20 \$5.02 \$1.88 \$3.58 \$1.11 \$4.50 \$2.55 \$1.88 \$4.32 \$4.40 \$2.75 \$4.63 \$3.30 \$1.35 [19] \$3.50 \$4.14 \$2.92 \$3.88 \$3.25 \$3.25 \$3.54 \$1.68 \$1.68 \$2.12 \$3.97 \$5.90 \$4.78 \$1.79 \$3.30 \$1.04 \$1.89 \$4.33 \$2.39 \$1.79 \$3.96 \$2.60 \$4.18 \$3.16 \$2.80 \$1.24 [18] \$4.19 \$3.02 \$1.13 \$3.29 \$3.29 \$4.27 \$4.27 \$4.29 \$1.69 \$4.55 \$4.57 \$5 \$4.57 \$4.57 \$4.57 \$4.57 \$4.57 \$4.57 \$4.57 \$4.57 \$4.57 \$4.57 \$4. \$4.16 \$2.25 \$1.71 \$3.64 \$3.97 \$2.64 \$3.09 \$2.56 \$3.51 \$1.97 \$1.97 \$3.73 \$3.73 \$3.73 \$3.29 \$3.29 \$3.29 \$5.36 \$2.11 \$1.63 \$3.34 \$3.98 \$2.89 \$1.67 \$4.00 \$2.31 \$3.48 \$2.40 \$3.34 \$1.84 \$2.89 \$1.42 \$1.74 \$3.62 \$4.13 \$1.55 \$2.58 \$0.85 \$5.10 \$1.57 \$3.85 \$1.98 \$1.55 \$3.06 15 American Electric Power Company, Inc. Portland General Electric Company Pinnacle West Capital Corporation Empire District Electric Company NorthWestern Corporation Alliant Energy Corporation Dominion Resources, Inc. Duke Energy Corporation Consolidated Edison, Inc. CMS Energy Corporation CenterPoint Energy, Inc. Great Plains Energy Inc. Black Hills Corporation DTE Energy Company Otter Tail Corporation Ameren Corporation SCANA Corporation TECO Energy, Inc. Westar Energy, Inc. Eversource Energy Southern Company Earnings per Share Avista Corporation OGE Energy Corp. FirstEnergy Corp. Projected Annual Xcel Energy Inc. IDACORP, Inc. ALLETE, Inc. Company

4	Projected Annual																		
ro -	Dividend Payout Ratio			[32]	[33]	[34]	[32]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]
9	Company	Ticker		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
7	ALLETE, Inc.	ALE	9	%00.99	64.75%	63.50%	62.25%	61.00%	62.05%	63.10%	64.15%	l.。	66,25% 6	٦	67.30%	67.30%	67.30%	67.30%	67.30%
8	Alliant Energy Corporation	Ę		31.00%	61.50%	62.00%	62.50%	63.00%	63.72%	64.43%		65.87%			_	_	67.30%	67.30%	67.30%
6	Ameren Corporation	AEE		65.00%	62.50%	%00.09	57.50%	25.00%	57.05%	59.10%	61.15%	63.20% (65.25% 6		67.30% 6	67.30%	67.30%	67.30%	67.30%
9	American Electric Power Company, Inc.	AEP		%00'59	64.75%	64.50%	64.25%	64.00%	64.55%	65.10%	65.65%	66.20% (66.75% 6	67.30% 6	67.30% 6	67.30%	67.30%	67,30%	67.30%
Ξ	Avista Corporation	AVA		%00.79	66.25%	65.50%	64.75%	64.00%	64.55%	65.10%	65.65%	66.20%	66.75% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
12	Black Hills Corporation	BKH		27.00%	57.50%	58.00%	58.50%	29.00%	60.38%	61.77%	63.15%	64.54% (65.92% 6	67.30% 6			67.30%	67.30%	67.30%
5	CenterPoint Energy, Inc.	CNP		93.00%	89.75%	86.50%	83.25%	80.00%	77.88%	75.77%	73.65%	71.54% (69.42% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
14	CMS Energy Corporation	CMS		61.00%	61.25%	61.50%	61.75%	62.00%	62.88%	63.77%	64.65%	65.54%	66.42% 6	67.30% 6	67.30% €	67.30%	67.30%	67.30%	67.30%
15 (Consolidated Edison, Inc.	잂		%00.59	64.50%	64.00%	63.50%	63.00%	63.72%	64.43%	65.15%	65.87%	66.59%	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
16	Dominion Resources, Inc.	۵		72.00%	72.00%	72.00%	72.00%	72.00%	71.22%	70.43%	69.65%	68.87%	68.09% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
17 .	DTE Energy Company	DTE		62.00%	61.50%	61.00%	60.50%	%00.09	61.22%	62.43%	63.65%	64.87% (9 %60'99	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
18	Duke Energy Corporation	EX.		72.00%	70.50%	%00'69	67.50%	%00.99	66.22%	66.43%	66.65%	66.87%	67.09% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
19	Empire District Electric Company	EDE		%00.92	74.25%	72.50%	70.75%	%00.69	68.72%	68.43%	68.15%	67.87%	67.59% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
20	Eversource Energy	S		29.00%	58.25%	57.50%	56.75%	26.00%	22.88%	59.77%	61.65%	63.54% (65.42% 6	67.30% 6	67.30% €	67.30%	67.30%	67.30%	67.30%
21	FirstEnergy Corp.	빞		28.00%	27.00%	26.00%	22.00%	54.00%	56.22%	58.43%	60.65%	62.87%	65.09% 6	67.30% 6	67.30% €	67.30%	67.30%	67.30%	67.30%
22	Great Plains Energy Inc.	GXP		%00.07	67.75%	65.50%	63.25%	61.00%	62.05%	63.10%	64.15%	65.20% (66,25% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
23	IDACORP, Inc.	ΔĀ		49.00%	51.25%	53.50%	55.75%	28.00%	29.55%	61.10%	62.65%	64.20% 6	65.75% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
24	NorthWestern Corporation	NWE		26.00%	59.25%	62.50%	65.75%	%00'69	68.72%	68.43%	68.15%	67.87%	67.59% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
25 (OGE Energy Corp.	99e		86.00%	79.25%	72.50%	65.75%	29.00%	60.38%	61.77%	63.15%	64.54%	65.92% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
56	Otter Tail Corporation	OTTR		70.00%	66.50%	63.00%	29.50%	26.00%	22.88%	59.77%	61.65%	63.54% (65.42% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
27	Pinnacle West Capital Corporation	MN ^Q		63.00%	63.25%	63.50%	63.75%	64.00%	64.55%	65.10%	65.65%	66.20% 6	66.75% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
28 F	Portland General Electric Company	POR		20.00%	51.50%	53.00%	54.50%	26.00%	57.88%	59.77%	61.65%	63.54% 6	65.42% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
53	SCANA Corporation	SCG		57.00%	26.75%	26.50%	56.25%	26.00%	57.88%	29.77%	61.65%	63.54% (65.42% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
9	Southern Company	SO		76.00%	74.75%	73.50%	72.25%	71.00%	70.38%	69.77%	69.15%	68.54%	67.92% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
•	TECO Energy, Inc.	뮏		83.00%	80.25%	77.50%	74.75%	72.00%	71.22%	70.43%	69.65%	68.87%	68.09% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
35 \	Westar Energy, Inc.	Ν		61.00%	29.50%	28.00%	26.50%	25.00%	57.05%	59.10%	61.15%	63.20% 6	65.25% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
33	Xcel Energy Inc.	XEL		63.00%	63.25%	63.50%	63.75%	64.00%	64.55%	65.10%	65.65%	66.20% 6	66.75% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%

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

4 Projected Annual 5 Cash Flows		[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	[64]
6 Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal
7 ALLETE, Inc.	ALE	\$2.04	\$2.13	\$2.22	\$2.32	\$2.42	\$2.62	\$2.83	\$3.05	\$3.29	\$3.54	\$3.79	\$4.01	\$4.24	\$4.47	\$4.73	\$4.99	\$112.40
8 Alliant Energy Corporation	Ę	\$2.25	\$2.40	\$2.57	\$2.75	\$2.93	\$3.14	\$3.37	\$3.60	\$3.85	\$4.12	\$4.40	\$4.64	\$4.91	\$5.18	\$5.48	\$5.79	\$136.46
9 Ameren Corporation	AEE	\$1.67	\$1.71	\$1.75	\$1.80	\$1.83	\$2.03	\$2.24	\$2.46	\$2.69	\$2.94	\$3.21	\$3.39	\$3.58	\$3.78	\$4.00	\$4.22	\$91,59
10 American Electric Power Company, Inc.	AEP	\$2.28	\$2.39	\$2.50	\$2.62	\$2.74	\$2.91	\$3.08	\$3.28	\$3.49	\$3.71	\$3.95	\$4.17	\$4.41	\$4.66	\$4.92	\$5.20	\$123.32
11 Avista Corporation	AVA	\$1.32	\$1.40	\$1.48	\$1.56	\$1.65	\$1.78	\$1.91	\$2.05	\$2.19	\$2.34	\$2.49	\$2.63	\$2.78	\$2.94	\$3.11	\$3.28	\$71.84
12 Black Hills Corporation	ВКН	\$1.76	\$1.90	\$2.05	\$2.22	\$2,39	\$2.61	\$2.85	\$3.10	\$3.36	\$3.63	\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$5.16	\$108.30
 CenterPoint Energy, Inc. 	CNP	\$1.40	\$1.42	\$1.45	\$1.48	\$1.50	\$1.54	\$1.59	\$1.63	\$1.67	\$1.71	\$1.76	\$1.85	\$1,96	\$2.07	\$2.19	\$2.31	\$40.74
14 CMS Energy Corporation	CMS	\$1.13	\$1.21	\$1.30	\$1.39	\$1.49	\$1.61	\$1.74	\$1.88	\$2.01	\$2.16	\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$3.05	\$75.97
15 Consolidated Edison, Inc.		\$2.43	\$2.48	\$2.54	\$2.60	\$2.66	\$2.79	\$2.93	\$3.10	\$3.28	\$3.49	\$3.73	\$3.94	\$4.16	\$4.40	\$4.65	\$4.91	\$133.15
16 Dominion Resources, Inc.	۵	\$2.37	\$2.56	\$2.77	\$2.99	\$3.23	\$3.43	\$3.64	\$3,85	\$4.05	\$4.24	\$4.43	\$4.68	\$4.95	\$5.23	\$5.52	\$5.84	\$155.72
17 DTE Energy Company	DTE	\$3.32	\$3.46	\$3.60	\$3.75	\$3.91	\$4.19	\$4.49	\$4.83	\$5.19	\$5.58	\$6.00	\$6.34	\$6.70	\$7.08	\$7.48	\$7.90	\$175.49
18 Duke Energy Corporation	And	\$3.12	\$3.21	\$3.30	\$3.39	\$3.48	\$3.67	\$3.87	\$4.09	\$4.33	\$4.58	\$4.86	\$5.13	\$5.42	\$5.73	\$6.05	\$6.40	\$165.07
19 Empire District Electric Company	EDE	\$1.24	\$1.27	\$1.30	\$1.33	\$1.36	\$1.43	\$1.50	\$1.57	\$1.65	\$1.73	\$1.82	\$1.93	\$2.04	\$2.15	\$2.27	\$2.40	\$50.10
20 Eversource Energy	ES	\$1.65	\$1.77	\$1.89	\$2.03	\$2.17	\$2.43	\$2.69	\$2.98	\$3.27	\$3.57	\$3.88	\$4.10	\$4.33	\$4.58	\$4.84	\$5.11	\$113.45
21 FirstEnergy Corp.	밀	\$0.53	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87	\$0.96	\$1.05	\$1.15	\$1.22	\$1.29	\$1.36	\$1.44	\$1.52	\$80.44
22 Great Plains Energy Inc.	GXP	\$1.17	\$1.20	\$1.24	\$1.27	\$1.30	\$1.41	\$1.52	\$1.64	\$1.76	\$1.90	\$2.04	\$2.15	\$2.27	\$2.40	\$2.54	\$2.68	\$57.81
23 IDACORP, Inc.	DA	\$1.96	\$2.13	\$2.32	\$2.51	\$2.72	\$2.91	\$3.12	\$3.35	\$3.61	\$3.90	\$4.22	\$4.45	\$4.71	\$4.97	\$5.25	\$5.55	\$134.59
24 NorthWestern Corporation	NWE	\$1.18	\$1.33	\$1.49	\$1.67	\$1.87	\$1.98	\$2.10	\$2.22	\$2.34	\$2.46	\$2.59	\$2.74	\$2.89	\$3.06	\$3.23	\$3.41	\$116.41
25 OGE Energy Corp.	OGE	\$1.40	\$1.35	\$1.30	\$1.24	\$1.17	\$1.26	\$1.35	\$1.46	\$1.57	\$1.69	\$1.82	\$1.93	\$2.04	\$2.15	\$2.27	\$2.40	\$67.63
26 Otter Tail Corporation	OTTR	\$2.33	\$2.42	\$2.50	\$2.57	\$2.64	\$2.96	\$3.29	\$3.64	\$4.01	\$4.39	\$4.77	\$5.04	\$5.32	\$5.62	\$5.94	\$6.28	\$64.90
27 Pinnacle West Capital Corporation	₽N≪	\$2.37	\$2.51	\$2.65	\$2.81	\$2.97	\$3.15	\$3.35	\$3.56	\$3.79	\$4.04	\$4.30	\$4.55	\$4.80	\$5.07	\$5.36	\$5.66	\$133.26
28 Portland General Electric Company	Por	\$1.16	\$1.26	\$1.38	\$1.50	\$1.63	\$1.79	\$1.96	\$2.14	\$2.33	\$2.53	\$2.75	\$2.91	\$3.07	\$3.25	\$3.43	\$3.62	\$81.09
29 SCANA Corporation	SCG	\$2.27	\$2.38	\$2.49	\$2.60	\$2.73	\$2.96	\$3.22	\$3.50	\$3.81	\$4.14	\$4.50	\$4.75	\$5.02	\$5.31	\$5.61	\$5.92	\$120.77
30 Southern Company	SO	\$2.20	\$2.26	\$2.32	\$2.39	\$2.45	\$2.54	\$2.64	\$2.75	\$2.87	\$3.00	\$3.14	\$3.32	\$3.51	\$3.71	\$3.92	\$4.14	\$93.17
31 TECO Energy, Inc.	밀	\$0.86	\$0.91	\$0.96	\$1.01	\$1.06	\$1.14	\$1.22	\$1.29	\$1.37	\$1.44	\$1.50	\$1.59	\$1.67	\$1.77	\$1.87	\$1.98	\$41.00
32 Westar Energy, Inc.	WR	\$1.52	\$1.57	\$1.62	\$1.68	\$1.73	\$1.90	\$2.08	\$2.28	\$2.50	\$2.72	\$2.97	\$3.14	\$3.31	\$3.50	\$3.70	\$3.91	\$83.12
33 Xcel Energy Inc.	XEL	\$1.34	\$1.42	\$1.49	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98	\$2.11	\$2.24	\$2.39	\$2.52	\$2.67	\$2.82	\$2.98	\$3.14	\$75.05

	[82]		6/30/30	\$117.40	\$142.25	\$95.81	128.53	\$75.12	\$113.45	\$43.05	\$79.02	3138.06	3161.55	\$183.39	\$171.46	\$52.50	1118.56	\$81.96	\$60.49	\$140.14	\$119.82	\$70.03	\$71.18	138.92	\$84.72	3126.69	\$97.31	\$42.97	\$87.02	\$78.19
	[81]		6/30/59	\$4.73	\$5.48			\$3.11	\$4.88	\$2.19	\$2.88																\$3.92		_	
	[80]		6/30/28	\$4.47	\$5.18	\$3.78	\$4.66	\$2.94	\$4.62	\$2.07	\$2.73	\$4.40	\$5.23	\$7.08	\$5.73	\$2.15	\$4.58	\$1.36	\$2.40	\$4.97	\$3.06	\$2.15	\$5.62	\$5.07	\$3.25	\$5.31	\$3.71	\$1.77	\$3.50	\$2.82
	[6/]		6/30/27	\$4.24	\$4.91	\$3.58	\$4.41	\$2.78	\$4.37	\$1.96	\$2.58	\$4.16	\$4.95	\$6.70	\$5.42	\$2.04	\$4.33	\$1.29	\$2.27	\$4.71	\$2.89	\$2.04	\$5.32	\$4.80	\$3.07	\$5.02	\$3.51	\$1.67	\$3.31	\$2.67
	[18]		6/30/26	\$4.01	\$4.64	\$3,39	\$4.17	\$2.63	\$4.14	\$1.85	\$2.44	\$3.94	\$4.68	\$6.34	\$5.13	\$1.93	\$4.10	\$1.22	\$2.15	\$4.45	\$2.74	\$1.93	\$5.04	\$4.55	\$2.91	\$4.75	\$3.32	\$1.59	\$3.14	\$2.52
	[77]		6/30/25	\$3.79	\$4.40	\$3.21	\$3.95	\$2.49	\$3.92	\$1.76	\$2.31	\$3.73	\$4.43	\$6.00	\$4.86	\$1.82	\$3.88	\$1.15	\$2.04	\$4.22	\$2.59	\$1.82	\$4.77	\$4.30	\$2.75	\$4.50	\$3.14	\$1.50	\$2.97	\$2.39
	[16]		6/30/24	\$3.54	\$4.12	\$2.94	\$3.71	\$2.34	\$3.63	\$1.71	\$2.16	\$3.49	\$4.24	\$5.58	\$4.58	\$1.73	\$3.57	\$1.05	\$1.90	\$3.90	\$2.46	\$1.69	\$4.39	\$4.04	\$2.53	\$4.14	\$3.00	\$1.44	\$2.72	\$2.24
	[22]		6/30/23	\$3.29	\$3.85	\$2.69	\$3.49	\$2.19	\$3.36	\$1.67	\$2.01	\$3.28	\$4.05	\$5.19	\$4.33	\$1.65	\$3.27	\$0.96	\$1.76	\$3.61	\$2.34	\$1.57	\$4.01	\$3.79	\$2.33	\$3.81	\$2.87	\$1.37	\$2.50	\$2.11
)	[74]		6/30/22	\$3.05	\$3.60	\$2.46	\$3.28	\$2.05	\$3.10	\$1.63	\$1.88	\$3.10	\$3.85	\$4.83	\$4.09	\$1.57	\$2.98	\$0.87	\$1.64	\$3.35	\$2.22	\$1.46	\$3.64	\$3.56	\$2.14	\$3.50	\$2.75	\$1.29	\$2.28	\$1.98
	[73]		6/30/21	\$2.83	\$3.37	\$2.24	\$3.08	\$1.91	\$2.85	\$1.59	\$1.74	\$2.93	\$3.64	\$4.49	\$3.87	\$1.50	\$2.69	\$0.79	\$1.52	\$3.12	\$2.10	\$1.35	\$3.29	\$3.35	\$1.96	\$3.22	\$2.64	\$1.22	\$2.08	\$1.87
	[72]		6/30/20	\$2.62	\$3.14	\$2.03	\$2.91	\$1.78	\$2.61	\$1.54	\$1.61	\$2.79	\$3.43	\$4.19	\$3.67	\$1.43	\$2.43	\$0.72	\$1 41	\$2.91	\$1.98	\$1.26	\$2.96	\$3.15	\$1.79	\$2.96	\$2.54	\$1.14	\$1.90	\$1.76
	[71]		6/30/19	\$2.42	\$2.93	\$1.83	\$2.74	\$1.65	\$2.39	\$1.50	\$1.49	\$2.66	\$3.23	\$3.91	\$3.48	\$1.36	\$2.17	\$0.64	\$1.30	\$2.72	\$1.87	\$1.17	\$2.64	\$2.97	\$1.63	\$2.73	\$2.45	\$1.06	\$1.73	\$1.66
	[02]		6/30/18	\$2.32	\$2.75	\$1.80	\$2.62	\$1.56	\$2.22	\$1.48	\$1.39	\$2.60	\$2.99	\$3.75	\$3.39	\$1.33	\$2.03	\$0.61	\$1.27	\$2.51	\$1.67	\$1.24	\$2.57	\$2.81	\$1.50	\$2.60	\$2.39	\$1.01	\$1.68	\$1.57
i i	[69]		6/30/17	\$2.22	\$2.57	\$1.75	\$2.50	\$1.48	\$2.05	\$1.45	\$1.30	\$2.54	\$2.77	\$3.60	\$3.30	\$1.30	\$1.89	\$0.58	\$1.24	\$2.32	\$1.49	\$1.30	\$2.50	\$2.65	\$1.38	\$2.49	\$2.32	\$0.96	\$1.62	\$1.49
, D :	[68]		6/30/16	\$2.10	\$2.32	\$1.72	\$2.34	\$1.37	\$1.82	\$1.44	\$1.17	\$2.47	\$2.47	\$3.40	\$3.20	\$1.27	\$1.72	\$0.55	\$1.21	\$2.00	\$1.22	\$1.43	\$2.44	\$2.44	\$1.19	\$2.33	\$2.25	\$0.90	\$1.57	\$1.38
	[67]		12/31/15	\$1.06	\$1.17	\$0.86	\$1.18	\$0.68	\$0.91	\$0.72	\$0.59	\$1.26	\$1.23	\$1.72	\$1.62	\$0.64	\$0.86	\$0.27	\$0.61	\$1.02	\$0.61	\$0.72	\$1.21	\$1.23	\$0.60	\$1.18	\$1.14	\$0.45	\$0.79	\$0.70
	[99]		6/25/15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	[65]	Initial	Outflow	\$48.97)	\$59.59)	\$39.13)	\$54.66)	\$31.45)	\$46.14)	\$19.77)	\$32.93)	\$59.64)	\$69.20)	\$76.77)	\$74.10)	\$22.93)	\$47.64)	\$34.60)	\$25.35)	\$57.95)	\$51.02)	\$30.33)	\$26.99)	\$58.80)	\$34.24)	\$51.78)	\$42.94)	\$18.35)	\$35.52)	(\$33.19)
			Ticker (ALE (F F	YEE (AEP (SO			XEL
4 Projected Annual Data	5 Investor Cash Flows		Company	7 ALLETE, Inc.	8 Alliant Energy Corporation	9 Ameren Corporation	 American Electric Power Company, Inc. 	11 Avista Corporation	12 Black Hills Corporation	 CenterPoint Energy, Inc. 	14 CMS Energy Corporation	 Consolidated Edison, Inc. 	16 Dominion Resources, Inc.			19 Empire District Electric Company	20 Eversource Energy	21 FirstEnergy Corp.		IDACORP, Inc.	NorthWestern Corporation	OGE Energy Corp.	Otter Tail Corporation	27 Pinnacle West Capital Corporation			0)	31 TECO Energy, Inc.	32 Westar Energy, Inc.	33 Xcel Energy Inc.
		Projected Annual Data [65] [66] [67] [68] [69] [70] [71] [72] [73] [74] [75] [77] [78] [79] [80] [81]	Projected Annual Data Projected Annual Data [65] [66] [67] [68] [69] [70] [71] [72] [73] [74] [75] [76] [77] [78] [79] [80] [81] Investor Cash Flows Initial	Projected Annual Data [65] [66] [67] [68] [69] [70] [71] [72] [73] [74] [75] [76] [77] [78] [79] [80] [81] [81] [81] [82] [83] [83] [83] [83] [83] [83] [83] [83	Projected Annual Data [65] [66] [67] [68] [69] [70] [71] [72] [73] [74] [75] [76] [77] [78] [79] [80] [81] [81] [81] [82] [83] [83] [83] [83] [83] [83] [83] [83	Projected Annual Data [65] [66] [67] [68] [69] [70] [71] [72] [73] [74] [75] [76] [77] [78] [79] [80] [81] [81] [81] [82] [83] [83] [83] [83] [83] [83] [83] [83	Projected Annual Data [65] [66] [67] [68] [69] [70] [71] [72] [73] [74] [75] [76] [77] [78] [79] [80] [81] [81] [10 estor Cash Flows Initial Company Ticker Outflow 6/25/15 12/31/15 6/30/17 6/30/18 6/30/19 6/30/20 6/30/22 6/30/22 6/30/25 6/30/26 6/30/27 6/30/29 6/30/29 ALLETE, Inc. ALE (\$48.97) \$0.00 \$1.06 \$2.10 \$2.22 \$2.57 \$2.75 \$2.83 \$3.05 \$3.29 \$3.54 \$3.77 \$4.01 \$4.54 \$4.91 \$5.18 \$5.48 \$4.00 \$4.00 \$4.00 \$4.00 \$1.75 \$1.80 \$1.83 \$2.03 \$2.24 \$2.84 \$2.84 \$2.89 \$3.59 \$3.59 \$3.59 \$3.58 \$3.59 \$3.58 \$3.59 \$3.58 \$3.59 \$3.58 \$3.59 \$3.5	Projected Annual Data Investor Cash Flows Investor Cash Flows I (65) [65] [65] [65] [65] [65] [65] [65] [65]	Projected Annual Data Initial Investor Cash Flows Initial Init	Projected Annual Data Initial Investor Cash Flows Initial Initial Investor Cash Flows Initial Initial Investor Cash Flows Initial	Projected Annual Data Investor Cash Flows [65] [66] [67] [68] [69] [70] [71] [72] [73] [74] [75] [76] [76] [77] [78] [79] [80] [81] [81] Investor Cash Flows Investor Cash Flows [65] [65] [65] [67] [68] [69] [70] [71] [71] [72] [73] [74] [75] [75] [76] [77] [78] [79] [80] [81] [81] [81] [82] [82] [82] [82] [82] [82] [82] [82	Projected Annual Data Investor Cash Flows Investor Flows	Projected Annual Data Initial	Projected Annual Data E5 E6 E7 E8 E9 E7 E8 E8 E7 E8 E8 E7 E8 E8	Forjected Annual Data Forj	Projected Annual Data	Projected Annual Data 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 189 189 170 171 172 173 174 175 177 178 179 189 189 189 189 170 171 172 173 174 175 177 178 179 189 189 189 189 170 171 172 173 174 175 177 178 178 179 189 189 189 189 170 171 172 173 174 175 177 178 178 179 189 189 189 189 170 171 172 173 174 175 175 177 178 178 177 178	Projected Annual Data E6j E6j E6j E7j E8j E9j E7j E8j E9j E7j E7j	Projected Annual Data	Projected Annual Data Proj	Projected Annual Data Proj	Projected Annual Data Integral Company Incorporation Integral Company Incorporation Integral Company Incorporation Integral Company Incorporation Integral Company Incorporation Incorporation	Projected Annual Data	Projected Amunal Data Inflate	Projected Annual Data Proj	Figure Projected Ammal Data Projected A	Projected Annual Data	Figure Projected Annual Data Projected Annual Da	Projected Annual Data Proj	Projected Annual Data Proj

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

- 26

4	Inputs		[1]	[2]	[3]	[4]	[9]	[9]	[2]	[8]	[6]	[10]	[11]	[12]	[13]	[14]
ß			Stock		EPS Gr	owth Rate	Growth Rate Estimates		Long-Term	Pa	Payout Rati	0	terative	terative Solution 1	Terminal	erminal
						Value	Retention								P/E	PEG
9	Company	Ticker	Price	Zacks	First Call	Line	Growth	Low Growth	Growth	2015	2019	2025	Proof	RR	Ratio	Ratio
7	ALLETE, Inc.	ALE	\$48.97	ΑĀ	%00.9	6.50%	3.97%	3.97%	5.65%	%00.99	61.00%	67.30%	\$0.00	9.65%	17.80	3.15
ω	Alliant Energy Corporation	LN	\$59.59	5.30%	5.45%	%00'9	2.66%	5.30%	5.65%	61.00%	63.00%	67.30%	\$0.00	9.94%	16.60	2.94
თ	Ameren Corporation	AEE	\$39.13	6.80%	5.85%	%00′9	4.56%	4.56%	2.65%	65.00%	25.00%	67.30%	\$0.00	9.88%	16.80	2.97
10	American Electric Power Company, Inc.	AEP	\$54.66	4.90%	2.08%	2.00%	4.07%	4.07%	2.65%	65.00%	64.00%	67.30%	\$0.00	9.83%	17.03	3.01
7	Avista Corporation	AVA	\$31.45	ž	2.00%	7.00%	3.80%	3.80%	5.65%	67.00%	64.00%	67.30%	\$0.00	9.58%	18.08	3.20
12	Black Hills Corporation	BKH	\$46.14	Ϋ́	7.00%	4.50%	4.02%	4.02%	5.65%	27.00%	29.00%	67.30%	\$0.00	9.82%	17.05	3.02
5	CenterPoint Energy, Inc.	CNP	\$19.77	2.70%	1.91%	1.00%	3.19%	1.00%	2.65%	93.00%	80.00%	67.30%	\$0.00	10.03%	16.24	2.87
14	CMS Energy Corporation	CMS	\$32.93	6.20%	6.73%	2.50%	5.27%	5.27%	2.65%	61.00%	62.00%	67.30%	\$0.00	9.51%	18.43	3.26
15	Consolidated Edison, Inc.		\$59.64	2.70%	2.38%	3.00%	3.15%	2.38%	5.65%	65.00%	63.00%	67.30%	\$0.00	9.35%	19.22	3.40
9	Dominion Resources, Inc.	۵	\$69.20	6.30%	2.89%	8.00%	%00.9	5.89%	2.65%	72.00%	72.00%	67.30%	\$0.00	9.11%	20.58	3.64
17	DTE Energy Company	DTE	\$76.77	2.00%	4.51%	2.00%	4.88%	4.51%	2.65%	62.00%	%00.09	67.30%	\$0.00	10.26%	15.43	2.73
18	Duke Energy Corporation	DČ K	\$74.10	4.70%	4.49%	2.00%	2.67%	2.67%	5.65%	72.00%	%00.99	67.30%	\$0.00	9.16%	20.27	3.59
9	Empire District Electric Company	EDE	\$22.93	2.00%	2.00%	3.00%	3.25%	3.00%	5.65%	76.00%	%00'69	67.30%	\$0.00	10.09%	16.01	2.83
8	Eversource Energy	ES	\$47.64	6.80%	%09'9	8.50%	4.50%	4.50%	2.65%	29.00%	26.00%	67.30%	\$0.00	9.36%	19.19	3.40
21	FirstEnergy Corp.	띥	\$34.60	Ϋ́	ž	7.00%	4.09%	4.09%	2.65%	28.00%	54.00%	%08.79	\$0.00	7.29%	43.43	7.68
22	Great Plains Energy Inc.	GΧΡ	\$25.35	%00.9	6.37%	2.00%	3.02%	3.02%	2.65%	70.00%	61.00%	67.30%	\$0.00	%09.6	18.01	3.19
23	IDACORP, Inc.	DΑ	\$57.95	4.00%	4.00%	1.00%	3.51%	1.00%	9.65%	49.00%	28.00%	67.30%	\$0.00	9.23%	19.88	3.52
24	NorthWestern Corporation	NWE	\$51.02	2.00%	2.00%	6.50%	3.90%	3.90%	5.65%	26.00%	%00.69	67.30%	\$0.00	8.25%	27.33	4.83
52	OGE Energy Corp.	96E	\$30.33	2.00%	4.00%	3.00%	3.68%	3.00%	5.65%	86.00%	29.00%	67.30%	\$0.00	8.94%	21.65	3.83
56	Otter Tail Corporation	OTTR	\$26.99	ž	%00'9	%00'6	7.25%	%00.9	2.65%	%00.02	26.00%	67.30%	\$0.00	14.31%	8.22	1,45
27	Pinnacle West Capital Corporation	PNW	\$58.80	4.60%	2.30%	4.00%	4.52%	4.00%	2.65%	63.00%	64.00%	67.30%	\$0.00	9.78%	17.22	3.05
78	Portland General Electric Company	POR	\$34.24	5.20%	4.72%	%00'9	4.04%	4.04%	2.65%	20.00%	26.00%	67.30%	\$0.00	9.82%	17.04	3.02
29	SCANA Corporation	SCG	\$51.78	4.20%	4.30%	4.50%	5.13%	4.20%	5.65%	22.00%	26.00%	67.30%	\$0.00	10.54%	14.54	2.57
8	Southern Company	S	\$42.94	3.50%	3.32%	4.50%	4.40%	3.32%	2.65%	%00'92	71.00%	67.30%	\$0.00	9.99%	16.37	2.90
31	TECO Energy, Inc.	世	\$18.35	7.10%	9.20%	%00.9	3.60%	3.60%	5.65%	83.00%	72.00%	67.30%	\$0.00	9.20%	20.04	3,55
35	Westar Energy, Inc.	Ν	\$35.52	3.50%	3.40%	%00'9	5.25%	3.40%	2.65%	61.00%	25.00%	67.30%	\$0.00	9.87%	16.87	2.99
33	Xcel Energy Inc.	XEL	\$33.19	2.00%	4.58%	4.50%	3.95%	3.95%	5.65%	63.00%	64.00%	67.30%	\$0.00	9.79%	17.20	3.04
													Mean	9.71%		
35													Max	14.31%		
98													Μij	7.29%		

						M	Iti-Stage Gro	Multi-Stage Growth Discounted Cash Flow Model	ted Cash	Flow Mor	ā							
3 2 .					è	w EPS Grov	30 D wth Rate Esti	30 Day Average Stock Price Low EPS Growth Rate Estimate in First Stage (with Sustainable Growth)	Stock Price Stage (wi	th Sustain	nable Gro	w(h)						
4 Projected Annual									,									
5 Earnings per Share		[15]	[16]	[17]	[18]	[19]	[50]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[59]	[30]	[31]
Gompany	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	9000	2030
7 ALLETE: Inc.	ALE	\$2.90	\$3.02	\$3.13	\$3.26	\$3.39	\$3.52	\$3,67	\$3.84	\$4.02	\$4.23	\$4.46	\$4.71	\$4.97	\$5.25	\$5,55	\$5.87	\$6.20
8 Alliant Energy Corporation	Ľ	\$3.48	\$3.66	\$3.86	\$4.06	\$4.28	\$4.51	\$4.75	\$5.00	\$5.28	\$5.57	\$5.88	\$6.21	\$6.57	\$6.94	\$7,33	\$7.74	\$8.18
9 Ameren Corporation	AEE	\$2.40	\$2.51	\$2.62	\$2.74	\$2.87	\$3.00	\$3.14	\$3.30	\$3.47	\$3.65	\$3.85	\$4.07	\$4.30	\$4.54	\$4.79	\$5.07	\$5.35
10 American Electric Power Company, Inc.		\$3.34	\$3.48	\$3.62	\$3.76	\$3.92	\$4.08	\$4.25	\$4.45	\$4.67	\$4.91	\$5.17	\$5.46	\$5.77	\$6.10	\$6.44	\$6.81	\$7.19
11 Avista Corporation	AVA	\$1.84	\$1.91	\$1.98	\$2.06	\$2.14	\$2.22	\$2.31	\$2.41	\$2.52	\$2.65	\$2.79	\$2.95	\$3.12	\$3.29	\$3.48	\$3.68	\$3.88
12 Black Hills Corporation	BKH	\$2.89	\$3.01	\$3.13	\$3.25	\$3.38	\$3.52	\$3.67	\$3.84	\$4.02	\$4.23	\$4.46	\$4.71	\$4.97	\$5.26	\$5.55	\$5.87	\$6.20
13 CenterPoint Energy, Inc.	CNP	\$1.42	\$1.43	\$1.45	\$1,46	\$1.48	\$1.49	\$1.52	\$1.56	\$1.61	\$1.68	\$1.76	\$1.86	\$1.96	\$2.07	\$2.19	\$2.31	\$2.44
14 CMS Energy Corporation	CMS	\$1.74	\$1.83	\$1.93	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.63	\$2.78	\$2.93	\$3.10	\$3.27	\$3.46	\$3.66	\$3.86	\$4.08
15 Consolidated Edison, Inc.		\$3.62	\$3.71	\$3.79	\$3.88	\$3.98	\$4.07	\$4.19	\$4.34	\$4.51	\$4.72	\$4.96	\$5.24	\$5.53	\$5.85	\$6.18	\$6.53	\$6.89
16 Dominion Resources, Inc.	Δ	\$3.05	\$3.23	\$3.42	\$3.62	\$3.83	\$4.06	\$4.30	\$4.55	\$4.81	\$5.09	\$5.38	\$5.68	\$6.00	\$6.34	\$6.70	\$7.08	\$7.48
17 DTE Energy Company	DTE	\$5.10	\$5.33	\$5.57	\$5.82	\$6.08	\$6.36	\$6.66	\$6.98	\$7.34	\$7.72	\$8.15	\$8.61	\$9.09	\$9.61	\$10.15	\$10.72	\$11.33
18 Duke Energy Corporation	Σ	\$4,13	\$4.24	\$4.35	\$4.47	\$4.59	\$4.71	\$4.86	\$5.04	\$5.25	\$5.49	\$5.78	\$6.10	\$6.45	\$6.81	\$7.20	\$7.60	\$8.03
19 Empire District Electric Company	EDE	\$1,55	\$1.60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.11	\$2.22	\$2,35	\$2.48	\$2.62	\$2.77	\$2.92	\$3.09
20 Eversource Energy	ES	\$2.58	\$2.70	\$2.82	\$2.94	\$3.08	\$3.21	\$3.37	\$3.53	\$3.71	\$3.90	\$4.12	\$4.35	\$4.60	\$4.86	\$5.13	\$5.42	\$5.73
21 FirstEnergy Corp.	벁	\$0,85	\$0.88	\$0.92	\$0.96	\$1.00	\$1.04	\$1.08	\$1.13	\$1.19	\$1.25	\$1.32	\$1.39	\$1.47	\$1.55	\$1.64	\$1.73	\$1.83
22 Great Plains Energy Inc.	GXP	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.82	\$1.88	\$1.96	\$2.04	\$2.14	\$2.25	\$2,38	\$2.51	\$2.66	\$2.81	\$2.96	\$3.13
23 IDACORP, Inc.	ΙŊ	\$3.85	\$3.89	\$3.93	\$3.97	\$4.01	\$4.05	\$4.12	\$4.22	\$4,36	\$4.54	\$4.76	\$5.03	\$5.32	\$5.62	\$5.94	\$6.27	\$6.63
24 NorthWestern Corporation	NWE	\$1.98	\$2.06	\$2.14	\$2.22	\$2.31	\$2.40	\$2.50	\$2.61	\$2.73	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57	\$3.77	\$3.98	\$4.21
25 OGE Energy Corp.	OGE	\$1.55	\$1.60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.11	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$2.92	\$3.09
26 Otter Tail Corporation	OTTR	\$3.06	\$3.24	\$3.44	\$3.64	\$3.86	\$4.09	\$4.34	\$4.59	\$4.86	\$5.14	\$5.44	\$5.74	\$6.07	\$6.41	\$6.77	\$7.15	\$7.56
27 Pinnacle West Capital Corporation	PNW	\$3,58	\$3.72	\$3.87	\$4.03	\$4.19	\$4.36	\$4.54	\$4.75	\$4.98	\$5.23	\$5.51	\$5.82	\$6.15	\$6.50	\$6.87	\$7.26	\$7.67
28 Portland General Electric Company	POR	\$2.18	\$2.27	\$2.36	\$2.45	\$2.55	\$2.66	\$2.77	\$2.90	\$3.04	\$3.19	\$3.37	\$3.56	\$3.76	\$3.97	\$4.19	\$4,43	\$4.68
29 SCANA Corporation	SCG	\$3.79	\$3.95	\$4.12	\$4.29	\$4.47	\$4.66	\$4.86	\$5.09	\$5.34	\$5.62	\$5.92	\$6.26	\$6.61	\$6.98	\$7.38	\$7.79	\$8.23
	SO	\$2.77	\$2.86	\$2.96	\$3.06	\$3.16	\$3.26	\$3.38	\$3.52	\$3.68	\$3.86	\$4.06	\$4.29	\$4.53	\$4.79	\$5.06	\$5.35	\$5.65
31 TECO Energy, Inc.	世	\$0.95	\$0.98	\$1.02	\$1.06	\$1.09	\$1.13	\$1.18	\$1.23	\$1.29	\$1.35	\$1.42	\$1.50	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98
32 Westar Energy, Inc.	WR	\$2.35	\$2.43	\$2.51	\$2.60	\$2.69	\$2.78	\$2.88	\$3.00	\$3.14	\$3.29	\$3.47	\$3.66	\$3.87	\$4.09	\$4.32	\$4.56	\$4.82
33 Xcel Energy Inc.	Ä	\$2.03	\$2.11	\$2.19	\$2.28	\$2.37	\$2.46	\$2.57	\$2.68	\$2.81	\$2.96	\$3.12	\$3.29	\$3.48	\$3.67	\$3.88	\$4.10	\$4.33

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4 Projected Annual 5 Dividend Payout Ratio		2	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]
6 Company	Ticker	5	2015	2016	2017	2018	2019	2020	2021	202	2023	2024	2025	2026	2027	2028 2	9202	2030
7 ALLETE, Inc.	ALE	99		l.	l _o	62.25%	61.00%	62.05%	l _s e	۰	l,e	l,	l_o	ا.	l,	ļ	Į,	67.30%
8 Alliant Energy Corporation	LN	.01			_	62.50%	63.00%	63.72%	64.43% 6		65.87% 6		67.30% 6	67.30% 6	67.30% 67			67.30%
9 Ameren Corporation	AEE	65.			_	57.50%	25.00%	24.05%	59.10% 6	61.15% 6	63.20% 6	65.25% 6	67.30% 6	67.30% 6	67.30% 67		67.30% 6	67.30%
10 American Electric Power Company, Inc.	nc. AEP	65.	65.00% 64	64.75% 64	64.50% 6	64.25%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	%06'.20
11 Avista Corporation		. 67.	67.00% 66	66.25% 68	65.50% 6	64.75%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
12 Black Hills Corporation	BKH	57.	57.00% 57	57.50% 58	58.00% {	58.50%	29.00%	60.38%	61.77% 6	63.15% 6	64.54% 6	65.92% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
13 CenterPoint Energy, Inc.	CNP	93.	93.00% 89	89.75% 86	86.50%	83.25%	80.00%	77.88%	75.77% 7	73.65% 7	71.54% 6	69.42% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
14 CMS Energy Corporation	CMS	61.	61.00% 61	61.25% 6	61.50% (61.75%	62.00%	62.88%	63.77% 6	64.65% E	65.54% 6	66.42% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
15 Consolidated Edison, Inc.		65.	65.00% 64	64.50% 64	64.00%	63.50%	63.00%	63.72%	64.43% 6	65.15% E	65.87% 6	9 %65.99	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
16 Dominion Resources, Inc.	۵	72.	72.00% 72	72.00% 7	72.00%	72.00%	72.00%	71.22%	70.43% 6	69.65% 6	68.87% 6	68.09% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
17 DTE Energy Company	DTE	62.	62.00% 61	61.50% 6	61.00%	%05.09	%00.09	61.22%	62.43% 6	63.65% 6	64.87% 6	9 %60.99	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
18 Duke Energy Corporation	DUK	72.	72.00% 70	70.50% 69	9 %00.69	%05'.29	%00.99	66.22%	66.43% 6	66.65% 6	66.87% 6	67.09% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
19 Empire District Electric Company	EDE	76.	76.00% 74	74.25% 7.	72.50%	70.75%	%00.69	68.72%	68.43% 6	68.15% 6	67.87% 6	67.59% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
20 Eversource Energy	ES	. 29	59.00% 58		57.50% (56.75%	26.00%	27.88%	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% 6	67.30% 6	67.30% 67			67.30%
21 FirstEnergy Corp.	밅	58	58.00% 57	57.00% 56	26.00%	22.00%	54.00%	56.22%	58.43% 6	60.65% 6	62.87% 6	65.09% 6	67.30% 6	9 %08.79	67.30% 67	67.30% 67	67.30% 6	67.30%
22 Great Plains Energy Inc.	GXP	70.	70.00% 67	67.75% 6	65.50%	63.25%	61.00%	62.05%	63.10% 6	64.15% 6	65.20% 6	66.25% 6		67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
23 IDACORP, Inc.	IDA	49.	49.00% 51	51.25% 53	53.50%	55.75%	28.00%	29.55%	61,10% 6	62.65% 6	64.20% 6	65.75% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
24 NorthWestern Corporation	NWE	. 56.	56.00% 55	59.25% 62	62.50%	65.75%	%00.69	68.72%	68.43% 6	68.15% 6	67.87% 6	67.59% 6	67.30% 6	9 %06.79	67.30% 67	67.30% 67	67.30% 6	67.30%
25 OGE Energy Corp.	OGE	86.	86.00% 79	79.25% 72	72.50% 6	65.75%	29.00%	%86.09	61.77% 6	63.15% 6	64.54% 6	65.92% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
26 Otter Tail Corporation	OTTR	70.	70.00% 66	66.50% 63	63.00% {	29.50%	26.00%	27.88%		61.65% 6	63.54% 6	65.42% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
27 Pinnacle West Capital Corporation	PNW	63	63.00% 63	63.25% 63	63.50% 6	63.75%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
28 Portland General Electric Company	POR	50.	50.00% 51	51.50% 53	53.00% \$	54.50%	26.00%	57.88%	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
29 SCANA Corporation	SCG	.79	57.00% 56	56.75% 56	26.50% E	56.25%	26.00%	24.88%	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%
30 Southern Company	SO	76.	76.00% 74	74.75% 73	73.50%	72.25%	71.00%	70.38%	69.77% 6	69.15% 6	68.54% 6	67.92% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	%0£'.20
31 TECO Energy, Inc.	믿	83.	83.00% 80	80.25% 7	77.50%	74.75%	72.00%	71.22%	70.43% 6	69.65% 6	68.87% 6	9 %60'89	67.30% 6	67.30% 6	67.30% 67	67.30% 67	9 %08'.29	67.30%
32 Westar Energy, Inc.	WR	. 61.	61.00% 55	59.50% 58	58.00%	96.50%	25.00%	22.05%	59.10% 6	61.15% 6	63.20% 6	65.25% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	%06.79
33 Xcel Energy Inc.	XEL	63.	63.00% 63	63.25% 63	53.50% 6	53.75%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30% 6	67.30% 6	67.30% 67	67.30% 67	67.30% 6	67.30%

4 Projected Annual 5 Cash Flows		[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[26]	[57]	[58]	[69]	[60]	[61]	[62]	[63]	[64]
																		Terminal
6 Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Value
7 ALLETE, Inc.	ALE	\$1.99	\$2.03	\$2.07	\$2.11	\$2.15	\$2.28	\$2.42	\$2.58	\$2.76	\$2.95	\$3.17	\$3.35	\$3.54	\$3.74	\$3.95	\$4.17	\$110.33
8 Alliant Energy Corporation	LN-	\$2.24	\$2.37	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22	\$3.44	\$3.67	\$3.92	\$4.18	\$4.42	\$4.67	\$4.93	\$5.21	\$5.51	\$135.76
9 Ameren Corporation	AEE	\$1.63	\$1.64	\$1.65	\$1.65	\$1.65	\$1.79	\$1.95	\$2.12	\$2.31	\$2.51	\$2.74	\$2.89	\$3.05	\$3.23	\$3.41	\$3.60	\$89.90
10 American Electric Power Company, Inc.	. AEP	\$2.26	\$2.34	\$2.43	\$2.52	\$2.61	\$2.75	\$2.90	\$3.06	\$3.25	\$3.45	\$3.68	\$3.88	\$4.10	\$4.34	\$4.58	\$4.84	\$122.46
11 Avista Corporation	AVA	\$1.28	\$1.31	\$1.35	\$1.38	\$1.42	\$1.49	\$1.57	\$1.66	\$1.75	\$1.86	\$1.99	\$2.10	\$2.22	\$2.34	\$2.47	\$2.61	\$70.22
12 Black Hills Corporation	BKH	\$1.71	\$1.80	\$1.89	\$1.98	\$2.08	\$2.22	\$2.37	\$2.54	\$2.73	\$2.94	\$3.17	\$3.35	\$3.54	\$3.74	\$3.95	\$4.17	\$105.70
13 CenterPoint Energy, Inc.	CND	\$1.33	\$1.30	\$1.27	\$1.23	\$1.19	\$1.18	\$1.18	\$1.19	\$1.20	\$1.22	\$1.25	\$1.32	\$1,39	\$1.47	\$1.56	\$1.64	\$39.69
14 CMS Energy Corporation	CMS	\$1.12	\$1.18	\$1.25	\$1.32	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82	\$1.95	\$2.09	\$2.20	\$2.33	\$2.46	\$2.60	\$2.75	\$75.19
15 Consolidated Edison, Inc.		\$2.41	\$2.45	\$2.49	\$2.53	\$2.57	\$2.67	\$2.79	\$2.94	\$3.11	\$3.30	\$3.52	\$3.72	\$3.93	\$4.16	\$4.39	\$4.64	\$132.53
16 Dominion Resources, Inc.	۵	\$2.33	\$2.46	\$2.61	\$2.76	\$2.92	\$3.06	\$3.20	\$3.35	\$3.50	\$3,66	\$3.82	\$4.04	\$4.27	\$4.51	\$4.76	\$5.03	\$153.89
17 DTE Energy Company	DTE	\$3.30	\$3.43	\$3.55	\$3.68	\$3.82	\$4.08	\$4.36	\$4.67	\$5.01	\$5.38	\$5.79	\$6.12	\$6.47	\$6.83	\$7.22	\$7.63	\$174.81
18 Duke Energy Corporation	DUK	\$3.05	\$3.07	\$3.08	\$3.10	\$3.11	\$3.22	\$3.35	\$3.50	\$3.67	\$3.88	\$4.11	\$4.34	\$4.59	\$4.84	\$5.12	\$5.41	\$162.85
19 Empire District Electric Company	EDE	\$1.21	\$1.22	\$1.23	\$1.23	\$1.24	\$1.28	\$1.32	\$1.37	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.86	\$1.97	\$2.08	\$49.43
20 Eversource Energy	ES	\$1.59	\$1.64	\$1,69	\$1.75	\$1.80	\$1.95	\$2.11	\$2.29	\$2.48	\$2.69	\$2.93	\$3.09	\$3.27	\$3.45	\$3.65	\$3.85	\$109.92
21 FirstEnergy Corp.	Ш	\$0.51	\$0.52	\$0.54	\$0.55	\$0.56	\$0.61	\$0.66	\$0.72	\$0.79	\$0.86	\$0.94	\$0.99	\$1.05	\$1.10	\$1.17	\$1.23	\$79.56
22 Great Plains Energy Inc.	GXP	\$1.13	\$1.13	\$1.12	\$1.12	\$1.11	\$1.17	\$1.24	\$1.31	\$1.40	\$1.49	\$1.60	\$1.69	\$1.79	\$1.89	\$1.99	\$2.11	\$56.41
23 IDACORP, Inc.	DА	\$1.91	\$2.01	\$2.12	\$2.23	\$2.35	\$2.45	\$2.58	\$2.73	\$2.92	\$3.13	\$3.39	\$3.58	\$3.78	\$4.00	\$4.22	\$4.46	\$131.76
24 NorthWestern Corporation	NWE	\$1.15	\$1.27	\$1.39	\$1.52	\$1.65	\$1.72	\$1.79	\$1.86	\$1.95	\$2.05	\$2.15	\$2.27	\$2.40	\$2.54	\$2.68	\$2.83	\$115.02
25 OGE Energy Corp.	OGE	\$1.37	\$1.30	\$1.23	\$1.15	\$1.06	\$1.12	\$1.19	\$1.27	\$1.36	\$1.46	\$1.58	\$1.67	\$1.76	\$1.86	\$1.97	\$2.08	\$66.85
26 Otter Tail Corporation	OTTR	\$2.27	\$2.29	\$2.30	\$2.30	\$2.29	\$2.51	\$2.75	\$3.00	\$3.27	\$3.56	\$3.86	\$4.08	\$4.31	\$4.56	\$4.82	\$5.09	\$62.11
27 Pinnacle West Capital Corporation	PNW	\$2.35	\$2.45	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09	\$3.27	\$3.46	\$3.68	\$3.92	\$4.14	\$4.38	\$4.62	\$4.88	\$5.16	\$132.04
28 Portland General Electric Company	POR	\$1.13	\$1.22	\$1.30	\$1.39	\$1.49	\$1.60	\$1.73	\$1.87	\$2.03	\$2.20	\$2.39	\$2.53	\$2.67	\$2.82	\$2.98	\$3.15	\$79.78
29 SCANA Corporation	ഉട	\$2.25	\$2.34	\$2.42	\$2.51	\$2.61	\$2.81	\$3.04	\$3.29	\$3.57	\$3.87	\$4.21	\$4.45	\$4.70	\$4.97	\$5.25	\$5.54	\$119.76
30 Southern Company	SO	\$2.18	\$2.21	\$2.25	\$2.28	\$2.32	\$2.38	\$2.46	\$2.54	\$2.64	\$2.76	\$2.89	\$3.05	\$3.22	\$3.41	\$3.60	\$3.80	\$92.49
31 TECO Energy, Inc.	里	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82	\$0.84	\$0.87	\$0.90	\$0.93	\$0.97	\$1.01	\$1.07	\$1.13	\$1.19	\$1.26	\$1.33	\$39.62
32 Westar Energy, Inc.	WR	\$1.48	\$1.49	\$1.51	\$1.52	\$1.53	\$1.64	\$1.77	\$1.92	\$2.08	\$2.26	\$2.46	\$2.60	\$2.75	\$2.91	\$3.07	\$3.24	\$81.33
33 Xcel Energy Inc.	XEL	\$1.33	\$1.39	\$1.45	\$1.51	\$1.58	\$1.66	\$1.75	\$1.85	\$1.96	\$2.08	\$2.22	\$2.34	\$2.47	\$2.61	\$2.76	\$2.92	\$74.50

m					ρ	V EPS Grow	Low EPS Growth Kate Estimate in First Stage (with Sustainable Growth)	nate in First	Stage (Wit.	n Sustair	able Gro	MT)							
4 Projected Annual Data																			
5 Investor Cash Flows		[65]	[99]	[67]	[88]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[92]	[77]	[78]	[79]	[80]	[81]	[82]
		Initial										-							
6 Company	Ticker	Outflow	6/25/15	12/31/15	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	6/30/30
7 ALLETE, Inc.	ALE	(\$48.97)	\$0.00	\$1.03	\$2.03	\$2.07	\$2.11	\$2.15	\$2.28	\$2.42	\$2.58	\$2.76	\$2.95	\$3.17	\$3.35	\$3.54	\$3.74	\$3,95	\$114.50
8 Alliant Energy Corporation	Ŗ	(\$29.59)	\$0.00	\$1.16	\$2.29	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22	\$3.44	\$3.67	\$3.92	\$4.18	\$4.45	\$4.67	\$4.93	\$5.21	\$141.26
9 Ameren Corporation	AEE	(\$39.13)	\$0.00	\$0.84	\$1.67	\$1.65	\$1.65	\$1.65	\$1.79	\$1.95	\$2.12	\$2.31	\$2.51	\$2.74	\$2.89	\$3.05	\$3.23	\$3.41	\$93.51
10 American Electric Power Company, Inc.	AEP	(\$54.66)	\$0.00	\$1.17	\$2.31	\$2.43	\$2.52	\$2.61	\$2.75	\$2.90	\$3.06	\$3,25	\$3.45	\$3.68	\$3.88	\$4.10	\$4.34	\$4.58	\$127.30
11 Avista Corporation	AVA	(\$31.45)	\$0.00	\$0.66	\$1.30	\$1.35	\$1.38	\$1.42	\$1.49	\$1.57	\$1.66	\$1.75	\$1.86	\$1.99	\$2.10	\$2.22	\$2.34	\$2.47	\$72.83
12 Black Hills Corporation	BKH	(\$46.14)	\$0.00	\$0.89	\$1.75	\$1.89	\$1.98	\$2.08	\$2.22	\$2.37	\$2.54	\$2.73	\$2.94	\$3.17	\$3.35	\$3.54	\$3.74	\$3.95	\$109.87
13 CenterPoint Energy, Inc.	CNP	(\$19.77)	\$0.00	\$0.69	\$1,34	\$1.27	\$1.23	\$1.19	\$1.18	\$1.18	\$1.19	\$1.20	\$1.22	\$1.25	\$1.32	\$1.39	\$1.47	\$1.56	\$41.33
14 CMS Energy Corporation	CMS	(\$32.93)	\$0.00	\$0.58	\$1.15	\$1.25	\$1.32	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82	\$1.95	\$2.09	\$2.20	\$2.33	\$2.46	\$2.60	\$77.94
15 Consolidated Edison, Inc.		(\$59.64)	\$0.00	\$1.25	\$2.44	\$2.49	\$2.53	\$2.57	\$2.67	\$2.79	\$2.94	\$3.11	\$3.30	\$3.52	\$3.72	\$3.93	\$4.16	\$4.39	\$137.17
16 Dominion Resources, Inc.	۵	(\$69.20)	\$0.00	\$1.20	\$2.39	\$2.61	\$2.76	\$2.92	\$3.06	\$3.20	\$3.35	\$3.50	\$3.66	\$3.82	\$4.04	\$4.27	\$4.51	\$4.76	\$158.92
17 DTE Energy Company	DTE	(\$76.77)	\$0.00	\$1.71	\$3.38	\$3.55	\$3.68	\$3.82	\$4.08	\$4.36	\$4.67	\$5.01	\$5.38	\$5.79	\$6.12	\$6.47	\$6.83	\$7.22	\$182.43
18 Duke Energy Corporation	DCK DCK	(\$74.10)	\$0.00	\$1.58	\$3.09	\$3.08	\$3.10	\$3.11	\$3.22	\$3.35	\$3.50	\$3.67	\$3.88	\$4.11	\$4.34	\$4.59	\$4.84	\$5.12	\$168.26
19 Empire District Electric Company	EDE	(\$22.93)	\$0.00	\$0.63	\$1.23	\$1.23	\$1.23	\$1.24	\$1.28	\$1.32	\$1.37	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.86	\$1.97	\$51,51
20 Eversource Energy	ES	(\$47.64)	\$0.00	\$0.82	\$1.63	\$1.69	\$1.75	\$1.80	\$1.95	\$2.11	\$2.29	\$2.48	\$2.69	\$2.93	\$3.09	\$3.27	\$3.45	\$3.65	\$113.77
21 FirstEnergy Corp.	띮	(\$34.60)	\$0.00	\$0.27	\$0.52	\$0.54	\$0.55	\$0.56	\$0.61	\$0.66	\$0.72	\$0.79	\$0.86	\$0.94	\$0.99	\$1.05	\$1.10	\$1.17	\$80.79
22 Great Plains Energy Inc.	GXP	(\$25.35)	\$0.00	\$0.59	\$1.15	\$1.12	\$1.12	\$1.11	\$1.17	\$1.24	\$1.31	\$1.40	\$1.49	\$1.60	\$1.69	\$1.79	\$1.89	\$1.99	\$58.52
23 IDACORP, Inc.	Δ	(\$57.95)	\$0.00	\$0.99	\$1.91	\$2.12	\$2.23	\$2.35	\$2.45	\$2.58	\$2.73	\$2.92	\$3.13	\$3.39	\$3.58	\$3.78	\$4.00	\$4.22	\$136.22
24 NorthWestern Corporation	NWE	(\$51.02)	\$0.00	\$0.60	\$1.17	\$1.39	\$1.52	\$1.65	\$1.72	\$1.79	\$1.86	\$1.95	\$2.05	\$2.15	\$2.27	\$2.40	\$2.54	\$2.68	\$117.85
25 OGE Energy Corp.	OGE	(\$30.33)	\$0.00	\$0.71	\$1.39	\$1.23	\$1.15	\$1.06	\$1.12	\$1.19	\$1.27	\$1.36	\$1.46	\$1.58	\$1.67	\$1.76	\$1.86	\$1.97	\$68.93
26 Otter Tail Corporation	OTTR	(\$26.99)	\$0.00	\$1.18	\$2.34	\$2.30	\$2.30	\$2.29	\$2.51	\$2.75	\$3.00	\$3.27	\$3.56	\$3.86	\$4.08	\$4.31	\$4.56	\$4.82	\$67.19
27 Pinnacle West Capital Corporation	PNW	(\$58.80)	\$0.00	\$1.21	\$2,39	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09	\$3.27	\$3,46	\$3.68	\$3.92	\$4.14	\$4.38	\$4.62	\$4.88	\$137.21
28 Portland General Electric Company	POR	(\$34.24)	\$0.00	\$0.59	\$1.16	\$1.30	\$1,39	\$1.49	\$1.60	\$1.73	\$1.87	\$2.03	\$2.20	\$2.39	\$2.53	\$2.67	\$2.82	\$2.98	\$82.93
29 SCANA Corporation	SCG	(\$51.78)	\$0.00	\$1.17	\$2.30	\$2.42	\$2.51	\$2.61	\$2.81	\$3.04	\$3.29	\$3.57	\$3.87	\$4.21	\$4.45	\$4.70	\$4.97	\$5.25	\$125.30
30 Southern Company	S	(\$42.94)	\$0.00	\$1.13	\$2.21	\$2.25	\$2.28	\$2.32	\$2.38	\$2.46	\$2.54	\$2.64	\$2.76	\$2.89	\$3.05	\$3.22	\$3.41	\$3.60	\$96.29
31 TECO Energy, Inc.	世	(\$18.35)	\$0.00	\$0.42	\$0.83	\$0.82	\$0.82	\$0.82	\$0.84	\$0.87	\$0.90	\$0.93	\$0.97	\$1.01	\$1.07	\$1.13	\$1.19	\$1.26	\$40.95
32 Westar Energy, Inc.	WR	(\$35.52)	\$0.00	\$0.77	\$1.51	\$1.51	\$1.52	\$1.53	\$1.64	\$1.77	\$1.92	\$2.08	\$2.26	\$2.46	\$2.60	\$2.75	\$2.91	\$3.07	\$84.58
33 Xcel Energy Inc.	XEL	(\$33.19)	\$0.00	\$0.69	\$1.36	\$1.45	\$1.51	\$1.58	\$1,66	\$1.75	\$1.85	\$1.96	\$2.08	\$2.22	\$2.34	\$2.47	\$2.61	\$2.76	\$77.42

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

7 0 6

Sick Price Sick	nputs			Ξ	[2]	9	[4]	[2]	9	E	[8]	6	[10]	11	[12]	[13]	[14]
Ticker Price First Call Line Growth Anerage Growth 2015 2019				Stock		EPS Grov	wth Rate E	stimates		Long-Term	ď	ayout Rati	0	Iterative Solution		<u></u>	Terminal
Thicker			į	å	2,00%	100	Value	Ketention	Y	d		0	0		<u>.</u>	7/E	PEG 5
ALE \$51.08 NA 6.00% 6.50% 3.97% 5.49% 5.65% 66.00% 61.00% ovation LNT AEE \$40.087 6.00% 6.50% 6.50% 61.00% 63.00% over Company, Inc. AEP \$55.94 4.90% 5.08% 5.00% 4.07% 4.76% 5.66% 65.00% 64.00% attain BKH \$48.78 NA 7.00% 4.07% 4.07% 4.76% 5.66% 65.00% 64.00% attain BKH \$48.78 NA 7.00% 4.07% 4.07% 4.76% 5.66% 65.00% 64.00% attain BKH \$48.78 NA 7.00% 4.00% 5.17% 5.65% 65.00% 64.00% attain BKH \$48.78 NA 7.00% 4.00% 5.17% 5.66% 65.00% 64.00% attain BKH \$48.78 NA 7.00% 4.00% 5.17% 5.66% 65.00% 64.00% attain BKH \$48.78 NA 7.00% 4.00% 5.17% 5.65% 65.00% 64.00% attain BKH \$48.78 NA 7.00% 4.00% 5.17% 5.66% 65.00% 62.00% attain BKH \$79.41 5.00% 6.73% 5.50% 5.27% 5.92% 5.65% 65.00% 62.00% attain DUK \$76.11 4.70% 4.49% 5.00% 6.56% 65.00% 65.00% 65.00% attain DUK \$76.11 4.70% 4.49% 5.00% 6.56% 65.00% 65.00% 65.00% attain DUK \$76.11 4.70% 4.49% 5.00% 6.60% 5.66% 65.00% 65.00% 65.00% attain DUK \$75.14 6.00% 6.00% 3.00% 6.60% 5.66% 65.00% 65.00% 65.00% attain DUK \$76.11 4.70% 4.49% 5.00% 6.60% 5.66% 65.00% 65.00% 65.00% attain DUK \$76.11 4.70% 4.49% 5.00% 6.60% 5.66% 65.00% 65.00% 65.00% attain DUK \$76.11 4.70% 4.49% 5.00% 6.60% 5.66% 66.00% 65.00% 65.00% attain DUK \$76.14 6.00% 6.00% 3.00% 6.60% 5.66% 66.00% 65.00% 65.00% 65.00% attain DUK \$76.14 6.00% 6.00% 3.00% 6.60% 5.66% 66.00% 65.00% 6	Company		Ticker	Price	Zacks	rirsi Call	LINE	Growth	Average	Growth	2015	2019	2025	Proof	IRR	Katio	Katio
oration LNT \$61.38 \$3.9% \$4.5% \$6.00% \$569% \$569% \$61.00% \$3.00% n AEE \$4.08 \$6.80% \$6.00% \$1.00% \$5	ALLETE, Inc.	ú	ALE	\$51.08	ž	%00.9	6.50%	3.97%	5.49%	2.65%	%00.99	61.00%	67.30%	\$0.00	9.87%	16.84	2.98
AEE \$40.87 6.80% 6.85% 6.00% 4.56% 5.80% 6.50% 65.00% 65.00% 64.00% ower Company, Inc. AEP \$55.94 4.90% 5.08% 6.00% 7.00% 4.76% 6.86% 6.50% 64.00% 64.00% and and an arrange of the company, Inc. CNP \$20.49 5.00% 1.91% 1.00% 3.19% 5.27% 5.65% 67.00% 64.00% and inc. CNP \$20.49 5.70% 1.91% 1.00% 3.19% 2.95% 5.65% 67.00% 62.00% and inc. CNS \$34.02 6.20% 6.73% 5.50% 6.5	Illiant Ener	gy Corporation	Ŋ	\$61.38	5.30%	5.45%	%00.9	2.66%	2.60%	5.65%	61.00%	63.00%	67.30%	\$0.00	9.89%	16.77	2.97
Ower Company, Inc. AEP \$55.94 4.90% 5.08% 5.00% 4.07% 4.76% 5.65% 65.00% 64.00% Available \$32.71 NA 5.00% 7.00% 4.07% 3.80% 5.27% 5.65% 67.00% 64.00% Atlan BKH \$48.78 A. 700% 7.00% 3.80% 5.27% 5.65% 67.00% 64.00% A, Inc. CNB \$20.49 6.70% 4.00% 3.19% 2.96% 5.60% 67.00% 64.00% A, Inc. CNB \$34.02 6.20% 6.73% 5.50% 5.27% 5.92% 5.65% 67.00% 62.00% An, Inc. CNB \$70.11 4.70% 4.49% 5.00% 3.05% 6.50% 6.00%	meren Co	rporation	AEE	\$40.87	6.80%	5.85%	%00.9	4.56%	5.80%	5.65%	65.00%	55.00%	67.30%	\$0.00	10.04%	16.21	2.87
AVA \$32.71 NA 5.00% 7.00% 3.80% 5.27% 5.65% 67.00% 64.0	merican E	lectric Power Company, Inc.	AEP	\$55.94	4.90%	2.08%	2.00%	4.07%	4.76%	5.65%	65.00%	64.00%	67.30%	\$0.00	9.95%	16.67	2.95
MICHAIL BKH \$48.78 NA 7.00% 4.50% 6.17% 5.65% 57.00% 59.00% Arithm CNP \$20.49 5.70% 1.91% 1.00% 3.19% 2.95% 5.65% 57.00% 59.00% Arithm CNP \$20.49 5.70% 1.91% 1.00% 3.19% 2.95% 5.65% 67.00% 80.00% ass, Inc. D \$70.78 6.20% 5.50% 8.00% 6.00% 6.20% 65.00% 65.00% 63.00% 60.00% ass, Inc. DTE \$70.71 4.50% 5.60% 4.00% 5.65% 5.65% 65.00% 60.00% any DDIK \$76.11 4.70% 4.51% 5.00% 4.22% 5.65% 62.00% 60.00% article Company ES \$49.32 6.00% 3.00% 4.50% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6	vista Corp	oration	AVA	\$32.71	Ϋ́	2.00%	7.00%	3.80%	5.27%	2.65%	67.00%		67.30%	\$0.00	9.81%	17.10	3.03
CNP \$20.49 5.70% 1.91% 1.00% 3.19% 2.95% 5.65% 63.00% 60.00% CNS \$34.02 6.20% 6.73% 5.69% 6.30% 3.19% 2.95% 5.65% 61.00% 62.00% 6.73% 5.69% 6.30% 3.15% 2.81% 5.65% 61.00% 62.00% 63.00% DTE \$70.78 6.30% 5.09% 6.00% 6.30% 6.	lack Hills	Corporation	BKH	\$48.78	¥	7.00%	4.50%	4.02%	5.17%	2.65%	57.00%	29.00%	67.30%	\$0.00	9.90%	16.74	2.96
CMS \$34.02 6.20% 6.73% 5.50% 5.27% 5.92% 5.65% 61.00% 62.00% CMS \$34.02 6.20% 6.73% 5.50% 3.16% 2.38% 3.00% 3.15% 2.81% 5.65% 65.00% 63.00% CMS 5.00% CMS 5.	enterPoin	t Energy, Inc.	SNP	\$20.49	5.70%	1.91%	1.00%	3.19%	2.95%	5.65%	93.00%	80.00%	67.30%	\$0.00	10.46%	14.79	2.62
ED \$60.91 2.70% 2.38% 3.00% 3.15% 2.81% 5.65% 65.00% 65.00% 63.00% DTE \$70.78 6.30% 5.89% 8.00% 6.00% 6.55% 5.65% 5.65% 62.00% 63.00% DDK \$70.78 6.30% 4.51% 5.00% 4.88% 4.85% 5.65% 72.00% 60.00% DDK \$70.41 4.70% 4.99% 5.00% 4.65% 72.00% 60.00% ED \$24.11 5.00% 6.60% 8.50% 4.06% 5.65% 72.00% 60.00% ES \$34.32 6.80% 6.60% 8.50% 4.06% 5.65% 70.00% 5.00% GXP \$25.14 4.00% 1.00% 3.02% 5.10% 5.65% 70.00% 6.00% IDA \$60.00 6.50% 3.00% 3.02% 5.10% 5.65% 70.00% 6.00% OGE \$31.7 6.00% 6.00% 3.02% 5.10% </td <td>MS Energ</td> <td>y Corporation</td> <td>CMS</td> <td>\$34.02</td> <td>6.20%</td> <td>6.73%</td> <td>5.50%</td> <td>5.27%</td> <td>5.92%</td> <td>2.65%</td> <td>61.00%</td> <td>62.00%</td> <td>67.30%</td> <td>\$0.00</td> <td>9.55%</td> <td>18.25</td> <td>3.23</td>	MS Energ	y Corporation	CMS	\$34.02	6.20%	6.73%	5.50%	5.27%	5.92%	2.65%	61.00%	62.00%	67.30%	\$0.00	9.55%	18.25	3.23
DTE \$70.78 6.30% 5.89% 8.00% 6.00% 6.55% 5.65% 72.00% 72.00% DTE \$79.41 5.00% 4.51% 5.00% 4.88% 4.86% 5.65% 62.00% 60.00% DUK \$76.11 4.70% 4.49% 5.00% 2.267% 4.06% 5.65% 72.00% 60.00% DUK \$76.11 4.70% 4.49% 5.00% 2.267% 4.06% 5.65% 76.00% 60.00% ES \$349.32 6.80% 6.60% 8.50% 4.50% 5.66% 5.65% 76.00% 60.00% DUK \$76.11 4.70% 6.60% 8.50% 4.06% 5.65% 76.00% 60.00% DUK \$52.13 NA NA NA 7.00% 4.09% 5.60% 5.60% 5.60% 5.60% 6.60% 6.60% 5.60% 5.60% 6.60% 6.60% 5.60% 6.	onsolidat	ed Edison, Inc.		\$60.91	2.70%	2.38%	3.00%	3.15%	2.81%	2.65%	65.00%		67.30%	\$0.00	9.38%	19.09	3.38
DUK \$76.14 5.00% 4.51% 5.00% 4.88% 4.85% 5.65% 62.00% 60.00% DUK \$76.11 4.70% 4.49% 5.00% 2.67% 4.22% 5.65% 72.00% 66.00% ED \$24.01 5.00% 6.60% 3.00% 3.25% 4.06% 5.65% 72.00% 66.00% ES \$49.32 kB. 6.00% 6.60% 3.00% 3.22% 4.06% 5.65% 72.00% 66.00% GE \$24.01 5.00% 6.60% 8.50% 4.09% 3.00% 3.02% 5.54% 5.65% 70.00% 61.00% IDA \$60.44 4.00% 4.00% 1.00% 3.02% 5.40% 5.65% 70.00% 61.00% IDA \$60.44 4.00% 4.00% 1.00% 3.02% 5.10% 5.65% 70.00% 61.00% IDA \$60.44 4.00% 4.00% 1.00% 3.25% 4.00% 5.65% 70.00% 61.00% IDA \$60.44 4.00% 4.00% 1.00% 3.51% 7.56% 5.65% 70.00% 61.00% IDA \$60.44 4.00% 4.00% 1.00% 7.25% 7.10% 5.65% 70.00% 61.00% IDA \$60.44 4.00% 4.00% 1.00% 7.25% 7.10% 5.65% 70.00% 61.00% IDA \$60.40 4.00% 7.00% 7.25% 7.10% 5.65% 70.00% 61.00% IDA \$60.00% 3.00% 7.25% 7.25% 7.60% 60.00% 61.00% 5.00% 7.25% 7.25% 7.25% 7.25% 7.00% 60.00% 7.25% 7.25% 7.25% 7.25% 7.00% 60.00% 7.25% 7.20% 7.00% 61.00% 7.25% 7.25% 7.20% 7.00% 61.00% 7.25% 7.20% 7.00% 61.00% 7.25% 7.00% 61.00% 7.2	ominion !	Resources, Inc.	۵	\$70.78	6.30%	5.89%	8.00%	%00.9	6.55%	5.65%	72.00%		. %08.79	\$0.00	9.18%	20.18	3.57
DUK \$76.11 4.70% 4.49% 5.00% 2.67% 4.22% 5.65% 72.00% 66.00% EDE \$24.01 5.00% 5.00% 3.00% 3.25% 4.06% 5.65% 72.00% 60.00% FE \$49.32 6.60% 8.50% 4.50% 6.60% 5.65% 70.00% 60.00% FE \$35.13 NA NA 7.00% 4.09% 5.54% 5.65% 70.00% 61.00% GXP \$26.14 4.00% 6.50% 3.02% 5.54% 5.65% 70.00% 61.00% IDA \$60.44 4.00% 1.00% 3.02% 5.10% 5.65% 70.00% 61.00% NWE \$52.34 5.00% 4.00% 3.00% 3.26% 4.60% 5.65% 60.00% 60.00% OGE \$31.57 5.00% 4.00% 3.00% 7.25% 4.60% 5.65% 60.00% 60.00% OGE \$5.30 4.00% 3.00% 7.25%	TE Energ	yy Company	DTE	\$79.41	2.00%	4.51%	2.00%	4.88%	4.85%	2.65%	62.00%	%00.09	67.30%	\$0.00	10.20%	15.62	2.76
EDE \$24.01 5.00% 5.00% 3.00% 3.25% 4.06% 5.65% 76.00% 69.00% FE \$49.32 6.80% 6.60% 8.50% 4.50% 6.60% 5.65% 5.65% 50.00% 50.00% FE \$35.13 NA 7.00% 4.09% 5.54% 5.65% 5.65% 50.00% 6.00% 1DA \$60.44 4.00% 1.00% 3.51% 5.10% 5.65% 70.00% 61.00% 1DA \$60.44 4.00% 1.00% 3.51% 5.10% 5.65% 60.00% 69.00% NWE \$52.34 5.00% 6.00% 3.00% 3.51% 7.42% 5.65% 60.00% 69.00% nn PNW \$51.59 NA 6.00% 9.00% 7.25% 7.42% 5.65% 60.00% 69.00% nn PNW \$51.59 4.00% 5.30% 4.00% 7.25% 7.42% 5.65% 60.00% 69.00% nn PNW \$51.50 4.00% 7.25% 4.00% 7.25% 7.40% 5.65% 60.00% 69.00% 5.00% 7.25% 7.40% 7.50% 7.2	Juke Ener	gy Corporation	PČK	\$76.11	4.70%	4.49%	2.00%	2.67%	4.22%	2.65%	72.00%		. %0£'.29	\$0.00	9.43%	18.80	3.33
FE \$49.32 6.80% 6.60% 8.50% 4.50% 6.60% 5.65% 5.00% 5.	mpire Dis	strict Electric Company	EDE	\$24.01	2.00%	2.00%	3.00%	3.25%	4.06%	2.65%	76.00%		67.30%	\$0.00	10.19%	15.66	2.77
FE \$35.13 NA NA 7.00% 4.09% 5.54% 5.65% 58.00% 54.00% y lnc. GSP \$26.14 6.00% 6.37% 5.00% 3.02% 5.10% 5.65% 70.00% 61.00% coration NWE \$52.44 4.00% 4.00% 4.00% 3.02% 5.10% 5.65% 70.00% 61.00% coration NWE \$52.34 4.00% 4.00% 3.00% 3.51% 3.92% 5.65% 70.00% 61.00% coration OGE \$31.57 5.00% 4.00% 9.00% 7.25% 7.42% 5.65% 70.00% 59.00% no OTTR \$29.98 NA 6.00% 9.00% 7.25% 7.42% 5.65% 70.00% 50.00% silectric Company POR \$35.60 5.20% 4.72% 6.00% 4.04% 4.59% 5.65% 60.00% 56.00% no SCG \$53.76 4.20% 4.50% 4.04% 4.05% 5.65% 70.00% 56.00% no SCG \$53.76 4.20% 4.50% 4.05% 5.65% 70.00% 56.00% no SCG \$53.76 8.20% 4.50% 4.00% 5.00% 5.65% 70.00% 56.00% no SCG \$53.76 8.20% 6.00% 3.00% 6.00% 7.00% 5.65% 70.00% 56.00% no SCG \$53.76 8.20% 6.00% 3.00% 6.00% 7.00% 5.65% 70.00% 56.00% 7.00%	versource	e Energy	S	\$49.32	6.80%	%09.9	8.50%	4.50%	%09.9	5.65%	59.00%		67.30%	\$0.00	9.75%	17.37	3.07
y Inc. GXP \$26.14 6.00% 6.37% 5.00% 3.02% 5.10% 5.65% 70.00% 61.00% oration NWE \$52.34 6.00% 6.00% 6.50% 3.61% 3.65% 70.00% 61.00% oration OGE \$31.57 6.00% 4.00% 4.00% 7.00% 3.61% 5.65% 65.60% 69.00% oration OGE \$31.57 6.00% 4.00% 4.00% 7.25% 7.42% 5.65% 70.00% 69.00% oration OTTR \$29.98 NA 6.00% 9.00% 7.25% 7.42% 5.65% 70.00% 69.00% oration PNW \$61.59 4.00% 4.00% 4.00% 7.25% 7.42% 5.65% 70.00% 69.00% oration POR \$35.60 5.20% 4.72% 6.00% 4.04% 4.99% 5.65% 63.00% 69.00% oration SCG \$53.75 4.20% 4.72% 6.00% 7.40% 3.93% 5.65% 70.00% 65.00% 71.00% 7.10% 9.20% 6.00% 3.90% 6.40% 75.00% 6.00% 71.00% 7.10% 9.20% 6.00% 3.95% 4.50% 6.40% 7.50% 6.00% 71.00% 7.10% 9.20% 6.00% 3.95% 4.50% 7.50% 6.00% 6.00% 7.10% 9.20% 6.00% 3.95% 4.51% 5.65% 61.00% 55.00% 71.00% 7.10% 9.20% 6.00% 3.95% 4.51% 5.65% 61.00% 55.00% 7.10% 55.00% 7.10% 9.20% 6.00% 3.95% 4.51% 5.65% 61.00% 64.00% 64.00%	irstEnergy	/ Corp.	빞	\$35,13	Ϋ́	Ϋ́	7.00%	4.09%	5.54%	2.65%	58.00%		67.30%	\$0.00	7.43%	39.94	70.7
IDA \$60.44 4.00% 4.00% 1.00% 3.51% 3.13% 5.65% 49.00% 58.00% 50.00% 5	reat Plair	is Energy Inc.	ĞΧΡ	\$26.14	%00.9	6.37%	2.00%	3.02%	5.10%	2.65%	70.00%		67.30%	\$0.00	10.03%	16.23	2.87
NWE \$52.34 5.00% 5.00% 6.50% 3.90% 5.10% 5.65% 56.00% 69.00% OGE \$31.57 5.00% 4.00% 3.00% 3.66% 3.92% 5.65% 56.00% 69.00% John OTTR \$29.98 NA 6.00% 9.00% 7.25% 7.42% 5.65% 70.00% 59.00% Jistal Corporation PNW \$61.59 4.00% 4.00% 4.00% 5.65% 70.00% 56.00% John \$35.60 5.20% 4.72% 6.00% 4.00% 5.65% 70.00% 56.00% John \$5.00 4.30% 4.10% 4.50% 5.65% 70.00% 56.00% John \$5.00 \$4.10% 3.93% 5.65% 70.00% 56.00% John \$5.00 \$1.20% 4.50% 3.60% 6.60% 70.00% 50.00% 70.00% John \$5.00 \$5.00 4.50% 3.60% 4.54% 5.65% 61.00% <td>IDACORP, Inc.</td> <td>lnc.</td> <td>₫</td> <td>\$60.44</td> <td>4.00%</td> <td>4.00%</td> <td>1.00%</td> <td>3.51%</td> <td>3.13%</td> <td>2.65%</td> <td>49.00%</td> <td></td> <td>67.30%</td> <td>\$0.00</td> <td>%09.6</td> <td>18.01</td> <td>3.19</td>	IDACORP, Inc.	lnc.	₫	\$60.44	4.00%	4.00%	1.00%	3.51%	3.13%	2.65%	49.00%		67.30%	\$0.00	%09.6	18.01	3.19
OGE \$31.57 5.00% 4.00% 3.00% 3.88% 3.92% 5.65% 86.00% 59.00% iton OTTR \$29.98 NA 6.00% 9.00% 7.25% 7.42% 5.65% 86.00% 50.00% attal Corporation PNW \$61.59 4.60% 5.30% 4.00% 4.00% 4.00% 4.52% 4.60% 5.65% 50.00% 64.00% n SCG \$53.75 4.20% 4.30% 4.50% 5.13% 4.40% 4.59% 5.65% 50.00% 64.00% TE \$19.00 7.10% 9.20% 6.00% 3.60% 6.40% 3.60% 7.10% 7.10% 9.20% 6.00% 3.60% 6.40% 7.50% 4.50% 6.00% 7.10% 5.00% 7.10% 5.00% 7.10% 5.00% 7.10% 5.20% 4.50% 6.00% 7.60% 7.10% 5.00% 6.00% 7.50% 6.00% 7.50%	JorthWest	ern Corporation	NWE	\$52.34	2.00%	2.00%	6.50%	3.90%	5.10%	2.65%	26.00%		67.30%	\$0.00	8.40%	25.86	4.57
OTTR \$29.98 NA 6.00% 9.00% 7.25% 7.42% 5.65% 70.00% 56.00% PNW \$61.59 4.60% 6.30% 4.00% 4.52% 4.60% 5.65% 63.00% 64.00% POR \$35.60 5.20% 4.72% 6.00% 4.00% 4.52% 4.60% 5.65% 63.00% 64.00% SOG \$53.76 4.20% 4.30% 4.50% 5.13% 4.59% 5.65% 57.00% 56.00% SO \$4.08 3.50% 3.32% 4.50% 4.40% 3.93% 5.65% 67.00% 77.00% NNR \$37.28 3.50% 7.50% 6.00% 5.25% 4.54% 5.65% 61.00% 55.00% 72.00% NNR \$37.28 3.50% 4.56% 6.00% 3.95% 4.51% 5.65% 61.00% 55.00% 64.00%	GE Energ		OGE	\$31.57	2.00%	4.00%	3.00%	3.68%	3.95%	2.65%	86.00%	_	67.30%	\$0.00	9.00%	21.22	3.75
PNW \$61.59 4.60% 5.30% 4.00% 4.52% 4.60% 5.65% 63.00% 64.00% PDR \$35.60 5.20% 4.72% 6.00% 4.04% 4.99% 5.65% 60.00% 56.00% 50.00%	Otter Tail (OTTR	\$29.98	Α	%00'9	%00.6	7.25%	7.42%	2.65%	70.00%		67.30%	\$0.00	14.10%	8.42	1.49
POR \$35.60 5.20% 4.72% 6.00% 4.04% 4.99% 5.65% 50.00% 56.00% 50.0	'innacle V	Vest Capital Corporation	PNW	\$61.59	4.60%	5.30%	4.00%	4.52%	4.60%	5.65%	63.00%		67.30%	\$0.00	9.75%	17.35	3.07
SCG \$53.75 4.20% 4.30% 4.50% 5.13% 4.53% 5.65% 57.00% 56.00% SO \$44.08 3.50% 3.32% 4.50% 4.40% 3.93% 5.65% 76.00% 71.00% TE \$19.00 7.10% 9.20% 6.00% 3.60% 6.48% 5.65% 83.00% 72.00% WR \$37.28 3.50% 3.40% 6.00% 5.25% 4.54% 5.65% 61.00% 55.00% XEL \$34.08 5.00% 4.58% 4.50% 3.95% 4.51% 5.65% 63.00% 64.00%	ortland G	ieneral Electric Company	POR	\$35.60	5.20%	4.72%	%00.9	4.04%	4.99%	5.65%	20.00%		67.30%	\$0.00	9.95%	16.66	2.95
any SO \$44.08 3.50% 3.32% 4.50% 4.40% 3.93% 5.65% 76.00% 71.00% nc. TE \$19.00 7.10% 9.20% 6.00% 3.60% 6.48% 5.65% 83.00% 72.00% lnc. WR \$37.28 3.50% 4.58% 6.00% 5.25% 4.54% 5.65% 61.00% 55.00% XEL \$34.08 5.00% 4.58% 4.50% 3.95% 4.51% 5.65% 63.00% 64.00%	SCANA CO	orporation	SCG	\$53.75	4.20%	4.30%	4.50%	5.13%	4.53%	2.65%	57.00%		67.30%	\$0.00	10.46%	14.78	2.62
nc. TE \$19.00 7.10% 9.20% 6.00% 3.60% 6.48% 5.65% 83.00% 72.00% 67 line. WR \$37.28 3.50% 3.40% 6.00% 5.25% 4.54% 5.65% 61.00% 55.00% 67 XEL \$34.08 5.00% 4.58% 4.50% 3.95% 4.51% 5.65% 63.00% 64.00% 67 XEL \$3.00% 64.00% 64.00% 67 XEL \$3.00% 64.00% 6	outhern (Sompany	SO	\$44.08	3.50%	3.32%	4.50%	4.40%	3.93%	2.65%	76.00%		67.30%	\$0.00	10.05%	16.17	2.86
Inc. WR \$37.28 3.50% 3.40% 6.00% 5.25% 4.54% 5.65% 61.00% 55.00% 67 XEL \$34.08 5.00% 4.58% 4.50% 3.95% 4.51% 5.65% 63.00% 64.00% 63	ECO Ene	ergy, Inc.	旦	\$19.00	7.10%	9.20%	%00.9	3.60%	6.48%	2.65%	83.00%		67.30%	\$0.00	9.79%	17.19	3.04
XEL \$34.08 5.00% 4.58% 4.50% 3.95% 4.51% 5.65% 63.00% 64.00% 67	Vestar En	iergy, Inc.	Χ	\$37.28	3.50%	3.40%	%00'9	5.25%	4.54%	2.65%	61.00%	55.00%	67.30%	\$0.00	9.97%	16.46	2.91
	Xcel Energy Inc.	ly Inc.	XEL	\$34.08	2.00%	4.58%	4.50%	3.95%	4.51%	5.65%	63.00%	64.00%	67.30%	\$0.00	9.83%	17.04	3.01
														Mean	9.85%		
														Max	14.10%		
														M	7.43%		

က						Avera	ye EPS Grα	owth Rate E	Average EPS Growth Rate Estimate in First Stage (with Sustainable Growth)	First Stage	with Su	stainable	Growth)						
4	Projected Annual																		
9	Earnings per Share		[15]	[16]	[11]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[56]	[27]	[28]	[29]	[30]	[31]
ď	, meaning of	Tight	2100		2016	717	a100	2010	0606	1000	2000	2003	2004	20.05	3036	2002	acuc	9000	0800
1 0	ALL FIFE 122	יוכאכו	1000	200	2017	42.40	200	2010	27.76	202	2777	277	1707	2020	2020	2021	2070	2020	2007
- (ALLEIE, Inc.	ALE:	05.24 05.24	92.00 00.00	\$3.25	96.40	90.04	90.76	\$4.00 0.15	27.46	34.40	94.70 0 1 1 0	76.00	45.45	40.00	45.85	90.19 10.19	40.04	\$0.9.
ω	Alliant Energy Corporation	Ż	\$3.48	\$3.67	\$3.88	\$4.10	\$4.33	\$4.57	\$4.83	\$5.10	\$5.38	\$5.69	\$6.01	\$6.35	\$6.71	\$7.09	\$7.49	\$7.91	\$8.36
ნ	Ameren Corporation	AEE	\$2.40	\$2.54	\$2.69	\$2.84	\$3.01	\$3.18	\$3.37	\$3.56	\$3.76	\$3.98	\$4.20	\$4.44	\$4.69	\$4.96	\$5.24	\$5.53	\$5.85
9	American Electric Power Company, Inc.	AEP	\$3,34	\$3.50	\$3.67	\$3.84	\$4.02	\$4.21	\$4.42	\$4.65	\$4.89	\$5.15	\$5.43	\$5.74	\$6.06	\$6.41	\$6.77	\$7.15	\$7.56
-	Avista Corporation	AVA	\$1.84	\$1.94	\$2.04	\$2.15	\$2.26	\$2.38	\$2.51	\$2.64	\$2.78	\$2.94	\$3.10	\$3.28	\$3.46	\$3.66	\$3.87	\$4.08	\$4.31
12	Black Hills Corporation	BKH	\$2.89	\$3.04	\$3.20	\$3.36	\$3.54	\$3.72	\$3.91	\$4.12	\$4.35	\$4.58	\$4.84	\$5.11	\$5.40	\$5.71	\$6.03	\$6.37	\$6.73
13	CenterPoint Energy, Inc.	CNP	\$1.42	\$1.46	\$1.50	\$1,55	\$1,60	\$1.64	\$1.70	\$1.76	\$1.84	\$1.93	\$2.03	\$2.14	\$2.26	\$2.39	\$2.53	\$2.67	\$2.82
14	CMS Energy Corporation	CMS	\$1.74	\$1.84	\$1.95	\$2.07	\$2.19	\$2.32	\$2.46	\$2.60	\$2.75	\$2.91	\$3.07	\$3.25	\$3.43	\$3.63	\$3.83	\$4.05	\$4.28
15	Consolidated Edison, Inc.		\$3.62	\$3.72	\$3.83	\$3.93	\$4.04	\$4.16	\$4.29	\$4.46	\$4.64	\$4.86	\$5.11	\$5.40	\$5.71	\$6.03	\$6.37	\$6.73	\$7.11
16	Dominion Resources, Inc.	Δ	\$3,05	\$3.25	\$3.46	\$3.69	\$3.93	\$4.19	\$4.46	\$4.73	\$5.02	\$5.32	\$5.63	\$5.95	\$6.29	\$6.64	\$7.02	\$7.41	\$7.83
17	DTE Energy Company	DTE	\$5.10	\$5,35	\$5.61	\$5.88	\$6.16	\$6.46	\$6.78	\$7.13	\$7.50	\$7.91	\$8.35	\$8.82	\$9.32	\$9.84	\$10.40	\$10.99	\$11.61
18	Duke Energy Corporation	DQ.	\$4.13	\$4.30	\$4.49	\$4.67	\$4.87	\$5.08	\$5.30	\$5.55	\$5.83	\$6.13	\$6.46	\$6.82	\$7.21	\$7.62	\$8.05	\$8.50	\$8.98
19	Empire District Electric Company	EDE	\$1.55	\$1.61	\$1.68	\$1.75	\$1.82	\$1.89	\$1.97	\$2.06	\$2.16	\$2.28	\$2.40	\$2.53	\$2.68	\$2.83	\$2.99	\$3.16	\$3.33
20	Eversource Energy	ES	\$2.58	\$2.75	\$2.93	\$3.13	\$3.33	\$3.55	\$3.78	\$4.02	\$4.26	\$4.52	\$4.78	\$5.05	\$5.34	\$5.64	\$5.96	\$6.29	\$6.65
21	FirstEnergy Corp.	出	\$0.85	\$0.90	\$0.95	\$1.00	\$1.05	\$1.11	\$1.18	\$1.24	\$1.31	\$1.38	\$1.46	\$1,54	\$1,63	\$1.72	\$1.82	\$1.92	\$2.03
22	Great Plains Energy inc.	GXP	\$1.57	\$1.65	\$1.73	\$1.82	\$1.92	\$2.01	\$2.12	\$2.23	\$2.35	\$2.48	\$2.62	\$2.76	\$2.92	\$3.08	\$3.26	\$3.44	\$3.64
23	IDACORP, Inc.	ΔĀ	\$3.85	\$3.97	\$4.09	\$4.22	\$4.35	\$4.49	\$4.65	\$4.83	\$5.05	\$5.29	\$5.57	\$5.88	\$6.21	\$6.56	\$6.94	\$7.33	\$7.74
24	NorthWestern Corporation	NWE	\$1.98	\$2.08	\$2.19	\$2.30	\$2.42	\$2.54	\$2.67	\$2.81	\$2.96	\$3.13	\$3.30	\$3.49	\$3.68	\$3.89	\$4.11	\$4,34	\$4.59
25	OGE Energy Corp.	0GE	\$1,55	\$1.61	\$1.67	\$1.74	\$1.81	\$1.88	\$1.96	\$2.05	\$2.14	\$2.25	\$2.37	\$2.51	\$2.65	\$2.80	\$2.96	\$3.12	\$3.30
26	Otter Tail Corporation	OTTR	\$3.06	\$3.29	\$3.53	\$3.79	\$4.07	\$4.38	\$4.69	\$5.01	\$5.34	\$5.67	\$6.01	\$6.34	\$6.70	\$7.08	\$7.48	\$7.91	\$8.35
27	Pinnacle West Capital Corporation	PNW	\$3,58	\$3.74	\$3.92	\$4.10	\$4.29	\$4,48	\$4.70	\$4.93	\$5.18	\$5.46	\$5.76	\$6.08	\$6.43	\$6.79	\$7.17	\$7.58	\$8.01
28	Portland General Electric Company	POR	\$2.18	\$2.29	\$2.40	\$2.52	\$2.65	\$2.78	\$2.92	\$3.08	\$3.24	\$3.41	\$3.60	\$3.81	\$4.02	\$4.25	\$4.49	\$4.74	\$5.01
59	SCANA Corporation	SCG	\$3.79	\$3.96	\$4.14	\$4.33	\$4.53	\$4.73	\$4.95	\$5.20	\$5.46	\$5.75	\$6.06	\$6.41	\$6.77	\$7.15	\$7.56	\$7.98	\$8.43
30	Southern Company	SO	\$2.77	\$2.88	\$2.99	\$3.11	\$3.23	\$3.36	\$3,50	\$3.66	\$3.83	\$4.03	\$4.24	\$4.48	\$4.74	\$5.01	\$5.29	\$5.59	\$5.90
સ	TECO Energy, Inc.	旦	\$0.95	\$1.01	\$1.08	\$1.15	\$1.22	\$1.30	\$1.38	\$1.47	\$1.56	\$1.65	\$1.75	\$1.84	\$1.95	\$2.06	\$2.17	\$2.30	\$2.43
32	Westar Energy, Inc.	WR	\$2.35	\$2.46	\$2.57	\$2.68	\$2.81	\$2.93	\$3.07	\$3.22	\$3.39	\$3.57	\$3.76	\$3.97	\$4.20	\$4.44	\$4.69	\$4.95	\$5.23
33	Xcel Fneray Inc.	×	\$2.03	\$2.12	\$2.22	\$2.32	\$2.42	\$2.53	\$2.65	\$2.7B	\$2.92	\$3.07	\$3 24	\$3.43	\$3.62	\$3.82	\$4 04	\$4.27	54.51

4 Projected Annual																		
5 Dividend Payout Ratio		[32]		[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]
, manager 1	TedoiT	2015		2016	2017	0.74 0.40	2010	0000	2021	2000	2003	2024	2005	9000	7000	2008	9006	2030
Company	ICRE			ŀ		2010	2013	2020	- 1	- 1	-1	-1	-1	1	2021	2020	2707	2020
7 ALLETE, Inc.	ALE	%00.99	0% 64	1.75% 6	63.50% (62.25%	61.00%	62.05%	63.10% 6	64.15% 6	65.20% 6	66.25% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%	67.30%
8 Alliant Energy Corporation	LN	61.00%	0% 61	.50% 6	62.00% 6	62.50%	63.00%	63.72%	64.43% 6	65.15% 6	65.87% 6	9 %65'99	37.30%	67.30%	37.30%	67.30%	67.30%	67.30%
9 Ameren Corporation	AEE	%00'59		62.50% 6	60.00%	57.50%	25.00%	57.05%	59.10% 6	61.15% 6	63.20% 6	65.25% 6	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
10 American Electric Power Company, Inc.	ny, Inc. AEP	%00.29		64.75% 6	64.50% (64.25%	64.00%	64.55%	65.10% 6	65,65% 6	66.20% 6	66.75% 6	67.30% (67.30% (67.30%	67.30%	67.30%	67.30%
11 Avista Corporation	•	%00.29		66.25% 6	65.50% (64.75%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30% (67.30% (67.30%	67.30%	67.30%	67.30%
12 Black Hills Corporation	BKT	27.00%		57.50% 5	58.00%	58.50%	29.00%	60.38%	61.77% 6	63.15% 6	64.54% 6	65.92% 6	67.30% (67.30% (67.30%	67.30%	67.30%	67.30%
13 CenterPoint Energy, Inc.	CNP	%00°E6		89.75% 8	86.50%	83.25%	80.00%	77.88%	75.77% 7	73.65% 7	71.54% 6	69.42% 6	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
14 CMS Energy Corporation	CMS	. 61,00%		61.25% 6	61.50% (61.75%	62.00%	62.88%	63.77% 6	64.65% 6	65.54% 6	66.42% 6	67,30%	67.30%	67.30%	67.30%	67.30%	67.30%
15 Consolidated Edison, Inc.		%00:99		64.50% 6	64.00% (63.50%	63.00%	63.72%	64.43% 6	65.15% 6	65.87% 6	9 %65.99	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
16 Dominion Resources, Inc.		72.00%		72.00% 7	72.00%	72.00%	72.00%	71.22%	70.43% 6	69.65% 6	68.87% 6	68.09% 6	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%
17 DTE Energy Company	DTE	62.00%		61.50% 6	61.00% (60.50%	%00.09	61.22%	62.43% 6	63.65% 6	64.87% 6	9 %60.99	67.30%	67.30% (67.30%	67.30%	67.30%	67.30%
18 Duke Energy Corporation	PUK			70.50% 6	9 %00.69	67.50%	%00.99	66.22%	66.43% 6	66.65% 6	66.87% 6	67.09% 6	67.30% (67.30% (67.30%	67.30%	67.30%	67.30%
19 Empire District Electric Company	_			74.25% 7		70.75%	%00'69	68.72%	68.43% 6	68.15% 6	67.87% 6	67.59% 6	67.30% (67.30%	67.30%	67.30%	67.30%	67.30%
20 Eversource Energy	ES	29.00%			57.50%	26.75%	26.00%	57.88%	59.77% 6			65.42% 6	67.30%	67.30% (67.30%	67.30%	67.30%	67.30%
21 FirstEnergy Corp.	믭	%00.89		57.00% 5		22.00%	54.00%	56.22%	58.43% 6	60.65% 6	62.87% 6	65.09% 6	67.30% (67.30% (67.30%	67.30%	67.30%	67.30%
22 Great Plains Energy Inc.	GXP	%00.0Z		67.75% 6	65.50% (63.25%	61.00%	62.05%	63.10% 6	64.15% 6	65.20% 6	66.25% 6	67.30% (67.30% (67.30%	67.30%	67.30%	67.30%
23 IDACORP, Inc.	IDA	49.00%		51.25% 5	53.50% (55.75%	58.00%	29.55%	61.10% 6	62.65% 6	64.20% 6	65.75% 6	67.30% (67.30% (67.30%	67.30%	67.30%	67.30%
24 NorthWestern Corporation	NWE	: 56.00%		59.25% 6	62.50% (65.75%	%00.69	68.72%	68.43% 6	68.15% 6	67.87% 6	67.59% 6	67.30% (67.30%	67.30%	67.30%	67.30%	67.30%
25 OGE Energy Corp.	OGE	86.00%		79.25% 7	72.50% (65.75%	29.00%	60.38%	61.77% 6	63.15% 6	64.54% 6	65.92% 6	67.30% (67.30% (67.30%	67.30%	67.30%	67.30%
26 Otter Tail Corporation	OTTR	۲0.00%		66.50% 6	63.00%	59.50%	26.00%	57.88%	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% (67.30%	67.30%	67.30%	67.30%	67.30%
27 Pinnacle West Capital Corporation		/ 63.00%		63.25% 6	63.50% (63.75%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30% (67.30% (67.30%	67.30%	67.30%	67.30%
28 Portland General Electric Company		20.00%		51.50% 5	53.00%	54.50%	26.00%	57.88%	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30%	67.30% (67.30%	67.30%	67.30%	67.30%
29 SCANA Corporation	SCG	. 57.00%		56.75% 5	56.50% (56.25%	26.00%	57.88%	59.77% 6	61.65% 6	63.54% 6	65.42% 6	67.30% (67.30% (67.30%	67.30%	67.30%	67.30%
30 Southern Company	SO	76.00%		74.75% 7	73.50%	72.25%	71.00%	70.38%	69.77% 6	69.15% 6	68.54% 6	67.92% 6	67.30% (67.30%	67.30%	67.30%	67.30%	67.30%
31 TECO Energy, Inc.	世	83.00%		80.25% 7	77.50%	74.75%	72.00%	71.22%	70.43% 6	69.65% 6	68.87% 6	68.09% 6	67.30% (67.30% (67.30%	67.30%	67.30%	67.30%
32 Westar Energy, Inc.	WR	61.00%		59.50% 5	28.00%	26.50%	25.00%	57.05%	59.10% 6	61.15% 6	63.20% 6	65.25% 6	67.30%	67.30% (67.30%	67.30%	67.30%	67.30%
33 Xcel Energy Inc.	Ä	%00.69		63.25% 6	63.50%	63.75%	64.00%	64.55%	65.10% 6	65.65% 6	66.20% 6	66.75% 6	67.30%	67.30%	67.30%	67.30%	67.30%	67.30%

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

− α ε

4 %	Projected Annual Cash Flows			[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[26]	[22]	[58]	[69]	[09]	[61]	[62]	[63]	[64]
																				[erminal
9	Company	Ticker	,	2015	2016	2017	2018	2019	2020	2021	2022	2023					2028	2029	2030	Value
7	ALLETE, Inc.	ALE	\$	\$2.02	\$2.09	\$2.16	\$2.24	\$2.31	\$2.48	\$2.66	\$2.86	\$3.07	\$3.29				\$4.17	\$4.40	\$4.65	\$116.37
æ	Alliant Energy Corporation	Ę	6	\$2.24	\$2.39	\$2.54	\$2.70	\$2.88	\$3.08	\$3.28	\$3.51	\$3.75					\$5.04	\$5.32	\$5.63	\$140.17
თ	Ameren Corporation	AEE	69	\$1.65	\$1.68	\$1.71	\$1.73	\$1.75	\$1.92	\$2.10	\$2.30	\$2.51					\$3.53	\$3.72	\$3.93	\$94.80
10	American Electric Power Company, Inc.	AEP	4	\$2.27	\$2.37	\$2.48	\$2.58	\$2.70	\$2.85	\$3.02	\$3.21	\$3.41	_	\$3.86		••	\$4.56	\$4.81	\$5.09	\$125.96
11	Avista Corporation	AVA	69	\$1.30	\$1.35	\$1.41	\$1.46	\$1.52	\$1.62	\$1.72	\$1.83	\$1.95		••			\$2.60	\$2.75	\$2.90	\$73.79
12	Black Hills Corporation	BKH	69	\$1.73	\$1.84	\$1.95	\$2.07	\$2.19	\$2.36	\$2.55	\$2.74	\$2.96	_	•			\$4.06	\$4.29	\$4.53	\$112.67
13	CenterPoint Energy, Inc.	CNP	69	\$1.36	\$1.35	\$1.34	\$1,33	\$1.31	\$1.32	\$1.34	\$1.35	\$1.38				•	\$1.70	\$1.80	\$1.90	\$41.68
14	CMS Energy Corporation	CMS	6 3	\$1.12	\$1.20	\$1.27	\$1.35	\$1.44	\$1.54	\$1.66	\$1.78	\$1.91					\$2.58	\$2.72	\$2.88	\$78.03
15	Consolidated Edison, Inc.		69	\$2.42	\$2.47	\$2.52	\$2.57	\$2.62	\$2.74	\$2.87	\$3.03	\$3.20		•		••	\$4.29	\$4.53	\$4.79	\$135.77
16	Dominion Resources, Inc.	Ω	ӨЭ	\$2.34	\$2.49	\$2.66	\$2.83	\$3.02	\$3.17	\$3.33	\$3.50	\$3.67					\$4.72	\$4.99	\$5.27	\$158.02
17	DTE Energy Company	DTE	69	\$3.32	\$3.45	\$3.59	\$3.73	\$3.88	\$4.15	\$4.45	\$4.78	\$5.13					\$7.00	\$7.39	\$7.81	\$181.33
18	Duke Energy Corporation	DUK	69	\$3.10	\$3.16	\$3.23	\$3.29	\$3.35	\$3.51	\$3.69	\$3.88	\$4.10	\$4.33	\$4.59	\$4.85	\$5.13	\$5.42	\$5.72	\$6.05	\$168.87
9	Empire District Electric Company	EDE	69	\$1.23	\$1.25	\$1.27	\$1.29	\$1.31	\$1.36	\$1.41	\$1.47	\$1.54		•			\$2.01	\$2.12	\$2.24	\$52.23
20	Eversource Energy	ES	6	\$1.62	\$1.71	\$1.80	\$1.89	\$1.99	\$2.19	\$2.40	\$2.63	\$2.87		•		••	\$4.01	\$4.24	\$4.48	\$115.50
2	FirstEnergy Corp.	丑	6 Э	\$0.52	\$0.54	\$0.56	\$0.58	\$0.60	\$0.66	\$0.73	\$0.79	\$0.87		•		•	\$1.23	\$1.30	\$1.37	\$81.19
22	Great Plains Energy Inc.	GXP	69	\$1.16	\$1.17	\$1.19	\$1.21	\$1.23	\$1.31	\$1.41	\$1.51	\$1.62				•	\$2.19	\$2.32	\$2.45	\$59.04
23	IDACORP, Inc.	Δ	69	\$1.95	\$2.10	\$2.26	\$2.43	\$2.60	\$2.77	\$2.95	\$3.16	\$3.40		•		••	\$4.67	\$4.93	\$5.21	\$139.40
24	NorthWestern Corporation	NWE	69	\$1.17	\$1.30	\$1.44	\$1.59	\$1.75	\$1.84	\$1.92	\$2.02	\$2.12		•			\$2.77	\$2.92	\$3.09	\$118.63
25	OGE Energy Corp.	OGE	69	\$1.39	\$1.33	\$1.26	\$1.19	\$1.11	\$1.18	\$1.26	\$1.35	\$1,45		••			\$1.99	\$2.10	\$2.22	\$70.03
26	Otter Tail Corporation	OTTR	69	\$2.30	\$2.35	\$2.39	\$2.42	\$2.45	\$2.71	\$2.99	\$3.29	\$3.60		-,			\$5.04	\$5.32	\$5.62	\$70.31
27	Pinnacle West Capital Corporation	PNW	69	\$2.36	\$2.48	\$2.60	\$2.73	\$2.87	\$3.03	\$3.21	\$3.40	\$3.61		•			\$4.83	\$5.10	\$5.39	\$138.96
78	Portland General Electric Company	POR	69	\$1.14	\$1.24	\$1.34	\$1.44	\$1.56	\$1.69	\$1.84	\$2.00	\$2.17				••	\$3.02	\$3.19	\$3.37	\$83.50
59	SCANA Corporation	SCG	69	\$2.26	\$2.35	\$2.45	\$2.55	\$2.65	\$2.87	\$3.11	\$3.37	\$3.65					\$5.08	\$5.37	\$5.68	\$124.65
30	Southern Company	SO	φ	\$2,19	\$2.24	\$2.29	\$2.33	\$2.38	\$2.46	\$2.55	\$2.65	\$2.76	\$2.88	-,		•	\$3.56	\$3.76	\$3.97	\$95.43
93	TECO Energy, Inc.	旦	φ	\$0.84	\$0.86	\$0.89	\$0.91	\$0.94	\$0.98	\$1.03	\$1.08	\$1.14	\$1.19	\$1.24 \$			\$1.46	\$1.55	\$1.63	\$41.72
32	Westar Energy, Inc.	×	69	\$1.50	\$1.53	\$1.56	\$1.59	\$1.61	\$1.75	\$1.90	\$2.07	\$2.25	\$2.45		63	••	\$3.15	\$3.33	\$3.52	\$86.11
33	Xcel Energy Inc.	XEL	6	\$1.34	\$1.40	\$1.47	\$1.54	\$1.62	\$1.71	\$1.81	\$1.92	\$2.04	\$2.16	\$2.31	"	\$2.57	\$2.72	\$2.87	\$3.03	\$76.83

					Averag	te EPS GE	WIN Kate E	4verage EPS Grown Kate Estimate in First Stage (With Sustainable Grown)	ırsı stage	(With Sus	stainable (Growth)							
4 Projected Annual Data																			
5 Investor Cash Flows		[65]	[99]	[67]	[68]	[69]	[02]	[71]	[72]	[23]	[74]	[15]	[9/]	[77]	[78]	[79]	[80]	[81]	[82]
		Initial																	
6 Company	Ticker	Outflow	6/25/15	12/31/15		6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22 (6/30/24 6		6/30/26	6/30/27	6/30/28	6/30/59	6/30/30
7 ALLETE, Inc.	ALE	(\$51.08)	\$0.00	\$1.05	\$2.07	\$2.16	\$2.24	\$2.31		\$2.66				i		\$3.94	\$4.17	\$4.40	\$121.02
8 Alliant Energy Corporation	LNT	(\$61.38)	\$0.00	\$1.16	\$2.30	\$2.54	\$2.70	\$2.88		\$3.28					\$4.51	\$4.77	\$5.04	\$5.32	\$145.79
9 Ameren Corporation	AEE	(\$40.87)	\$0.00	\$0.85	\$1.70	\$1.71	\$1.73	\$1.75		\$2.10	_				\$3.16	\$3.34	\$3.53	\$3.72	\$98.73
10 American Electric Power Company, Inc.	AEP	(\$55.93)	\$0.00	\$1.18	\$2.33	\$2.48	\$2.58	\$2.70		\$3.02	\$3.21				\$4.08	\$4.31	\$4.56	\$4.81	\$131.05
11 Avista Corporation	AVA	(\$32.71)	\$0.00	\$0.67	\$1.33	\$1.41	\$1.46	\$1,52	\$1.62	\$1.72		\$1.95	\$2.07	\$2.21	\$2,33	\$2.46	\$2.60	\$2.75	\$76.69
12 Black Hills Corporation	BKH	(\$48.78)	\$0.00	\$0.90	\$1.78	\$1.95	\$2.07	\$2.19		\$2.55					\$3.64	\$3.84	\$4.06	\$4.29	\$117.21
 CenterPoint Energy, Inc. 	CNP	(\$20.49)	\$0.00	\$0.70	\$1.38	\$1.34	\$1.33	\$1.31		\$1.34					\$1.52	\$1.61	\$1.70	\$1.80	\$43.58
14 CMS Energy Corporation	CMS	(\$34.02)	\$0.00	\$0.58	\$1.16	\$1.27	\$1,35	\$1.44		\$1.66					\$2.31	\$2.44	\$2.58	\$2.72	\$80.91
15 Consolidated Edison, Inc.		(\$60.91)	\$0.00	\$1.25	\$2.45	\$2.52	\$2.57	\$2.62		\$2.87					\$3.84	\$4.06	\$4.29	\$4.53	\$140.56
16 Dominion Resources, Inc.	Δ	(\$70.78)	\$0.00	\$1.21	\$2.42	\$2.66	\$2.83	\$3.02		\$3.33					\$4.23	\$4.47	\$4.72	\$4.99	\$163.30
17 DTE Energy Company	DTE	(\$79.41)	\$0.00	\$1.72	\$3.40	\$3.59	\$3.73	\$3.88		\$4.45					\$6.27	\$6.62	\$7.00	\$7.39	\$189.14
18 Duke Energy Corporation	Š	(\$76.11)	\$0.00	\$1.60	\$3.16	\$3.23	\$3.29	\$3,35		\$3.69					\$4.85	\$5.13	\$5.42	\$5.72	\$174.91
19 Empire District Electric Company	EDE	(\$24.01)	\$0.00	\$0.63	\$1.25	\$1.27	\$1.29	\$1.31		\$1.41					\$1.80	\$1.90	\$2.01	\$2.12	\$54.47
20 Eversource Energy	S	(\$49.32)	\$0.00	\$0.84	\$1.68	\$1.80	\$1.89	\$1.99		\$2.40					\$3.59	\$3.79	\$4.01	\$4.24	\$119.97
21 FirstEnergy Corp.	딾	(\$35.13)	\$0.00	\$0.27	\$0.53	\$0.56	\$0.58	\$0.60		\$0.73	\$0.79				\$1.10	\$1.16	\$1.23	\$1.30	\$82,56
22 Great Plains Energy Inc.	ΘXΡ	(\$26.14)	\$0.00	\$0.60	\$1.18	\$1.19	\$1.21	\$1.23		\$1.41					\$1.96	\$2.08	\$2.19	\$2.32	\$61.49
23 IDACORP, Inc.	ΔĀ	(\$60.44)	\$0.00	\$1.01	\$1.98	\$2.26	\$2.43	\$2.60		\$2.95					\$4.18	\$4.42	\$4.67	\$4.93	\$144.61
24 NorthWestern Corporation	NWE	(\$52.34)	\$0.00	\$0.60	\$1.20	\$1.44	\$1.59	\$1.75		\$1.92					\$2.48	\$2.62	\$2.77	\$2.92	\$121.71
25 OGE Energy Corp.	OGE	(\$31.57)	\$0.00	\$0.72	\$1.41	\$1.26	\$1.19	\$1.11		\$1.26					\$1.78	\$1.88	\$1.99	\$2.10	\$72.25
26 Otter Tail Corporation	OTTR	(\$29.98)	\$0.00	\$1.19	\$2.39	\$2.39	\$2.42	\$2.45		\$2.99					\$4.51	\$4.77	\$5.04	\$5.32	\$75.93
27 Pinnacle West Capital Corporation	PNW	(\$61.59)	\$0.00	\$1.22	\$2.41	\$2.60	\$2.73	\$2.87		\$3.21					\$4.33	\$4.57	\$4.83	\$5.10	\$144.35
28 Portland General Electric Company	POR	(\$35.60)	\$0.00	\$0.59	\$1.17	\$1.34	\$1.44	\$1.56		\$1.84					\$2.71	\$2.86	\$3.02	\$3.19	\$86.87
29 SCANA Corporation	SCG	(\$53.75)	\$0.00	\$1.17	\$2.31	\$2.45	\$2.55	\$2.65		\$3.11					\$4.56	\$4.81	\$5.08	\$5.37	\$130.32
30 Southern Company	SO	(\$44.08)	\$0.00	\$1.13	\$2.23	\$2.29	\$2.33	\$2.38		\$2.55					\$3.19	\$3.37	\$3.56	\$3.76	\$99.40
31 TECO Energy, Inc.	里	(\$19.00)	\$0.00	\$0.43	\$0.87	\$0.89	\$0.91	\$0.94		\$1.03					\$1.31	\$1.39	\$1.46	\$1.55	\$43.36
32 Westar Energy, Inc.	WR	(\$37.28)	\$0.00	\$0.78	\$1.53	\$1.56	\$1.59	\$1.61		\$1.90	\$2.07				\$2.83	\$2.99	\$3.15	\$3.33	\$89.63
33 Xcel Energy Inc.	ΧEL	(\$34.08)	\$0.00	\$0.69	\$1.37	\$1.47	\$1.54	\$1.62		\$1.81					\$2.44	\$2.57	\$2.72	\$2.87	\$79.86

Multi-Stage Growth Discounted Cash Flow Model 90 Day Average Stock Price High EPS Growth Rate Estimate in First Stage (with Sustainable Growth)

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		Stock		EPS Gro	Growth Rate i	Estimates		Long-Term		Payout Ratio	_	terative Solution		Terminal T	Terminal
					Value	Retention	High							P/E	PEG
5 Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	Growth	2015	2019	2025	Proof	IRR	Ratio	Ratio
7 ALLETE, Inc.	ALE	\$51.08	¥	%00.9	6.50%	3.97%	9.50%	2.65%	%00.99	61.00% (67.30%	\$0.00	10.15%	15.80	2.80
3 Alliant Energy Corporation	LN	\$61.38	5.30%	5.45%	%00'9	2.66%	%00.9	5.65%	61.00%	63.00%	67.30%	\$0.00	10.00%	16.35	2.89
Ameren Corporation	AEE	\$40.87	%08'9	5.85%	%00.9	4.56%	%08.9	5.65%	65.00%	55.00% (67.30%	\$0.00	10.32%	15.24	2.70
 American Electric Power Company, Inc. 		\$55.94	4.90%	5.08%	2.00%	4.07%	5.08%	5.65%	65.00%	64.00%	67.30%	\$0.00	10.01%	16.33	2.89
11 Avista Corporation		\$32.71	Ν	2.00%	7.00%	3.80%	7.00%	5.65%	67.00%	64.00%	67.30%	\$0.00	10.29%	15.32	2.71
12 Black Hills Corporation	BKH	\$48.78	Ϋ́	7.00%	4.50%	4.02%	7.00%	5.65%	57.00%	29.00%	67.30%	\$0.00	10.42%	14.93	2.64
 CenterPoint Energy, Inc. 	CNP	\$20.49	5.70%	1.91%	1.00%	3.19%	5.70%	5.65%	93.00%	80.00%	67.30%	\$0.00	11.42%	12.34	2.18
14 CMS Energy Corporation	CMS	\$34.02	6.20%	6.73%	5.50%	5.27%	6.73%	5.65%	61.00%	62.00%	67.30%	\$0.00	9.75%	17.34	3.07
15 Consolidated Edison, Inc.	유	\$60.91	2.70%	2.38%	3.00%	3.15%	3.15%	5.65%	65.00%	63.00%	67.30%	\$0.00	9.46%	18.66	3.30
16 Dominion Resources, Inc.	۵	\$70.78	6.30%	2.89%	8.00%	9.00%	8.00%	5.65%	72.00%	72.00%	67.30%	\$0.00	9.52%	18.38	3.25
17 DTE Energy Company	DTE	\$79.41	2.00%	4.51%	5.00%	4.88%	2.00%	2.65%	62.00%		67.30%	\$0.00	10.25%	15.47	2.74
18 Duke Energy Corporation	DOK	\$76.11	4.70%	4.49%	2.00%	2.67%	2.00%	2.65%	72.00%	900.99	67.30%	\$0.00	9.63%	17.86	3.16
19 Empire District Electric Company		\$24.01	2.00%	2.00%	3.00%	3.25%	5.00%	5.65%	76.00%		67.30%	\$0.00	10.48%	14.74	2.61
20 Eversource Energy	ES	\$49.32	6.80%	%09'9	8.50%	4.50%	8.50%	2.65%	29.00%		67.30%	\$0.00	10.25%	15.45	2.73
 FirstEnergy Corp. 	밆	\$35.13	ž	Ϋ́	7.00%	4.09%	7.00%	5.65%	28.00%		67.30%	\$0.00	7.61%	36.24	6.41
22 Great Plains Energy Inc.	GXP	\$26.14	%00'9	6.37%	2.00%	3.02%	6.37%	2.65%	70.00%	61.00%	67.30%	\$0.00	10.40%	14.98	2.65
23 IDACORP, Inc.	IDA	\$60.44	4.00%	4.00%	1.00%	3.51%	4.00%	5.65%	49.00%	28.00%	67.30%	\$0.00	9.83%	17.01	3.01
24 NorthWestern Corporation	NVE	\$52.34	2.00%	2.00%	6.50%	3.90%	6.50%	5.65%	26.00%	_	67.30%	\$0.00	8.67%	23.57	4.17
25 OGE Energy Corp.	OGE	\$31.57	2.00%	4.00%	3.00%	3.68%	2.00%	5.65%	86.00%		67.30%	\$0.00	9.25%	19.76	3.50
26 Otter Tail Corporation	OTTR	\$29.98	Ϋ́	%00'9	%00.6	7.25%	%00.6	2.65%	70.00%	26.00%	67.30%	\$0.00	14.87%	7.71	1.36
27 Pinnacle West Capital Corporation	₽NW W	\$61.59	4.60%	5.30%	4.00%	4.52%	5.30%	5.65%	63.00%		67.30%	\$0.00	9.94%	16.59	2.94
28 Portland General Electric Company	POR	\$35.60	5.20%	4.72%	%00'9	4.04%	%00'9	5.65%	20.00%		67.30%	\$0.00	10.20%	15.64	2.77
29 SCANA Corporation	SCG	\$53,75	4.20%	4.30%	4.50%	5.13%	5.13%	5.65%	24.00%	26.00%	67.30%	\$0.00	10.65%	14.24	2.52
30 Southern Company	SO	\$44.08	3.50%	3.32%	4.50%	4.40%	4.50%	5.65%	76.00%	71.00%	67.30%	\$0.00	10.22%	15.57	2.76
31 TECO Energy, Inc.	里	\$19.00	7.10%	9.20%	%00'9	3.60%	9.20%	2.65%	83.00%	72.00%	67.30%	\$0.00	10.56%	14.48	2.56
32 Westar Energy, Inc.	WR	\$37.28	3.50%	3.40%	%00'9	5.25%	%00'9	2.65%	61.00%	25.00%	67.30%	\$0.00	10.39%	15.01	2.66
33 Xcel Energy Inc.	XEL	\$34.08	2.00%	4.58%	4.50%	3.95%	2.00%	5.65%	63.00%	64.00%	67.30%	\$0.00	8.96%	16.50	2.92
34													10.17%		
35													14.87%		
36												Σ	7.61%		

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4	Projected Annual																		
2	Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[59]	[30]	[31]
'																			
9	Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	ALLETE, Inc.	ALE	\$2.90	\$3.09	\$3.29	\$3.50	\$3.73	\$3.97	\$4.23	\$4.49	\$4.76	\$5.04	\$5.34	\$5.64	\$5.96	\$6.29	\$6.65	\$7.02	\$7.42
80	Alliant Energy Corporation	Ę	\$3.48	\$3.69	\$3.91	\$4.14	\$4.39	\$4.66	\$4.93	\$5.22	\$5.53	\$5.85	\$6.18	\$6.53	\$6.90	\$7.29	\$7.70	\$8.14	\$8.60
ა თ	Ameren Corporation	AEE	\$2.40	\$2.56	\$2.74	\$2.92	\$3.12	\$3.33	\$3.56	\$3.78	\$4.02	\$4.26	\$4.51	\$4.77	\$5.03	\$5.32	\$5.62	\$5.94	\$6.27
10,	American Electric Power Company, Inc.	AEP	\$3.34	\$3.51	\$3.69	\$3.88	\$4.07	\$4.28	\$4.50	\$4.74	\$4.99	\$5.26	\$5.56	\$5.87	\$6.20	\$6.55	\$6.92	\$7.32	\$7.73
7	Avista Corporation	AVA	\$1.84	\$1.97	\$2.11	\$2.25	\$2.41	\$2.58	\$2.76	\$2.94	\$3.12	\$3.31	\$3.51	\$3.71	\$3.91	\$4.14	\$4.37	\$4.62	\$4.88
12	Black Hills Corporation	KH	\$2.89	\$3.09	\$3.31	\$3.54	\$3.79	\$4.05	\$4.33	\$4.61	\$4.90	\$5.20	\$5.51	\$5.82	\$6.15	\$6.50	\$6.86	\$7.25	\$7.66
13 (CenterPoint Energy, Inc.	CNP	\$1.42	\$1.50	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98	\$2.09	\$2.21	\$2.34	\$2.47	\$2.61	\$2.76	\$2.91	\$3.08	\$3.25	\$3.43
4	CMS Energy Corporation	CMS	\$1.74	\$1.86	\$1.98	\$2.12	\$2.26	\$2.41	\$2.57	\$2.73	\$2.90	\$3.07	\$3.25	\$3.44	\$3.63	\$3.84	\$4.05	\$4.28	\$4.53
15 (Consolidated Edison, Inc.		\$3.62	\$3.73	\$3.85	\$3.97	\$4.10	\$4.23	\$4.38	\$4.55	\$4.75	\$4.98	\$5.24	\$5.54	\$5.85	\$6.18	\$6.53	\$6.90	\$7.29
16 [Dominion Resources, Inc.	Δ	\$3.05	\$3.29	\$3.56	\$3.84	\$4.15	\$4.48	\$4.82	\$5.17	\$5.52	\$5.88	\$6.23	\$6.59	\$6.96	\$7.35	\$7.77	\$8.21	\$8.67
17 1	DTE Energy Company	DTE	\$5.10	\$5.36	\$5.62	\$5.90	\$6.20	\$6.51	\$6.84	\$7.20	\$7.58	\$7.99	\$8.44	\$8.91	\$9.42	\$9.95	\$10.51	\$11.11	\$11.73
18	Duke Energy Corporation	Š	\$4.13	\$4.34	\$4.55	\$4.78	\$5.02	\$5.27	\$5.54	\$5.83	\$6.14	\$6.47	\$6.83	\$7.22	\$7.63	\$8.06	\$8.51	\$8.99	\$9.50
19	Empire District Electric Company	EDE	\$1.55	\$1.63	\$1.71	\$1.79	\$1.88	\$1.98	\$2.08	\$2.19	\$2.30	\$2.43	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.38	\$3.57
20	Eversource Energy	ES	\$2.58	\$2.80	\$3.04	\$3.30	\$3.58	\$3.88	\$4.19	\$4.51	\$4,83	\$5.14	\$5.46	\$5.77	\$6.09	\$6.44	\$6.80	\$7.19	\$7.59
21	FirstEnergy Corp.	 H	\$0.85	\$0.91	\$0.97	\$1.04	\$1.11	\$1.19	\$1.27	\$1,36	\$1.44	\$1.53	\$1.62	\$1.71	\$1.81	\$1.91	\$2.02	\$2.13	\$2.25
22 (Great Plains Energy Inc.	GXP	\$1.57	\$1.67	\$1.78	\$1,89	\$2.01	\$2.14	\$2.27	\$2.41	\$2.56	\$2.71	\$2.86	\$3.02	\$3.20	\$3.38	\$3.57	\$3.77	\$3.98
73	IDACORP, Inc.	Δ	\$3.85	\$4.00	\$4.16	\$4.33	\$4.50	\$4.68	\$4.88	\$5.11	\$5.35	\$5.63	\$5.93	\$6.26	\$6.62	\$6.99	\$7.39	\$7.80	\$8.25
	NorthWestern Corporation	NWE	\$1,98	\$2.11	\$2.25	\$2.39	\$2.55	\$2.71	\$2.89	\$3.06	\$3.25	\$3.44	\$3.64	\$3.85	\$4.07	\$4.30	\$4.54	\$4.80	\$5.07
52	OGE Energy Corp.	OGE	\$1,55	\$1.63	\$1.71	\$1.79	\$1.88	\$1.98	\$2.08	\$2.19	\$2.30	\$2.43	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.38	\$3.57
56 (Otter Tail Corporation	OTTR	\$3.06	\$3.34	\$3.64	\$3.96	\$4.32	\$4.71	\$5.11	\$5.51	\$5.91	\$6.31	\$6.70	\$7.08	\$7.48	\$7.91	\$8.35	\$8.82	\$9.32
27	Pinnacle West Capital Corporation	MNM	\$3.58	\$3.77	\$3.97	\$4.18	\$4.40	\$4.63	\$4.88	\$5.15	\$5.43	\$5.73	\$6.05	\$6.39	\$6.75	\$7.14	\$7.54	\$7.96	\$8.42
28 F	Portland General Electric Company	POR	\$2.18	\$2.31	\$2.45	\$2.60	\$2.75	\$2.92	\$3.09	\$3.27	\$3.46	\$3.66	\$3.87	\$4.09	\$4.32	\$4.57	\$4.82	\$5.10	\$5.39
59	SCANA Corporation	SCG	\$3.79	\$3.98	\$4.19	\$4.40	\$4.63	\$4.87	\$5.12	\$5.39	\$5.68	\$5.99	\$6.33	\$6.68	\$7.06	\$7.46	\$7.88	\$8.33	\$8.80
8	Southern Company	S	\$2,77	\$2.89	\$3.02	\$3.16	\$3.30	\$3.45	\$3.61	\$3.79	\$3.98	\$4.19	\$4.42	\$4.67	\$4.94	\$5.21	\$5.51	\$5.82	\$6.15
3	TECO Energy, Inc.	# #	\$0.95	\$1.04	\$1.13	\$1.24	\$1.35	\$1.48	\$1.60	\$1.73	\$1.86	\$1.99	\$2.11	\$2.23	\$2.36	\$2.49	\$2.63	\$2.78	\$2.93
32 \	Westar Energy, Inc.	¥	\$2.35	\$2.49	\$2.64	\$2.80	\$2.97	\$3.14	\$3.33	\$3.53	\$3.73	\$3.95	\$4.17	\$4.41	\$4.66	\$4.92	\$5.20	\$5.49	\$5.81
33	Xcel Energy Inc.	XEL	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	\$2.87	\$3.02	\$3.18	\$3.36	\$3.55	\$3.75	\$3.96	\$4.18	\$4.42	\$4.67
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ALE	r w	Dividend Payout Ratio		5]		33]	[34]	[32]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]
Line 66,00% 61,00% 62,26% 61,00% 62,05% 61,00% 64,13% 65,10% 61,20% 61,20% 61,00% 61,00% 61,00% 62,05% 61,00% 61,05% 61,00% 61,05% 61,00% 61,05% 61,00% 61,	G		10301	,				9700	0700	0606	1000	2000	2002				7606	9000	0000	0800
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LINT HE 66.00% 61.56% 62.50% 63.25% 63.00% 63.72% 64.43% 65.15% 66.59% 67.30% 6	7	ALLETE, Inc.	ALE	. 66.		_	_		61.00%	62.05%						_	_	_	67.30%	67.30%
AEP	ω	Alliant Energy Corporation	LN1	9.		_			63.00%	63.72%								37.30%	67.30%	67.30%
APP	თ	Ameren Corporation	AEE	65.					25.00%	57.05%								37.30%	67.30%	67.30%
AVM BY BY BY BY BY BY BY B	5	American Electric Power Company, Inc.	AEP	. 65.					64.00%	64.55%								37.30%	67.30%	67.30%
BKH STOON ST.50N ST.60N SE.50N	7	Avista Corporation	AVA	67,					64.00%	64.55%							_	37.30%	67.30%	67.30%
CNP	12	Black Hills Corporation	BKH	57.			_		29.00%	60.38%								37.30%	67.30%	67.30%
CMS 61,00% 61,25% 61,50% 61,75% 62,00% 62,88% 63,77% 64,65% 65,44% 66,42% 67,30% 67,	13	CenterPoint Energy, Inc.	SNP	93.			_		80.00%	77.88%	75.77%							37.30%	67.30%	67.30%
ED 65.00% 64.50% 64.00% 63.50% 63.00% 63.12% 64.43% 65.15% 65.87% 65.87% 67.30	14	CMS Energy Corporation	CMS	61.			_		62.00%	62.88%								37.30%	67.30%	67.30%
DTE (S.100%) 72.00% 72.00% 72.00% 72.00% 72.00% 71.22% 70.43% 69.65% 68.87% 61.30% 67.	15		ED	65.			_		63.00%	63.72%								37.30%	67.30%	67.30%
DTE DTE C2.00% 61.50% 61.00% 60.50% 60.00% 61.22% 65.43% 63.65% 64.87% 66.09% 67.30% 6	16		۵	72.					72.00%	71.22%									67.30%	67,30%
DUK 72.00% 70.50% 60.00% 60.20% 66.22% 66.43% 66.65% 66.87% 67.30% 67.3	17		DTE	62.					%00.09	61.22%								37.30%	67.30%	67.30%
EDE	18		DCK S	72.					%00.99	66.22%								37.30%	67.30%	67.30%
ES 69.00% 58.25% 57.50% 56.00% 57.88% 59.17% 61.65% 63.54% 65.42% 67.30%	19		EDE	76.					%00'69	68.72%								37.30%	67.30%	67.30%
FE 58.00% 57.00% 56.00% 56.00% 56.00% 56.22% 58.43% 60.66% 62.87% 65.09% 67.30%	20	À:	S	59.			_		26,00%	57.88%								37.30%	67.30%	67.30%
GXP 70.00% 67.75% 65.50% 63.25% 61.00% 62.05% 63.10% 64.15% 65.20% 66.25% 67.30% <th>21</th> <th></th> <th>FF</th> <th>58.</th> <th></th> <th></th> <th></th> <th></th> <th>54.00%</th> <th>56.22%</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>67.30%</th> <th>67.30%</th>	21		FF	58.					54.00%	56.22%									67.30%	67.30%
IDA 49.00% 51.25% 53.50% 55.75% 58.00% 59.55% 61.10% 62.65% 64.20% 65.75% 67.30% 67.3	22		GXP	ģ					61.00%	62.05%									67.30%	67.30%
NWE 66.00% 59.25% 62.50% 65.75% 69.00% 68.12% 68.13% 61.15% 67.87% 67.59% 67.30	33		IDA	49.					28.00%	29.55%								37.30%	67.30%	67.30%
OGE 86.00% 79.25% 72.50% 65.75% 59.00% 60.38% 61.17% 63.15% 64.54% 65.92% 67.30	54		NWE	56.	_				%00'69	68.72%								37.30%	67.30%	67.30%
OTTR 1,00% 66.50% 63.00% 59.50% 56.00% 57.88% 59.77% 61.65% 63.42% 67.30% 67.	25		OGE	86.					29.00%	60.38%									67.30%	67.30%
PNW 63.00% 63.25% 63.50% 63.75% 64.00% 64.55% 65.10% 65.65% 66.20% 66.75% 67.30	26		OTTR	6	_		_		26.00%	57.88%								37.30%	67.30%	67.30%
POR 50.00% 51.50% 53.00% 54.50% 56.00% 57.88% 59.77% 61.65% 63.54% 65.42% 67.30	27		PNW	63.			_		64.00%	64.55%								37.30%	67.30%	67.30%
SCG 57.00% 56.75% 56.50% 56.25% 56.00% 57.88% 59.77% 61.65% 63.42% 67.30%	28		Por	50.					26.00%	57.88%								37.30%	67.30%	67.30%
SO 76.00% 74.75% 73.50% 72.25% 71.00% 70.38% 69.17% 69.15% 68.54% 67.32% 67.30%	59		SCG	57.					26.00%	57.88%								37.30%	%08.79	67.30%
TE 83.00% 80.25% 77.50% 74,75% 72.00% 71.22% 70.43% 69.65% 68.87% 68.09% 67.30%	30	Southern Company	SO	76.				72.25%	71.00%	70.38%								37.30%	67.30%	67.30%
WR 59.50% 59.50% 56.50% 55.00% 57.05% 59.10% 61.15% 63.20% 65.25% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 70.30% 67.30%	31	TECO Energy, Inc.	里	83.				.4.75%	72.00%	71.22%								37.30%	67.30%	67.30%
XEL REST 63.00% 63.25% 63.25% 63.75% 64.00% 64.55% 65.10% 65.65% 66.20% 66.75% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30%	32	Westar Energy, Inc.	× R	61.			4,		25.00%	57.05%								37.30%	67.30%	67.30%
	33	Xcel Energy Inc.	XEL	63.		_	20%	3.75%	64.00%			%59					30%	37.30%	67.30%	67.30%

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4 Projected Annual 5 Cash Flows		[48]	[49]	[20]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	[63]	[64]
																		Ferminal
6 Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024			2027	2028	2029	2030	Value
7 ALLETE, Inc.	ALE	\$2.04	\$2.13	\$2.22	\$2.32	\$2.42	\$2.62	\$2.83	\$3.05	\$3.29	\$3.54			54.24	\$4.47	\$4.73	\$4.99	\$117.25
8 Alliant Energy Corporation	Ρ̈́	\$2.25	\$2.40	\$2.57	\$2.75	\$2.93	\$3.14	\$3.37	\$3.60	\$3.85	\$4.12			54.91	\$5.18	\$5.48	\$5.79	\$140.58
9 Ameren Corporation	AEE	\$1.67	\$1.71	\$1.75	\$1.80	\$1.83	\$2.03	\$2.24	\$2.46	\$2.69	\$2.94			33.58	\$3.78	\$4.00	\$4.22	\$95.59
10 American Electric Power Company, Inc.	AEP	\$2.28	\$2.39	\$2.50	\$2.62	\$2.74	\$2.91	\$3.08	\$3.28	\$3.49	\$3.71			54.41	\$4.66	\$4.92	\$5.20	\$126.24
11 Avista Corporation	AVA	\$1.32	\$1.40	\$1.48	\$1.56	\$1.65	\$1.78	\$1.91	\$2.05	\$2.19	\$2.34			\$2.78	\$2.94	\$3.11	\$3.28	\$74.72
12 Black Hills Corporation	BKH	\$1.76	\$1.90	\$2.05	\$2.22	\$2.39	\$2.61	\$2.85	\$3.10	\$3.36	\$3.63			54.37	\$4.62	\$4.88	\$5.16	\$114.35
 CenterPoint Energy, Inc. 	CNP	\$1.40	\$1.42	\$1.45	\$1.48	\$1.50	\$1.54	\$1.59	\$1.63	\$1.67	\$1.71			51.96	\$2.07	\$2.19	\$2.31	\$42.37
14 CMS Energy Corporation	CMS	\$1.13	\$1.21	\$1.30	\$1,39	\$1.49	\$1.61	\$1.74	\$1.88	\$2.01	\$2.16	\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$3.05	\$78.47
15 Consolidated Edison, Inc.	9	\$2.43	\$2.48	\$2.54	\$2.60	\$2.66	\$2.79	\$2.93	\$3.10	\$3.28	\$3.49			54.16	\$4.40	\$4.65	\$4.91	\$136,05
16 Dominion Resources, Inc.	Δ	\$2.37	\$2.56	\$2.77	\$2.99	\$3.23	\$3.43	\$3.64	\$3.85	\$4.05	\$4.24			4.95	\$5.23	\$5.52	\$5.84	\$159.32
17 DTE Energy Company	DTE	\$3.32	\$3.46	\$3.60	\$3.75	\$3.91	\$4.19	\$4.49	\$4.83	\$5.19	\$5.58			96.70	\$7.08	\$7.48	\$7.90	\$181.55
18 Duke Energy Corporation	PUK	\$3.12	\$3.21	\$3.30	\$3.39	\$3.48	\$3.67	\$3.87	\$4.09	\$4.33	\$4.58			55.42	\$5.73	\$6.05	\$6.40	\$169.67
19 Empire District Electric Company	EDE	\$1.24	\$1.27	\$1.30	\$1.33	\$1.36	\$1.43	\$1.50	\$1.57	\$1.65	\$1.73			\$2.04	\$2.15	\$2.27	\$2.40	\$52.56
20 Eversource Energy	ES	\$1.65	\$1.77	\$1.89	\$2.03	\$2.17	\$2.43	\$2.69	\$2.98	\$3.27	\$3.57			64.33	\$4.58	\$4.84	\$5.11	\$117.31
21 FirstEnergy Corp.	밆	\$0.53	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87	\$0.96	\$1.05			11.29	\$1.36	\$1.44	\$1.52	\$81.66
22 Great Plains Energy Inc.	ΘXΡ	\$1.17	\$1.20	\$1.24	\$1.27	\$1.30	\$1.41	\$1.52	\$1.64	\$1.76	\$1.90			\$2.27	\$2.40	\$2.54	\$2.68	\$59.62
23 IDACORP, Inc.	IDA	\$1.96	\$2.13	\$2.32	\$2.51	\$2.72	\$2.91	\$3.12	\$3.35	\$3.61	\$3.90			54.71	\$4.97	\$5.25	\$5.55	\$140.30
24 NorthWestern Corporation	ШWП	\$1.18	\$1.33	\$1.49	\$1.67	\$1.87	\$1.98	\$2.10	\$2.22	\$2.34	\$2.46			\$2.89	\$3.06	\$3.23	\$3.41	\$119.42
25 OGE Energy Corp.	900	\$1.40	\$1.35	\$1.30	\$1.24	\$1.17	\$1.26	\$1.35	\$1.46	\$1.57	\$1.69			52.04	\$2.15	\$2.27	\$2.40	\$70.47
26 Otter Tail Corporation	OTTR	\$2.33	\$2.42	\$2.50	\$2.57	\$2.64	\$2.96	\$3.29	\$3.64	\$4.01	\$4.39			5.32	\$5.62	\$5.94	\$6.28	\$71.90
27 Pinnacle West Capital Corporation	PNW	\$2.37	\$2.51	\$2.65	\$2.81	\$2.97	\$3.15	\$3.35	\$3.56	\$3.79	\$4.04			64.80	\$5.07	\$5.36	\$5.66	\$139.62
28 Portland General Electric Company	POR	\$1.16	\$1.26	\$1.38	\$1.50	\$1.63	\$1.79	\$1.96	\$2.14	\$2.33	\$2.53			33.07	\$3.25	\$3.43	\$3.62	\$84.20
29 SCANA Corporation	SCG	\$2.27	\$2.38	\$2.49	\$2.60	\$2.73	\$2.96	\$3.22	\$3.50	\$3.81	\$4.14			55.02	\$5.31	\$5.61	\$5.92	\$125.31
30 Southern Company	80	\$2.20	\$2.26	\$2.32	\$2.39	\$2.45	\$2.54	\$2.64	\$2.75	\$2.87	\$3.00			3.51	\$3.71	\$3.92	\$4.14	\$95.77
31 TECO Energy, Inc.	Щ	\$0.86	\$0.91	\$0.96	\$1.01	\$1.06	\$1.14	\$1.22	\$1.29	\$1.37	\$1.44			1.67	\$1.77	\$1.87	\$1,98	\$42.48
32 Westar Energy, Inc.	WR	\$1.52	\$1.57	\$1.62	\$1.68	\$1.73	\$1.90	\$2.08	\$2.28	\$2.50	\$2.72			3.31	\$3.50	\$3.70	\$3.91	\$87.16
33 Xcel Energy Inc.	XEL	\$1.34	\$1.42	\$1.49	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98	\$2.11	\$2.24		32.52	52.67	\$2.82	\$2.98	\$3.14	\$77.09

		ا_		30	24	36	31	44	71	51	38	22	96	16	44	90	96	42	8	20	85	83	37	17	29	33	23	31	16	70	33
		[82]			\$122.24	\$146.36	\$99.81	\$131.44	\$78.01	\$119.5	\$44.68	\$81.52	\$140.96	\$165.16	\$189.44	\$176.06	\$54.96	\$122.42	\$83.18	\$62.30	\$145.85	\$122.83	\$72.87	\$78.17	\$145.29	\$87.83	\$131.23	\$99.91	\$44.46	\$91.07	\$80.23
		[81]		6/30/29	\$4.73	\$5.48	\$4.00	\$4.92	\$3.11	\$4.88	\$2.19	\$2.88	\$4.65	\$5.52	\$7.48	\$6.05	\$2.27	\$4.84	\$1.44	\$2.54	\$5.25	\$3.23	\$2.27	\$5.94	\$5.36	\$3.43	\$5.61	\$3.92	\$1.87	\$3.70	\$2.98
		[80]		6/30/28	\$4.47	\$5.18	\$3.78	\$4.66	\$2.94	\$4.62	\$2.07	\$2.73	\$4.40	\$5.23	\$7.08	\$5.73	\$2.15	\$4.58	\$1,36	\$2.40	\$4.97	\$3.06	\$2.15	\$5.62	\$5.07	\$3.25	\$5,31	\$3.71	\$1.77	\$3.50	\$2.82
		[79]		6/30/27	\$4.24	\$4.91	\$3.58	\$4.41	\$2.78	\$4.37	\$1.96	\$2.58	\$4.16	\$4.95	\$6.70	\$5.42	\$2.04	\$4.33	\$1.29	\$2.27	\$4.71	\$2.89	\$2.04	\$5.32	\$4.80	\$3.07	\$5.02	\$3.51	\$1.67	\$3.31	\$2.67
		[78]		6/30/26	\$4.01	\$4.64	\$3.39	\$4.17	\$2.63	\$4,14	\$1.85	\$2.44	\$3.94	\$4.68	\$6.34	\$5.13	\$1.93	\$4.10	\$1.22	\$2.15	\$4.45	\$2.74	\$1.93	\$5.04	\$4.55	\$2.91	\$4.75	\$3.32	\$1.59	\$3.14	\$2.52
		[77]		6/30/25	\$3.79	\$4.40	\$3.21	\$3.95	\$2.49	\$3.92	\$1.76	\$2.31	\$3.73	\$4,43	\$6.00	\$4.86	\$1.82	\$3.88	\$1.15	\$2.04	\$4.22	\$2.59	\$1.82	\$4.77	\$4.30	\$2.75	\$4.50	\$3.14	\$1.50	\$2.97	\$2.39
	•	[9/]		6/30/24	\$3.54	\$4.12	\$2.94	\$3.71	\$2,34	\$3.63	\$1.71	\$2.16	\$3.49	\$4.24	\$5.58	\$4.58	\$1.73	\$3.57	\$1.05	\$1.90	\$3.90	\$2.46	\$1.69	\$4.39	\$4.04	\$2.53	\$4.14	\$3.00	\$1.44	\$2.72	\$2.24
rowth)		[75]		6/30/23	\$3.29	\$3.85	\$2.69	\$3.49	\$2.19	\$3.36	\$1.67	\$2.01	\$3.28	\$4.05	\$5.19	\$4.33	\$1.65	\$3.27	\$0.96	\$1.76	\$3.61	\$2.34	\$1.57	\$4.01	\$3.79	\$2,33	\$3.81	\$2.87	\$1.37	\$2.50	\$2.11
odel ainable G	!	[74]		6/30/22	\$3.05	\$3.60	\$2.46	\$3.28	\$2.05	\$3.10	\$1.63	\$1.88	\$3.10	\$3,85	\$4.83	\$4,09	\$1.57	\$2.98	\$0.87	\$1.64	\$3.35	\$2.22	\$1.46	\$3.64	\$3.56	\$2.14	\$3.50	\$2.75	\$1.29	\$2.28	\$1.98
r Flow Mo ce with Susta	ļ	[73]		6/30/21	\$2.83	\$3.37	\$2.24	\$3.08	\$1.91	\$2.85	\$1.59	\$1.74	\$2.93	\$3.64	\$4.49	\$3.87	\$1.50	\$2.69	\$0.79	\$1.52	\$3.12	\$2.10	\$1.35	\$3.29	\$3.35	\$1.96	\$3.22	\$2.64	\$1.22	\$2.08	\$1.87
nted Cash Stock Priot Stage (v	•	[72]		6/30/20	\$2.62	\$3.14	\$2.03	\$2.91	\$1.78	\$2.61	\$1.54	\$1.61	\$2.79	\$3.43	\$4.19	\$3.67	\$1.43	\$2.43	\$0.72	\$1.41	\$2.91	\$1.98	\$1.26	\$2.96	\$3.15	\$1.79	\$2.96	\$2.54	\$1.14	\$1.90	\$1.76
Multi-Stage Growth Discounted Cash Flow Model 90 Day Average Stock Price High EPS Growth Rate Estimate in First Stage (with Sustainable Growth)	į	[71]		6/30/19	\$2.42	\$2.93	\$1.83	\$2.74	\$1.65	\$2.39	\$1.50	\$1.49	\$2.66	\$3.23	\$3.91	\$3.48	\$1.36	\$2.17	\$0.64	\$1.30	\$2.72	\$1.87	\$1.17	\$2.64	\$2.97	\$1.63	\$2.73	\$2.45	\$1.06	\$1.73	\$1.66
-Stage Gro 90 De h Rate Esti	į	[70]		6/30/18	\$2.32	\$2.75	\$1.80	\$2.62	\$1.56	\$2.22	\$1.48	\$1.39	\$2.60	\$2.99	\$3.75	\$3.39	\$1.33	\$2.03	\$0.61	\$1.27	\$2.51	\$1.67	\$1.24	\$2.57	\$2.81	\$1.50	\$2.60	\$2.39	\$1.01	\$1.68	\$1.57
Multi	;	[69]		6/30/17	\$2.22	\$2.57	\$1.75	\$2.50	\$1.48	\$2.05	\$1.45	\$1.30	\$2.54	\$2.77	\$3.60	\$3.30	\$1.30	\$1.89	\$0.58	\$1.24	\$2.32	\$1.49	\$1.30	\$2.50	\$2.65	\$1.38	\$2.49	\$2.32	\$0.96	\$1.62	\$1.49
Agi	· :	[68]		6/30/16	\$2.10	\$2.32	\$1.72	\$2.34	\$1.37	\$1.82	\$1.44	\$1.17	\$2.47	\$2.47	\$3.40	\$3.20	\$1.27	\$1.72	\$0.55	\$1.21	\$2.00	\$1.22	\$1.43	\$2.44	\$2.44	\$1.19	\$2.33	\$2.25	\$0.90	\$1.57	\$1.38
		[67]		12/31/15	\$1.06	\$1.17	\$0,86	\$1.18	\$0.68	\$0.91	\$0.72	\$0.59	\$1.26	\$1.23	\$1.72	\$1.62	\$0.64	\$0.86	\$0.27	\$0.61	\$1.02	\$0.61	\$0.72	\$1.21	\$1.23	\$0.60	\$1.18	\$1.14	\$0.45	\$0.79	\$0.70
	:	[99]		6/25/15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	į	[65]		Outflow 6	_	(\$61.38)	(\$40.87)	_			(\$20.49)	\$34.02)		_					(\$35.13)			_		(\$29.98)	\$61.59)		(\$53.75)	\$44.08)			(\$34.08)
			_	Ticker Ou	,LE (\$	LNT (\$6	AEE (\$	AEP (\$		BKH (\$		CMS (\$3							FE (\$3					OTTR (\$	PNW (\$6	_	_	7\$) OS		WR (\$3	XEL (\$3
		Maria Bandandan		F	٩	_	∢		∢	ш	O	O	_		(.)		Ш	_	_	Θ	_	Z	0	Ö	Δ.	Δ.	S	٠,	•	>	×
	Projected Annual Data	Investor Cash Flows		Company	ALLETE, Inc.	Alliant Energy Corporation	Ameren Corporation	American Electric Power Company, Inc.	Avista Corporation	Black Hills Corporation	CenterPoint Energy, Inc.	CMS Energy Corporation	Consolidated Edison, Inc.	Dominion Resources, Inc.	DTE Energy Company	Duke Energy Corporation	Empire District Electric Company	Eversource Energy	FirstEnergy Corp.	Great Plains Energy Inc.	DACORP, Inc.	NorthWestern Corporation	OGE Energy Corp.	Otter Tail Corporation	Pinnacle West Capital Corporation	Portland General Electric Company	SCANA Corporation	Southern Company	TECO Energy, Inc.	Westar Energy, Inc.	Xcel Energy Inc.
− α α	4	•		ပ ဖ	7 A	8	₹ 6	10 A	11 A	12 BI	<u>ნ</u>	14 C	15 Q	16 D	17 D	18 D		_	21 Fi		_	_			27 Pi			_		32 ∨	33 X

Multi-Stage Growth Discounted Cash Flow Model 90 Day Average Stock Price Low EPS Growth Rate Estimate in First Stage (with Sustainable Growth)

Inputs Stock	[1] Stoc		*	[2]	[3] EPS Grov	[4] Growth Rate B	[5] Estimates	[6]	[7] Long-Term	[8]	[9] Payout Ratio	[10]	[11] Iterative	[11] [12] terative Solution	[13] Terminal	[14] Terminal
			2		- 4	Value	Retention	Low	5	5	your Patie	-	י בו מוועם י בו מוועם	Solution	P/E	PEG
Company Ticker Price Zacks First Call	Price Zacks	Zacks		irst Call		Line	Growth	Growth	Growth	2015	2019	2025	Proof	IRR	Ratio	Ratio
\$51.08 NA	\$51.08 NA	Y.		%00'9		6.50%	3.97%	3.97%	5.65%	66.00% 6	61.00% 6	67.30%	\$0.00	9.48%	18.58	3.29
Alliant Energy Corporation LNT \$61.38 5.30% 5.45%	\$61.38 5.30%	2.30%		5.45%		%00.9	2.66%	5.30%	5.65%	61,00% 6	63.00% 6	67.30%	\$0.00	9.81%	17.10	3.03
Ameren Corporation AEE \$40.87 6.80% 5.85%	\$40.87 6.80%	808.9	_	5.85%		%00'9	4.56%	4.56%	5.65%	65.00% 5	55.00% 6	67.30%	\$0.00	9.70%	17.54	3.10
\$55.94 4.90%	\$55.94 4.90%	4.90%		5.08%		2.00%	4.07%	4.07%	5.65%	65.00% 6	64.00% 6	67.30%	\$0.00	9.73%	17.44	3.08
AVA	\$32.71 NA	Ϋ́		5.00%		7.00%	3.80%	3.80%	2.65%	67.00% 6	64.00% 6	67.30%	\$0.00	9.43%	18.82	3.33
BKH \$48.78 NA 7	\$48.78 NA	ΑN		7.00%		4.50%	4.02%	4.02%	5.65%	57.00% 5	59.00% 6	67.30%	\$0.00	%09.6	18.03	3.19
CNP \$20.49 5.70%	\$20.49 5.70%	5.70%		1.91%	o	1.00%	3.19%	1.00%	2.65%	93.00% 8	80.00% 6	67.30%	\$0.00	9.86%	16.91	2.99
CMS \$34.02 6.20%	\$34.02 6.20%	6.20%		6.73%	۰	5.50%	5.27%	5.27%	2.65%	61.00% 6	62.00% 6	%06.79	\$0.00	9.39%	19.04	3.37
ED \$60.91 2.70%	\$60.91 2.70%	2.70%		2.38%		3.00%	3.15%	2.38%	2.65%	65.00% 6		67.30%	\$0.00	9.27%	19.64	3.48
Inc. D \$70.78 6.30%	\$70.78 6.30%	6.30%		5.89%	٠.	8.00%	%00'9	5.89%				67.30%	\$0.09	9.03%	21.07	3.73
DTE \$79.41 5.00%	\$79.41 5.00%	2.00%		4.51%	,o	2.00%	4.88%	4.51%	2.65%	62.00% 6	9 %00.09	67.30%	\$0.00	10.11%	15,96	2.82
DUK \$76.11 4.70%	\$76.11 4.70%	4.70%		4.49%	,o	2.00%	2.67%	2.67%	2.65%	72.00% 6		67.30%	\$0.00	9.06%	20.84	3.69
ctric Company EDE \$24.01 5.00%	\$24.01 5.00%	2.00%		5.00%	.0	3.00%	3.25%	3.00%	2.65%	76.00% 6	9 %00.69	67.30%	\$0.00	9.88%	16.80	2.97
y ES \$49:32 6.80%	\$49.32 6.80%	%08.9		6.60%		8.50%	4.50%	4.50%	2.65%			67.30%	\$0.00	9.23%	19.86	3.51
FE \$35.13	\$35.13 NA	₹		Ž		7.00%	4.09%	4.09%	2.65%			67.30%	\$0.00	7.26%	44.09	7.80
nergy Inc. GXP \$26.14 6.00%	\$26.14 6.00%	%00'9		6.37%	vo.	5.00%	3.02%	3.02%	2.65%			67.30%	\$0.00	9.48%	18.59	3.29
IDA	\$60.44 4.00%	4.00%		4.00%	Q.	1.00%	3.51%	1.00%	2.65%			67.30%	\$0.00	9.08%	20.74	3.67
ooration NWE \$52.34 5.00%	\$52.34 5.00%	2:00%		5.00	%	6.50%	3.90%	3.90%	2.65%			67.30%	\$0.00	8.19%	28.04	4.96
OGE \$31.57 5.00%	\$31.57 5.00%	2.00%		9.0	%	3.00%	3.68%	3.00%	2.65%			67.30%	\$0.00	8.80%	22.57	3.99
OTTR \$29.98 NA	\$29.98 NA	₹ Z		6.00%		%00.6	7.25%	%00.9	2.65%			67.30%	\$0.00	13.44%	9.13	1.62
PNW \$61.59 4.60%	\$61.59 4.60%	4.60%		5.30%		4.00%	4.52%	4.00%	2.65%		64.00% 6	67.30%	\$0.00	9:59%	18.05	3.19
ectric Company POR \$35.60 5.20% 4	\$35.60 5.20%	5.20%		4.72	_	%00.9	4.04%	4.04%	5.65%			67.30%	\$0.00	9.67%	. 17.70	3.13
n SCG \$53.75 4.20%	\$53.75 4.20% 4	4.20% 4	4	4.30	%	4.50%	5.13%	4.20%	5.65%	57.00% 5	56.00% 6	67.30%	\$0.00	10.36%	15.09	2.67
SO \$44,08 3.50%	\$44.08 3.50%	3.50%		3.32	%	4.50%	4.40%	3.32%	2.65%	76.00% 7	71.00% 6	67.30%	\$0.00	9.88%	16.83	2:98
TE \$19.00	\$19.00 7.10%	7.10%		9.20	%	%00'9	3.60%	3.60%	2.65%	83.00% 7	72.00% 6	67.30%	\$0.00	9.07%	20.79	3.68
Westar Energy, Inc.	\$37.28 3.50%	3.50%		3.40%	vo.	8.00.9	5.25%	3.40%	2.65%	61.00% 5	55.00% 6	67.30%	\$0.00	9.67%	17.71	3,13
Xcel Energy inc. XEL \$34.08 5.00% 4.58%	\$34.08 5.00% 4	5.00% 4	4	4.58%	,	4.50%	3.95%	3.95%	5.65%	63.00% 6	64.00% 6	67.30%	\$0.00	9.68%	17.67	3.13
						2							Mean	9.55%		
													Max	`		
													Min	7.26%		

က						P	/ EPS Grov	Low EPS Growth Rate Estimate in First Stage (with Sustainable Growth)	mate in Firs	it Stage (w	ith Susta	nable Gr	w(h)						
4	Projected Annual																		
2	Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[59]	[30]	[31]
9	Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023					2028	2029	2030
7	ALLETE, Inc.	ALE	\$2.90	\$3.02	\$3.13	\$3.26	\$3.39	\$3.52	\$3.67	\$3.84	\$4.02	\$4.23	\$4.46	\$4.71	\$4.97	\$5.25	\$5,55	\$5.87	\$6.20
ω	Ailiant Energy Corporation	Ę	\$3.48	\$3.66	\$3.86	\$4.06	\$4.28	\$4.51	\$4.75	\$5.00	\$5.28	\$5.57					\$7.33	\$7.74	\$8.18
6	Ameren Corporation	AEE	\$2.40	\$2.51	\$2.62	\$2.74	\$2.87	\$3.00	\$3.14	\$3.30	\$3.47	\$3.65					\$4.79	\$5.07	\$5.35
9) American Electric Power Company, Inc.	AEP	\$3.34	\$3.48	\$3.62	\$3.76	\$3.92	\$4.08	\$4.25	\$4.45	\$4.67	\$4.91					\$6.44	\$6.81	\$7.19
=	Avista Corporation	AVA	\$1.84	\$1.91	\$1.98	\$2.06	\$2,14	\$2.22	\$2.31	\$2.41	\$2.52	\$2.65					\$3.48	\$3.68	\$3.88
12	Black Hills Corporation	BKI	\$2.89	\$3.01	\$3.13	\$3.25	\$3.38	\$3.52	\$3.67	\$3.84	\$4.02	\$4.23					\$5.55	\$5.87	\$6.20
73	 CenterPoint Energy, Inc. 	CNP	\$1.42	\$1.43	\$1.45	\$1.46	\$1.48	\$1.49	\$1.52	\$1.56	\$1.61	\$1.68					\$2.19	\$2.31	\$2.44
14	CMS Energy Corporation	CMS	\$1.74	\$1.83	\$1.93	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.63	\$2.78					\$3.66	\$3.86	\$4.08
15	Consolidated Edison, Inc.		\$3.62	\$3.71	\$3.79	\$3.88	\$3.98	\$4.07	\$4.19	\$4.34	\$4.51	\$4.72					\$6.18	\$6.53	\$6.89
16		Ω	\$3.05	\$3.23	\$3.42	\$3.62	\$3.83	\$4.06	\$4.30	\$4.55	\$4.81	\$5.09					\$6.70	\$7.08	\$7.48
17	'DTE Energy Company	DTE	\$5.10	\$5.33	\$5.57	\$5.82	\$6.08	\$6.36	\$6.66	\$6.98	\$7.34	\$7.72					\$10.15	\$10.72	\$11.33
9	Duke Energy Corporation	DUK	\$4.13	\$4.24	\$4.35	\$4.47	\$4.59	\$4.71	\$4.86	\$5.04	\$5.25	\$5.49					\$7.20	\$7.60	\$8.03
19		EDE	\$1.55	\$1.60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.11					\$2.77	\$2.92	\$3.09
20	Eversource Energy	ES	\$2.58	\$2.70	\$2.82	\$2.94	\$3.08	\$3.21	\$3.37	\$3.53	\$3.71	\$3.90					\$5.13	\$5.42	\$5.73
21	FirstEnergy Corp.	밆	\$0.85	\$0.88	\$0.92	\$0.96	\$1.00	\$1.04	\$1.08	\$1.13	\$1.19	\$1.25					\$1.64	\$1.73	\$1.83
22	: Great Plains Energy Inc.	GXD	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.82	\$1.88	\$1.96	\$2.04	\$2.14					\$2.81	\$2.96	\$3.13
23	IDACORP, Inc.	Ճ	\$3.85	\$3.89	\$3.93	\$3.97	\$4.01	\$4.05	\$4.12	\$4.22	\$4.36	\$4.54					\$5.94	\$6.27	\$6.63
24		NWE	\$1.98	\$2.06	\$2.14	\$2.22	\$2.31	\$2.40	\$2.50	\$2.61	\$2.73	\$2.87					\$3.77	\$3.98	\$4.21
25		0GE	\$1.55	\$1.60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.11					\$2.77	\$2.92	\$3.09
26		OTTR	\$3.06	\$3.24	\$3.44	\$3.64	\$3.86	\$4.09	\$4.34	\$4.59	\$4.86	\$5.14					\$6.77	\$7.15	\$7.56
27		PNW	\$3.58	\$3.72	\$3.87	\$4.03	\$4.19	\$4.36	\$4.54	\$4.75	\$4.98	\$5.23					\$6.87	\$7.26	\$7.67
28		POR	\$2.18	\$2.27	\$2.36	\$2.45	\$2.55	\$2.66	\$2.77	\$2.90	\$3.04	\$3.19					\$4.19	\$4.43	\$4.68
29	SCANA Corporation	SCG	\$3.79	\$3.95	\$4.12	\$4.29	\$4.47	\$4.66	\$4.86	\$5.09	\$5.34	\$5.62					\$7.38	\$7.79	\$8.23
99	_	S	\$2.77	\$2.86	\$2.96	\$3.06	\$3.16	\$3.26	\$3.38	\$3.52	\$3.68	\$3.86					\$5.06	\$5,35	\$5.65
છ		世	\$0.95	\$0.98	\$1.02	\$1.06	\$1.09	\$1.13	\$1.18	\$1.23	\$1.29	\$1.35					\$1.77	\$1.87	\$1.98
32	. Westar Energy, Inc.	X.	\$2.35	\$2.43	\$2,51	\$2.60	\$2.69	\$2.78	\$2.88	\$3.00	\$3.14	\$3.29					\$4.32	\$4.56	\$4.82
33	Xcel Energy Inc.	XEL	\$2.03	\$2.11	\$2.19	\$2.28	\$2.37	\$2.46	\$2.57	\$2.68	\$2.81	\$2.96		ı			\$3.88	\$4.10	\$4.33

67.30%

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65.65%

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63.25%

63.00%

Xcel Energy Inc

Multi-Stage Growth Discounted Cash Flow Model 90 Day Average Stock Price

67.30% [47] 67.30% [46] 67.30% [45] 67.30% [44] 67.30% [43] 67.30% [42] 66.75% 66.75% 65.42% 65.09% 66.25% 63.54% 65.42% 66.20% 66.75% 65.20% 66.25% %65'99 65.25% 65.92% 69.42% 66.42% 66.59% 68.87% 68.09% 64.87% 66.09% %60.73 %78.39 67.59% 65.75% 67.59% 65.92% 65.42% 65.42% [41] Low EPS Growth Rate Estimate in First Stage (with Sustainable Growth) 66.20% 63.54% 62.87% 64.54% 65.87% 63.20% 66.20% 71.54% 65.54% 65.87% 67.87% 65.20% 64.20% 67.87% 64.54% 63.54% 63.54% 68.87% 63.20% [40] 73.65% 64.65% 61.15% 65.65% 65.65% 63.15% 65.15% 68.15% 61.65% 60.65% 64.15% 61.65% 69.15% 69.65% 65.15% 69.65% 63.65% 66.65% 62.65% 68.15% 65.65% 61.65% 61.65% 63.15% [39] 64.43% 59.10% 65.10% 65.10% 61.77% 64.43% 70.43% 66.43% 59.77% 58.43% 63.10% 65.10% 75.77% 63.77% 62.43% 68.43% 61.10% 59.77% 68.43% 61.77% 59.77% 59.77% 69.77% 70.43% 59.10% [38] 57.05% 64.55% 64.55% 60.38% 57.88% 56.22% 62.05% 59.55% 77.88% 62.88% 71.22% 61.22% 66.22% 68.72% 70.38% 71.22% 57.05% 63.72% 68.72% 60.38% 57.88% 64.55% 57.88% 57.88% [37] 64.00% 56.00% 61.00% 63.00% 55.00% 64.00% 64.00% 59.00% 80.00% 62.00% 63.00% 72.00% 60.00% 61.00% %00.99 69.00% 56.00% 54,00% 58.00% %00.69 59.00% 56.00% 26.00% 71.00% 72.00% 55.00% [36] 62.50% 64.25% 64.75% 58.50% 72.00% 60.50% 57.50% 67.50% 70.75% 55.00% 55.75% 65.75% 54.50% 56.25% 83.25% 61.75% 63.50% 56.75% 63.25% 65.75% 59.50% 63.75% 72.25% 56.50% 63.75% 74.75% [35] 63.50% 62.00% 60.00% 64.50% 65.50% 58.00% 86.50% 72.00% 61.00% 69.00% 72.50% 53.00% 56.50% 58.00% 63.50% 61.50% 64.00% 57.50% 56.00% 65.50% 53.50% 62.50% 72.50% 63.00% 63.50% 73.50% 77.50% [34] 64.75% 66.25% 57.50% 89.75% 74.25% 57.00% 67.75% 51.25% 59.25% 51.50% 56.75% 61.50% 61.25% 64.50% 72.00% 61.50% 70.50% 58.25% 79.25% 74.75% 62.50% 66.50% 63.25% 80.25% 59.50% [33] 66.00% 61.00% 65.00% 67.00% 57.00% 93.00% 61.00% 65.00% 72.00% 72.00% 76.00% 59.00% 58.00% 70.00% 49.00% 56.00% 86.00% 65.00% 63.00% 57.00% 76.00% 50.00% 61.00% 70.00% 83.00% [32] American Electric Power Company, Inc. Portland General Electric Company Pinnacle West Capital Corporation **Empire District Electric Company** Alliant Energy Corporation NorthWestern Corporation Dominion Resources, Inc. **Duke Energy Corporation** Consolidated Edison, Inc. CMS Energy Corporation CenterPoint Energy, Inc. Great Plains Energy Inc. Black Hills Corporation DTE Energy Company Dividend Payout Ratio Otter Tail Corporation Ameren Corporation SCANA Corporation Westar Energy, Inc. Avista Corporation Eversource Energy Southern Company TECO Energy, Inc. OGE Energy Corp. FirstEnergy Corp. Projected Annual IDACORP, Inc. ALLETE, Inc.

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4 Projected Annual 5 Cash Flows			[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[69]	[60]	[61]	[62]	[63]	[64]
6 Company	Ticker	7	2015	2016	2017	2018	2019	0202	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal
7 ALLETE, Inc.	ALE	\$1	"		\$2.07	\$2.11	\$2.15	\$2.28	\$2.42	\$2.58	\$2.76	\$2.95	\$3.17	\$3.35	\$3.54	\$3.74	\$3.95	\$4.17	\$115.16
8 Alliant Energy Corporation	LN1	\$2	.24	\$2.37	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22	\$3.44	\$3.67	\$3.92	\$4.18	\$4.42	\$4.67	\$4.93	\$5.21	\$5.51	\$139.87
9 Ameren Corporation	AEE	8		\$1.64	\$1.65	\$1.65	\$1.65	\$1.79	\$1.95	\$2.12	\$2.31	\$2.51	\$2.74	\$2.89	\$3.05	\$3.23	\$3.41	\$3.60	\$93.89
10 American Electric Power Company, Inc.	AEP	\$2		\$2.34	\$2.43	\$2.52	\$2.61	\$2.75	\$2.90	\$3.06	\$3.25	\$3.45	\$3.68	\$3.88	\$4.10	\$4.34	\$4.58	\$4.84	\$125.37
11 Avista Corporation	AVA	8-	\$1.28	\$1.31	\$1.35	\$1.38	\$1.42	\$1.49	\$1.57	\$1.66	\$1.75	\$1.86	\$1.99	\$2.10	\$2.22	\$2.34	\$2.47	\$2.61	\$73.10
12 Black Hills Corporation	WKH	2		\$1.80	\$1.89	\$1.98	\$2.08	\$2.22	\$2.37	\$2.54	\$2.73	\$2.94	\$3.17	\$3.35	\$3.54	\$3.74	\$3.95	\$4.17	\$111.73
 CenterPoint Energy, Inc. 	CNP			\$1.30	1.27	\$1.23	\$1.19	\$1.18	\$1,18	\$1.19	\$1.20	\$1.22	\$1.25	\$1.32	\$1.39	\$1.47	\$1.56	\$1.64	\$41.32
14 CMS Energy Corporation	CMS	5			\$1.25	\$1.32	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82	\$1.95	\$2.09	\$2.20	\$2.33	\$2.46	\$2.60	\$2.75	\$77.69
15 Consolidated Edison, Inc.	ED	\$2			\$2.49	\$2.53	\$2.57	\$2.67	\$2.79	\$2.94	\$3.11	\$3.30	\$3.52	\$3.72	\$3.93	\$4.16	\$4,39	\$4.64	\$135.43
16 Dominion Resources, Inc.	<u>□</u>	\$2		\$2.46	52.61	\$2.76	\$2.92	\$3.06	\$3.20	\$3,35	\$3.50	\$3.66	\$3.82	\$4.04	\$4.27	\$4.51	\$4.76	\$5.03	\$157.49
17 DTE Energy Company	DTE	\$3		\$3.43	\$3.55	\$3.68	\$3.82	\$4.08	\$4.36	\$4.67	\$5.01	\$5.38	\$5.79	\$6.12	\$6.47	\$6.83	\$7.22	\$7.63	\$180.86
18 Duke Energy Corporation	ž	eş			3.08	\$3.10	\$3.11	\$3.22	\$3.35	\$3.50	\$3.67	\$3.88	\$4.11	\$4.34	\$4.59	\$4.84	\$5.12	\$5.41	\$167.45
19 Empire District Electric Company	EDE	29			1.23	\$1.23	\$1.24	\$1.28	\$1.32	\$1.37	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.86	\$1.97	\$2.08	\$51.89
20 Eversource Energy	ES	5			1.69	\$1.75	\$1.80	\$1.95	\$2.11	\$2.29	\$2.48	\$2.69	\$2.93	\$3.09	\$3.27	\$3.45	\$3.65	\$3.85	\$113.76
21 FirstEnergy Corp.	Ш	\$		\$0.52	50.54	\$0.55	\$0.56	\$0.61	\$0.66	\$0.72	\$0.79	\$0.86	\$0.94	\$0.99	\$1.05	\$1.10	\$1.17	\$1.23	\$80.78
22 Great Plains Energy Inc.	GXP	\$	~		51.12	\$1.12	\$1.11	\$1.17	\$1.24	\$1.31	\$1.40	\$1.49	\$1.60	\$1.69	\$1.79	\$1.89	\$1.99	\$2.11	\$58.22
23 IDACORP, Inc.	PΑ	5			\$2.12	\$2.23	\$2.35	\$2.45	\$2.58	\$2.73	\$2.92	\$3.13	\$3.39	\$3.58	\$3.78	\$4.00	\$4.22	\$4.46	\$137.45
24 NorthWestern Corporation	NWE	\$1	\$1.15		1.39	\$1.52	\$1.65	\$1.72	\$1.79	\$1.86	\$1.95	\$2.05	\$2.15	\$2.27	\$2.40	\$2.54	\$2.68	\$2.83	\$118.02
25 OGE Energy Corp.	OGE	₹			1.23	\$1.15	\$1.06	\$1.12	\$1.19	\$1.27	\$1.36	\$1.46	\$1.58	\$1.67	\$1.76	\$1.86	\$1.97	\$2.08	\$69.69
26 Otter Tail Corporation	OTTR	\$2			52.30	\$2.30	\$2.29	\$2.51	\$2.75	\$3.00	\$3.27	\$3.56	\$3.86	\$4.08	\$4.31	\$4.56	\$4.82	\$5.09	\$69.02
27 Pinnacle West Capital Corporation	≥ Na a	\$2	\$2.35 \$:	\$2.45	52.56	\$2.67	\$2.79	\$2.93	\$3.09	\$3.27	\$3.46	\$3.68	\$3.92	\$4.14	\$4.38	\$4.62	\$4.88	\$5.16	\$138.41
28 Portland General Electric Company	Por	5			1.30	\$1.39	\$1.49	\$1.60	\$1.73	\$1.87	\$2.03	\$2.20	\$2.39	\$2,53	\$2.67	\$2.82	\$2.98	\$3.15	\$82.89
29 SCANA Corporation	SCG	\$2		\$2.34	52.42	\$2.51	\$2.61	\$2.81	\$3.04	\$3.29	\$3.57	\$3.87	\$4.21	\$4.45	\$4.70	\$4.97	\$5.25	\$5.54	\$124.29
30 Southern Company	SO	\$2			\$2.25	\$2.28	\$2.32	\$2.38	\$2.46	\$2.54	\$2.64	\$2.76	\$2.89	\$3.05	\$3.22	\$3.41	\$3.60	\$3.80	\$95.08
31 TECO Energy, Inc.	ᆵ	င္အ		\$0.82	50.82	\$0.82	\$0.82	\$0.84	\$0.87	\$0.90	\$0.93	\$0.97	\$1.01	\$1.07	\$1.13	\$1.19	\$1.26	\$1.33	\$41.10
32 Westar Energy, Inc.	W.	₹.	\$1.48	\$1.49	1.51	\$1.52	\$1.53	\$1.64	\$1.77	\$1.92	\$2.08	\$2.26	\$2.46	\$2.60	\$2.75	\$2.91	\$3.07	\$3.24	\$85.36
33 Xcel Energy Inc.	XEL	\$1	\$1.33	\$1.39	\$1.45	\$1.51	\$1.58	\$1.66	\$1.75	\$1.85	\$1.96	\$2.08	\$2.22	\$2.34	\$2.47	\$2.61	\$2.76	\$2.92	\$76.54

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4 Projected Amidal Data 5 Investor Cash Flows		[65]	[99]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[22]	[16]	1771	[78]	1621	[80]	[81]	[82]
		Initial															·		
6 Company	Ticker	Outflow	6/25/15	12/31/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21 6	5/30/22 6	5/30/23 6/	6/30/24 6/	3/30/25 6	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
7 ALLETE, Inc.	ALE	(\$51.08)	\$0.00	\$1.03	\$2.03	\$2.07	\$2.11	\$2.15	\$2.28						\$3.35	\$3.54	\$3.74		\$119.33
8 Alliant Energy Corporation	Ρ	(\$61.38)	\$0.00	\$1.16	\$2.29	\$2.52	\$2.67	\$2.84	\$3.02		\$3.44				34.42	\$4.67	\$4.93		\$145.37
9 Ameren Corporation	AEE	(\$40.87)	\$0.00	\$0.84	\$1.67	\$1.65	\$1.65	\$1.65	\$1.79						52.89	\$3.05	\$3.23		\$97.49
10 American Electric Power Company, Inc.	AEP	(\$25.93)	\$0.00	\$1.17	\$2.31	\$2.43	\$2.52	\$2.61	\$2.75		\$3.06	\$3.25			33.88	\$4.10	\$4.34		\$130.21
11 Avista Corporation	AVA	(\$32.71)	\$0.00	\$0.66	\$1.30	\$1.35	\$1.38	\$1.42	\$1.49				\$1.86 \$	\$1.99	\$2.10	\$2.22	\$2.34	\$2.47	\$75.71
12 Black Hills Corporation	BKH	(\$48.78)	\$0.00	\$0.89	\$1.75	\$1.89	\$1.98	\$2.08	\$2.22	\$2.37	\$2.54	2.73			3.35	\$3.54	\$3.74		\$115.90
 CenterPoint Energy, Inc. 	CNP	(\$20.49)	\$0.00	\$0.69	\$1.34	\$1.27	\$1.23	\$1.19	\$1.18			\$1.20 \$			1.32	\$1.39	\$1.47		\$42.97
14 CMS Energy Corporation	CMS	(\$34.02)	\$0.00	\$0.58	\$1.15	\$1.25	\$1.32	\$1.39	\$1.49						32.20	\$2.33	\$2.46		\$80.44
15 Consolidated Edison, Inc.	Ш	(\$60.91)	\$0.00	\$1.25	\$2.44	\$2.49	\$2.53	\$2.57	\$2.67						3.72	\$3.93	\$4.16		\$140.07
16 Dominion Resources, Inc.		(\$70.78)	\$0.00	\$1.20	\$2.39	\$2.61	\$2.76	\$2.92	\$3.06	\$3.20	\$3.35	\$3.50 \$			4.04	\$4.27	\$4.51		162.52
17 DTE Energy Company		(\$79.41)	\$0.00	\$1.71	\$3.38	\$3.55	\$3.68	\$3.82	\$4.08						6.12	\$6.47	\$6.83		\$188.48
18 Duke Energy Corporation	E E	(\$76.11)	\$0.00	\$1.58	\$3.09	\$3.08	\$3.10	\$3.11	\$3.22						4.34	\$4.59	\$4.84		172.86
19 Empire District Electric Company		(\$24.01)	\$0.00	\$0.63	\$1.23	\$1.23	\$1.23	\$1.24	\$1.28						1.67	\$1.76	\$1.86		\$53.96
20 Eversource Energy		(\$49.32)	\$0.00	\$0.82	\$1.63	\$1.69	\$1.75	\$1.80	\$1.95						3.09	\$3.27	\$3.45		\$117.61
21 FirstEnergy Corp.	出	(\$35.13)	\$0.00	\$0.27	\$0.52	\$0.54	\$0.55	\$0.56	\$0.61		-				66.0	\$1.05	\$1.10		\$82.01
22 Great Plains Energy Inc.		(\$26.14)	\$0.00	\$0.59	\$1.15	\$1.12	\$1.12	\$1.11	\$1.17						1.69	\$1.79	\$1.89		\$60.33
23 IDACORP, Inc.	ΙDΑ	(\$60.44)	\$0.00	\$0.99	\$1.91	\$2.12	\$2.23	\$2.35	\$2.45						3.58	\$3.78	\$4.00		141.91
24 NorthWestern Corporation		(\$52.34)	\$0.00	\$0.60	\$1.17	\$1.39	\$1.52	\$1.65	\$1.72						2.27	\$2.40	\$2.54		\$120.85
-		(\$31.57)	\$0.00	\$0.71	\$1.39	\$1.23	\$1.15	\$1.06	\$1.12						1.67	\$1.76	\$1.86		\$71.76
26 Otter Tail Corporation		(\$29.98)	\$0.00	\$1.18	\$2.34	\$2.30	\$2.30	\$2.29	\$2.51						4.08	\$4.31	\$4.56		\$74.11
27 Pinnacle West Capital Corporation	PNW	(\$61.59)	\$0.00	\$1.21	\$2.39	\$2.56	\$2.67	\$2.79	\$2.93						4.14	\$4.38	\$4.62		143.57
28 Portland General Electric Company		(\$35.60)	\$0.00	\$0.59	\$1.16	\$1.30	\$1.39	\$1.49	\$1.60			•			2.53	\$2.67	\$2.82		\$86.04
29 SCANA Corporation	رn.	(\$53.75)	\$0.00	\$1.17	\$2.30	\$2.42	\$2.51	\$2.61	\$2.81			-,			4.45	\$4.70	\$4.97		129.84
	SO	(\$44.08)	\$0.00	\$1.13	\$2.21	\$2.25	\$2.28	\$2.32	\$2.38						3.05	\$3.22	\$3.41		\$98.86
31 TECO Energy, Inc.		(\$19.00)	\$0.00	\$0.42	\$0.83	\$0.82	\$0.82	\$0.82	\$0.84		•	\$0.93			1.07	\$1.13	\$1.19		\$42.43
32 Westar Energy, Inc.		(\$37.28)	\$0.00	\$0.77	\$1.51	\$1.51	\$1.52	\$1.53	\$1.64	\$1,77	65	\$ 80.2			2.60	\$2.75	\$2.91		\$88.61
33 Xcel Energy Inc.	XEL	(\$34.08)	\$0.00	\$0.69	\$1.36	\$1.45	\$1.51	\$1.58	\$1.66	\$1.75		·^	63		2.34	\$2.47	\$2.61		\$79.46

Max 14.05% Min 7.37%

35 36

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

4	Inputs		[1]	[2]	[3]	[4]	[2]	[6]	[2]	[8]	[6]	[10]	[11]	[12]	[13]	[14]
2			Stock		EPS Growth Rate	vth Rate E	Estimates		Long-Term	Pa	Payout Ratio		Iterative Solution	ļ —	ā	Terminal
						Value	Retention								P/E	PEG
9	Company	Ticker	Price	Zacks	First Call	Line	Growth	Average	Growth	2015	2019	2025	Proof	IRR	Ratio	Ratio
7	ALLETE, Inc.	ALE	\$52.15	ΑĀ	%00'9	9.50%	3.97%	5.49%	2.65%	%00'99	61.00% 6	67.30%	\$0.00	9.79%	17.19	3.04
ထ	Alliant Energy Corporation	LN	\$62.78	5.30%	5.45%	%00'9	2.66%	2.60%	2.65%	61.00%	63.00% 6	67.30%	\$0.00	9.80%	17.15	3.03
თ	Ameren Corporation	AEE	\$42.21	6.80%	5.85%	%00'9	4.56%	2.80%	2.65%	%00.59	55.00% E	67.30%	\$0.00	9.90%	16.74	2.96
6	American Electric Power Company, Inc.	AEP	\$57.48	4.90%	2.08%	2.00%	4.07%	4.76%	2.65%	65.00%	64.00% 6	67.30%	\$0.00	9.80%	17.14	3.03
=	Avista Corporation	AVA	\$33.86	ž	2.00%	7.00%	3.80%	5.27%	2.65%	67.00%	64.00% 6	67.30%	\$0.00	9.67%	17.71	3.13
12	Black Hills Corporation	BKH	\$50.52	¥	7.00%	4.50%	4.02%	5.17%	2.65%	27.00%	59.00%	67.30%	\$0.00	9.75%	17.33	3.07
13	CenterPoint Energy, Inc.	CNP	\$21.96	2.70%	1.91%	1.00%	3.19%	2.95%	2.65%	93.00%	80.00%	67.30%	\$0.00	10.11%	15.97	2.82
14	CMS Energy Corporation	CMS	\$34.05	6.20%	6.73%	2.50%	5.27%	5.92%	2.65%	61.00%	62.00% 6	87.30%	\$0.00	9.54%	18.27	3.23
15	_	딦	\$62.87	2.70%	2.38%	3.00%	3.15%	2.81%	2.65%	65.00%	63.00% 6	67.30%	\$0.00	9.26%	19.72	3.49
16		Δ	\$72.44	6.30%	2.89%	8.00%	%00'9	6.55%	2.65%	72.00%	72.00% 6	67.30%	\$0.00	9.09%	20.66	3.66
17	DTE Energy Company	DTE	\$81.72	2.00%	4.51%	2.00%	4.88%	4.85%	2.65%	62.00%	60.00%	87.30%	\$0.00	10.07%	16.08	2.84
18	Duke Energy Corporation	P.K	\$79.36	4.70%	4.49%	2.00%	2.67%	4.22%	2.65%	72.00%	66.00% 6	67.30%	\$0.00	9.28%	19.62	3.47
19	Empire District Electric Company	EDE	\$26.21	2.00%	2.00%	3.00%	3.25%	4.06%	2.65%	76.00%	69.00%	67.30%	\$0.00	9.79%	17.16	3.04
20	Eversource Energy	ES	\$50.51	8.80%	%09.9	8.50%	4.50%	%09'9	2.65%	29.00%	56.00% e	67.30%	\$0.00	9.65%	17.78	3.15
7	FirstEnergy Corp.	띥	\$36.48	¥	₹	7.00%	4.09%	5.54%	2.65%	58.00%	54.00% 6	67.30%	\$0.00	7.37%	41.46	7.34
22	Great Plains Energy Inc.	СХР	\$26.74	%00.9	6.37%	2.00%	3.02%	5.10%	5.65%	%00.02	61.00% 6	67.30%	\$0.00	9.93%	16,60	2.94
23	IDACORP, Inc.	ΙDΑ	\$62.00	4.00%	4.00%	1.00%	3.51%	3.13%	2.65%	49.00%	58.00% 6	67.30%	\$0.00	9.50%	18.47	3.27
24	NorthWestern Corporation	NWE	\$53.21	2.00%	2.00%	6.50%	3.90%	5.10%	2.65%	26.00%	9 %00'69	67.30%	\$0.00	8.36%	26.29	4.65
25	_	OGE	\$33,59	2.00%	4.00%	3.00%	3.68%	3.95%	5.65%	86.00%	9 %00'69	67.30%	\$0.00	8.80%	22.61	4.00
56	_	OTTR	\$30.14	Ϋ́	%00.9	%00.6	7.25%	7.42%	5.65%	70.00%	56.00% e	67.30%	\$0.00	14.05%	8.46	1.50
27	Pinnacle West Capital Corporation	δN	\$63,34	4.60%	2.30%	4.00%	4.52%	4.60%	2.65%	63.00%	64.00% 6	67.30%	\$0.00	9.63%	17.85	3.16
28	Portland General Electric Company	POR	\$36.46	5.20%	4.72%	%00.9	4.04%	4.99%	2.65%	20.00%	56.00% e	67.30%	\$0.00	9.82%	17.06	3.02
59	SCANA Corporation	SCG	\$55.87	4.20%	4.30%	4.50%	5.13%	4.53%	5.65%	22.00%	56.00% 6	67.30%	\$0.00	10.28%	15.36	2.72
ဗ္က	Southern Company	SO	\$46.21	3.50%	3.35%	4.50%	4.40%	3.93%	2.65%	76.00%	71.00% 6	67.30%	\$0.00	9.84%	16.99	3.01
33	TECO Energy, Inc.	世	\$19.49	7.10%	9.20%	%00'9	3.60%	6.48%	2.65%	83.00%	72.00% 6	67.30%	\$0.00	9.68%	17.64	3.12
32	_	Ν×	\$38.47	3.50%	3.40%	%00'9	5.25%	4.54%	2.65%	61.00%	55.00% 6	67.30%	\$0.00	9.84%	16.98	3.00
33	Xcel Energy Inc.	ΧĒΓ	\$34.44	2.00%	4.58%	4.50%	3.95%	4.51%	2.65%	63.00%	64.00% 6	67.30%	\$0.00	9.78%	17.22	3.05
34													Mean	9.72%		

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4	Projected Annual									•									
2	Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[36]	[27]	[28]	[29]	[30]	[31]
9	Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023							2030
^	ALLETE, Inc.	ALE	\$2.90	\$3.06	\$3.23	\$3:40	\$3.59	\$3.79	\$4.00	\$4.22	\$4.45	\$4.70							\$6.91
œ	Alliant Energy Corporation	Ľ	\$3.48	\$3.67	\$3.88	\$4.10	\$4.33	\$4.57	\$4.83	\$5.10	\$5.38	\$5.69							\$8.36
6	Ameren Corporation	AEE	\$2.40	\$2.54	\$2.69	\$2.84	\$3.01	\$3.18	\$3.37	\$3.56	\$3.76	\$3.98							\$5.85
9	American Electric Power Company, Inc.	AEP	\$3.34	\$3.50	\$3.67	\$3.84	\$4.02	\$4.21	\$4.42	\$4.65	\$4.89	\$5.15							\$7.56
=	Avista Corporation	AVA	\$1.84	\$1.94	\$2.04	\$2.15	\$2.26	\$2.38	\$2.51	\$2.64	\$2.78	\$2.94	\$3.10	\$3.28	\$3.46	\$3.66	\$3.87	\$4.08	\$4.31
12	Black Hills Corporation	MK H	\$2.89	\$3.04	\$3.20	\$3.36	\$3.54	\$3.72	\$3.91	\$4.12	\$4.35	\$4.58							\$6.73
13	CenterPoint Energy, Inc.	CNP	\$1.42	\$1.46	\$1.50	\$1.55	\$1.60	\$1.64	\$1.70	\$1.76	\$1.84	\$1.93							\$2.82
4	CMS Energy Corporation	CMS	\$1.74	\$1.84	\$1.95	\$2.07	\$2.19	\$2.32	\$2.46	\$2.60	\$2.75	\$2.91							\$4.28
5	Consolidated Edison, Inc.		\$3.62	\$3.72	\$3.83	\$3.93	\$4.04	\$4.16	\$4.29	\$4.46	\$4.64	\$4.86							\$7.11
16		△	\$3.05	\$3.25	\$3.46	\$3.69	\$3.93	\$4.19	\$4.46	\$4.73	\$5.02	\$5.32							\$7.83
17	DTE Energy Company	DTE	\$5.10	\$5.35	\$5.61	\$5.88	\$6.16	\$6.46	\$6.78	\$7.13	\$7.50	\$7.91							\$11.61
9	Duke Energy Corporation	DOK	\$4.13	\$4,30	\$4.49	\$4.67	\$4.87	\$5.08	\$5.30	\$5.55	\$5.83	\$6.13							\$8.98
9	Empire District Electric Company	EDE	\$1.55	\$1.61	\$1.68	\$1.75	\$1.82	\$1.89	\$1.97	\$2.06	\$2.16	\$2.28							\$3.33
2	Eversource Energy	S	\$2.58	\$2.75	\$2.93	\$3.13	\$3.33	\$3.55	\$3.78	\$4.02	\$4.26	\$4.52							\$6.65
7	FirstEnergy Corp.	Ш	\$0.85	\$0.90	\$0.95	\$1.00	\$1.05	\$1.11	\$1.18	\$1.24	\$1.31	\$1.38							\$2.03
22	Great Plains Energy Inc.	GXB	\$1.57	\$1.65	\$1.73	\$1.82	\$1.92	\$2.01	\$2.12	\$2.23	\$2.35	\$2.48							\$3.64
23	IDACORP, Inc.	DΑ	\$3.85	\$3.97	\$4.09	\$4.22	\$4.35	\$4.49	\$4.65	\$4.83	\$5.05	\$5.29							\$7.74
54	_	N N N	\$1.98	\$2.08	\$2.19	\$2.30	\$2.42	\$2.54	\$2.67	\$2.81	\$2.96	\$3.13							\$4.59
25		OGE	\$1.55	\$1.61	\$1.67	\$1.74	\$1.81	\$1.88	\$1.96	\$2.05	\$2.14	\$2.25							\$3.30
56	Otter Tail Corporation	OTTR	\$3.06	\$3.29	\$3.53	\$3.79	\$4.07	\$4.38	\$4.69	\$5.01	\$5.34	\$5.67							\$8.35
27		NA NA	\$3.58	\$3.74	\$3.92	\$4.10	\$4.29	\$4.48	\$4.70	\$4.93	\$5.18	\$5.46							\$8.01
78		POR	\$2.18	\$2.29	\$2.40	\$2.52	\$2.65	\$2.78	\$2.92	\$3.08	\$3.24	\$3.41			•				\$5.01
83	SCANA Corporation	SCG	\$3.79	\$3.96	\$4.14	\$4.33	\$4.53	\$4.73	\$4.95	\$5.20	\$5.46	\$5.75							\$8.43
8	Southern Company	တ္တ	\$2.77	\$2.88	\$2.99	\$3.11	\$3.23	\$3.36	\$3.50	\$3.66	\$3.83	\$4.03			••				\$5.90
3	TECO Energy, Inc.	出	\$0.95	\$1.01	\$1.08	\$1.15	\$1.22	\$1,30	\$1.38	\$1.47	\$1.56	\$1.65							\$2.43
32	Westar Energy, Inc.	Νĸ	\$2.35	\$2.46	\$2.57	\$2.68	\$2.81	\$2.93	\$3.07	\$3.22	\$3.39	\$3.57							\$5.23
33	Xcel Energy Inc.	XEL	\$2.03	\$2.12	\$2.22	\$2.32	\$2.42	\$2.53	\$2.65	\$2.78	\$2.92	\$3.07							\$4.51

67.30% 2030 [47] 67.30% 2029 [46] 67.30% [45] 67.30% 2027 [44] 67.30% [43] 67.30% [42] 65.25% 66.75% 66.75% 65.92% %60.99 67.09% 65.42% 65.09% 66.25% 65.75% 66.25% 66.59% 66.42% 66.59% 67.59% 67.59% 65.92% 65.42% 66.75% 65.42% 65.42% 66.75% 69.42% 68.09% <u>7</u> 63.20% 66.20% 66.20% 67.87% 63.54% 62.87% 65.20% 64.20% 64.54% 63.54% 66.20% 63.54% 63.54% 65.87% 64.54% 71.54% 65.54% 65.87% 68.87% 64.87% %28.99 67.87% 68.87% 66.20% 63.20% [40] 61.15% 65.65% 65.65% 63.15% 73.65% %59.99 68.15% 61.65% 60.65% 64.15% 62.65% 69.15% 69.65% 69.65% 63.65% 63.15% 61.65% 65.65% 61.65% 65.15% 64.65% 65.15% 68.15% 65.65% [33] 59.10% 65.10% 65.10% 68.43% 59.77% 58.43% 63.10% 64.43% 70.43% 62.43% 66.43% 68.43% 61.77% 59.77% 65.10% 59.77% 59.77% 64.43% 61.77% 75.77% 63.77% 61.10% 69.77% 70.43% 65.10% 59.10% [38] 57.05% 64.55% 64.55% 71.22% 61.22% 57.88% 56.22% 62.05% 59.55% 64.55% 63.72% 60.38% 77.88% 62.88% 66.22% 68.72% 68.72% 57.88% 70.38% 71.22% 57.05% 64.55% 63.72% 60.38% 57.88% 57.88% [37] 55.00% 64.00% 64.00% 59.00% 62.00% 63.00% 72.00% 69.00% 56.00% 54.00% 61.00% 58.00% 71.00% 60.00% 86.00% 69.00% 56.00% 64.00% 56.00% 56.00% 61.00% 63.00% 80.00% 59.00% 55.00% 64.00% [36] 57.50% 64.25% 64.75% 56.75% 55.00% 55.75% 63.75% 72.00% 60.50% 67.50% 70.75% 63.25% 65.75% 54.50% 56.25% 62.50% 58.50% 83.25% 61.75% 63.50% 65.75% 59.50% 72.25% 56.50% 2018 [32]61.50% 64.00% 72.00% 62.00% 60.00% 64.50% 65.50% 58.00% 86.50% 61.00% %00.69 72.50% 57.50% 56.00% 53.50% 62.50% 72.50% 63.00% 63.50% 53.00% 56.50% 73.50% 77.50% 58.00% 63.50% 65.50% [34] 79.25% 66.50% 64.75% 66.25% 57.50% 89.75% 64.50% 72.00% 70.50% 58.25% 57.00% 67.75% 51.25% 61.50% 62.50% 61.50% 74.25% 59.25% 63.25% 51.50% 56.75% 74.75% 80.25% 59.50% 63.25% [33] 66.00% 61.00% 65.00% 65.00% 67.00% 57.00% 61.00% 65.00% 58.00% 70.00% 93.00% 72.00% 62.00% 72.00% 76.00% 59.00% 56.00% 70.00% 63.00% 50.00% 57.00% 49.00% 86.00% 76.00% 63.00% [32] PNW American Electric Power Company, Inc. Portland General Electric Company Pinnacle West Capital Corporation Empire District Electric Company Eversource Energy Alliant Energy Corporation NorthWestern Corporation Consolidated Edison, Inc. **Duke Energy Corporation** Dominion Resources, Inc. CMS Energy Corporation CenterPoint Energy, Inc. Great Plains Energy Inc. Black Hills Corporation **DTE Energy Company** Dividend Payout Ratio Otter Tail Corporation SCANA Corporation Ameren Corporation Westar Energy, Inc. Southern Company OGE Energy Corp. Avista Corporation TECO Energy, Inc. FirstEnergy Corp. Projected Annual IDACORP, Inc. Xcel Energy Inc ALLETE, Inc. Company 25 25 27 28 29 30 30 4 10

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

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4	Cash Flows		[48]	[49]	[20]	[51]	[52]	[53]	[54]	[55]	[99]	[57]	[58]	[29]	[60]	[61]	[62]	[63]	[64]
																			erminal
ဖ	Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024				2028	2029	2030	Value
7	ALLETE, Inc.	ALE	\$2.02	\$2.09	\$2.16	\$2.24	\$2.31	\$2.48	\$2.66	\$2.86	\$3.07	\$3.29				\$4.17	\$4.40		\$118.80
œ	Alliant Energy Corporation	ΙΝ	\$2.24	\$2.39	\$2.54	\$2.70	\$2.88	\$3.08	\$3.28	\$3.51	\$3.75	\$4.00				\$5.04	\$5.32		\$143.36
တ	Ameren Corporation	AEE	\$1.65	\$1.68	\$1.71	\$1.73	\$1.75	\$1.92	\$2.10	\$2.30	\$2.51	\$2.74				\$3.53	\$3.72		\$97.88
10	Merican Electric Power Company, Inc.	AEP	\$2.27	\$2.37	\$2.48	\$2.58	\$2.70	\$2.85	\$3.02	\$3.21	\$3.41	\$3.63				\$4.56	\$4.81		\$129.50
	Avista Corporation	AVA	\$1.30	\$1.35	\$1.41	\$1.46	\$1.52	\$1.62	\$1.72	\$1.83	\$1.95	\$2.07	\$2.21	\$2.33	\$2.46	\$2.60	\$2.75	\$2.90	\$76.42
12	Black Hills Corporation	EK T	\$1.73	\$1.84	\$1.95	\$2.07	\$2.19	\$2.36	\$2.55	\$2.74	\$2.96	\$3.19				\$4.06	\$4.29		\$116.67
13	CenterPoint Energy, Inc.	CNP	\$1.36	\$1.35	\$1.34	\$1.33	\$1.31	\$1.32	\$1.34	\$1.35	\$1.38	\$1.41				\$1.70	\$1.80		\$45.01
4	CMS Energy Corporation	CMS	\$1.12	\$1.20	\$1.27	\$1,35	\$1.44	\$1.54	\$1.66	\$1.78	\$1.91	\$2.04				\$2.58	\$2.72		\$78.10
15			\$2.42	\$2.47	\$2.52	\$2.57	\$2.62	\$2.74	\$2.87	\$3.03	\$3.20	\$3.41				\$4.29	\$4.53		\$140.26
16	5 Dominion Resources, Inc.	Δ	\$2.34	\$2.49	\$2.66	\$2.83	\$3.02	\$3.17	\$3.33	\$3.50	\$3.67	\$3.83				\$4.72	\$4.99		\$161.81
17	' DTE Energy Company	DTE	\$3.32	\$3.45	\$3.59	\$3.73	\$3.88	\$4.15	\$4.45	\$4.78	\$5.13	\$5.51				\$7.00	\$7.39		\$186.63
18	3 Duke Energy Corporation	PK	\$3.10	\$3.16	\$3.23	\$3.29	\$3.35	\$3.51	\$3.69	\$3.88	\$4.10	\$4.33				\$5.42	\$5.72		\$176.27
6	 Empire District Electric Company 		\$1.23	\$1.25	\$1.27	\$1.29	\$1.31	\$1.36	\$1.41	\$1.47	\$1.54	\$1.62				\$2.01	\$2.12		\$57.24
20	Eversource Energy	ន្ន	\$1.62	\$1.71	\$1.80	\$1.89	\$1.99	\$2.19	\$2.40	\$2.63	\$2.87	\$3.13				\$4.01	\$4.24		\$118.24
21	FirstEnergy Corp.	H	\$0.52	\$0.54	\$0.56	\$0.58	\$0.60	\$0.66	\$0.73	\$0.79	\$0.87	\$0.95				\$1.23	\$1,30		\$84.28
22	Great Plains Energy Inc.	GX9	\$1.16	\$1.17	\$1.19	\$1.21	\$1.23	\$1.31	\$1.41	\$1.51	\$1.62	\$1.73				\$2.19	\$2.32		\$60,40
23	IDACORP, Inc.	ĕ	\$1.95	\$2.10	\$2.26	\$2.43	\$2.60	\$2.77	\$2.95	\$3.16	\$3.40	\$3.66				\$4.67	\$4.93		\$142.96
24		NWE	\$1.17	\$1.30	\$1.44	\$1.59	\$1.75	\$1.84	\$1.92	\$2.02	\$2.12	\$2.23				\$2.77	\$2.92		\$120.61
25	6 OGE Energy Corp.	OGE	\$1.39	\$1.33	\$1.26	\$1.19	\$1.11	\$1.18	\$1.26	\$1.35	\$1.45	\$1.56				\$1.99	\$2,10		\$74.63
56	otter Tail Corporation	OTTR	\$2,30	\$2:35	\$2,39	\$2.42	\$2.45	\$2.71	\$2.99	\$3.29	\$3.60	\$3.93				\$5.04	\$5.32		\$70.68
27	Pinnacle West Capital Corporation	MN≪	\$2.36	\$2.48	\$2.60	\$2.73	\$2.87	\$3.03	\$3.21	\$3.40	\$3.61	\$3.84				\$4.83	\$5.10		\$142.95
28	Portland General Electric Company	POR	\$1.14	\$1.24	\$1.34	\$1.44	\$1.56	\$1.69	\$1.84	\$2.00	\$2.17	\$2.36				\$3.02	\$3.19		\$85,49
59	SCANA Corporation	SCG	\$2.26	\$2.35	\$2.45	\$2.55	\$2.65	\$2.87	\$3.11	\$3.37	\$3.65	\$3.97				\$5.08	\$5.37		\$129.52
30	Southern Company	SO	\$2.19	\$2.24	\$2.29	\$2.33	\$2.38	\$2.46	\$2.55	\$2.65	\$2.76	\$2.88				\$3.56	\$3.76		\$100.29
ည	TECO Energy, Inc.	里	\$0.84	\$0.86	\$0.89	\$0.91	\$0.94	\$0.98	\$1.03	\$1.08	\$1.14	\$1.19				\$1.46	\$1.55		\$42.82
32	. Westar Energy, Inc.	¥	\$1.50	\$1.53	\$1.56	\$1.59	\$1.61	\$1.75	\$1.90	\$2.07	\$2.25	\$2.45				\$3.15	\$3.33		\$88.84
33	Ncel Energy Inc.	ХĒ	\$1.34	\$1.40	\$1.47	\$1.54	\$1.62	\$1.71	\$1.81	\$1.92	\$2.04	\$2.16				\$2.72	\$2.87		\$77,65

က						Averag	e EPS Gro	Average EPS Growth Rate Estimate in First Stage (with Sustainable Growth)	stimate in F	irst Stage	(with Sus	tainable (Srowth)							
4	Projected Annual Data																			
2	Investor Cash Flows		[65]	[99]	[67]	[89]	[69]	[0/]	[71]	[72]	[73]	[74]	[22]	[9/]	[77]	[18]	[42]	[80]	[81]	[82]
			Initial																	The state of the s
9	Company	Ticker	Outflow	6/25/15	12/31/15	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	6/30/59	08/08/9
7	ALLETE, Inc.	ALE	(\$52.15)	\$0.00	\$1.05	1	\$2.16	\$2.24	\$2.31	\$2.48	\$2.66		\$3.07	\$3.29	\$3.53	\$3.73	\$3.94	\$4.17	\$4.40	\$123.45
œ	Alliant Energy Corporation	Ľ	(\$62.78)	\$0.00	\$1.16		\$2.54	\$2.70	\$2.88	\$3.08	\$3.28		\$3.75	\$4.00	\$4.27	\$4.51	\$4.77	\$5.04	\$5.32	\$148.98
6	Ameren Corporation	AEE	(\$42.21)	\$0.00	\$0.85		\$1.71	\$1.73	\$1.75	\$1.92	\$2.10		\$2.51		\$2.99	\$3.16	\$3.34	\$3,53	\$3.72	\$101.81
9	American Electric Power Company, Inc.	AEP	(\$57.48)	\$0.00	\$1.18	\$2.33	\$2.48	\$2.58	\$2.70	\$2.85	\$3.02	\$3.21	\$3.41	\$3.63	\$3.86	\$4.08	\$4.31	\$4.56	\$4.81	\$134.59
Ξ	Avista Corporation	AVA	(\$33.86)	\$0.00	\$0.67		\$1.41	\$1.46	\$1.52	\$1.62	\$1.72		\$1.95		\$2.21	\$2.33	\$2.46	\$2.60	\$2.75	\$79.33
12		BKH	(\$50.52)	\$0.00	\$0.90		\$1.95	\$2.07	\$2.19	\$2.36	\$2.55		\$2.96		\$3.44	\$3.64	\$3.84	\$4.06	\$4.29	\$121.20
13	CenterPoint Energy, Inc.	CNP	(\$21.96)	\$0.00	\$0.70		\$1.34	\$1.33	\$1.31	\$1.32	\$1,34		\$1.38		\$1.44	\$1.52	\$1.61	\$1.70	\$1.80	\$46.90
7	CMS Energy Corporation	CMS	(\$34.05)	\$0.00	\$0.58		\$1.27	\$1.35	\$1.44	\$1,54	\$1.66		\$1.91		\$2.19	\$2.31	\$2.44	\$2.58	\$2.72	\$80.97
15	Consolidated Edison, Inc.		(\$62.87)	\$0.00	\$1.25		\$2.52	\$2.57	\$2.62	\$2.74	\$2.87		\$3.20		\$3.64	\$3.84	\$4.06	\$4.29	\$4.53	\$145.04
16		۵	(\$72.44)	\$0.00	\$1.21		\$2.66	\$2.83	\$3.02	\$3.17	\$3.33		\$3.67		\$4.00	\$4.23	\$4.47	\$4.72	\$4.99	\$167.08
17	DTE Energy Company	DTE	(\$81.72)	\$0.00	\$1.72		\$3.59	\$3.73	\$3.88	\$4.15	\$4.45		\$5.13		\$5.93	\$6.27	\$6.62	\$7.00	\$7.39	\$194.44
18		E E	(\$79.36)	\$0.00	\$1.60		\$3.23	\$3.29	\$3.35	\$3.51	\$3.69		\$4.10		\$4.59	\$4.85	\$5.13	\$5.42	\$5.72	\$182.32
19	Empire District Électric Company	EDE	(\$26.21)	\$0.00	\$0.63		\$1.27	\$1.29	\$1.31	\$1.36	\$1.41		\$1.54		\$1.70	\$1.80	\$1.90	\$2.01	\$2.12	\$59.48
20		S	(\$50.51)		\$0.84		\$1.80	\$1.89	\$1.99	\$2.19	\$2.40		\$2.87		\$3.40	\$3.59	\$3.79	\$4.01	\$4.24	\$122.71
2	FirstEnergy Corp.	밆	(\$36.48)	\$0.00	\$0.27		\$0.56	\$0.58	\$0.60	\$0.66	\$0.73		\$0.87		\$1.04	\$1.10	\$1.16	\$1.23	\$1.30	\$85.65
22	Great Plains Energy Inc.	GXP	(\$26.74)	\$0.00	\$0.60		\$1.19	\$1.21	\$1.23	\$1.31	\$1.41		\$1.62		\$1.86	\$1.96	\$2.08	\$2.19	\$2.32	\$62.85
23	IDACORP, Inc.	DΑ	(\$62.00)	\$0.00	\$1.01		\$2.26	\$2.43	\$2.60	\$2.77	\$2.95		\$3.40		\$3.96	\$4.18	\$4.42	\$4.67	\$4.93	\$148.17
54		NWE	(\$53.21)		\$0.60		\$1.44	\$1.59	\$1.75	\$1.84	\$1.92		\$2.12		\$2.35	\$2.48	\$2.62	\$2.77	\$2.92	\$123.70
52		OGE	(\$33.59)		\$0.72		\$1.26	\$1.19	\$1.11	\$1.18	\$1.26		\$1.45		\$1.69	\$1.78	\$1.88	\$1.99	\$2.10	\$76.85
56	Otter Tall Corporation	OTTR	(\$30.14)	\$0.00	\$1.19		\$2.39	\$2.42	\$2.45	\$2.71	\$2.99		\$3.60		\$4.27	\$4.51	\$4.77	\$5.04	\$5.32	\$76.30
27	Pinnacle West Capital Corporation	PNW	(\$63.34)	\$0.00	\$1.22		\$2.60	\$2.73	\$2.87	\$3.03	\$3.21		\$3.61		\$4.09	\$4.33	\$4.57	\$4.83	\$5.10	\$148.34
28	Portland General Electric Company	POR	(\$36.46)		\$0.59		\$1.34	\$1.44	\$1.56	\$1.69	\$1.84		\$2.17		\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$88.87
53	SCANA Corpóration	SCG	(\$55.87)	\$0.00	\$1.17		\$2.45	\$2.55	\$2.65	\$2.87	\$3.11		\$3.65		\$4.31	\$4.56	\$4.81	\$5.08	\$5.37	\$135.20
္က	Southern Company	SO	(\$46.21)	\$0.00	\$1.13		\$2.29	\$2.33	\$2.38	\$2.46	\$2.55		\$2.76		\$3.02	\$3.19	\$3.37	\$3.56	\$3.76	\$104.26
31	TECO Energy, Inc.	世	(\$19.48)	\$0.00	\$0.43		\$0.89	\$0.91	\$0.94	\$0.98	\$1.03		\$1.14		\$1.24	\$1.31	\$1.39	\$1.46	\$1.55	\$44.45
32		Χ×	(\$38.47)		\$0.78		\$1.56	\$1.59	\$1.61	\$1.75	\$1.90	\$2.07	\$2.25		\$2.67	\$2,83	\$2.99	\$3.15	\$3.33	\$92.36
33	Xcel Energy Inc.	Ä	(\$34.44)	\$0.00	\$0.69	\$1.37	\$1.47	\$1.54	\$1.62	\$1.71	\$1.81		\$2.04		\$2.31	\$2.44	\$2.57	\$2.72	\$2.87	\$80.68

Multi-Stage Growth Discounted Cash Flow Model 180 Day Average Stock Price High EPS Growth Rate Estimate in First Stage (with Sustainable Growth)

inputs		Ξ	[2]	<u></u>	4	[2]	9	Ξ	[8]	<u>6</u>	<u>5</u>	Ξ	[12]	[13]	[14]	
		Stock		EPS Gr	owth Rate	EPS Growth Rate Estimates		Long-Term	P	Payout Ratio		terative Solution		Terminal 7	Terminal	
		•			Value	Retention	High							P/E	PEG	
Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	Growth	2015	2019	2025	Proof	H H	Ratio	Ratio	
ALLETE, Inc.	ALE	\$52.15	Ϋ́	%00.9	6.50%	3.97%	6.50%	2.65%	%00.99	61.00%	67.30%	\$0.00	10.06%	16.13	2.85	
Alliant Energy Corporation	Ľ	\$62.78	5.30%	5.45%	8.00.9	2.66%	%00.9	2.65%	61.00%	63.00%	67.30%	\$0.00	%06.6	16.72	2.96	
Ameren Corporation	AEE	\$42.21	808.9	5.85%	8.00.9	4.56%	6.80%	5.65%	65.00%	55.00%	67.30%	\$0.00	10.17%	15.73	2.78	
American Electric Power Company, Inc.	AEP	\$57.48	4.90%	2.08%	2.00%	4.07%	5.08%	5.65%	65.00%	64.00%	67.30%	\$0.00	9.89%	16.79	2.97	
Avista Corporation	AVA	\$33.86	¥	2.00%	7.00%	3.80%	7.00%	5.65%	67.00%	64.00%	67.30%	\$0.00	10.13%	15.86	2.81	
Black Hills Corporation	BKI	\$50.52	¥	7.00%	4.50%	4.02%	7.00%	5.65%	57.00%	59.00%	67.30%	\$0.00	10.25%	15.45	2.73	
CenterPoint Energy, Inc.	CNP	\$21.96	5.70%	1.91%	1.00%	3.19%	5.70%	5.65%	93.00%	80.00%	67.30%	\$0.00	11.00%	13.30	2.35	
CMS Energy Corporation	CMS	\$34.05	6.20%	6.73%	2.50%	5.27%	6.73%	5.65%	61.00%	62.00%	67.30%	\$0.00	9.75%	17.35	3.07	
Consolidated Edison, Inc.		\$62.87	2.70%	2.38%	3.00%	3.15%	3.15%	5.65%	65.00%	63.00%	67.30%	\$0.00	9.34%	19.27	3.41	
Dominion Resources, Inc.	Δ	\$72.44	6.30%	2.89%	8.00%	%00'9	8.00%	5.65%	72.00%	72.00%	67.30%	\$0.00	9.43%	18.81	3.33	
DTE Energy Company	DTE	\$81.72	2.00%	4.51%	2.00%	4.88%	2.00%	5.65%	62.00%	%00.09	67.30%	\$0.00	10.12%	15.92	2.82	
Duke Energy Corporation	Š	\$79.36	4.70%	4.49%	2.00%	2.67%	2.00%	5.65%	72.00%	%00.99	67.30%	\$0.00	9.47%	18.64	3.30	
Empire District Electric Company	EDE	\$26.21	2.00%	2.00%	3.00%	3.25%	2.00%	2.65%	76.00%	%00.69	67.30%	\$0.00	10.06%	16.14	2.86	
Eversource Energy	S	\$50.51	8.80%	%09'9	8.50%	4.50%	8.50%	5.65%	29.00%	26.00%	67.30%	\$0.00	10.15%	15.81	2.80	
FirstEnergy Corp.	빞	\$36.48	¥	¥	7.00%	4.09%	7.00%	5.65%	58.00%	54.00%	67.30%	\$0.00	7.54%	37.61	99'9	
Great Plains Energy Inc.	GXP	\$26.74	%00.9	6.37%	2.00%	3.02%	6.37%	5.65%	70.00%	61.00%	67.30%	\$0.00	10.29%	15,32	2.71	
DACORP, Inc.	ΙDΑ	\$62.00	4.00%	4.00%	1.00%	3.51%	4.00%	5.65%	49.00%	28.00%	67.30%	\$0.00	9.73%	17.45	3.09	
VorthWestern Corporation	NWE	\$53.21	2.00%	2.00%	6.50%	3.90%	6.50%	2.65%	26.00%	%00'69	67.30%	\$0.00	8.62%	23.96	4.24	
OGE Energy Corp.	OGE	\$33.59	2.00%	4.00%	3.00%	3.68%	2.00%	2.65%	86.00%	29.00%	67.30%	\$0.00	9.03%	21.05	3.72	
Otter Tail Corporation	OTTR	\$30.14	ž	%00'9	9.00%	7.25%	%00.6	2.65%	70.00%	26.00%	67.30%	\$0.00	14.83%	7,75	1.37	
Pinnacle West Capital Corporation	PNW	\$63.34	4.60%	5.30%	4.00%	4.52%	5.30%	2.65%	63.00%	64.00%	67.30%	\$0.00	9.82%	17.07	3.02	
Portland General Electric Company	POR	\$36.46	5.20%	4.72%	%00'9	4.04%	%00'9	2.65%	20.00%	26.00%	67.30%	\$0.00	10.09%	16.01	2.83	
SCANA Corporation	SCG	\$55.87	4.20%	4.30%	4.50%	5.13%	5.13%	2.65%	57.00%	26.00%	. %08.79	\$0.00	10.46%	14.79	2.62	
Southern Company	SO	\$46.21	3.50%	3.32%	4.50%	4.40%	4.50%	2.65%	76.00%	71.00%	67.30%	\$0.00	10.00%	16.36	2.90	
TECO Energy, Inc.	프	\$19.49	7.10%	9.20%	%00'9	3.60%	9.20%	5.65%	83.00%	72.00%	67.30%	\$0.00	10.44%	14.85	2.63	
Westar Energy, Inc.	X R	\$38.47	3.50%	3.40%	%00.9	5.25%	%00.9	2.65%	61.00%	25.00%	67.30%	\$0.00	10.24%	15.49	2.74	
Xcel Energy Inc.	XEL	\$34.44	2.00%	4.58%	4.50%	3.95%	5.00%	5.65%	63.00%	64.00%	67.30%	\$0.00	9.91%	16.68	2.95	
													10.03%			
												Max	14.83%			
												Ξ	7.54%			

3						ධ L	JU EPS Gro	nign erb Growin Kate Estimate in First Stage (with Sustainable Growin)	amate in Fire	st Stage (w	ATT SUSTA	nable G	owth)						
4	Projected Annual																		
2	Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[36]	[27]	[28]	[59]	[30]	[31]
9	Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023				2027	2028	2029	2030
7	ALLETE, Inc.	ALE	\$2.90	\$3.09	\$3.29	\$3.50	\$3.73	\$3.97	\$4.23	\$4.49	\$4.76	\$5.04				\$6.29	\$6.65	\$7.02	\$7.42
æ	Alliant Energy Corporation	Ę	\$3.48	\$3.69	\$3.91	\$4.14	\$4.39	\$4.66	\$4.93	\$5.22	\$5.53	\$5.85				\$7.29	\$7.70	\$8.14	\$8.60
თ	Ameren Corporation	AEE	\$2.40	\$2.56	\$2.74	\$2.92	\$3.12	\$3.33	\$3.56	\$3.78	\$4.02	\$4.26				\$5.32	\$5.62	\$5.94	\$6.27
10	American Electric Power Company, Inc.	AEP	\$3.34	\$3.51	\$3.69	\$3.88	\$4.07	\$4.28	\$4.50	\$4.74	\$4.99	\$5.26	\$5.56	\$5.87	\$6.20	\$6.55	\$6.92	\$7.32	\$7.73
7	Avista Corporation	AVA	\$1.84	\$1.97	\$2.11	\$2.25	\$2.41	\$2.58	\$2.76	\$2.94	\$3.12	\$3,31				\$4.14	\$4.37	\$4.62	\$4.88
12	Black Hills Corporation	BKH	\$2.89	\$3.09	\$3.31	\$3.54	\$3.79	\$4.05	\$4.33	\$4.61	\$4.90	\$5.20				\$6.50	\$6.86	\$7.25	\$7.66
13	CenterPoint Energy, Inc.	CNP	\$1.42	\$1.50	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98	\$2.09	\$2.21	\$2.34				\$2.91	\$3.08	\$3.25	\$3.43
4	CMS Energy Corporation	CMS	\$1.74	\$1.86	\$1.98	\$2.12	\$2.26	\$2.41	\$2.57	\$2.73	\$2.90	\$3.07				\$3.84	\$4.05	\$4.28	\$4.53
15			\$3.62	\$3.73	\$3.85	\$3.97	\$4.10	\$4.23	\$4.38	\$4.55	\$4.75	\$4.98				\$6.18	\$6.53	\$6.90	\$7.29
16	Dominion Resources, Inc.	Δ	\$3.05	\$3.29	\$3.56	\$3.84	\$4.15	\$4.48	\$4.82	\$5.17	\$5.52	\$5.88				\$7.35	\$7.77	\$8.21	\$8.67
17	DTE Energy Company	DTE	\$5,10	\$5.36	\$5.62	\$5.90	\$6.20	\$6.51	\$6.84	\$7.20	\$7.58	\$7.99				\$9.95	\$10.51	\$11.11	\$11.73
18	Duke Energy Corporation	Š	\$4.13	\$4.34	\$4.55	\$4.78	\$5.02	\$5.27	\$5.54	\$5.83	\$6.14	\$6.47				\$8.06	\$8.51	\$8.99	\$9.50
19	Empire District Electric Company	EDE	\$1.55	\$1.63	\$1.71	\$1.79	\$1.88	\$1.98	\$2.08	\$2.19	\$2.30	\$2.43				\$3.02	\$3.19	\$3.38	\$3.57
20	Eversource Energy	S	\$2.58	\$2.80	\$3.04	\$3.30	\$3.58	\$3.88	\$4.19	\$4.51	\$4.83	\$5.14				\$6.44	\$6.80	\$7.19	\$7.59
2	FirstEnergy Corp.	Ш	\$0.85	\$0.91	\$0.97	\$1.04	\$1.11	\$1.19	\$1.27	\$1.36	\$1.44	\$1.53				\$1.91	\$2.02	\$2.13	\$2.25
22	Great Plains Energy Inc.	GXP	\$1.57	\$1.67	\$1.78	\$1.89	\$2.01	\$2.14	\$2.27	\$2.41	\$2.56	\$2.71				\$3.38	\$3.57	\$3.77	\$3.98
23	IDACORP, Inc.	ΙDΑ	\$3.85	\$4.00	\$4.16	\$4.33	\$4.50	\$4.68	\$4.88	\$5.11	\$5.35	\$5.63				\$6.99	\$7.39	\$7.80	\$8.25
24	NorthWestern Corporation	NWE	\$1.98	\$2.11	\$2.25	\$2.39	\$2.55	\$2.71	\$2.89	\$3.06	\$3.25	\$3.44				\$4.30	\$4.54	\$4.80	\$5.07
25	OGE Energy Corp.	OGE	\$1.55	\$1.63	\$1.71	\$1.79	\$1.88	\$1.98	\$2.08	\$2.19	\$2.30	\$2.43				\$3.02	\$3.19	\$3,38	\$3.57
56	Otter Tail Corporation	OTTR	\$3.06	\$3.34	\$3.64	\$3.96	\$4.32	\$4.71	\$5.11	\$5.51	\$5.91	\$6.31				\$7.91	\$8.35	\$8.82	\$9.32
27	Pinnacle West Capital Corporation	ΜM	\$3.58	\$3.77	\$3.97	\$4.18	\$4.40	\$4.63	\$4.88	\$5.15	\$5.43	\$5.73				\$7.14	\$7.54	\$7.96	\$8.42
28	Portland General Electric Company	PoR	\$2.18	\$2.31	\$2.45	\$2.60	\$2.75	\$2.92	\$3.09	\$3.27	\$3.46	\$3,66				\$4.57	\$4.82	\$5.10	\$5.39
29	SCANA Corporation	SCG	\$3.79	\$3.98	\$4.19	\$4.40	\$4.63	\$4.87	\$5.12	\$5.39	\$5.68	\$5.99				\$7.46	\$7.88	\$8.33	\$8.80
ဗ္ဂ	Southern Company	SO	\$2,77	\$2.89	\$3.02	\$3.16	\$3.30	\$3.45	\$3.61	\$3.79	\$3.98	\$4.19				\$5.21	\$5.51	\$5.82	\$6.15
33	TECO Energy, Inc.	世	\$0.95	\$1.04	\$1.13	\$1.24	\$1.35	\$1.48	\$1.60	\$1.73	\$1.86	\$1.99				\$2.49	\$2.63	\$2.78	\$2.93
32	Westar Energy, Inc.	×	\$2.35	\$2.49	\$2.64	\$2.80	\$2.97	\$3.14	\$3.33	\$3.53	\$3.73	\$3.95				\$4.92	\$5.20	\$5.49	\$5.81
8	Xcel Energy Inc.	Ä	\$2.03	\$2.13	\$2.24	\$2.35	\$2.47	\$2.59	\$2.72	\$2.87	\$3.02	\$3.18				\$3.96	\$4.18	\$4.42	\$4.67

67.30% [47] 67.30% [46] 67.30% [45] 67.30% 2027 [44] 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% [43] 67.30% 67.30% 67.30% 67.30% 61.65% 63.54% 65.42% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 66.75% 67.30% 65.42% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% 67.30% [42] 66.75% 65.92% 65.42% 65.25% 66.75% 66.42% %60.89 %60.99 67.09% 65.42% %65'99 %69.99 67.59% 66.25% 69.42% 67.59% 65.09% 66.25% 65.75% 65.92% 66.75% [41] High EPS Growth Rate Estimate in First Stage (with Sustainable Growth) 66.20% 66.20% 62.87% 65.20% 63.54% 63.54% 66.20% 63.54% 64.54% 71.54% 65.54% 65.87% 68.87% 64.87% 67.87% 64.54% 68.87% 63.20% 66.87% 67.87% 65.20% 65.87% 64.20% 66.20% [40] 65.65% 65.15% 61.65% 65.65% 65.15% 61.15% 63.15% 64.65% 69.65% 61.65% 60.65% 68.15% 63.15% 65.65% 64.15% 65.65% 73.65% 63.65% 66.65% 68.15% 64.15% 62.65% [39] 65.10% 59.10% 65.10% 65.10% 64.43% 63.77% 64.43% 70.43% 62.43% 66.43% 68.43% 59.77% 61.10% 68.43% 59.77% 69.77% 70.43% 61.77% 75.77% 58.43% 63.10% 59.77% 63.10% 61.77% 59.77% 59.10% 65.10% [38] 2021 62.05% 63.72% 57.05% 64.55% 64.55% 60.38% 77.88% 62.05% 59.55% 60.38% 57.88% 64.55% 62.88% 63.72% 71.22% 66.22% 68.72% 57.88% 56.22% 68.72% 57.88% 70.38% 64.55% 61.22% 57.88% [37] 55.00% 64.00% 64.00% 59.00% 62.00% 63.00% 60.00% 54.00% 61.00% 58.00% 64.00% 59.00% 71.00% 61.00% 63.00% %00.99 %00.69 56.00% 69.00% 56.00% 56.00% 55.00% 64.00% [36] 57.50% 64.25% 64.75% 58.50% 61.75% 63.50% 72.00% 55.00% 63.25% 55.75% 72.25% 74.75% 56.50% 62.25% 62.50% 83.25% 60.50% 67.50% 70.75% 56.75% 65.75% 65.75% 59.50% 54.50% 56.25% 63.75% [32] 63.50% 62.00% 64.50% 65.50% 58.00% 64.00% 72.00% 61.00% 72.50% 65.50% 53.50% 62.50% 72.50% 53.00% 56.50% 60.00% 86.50% 61.50% 57.50% 56.00% 63.00% 73.50% 77.50% 58.00% 63.50% 69.00% 63.50% 2017 [34] 64.75% 61.50% 62.50% 64.75% 66.25% 57.50% 61.25% 64.50% 72.00% 74.25% 58.25% 57.00% 67.75% 51.25% 59.25% 79.25% 66.50% 63.25% 51.50% 56.75% 74.75% 80.25% 89.75% 61.50% 70.50% 59.50% 63.25% [33] 93.00% 61.00% 65.00% 72.00% 62.00% 76.00% 58.00% 70.00% 49.00% 70.00% 66.00% 61.00% 65.00% 65.00% 67.00% 57.00% 72.00% 59.00% 56.00% 86.00% 50.00% 57.00% 76.00% 83.00% 61.00% 63.00% American Electric Power Company, Inc. Portland General Electric Company Pinnacle West Capital Corporation Empire District Electric Company Alliant Energy Corporation NorthWestern Corporation Dominion Resources, Inc. **Duke Energy Corporation** CMS Energy Corporation Consolidated Edison, Inc. CenterPoint Energy, Inc. Great Plains Energy Inc. Black Hills Corporation DTE Energy Company Dividend Payout Ratio Otter Tail Corporation Ameren Corporation SCANA Corporation Westar Energy, Inc. Eversource Energy Southern Company Avista Corporation OGE Energy Corp. TECO Energy, Inc. FirstEnergy Corp. Projected Annual Xcel Energy Inc. IDACORP, Inc. ALLETE, Inc. Company 4 6

Multi-Stage Growth Discounted Cash Flow Model 180 Day Average Stock Price High EPS Growth Rate Estimate in First Stage (with Sustainable Growth)

4 Projected Annual 5 Cash Flows		[48]	[49]	[20]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[29]	[09]	[61]	[62]	[63]	[64]
	-															The state of the s		Terminal
6 Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		2026	2027	2028	2029	2030	Value
7 ALLETE, Inc.	ALE	\$2.04	\$2.13	\$2.22	\$2.32	\$2.42	\$2.62	\$2.83	\$3.05	\$3.29	\$3.54			\$4.24	\$4.47	\$4.73	\$4.99	\$119.69
8 Alliant Energy Corporation	LN-	\$2.25	\$2.40	\$2.57	\$2.75	\$2.93	\$3.14	\$3.37	\$3.60	\$3.85	54.12			\$4.91	\$5.18	\$5.48	\$5.79	\$143.76
9 Ameren Corporation	AEE	\$1.67	\$1.71	\$1.75	\$1.80	\$1.83	\$2.03	\$2.24	\$2.46	\$2.69	\$2.94			\$3.58	\$3.78	\$4.00	\$4.22	\$98.67
10 American Electric Power Company, Inc.	AEP	\$2.28	\$2.39	\$2.50	\$2.62	\$2.74	\$2.91	\$3.08	\$3.28	\$3.49	3.71		_	\$4.41	\$4.66	\$4.92	\$5.20	\$129.78
11 Avista Corporation	AVA	\$1.32	\$1.40	\$1.48	\$1.56	\$1.65	\$1.78	\$1.91	\$2.05	\$2.19	\$2.34	\$2.49	\$2.63	\$2.78	\$2.94	\$3.11	\$3.28	\$77.36
12 Black Hills Corporation	ВКН	\$1.76	\$1.90	\$2.05	\$2.22	\$2.39	\$2.61	\$2.85	\$3.10	\$3.36	\$3.63			\$4.37	\$4.62	\$4.88	\$5.16	\$118.35
13 CenterPoint Energy, Inc.	CNP	\$1.40	\$1.42	\$1.45	\$1.48	\$1.50	\$1.54	\$1.59	\$1.63	\$1.67	\$1.71			\$1.96	\$2.07	\$2.19	\$2.31	\$45.69
14 CMS Energy Corporation	CMS	\$1.13	\$1.21	\$1.30	\$1.39	\$1.49	\$1.61	\$1.74	\$1.88	\$2.01	\$2.16			\$2.58	\$2.73	\$2.88	\$3.05	\$78.54
15 Consolidated Edison, Inc.	ED	\$2.43	\$2,48	\$2,54	\$2.60	\$2.66	\$2.79	\$2.93	\$3.10	\$3.28	33.49		_	\$4.16	\$4.40	\$4.65	\$4.91	\$140.54
16 Dominion Resources, Inc.	0	\$2.37	\$2.56	\$2.77	\$2.99	\$3.23	\$3.43	\$3.64	\$3.85	\$4.05	\$4.24			\$4.95	\$5.23	\$5.52	\$5.84	\$163.11
17 DTE Energy Company	DTE	\$3.32	\$3.46	\$3.60	\$3.75	\$3.91	\$4.19	\$4.49	\$4.83	\$5.19	\$5.58			\$6.70	\$7.08	\$7.48	\$7.90	\$186.85
18 Duke Energy Corporation	PUK	\$3.12	\$3.21	\$3.30	\$3.39	\$3.48	\$3.67	\$3.87	\$4.09	\$4.33	14.58		_	\$5.42	\$5.73	\$6.05	\$6.40	\$177.08
19 Empire District Electric Company	EDE	\$1.24	\$1.27	\$1.30	\$1.33	\$1.36	\$1.43	\$1.50	\$1.57	\$1.65	1.73			\$2.04	\$2.15	\$2.27	\$2.40	\$57.57
20 Eversource Energy	ES	\$1.65	\$1.77	\$1.89	\$2.03	\$2.17	\$2.43	\$2.69	\$2.98	\$3.27	3.57			\$4.33	\$4.58	\$4.84	\$5.11	\$120.06
21 FirstEnergy Corp.	밀	\$0.53	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87	\$0.96	\$1.05		-	\$1.29	\$1.36	\$1.44	\$1.52	\$84.75
22 Great Plains Energy Inc.	eX OX OX	\$1.17	\$1.20	\$1.24	\$1.27	\$1.30	\$1.41	\$1.52	\$1.64	\$1.76	\$1.90			\$2.27	\$2.40	\$2.54	\$2.68	\$60.98
23 IDACORP, Inc.	IDA	\$1.96	\$2.13	\$2.32	\$2.51	\$2.72	\$2.91	\$3.12	\$3.35	\$3.61	3.90			\$4.71	\$4.97	\$5.25	\$5.55	\$143.87
24 NorthWestern Corporation	NWE	\$1.18	\$1.33	\$1.49	\$1.67	\$1.87	\$1.98	\$2.10	\$2.22	\$2.34	\$2.46			\$2.89	\$3.06	\$3.23	\$3.41	\$121.40
25 OGE Energy Corp.	OGE	\$1.40	\$1.35	\$1.30	\$1.24	\$1.17	\$1.26	\$1.35	\$1.46	\$1.57	\$1.69		-	\$2.04	\$2.15	\$2.27	\$2.40	\$75.07
26 Otter Tail Corporation	OTTR	\$2.33	\$2.42	\$2.50	\$2.57	\$2.64	\$2.96	\$3.29	\$3.64	\$4.01	54.39			\$5.32	\$5.62	\$5.94	\$6.28	\$72.27
27 Pinnacle West Capital Corporation	PNW	\$2.37	\$2.51	\$2.65	\$2.81	\$2.97	\$3.15	\$3.35	\$3.56	\$3.79	54.04			\$4.80	\$5.07	\$5.36	\$5.66	\$143.62
28 Portland General Electric Company	POR	\$1.16	\$1.26	\$1.38	\$1.50	\$1.63	\$1.79	\$1.96	\$2.14	\$2.33	\$2.53		_	\$3.07	\$3.25	\$3.43	\$3.62	\$86.20
29 SCANA Corporation	SCG	\$2.27	\$2.38	\$2.49	\$2.60	\$2.73	\$2.96	\$3.22	\$3.50	\$3.81	54.14			\$5.02	\$5.31	\$5.61	\$5.92	\$130.18
30 Southern Company	SO	\$2.20	\$2.26	\$2.32	\$2,39	\$2.45	\$2.54	\$2.64	\$2.75	\$2.87	3.00 8			\$3.51	\$3.71	\$3.92	\$4.14	\$100.63
31 TECO Energy, Inc.	7E	\$0.86	\$0.91	\$0.96	\$1.01	\$1.06	\$1.14	\$1.22	\$1.29	\$1.37	1.44			\$1.67	\$1.77	\$1.87	\$1.98	\$43.58
32 Westar Energy, Inc.	WR	\$1.52	\$1.57	\$1.62	\$1.68	\$1.73	\$1.90	\$2.08	\$2.28	\$2.50	\$2.72			\$3.31	\$3.50	\$3.70	\$3.91	\$89.90
33 Xcel Energy Inc.	Ä	\$1.34	\$1.42	\$1.49	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98	\$2.11	\$2.24		\$2.52	\$2.67	\$2.82	\$2.98	\$3.14	\$77.91

\$102.89 \$134.98 \$80.65 \$123.51 \$48.00 \$48.00 \$145.45 \$168.95 \$183.47 \$183.47 \$183.47 \$183.47 \$183.47 \$183.47 \$183.47 \$184.44 \$184.47 \$ \$149.55 \$124.82 \$77.47 \$78.55 \$149.28 6/30/30 \$136.11 \$104.77 \$45.56 \$93.80 \$81.05 \$89.82 [82] \$ 5.4.73 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.4.00 \$ 5.5.00 \$ 5 [81] 6/30/28 \$5.18 \$4.66 \$4.66 \$5.29 \$4.62 \$4.02 \$5.07 \$3.06 \$2.15 \$5.62 \$5.07 \$3.25 \$5.31 \$3.71 \$1.77 \$3.50 \$2.82 [80] \$3.58 \$4.41 \$2.78 \$4.37 \$4.37 \$5.70 \$5.70 \$5.42 \$5.42 \$6.70 \$5.27 \$4.33 \$4.33 \$4.33 \$4.29 \$5.27 \$2.89 \$5.32 \$4.80 \$3.07 \$5.02 \$3.51 \$1.67 \$3.31 [79] 6/30/26 \$4.01 \$4.64 \$3.39 \$4.17 \$2.63 \$4.14 \$1.85 \$2.44 \$3.94 \$3.94 \$3.94 \$4.10 \$1.22 \$2.15 \$4.45 \$2.74 \$1.93 \$5.04 \$4.55 \$1.93 [48] \$3.79 \$4.40 \$3.21 \$3.95 \$2.49 \$3.92 \$2.31 \$6.00 \$1.82 \$3.88 \$1.15 \$2.04 \$4.22 \$2.59 \$1.82 \$4.77 \$4.30 \$4.43 \$4.50 [77] \$2.16 \$5.24 \$4.24 \$5.58 \$4.58 \$1.73 \$1.05 \$1.05 \$1.05 \$1.05 \$1.69 \$2.46 \$1.69 \$2.46 \$1.69 \$2.54 \$1.69 \$2.54 \$1.69 \$2.54 \$2.54 \$2.55 \$2.54 \$3.54 \$4.12 \$2.94 \$3.71 \$2.34 \$3.63 \$1.71 \$4.14 [9/] \$3.85 \$2.69 \$3.49 \$2.19 \$3.36 \$2.01 \$3.28 \$4.05 \$3.27 \$0.96 \$1.76 \$3.61 \$2.34 \$1.57 \$4.01 \$5.19 \$4.33 \$1.65 \$3.79 \$1.67 \$2.87 [75] \$3.81 High EPS Growth Rate Estimate in First Stage (with Sustainable Growth) 5/30/22 \$3.05 \$2.46 \$3.28 \$2.05 \$3.28 \$3.10 \$3.10 \$3.10 \$3.30 \$4.83 \$5.83 \$4.83 \$4.83 \$4.83 \$4.83 \$4.83 \$4.83 \$4.83 \$4.83 \$4.83 \$4.83 \$3.50 \$2.75 \$1.29 \$2.28 \$1.98 [74] \$2.24 \$3.08 \$1.91 \$2.85 \$1.59 \$1.74 \$2.69 \$0.79 \$1.52 \$3.12 \$2.93 \$3.64 \$4.49 \$1,50 \$2.10 \$1.35 \$3.29 \$3.35 \$3.87 \$3.22 [73] \$3.14 \$2.03 \$2.03 \$1.78 \$2.61 \$1.54 \$1.61 \$2.79 \$3.43 \$3.43 \$2.43 \$0.72 \$1.41 \$2.91 \$1.43 \$1.98 \$1.26 \$2.96 \$3.15 [72] \$2.42 \$1.83 \$1.83 \$2.74 \$1.65 \$1.65 \$1.49 \$1.49 \$2.66 \$2.66 \$2.66 \$3.31 \$3.33 \$2.17 \$0.64 \$1.30 \$2.72 \$2.64 \$2.97 \$1.63 \$2.73 \$2.45 \$1.06 \$1.73 \$1.66 \$1.87 [71] \$2.32 \$2.75 \$1.80 \$1.80 \$1.56 \$1.22 \$1.39 \$2.99 \$2.99 \$1.33 \$2.99 \$2.99 \$1.33 \$2.99 \$2.99 \$1.33 \$2.99 \$2.99 \$1.39 \$2.99 \$2.90 \$1.39 \$2.90 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$2.00 \$1.67 \$1.24 \$2.57 \$2.81 \$1.50 \$2.60 \$2.39 \$1.01 \$1.68 [0] \$1.30 \$2.54 \$2.77 \$3.60 \$3.30 \$1.30 \$1.89 \$0.58 \$1.24 \$2.32 \$1.49 \$1.30 \$2.50 \$2.50 \$2.65 \$1.38 [69] \$2.10 \$2.32 \$1.72 \$2.34 \$1.37 \$1.82 \$1.44 \$2.47 \$2.47 \$3.40 \$1.27 \$1.27 \$1.27 \$1.27 \$1.21 \$2.00 \$2.00 \$1.43 \$2.44 \$1.19 \$2.33 \$2.25 \$0.90 \$1.57 \$1.38 [68] \$1.77 \$5.08 \$6.08 \$6.08 \$7.08 \$7.08 \$7.12 [67] \$0.00 [99] (\$52.15) (\$62.78) (\$42.21) (\$57.48) (\$53.86) (\$50.52) (\$21.96) (\$50.51)(\$36.48) (\$26.74) (\$62.00) (\$53.21)(\$34.05)(\$62.87) (\$81.72) (\$2.67\$)(\$26.21)(\$33.59) (\$30.14) (\$63.34) (\$55.87)(\$46.21)(\$19.48)(\$38.47) Outflow (\$72.44)(\$36.46) [65] American Electric Power Company, Inc. Portland General Electric Company Pinnacle West Capital Corporation Empire District Electric Company NorthWestern Corporation Alliant Energy Corporation Dominion Resources, Inc. DTE Energy Company Duke Energy Corporation Consolidated Edison, Inc. CMS Energy Corporation CenterPoint Energy, Inc. Great Plains Energy Inc. Black Hills Corporation Projected Annual Data Otter Tail Corporation Investor Cash Flows Ameren Corporation SCANA Corporation Westar Energy, Inc. Eversource Energy Southern Company TECO Energy, Inc. Avista Corporation OGE Energy Corp. FirstEnergy Corp. Xcel Energy Inc. IDACORP, Inc. ALLETE, Inc.

Multi-Stage Growth Discounted Cash Flow Model 180 Day Average Stock Price Low EPS Growth Rate Estimate in First Stage (with Sustainable Growth)

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First Call Line Growth Growt	Line Growth Growth Growth 2015 2019 2025 Proof IRR Ratio E50% 3.97% 3.97% 5.65% E6.00% E1.00% E7.30% so.oo 9.40% 18.96 E0.00% E7.30% so.oo 9.40% 17.49 E6.00% E7.30% so.oo 9.40% 17.93 17.93 2.00% E7.30% so.oo 9.40% 17.93 17.93 17.93 2.00% E7.30% so.oo 9.40% 18.67 1.00% 2.38% E7.20% E7.30% E7.30% so.oo 9.40% 18.67 1.00% E7.20% E7.30%
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4 Projected Annual	ual		1481	[49]	[50]	[54]	[52]	[53]	[54]	!?	r G	1571	1581	102	109	<u>.</u>	1631	183	16.41
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6 Company		Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024			2027	2028	2029	2030	Value
7 ALLETE, Inc.		ALE	\$1.99	\$2.03	\$2.07	\$2.11	\$2.15	\$2.28	\$2.42	\$2.58	\$2.76	\$2.95			\$3.54	\$3.74	\$3.95	\$4.17	\$117.59
8 Alliant Energy Corporation	Corporation	LN LN	\$2.24	\$2.37	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22	\$3.44	\$3.67	\$3.92			\$4.67	\$4.93	\$5.21		\$143.06
9 Ameren Corporation	ration	AEE	\$1.63	\$1.64	\$1.65	\$1.65	\$1.65	\$1.79	\$1.95	\$2.12	\$2.31	\$2.51	\$2.74		\$3.05	\$3.23	\$3.41		\$96,96
10 American Elec	American Electric Power Company, Inc.	AEP	\$2.26	\$2.34	\$2.43	\$2.52	\$2.61	\$2.75	\$2.90	\$3.06	\$3.25	\$3.45			\$4.10	\$4.34	\$4.58		\$128.91
11 Avista Corporation	ation	AVA	\$1.28	\$1.31	\$1,35	\$1.38	\$1.42	\$1.49	\$1.57	\$1.66	\$1.75	\$1.86	_		\$2.22	\$2.34	\$2.47		\$75.73
12 Black Hills Corporation	rporation	BKH	\$1.71	\$1.80	\$1.89	\$1.98	\$2.08	\$2.22	\$2.37	\$2.54	\$2.73	\$2.94		\$3.35	\$3.54	\$3.74	\$3.95	\$4.17	\$115.72
13 CenterPoint Energy, Inc.	nergy, Inc.	SNP	\$1.33	\$1.30	\$1.27	\$1.23	\$1,19	\$1.18	\$1.18	\$1.19	\$1.20				\$1.39	\$1.47	\$1.56		\$44.64
14 CMS Energy Corporation	Sorporation	CMS	\$1.12	\$1.18	\$1.25	\$1.32	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82		\$2.09		\$2.33	\$2.46	\$2.60		\$77.76
15 Consolidated Edison, Inc	Edison, Inc.		\$2.41	\$2.45	\$2.49	\$2.53	\$2.57	\$2.67	\$2.79	\$2.94	\$3.11				\$3.93	\$4.16	\$4.39		\$139.92
16 Dominion Resources, Inc.	ources, Inc.	Δ	\$2.33	\$2.46	\$2.61	\$2.76	\$2.92	\$3.06	\$3.20	\$3.35	\$3.50				\$4.27	\$4.51	\$4.76		\$161.28
17 DTE Energy Company	ompany	ᆵ	\$3.30	\$3.43	\$3.55	\$3.68	\$3.82	\$4.08	\$4.36	\$4.67	\$5.01				\$6.47	\$6.83	\$7.22		\$186.16
18 Duke Energy Corporation	Sorporation	S	\$3.05	\$3.07	\$3.08	\$3.10	\$3.11	\$3.22	\$3.35	\$3.50	\$3.67		*		\$4.59	\$4.84	\$5.12		\$174.85
19 Empire District	Empire District Electric Company	EDE	\$1.21	\$1.22	\$1.23	\$1.23	\$1.24	\$1.28	\$1.32	\$1.37	\$1.43				\$1.76	\$1.86	\$1.97		\$56.89
20 Eversource Energy	nergy	S	\$1.59	\$1.64	\$1.69	\$1.75	\$1.80	\$1.95	\$2.11	\$2.29	\$2.48				\$3.27	\$3.45	\$3.65		\$116.50
21 FirstEnergy Corp.	orp.	出	\$0.51	\$0.52	\$0.54	\$0.55	\$0.56	\$0.61	\$0.66	\$0.72	\$0.79				\$1.05	\$1.10	\$1.17		\$83.87
22 Great Plains Energy Inc.	nergy Inc.	GXP	\$1.13	\$1.13	\$1.12	\$1.12	\$1.11	\$1.17	\$1.24	\$1.31	\$1.40	\$1,49	\$1.60		\$1.79	\$1.89	\$1.99		\$59.57
23 IDACORP, Inc.		Δ	\$1.91	\$2.01	\$2.12	\$2.23	\$2.35	\$2.45	\$2.58	\$2.73	\$2.92				\$3.78	\$4.00	\$4.22		\$141.01
24 NorthWestern Corporation	Corporation	NWE	\$1,15	\$1.27	\$1.39	\$1.52	\$1.65	\$1.72	\$1.79	\$1.86	\$1,95				\$2.40	\$2.54	\$2.68		\$120.01
25 OGE Energy Corp.	orp.	OGE	\$1.37	\$1.30	\$1.23	\$1.15	\$1.06	\$1.12	\$1.19	\$1.27	\$1.36				\$1.76	\$1.86	\$1.97		\$74.29
26 Otter Tail Corporation	oration	OTTR	\$2.27	\$2.29	\$2.30	\$2.30	\$2.29	\$2.51	\$2.75	\$3.00	\$3.27				\$4.31	\$4.56	\$4.82		\$69,39
27 Pinnacle West	Pinnacle West Capital Corporation	PNW	\$2.35	\$2.45	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09	\$3.27	\$3.46				\$4.38	\$4.62	\$4.88		\$142.40
28 Portland Gene	Portland General Electric Company	POR	\$1.13	\$1.22	\$1.30	\$1.39	\$1.49	\$1.60	\$1.73	\$1.87	\$2.03				\$2.67	\$2.82	\$2.98		\$84.88
29 SCANA Corporation	ration	SCG	\$2.25	\$2.34	\$2.42	\$2.51	\$2.61	\$2.81	\$3.04	\$3.29	\$3.57	\$3.87			\$4.70	\$4.97	\$5.25		\$129.16
30 Southern Company	pany	SO	\$2.18	\$2.21	\$2.25	\$2.28	\$2.32	\$2.38	\$2.46	\$2.54	\$2.64				\$3.22	\$3.41	\$3.60		\$99.95
31 TECO Energy, Inc.	Inc.	끧	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82	\$0.84	\$0.87	\$0.90	\$0.93	\$0.97			\$1.13	\$1.19	\$1.26		\$42.20
	/, Inc.	Μĸ	\$1.48	\$1.49	\$1.51	\$1.52	\$1.53	\$1.64	\$1.77	\$1.92	\$2.08				\$2.75	\$2.91	\$3.07		\$88.09
33 Xcel Energy Inc.	Ç.	XEL	\$1.33	\$1.39	\$1.45	\$1.51	\$1.58	\$1.66	\$1.75	\$1.85	\$1.96				\$2.47	\$2.61	\$2.76		\$77.36

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4 Projected Annual Data 5 Investor Cash Flows		[65]	[99]	[67]	[88]	[69]	[02]	[71]	[72]	[73]	[74]	[75]	[192]	127	[78]	1821	[80]	[81]	[82]
		Initial																	
6 Company	Ticker	Outflow	6/25/15	12/31/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22 6	6/30/23 6/	6/30/24 6/	6/30/25 6/3	3/30/26 6/	6/30/27	5/30/28	6/30/59	08/08/9
7 ALLETE, Inc.	ALE	(\$52.15)	\$0.00	\$1.03	\$2.03	\$2.07	\$2.11	\$2.15	\$2.28	\$2.42	_	١.	ľ		\$3.35	3.54	\$3.74	\$3.95	121.76
8 Alliant Energy Corporation	LN	(\$62.78)	\$0.00	\$1.16	\$2.29	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22			•				\$4.93	\$5.21	148.56
9 Ameren Corporation	AEE	(\$42.21)	\$0.00	\$0.84	\$1.67	\$1.65	\$1.65	\$1.65	\$1.79	\$1.95			•	\$2.74 \$2			\$3.23		\$100.56
10 American Electric Power Company, Inc.	. AEP	(\$57.48)	\$0.00	\$1.17	\$2.31	\$2.43	\$2.52	\$2.61	\$2.75	\$2.90	\$3.06	\$3.25	\$3.45 \$		\$3.88	\$4.10	\$4.34	\$4.58	\$133.75
11 Avista Corporation	AVA	(\$33.86)	\$0.00	\$0.66	\$1.30	\$1.35	\$1.38	\$1.42	\$1.49	\$1.57				_			\$2.34		\$78.34
12 Black Hills Corporation	BKH	(\$50.52)	\$0.00	\$0.89	\$1.75	\$1.89	\$1.98	\$2.08	\$2.22	\$2.37							\$3.74		119.89
13 CenterPoint Energy, Inc.	CNP	(\$21.96)	\$0.00	\$0.69	\$1.34	\$1.27	\$1.23	\$1.19	\$1.18	\$1.18							\$1.47		\$46.29
14 CMS Energy Corporation	CMS	(\$34.05)	\$0.00	\$0.58	\$1.15	\$1.25	\$1.32	\$1.39	\$1.49	\$1.59							\$2.46		\$80.50
15 Consolidated Edison, Inc.		(\$62.87)	\$0.00	\$1.25	\$2.44	\$2.49	\$2.53	\$2.57	\$2.67	\$2.79	\$2.94	\$3.11		\$3.52			\$4.16		144.56
16 Dominion Resources, Inc.	۵	(\$72.44)	\$0.00	\$1.20	\$2.39	\$2.61	\$2.76	\$2.92	\$3.06	\$3.20							\$4.51		166.31
17 DTE Energy Company	DTE	(\$81.72)	\$0.00	\$1.71	\$3.38	\$3.55	\$3.68	\$3.82	\$4.08	\$4.36							\$6.83		193.78
18 Duke Energy Corporation	PQ.	(\$2.6.36)	\$0.00	\$1.58	\$3.09	\$3.08	\$3.10	\$3.11	\$3.22	\$3.35							\$4.84		180.26
19 Empire District Electric Company	EDE	(\$26.21)	\$0.00	\$0.63	\$1.23	\$1.23	\$1.23	\$1.24	\$1.28	\$1.32							\$1.86		\$58.97
20 Eversource Energy	ES	(\$50.51)	\$0.00	\$0.82	\$1.63	\$1.69	\$1.75	\$1.80	\$1.95	\$2.11							\$3.45		120.35
21 FirstEnergy Corp.	Щ	(\$36.48)	\$0.00	\$0.27	\$0.52	\$0.54	\$0.55	\$0.56	\$0.61	\$0.66							\$1.10		\$85.10
22 Great Plains Energy inc.	GXP	(\$26.74)	\$0.00	\$0.59	\$1.15	\$1.12	\$1.12	\$1.11	\$1.17	\$1.24	••						\$1.89		\$61.68
23 IDACORP, Inc.	ΔĀ	(\$62.00)	\$0.00	\$0.99	\$1,91	\$2.12	\$2.23	\$2.35	\$2.45	\$2.58							\$4.00		145.47
24 NorthWestern Corporation	NWE	(\$53.21)	\$0.00	\$0.60	\$1.17	\$1.39	\$1.52	\$1.65	\$1.72	\$1.79							\$2.54		122.84
25 OGE Energy Corp.	90 0	(\$33.59)	\$0.00	\$0,71	\$1.39	\$1.23	\$1.15	\$1.06	\$1.12	\$1,19							\$1.86		\$76.37
26 Otter Tail Corporation	OTTR	(\$30.14)	\$0.00	\$1.18	\$2.34	\$2.30	\$2.30	\$2.29	\$2.51	\$2.75							\$4.56		\$74.48
27 Pinnacle West Capital Corporation	PNV	(\$63.34)	\$0.00	\$1.21	\$2.39	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09							\$4.62		147.56
28 Portland General Electric Company	POR	(\$36.46)	\$0.00	\$0.59	\$1.16	\$1.30	\$1.39	\$1.49	\$1,60	\$1.73							\$2.82		\$88.03
29 SCANA Corporation	SCG	(\$55.87)	\$0.00	\$1.17	\$2.30	\$2.42	\$2.51	\$2.61	\$2.81	\$3.04	••						\$4.97		134.71
30 Southern Company	SO	(\$46.21)	\$0.00	\$1.13	\$2.21	\$2.25	\$2.28	\$2.32	\$2.38	\$2.46	••						\$3.41		103.75
31 TECO Energy, Inc.	世	(\$19.48)	\$0.00	\$0.42	\$0.83	\$0.82	\$0.82	\$0.82	\$0.84	\$0.87	\$0.90		0,				\$1.19		\$43.53
32 Westar Energy, Inc.	WR	(\$38.47)	\$0.00	\$0.77	\$1.51	\$1.51	\$1.52	\$1.53	\$1.64	\$1.77	\$1.92	2.08	0,	52.46 \$2			\$2.91		\$91.33
33 Xcel Energy Inc.	ΧĒ	(\$34.44)	\$0.00	\$0.69	\$1.36	\$1.45	\$1.51	\$1.58	\$1.66	\$1.75	\$1.85		0,				\$2.61		\$80.28

Multi-Stage Growth Discounted Cash Flow Model 360 Day Average Stock Price Average EPS Growth Rate Estimate in First Stage (with Sustainable Growth)

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ro			Stock		EPS Gro	wth Rate	EPS Growth Rate Estimates		Long-Term	P.	Payout Ratio	=	erative S	Iterative Solution Terminal	_	erminal
		i	:	ı	i	. מוכנ			;						۲ ۱ :	ን ተ ያ :
ဖ	Company	Ticker	Príce	Zacks	First Call	rine	Growth	Average	Growth	2015	2019	2025	Proof	RR	Ratio	Ratio
7	ALLETE, Inc.	ALE	\$50.73	¥	%00.9	6.50%	3.97%	5.49%	2.65%	%00'99	61.00% 6	67.30%	\$0.00	%06.6	16.73	2.96
œ	Alliant Energy Corporation	Ŗ	\$59.66	5.30%	5.45%	%00.9	2.66%	2.60%	2.65%	61.00%	63.00% 6	67.30%	\$0.00	10.01%	16.30	2.88
თ	Ameren Corporation	AEE	\$40.80	6.80%	5.85%	%00'9	4.56%	2.80%	2.65%	65.00%	55.00% 6	67.30%	\$0.00	10.05%	16.19	2.86
10	American Electric Power Company, Inc.	ĄEP	\$54.66	4.90%	2.08%	2.00%	4.07%	4.76%	5.65%	65.00%	64.00% 6	67.30%	\$0.00	10.02%	16.28	2.88
7	Avista Corporation	AVA	\$32.48	¥	2.00%	7.00%	3.80%	5.27%	2.65%	67.00%	64.00% 6	67.30%	\$0.00	9.84%	16.98	3.00
12	Black Hills Corporation	BKH	\$53.06	¥	7.00%	4.50%	4.02%	5.17%	2.65%	57.00%	59.00% 6	67.30%	\$0.00	9.56%	18.19	3.22
5		CNP	\$23.08	5.70%	1.91%	1.00%	3.19%	2.95%	2.65%	93.00%	80.00% 6	67.30%	\$0.00	9.87%	16.86	2.98
14	CMS Energy Corporation	CMS	\$31.69	6.20%	6.73%	2.50%	5.27%	5.95%	2.65%	61.00%	62.00% 6	67.30%	\$0.00	9.83%	17.01	3.01
15	Consolidated Edison, Inc.		\$59.34	2.70%	2.38%	3.00%	3.15%	2.81%	2.65%	65.00%	63,00% 6	67.30%	\$0.00	9.48%	18.58	3.29
16		Δ	\$70.94	6.30%	5.89%	8.00%	8.00.9	6.55%	5.65%	. %00.7	72.00% 6	67.30%	\$0.00	9.17%	20.22	3.58
17	DTE Energy Company	DTE	\$78.15	2.00%	4.51%	2.00%	4.88%	4.85%	2.65%	62.00%	60.00% 6	67.30%	\$0.00	10.28%	15.37	2.72
9	Duke Energy Corporation	DOK	\$75.64	4.70%	4.49%	5.00%	2.67%	4.22%	5.65%	72.00%	66.00% 6	67.30%	\$0.00	9.46%	18.68	3.30
19	Empire District Electric Company	EDE	\$25.27	5.00%	2.00%	3.00%	3.25%	4.06%	2.65%			67.30%	\$0.00	%96.6	16.52	2.92
8	Eversource Energy	ES	\$47.78	6.80%	8.60%	8.50%	4.50%	%09.9	5.65%	29.00%	56.00% 6	67.30%	\$0.00	9.87%	16.84	2.98
7	FirstEnergy Corp.	出	\$34.67	Š	¥ Z	7.00%	4.09%	5.54%	5.65%		_	-	\$0.00	7.46%	39.43	6.98
22	Great Plains Energy Inc.	GXP	\$26.21	8.00%	6.37%	2.00%	3.02%	5.10%	5.65%	70.00%	61.00% 6	67.30%	\$0.00	10.02%	16.27	2.88
23	IDACORP, Inc.	IDA	\$58.41	4.00%	4.00%	1.00%	3.51%	3.13%	2.65%	49.00%	58.00% 6	67.30%	\$0.00	9.74%	17.40	3.08
24	NorthWestern Corporation	NWE	\$50.29	2.00%	2.00%	6.50%	3.90%	5.10%	5.65%	26.00%	9 %00.69	67.30%	\$0.00	8.51%	24.84	4.39
22	OGE Energy Corp.	OGE	\$34.96	2.00%	4.00%	3.00%	3.68%	3.95%	2.65%	86.00%	9 %00.69	67.30%	\$0.00	8.67%	23.56	4.17
56	Otter Tail Corporation	OTTR	\$29.53	Š	6.00%	800.6	7.25%	7.42%	5.65%	70.00%	56.00% 6	67.30%	\$0.00	14.23%	8.29	1.47
27	Pinnacle West Capital Corporation	PNW	\$59.20	4.60%	5.30%	4.00%	4.52%	4.60%	5.65%	63.00%	64.00% 6	67,30%	\$0.00	9.92%	16.67	2.95
58	Portland General Electric Company	POR	\$34.50	5.20%	4.72%	%00'9	4.04%	4.99%	2.65%		56.00% 6	67.30%	\$0.00	10.05%	16.16	2.86
59	SCANA Corporation	SCG	\$53,30	4.20%	4.30%	4.50%	5.13%	4.53%	5.65%	57.00%	56,00% 6	67.30%	\$0.00	10.50%	14.66	2.59
ဗ္က	Southern Company	SO	\$44.89	3.50%	3.32%	4.50%	4.40%	3.93%	5.65%	76.00%	_	67.30%	\$0.00	9.97%	16.48	2.92
93	TECO Energy, Inc.	끧	\$18.43	7.10%	9.20%	8.00%	3.60%	6.48%	2.65%	83.00%	72.00% 6	67.30%	\$0.00	9.92%	16.65	2.95
35		N N	\$36.94	3.50%	3.40%	8.00%	5.25%	4.54%	2.65%	61.00% {	55.00% 6	67.30%	\$0.00	10.01%	16.31	2.89
33	Xcel Energy Inc.	XEL	\$32.56	2.00%	4.58%	4.50%	3.95%	4.51%	5.65%	63.00%	64.00% 6	67.30%	\$0.00	10.02%	16.27	2.88
34													Mean	%98'6		
32														14.23%		
36													Min	7.46%		

4	Projected Annual																		
ß	Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[56]	[27]	[28]	[59]	[30]	[31]
(i i	2	9	2	6	Š	2	6	200	0							0	0
۵	Company	licker	20:14	C1.02	2016	/1.07	2018	61.02	2020	2021	2022	-	١	- 1					2030
7	ALLETE, Inc.	ALE	\$2.90	\$3.06	\$3.23	\$3.40	\$3.59	\$3.79	\$4.00	\$4.22	\$4.45								\$6.91
80	Alliant Energy Corporation	Ę.	\$3.48	\$3.67	\$3.88	\$4.10	\$4.33	\$4.57	\$4.83	\$5.10	\$5.38								\$8.36
6	Ameren Corporation	AEE	\$2.40	\$2.54	\$2.69	\$2.84	\$3.01	\$3.18	\$3.37	\$3.56	\$3.76								\$5.85
9	American Electric Power Company, Inc.	AEP	\$3.34	\$3.50	\$3.67	\$3.84	\$4.02	\$4.21	\$4.42	\$4.65	\$4.89	\$5.15	\$5.43	\$5.74	\$6.06	\$6.41	\$6.77	\$7.15	\$7,56
Ξ	Avista Corporation	AVA	\$1.84	\$1.94	\$2.04	\$2.15	\$2.26	\$2.38	\$2.51	\$2.64	\$2.78								\$4.31
12	: Black Hills Corporation	BKH	\$2.89	\$3.04	\$3.20	\$3.36	\$3.54	\$3.72	\$3.91	\$4.12	\$4.35								\$6.73
5	: CenterPoint Energy, Inc.	CNP	\$1.42	\$1.46	\$1.50	\$1.55	\$1.60	\$1.64	\$1.70	\$1.76	\$1.84								\$2.82
4	 CMS Energy Corporation 	CMS	\$1.74	\$1.84	\$1.95	\$2.07	\$2.19	\$2.32	\$2.46	\$2.60	\$2.75								\$4.28
15	Consolidated Edison, Inc.		\$3.62	\$3.72	\$3.83	\$3.93	\$4.04	\$4.16	\$4.29	\$4.46	\$4.64								\$7.11
16	Dominion Resources, Inc.	Ω	\$3.05	\$3.25	\$3.46	\$3.69	\$3.93	\$4.19	\$4.46	\$4.73	\$5.02								\$7.83
17	DTE Energy Company	DTE	\$5.10	\$5.35	\$5.61	\$5.88	\$6.16	\$6.46	\$6.78	\$7.13	\$7.50								11.61
9	Duke Energy Corporation	돌	\$4.13	\$4.30	\$4.49	\$4.67	\$4.87	\$5.08	\$5.30	\$5.55	\$5.83								\$8.98
9	 Empire District Electric Company 	EDE	\$1.55	\$1.61	\$1.68	\$1.75	\$1.82	\$1.89	\$1.97	\$2.06	\$2.16								\$3.33
8	Eversource Energy	S	\$2.58	\$2.75	\$2.93	\$3.13	\$3.33	\$3.55	\$3.78	\$4.02	\$4.26								\$6.65
21	FirstEnergy Corp.	出	\$0.85	\$0.90	\$0.95	\$1.00	\$1.05	\$1.11	\$1.18	\$1.24	\$1.31								\$2.03
22	Great Plains Energy Inc.	ВXР	\$1.57	\$1.65	\$1.73	\$1.82	\$1.92	\$2.01	\$2.12	\$2.23	\$2.35								\$3.64
23	IDACORP, Inc.	ΙDΑ	\$3.85	\$3.97	\$4.09	\$4.22	\$4.35	\$4.49	\$4.65	\$4.83	\$5.05								\$7.74
54		NWE	\$1.98	\$2.08	\$2.19	\$2.30	\$2.42	\$2.54	\$2.67	\$2.81	\$2.96								\$4.59
22	OGE Energy Corp.	0GE	\$1.55	\$1.61	\$1.67	\$1.74	\$1.81	\$1.88	\$1.96	\$2.05	\$2.14								\$3.30
56	Otter Tail Corporation	OTTR	\$3.06	\$3.29	\$3.53	\$3.79	\$4.07	\$4.38	\$4.69	\$5.01	\$5.34								\$8.35
27	Pinnacle West Capital Corporation	PNW	\$3.58	\$3.74	\$3.92	\$4.10	\$4.29	\$4.48	\$4.70	\$4.93	\$5.18								\$8.01
88	Portland General Electric Company	POR	\$2.18	\$2.29	\$2.40	\$2.52	\$2.65	\$2.78	\$2.92	\$3.08	\$3.24								\$5.01
53	SCANA Corporation	908	\$3.79	\$3.96	\$4.14	\$4.33	\$4.53	\$4.73	\$4.95	\$5.20	\$5.46								\$8.43
8	0)	S	\$2.77	\$2.88	\$2.99	\$3.11	\$3.23	\$3.36	\$3.50	\$3.66	\$3.83								\$5.90
33	TECO Energy, Inc.	担	\$0.95	\$1.01	\$1.08	\$1.15	\$1.22	\$1.30	\$1.38	\$1.47	\$1.56								\$2.43
35	. Westar Energy, Inc.	WR	\$2.35	\$2.46	\$2.57	\$2.68	\$2.81	\$2.93	\$3.07	\$3.22	\$3.39								\$5.23
33	Xcel Energy Inc.	XEL	\$2.03	\$2.12	\$2.22	\$2.32	\$2.42	\$2.53	\$2.65	\$2.78	\$2.92								54.51

67.30% [47] 67.30% 67:30% 2029 [46] 67.30% 2028 [45] 66.42% 67.30% 67.30% 67.30% 67.30% 68.09% 67.30% 67 6 65.92% 67.30% 67.30% 67.30% 66.42% 67.30% 67.30% 67.30% 67.30% 66.75% 67.30% 2027 [44] 6 65.25% 67.30% 67.30% 6 6 66.75% 67.30% 67.30% 6 6 66.75% 67.30% 67.30% 6 6 65.92% 67.30% 67.30% 6 6 69.42% 67.30% 67.30% 6 67.30% 65.75% 67.30% 67.30% 67.30% 67.30% 65.42% 67.30% 67.30% [43] 67.30% 67.30% [42] %65.99 67.59% 66.75% <u>4</u> 66.20% 66.20% 65.20% 64.54% 64.54% 63.54% 66.20% 63.54% 63.54% 65.87% 71.54% 65.54% 65.87% 68.87% 64.87% 66.87% 67.87% 63.54% 67.87% 65.20% 63.20% 62.87% 64.20% 66.20% 2023 <u>7</u> 65.15% 63.15% 64.65% 65.15% 69.65% 63.65% 61.65% 68.15% 63.15% 61.65% 69.15% 61.15% 65.65% 65.65% 68.15% 60.65% 64.15% 61.65% 64.15% 73.65% 66.65% 62.65% 65.65% 65.65% [38] 59.10% 65.10% 65.10% 63.10% 70.43% 64.43% 63.77% 64.43% 62.43% 66.43% 68.43% 59.77% 58.43% 61.10% 65.10% 59.77% 59.77% 69.77% 70.43% 61.77% 75.77% 63.10% 68.43% 61.77% 59.77% 59.10% 65.10% [38] 62.05% 57.05% 64.55% 64.55% 60.38% 77.88% 63.72% 71.22% 61.22% 66.22% 68.72% 57.88% 56.22% 62.05% 59.55% 68.72% 60.38% 57.88% 64.55% 57.88% 70.38% 63.72% 62.88% 57.88% [37] 54.00% 61.00% 61.00% 63.00% 55.00% 64.00% 59.00% 80.00% 62.00% 63.00% 72.00% 86.00% %00.69 56.00% 58.00% 56.00% 71.00% 72.00% 60.00% 69.00% 59.00% 56.00% 64.00% 56.00% 55.00% 64.00% [96] 56.25% 72.25% 74.75% 62.25% 62.50% 57.50% 64.25% 64.75% 58.50% 83.25% 61.75% 63.50% 72.00% 60.50% 67.50% 70.75% 56.75% 55.00% 63.25% 55.75% 65.75% 65.75% 59.50% 63.75% 54.50% 56.50% [32] 72.00% 57.50% 56.00% 65.50% 73.50% 60.00% 64.50% 65.50% 58.00% 61.50% 64.00% 61.00% %00.69 72.50% 53.50% 63.00% 63.50% 53.00% 56.50% 77.50% 58.00% 63.50% 62.00% 86.50% 62.50% 72.50% 63.50% [34] 64.50% 72.00% 61.50% 62.50% 64.75% 66.25% 57.50% 89.75% 61.50% 70.50% 74.25% 58.25% 57.00% 67.75% 51.25% 59.25% 79.25% 66.50% 63.25% 51.50% 56.75% 74.75% 80.25% 59.50% [33] 76.00% 83.00% 61.00% 66.00% 61.00% 65.00% 65.00% 67.00% 57.00% 61.00% 65.00% 72.00% 72.00% 59.00% 58.00% 70.00% 86.00% 70.00% 63.00% 49.00% 56.00% 50.00% 57.00% [32] American Electric Power Company, Inc. Portland General Electric Company Pinnacle West Capital Corporation Empire District Electric Company Alliant Energy Corporation NorthWestern Corporation Consolidated Edison, Inc. Dominion Resources, Inc. Duke Energy Corporation CMS Energy Corporation CenterPoint Energy, Inc. Great Plains Energy Inc. Black Hills Corporation DTE Energy Company Dividend Payout Ratio Otter Tail Corporation SCANA Corporation Ameren Corporation Westar Energy, Inc. Eversource Energy Southern Company TECO Energy, Inc. Avista Corporation OGE Energy Corp. FirstEnergy Corp. Projected Annual IDACORP, Inc. Xcel Energy Inc. ALLETE, Inc. 9 17 18 19 20 22 22 23 24 25 25 26 26 27 33 33 33 33 33 2

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4 3	Projected Annual Cash Flows			[48]	[49]	[20]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[69]	[61]	[62]	[63]	[64]
																				Ferminal
9	Company	Ticker	. 7	2015	2016	2017	2018	2019	2020	2021	2022	2023				2027	2028	2029	2030	Value
7	ALLETE, Inc.	ALE	9	2.02	_	\$2.16	\$2.24	\$2.31	\$2.48	\$2.66	\$2.86	\$3.07				\$3.94	\$4.17	\$4.40		\$115.56
ω	Alliant Energy Corporation	¥	69	2.24	\$2.39	\$2.54	\$2.70	\$2.88	\$3.08	\$3.28	\$3.51	\$3.75				\$4.77	\$5.04	\$5.32		\$136.23
თ	Ameren Corporation	AEE	69	\$1.65	\$1.68	\$1.71	\$1.73	\$1.75	\$1.92	\$2.10	\$2.30	\$2.51				\$3.34	\$3.53	\$3.72		\$94.63
10	American Electric Power Company, Inc.	AEP	69	\$2.27	\$2.37	\$2.48	\$2.58	\$2.70	\$2.85	\$3.02	\$3.21	\$3.41				\$4.31	\$4.56	\$4.81		\$123.04
7	Avista Corporation	AVA	69	\$1.30	\$1.35	\$1.41	\$1.46	\$1.52	\$1.62	\$1.72	\$1.83	\$1.95				\$2.46	\$2.60	\$2.75		\$73.27
12	Black Hills Corporation	BKH	6	1.73	\$1.84	\$1.95	\$2.07	\$2.19	\$2.36	\$2.55	\$2.74	\$2.96				\$3.84	\$4.06	\$4.29		\$122.49
13	CenterPoint Energy, Inc.	CNP	8	\$1.36	\$1.35	\$1.34	\$1.33	\$1.31	\$1.32	\$1.34	\$1.35	\$1.38				\$1.61	\$1.70	\$1.80		\$47.53
14	 CMS Energy Corporation 	CMS	69	\$1.12	\$1.20	\$1.27	\$1.35	\$1.44	\$1.54	\$1.66	\$1.78	\$1.91	\$2.04	\$2.19	\$2.31	\$2.44	\$2.58	\$2.72	\$2.88	\$72.70
15	_		9	\$2.42	\$2.47	\$2.52	\$2.57	\$2.62	\$2.74	\$2.87	\$3.03	\$3.20				\$4.06	\$4.29	\$4.53		\$132.18
16	Dominion Resources, Inc.	۵	s	\$2.34	\$2.49	\$2.66	\$2.83	\$3.02	\$3.17	\$3.33	\$3.50	\$3.67				\$4.47	\$4.72	\$4.99		\$158.38
17	DTE Energy Company	DTE	69	\$3.32	\$3.45	\$3.59	\$3.73	\$3.88	\$4.15	\$4.45	\$4.78	\$5.13				\$6.62	\$7.00	\$7.39		\$178.44
18	Duke Energy Corporation	ž	69	\$3.10	\$3.16	\$3.23	\$3.29	\$3.35	\$3.51	\$3.69	\$3.88	\$4.10				\$5.13	\$5.42	\$5.72		\$167.79
19	Empire District Electric Company	EDE	69			\$1.27	\$1.29	\$1.31	\$1.36	\$1.41	\$1.47	\$1.54				\$1.90	\$2.01	\$2.12		\$55.09
20	Eversource Energy	ES	69			\$1.80	\$1.89	\$1.99	\$2.19	\$2.40	\$2.63	\$2.87				\$3.79	\$4.01	\$4.24		\$111.97
21	FirstEnergy Corp.	밀	69	\$0.52	\$0.54	\$0.56	\$0.58	\$0.60	\$0.66	\$0.73	\$0.79	\$0.87				\$1.16	\$1.23	\$1.30		\$80.15
22	Great Plains Energy Inc.	СХР	69	\$1.16		\$1.19	\$1.21	\$1.23	\$1.31	\$1.41	\$1.51	\$1.62				\$2.08	\$2.19	\$2.32		\$59.19
23	IDACORP, Inc.	ΙDΑ	69		_	\$2.26	\$2.43	\$2.60	\$2.77	\$2.95	\$3.16	\$3.40				\$4.42	\$4.67	\$4.93		\$134.74
24	NorthWestern Corporation	NWE	69			\$1.44	\$1.59	\$1.75	\$1.84	\$1.92	\$2.02	\$2.12				\$2.62	\$2.77	\$2.92		\$113.96
52	OGE Energy Corp.	90E	69	\$1.39		\$1.26	\$1.19	\$1.11	\$1.18	\$1.26	\$1.35	\$1.45				\$1.88	\$1.99	\$2.10		\$77.78
56	Otter Tail Corporation	OTTR	69		\$2,35	\$2.39	\$2.42	\$2.45	\$2.71	\$2.99	\$3.29	\$3.60				\$4.77	\$5.04	\$5,32		\$69.27
27	Pinnacle West Capital Corporation	PNW	ு	\$2.36		\$2.60	\$2.73	\$2.87	\$3.03	\$3.21	\$3.40	\$3.61				\$4.57	\$4.83	\$5.10		\$133.51
28	Portland General Electric Company	POR	சு		-	\$1.34	\$1.44	\$1.56	\$1.69	\$1.84	\$2.00	\$2.17				\$2.86	\$3.02	\$3.19		\$80.98
59	SCANA Corporation	SCG	4	\$2.26	\$2.35	\$2.45	\$2.55	\$2.65	\$2.87	\$3.11	\$3.37	\$3.65				\$4.81	\$5.08	\$5.37		\$123.61
30	U	SO	G			\$2.29	\$2.33	\$2.38	\$2.46	\$2.55	\$2.65	\$2.76				\$3.37	\$3.56	\$3.76		\$97.28
31	TECO Energy, Inc.	世	Φ	\$0.84		\$0.89	\$0.91	\$0.94	\$0.98	\$1.03	\$1.08	\$1.14		\$1.24	\$1.31	\$1.39	\$1.46	\$1.55		\$40.42
32	Westar Energy, Inc.	Χ×	69		_	\$1.56	\$1.59	\$1.61	\$1.75	\$1.90	\$2.07	\$2.25		\$2.67	\$2.83	\$2.99	\$3.15	\$3.33		\$85.32
8	Xcel Energy Inc.	XEL	69	\$1.34	\$1.40	\$1.47	\$1.54	\$1.62	\$1.71	\$1.81	\$1.92	\$2.04	- 1	\$2.31	\$2.44	\$2.57	\$2.72	\$2.87	ı	\$73.35

ო						Averag	je EPS Gro	Average EPS Growth Rate Estimate in First Stage (with Sustainable Growth)	stimate in F	irst Stage	(with Sus	tainable	srowth)							
4	Projected Annual Data																			
ა	Investor Cash Flows		[65]	[99]	[67]	[68]	[69]	[70]	[71]	[72]	[23]	[74]	[22]	[16]	[77]	[78]	[6/]	[80]	[81]	[82]
			Initial																	
9	Company	Ticker	Outflow	6/25/15	12/3:1/15	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	6/30/25 6	6/30/26	6/30/27	6/30/28	6/30/59	6/30/30
7	ALLETE, Inc.	ALE	(\$50.73)	\$0.00	\$1.05	\$2.07	\$2.16	\$2.24	\$2.31	\$2.48	\$2.66	\$2.86	ŀ	\$3.29	\$3.53	\$3.73	\$3.94	\$4.17	\$4.40	\$120.21
ထ	Alliant Energy Corporation	۲	(\$29.66)	\$0.00	\$1.16	\$2.30	\$2.54	\$2.70	\$2.88	\$3.08	\$3.28	\$3.51	\$3.75	\$4.00	\$4.27	\$4.51	\$4.77	\$5.04	\$5.32	\$141.86
თ	Ameren Corporation	AEE	(\$40.80)	\$0.00	\$0.85	\$1.70	\$1.71	\$1.73	\$1.75	\$1.92	\$2.10	\$2.30		٠,	\$2.99	\$3.16	\$3.34	\$3.53		\$98.56
은	American Electric Power Company, Inc.	AEP	(\$54.66)	\$0.00	\$1.18	\$2.33	\$2.48	\$2.58	\$2.70	\$2.85	\$3.02	\$3.21		٠.	\$3.86	\$4.08	\$4.31	\$4.56		\$128.13
Ξ	Avista Corporation	AVA	(\$32.48)	\$0.00	\$0.67	\$1.33	\$1.41	\$1.46	\$1.52	\$1.62	\$1.72	\$1.83		\$2.07		\$2.33	\$2.46	\$2.60	\$2.75	\$76.17
12	Black Hills Corporation	BKH	(\$53.06)	\$0.00	\$0.90	\$1.78	\$1.95	\$2.07	\$2.19	\$2.36	\$2.55	\$2.74			\$3.44	\$3.64	\$3.84	\$4.06		\$127.02
13	CenterPoint Energy, Inc.	CNP	(\$23.08)	\$0.00	\$0.70	\$1.38	\$1.34	\$1.33	\$1.31	\$1.32	\$1.34	\$1.35				\$1.52	\$1.61	\$1.70		\$49.43
4	CMS Energy Corporation	CMS	(\$31.69)	\$0.00	\$0.58	\$1.16	\$1.27	\$1.35	\$1.44	\$1.54	\$1.66	\$1.78				\$2.31	\$2.44	\$2.58		\$75.58
15	Consolidated Edison, Inc.		(\$59.34)	\$0.00	\$1.25	\$2.45	\$2.52	\$2.57	\$2.62	\$2.74	\$2.87	\$3.03	\$3.20	\$3.41	\$3.64	\$3.84	\$4.06	\$4.29		\$136.96
16		Δ	(\$70.94)	\$0.00	\$1.21	\$2.42	\$2.66	\$2.83	\$3.02	\$3.17	\$3.33	\$3.50				\$4.23	\$4.47	\$4.72		\$163.65
17	DTE Energy Company	DTE	(\$78.15)	\$0.00	\$1.72	\$3.40	\$3.59	\$3.73	\$3.88	\$4.15	\$4.45	\$4.78				\$6.27	\$6.62	\$7.00		\$186.25
18		Š	(\$75.64)	\$0.00	\$1.60	\$3.16	\$3.23	\$3.29	\$3.35	\$3.51	\$3.69	\$3.88				\$4.85	\$5.13	\$5.42		\$173.83
19	Empire District Electric Company	EDE	(\$25.27)	\$0.00	\$0.63	\$1.25	\$1.27	\$1.29	\$1.31	\$1.36	\$1.41	\$1.47				\$1.80	\$1.90	\$2.01		\$57.34
8	Eversource Energy	S	(\$47.78)	\$0.00	\$0.84	\$1.68	\$1.80	\$1.89	\$1.99	\$2,19	\$2.40	\$2.63				\$3.59	\$3.79	\$4.01		\$116,44
21	FirstEnergy Corp.	띥	(\$34.67)	\$0.00	\$0.27	\$0.53	\$0.56	\$0.58	\$0.60	\$0.66	\$0.73	\$0.79				\$1.10	\$1.16	\$1.23		\$81.52
22	Great Plains Energy Inc.	GXP	(\$26.21)	\$0.00	\$0.60	\$1.18	\$1.19	\$1.21	\$1.23	\$1.31	\$1.41	\$1.51				\$1.96	\$2.08	\$2.19		\$61.63
23	IDAĆORP, Inc.	IDA	(\$58.41)	\$0.00	\$1.01	\$1.98	\$2.26	\$2.43	\$2.60	\$2.77	\$2.95	\$3.16				\$4.18	\$4.42	\$4.67		\$139.95
24		NWE	(\$50.29)	\$0.00	\$0.60	\$1.20	\$1.44	\$1.59	\$1.75	\$1.84	\$1.92	\$2.02				\$2.48	\$2.62	\$2.77		\$117.05
52	OGE Energy Corp.	OGE	(\$34.96)	\$0.00	\$0.72	\$1.41	\$1.26	\$1.19	\$1.11	\$1.18	\$1.26	\$1.35				\$1.78	\$1.88	\$1.99		\$80.00
56	Otter Tail Corporation	OTTR	(\$29.53)	\$0.00	\$1.19	\$2.39	\$2.39	\$2.42	\$2.45	\$2.71	\$2.99	\$3.29				\$4.51	\$4.77	\$5.04		\$74.89
27	Pinnacle West Capital Corporation	PNW	(\$59.20)	\$0.00	\$1.22	\$2.41	\$2.60	\$2.73	\$2.87	\$3.03	\$3.21	\$3.40				\$4.33	\$4.57	\$4.83		\$138.90
78	Portland General Electric Company	POR	(\$34.50)	\$0.00	\$0.59	\$1.17	\$1.34	\$1.44	\$1.56	\$1.69	\$1.84	\$2.00				\$2.71	\$2.86	\$3.02		\$84.36
23	SCANA Corporation	ഉഗ്ര	(\$53.30)	\$0.00	\$1.17	\$2.31	\$2.45	\$2.55	\$2.65	\$2.87	\$3.11	\$3.37				\$4.56	\$4.81	\$5.08		\$129.28
8	Southern Company	SO	(\$44.89)	\$0.00	\$1.13	\$2.23	\$2.29	\$2.33	\$2.38	\$2.46	\$2.55	\$2.65		-	\$3.02	\$3.19	\$3.37	\$3.56		\$101.25
31	TECO Energy, Inc.	旦	(\$18.43)	\$0.00	\$0.43	\$0.87	\$0.89	\$0.91	\$0.94	\$0.98	\$1.03	\$1.08				\$1.31	\$1.39	\$1.46		\$42.05
32	Westar Energy, Inc.	Ν	(\$36.94)	\$0.00	\$0.78	\$1.53	\$1.56	\$1.59	\$1.61	\$1.75	\$1.90	\$2.07	\$2.25			\$2.83	\$2.99	\$3.15		\$88.84
33	Xcel Energy Inc.	Ä	(\$32.56)	\$0.00	\$0.69	\$1.37	\$1.47	\$1.54	\$1.62	\$1.71	\$1.81	\$1.92	\$2.04			\$2.44	\$2.57	\$2.72		\$76.38

Multi-Stage Growth Discounted Cash Flow Model 360 Day Average Stock Price High EPS Growth Rate Estimate in First Stage (with Sustainable Growth)

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4	Inputs		[1]	[2]	[3]	[4]	[2]	[9]	[7]	[8]	6	[10]	[11]	[12]	[13]	[14]
2			Stock		EPS Gro	Growth Rate Estimate	Estimates		Long-Term	Pa	Payout Ratio		terative S	Iterative Solution Terminal Terminal	erminal T	erminal
						Value	Retention	High						•	P/E	PEG
9	Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	Growth	2015	2019	2025	Proof	RR	Ratio	Ratio
7	ALLETE, Inc.	ALE	\$50.73	ΑN	%00'9	8.50%	3.97%	9:20%	5.65%	86.00%	61.00%	67.30%	\$0.00	10.18%	15.69	2.78
œ	Alliant Energy Corporation	Ľ	\$59.66	5.30%	5.45%	%00'9	2.66%	%00'9	5.65%	61.00%	63.00%	67.30%	\$0.00	10.13%	15.89	2.81
6	Ameren Corporation	AEE	\$40.80	%08.9	5.85%	%00'9	4.56%	%08.9	2.65%	65.00%	55.00% (67.30%	\$0.00	10.33%	15.21	2.69
9	American Electric Power Company, Inc.	AEP	\$54.66	4.90%	2.08%	2.00%	4.07%	2.08%	5.65%	65.00%	64.00%	67.30%	\$0.00	10.11%	15.96	2.82
Ξ	Avista Corporation	AVA	\$32.48	Ā	2.00%	7.00%	3.80%	7.00%	5.65%	67.00%	64.00%	67.30%	\$0.00	10.33%	15.21	2.69
12	Black Hills Corporation	BKH	\$53.06	₹	7.00%	4.50%	4.02%	7.00%	2.65%	57.00%	59.00%	67.30%	\$0.00	10.04%	16.21	2.87
13	CenterPoint Energy, Inc.	CNP	\$23.08	5.70%	1.91%	1.00%	3.19%	5.70%	2.65%	93.00%	80.00%	67.30%	\$0.00	10.72%	14.04	2.48
14	CMS Energy Corporation	CMS	\$31.69	6.20%	6.73%	2.50%	5.27%	6.73%	5.65%	61.00%	62.00%	87.30%	\$0.00	10.05%	16.16	2.86
15	Consolidated Edison, Inc.		\$59.34	2.70%	2.38%	3.00%	3.15%	3.15%	5.65%	65.00%	63.00%	67.30%	\$0.00	9.57%	18.16	3.21
16	Dominion Resources, Inc.	Δ	\$70.94	6.30%	2.89%	8.00%	%00.9	8.00%	2.65%	72.00%	72.00%	67.30%	\$0.00	9.51%	18.42	3.26
17		DTE	\$78.15	2.00%	4.51%	2.00%	4.88%	2.00%	2.65%	62.00%	60.00%	67.30%	\$0.00	10.32%	15.23	2.69
18		S S	\$75.64	4.70%	4.49%	2.00%	2.67%	2.00%	2.65%	72.00%		67.30%	\$0.00	9.66%	17.74	3.14
19	ctric Company	EDE	\$25.27	2.00%	2.00%	3.00%	3.25%	2.00%	5.65%	76.00%	69.00%	67.30%	\$0.00	10.23%	15.54	2.75
8	A	S	\$47.78	6.80%	%09'9	8.50%	4.50%	8.50%	2.65%	29.00%		67.30%	\$0.00	10.40%	14.98	2.65
7		丑	\$34.67	Ϋ́	¥	%00'	4.09%	7.00%	5.65%	58.00%	54.00% (67.30%	\$0.00	7.64%	35.78	6.33
22	nergy Inc.	GXP	\$26.21	%00'9	6.37%	2.00%	3.02%	6.37%	9.65%	70.00%	61.00% (67.30%	\$0.00	10.39%	15.01	2.66
23	IDACORP, Inc.	ΙDΑ	\$58.41	4.00%	4.00%	1.00%	3.51%	4.00%	2.65%	49.00%	58.00% (67.30%	\$0.00	9.97%	16.45	2.91
54	NorthWestern Corporation	NWE	\$50.29	2.00%	2.00%	6.50%	3.90%	6.50%	2.65%	26.00%	9 %00.69	67.30%	\$0.00	8.79%	22.65	4.01
22	OGE Energy Corp.	OGE	\$34.96	2.00%	4.00%	3.00%	3.68%	2.00%	2.65%	86.00%	29.00%	67.30%	\$0.00	8.89%	21.93	3.88
26	Otter Tail Corporation	OTTR	\$29.53	Ϋ́	8.00.9	%00.6	7.25%	%00%	5.65%	%00'02	56.00%	67.30%	\$0.00	15.01%	7.60	1.34
27		PNW	\$59.20	4.60%	5.30%	4.00%	4.52%	5.30%	5.65%	63.00%	64.00%	67.30%	\$0.00	10.11%	15.94	2.82
78	Portland General Electric Company	Por	\$34.50	5.20%	4.72%	%00.9	4.04%	%00'9	5.65%	20.00%	56.00% (67.30%	\$0.00	10.34%	15.17	2.68
53	SCANA Corporation	SCG	\$53.30	4.20%	4.30%	4.50%	5.13%	5.13%	2.65%	27.00%	56.00%	67.30%	\$0.00	10.69%	14.12	2.50
39	Southern Company	SO	\$44.89	3.50%	3.32%	4.50%	4.40%	4.50%	2.65%	76.00%	71.00%	67.30%	\$0.00	10.13%	15.87	2.81
33	TECO Energy, Inc.	끧	\$18.43	7.10%	9.20%	%00.9	3.60%	9.20%	2.65%	83.00%	72.00%	67.30%	\$0.00	10.72%	14.03	2.48
32	-	Ν	\$36.94	3.50%	3.40%	%00'9	5.25%	%00'9	2.65%	61.00%	55.00% (67.30%	\$0.00	10.43%	14.88	2.63
33	Xcel Energy Inc.	ΧĒ	\$32.56	2.00%	4.58%	4.50%	3.95%	2.00%	5.65%	63.00%	64.00% 6	67.30%	\$0.00	10.16%	15.76	2.79
34														10.18%		
33														15.01%		
န													Σ	7.64%		

4 Projecte	Projected Annual																		
5 Earning	Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[59]	[30]	[31]
6 Company	. Au	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
7 ALLETE, Inc.	Ξ, Inc.	ALE	\$2.90	\$3.09	\$3.29	\$3.50	\$3.73	\$3.97	\$4.23	\$4.49	\$4.76	\$5.04	\$5.34	\$5.64	\$5.96	\$6.29	\$6.65	\$7.02	\$7.42
8 Alliant E	Alliant Energy Corporation	Ľ	\$3.48	\$3.69	\$3.91	\$4,14	\$4.39	\$4.66	\$4.93	\$5.22	\$5.53	\$5.85	\$6.18	\$6.53	\$6.90	\$7.29	\$7.70	\$8.14	\$8.60
9 Ameren	Ameren Corporation	AEE	\$2.40	\$2.56	\$2.74	\$2.92	\$3.12	\$3.33	\$3.56	\$3.78	\$4.02	\$4.26	\$4.51	\$4.77	\$5.03	\$5.32	\$5.62	\$5.94	\$6.27
10 America	American Electric Power Company, Inc.	AEP	\$3.34	\$3.51	\$3.69	\$3.88	\$4.07	\$4.28	\$4.50	\$4.74	\$4.99	\$5.26	\$5.56	\$5.87	\$6.20	\$6.55	\$6.92	\$7.32	\$7.73
11 Avista (Avista Corporation	AVA	\$1.84	\$1.97	\$2.11	\$2.25	\$2.41	\$2.58	\$2.76	\$2.94	\$3.12	\$3.31	\$3.51	\$3.71	\$3.91	\$4.14	\$4.37	\$4.62	\$4.88
12 Black H	Black Hills Corporation	BKH	\$2.89	\$3.09	\$3.31	\$3.54	\$3.79	\$4.05	\$4.33	\$4.61	\$4.90	\$5.20	\$5.51	\$5.82	\$6.15	\$6.50	\$6.86	\$7.25	\$7.66
13 CenterF	CenterPoint Energy, Inc.	CNP	\$1.42	\$1.50	\$1.59	\$1.68	\$1.77	\$1.87	\$1.98	\$2.09	\$2.21	\$2.34	\$2.47	\$2.61	\$2.76	\$2.91	\$3.08	\$3.25	\$3.43
14 CMS E	CMS Energy Corporation	CMS	\$1.74	\$1.86	\$1.98	\$2.12	\$2.26	\$2.41	\$2.57	\$2.73	\$2.90	\$3.07	\$3.25	\$3.44	\$3.63	\$3.84	\$4.05	\$4.28	\$4.53
15 Consoli	Consolidated Edison, Inc.		\$3.62	\$3.73	\$3.85	\$3.97	\$4.10	\$4.23	\$4.38	\$4.55	\$4.75	\$4.98	\$5.24	\$5.54	\$5.85	\$6.18	\$6.53	\$6.90	\$7.29
16 Dominio	Dominion Resources, Inc.	Δ	\$3.05	\$3.29	\$3.56	\$3.84	\$4.15	\$4.48	\$4.82	\$5.17	\$5.52	\$5.88	\$6.23	\$6.59	\$6.96	\$7.35	\$7.77	\$8.21	\$8.67
17 DTE Er	DTE Energy Company	DTE	\$5.10	\$5.36	\$5.62	\$5.90	\$6.20	\$6.51	\$6.84	\$7.20	\$7.58	\$7.99	\$8.44	\$8.91	\$9.42	\$9.95	\$10.51	\$11.11	\$11.73
18 Duke E	Duke Energy Corporation	PUK	\$4.13	\$4.34	\$4.55	\$4.78	\$5.02	\$5.27	\$5.54	\$5.83	\$6.14	\$6.47	\$6.83	\$7.22	\$7.63	\$8.06	\$8.51	\$8.99	\$9.50
19 Empire	Empire District Electric Company	EDE	\$1.55	\$1.63	\$1.71	\$1.79	\$1.88	\$1.98	\$2.08	\$2.19	\$2.30	\$2.43	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.38	\$3.57
20 Eversor	Eversource Energy	ES	\$2.58	\$2.80	\$3.04	\$3.30	\$3.58	\$3.88	\$4.19	\$4.51	\$4.83	\$5.14	\$5.46	\$5.77	\$6.09	\$6.44	\$6.80	\$7.19	\$7.59
21 FirstEn	FirstEnergy Corp.	μ	\$0.85	\$0.91	\$0.97	\$1.04	\$1.11	\$1.19	\$1.27	\$1.36	\$1.44	\$1.53	\$1.62	\$1.71	\$1.81	\$1.91	\$2.02	\$2.13	\$2.25
22 Great F	Great Plains Energy Inc.	GXP	\$1.57	\$1.67	\$1.78	\$1.89	\$2.01	\$2.14	\$2.27	\$2.41	\$2.56	\$2.71	\$2.86	\$3.02	\$3.20	\$3.38	\$3.57	\$3.77	\$3.98
23 IDACO	IDACORP, Inc.	ΙDΑ	\$3,85	\$4.00	\$4.16	\$4.33	\$4.50	\$4.68	\$4.88	\$5.11	\$5.35	\$5.63	\$5.93	\$6.26	\$6.62	\$6.99	\$7.39	\$7.80	\$8.25
24 NorthW	NorthWestern Corporation	NWE	\$1.98	\$2.11	\$2.25	\$2.39	\$2.55	\$2.71	\$2.89	\$3.06	\$3.25	\$3.44	\$3.64	\$3.85	\$4.07	\$4.30	\$4.54	\$4.80	\$5.07
25 OGE E	OGE Energy Corp.	OGE	\$1,55	\$1.63	\$1.71	\$1.79	\$1.88	\$1.98	\$2.08	\$2.19	\$2.30	\$2.43	\$2.56	\$2.71	\$2.86	\$3.02	\$3.19	\$3.38	\$3.57
26 Otter Ta	Otter Tail Corporation	OTTR	\$3.06	\$3.34	\$3.64	\$3.96	\$4.32	\$4.71	\$5.11	\$5.51	\$5.91	\$6.31	\$6.70	\$7.08	\$7.48	\$7.91	\$8.35	\$8.82	\$9.32
27 Pinnacl	Pinnacle West Capital Corporation	PNW	\$3.58	\$3.77	\$3.97	\$4.18	\$4.40	\$4.63	\$4.88	\$5.15	\$5.43	\$5.73	\$6.05	\$6.39	\$6.75	\$7.14	\$7.54	\$7.96	\$8.42
28 Portlan	Portland General Electric Company	POR	\$2.18	\$2.31	\$2.45	\$2.60	\$2.75	\$2.92	\$3:09	\$3.27	\$3.46	\$3.66	\$3.87	\$4.09	\$4.32	\$4.57	\$4.82	\$5.10	\$5.39
29 SCANA	SCANA Corporation	SCG	\$3.79	\$3.98	\$4.19	\$4.40	\$4.63	\$4.87	\$5.12	\$5.39	\$5.68	\$5.99	\$6.33	\$6.68	\$7.06	\$7.46	\$7.88	\$8.33	\$8.80
30 Souther	Southern Company	S	\$2.77	\$2.89	\$3.02	\$3.16	\$3.30	\$3.45	\$3.61	\$3.79	\$3.98	\$4.19	\$4.42	\$4.67	\$4.94	\$5.21	\$5.51	\$5.82	\$6.15
31 TECO I	TECO Energy, Inc.	世	\$0.95	\$1.04	\$1.13	\$1.24	\$1.35	\$1.48	\$1.60	\$1.73	\$1.86	\$1.99	\$2.11	\$2.23	\$2.36	\$2.49	\$2.63	\$2.78	\$2.93
32 Westar	Westar Energy, Inc.	X R	\$2.35	\$2.49	\$2.64	\$2.80	\$2.97	\$3.14	\$3.33	\$3.53	\$3.73	\$3.95	\$4.17	\$4.41	\$4.66	\$4.92	\$5.20	\$5.49	\$5.81
33 Xcel En	Xcel Energy Inc.	XEL	\$2.03	\$2.13	\$2.24	\$2,35	\$2.47	\$2.59	\$2.72	\$2.87	\$3.02	\$3.18	\$3.36	\$3.55	\$3.75	\$3.96	\$4.18	\$4.42	\$4.67

							i						,						
4	Projected Annual																		
ι C	Dividend Payout Ratio			[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]
ဖ	Company	Ticker		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025 2	2026 2	2027 2	2028	2029	2030
	ALLETE, Inc.	ALE	9	36.00%	64.75%	63.50%	62.25%	61.00%	62.05%	63.10% 6	64.15% (65.20% 6	66.25% 6	67.30% 67	30%	67.30% 67	67.30% 6	67.30% 6	67.30%
œ	Alliant Energy Corporation	볼	9	61.00%	61.50%	62.00%	62.50%	63.00%	63.72%	64.43% 6	65.15% (65.87% 6	66.59% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
თ	Ameren Corporation	AEE	Ó	65.00% 6	62.50%	%00.09	57.50%	22.00%	57.05%	59.10% 6	61.15%	63.20% 6	65.25% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
9	American Electric Power Company, Inc.	AEP	ø	65.00% 6	64.75%	64.50%	64.25%	64.00%	64.55%	65.10% 6	65.65%	66.20% 6	66.75% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6		67.30%
7	Avista Corporation	AVA	ဖ	67.00% 6		65.50%	64.75%	64.00%	64.55%	65.10% 6	65.65% (66.20% 6	66.75% 6	67.30% 67	67.30% 67	67.30% 67			67.30%
12	Black Hills Corporation	ΚΉ	9	57.00%		28.00%	58.50%	29.00%	60.38%	61.77% 6	63.15% (64.54% 6	65.92% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
5	CenterPoint Energy, Inc.	CNP	ர	93.00%		86.50%	83.25%	%00'08	77.88%	75.77% 7	. %59.82	71.54% 6	69.42% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6		67.30%
4	CMS Energy Corporation	CMS	9	61.00% 6	61.25%	61.50%	61.75%	62.00%	62.88%	63.77% 6	64.65%	65.54% 6	66.42% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
15	Consolidated Edison, Inc.		Ó	65.00% 6		64.00%	63.50%	63.00%	63.72%	64.43% 6	65.15% (65.87% 6	.9 %65.99	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
16	Dominion Resources, Inc.	۵	7	72.00% 7		72.00%	72.00%	72.00%	71.22%	70.43% 6	69.65%	68.87% 6	.9 %60.89	67.30% 67	67.30% 67	67.30% 67	.9 %0£.29	67.30% 6	67.30%
17	DTE Energy Company	ᆵ	Ó	62.00% 6		61.00%	%05.09	%00.09	61.22%	62.43% 6	63.65% (64.87% 6	.9 %60.99	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
18	Duke Energy Corporation	ž	7	72.00% 7	70.50%	%00.69	67.50%	%00'99	66.22%	66.43% 6	96.65%	66.87% 6	9 %60.79	67.30% 67	67.30% 67	67.30% 67	.9 %0£.29	67.30% 6	67.30%
19	Empire District Electric Company	EDE	7	76.00% 7		72.50%	70.75%	%00.69	68.72%	68.43% 6	68.15%	67.87%	67.59% 6	67.30% 67	67.30% 67	67.30% 67	.9 %06.79	67.30% 6	67.30%
20	Eversource Energy	ES	2	9,00.69		27.50%	56.75%	26.00%	27.88%	59.77% 6	61.65%	63.54% 6	65.42% 6	67.30% 67	67.30% 67	67.30% 67	.9 %06.79	67.30% 6	67.30%
21	FirstEnergy Corp.	丑	Ġ				25.00%	54.00%	56.22%	58.43% 6	60.65%	62.87% 6	9 %60.59	67.30% 67	67.30% 67	67.30% 67	.9 %06.79	67.30% 6	67.30%
22	Great Plains Energy Inc.	ЭХР	7.	70.00%			63.25%	61.00%	62.05%	63.10% 6	64.15% (65.20% 6	66.25% 6	67.30% 67	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
53	IDACORP, Inc.	ΙDΑ	4	49.00% €		53.50%	55.75%	58.00%	29.55%	61.10% 6	62.65%	64.20% 6	65.75% 6	67,30% 67	67.30% 67	67.30% 67	67.30% 6	67.30% 6	67.30%
24	NorthWestern Corporation	NWE	5	56.00% \$		62.50%	65.75%	%00'69	68.72%	68.43% 6	68:15% (67.87% 6	67.59% 6	67.30% 67	67.30% 67	67.30% 67	.9 %06.79	67.30% 6	67.30%
55	OGE Energy Corp.	990	œ	86.00% 7	79.25%	72.50%	65.75%	29.00%	60.38%	61.77% 6	63.15% (64.54% 6	65.92% 6	67.30% 67	67.30% 67	67.30% 67	.9 %08.29	67.30% 6	67.30%
56	Otter Tail Corporation	OTTR	7	70.00%		63.00%	29.50%	26.00%	57.88%	59.77% 6	61.65% (63.54% 6	65.42% 6	67.30% 67	67.30% 67	67.30% 67	.9 %06.79	67.30% 6	67.30%
27	Pinnacle West Capital Corporation	PNW	Ó	63.00% 6		63.50%	63.75%	64.00%	64.55%	65.10% 6	65.65%	66.20% 6	66.75% 6	67.30% 67	67.30% 67	67.30% 67	.9 %06.79	67.30% 6	67.30%
78	Portland General Electric Company	POR	Ğ	20.00% \$	51.50%	53.00%	54.50%	26.00%	27.88%	59.77% 6	61.65%	63.54% 6	65.42% 6	67.30% 67	67.30% 67.	67.30% 67	67.30% 6	67.30% 6	67.30%
59	SCANA Corporation	908	2	57.00% 5	56.75%	26.50%	56.25%	26.00%	57.88%	59.77% 6	61.65% (63.54% 6	65.42% 67	67.30% 67	67.30% 67.	67.30% 67	.9 %08.29	67.30% 6	67.30%
30	Southern Company	SO	7	76.00%	74.75%	73.50%	72.25%	71.00%	70.38%	69.77% 6	69.15% (68.54% 6	67.92% 6	67.30% 67	67.30% 67.	67.30% 67	.9 %08.29	67.30% 6	67.30%
		世	οÓ	83.00% E	80.25%	77.50%	74.75%	72.00%	71.22%	70.43% 6	69.65%	68.87% 6	9 %60.89	67.30% 67	67.30% 67.	67.30% 67	67.30% 6	67.30% 6	67.30%
35		Χ×	ω	61.00% 5	29.50%		26.50%	22.00%	57.05%	59.10% 6	61.15% (63.20% 6	65.25% 6	67.30% 67	67.30% 67.	67.30% 67	67.30% 6	67.30% 6	67.30%
ဗ္ဗ	Xcel Energy Inc.	XEL	9	63.00%	63.25%	63.50%	63.75%	64.00%	64.55%	65.10% 6	65.65%	66.20% 6	66.75% 6	67.30% 67	67.30% 67.	67.30% 67	67.30% 6	67.30% 6	67.30%

Multi-Stage Growth Discounted Cash Flow Model 360 Day Average Stock Price High EPS Growth Rate Estimate in First Stage (with Sustainable Growth)

4 n	Projected Annual			187	2	105	[51]	[52]	. 1531	12.7	i i	191	17.7	1831	1601	108	5	1031	[69]	1841
٠	CAST I LOSS			2	5	[22]		125	22	5	3	[00]	2	[00]	[22]	[22]	[2]	[02]	200	101
		i	٠			!	:	:	;	;										Terminal
و د	Company	icker		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Value
1 2	ALLETE, Inc.	ALE		\$2.04	\$2.13	\$2.22	\$2.32	\$2.42	\$2.62	\$2.83	\$3.05	\$3.29	\$3.54	\$3.79	\$4.01	\$4.24	\$4.47	\$4.73	\$4.99	\$116.44
8	Alliant Energy Corporation	Ę		\$2.25	\$2.40	\$2.57	\$2.75	\$2.93	\$3.14	\$3.37	\$3.60	\$3.85	\$4.12	\$4.40	\$4.64	\$4.91	\$5.18	\$5.48	\$5.79	\$136.64
6	Ameren Corporation	AEE		\$1.67	\$1.71	\$1.75	\$1.80	\$1.83	\$2.03	\$2.24	\$2.46	\$2.69	\$2.94	\$3.21	\$3.39	\$3.58	\$3.78	\$4.00	\$4.22	\$95.42
10	American Electric Power Company, Inc.	AEP		\$2.28	\$2.39	\$2.50	\$2.62	\$2.74	\$2.91	\$3.08	\$3.28	\$3.49	\$3.71	\$3.95	\$4.17	\$4.41	\$4.66	\$4.92	\$5.20	\$123.32
7	Avista Corporation	AVA		\$1.32	\$1.40	\$1.48	\$1.56	\$1.65	\$1.78	\$1.91	\$2.05	\$2.19	\$2.34	\$2.49	\$2.63	\$2.78	\$2.94	\$3.11	\$3.28	\$74.20
12 E	Black Hills Corporation	BKH		\$1.76	\$1.90	\$2.05	\$2.22	\$2.39	\$2.61	\$2.85	\$3.10	\$3.36	\$3.63	\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$5.16	\$124.18
13	CenterPoint Energy, Inc.	SNP		\$1.40	\$1.42	\$1.45	\$1.48	\$1.50	\$1.54	\$1.59	\$1.63	\$1.67	\$1.71	\$1.76	\$1.85	\$1.96	\$2.07	\$2.19	\$2.31	\$48.22
14	CMS Energy Corporation	CMS		\$1,13	\$1.21	\$1.30	\$1.39	\$1.49	\$1.61	\$1.74	\$1.88	\$2.01	\$2.16	\$2.31	\$2.44	\$2.58	\$2.73	\$2.88	\$3.05	\$73,14
15 (Consolidated Edison, Inc.			\$2.43	\$2.48	\$2.54	\$2.60	\$2.66	\$2.79	\$2.93	\$3.10	\$3.28	\$3.49	\$3.73	\$3.94	\$4.16	\$4.40	\$4.65	\$4.91	\$132.46
16 L	Dominion Resources, Inc.	Δ		\$2.37	\$2.56	\$2.77	\$2.99	\$3.23	\$3.43	\$3.64	\$3.85	\$4.05	\$4.24	\$4.43	\$4.68	\$4.95	\$5.23	\$5.52	\$5.84	\$159.68
17 L	DTE Energy Company	ᆵ		\$3.32	\$3.46	\$3.60	\$3.75	\$3.91	\$4,19	\$4.49	\$4.83	\$5.19	\$5.58	\$6.00	\$6.34	\$6.70	\$7.08	\$7.48	\$7.90	\$178.66
18 [Duke Energy Corporation	PK		\$3.12	\$3.21	\$3.30	\$3.39	\$3.48	\$3.67	\$3.87	\$4.09	\$4.33	\$4.58	\$4.86	\$5.13	\$5.42	\$5.73	\$6.05	\$6.40	\$168.59
19 E	Empire District Electric Company	EDE		\$1.24	\$1.27	\$1.30	\$1.33	\$1.36	\$1.43	\$1,50	\$1.57	\$1.65	\$1.73	\$1.82	\$1.93	\$2.04	\$2.15	\$2.27	\$2.40	\$55.43
20 E	Eversource Energy	ន្ន		\$1.65	\$1.77	\$1.89	\$2.03	\$2.17	\$2.43	\$2.69	\$2.98	\$3.27	\$3.57	\$3.88	\$4,10	\$4.33	\$4.58	\$4.84	\$5.11	\$113.78
21	FirstEnergy Corp.	빞		\$0.53	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87	\$0.96	\$1,05	\$1.15	\$1.22	\$1.29	\$1.36	\$1.44	\$1.52	\$80.62
22 (Great Plains Energy Inc.	ĞΧΡ		\$1.17	\$1.20	\$1.24	\$1.27	\$1.30	\$1.41	\$1.52	\$1.64	\$1.76	\$1.90	\$2.04	\$2.15	\$2.27	\$2.40	\$2.54	\$2.68	\$59.77
23	IDACORP, Inc.	ΙDΑ		\$1.96	\$2.13	\$2.32	\$2.51	\$2.72	\$2.91	\$3.12	\$3.35	\$3.61	\$3.90	\$4.22	\$4,45	\$4.71	\$4.97	\$5.25	\$5.55	\$135.63
24	NorthWestern Corporation	NWE		\$1.18	\$1.33	\$1.49	\$1.67	\$1.87	\$1.98	\$2.10	\$2.22	\$2.34	\$2.46	\$2.59	\$2.74	\$2.89	\$3.06	\$3.23	\$3.41	\$114.75
25 (OGE Energy Corp.	90		\$1.40	\$1.35	\$1.30	\$1.24	\$1.17	\$1.26	\$1.35	\$1.46	\$1.57	\$1.69	\$1.82	\$1.93	\$2.04	\$2.15	\$2.27	\$2.40	\$78.22
79	Otter Tail Corporation	OTTR		\$2,33	\$2.42	\$2.50	\$2.57	\$2.64	\$2.96	\$3.29	\$3.64	\$4.01	\$4.39	\$4.77	\$5.04	\$5.32	\$5.62	\$5.94	\$6.28	\$70.85
27 F	Pinnacle West Capital Corporation	MN M		\$2.37	\$2.51	\$2.65	\$2.81	\$2.97	\$3.15	\$3.35	\$3.56	\$3.79	\$4.04	\$4.30	\$4.55	\$4.80	\$5.07	\$5.36	\$5.66	\$134.17
	Portland General Electric Company	POR		\$1.16	\$1.26	\$1.38	\$1.50	\$1.63	\$1.79	\$1.96	\$2.14	\$2.33	\$2.53	\$2.75	\$2.91	\$3.07	\$3.25	\$3.43	\$3.62	\$81.68
29	SCANA Corporation	908		\$2.27	\$2.38	\$2.49	\$2.60	\$2.73	\$2.96	\$3.22	\$3.50	\$3.81	\$4.14	\$4.50	\$4.75	\$5.02	\$5.31	\$5.61	\$5.92	\$124.26
_	Southern Company	SO		\$2.20	\$2.26	\$2.32	\$2.39	\$2.45	\$2.54	\$2.64	\$2.75	\$2.87	\$3.00	\$3.14	\$3.32	\$3.51	\$3.71	\$3.92	\$4.14	\$97.62
31	TECO Energy, Inc.	里		\$0.86	\$0.91	\$0.96	\$1.01	\$1.06	\$1.14	\$1.22	\$1.29	\$1.37	\$1.44	\$1.50	\$1.59	\$1.67	\$1.77	\$1.87	\$1.98	\$41.17
32 \	Westar Energy, Inc.	× R		\$1.52	\$1.57	\$1.62	\$1.68	\$1.73	\$1.90	\$2.08	\$2.28	\$2.50	\$2.72	\$2.97	\$3.14	\$3.31	\$3.50	\$3.70	\$3.91	\$86.37
33	Xcel Energy Inc.	XEL		\$1.34	\$1.42	\$1.49	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98	\$2.11	\$2.24	\$2.39	\$2.52	\$2.67	\$2.82	\$2.98	\$3.14	\$73.61

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4	Projected Annual Data					•				•										
	Investor Cash Flows		[65]	[99]	[67]	[68]	[69]	[0/]	[71]	[72]	[23]	[74]	[22]	[92]	[77]	[18]	[62]	[80]	[81]	[82]
			Initial																	
	Company	Ticker	Outflow	6/25/15	12/31/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	5/30/24 6	6/30/25	3/30/26	6/30/27	6/30/28	6/30/29	6/30/30
	ALLETE, Inc.	ALE	(\$50.73)	\$0,00	\$1.06	\$2.10	\$2.22	\$2.32	\$2.42	\$2.62	\$2.83	\$3.05	\$3.29	\$3.54	\$3.79	\$4.01	\$4.24	\$4.47	\$4.73	\$121.44
~	Alliant Energy Corporation	LN	(\$29.66)	\$0.00	\$1.17	\$2.32	\$2.57	\$2.75	\$2.93	\$3.14	\$3.37	\$3.60	\$3.85	\$4.12	\$4.40	\$4.64	\$4.91	\$5.18		\$142.42
a	Ameren Corporation	AEE	(\$40.80)	\$0.00	\$0.86	\$1.72	\$1.75	\$1.80	\$1.83	\$2.03	\$2.24	\$2.46	\$2.69	\$2.94		\$3.39	\$3.58	\$3.78		\$99.64
9	American Electric Power Company, Inc.	AEP	(\$54.66)	\$0.00	\$1.18	\$2,34	\$2.50	\$2.62	\$2.74	\$2.91	\$3.08	\$3.28	\$3.49	\$3.71	\$3.95	\$4.17	\$4.41	\$4.66		\$128.53
Ξ	Avista Corporation	AVA	(\$32.48)	\$0.00	\$0.68	\$1.37	\$1.48	\$1.56	\$1.65	\$1.78	\$1.91	\$2.05	\$2.19	\$2.34	_	\$2.63	\$2.78	\$2.94		\$77.48
7	Black Hills Corporation	BKH	(\$53.06)	\$0.00	\$0.91	\$1.82	\$2.05	\$2.22	\$2.39	\$2.61	\$2.85	\$3.10	\$3.36	\$3.63		\$4.14	\$4.37	\$4.62		\$129.34
$\frac{\epsilon}{\omega}$	CenterPoint Energy, Inc.	CNP	(\$23.08)	\$0.00	\$0.72	\$1.44	\$1.45	\$1.48	\$1.50	\$1.54	\$1.59	\$1.63	\$1.67	\$1.71		\$1.85	\$1.96	\$2.07		\$50.53
4	CMS Energy Corporation	CMS	(\$31.69)	\$0.00	\$0.59	\$1.17	\$1.30	\$1.39	\$1.49	\$1.61	\$1.74	\$1.88	\$2.01			\$2.44	\$2.58	\$2.73		\$76.19
5	Consolidated Edison, Inc.	입	(\$59.34)	\$0.00	\$1.26	\$2.47	\$2.54	\$2.60	\$2.66	\$2.79	\$2.93	\$3.10	\$3.28		\$3.73	\$3.94	\$4.16	\$4.40		\$137.37
16	Dominion Resources, Inc.	۵	(\$70.94)	\$0.00	\$1.23	\$2.47	\$2.77	\$2.99	\$3.23	\$3.43	\$3.64	\$3.85	\$4.05			\$4.68	\$4.95	\$5.23		\$165.51
17	DTE Energy Company	DTE	(\$78.15)	\$0.00	\$1.72	\$3.40	\$3.60	\$3.75	\$3.91	\$4.19	\$4.49	\$4.83	\$5.19			\$6.34	\$6.70	\$7.08		\$186.55
8	Duke Energy Corporation	S S	(\$75.64)	\$0.00	\$1.62	\$3.20	\$3.30	\$3.39	\$3.48	\$3.67	\$3.87	\$4.09	\$4.33			\$5.13	\$5.42	\$5.73		\$174.98
5	Empire District Electric Company	EDE	(\$25.27)	\$0.00	\$0.64	\$1.27	\$1.30	\$1.33	\$1.36	\$1.43	\$1.50	\$1.57	\$1.65	\$1.73	\$1.82	\$1.93	\$2.04	\$2.15	\$2.27	\$57.83
8	Eversource Energy	S	(\$47.78)	\$0.00	\$0.86	\$1.72	\$1.89	\$2.03	\$2.17	\$2.43	\$2.69	\$2.98	\$3.27			\$4.10	\$4.33	\$4.58		\$118.89
2	FirstEnergy Corp.		(\$34.67)	\$0.00	\$0.27	\$0.55	\$0.58	\$0.61	\$0.64	\$0.72	\$0.79	\$0.87	\$0.96			\$1.22	\$1.29	\$1.36		\$82.13
22	Great Plains Energy Inc.	GXP	(\$26.21)	\$0.00	\$0.61	\$1.21	\$1.24	\$1.27	\$1.30	\$1.41	\$1.52	\$1.64	\$1.76			\$2.15	\$2.27	\$2.40		\$62.44
83	IDACORP, Inc.	Δ	(\$58.41)	\$0.00	\$1.02	\$2.00	\$2.32	\$2.51	\$2.72	\$2.91	\$3.12	\$3.35	\$3.61			\$4.45	\$4.71	\$4.97		\$141.18
24	NorthWestern Corporation	NWE	(\$50.29)	\$0.00	\$0.61	\$1.22	\$1.49	\$1.67	\$1.87	\$1.98	\$2.10	\$2.22	\$2.34			\$2.74	\$2.89	\$3.06		\$118.16
22	OGE Energy Corp.	OGE	(\$34.96)	\$0.00	\$0.72	\$1.43	\$1.30	\$1.24	\$1.17	\$1.26	\$1.35	\$1.46	\$1.57			\$1.93	\$2.04	\$2.15		\$80.62
8	Otter Tail Corporation	OTTR	(\$29.53)	\$0.00	\$1.21	\$2.44	\$2.50	\$2.57	\$2.64	\$2.96	\$3.29	\$3.64	\$4.01			\$5.04	\$5.32	\$5.62		\$77.13
27	Pinnacle West Capital Corporation	PNW	(\$59.20)	\$0.00	\$1.23	\$2.44	\$2.65	\$2.81	\$2.97	\$3.15	\$3.35	\$3.56	\$3.79			\$4.55	\$4.80	\$5.07		\$139.84
28	Portland General Electric Company	POR	(\$34.50)	\$0.00	\$0.60	\$1.19	\$1.38	\$1.50	\$1.63	\$1.79	\$1.96	\$2.14	\$2.33			\$2.91	\$3.07	\$3.25		\$85.31
29	SCANA Corporation	SCG	(\$53.30)	\$0.00	\$1.18	\$2.33	\$2.49	\$2.60	\$2.73	\$2.96	\$3.22	\$3.50	\$3.81			\$4.75	\$5.02	\$5.31		\$130.19
3	Southern Company	S	(\$44.89)	\$0.00	\$1.14	\$2.25	\$2.32	\$2.39	\$2.45	\$2.54	\$2.64	\$2.75	\$2.87	\$3,00	\$3.14	\$3,32	\$3.51	\$3.71		\$101.76
3	TECO Energy, Inc.	끧	(\$18.43)	\$0.00	\$0.45	\$0.90	\$0.96	\$1.01	\$1.06	\$1.14	\$1.22	\$1.29	\$1.37	\$1.44	_	\$1.59	\$1.67	\$1.77		\$43.15
32	Westar Energy, Inc.	Ν N	(\$36.94)	\$0.00	\$0.79	\$1.57	\$1.62	\$1.68	\$1.73	\$1.90	\$2.08	\$2.28	\$2.50	\$2.72		\$3.14	\$3.31	\$3.50		\$90.28
33	Xcel Energy Inc.	ΧE	(\$32.56)	\$0.00	\$0.70	\$1.38	\$1.49	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98	\$2.11	\$2.24	\$2.39	\$2.52	\$2.67	\$2.82		\$76.75

Multi-Stage Growth Discounted Cash Flow Model 360 Day Average Stock Price Low EPS Growth Rate Estimate in First Stage (with Sustainable Growth)

4	Inputs		Ξ	[2]	[3]	[4]	[2]	[9]	Ε	[8]	6	[10]	[1]	[12]	[13]	[14]
ß			Stock		EPS Gr	owth Rate	Growth Rate Estimates		Long-Term	Pa	Payout Ratio		Iterative Solution		Terminal	erminal
						Value	Retention	,							P/E	PEG
ø	Company	Ticker	Price	Zacks	First Call	Line	Growth	Low Growth	Growth	2015	2019	2025	Proof	꿈	Ratio	Ratio
7	ALLETE, Inc.	ALE	\$50.73	ΑĀ	%00.9	6.50%	3.97%	3.97%	5.65%	%00.99	61.00% 6	67.30%	\$0.00	9.51%	18.45	3.27
œ	Alliant Energy Corporation	۲	\$59.66	5.30%	5.45%	%00'9	2.66%	5.30%	2.65%	61.00%	63.00% 6	67.30%	\$0.00	9.93%	16,62	2.94
თ	Ameren Corporation	AEE	\$40.80	6.80%	5.85%	%00'9	4.56%	4.56%	2.65%	65.00%	55.00% 6	67.30%	\$0.00	9.71%	17.51	3,10
5	 American Electric Power Company, Inc. 	AEP	\$54.66	4.90%	2.08%	2.00%	4.07%	4.07%	5.65%	65.00%	64.00% 6	67.30%	\$0.00	9.83%	17.03	3.01
=	l Avista Corporation	AVA	\$32.48	¥	2.00%	7.00%	3.80%	3.80%	2.65%	82.00%	64.00% 6	67.30%	\$0.00	9.46%	18.69	3,31
12	2 Black Hills Corporation	BKH	\$53.06	Ϋ́	7.00%	4.50%	4.02%	4.02%	5.65%	27.00%	59.00% 6	67.30%	\$0.00	9.28%	19.61	3.47
13	3 CenterPoint Energy, Inc.	CNP	\$23.08	5.70%	1.91%	1.00%	3.19%	1.00%	5.65%	93.00%	80.00%	67.30%	\$0.00	9.34%	19.30	3.42
4	t CMS Energy Corporation	CMS	\$31.69	6.20%	6.73%	2.50%	5.27%	5.27%	5.65%	61.00%	62.00% 6	67.30%	\$0.00	9.66%	17.74	3.14
15	5 Consolidated Edison, Inc.		\$59.34	2.70%	2.38%	3.00%	3.15%	2.38%	5.65%	65.00%	63.00% 6	67.30%	\$0.00	9.37%	19.12	3.38
16	S Dominion Resources, Inc.	Δ	\$70.94	6.30%	2.89%	8.00%	%00'9	2.89%	2.65%	72.00%	72.00% 6	67.30%	\$0.00	9.02%	21.11	3.74
17	7 DTE Energy Company	DTE	\$78.15	2.00%	4.51%	2.00%	4.88%	4,51%	5.65%	62.00%		67.30%	\$0.00	10.18%	15.71	2.78
28	3 Duke Energy Corporation	Š	\$75.64	4.70%	4.49%	2.00%	2.67%	2.67%	2.65%		66.00% 6	67.30%	\$0.00	9.09%	20.71	3.66
19	9 Empire District Electric Company	EDE	\$25.27	2.00%	2.00%	3.00%	3.25%	3.00%	2.65%	76.00%	69.00% 6	67.30%	\$0.00	%99.6	17.73	3.14
8) Eversource Energy	ES	\$47.78	6.80%	%09.9	8.50%	4.50%	4.50%	2.65%			67.30%	\$0.00	9.35%	19.25	3.41
7	l FirstEnergy Corp.	밆	\$34.67	Ϋ́	Ϋ́	7.00%	4.09%	4.09%	2.65%			67.30%	\$0.00	7.29%	43.52	7.70
22	2 Great Plains Energy Inc.	GXP	\$26.21	6.00%	6.37%	2.00%	3.05%	3.02%	2.65%	70.00%	61.00% 6	67.30%	\$0.00	9.47%	18.63	3.30
23		ΙDΑ	\$58.41	4.00%	4.00%	1.00%	3.51%	1.00%	2.65%	49.00%		67.30%	\$0.00	9.20%	20.04	3.55
24	NorthWestern Corporation	NWE	\$50.29	2.00%	2.00%	6.50%	3.90%	3.90%	2.65%	26.00%		%08.79	\$0.00	8.29%	26.93	4.76
52		OGE	\$34.96	5.00%	4.00%	3.00%	3.68%	3.00%	2.65%			67.30%	\$0.00	8.49%	25.07	4.44
56	Otter Tail Corporation	OTTR	\$29.53	Υ	%00'9	%00.6	7.25%	%00.9	2.65%			67.30%	\$0.00	13.56%	8.99	1.59
27		PNW	\$59.20	4.60%	5.30%	4.00%	4.52%	4.00%	2.65%	63.00%	64.00% 6	67.30%	\$0.00	9.75%	17.34	3.07
28		POR	\$34.50	5.20%	4.72%	%00.9	4.04%	4.04%	2.65%	20.00%	56.00% 6	67.30%	\$0.00	9.79%	17.17	3.04
59	SCANA Corporation	SCG	\$53.30	4.20%	4.30%	4.50%	5.13%	4.20%	5.65%	57.00%	56.00% 6	67.30%	\$0.00	10.40%	14.97	2,65
8		SO	\$44.89	3.50%	3.32%	4.50%	4.40%	3.32%	2.65%	. %00.92	71.00% 6	67.30%	\$0.00	9.80%	17.16	3.04
33	TECO Energy, Inc.	Щ	\$18.43	7.10%	9.20%	%00.9	3.60%	3.60%	2.65%	83.00%	72.00% 6	67.30%	\$0.00	9.18%	20.13	3.56
32	Westar Energy, Inc.	ΝR	\$36.94	3.50%	3.40%	%00.9	5.25%	3.40%	2.65%	61.00%	55.00% 6	67.30%	\$0.00	9.70%	17.55	3.10
33	Xcel Energy Inc.	XEL	\$32.56	5.00%	4.58%	4.50%	3.95%	3.95%	2.65%	63.00%	64.00% 6	37.30%	\$0.00	9.87%	16.86	2.98
34														9.56%		
35													•	13.56%		
8													Μ	7.29%		

က						ĭ	W EPS Gro	Low EPS Growth Rate Estimate in Pirst Stage (with Sustainable Growth)	mate in Firs	t Stage (w	tn Sustai	nable Gro	WID)						
4 w	Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[56]	[27]	[28]	[29]	[30]	[31]
ď	Vocanno	ا م	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		2025	2026		2028	2029	2030
^	ALLETE, Inc.	ALE	\$2.90	\$3.02	\$3.13	\$3.26	\$3,39	\$3.52	\$3.67	\$3.84	\$4.02	\$4.23		\$4,71	\$4.97		\$5.55	\$5.87	\$6.20
- ∞	Alliant Energy Corporation	Ŗ	\$3.48	\$3.66	\$3,86	\$4.06	\$4.28	\$4.51	\$4.75	\$5.00	\$5.28	\$5.57	\$5.88	\$6.21	\$6.57	\$6.94	\$7,33	\$7.74	\$8.18
6	Ameren Corporation	AEE	\$2.40	\$2.51	\$2.62	\$2.74	\$2.87	\$3.00	\$3.14	\$3,30	\$3.47	\$3.65		\$4.07	\$4.30		\$4.79	\$5.07	\$5.35
5	American Electric Power Company, Inc.	AEP	\$3.34	\$3.48	\$3.62	\$3.76	\$3.92	\$4.08	\$4.25	\$4.45	\$4.67	\$4.91		\$5.46	\$5.77		\$6.44	\$6.81	\$7.19
=	1 Avista Corporation	AVA	\$1,84	\$1.91	\$1.98	\$2.06	\$2.14	\$2.22	\$2.31	\$2.41	\$2.52	\$2.65		\$2.95	\$3.12		\$3.48	\$3.68	\$3.88
12	2 Black Hills Corporation	BKH	\$2.89	\$3.01	\$3.13	\$3.25	\$3.38	\$3.52	\$3.67	\$3.84	\$4.02	\$4.23		\$4.71	\$4.97		\$5.55	\$5.87	\$6.20
13		CNP	\$1.42	\$1.43	\$1.45	\$1.46	\$1.48	\$1.49	\$1.52	\$1.56	\$1.61	\$1.68		\$1.86	\$1.96		\$2.19	\$2.31	\$2.44
14		CMS	\$1.74	\$1.83	\$1.93	\$2.03	\$2.14	\$2.25	\$2.37	\$2.50	\$2.63	\$2.78		\$3.10	\$3.27		\$3.66	\$3.86	\$4.08
15	5 Consolidated Edison, Inc.		\$3.62	\$3.71	\$3.79	\$3.88	\$3.98	\$4.07	\$4.19	\$4.34	\$4.51	\$4.72		\$5.24	\$5.53		\$6.18	\$6.53	\$6.89
16	5 Dominion Resources, Inc.		\$3.05	\$3,23	\$3.42	\$3.62	\$3.83	\$4.06	\$4.30	\$4.55	\$4.81	\$5.09		\$5.68	\$6.00		\$6.70	\$7.08	\$7.48
7	7 DTE Energy Company	DTE	\$5.10	\$5.33	\$5.57	\$5.82	\$6.08	\$6.36	\$6.66	\$6.98	\$7.34	\$7.72		\$8.61	\$9.09		\$10.15	\$10.72	\$11.33
18		Š	\$4.13	\$4.24	\$4.35	\$4.47	\$4,59	\$4.71	\$4.86	\$5.04	\$5.25	\$5.49		\$6.10	\$6.45		\$7.20	\$7.60	\$8.03
19	9 Empire District Electric Company	EDE	\$1.55	\$1.60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.11		\$2.35	\$2.48		\$2.77	\$2.92	\$3.09
Z) Eversource Energy	S	\$2.58	\$2.70	\$2.82	\$2.94	\$3.08	\$3.21	\$3.37	\$3.53	\$3.71	\$3.90		\$4.35	\$4.60		\$5.13	\$5.42	\$5.73
2	 FirstEnergy Corp. 	世	\$0.85	\$0.88	\$0.92	\$0.96	\$1.00	\$1.04	\$1.08	\$1.13	\$1.19	\$1.25		\$1,39	\$1.47		\$1.64	\$1.73	\$1.83
22	2 Great Plains Energy Inc.	GXP	\$1,57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.82	\$1.88	\$1.96	\$2.04	\$2.14		\$2.38	\$2.51		\$2.81	\$2.96	\$3.13
23	3 IDACORP, Inc.	Δ	\$3.85	\$3.89	\$3,93	\$3.97	\$4.01	\$4,05	\$4.12	\$4.22	\$4.36	\$4.54		\$5.03	\$5.32		\$5.94	\$6.27	\$6.63
24	4 NorthWestern Corporation	NWE	\$1,98	\$2.06	\$2.14	\$2.22	\$2.31	\$2.40	\$2.50	\$2.61	\$2.73	\$2.87		\$3.20	\$3.38		\$3.77	\$3.98	\$4.21
25	5 OGE Energy Corp.	OGE	\$1.55	\$1.60	\$1.64	\$1.69	\$1.74	\$1.80	\$1.86	\$1.93	\$2.01	\$2.11		\$2.35	\$2.48		\$2.77	\$2.92	\$3.09
56	5 Otter Tail Corporation	OTTR	\$3.06	\$3.24	\$3.44	\$3.64	\$3.86	\$4.09	\$4.34	\$4.59	\$4.86	\$5.14		\$5.74	\$6.07		\$6.77	\$7.15	\$7.56
27	7 Pinnacle West Capital Corporation	PNW	\$3.58	\$3.72	\$3.87	\$4.03	\$4.19	\$4.36	\$4.54	\$4.75	\$4.98	\$5.23		\$5.82	\$6.15		\$6.87	\$7.26	\$7.67
28	3 Portland General Electric Company	POR	\$2.18	\$2.27	\$2.36	\$2.45	\$2.55	\$2.66	\$2.77	\$2.90	\$3.04	\$3.19		\$3.56	\$3.76		\$4.19	\$4.43	\$4.68
53	SCANA Corporation	SCG	\$3.79	\$3.95	\$4.12	\$4.29	\$4.47	\$4.66	\$4.86	\$5.09	\$5.34	\$5.62		\$6.26	\$6.61		\$7.38	\$7.79	\$8.23
36	 Southern Company 	S	\$2.77	\$2.86	\$2.96	\$3.06	\$3.16	\$3.26	\$3.38	\$3.52	\$3.68	\$3.86		\$4.29	\$4.53		\$5.06	\$5.35	\$5.65
3	1 TECO Energy, Inc.	Щ	\$0.95	\$0.98	\$1.02	\$1.06	\$1.09	\$1.13	\$1.18	\$1.23	\$1.29	\$1.35		\$1.50	\$1.59		\$1.77	\$1.87	\$1.98
33	 Westar Energy, Inc. 	Ν	\$2.35	\$2.43	\$2.51	\$2.60	\$2.69	\$2.78	\$2.88	\$3.00	\$3.14	\$3.29		\$3.66	\$3.87		\$4.32	\$4.56	\$4.82
88	3 Xcel Energy Inc.	XEL	\$2.03	\$2.11	\$2.19	\$2.28	\$2.37	\$2.46	\$2.57	\$2.68	\$2.81	\$2.96		\$3.29	\$3.48		\$3.88	\$4.10	\$4.33

က					Ś	v EPS Grov	vth Rate Est	Low EPS Growth Rate Estimate in First Stage (with Sustainable Growth)	Stage (w	ith Sustai	nable Gro	wth)						
4 Projected Annual			. [05]	133	125	13.5	1361	1371	č	130	[2]	2	[42]	23	177	[745]	[46]	2
•			[25]	3	5	2	<u>-</u>	2	192	[60]	1	<u> </u>	[44]	12	<u>+</u>	[24]	[- 1	[41]
6 Company	Ticker		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
7 ALLETE, Inc.	ALE		%00'99	64.75%	63.50%	62.25%	61.00%	62.05%	63.10%	64.15%	65.20%	66.25%	37.30% 6	7.30% 6	37.30%	67.30%	67.30%	67.30%
8 Alliant Energy Corporation	Ľ		61.00%	61.50%	62.00%	62.50%	63.00%	63.72%	64.43%	65.15%	65.87%	66.59%	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
9 Ameren Corporation	AEE		%00.59	62.50%	%00'09	27.50%	25.00%	27.05%	59.10%	61.15%	63.20%	65.25% 6	37.30% 6	67.30% 6	37.30%	67.30%	67.30%	67.30%
10 American Electric Power Company, Inc.	AEP		%00.59	64.75%	64.50%	64.25%	64.00%	64.55%	65.10%	65.65%	66.20%	66.75%	67.30% 6	67.30% 6	37.30%	67.30%	67.30%	67.30%
11 Avista Corporation	AVA		%00'.29	66.25%	%05.59	64.75%	64.00%	64.55%	65.10%	65.65%	66.20%	66.75%	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
12 Black Hills Corporation	BKH		27.00%	57.50%	58.00%	58.50%	%00.69	60.38%	61.77%	63.15%	64.54%	65.92%	37.30% 6	67.30% 6	37.30%	67.30%	67.30%	67.30%
13 CenterPoint Energy, Inc.	CNP		93.00%	89.75%	86.50%	83.25%	80.00%	77.88%	75.77%	73.65%		69.42% (67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
14 CMS Energy Corporation	CMS		61.00%	61.25%	61.50%	61.75%	62.00%	62.88%	63.77%	64.65%	65.54%		67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
15 Consolidated Edison, Inc.	G		65.00%	64.50%	64.00%	63.50%	63.00%	63.72%	64.43%	65.15%	65.87%	66.59%	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
16 Dominion Resources, Inc.	Δ		72.00%	72.00%	72.00%	72.00%	72.00%	71.22%	70.43%	%59.69	68.87%		67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
17 DTE Energy Company	DTE		62.00%	61.50%	61.00%	%05.09	%00'09	61.22%			64.87%	9 %60.99		67.30% 6	67.30%	67.30%	67.30%	67.30%
18 Duke Energy Corporation	Š		72.00%	70.50%	%00'69	67.50%	%00.99	66.22%	66.43%	86.65%	%28.99		67.30% 6		67.30%			67.30%
19 Empire District Electric Company	EDE		76.00%	74.25%	72.50%	70.75%	%00.69	68.72%	68.43%	68.15%							67.30%	67.30%
20 Eversource Energy	S		29.00%	58.25%	57.50%	56.75%	26.00%	57.88%	59.77%	61.65%		65.42%	67.30% 6	67.30% 6	67.30%			67.30%
21 FirstEnergy Corp.	벁		28.00%	27.00%	26.00%	22.00%	24.00%	56.22%	58.43%	60.65%	62.87%	65.09%	67.30% 6	67.30% 6	67.30%	67.30%		67.30%
22 Great Plains Energy Inc.	GXP		%00.02	67.75%	65.50%	63.25%	61.00%	62.05%	63.10%	64.15%				67.30% 6	67.30%	67.30%		67.30%
23 IDACORP, Inc.:	Δ		49.00%		53.50%	55.75%	28.00%	59.55%				65.75% 6						67.30%
24 NorthWestern Corporation	NWE		26.00%		62.50%	65.75%	%00.69	68.72%	68.43%			67.59%	67.30% 6		67.30%		67.30%	67.30%
25 OGE Energy Corp.	OGE		86.00%		72.50%	65.75%	%00.69	60.38%	61.77%	63.15%		65.92%			67.30%			67.30%
26 Otter Tail Corporation	OTTR		70.00%		63.00%	59.50%	26.00%	57.88%	59.77%	61.65%	63.54%	65.42% (67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
27 Pinnacle West Capital Corporation	PNW	·	63.00%	63.25%	63.50%	63.75%	64.00%	64.55%	65.10%	65.65%	66.20%	66.75% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
28 Portland General Electric Company	POR			51.50%	53.00%	54.50%	26.00%	27.88%	59.77%	61.65%			67.30% 6		67.30%	67.30%	67.30%	67.30%
29 SCANA Corporation	SCG		27.00%	26.75%	26.50%	56.25%	26.00%	57.88%	59.77%	61.65%	63.54%	65.42% 6	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
30 Southern Company	SO		%00.92	74.75%	73.50%	72.25%	71.00%	70.38%	69.77%	69.15%	68.54%	67.92%	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
31 TECO Energy, Inc.	世		83.00%		77.50%	74.75%	72.00%	71.22%	70.43%	69.65%	68.87%	68.09%	67.30% 6		67.30%	67.30%	67.30%	67.30%
32 Westar Energy, Inc.	X Y		61.00%		58.00%	26.50%	25.00%	57.05%	59.10%	61.15%	63.20%	65.25%	67.30% 6	67.30% 6	67.30%	67.30%	67.30%	67.30%
33 Xeel Fnergy Inc	Ж		63.00%		63 50%	63.75%	64.00%	64 55%	65 10%	65 65%	%02 99	66 75%	67.30% 6		67.30%	67.30%		67.30%

4 Projected Annual 5 Cash Flows		[48]	[49]	[20]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[69]	[60]	[61]	[62]	[63]	[64]
																		[erminal
6 Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023				2027	2028	2029	2030	Value
7 ALLETE, Inc.	ALE	\$1.99	\$2.03	\$2.07	\$2.11	\$2.15	\$2.28	\$2.42	\$2.58	\$2.76				\$3.54	\$3.74	\$3.95	\$4.17	\$114.36
8 Alliant Energy Corporation	۱	\$2.24	\$2.37	\$2.52	\$2.67	\$2.84	\$3.02	\$3.22	\$3.44	\$3.67				\$4.67	\$4.93	\$5.21	\$5.51	\$135.93
9 Ameren Corporation	AEE	\$1.63	\$1.64	\$1.65	\$1.65	\$1.65	\$1.79	\$1.95	\$2.12	\$2.31				\$3.05	\$3.23	\$3.41	\$3.60	\$93.72
10 American Electric Power Company, Inc.	AEP	\$2.26	\$2.34	\$2.43	\$2.52	\$2.61	\$2.75	\$2.90	\$3.06	\$3.25				\$4.10	\$4.34	\$4.58	\$4.84	\$122.46
11 Avista Corporation	AVA	\$1.28	\$1.31	\$1.35	\$1.38	\$1.42	\$1.49	\$1.57	\$1.66	\$1.75				\$2.22	\$2.34	\$2.47	\$2.61	\$72.57
12 Black Hills Corporation	KH H	\$1.71	\$1.80	\$1.89	\$1.98	\$2.08	\$2.22	\$2.37	\$2.54	\$2.73				\$3.54	\$3.74	\$3.95	\$4.17	\$121.53
 CenterPoint Energy, Inc. 	CNP	\$1.33	\$1.30	\$1.27	\$1.23	\$1.19	\$1.18	\$1.18	\$1.19	\$1.20				\$1.39	\$1.47	\$1.56	\$1.64	\$47.17
14 CMS Energy Corporation	CMS	\$1.12	\$1.18	\$1.25	\$1.32	\$1.39	\$1.49	\$1.59	\$1.70	\$1.82				\$2.33	\$2.46	\$2.60	\$2.75	\$72.37
15 Consolidated Edison, Inc.		\$2.41	\$2.45	\$2.49	\$2.53	\$2.57	\$2.67	\$2.79	\$2.94	\$3.11				\$3.93	\$4.16	\$4.39	\$4.64	\$131.84
16 Dominion Resources, Inc.	۵	\$2.33	\$2.46	\$2.61	\$2.76	\$2.92	\$3.06	\$3.20	\$3.35	\$3.50				\$4.27	\$4.51	\$4.76	\$5.03	\$157.85
17 DTE Energy Company	DTE	\$3.30	\$3.43	\$3.55	\$3.68	\$3.82	\$4.08	\$4.36	\$4.67	\$5.01				\$6.47	\$6.83	\$7.22	\$7.63	\$177.97
18 Duke Energy Corporation	DUK	\$3.05	\$3.07	\$3.08	\$3.10	\$3.11	\$3.22	\$3.35	\$3.50	\$3.67				\$4.59	\$4.84	\$5.12	\$5.41	\$166.37
19 Empire District Electric Company	EDE	\$1.21	\$1.22	\$1.23	\$1.23	\$1.24	\$1.28	\$1.32	\$1.37	\$1.43	\$1.50	\$1.58	\$1.67	\$1.76	\$1.86	\$1.97	\$2.08	\$54.75
20 Eversource Energy	ES	\$1.59	\$1.64	\$1.69	\$1.75	\$1.80	\$1.95	\$2.11	\$2.29	\$2,48				\$3.27	\$3,45	\$3.65	\$3.85	\$110.24
21 FirstEnergy Corp.	世	\$0.51	\$0.52	\$0.54	\$0.55	\$0.56	\$0.61	\$0.66	\$0.72	\$0.79				\$1.05	\$1.10	\$1.17	\$1.23	\$79.74
22 Great Plains Energy Inc.	GXP	\$1.13	\$1.13	\$1.12	\$1.12	\$1.11	\$1.17	\$1.24	\$1.31	\$1.40				\$1.79	\$1.89	\$1.99	\$2.11	\$58.36
23 IDACORP, Inc.	ΙDΑ	\$1.91	\$2.01	\$2.12	\$2.23	\$2.35	\$2.45	\$2.58	\$2.73	\$2.92				\$3.78	\$4.00	\$4.22	\$4.46	\$132.80
24 NorthWestern Corporation	NWE	\$1.15	\$1.27	\$1.39	\$1.52	\$1.65	\$1.72	\$1.79	\$1.86	\$1.95				\$2.40	\$2.54	\$2.68	\$2.83	\$113.36
25 OGE Energy Corp.	06E	\$1.37	\$1.30	\$1.23	\$1.15	\$1.06	\$1.12	\$1.19	\$1.27	\$1.36				\$1.76	\$1.86	\$1.97	\$2.08	\$77.44
26 Otter Tail Corporation	OTTR	\$2.27	\$2.29	\$2.30	\$2.30	\$2.29	\$2.51	\$2.75	\$3.00	\$3.27				\$4.31	\$4.56	\$4.82	\$5.09	\$67.99
27 Pinnacle West Capital Corporation	PNW	\$2,35	\$2.45	\$2.56	\$2.67	\$2.79	\$2.93	\$3.09	\$3.27	\$3.46				\$4,38	\$4.62	\$4.88	\$5.16	\$132.96
28 Portland General Electric Company	POR	\$1.13	\$1.22	\$1.30	\$1.39	\$1.49	\$1.60	\$1.73	\$1.87	\$2.03				\$2.67	\$2.82	\$2,98	\$3.15	\$80.37
29 SCANA Corporation	SCG	\$2.25	\$2.34	\$2.42	\$2.51	\$2.61	\$2.81	\$3.04	\$3.29	\$3.57				\$4.70	\$4.97	\$5.25	\$5.54	\$123.25
30 Southern Company	SO	\$2.18	\$2.21	\$2.25	\$2.28	\$2.32	\$2.38	\$2.46	\$2.54	\$2.64				\$3.22	\$3.41	\$3.60	\$3.80	\$96.93
31 TECO Energy, Inc.	Щ	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82	\$0.84	\$0.87	\$0.90	\$0.93				\$1.13	\$1.19	\$1.26	\$1.33	\$39.80
32 Westar Energy, Inc.	X K	\$1.48	\$1.49	\$1.51	\$1.52	\$1.53	\$1.64	\$1.77	\$1.92	\$2.08				\$2.75	\$2.91	\$3.07	\$3.24	\$84.58
33 Xcel Energy Inc.	XEL	\$1.33	\$1.39	\$1.45	\$1.51	\$1.58	\$1.66	\$1.75	\$1.85	\$1.96		- 1		\$2.47	\$2.61	\$2.76	\$2.92	\$73.07

6/30/30 \$97.32 \$127.30 \$75.19 \$125.70 \$75.11 \$136.48 \$162.88 \$185.59 \$171.78 \$56.83 \$80.97 \$60.47 \$137.26 \$116.19 \$79.51 \$73.08 \$138.12 \$83.52 \$128.80 \$100.74 \$141.44 \$48.82 [82] \$3.41 \$4.58 \$2.47 \$3.95 \$1.56 \$2.60 \$4.39 \$4.76 \$7.22 \$5.12 \$1.97 \$1.99 \$4.22 \$2.68 \$1.97 \$4.82 \$4.88 \$2.98 \$5.25 \$3.60 \$1.26 \$3.07 [84] \$4.93 \$3.23 \$4.34 \$2.34 \$3.74 \$1.47 \$2.46 \$4.16 \$4.51 \$6.83 \$4.84 \$1.86 \$1.86 \$1.89 \$1.89 \$2.10 \$2.82 \$3.45 \$1.86 \$2.82 \$3.45 [80] \$4.67 \$3.05 \$4.10 \$2.22 \$3.54 \$1.39 \$2.33 \$2.33 \$2.33 \$2.33 \$4.27 \$4.27 \$3.27 \$1.05 \$1.79 \$3.78 \$2.40 \$4.31 \$4.38 \$2.67 [6] 6/30/26 \$3.88 \$2.10 \$3.35 \$1.32 \$2.20 \$3.72 \$4.04 \$6.12 \$1.67 \$3.09 \$0.99 \$1.69 \$3.58 \$2.27 \$1.67 \$4.08 \$2.53 \$4.45 \$3.05 \$1.07 \$2.60 \$2.34 [78] \$4.18 \$2.74 \$3.68 \$1.99 \$3.17 \$1.25 \$2.09 \$3.52 \$3.82 \$5.79 \$4.11 \$2.93 \$0.94 \$1.60 \$3.39 \$1.58 \$2.15 \$1.58 \$3.86 \$3.92 [77] \$3.45 \$1.86 \$2.94 \$1.22 \$1.95 \$3.30 \$3.36 \$5.38 \$3.88 \$1.50 \$2.69 \$0.86 \$1.49 \$3.13 \$2.05 \$1.46 \$3.56 \$3.68 \$2.20 \$3.87 \$2.76 \$0.97 \$2.26 \$2.08 [9/] \$2.76 \$3.67 \$2.31 \$3.25 \$1.75 \$2.73 \$1.20 \$1.82 \$3.50 \$5.01 \$3.67 \$2.48 \$1.40 \$2.92 \$3.46 \$1,43 \$1.36 \$0.93 \$2.08 \$1.96 \$3.11 \$1.95 \$3.57 \$2.64 [75] \$3.44 \$3.06 \$1.66 \$2.54 \$1.19 \$1.19 \$2.94 \$3.35 \$4.67 \$3.50 \$1.37 \$3.50 \$1.37 \$3.50 \$1.37 \$3.50 \$1.37 \$3.50 \$1.37 \$3.50 \$1.37 \$1.37 \$3.50 \$1.37 \$1.86 \$1.27 \$3.00 \$3.27 \$1.87 \$2.54 \$0.90 \$1.92 \$1.85 \$3.29 [74] \$4.36 \$3.35 \$1.32 \$2.11 \$0.66 \$1.24 \$2.58 \$1.79 \$2.90 \$1.57 \$2.37 \$3.09 \$1.59 \$3.20 \$2.75 \$3.04 [73] \$2.28 \$3.02 \$1.79 \$2.75 \$1.49 \$2.22 \$1.18 \$1.49 \$2.67 \$3.06 \$4.08 \$3.22 \$1.28 \$1.28 \$2.51 \$2.93 \$1.60 \$0.61 \$1.17 \$2.45 \$1.72 [72] \$2.15 \$2.84 \$1.65 \$2.84 \$1.65 \$1.42 \$1.42 \$1.40 \$1.39 \$2.57 \$2.92 \$3.82 \$0.56 \$1.11 \$2.35 \$1.65 \$1.06 \$2.29 \$2.29 \$1.49 [7] \$2.67 \$1.65 \$1.65 \$1.38 \$1.38 \$1.32 \$1.32 \$1.32 \$2.53 \$2.53 \$2.53 \$2.76 \$3.76 \$3.10 \$3.10 \$0.55 \$1.12 \$2.23 \$1.52 \$2.67 \$2.30 [02] \$2.51 \$2.07 \$2.65 \$1.65 \$1.65 \$1.35 \$1.35 \$1.27 \$1.27 \$2.49 \$2.12 \$3.58 \$3.58 \$1.25 \$1.39 \$1.23 \$2.30 \$2.56 \$1.30 \$2.42 \$2.25 [69] \$2.44 \$2.39 \$3.38 \$3.09 \$1.23 \$2.03 \$2.29 \$1.67 \$2.31 \$1.30 \$1.75 \$0.52 \$1.15 \$1.91 \$2.34 \$2.39 \$1.16 \$2.30 \$1.63 \$1.17 [68] \$1.03 \$1.16 \$0.84 \$0.66 \$0.89 \$0.89 \$0.69 \$0.58 \$1.25 \$1.20 \$1.71 \$1.58 \$0.27 \$0.59 \$0.99 \$0.60 \$1.21 \$0.82 \$0.71 [67] \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 [99] (\$59.66) (\$40.80) (\$32.48) (\$53.06) (\$31.69)(\$59.34)(\$78.15) (\$75.64)(\$34.67)\$26.21) (\$58.41)(\$29.53)(\$44.89)(\$18.43) (\$36.94) (\$32.56) (\$70.94) (\$25.27)(\$50.29) (\$34.96)(\$34.50) (\$54.66)(\$47.78) \$59.20) \$53.30) American Electric Power Company, Inc. Portland General Electric Company Pinnacle West Capital Corporation Empire District Electric Company NorthWestern Corporation Alliant Energy Corporation DTE Energy Company Duke Energy Corporation Consolidated Edison, Inc. Dominion Resources, Inc. CMS Energy Corporation CenterPoint Energy, Inc. FirstEnergy Corp. Great Plains Energy Inc. Black Hills Corporation Projected Annual Data Otter Tail Corporation Ameren Corporation Investor Cash Flows SCANA Corporation Eversource Energy Southern Company Westar Energy, Inc. Avista Corporation TECO Energy, Inc. OGE Energy Corp. Xcel Energy Inc. IDACORP, Inc. ALLETE, Inc. 9

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Multi-Stage DCF Notes (with Sustainable Growth)
2
            [1] Source: Bloomberg; based on 30-, 90-, 180, and 360-day historical average as of June 25, 2015
3
            [2] Source: Zacks
4
            [3] Source: Yahoo! Finance
            [4] Source: Value Line
           [5] Source: PNM Exhibit RBH-4
            [6] Equals indicated value (average, minimum, maximum) from Columns [2], [3], [4], [5]
8
            [7] Source: Average of 5.25%, 6.10%, 5.94%, 5.32%
            [8] Source: Value Line
10
           [9] Source: Value Line
11
          [10] Source: Bloomberg Professional
12
          [11] Equals Column [1] + Column [65]
          [12] Equals result of Excel Solver function; goal: Column [11] equals $0.00
13
14
          [13] Equals Column [64] / Column [31]
15
          [14] Equals Column [13] / (Column [7] x 100)
          [15] Source: Value Line
16
17
          [16] Equals Column [15] x (1 + Column [6])
18
          [17] Equals Column [16] x (1 + Column [6])
19
          [18] Equals Column [17] x (1 + Column [6])
20
          [19] Equals Column [18] x (1 + Column [6])
21
          [20] Equals Column [15] x (1 + Column [6])
22
               Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2020 - 2019)))) x Column [20]
23
          [22] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2021 - 2019)))) x Column [20]
24
          [23] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2022 - 2019)))) x Column [21]
          [24] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2023 - 2019)))) x Column [22]
25
26
          [25] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2024 - 2019)))) x Column [23]
27
          [26] Equals Column [25] x (1 + Column [7])
          [27] Equals Column [26] x (1 + Column [7])
28
29
          [28] Equals Column [27] x (1 + column [7])
30
          [29] Equals Column [28] x (1 + column [7])
31
          [30] Equals Column [29] x (1 + column [7])
32
          [31] Equals Column [30] x (1 + column [7])
33
          [32] Equals Column [8]
34
          [33] Equals Column [32] + ((Column [36] - Column [32]) / 4)
35
          [34] Equals Column [33] + ((Column [36] - Column [32]) / 4)
36
          [35] Equals Column [34] + ((Column [36] - Column [32]) / 4)
37
          [36] Equals Column [9]
38
          [37] Equals Column [36] + ((Column [42] - Column [36]) / 6)
          [38] Equals Column [37] + ((Column [42] - Column [36]) / 6)
39
40
          [39] Equals Column [38] + ((Column [42] - Column [36]) / 6)
41
          [40] Equals Column [39] + ((Column [42] - Column [36]) / 6)
42
          [41] Equals Column [40] + ((Column [42] - Column [36]) / 6)
          [42] Equals Column [10]
43
44
          [43] Equals Column [10]
45
          [44] Equals Column [10]
46
          [45] Equals Column [10]
47
          [46] Equals Column [10]
48
          [47] Equals Column [10]
49
          [48] Equais Column [16] x Column [32]
50
          [49] Equals Column [17] x Column [33]
51
          [50] Equals Column [18] x Column [34]
52
          [51] Equals Column [19] x Column [35]
53
          [52] Equals Column [20] x Column [36]
54
          [53] Equals Column [21] x Column [37]
55
          [54] Equals Column [22] x Column [38]
          [55] Equals Column [23] x Column [39]
57
          [56] Equals Column [24] x Column [40]
58
          [57] Equals Column [25] x Column [41]
59
          [58] Equals Column [26] x Column [42]
60
          [59] Equals Column [27] x Column [43]
          [60] Equals Column [28] x Column [44]
61
62
          [61] Equals Column [29] x Column [45]
63
               Equals Column [30] x Column [46]
64
          [63] Equals Column [31] x Column [47]
          [64] Equals (Column [63] x (1 + Column [7])) / (Column [12] - Column [7])
65
66
          [65] Equals negative net present value; discount rate equals Column [12], cash flows equal Column [66] through Column [82]
67
68
          [67] Equals Column [48] x (12/31/2015 - 6/25/2015) / 365
          [68] Equals Column [48] x (1 + (0.5 x Column [5]))
69
70
          [69] Equals Column [50]
71
          [70] Equals Column [51]
72
          [71] Equals Column [52]
73
          [72] Equals Column [53]
74
          [73] Equals Column [54]
75
          [74] Equals Column [55]
          [75] Equals Column [56]
76
77
          [76] Equals Column [57]
          [77] Equals Column [58]
79
          [78] Equals Column [59]
          [79] Equals Column [60]
80
81
          [80] Equals Column [61]
82
          [81] Equals Column [62]
          [82] Equals Column [63] + [64]
```

Ex-Ante Market Risk Premium

PNM Exhibit RBH-6

Is contained in the following 18 pages.

Ex-Ante Market Risk Premium Market DCF Method Based - Bloomberg

3

[1]	[2]	[3]
S&P 500	Current 30-Year	
Est, Required	Treasury (30-day	Implied Market
Market Return	average)	Risk Premium
13.43%	3.05%	10.38%

6			[4]	[5]	[6]	[7]	[8]	[9]
7	Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
•	ACH ENT TECHNOLOGIES INC		40.044.00					
8	AGILENT TECHNOLOGIES INC	A	13,344.33	0.07%	1.00%	14.00%	15.07%	0.0106%
9	ALCOA INC	AA	14,142.96	0.07%	1.05%	5.00%	6.08%	0.0045%
10	AMERICAN AIRLINES GROUP INC	AAL	29,263.82	0.15%	0.99%	17.86%	18.94%	0.0292%
11	APPLE INC	AAPL	734,531.33	3.86%	1.57%	15.79%	17.48%	0.6754%
12	ABBVIE INC	ABBV	122,185.93	0.64%	2.90%	9.40%	12.44%	0.0800%
13	AMERISOURCEBERGEN CORP	ABC	23,640.36	0.12%	1.08%	13.42%	14.58%	0.0181%
14	ABBOTT LABORATORIES	ABT	73,440.40	0.39%	1.95%	11.49%	13.55%	0.0523%
15	ACE LTD	ACE	33,557.37	0.18%	2.58%	8.48%	11.17%	0.0197%
16	ACCENTURE PLC-CL A	ACN	65,967.84	0.35%	2.06%	10.30%	12.46%	0.0433%
17	ADOBE SYSTEMS INC	ADBE	41,772.35	0.22%	0.00%	14.83%	14.83%	0.0326%
18	ANALOG DEVICES INC	ADI	20,878.74	0.11%	2.36%	11.78%	14.27%	0.0157%
19	ARCHER-DANIELS-MIDLAND CO	ADM	31,452.93	0.17%	2.12%	3.73%	5.89%	0.0097%
20	AUTOMATIC DATA PROCESSING	ADP	39,134.83	0.21%	2.34%	10.33%	12.80%	0.0264%
21	ALLIANCE DATA SYSTEMS CORP	ADS	18,855.34	0.10%	0.00%	14.60%	14.60%	0.0145%
22	AUTODESK INC	ADSK	12,133.86	0.06%	0.00%	15.63%	15.63%	0.0100%
23	ADT CORP/THE	ADT	5,825.81	0.03%	2.45%	6.70%	9.23%	0.0028%
24	AMEREN CORPORATION	AEE	9,101.23	0.05%	4.42%	6.15%	10.71%	0.0051%
25	AMERICAN ELECTRIC POWER	AEP	25,780.75	0.14%	4.06%	5.11%	9.27%	0.0126%
26	AES CORP	AES	9,233.43	0.05%	2.96%	6.25%	9.30%	0.0045%
27	AETNA INC	AET	46,303.92	0.24%	0.78%	12.07%	12.89%	0.0314%
28	AFLAC INC	AFL	27,482.23	0.14%	2.50%	9.68%	12.30%	0.0178%
29	ALLERGAN PLC	AGN	121,324.26	0.64%	0.00%	14.72%	14.72%	0.0940%
30	AMERICAN INTERNATIONAL GROUP	AIG	83,243.88	0.44%	0.88%	9.04%	9.96%	0.0436%
31	APARTMENT INVT & MGMT CO -A	AIV	5,802.62	0.03%	3.21%	7.28%	10.61%	0.0032%
32	ASSURANT INC	AIZ	4,620.36	0.02%	1.71%	8.20%	9.98%	0.0024%
33	AKAMAI TECHNOLOGIES INC	AKAM	12,743.74	0.07%	0.00%	15.80%	15.80%	0.0106%
34	ALLSTATE CORP	ALL	26,598.11	0.14%	1.84%	9.91%	11.84%	0.0166%
35	ALLEGION PLC	ALLE	5,906.11	0.03%	0.65%	14.50%	15.19%	0.0047%
36	ALTERA CORP	ALTR	15,439.84	0.08%	1.39%	10.88%	12.35%	0.0100%
37	ALEXION PHARMACEUTICALS INC	ALXN	41,009.15	0.22%	0.00%	22.25%	22.25%	0.0480%
38	APPLIED MATERIALS INC	AMAT	24,705.86	0.13%	2.01%	12.30%	14.44%	0.0188%
39	AMETEK INC	AME	12,993.84	0.07%	0.70%	10.67%	11.41%	0.0078%
40	AFFILIATED MANAGERS GROUP	AMG	12,361.57	0.07%	0.00%	15.15%	15,15%	0.0099%
41	AMGEN INC	AMGN	120,708.98	0.64%	1.98%	10.36%	12.44%	0.0790%
42	AMERIPRISE FINANCIAL INC	AMP	23,191.29	0.12%	2.01%	11.65%	13.78%	0.0168%
43	AMERICAN TOWER CORP	AMT	40,083.45	0.21%	1.84%	16.36%	18.35%	0.0387%
44	AMAZON.COM INC	AMZN	204,946.19	1.08%	0.00%	45.97%	45.97%	0.4957%
45	AUTONATION INC	AN	7,337.52	N/A	N/A	12.32%	N/A	N/A
46	ANTHEM INC	ANTM	44,867.56	0.24%	1.47%	10.03%	11.57%	0.0273%
47	AON PLC	AON	29,043.86	0.15%	1.13%	12.08%	13.28%	0.0203%
48	APACHE CORP	APA	21,796.07	0.11%	1.75%	7.00%	8.81%	0.0101%
49	ANADARKO PETROLEUM CORP	APC	41,005.66	0.22%	1.34%	-0.12%	1.22%	0.0026%
50	AIR PRODUCTS & CHEMICALS INC	APD	30,674.85	0.16%	2.24%	9.00%	11.34%	0.0183%
51	AMPHENOL CORP-CL A	APH	17,355.22	0.09%	0.91%	10.73%	11.68%	0.0107%
52	AIRGAS INC	ARG	8,092.80	0.04%	2.25%	9.34%	11.69%	0.0050%
53	ALLEGHENY TECHNOLOGIES INC	ATI	3,432.64	0.02%	2.28%	16.10%	18.57%	0.0034%
54	AVALONBAY COMMUNITIES INC	AVB	21,348.43	0.11%	3.10%	6.69%	9.89%	0.0034%
55	AVAGO TECHNOLOGIES LTD	AVGO	36,162.17	0.19%	1.11%	17.32%	18.52%	0.0352%
56	AVERY DENNISON CORP	AVY	5,588.75	0.03%	2.46%	7.45%	10.00%	0.0029%
57	AMERICAN EXPRESS CO	AXP	81,141.76	0.43%	1.41%	9.90%	11.38%	
58	AUTOZONE INC	AZO	21,002.82	0.11%	0.00%	13.56%	13.56%	0.0486%
59	BOEING CO/THE	BA	98,506.64	0.52%	2.56%	10.34%	13.03%	0.0150%
60	BANK OF AMERICA CORP	BAC	182,421.48	0.96%	1.20%	8.83%		0.0675%
61	BAXTER INTERNATIONAL INC	BAX	39,371.35	0.21%	2.94%		10.09%	0.0968%
62	BED BATH & BEYOND INC	BBBY	11,859.70	0.06%	0.00%	8.47% 7.45%	11.53%	0.0239%
63	BB&T CORP	BBT	29,985.68			7.45%	7.45%	0.0046%
64	BEST BUY CO INC	BBY	29,985.68 11,934.26	0.16%	2.56%	9.20%	11.88%	0.0187%
65			,	0.06%	3.82%	11.66%	15.71%	0.0099%
66	CR BARD INC	BCR	12,834.12	0.07%	0.56%	9.60%	10.18%	0.0069%
	BECTON DICKINSON AND CO	BDX	29,713.91	0.16%	1.69%	11.15%	12.94%	0.0202%
67 68	FRANKLIN RESOURCES INC	BEN	31,119.72	0.16%	2.10%	9.63%	11.83%	0.0194%
68 60	BROWN-FORMAN CORP-CLASS B	BF/B	21,399.86	0.11%	1.35%	8.50%	9.91%	0.0112%
69 70	BAKER HUGHES INC	BHI	26,975.97	0.14%	1.10%	5.75%	6.88%	0.0098%
70	BIOGEN INC	BIIB	96,747.84	0.51%	0.00%	16.52%	16.52%	0.0841%

3

5

Ex-Ante Market Risk Premium Market DCF Method Based - Bloomberg

 [1]
 [2]
 [3]

 S&P 500
 Current 30-Year
 Implied Market

 Est. Required Market Return
 Treasury (30-day average)
 Implied Market

 13.43%
 3.05%
 10.38%

6			[4]	[5]	[6]	[7]	[8]	[9]
			Market	121	Estimated	Long-Term Growth	101	Weighted
7	Company	Ticker	Capitalization	Weight in Index	Dividend Yield	Est.	DCF Result	DCF Result
,	Обупрану	Tioloi	Oupitalization	vvoigitt in index	Dividend Field	Lot.	DOF Result	DCF Result
8	BANK OF NEW YORK MELLON CORP	BK	48,056.78	0.25%	4.040/	44.000/	40.000/	0.00000/
9	BLACKROCK INC		,		1.61%	11.60%	13.30%	0.0336%
		BLK	58,551.39	0.31%	2.48%	15.10%	17.77%	0.0547%
10	BALL CORP	BLL	10,007.49	0.05%	0.73%	9.07%	9.82%	0.0052%
11	BRISTOL-MYERS SQUIBB CO	BMY	111,420.58	0.59%	2.22%	17.33%	19.75%	0.1158%
12	BROADCOM CORP-CL A	BRCM	31,640.18	0.17%	1.06%	12.10%	13.22%	0.0220%
13	BERKSHIRE HATHAWAY INC-CL B	BRK/B	344,031.60	N/A	N/A	5.80%	N/A	N/A
14	BOSTON SCIENTIFIC CORP	BSX	24,440.52	0.13%	0.00%	10.20%	10.20%	0.0131%
15	BORGWARNER INC	BWA	13,449.21	0.07%	0.88%	11.22%	12.16%	
16	BOSTON PROPERTIES INC	BXP	18,908.95					0.0086%
			•	0.10%	3.44%	7.58%	11.15%	0.0111%
17	CITIGROUP INC	С	170,488.31	0.90%	0.28%	27.67%	27.99%	0.2511%
18	CA INC	CA	13,364.75	0.07%	3.31%	5.77%	9.18%	0.0065%
19	CONAGRA FOODS INC	CAG	18,726.24	0.10%	2.29%	8.90%	11.30%	0.0111%
20	CARDINAL HEALTH INC	CAH	28,673.34	0.15%	1.60%	11.55%	13.24%	0.0200%
21	CAMERON INTERNATIONAL CORP	CAM	10,333.99	0.05%	0.00%	2.77%	2.77%	0.0015%
22	CATERPILLAR INC	CAT	52,352.86	0.28%	3.25%	9.00%	12.39%	0.0341%
23	CHUBB CORP	СВ	21,989.63	0.12%	2.33%	7.73%		
24	CBRE GROUP INC - A	CBG	•				10.16%	0.0118%
			12,390.11	N/A	N/A	10.50%	N/A	N/A
25	CBS CORP-CLASS B NON VOTING	CBS	28,206.53	0.15%	1.10%	15.17%	16.35%	0.0243%
26	COCA-COLA ENTERPRISES	CCE	10,360.86	0.05%	2.52%	6.19%	8.79%	0.0048%
27	CROWN CASTLE INTL CORP	CCI	27,341.71	0.14%	4.02%	21.60%	26.06%	0.0375%
28	CARNIVAL CORP	CCL	39,390.98	0.21%	2.04%	17.12%	19.33%	0.0401%
29	CELGENE CORP	CELG	94,233.48	0.50%	0.00%	25.20%	25.20%	0.1249%
30	CERNER CORP	CERN	23,806.78	0.13%	0.00%	19.32%	19.32%	0.0242%
31	CF INDUSTRIES HOLDINGS INC	CF	15,052.81	0.08%	1.90%			
			·			15.80%	17.85%	0.0141%
32	CHESAPEAKE ENERGY CORP	CHK	7,389.65	0.04%	3.14%	13.37%	16.72%	0.0065%
33	C.H. ROBINSON WORLDWIDE INC	CHRW	9,110.45	0.05%	2.46%	10.44%	13.03%	0.0062%
34	CIGNA CORP	CI	43,693.21	0.23%	0.02%	11.30%	11.33%	0.0260%
35	CINCINNATI FINANCIAL CORP	CINF	8,295.16	N/A	3.65%	N/A	N/A	N/A
36	COLGATE-PALMOLIVE CO	CL	60,117.72	0.32%	2.25%	8.48%	10.83%	0.0342%
37	CLOROX COMPANY	CLX	13,933.75	0.07%	2.80%	6.94%	9.84%	0.0072%
38	COMERICA INC	CMA	9,329.47	0.05%	1.58%	9.42%	11.07%	
39	COMCAST CORP-CLASS A	CMCSA						0.0054%
			152,889.44	0.80%	1.64%	12.68%	14.42%	0.1160%
40	CME GROUP INC	CME	31,730,45	0.17%	4.23%	12.30%	16.79%	0.0280%
41	CHIPOTLE MEXICAN GRILL INC	CMG	18,857.23	0.10%	0.00%	20.59%	20.59%	0.0204%
42	CUMMINS INC	CMI	24,312.10	0.13%	2.49%	10.35%	12.96%	0.0166%
43	CMS ENERGY CORP	CMS	8,688.67	0.05%	3.70%	6.12%	9.93%	0.0045%
44	CENTERPOINT ENERGY INC	CNP	8,242.77	0.04%	5.17%	6.33%	11.66%	0.0051%
45	CONSOL ENERGY INC	CNX	5,212.57	0.03%	1.10%	12.40%	13.57%	0.0037%
46	CAPITAL ONE FINANCIAL CORP	COF	48,549.81	0.26%	1.70%	5.23%		
47							6.98%	0.0178%
	CABOT OIL & GAS CORP	COG	13,198.10	0.07%	0.25%	34.08%	34.37%	0.0239%
48	COACHINC	COH	9,866.22	0.05%	3.78%	11.58%	15.58%	0.0081%
49	ROCKWELL COLLINS INC	COL	12,547.01	0.07%	1.36%	10.46%	11.89%	0.0078%
50	CONOCOPHILLIPS	COP	76,713.94	0.40%	4.70%	7.25%	12.12%	0.0489%
51	COSTCO WHOLESALE CORP	COST	60,407.58	0.32%	1.02%	9.69%	10.76%	0.0342%
52	CAMPBELL SOUP CO	CPB	14,811.84	0.08%	2.66%	3.62%	6.33%	0.0049%
53	SALESFORCE.COM INC	CRM	48,288.16	0.25%	0.00%	24.57%	24.57%	0.0624%
54	COMPUTER SCIENCES CORP	CSC	9,135.05	0.05%	1.48%			
						9.90%	11.45%	0.0055%
55	CISCO SYSTEMS INC	CSCO	144,439.24	0.76%	2.81%	7.34%	10.26%	0.0780%
56	CSX CORP	CSX	33,294.97	0.18%	2.07%	10.14%	12.31%	0.0216%
57	CINTAS CORP	CTAS	9,819.07	0.05%	1.98%	11.33%	13.42%	0.0069%
58	CENTURYLINK INC	CTL	16,867.38	0.09%	7.22%	2.17%	9.46%	0.0084%
59	COGNIZANT TECH SOLUTIONS-A	CTSH	38,889.97	0.20%	0.00%	16.01%	16.01%	0.0328%
60	CITRIX SYSTEMS INC	CTXS	11,478.20	0.06%	0.00%	14.28%	14.28%	0.0086%
61	CABLEVISION SYSTEMS-NY GRP-A	CVC	6,677.46	0.04%	2.48%	2.24%		
62	CVS HEALTH CORP	CVS					4.75%	0.0017%
			118,486.01	0.62%	1.28%	14.64%	16.01%	0.0998%
63	CHEVRON CORP	CVX	184,926.18	0.97%	4.41%	-0.57%	3.83%	0.0373%
64	DOMINION RESOURCES INC/VA	D	39,786.41	0.21%	3.86%	6.16%	10.14%	0.0212%
65	DELTA AIR LINES INC	DAL	34,774.46	0.18%	1.08%	21.16%	22.34%	0.0409%
66	DU PONT (E.I.) DE NEMOURS	DD	59,881.43	0.32%	2.91%	6.37%	9.37%	0.0295%
67	DEERE & CO	DE	31,383.92	0.17%	2.56%	6.80%	9.44%	0.0156%
68	DISCOVER FINANCIAL SERVICES	DFS	26,125.50	0.14%	1.83%	9.22%	11.14%	0.0153%
69	DOLLAR GENERAL CORP	DG	23,385.41	0.12%	1.12%			
						12.35%	13.54%	0.0167%
70	QUEST DIAGNOSTICS INC	DGX	10,461.03	0.06%	1.97%	11.26%	13.34%	0.0073%
71	DR HORTON INC	DHI	10,214.18	0.05%	0.88%	24.20%	25.19%	0.0135%

3

4 5

Ex-Ante Market Risk Premium Market DCF Method Based - Bloomberg

 [1]
 [2]
 [3]

 S&P 500
 Current 30-Year
 Implied Market

 Est. Required Market Return
 Treasury (30-day average)
 Implied Market

 13.43%
 3.05%
 10.38%

6			[4]	[5]	[6]	[7]	[8]	[9]
	_		Market		Estimated	Long-Term Growth		Weighted
7	Company	Ticker	Capitalization	Weight in Index	Dividend Yield	Est,	DCF Result	DCF Result
	D			/				
8 9	DANAHER CORP	DHR	60,523.50	0.32%	0.61%	11.87%	12.52%	0.0399%
10	WALT DISNEY COMMUNICATIONS A	DIS	194,194.33	1.02%	1.00%	11.61%	12.67%	0.1295%
11	DISCOVERY COMMUNICATIONS-A	DISCA	21,276.25	0.11%	0.00%	15.80%	15.80%	0.0177%
	DELPHI AUTOMOTIVE PLC	DLPH	25,622.60	0.13%	1.21%	13.74%	15.03%	0.0203%
12 13	DOLLAR TREE INC DUN & BRADSTREET CORP	DLTR	16,590.17	0.09%	0.00%	14.70%	14.70%	0.0128%
14	DIAMOND OFFSHORE DRILLING	DNB DO	4,566.38	0.02%	1.46%	10.25%	11.78%	0.0028%
15	DOVER CORP	DOV	3,601.79 11,382.35	0.02%	1.90%	-7.80%	-5.97%	-0.0011%
16	DOW CHEMICAL CO/THE	DOW	•	0.06%	2.34%	12.00%	14.48%	0.0087%
17	DR PEPPER SNAPPLE GROUP INC	DOW	61,356.32 14,320.37	0.32% 0.08%	3.16% 2.54%	7.60%	10.88%	0.0351%
18	DARDEN RESTAURANTS INC	DRI	8,960.19	0.05%	3.30%	6,98%	9.60%	0.0072%
19	DTE-ENERGY COMPANY	DTE	13,250.72	0.07%	3.82%	13.46%	16.98%	0.0080%
20	DIRECTV	DTV	47,260.90	0.25%	0.00%	4.90%	8.81%	0.0061%
21	DUKE ENERGY CORP	DUK	48,877.86	0.26%	4.61%	2.25%	2.25%	0.0056%
22	DAVITA HEALTHCARE PARTNERS I	DVA	17,395.65	0.09%		5.00%	9.72%	0.0250%
23	DEVON ENERGY CORP	DVN	•		0.00%	10.22%	10.22%	0.0094%
23 24			24,822.22	0.13%	1.59%	2.59%	4.20%	0.0055%
25	ELECTRONIC ARTS INC EBAY INC	EBAY	21,220.33	0.11%	0.00%	16.00%	16.00%	0.0179%
26	ECOLAB INC		74,826.94	0.39%	0.00%	12.21%	12.21%	0.0481%
	CONSOLIDATED EDISON INC	ECL ·	34,528.33	0.18%	1.12%	13.17%	14.37%	0.0261%
27		ED	16,840.44	0.09%	4.46%	3.00%	7.53%	0.0067%
28	EQUIFAX INC	EFX	11,856.62	0.06%	1.16%	10.00%	11.22%	0.0070%
29	EDISON INTERNATIONAL	EIX	18,245.43	0.10%	3.00%	3.95%	7.01%	0.0067%
30	ESTEE LAUDER COMPANIES-CL A	EL	32,826.06	0.17%	1.05%	10.38%	11.48%	0.0198%
31	EMC CORP/MA	EMC	52,513.33	0.28%	1.80%	10.44%	12.33%	0.0341%
32	EASTMAN CHEMICAL CO	EMN	12,359.44	0.07%	1.92%	7.15%	9.14%	0.0059%
33	EMERSON ELECTRIC CO	EMR	37,839.43	0.20%	3.33%	6.73%	10.17%	0.0202%
34	ENDO INTERNATIONAL PLC	ENDP	16,822.21	0.09%	0.00%	8.37%	8.37%	0.0074%
35	EOG RESOURCES INC	EOG	48,114.11	0.25%	0.75%	5.24%	6.01%	0.0152%
36	EQUINIX INC	EQIX	14,605.92	0.08%	2.95%	33.92%	37.37%	0.0287%
37	EQUITY RESIDENTIAL	EQR	25,715.81	0.14%	3.11%	7.46%	10.68%	0.0145%
38	EQT CORP	EQT	12,653.86	0.07%	0.15%	30.00%	30.17%	0.0201%
39	EVERSOURCE ENERGY	E\$	14,456.14	0.08%	3.70%	6.60%	10.42%	0.0079%
40	EXPRESS SCRIPTS HOLDING CO	ESRX	66,496.75	0.35%	0.00%	12.73%	12.73%	0.0446%
41	ESSEX PROPERTY TRUST INC	ESS	13,939.61	0.07%	2.67%	7.86%	10.64%	0.0078%
42	ENSCO PLC-CL A	ESV	5,102.86	N/A	2.76%	N/A	N/A	N/A
43	E*TRADE FINANCIAL CORP	ETFC	8,914.91	0.05%	0.00%	18.52%	18.52%	0.0087%
44	EATON CORP PLC	ETN	32,015.03	0.17%	3.21%	8.70%	12.05%	0.0203%
45	ENTERGY CORP	ETR	12,471.41	0.07%	4.78%	3.96%	8.83%	0.0058%
46	EDWARDS LIFESCIENCES CORP	EW	15,553.92	0.08%	0.00%	14.50%	14.50%	0.0119%
47	EXELON CORP	EXC	27,585.63	0.15%	3.88%	6.98%	10.99%	0.0160%
48	EXPEDITORS INTL WASH INC	EXPD	8,963.11	0.05%	1.50%	11.10%	12.69%	0.0060%
49	EXPEDIA INC	EXPE	13,938.71	0.07%	0.66%	14.52%	15.22%	0.0112%
50	FORD MOTOR CO	F	61,379.50	0.32%	3.84%	15.65%	19.79%	0.0639%
51	FASTENAL CO	FAST	12,563.64	0.07%	2.60%	15.65%	18.46%	0.0122%
52	FACEBOOK INC-A	FB	247,068.63	1.30%	0.00%	28.25%	28.25%	0.3673%
53	FREEPORT-MCMORAN INC	FCX	20,530.48	0.11%	1.08%	21.74%	22.94%	0.0248%
54	FAMILY DOLLAR STORES	FDO	9,078.26	0.05%	1.47%	8.00%	9.53%	0.0046%
55	FEDEX CORP	FDX	48,882.83	0.26%	0.58%	14.69%	15.31%	0.0394%
56	FIRSTENERGY CORP	FE	13,867.77	0.07%	4.38%	0.55%	4.94%	0.0036%
57	F5 NETWORKS INC	FFIV	9,103.04	0.05%	0.00%	15.42%	15.42%	0.0074%
58	FIDELITY NATIONAL INFO SERV	FIS	17,895.07	0.09%	1.61%	12.42%	14.13%	0.0133%
59	FISERV INC	FISV	20,098.61	0.11%	0.00%	13.00%	13.00%	0.0137%
60	FIFTH THIRD BANCORP	FiTB	17,340.69	0.09%	2.47%	5.28%	7.81%	0.0071%
61	FLIR SYSTEMS INC	FLIR	4,378.89	0.02%	1.41%	15.00%	16.51%	0.0038%
62	FLUOR CORP	FLR	8,011.66	0.04%	1.54%	5.17%	6.75%	0.0028%
63	FLOWSERVE CORP	FLS	7,077.49	0.04%	1.36%	8.37%	9.79%	0.0036%
64	FMC CORP	FMC	7,105.35	0.04%	1.20%	8.38%	9.62%	0.0036%
65	FOSSIL GROUP INC	FOSL	3,534.36	0.02%	0.00%	12.72%	12.72%	0.0024%
66	TWENTY-FIRST CENTURY FOX-A	FOXA	67,534.42	0.36%	0.88%	14.66%	15.61%	0.0555%
67	FIRST SOLAR INC	FSLR	5,138.83	0.03%	0.00%	6.25%	6.25%	0.0017%
68	FMC TECHNOLOGIES INC	FTI	9,751.40	0.05%	0.00%	7.30%	7.30%	0.0037%
69	FRONTIER COMMUNICATIONS CORP	FTR	5,858.80	0.03%	8.27%	10.45%	19.15%	0.0059%
70	AGL RESOURCES INC	GAS	5,622.53	0.03%	4.35%	6.50%	10.99%	0.0033%
71	GANNETT CO INC	GCI	8,371.00	0.04%	2.21%	4.35%	6.61%	0.0029%

3

4 5

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		
13.43%	3.05%	10.38%		

6 [4] [5] [6] [7] [8] [9] Market Estimated Long-Term Growth Weighted DCF Result 7 Company Ticker Capitalization Weight in Index Dividend Yield DCF Result Est. 8 GENERAL DYNAMICS CORP GD 47,380.26 0.25% 1.88% 8.74% 10.70% 0.0267% GENERAL ELECTRIC CO 9 GE 272,453.12 1.43% 3.41% 7.92% 11.46% 0.1644% 10 GENERAL GROWTH PROPERTIES GGF 23,085.59 0.12% 2 65% 7 92% 10.67% 0.0130% 11 GILFAD SCIENCES INC GILD 176,690,73 0.93% 1.07% 14.58% 15.73% 0.1463% 12 GENERAL MILLS INC GIS 33,673.12 0.18% 2.96% 6.98% 10.04% 0.0178% CORNING INC 13 **GLW** 25,863.27 0.14% 2.33% 5.09% 7.48% 0.0102% GENERAL MOTORS CO 14 GM 55.770.11 0.29% 4 02% 12.30% 16.57% 0.0486% KEURIG GREEN MOUNTAIN INC 15 **GMCR** 12.055.77 0.06% 1.46% 14.80% 16.37% 0.0104% 16 GAMESTOP CORP-CLASS A GME 0.02% 4,659.39 3.30% 14.43% 17.97% 0.0044% 17 GENWORTH FINANCIAL INC-CL A **GNW** 3.874.66 0.02% 0.00% 5 00% 5 00% 0.0010% 18 GOOGLE INC-CL C GOOG 0.00% 372,391,20 1.96% 17.43% 17.43% 0.3416% 19 GENUINE PARTS CO GPC 13.941.56 0.07% 2.69% 7.87% 10.66% 0.0078% 20 GAP INC/THE **GPS** 0.09% 16,176.69 2.39% 10.05% 12.56% 0.0107% 21 GARMIN LTD **GRMN** 0.05% 8.757.25 4.40% 7.03% 11.58% 0.0053% GOLDMAN SACHS GROUP INC 22 GS 95,944.12 0.50% 1,19% 19.30% 20.61% 0.1040% 23 GOODYEAR TIRE & RUBBER CO 8,429.08 0.04% 0.80% GT 7.00% 7.83% 0.0035% 24 WW GRAINGER INC GWW 16,029.52 0.08% 1.91% 11.87% 13.89% 0.0117% 25 HALLIBURTON CO HAL 0.19% 13.85% 37.013.04 1.66% 15.62% 0.0304% HARMAN INTERNATIONAL 26 HAR 8.842.75 0.05% 1.16% 16.70% 17.96% 0.0084% 27 HASBRO INC HAS 9,761.67 0.05% 2.33% 10.40% 12.85% 0.0066% **HUNTINGTON BANCSHARES INC** 28 **HBAN** 9,241.48 0.05% 2.18% 7.06% 9.31% 0.0045% 29 HANESBRANDS INC HBI 13.757.07 0.07% 1.16% 11.00% 12.23% 0.0089% 30 HCA HOLDINGS INC **HCA** 37,587.16 0.20% 0.00% 11.36% 11.36% 0.0225% 31 HUDSON CITY BANCORP INC **HCBK** 5,342.97 0.03% 0.40% -3.00% -2.61% -0.0007% 32 HEALTH CARE REIT INC HCN 23,134,34 0.12% 5.02% 5.46% 10.62% 0.0129% HCP INC 33 HCP 0.09% 16.777.32 6.21% 3.24% 9.54% 0.0084% 34 HOME DEPOT INC HD 145,797.07 0.77% 2.10% 13.63% 15.88% 0.1218% 35 HESS CORP HES 19,550.60 0.10% 1.48% -1.38% 0.09% 0.0001% 36 HARTFORD FINANCIAL SVCS GRP 17.565.62 0.09% HIG 1.81% 9.00% 10.89% 0.0101% 37 HARLEY-DAVIDSON INC HOG 11,951.12 0.06% 2.16% 10.20% 12.47% 0.0078% 38 HONEYWELL INTERNATIONAL INC HON 80,797.29 0.43% 2.01% 9.39% 11.50% 0.0489% 39 STARWOOD HOTELS & RESORTS HOT 14,050.24 0.07% 1.83% 9.50% 11.42% 0.0084% 40 HEI MERICH & PAYNE HP 7 621 94 0.04% 3.89% 18.57% 22.83% 0.0092% 41 HEWLETT-PACKARD CO **HPQ** 56,378.21 0.30% 2.16% 5.23% 7.45% 0.0221% H&R BLOCK INC 42 HRB 8,410.02 0.04% 2.64% 11.67% 14.47% 0.0064% 43 HORMEL FOODS CORP HRL 15,320,03 0.08% 1.71% 6.60% 8.37% 0.0067% 44 HARRIS CORP HRS 9.689.60 N/A 2.37% N/A N/A N/A 45 HENRY SCHEIN INC HSIC 12,082.13 N/A N/A 11.12% N/A N/A 46 HOSPIRA INC HSP 15,323.76 N/A 0.00% N/A N/A N/A 47 HOST HOTELS & RESORTS INC HST 15.380.80 0.08% 4 07% 6.85% 11.06% 0.0089% 48 HERSHEY CO/THE HSY 19,245.34 0.10% 2.51% 9.18% 11.81% 0.0120% 49 **HUMANA INC** HUM 29,562.33 0.16% 0.58% 13.13% 13.75% 0.0214% INTL BUSINESS MACHINES CORP 50 **IBM** 163,544.63 0.86% 2.82% 6.75% 9.66% 0.0832% 51 INTERCONTINENTAL EXCHANGE IN ICE 25,348,53 0.13% 1.28% 16.18% 17.55% 0.0234% 52 INTL FLAVORS & FRAGRANCES IFF 9,109.42 0.05% 1.72% 8.95% 10.75% 0.0052% 53 INTEL CORP INTC 151,760.56 0.80% 3.00% 8.22% 11.35% 0.0906% 54 INTUIT INC INTU 0.15% 28.559.29 0.96% 14 48% 15.51% 0.0233% INTERNATIONAL PAPER CO. 55 20,359,54 iΡ 0.11% 3.38% 9.67% 13.21% 0.0141% 56 INTERPUBLIC GROUP OF COS INC **IPG** 8,172.03 0.04% 2.37% 5.80% 8.24% 0.0035% 57 INGERSOLL-RAND PLC IR 18,045.91 0.09% 1.70% 10.36% 12 15% 0.0115% 58 IRON MOUNTAIN INC IRM 6.621.97 0.03% 6.06% 10.07% 16.43% 0.0057% INTUITIVE SURGICAL INC 59 ISRG 18,239,56 N/A N/A 13.38% N/A N/A 60 ILLINOIS TOOL WORKS ITW 34,162.19 0.18% 2.16% 8.95% 11.21% 0.0201% 61 INVESCO LTD IVZ 16,599.41 0.09% 2.80% 13.48% 16 47% 0.0144% JOHNSON CONTROLS INC 62 JCI 33.435.65 0.18% 2 12% 7,63% 9.83% 0.0173% JACOBS ENGINEERING GROUP INC 63 JEC 5,337.31 0.03% 0.00% 7.54% 7.54% 0.0021% 64 JOHNSON & JOHNSON JNJ 274,864.26 1.45% 2.98% 6.63% 9.71% 0.1404% 65 JUNIPER NETWORKS INC JNPR 0.06% 10.644.80 1.34% 11.43% 12 85% 0.0072% 66 JOY GLOBAL INC JOY 3.645.74 0.02% 2 14% 15.05% 17.35% 0.0033% 67 JPMORGAN CHASE & CO JPM 254,766.13 1.34% 2.46% 6.68% 9.22% 0.1236% 68 NORDSTROM INC JWN 14,371.96 0.08% 1.94% 10.42% 12.46% 0.0094% 69 KELLOGG CO 22.186.70 0.12% 3.20% Κ 4.45% 7.73% 0.0090% 70 KEYCORP KEY 13,038,46 0.07% 1.91% 6.04% 8.00% 0.0055% 71 KIMCO REALTY CORP KIM 9,542.84 0.05% 4.21% 5.02% 9.34% 0.0047%

Ex-Ante Market Risk Premium Market DCF Method Based - Bloomberg

 [1]
 [2]
 [3]

 S&P 500
 Current 30-Year
 Implied Market Market Return average)

 Market Return 13.43%
 3.05%
 10.38%

Company Ticker Capitulation Weight In Index Def Franci Def		6			[4]	[5]	[6]	[7]	[8]	[9]
SILATEMOOR CORP										
9 KIMBERLY-CLARK CORP KMB 93,444 30 0,214 3,249 7,50% 10,57% 00,22464 11 CARMAX ING KIMDER MORGAN INC KMM 14,242.20 NAN NAN 14,49% NA NA NA 14,69% NA NA NA CARMAX INC KMB 12,242.20 NAN NAN 14,49% NA		7	Company	Ticker	Capitalization	Weight in Index	Dividend Yield		DCF Result	
9 KIMBERLY-CLARK CORP KMB 93,444 30 0,214 3,249 7,50% 10,57% 00,22464 11 CARMAX ING KIMDER MORGAN INC KMM 14,242.20 NAN NAN 14,49% NA NA NA 14,69% NA NA NA CARMAX INC KMB 12,242.20 NAN NAN 14,49% NA									*****	
10 KAINDER MORCANINC KMX			•			and the second s				
11 CARMAXINC FAMX		,								
12 COCA-COLA COTHE NO 174,495 21 0.92% 3.25% 6.75% 10.15% 0.00939					*					
13 MCHAEL KORS HOLDINGS LTD										
14 KROGER CO										
15 KART FOODS GROUP INC KPFT 51,967.75 0.27% 2.84% 7.06% 9,96% 0.0026% 16 KOHLS CORP KS 12,357.45 0.07% 2.83% 8.12.95 17 KANRAS CITY SOUTHERN KSU 10,216.57 0.05% 1.42% 11,88% 13,38% 0.0072% 18 LOEWS CORP L 1.49.457 N/A 0.72% N/A N/A 19 LERANDS ING LEG 6,760.14 N/A 2.52% N/A N/A N/A 19 LERANDS ING LEG 6,760.14 N/A 2.52% N/A N/A N/A 10 LEGOGRI F LATATI INC LEG 6,760.14 N/A 2.52% N/A N/A N/A 11 LEINAR CORP LEN 16,778.85 0.05% 0.05% 0.020% 20,55% 0.01111% 12 LABORATORY COP OF AMER HLDGS LH 21,145.38 0.06% 0.000% 10,37% 0.035% 0.0006% 12 LABORATORY COP OF AMER HLDGS LH 21,145.38 0.06% 0.000% 10,37% 0.035% 0.0006% 13 LEG COMMANICATIONS HOLDINGS LLTC 1.41% 0.0005 0.0006% 0.0006% 0.0006% 0.0006% 14 LEG GASON INC LM 5,744.02 0.03% 0.0006% 0.0006% 0.0006% 0.0006% 0.0006% 15 EU LLLLY AND COLORY CORP LTC 1.5272.40 0.03% 1.56% 1.55% 17,16% 0.0056% 15 LUCKAIN CORP LTC 1.5272.40 0.084 1.46% 1.68% 0.0006% 0.0006% 15 LOWEST COS INC LOW 64,976.88 0.34% 1.46% 1.68% 0.0006% 0.0006% 15 LOWEST COS INC LOW 64,976.88 0.07% 0.84% 1.46% 1.68% 0.0006%			· · · · · · · · · · · · · · · · · · ·							
16 KOHLS CORP										
17 KANSAS CITY SOUTHERN KSU										
18 LERANDS INC LB 25,2135 0.13% 6.11% 10.63% 15,48% 0.0207										
19 LBRANDS INC										
EIGGETT & PLATT INC										
ELRINAR CORP-A										
ABORATORY CRP OF AMERILLOS LH										
23 L.S. COMMUNICATIONS HOLDINGS LLC 9.412.11 0.05% 2.29% 7.79% 10.17% 0.0050%										
LINEAR TECHNOLOGY CORP			•	4						
28 ELIULLY & CO		24	LINEAR TECHNOLOGY CORP	LLTC						
LEGG MASON INC		25.	ELI LILLY & CO	LLY	94,106.05	0.50%	2.38%	8.92%		
28 LINCOLN NATIONAL CORP		26	LEGG MASON INC	LM ·	5,744.02	0.03%	1.56%	15.50%	17.18%	
29 LOWE'S COS INC		27	LOCKHEED MARTIN CORP	LMT	59,801.36	0.31%	3.28%	7.97%	11.38%	0.0358%
30 LAM RESEARCH CORP LUX 13,256,58 0.07% 0.84% 7.83% 8.70% 0.0061% NA	1	28	LINCOLN NATIONAL CORP	LNC .	15,272.40	0.08%	1.35%	10.30%	11.72%	0.0094%
SEUCADIA NATIONAL CORP		29	LOWE'S COS INC		64,970.88	0.34%	1.49%	16.68%	18.28%	0.0625%
22 SOUTHWEST AIRLINES CO LUV 23.049.55 0.12% 0.82% 17.44% 18.34% 0.022% 0.22% 0.00MUNICATIONS INC LVI.T 19.254.74 0.10% 0.00% 29.15% 29.15% 0.0255% 14.10% 0.00% 0.00% 0.0	:	30	LAM RESEARCH CORP		13,256.58	0.07%	0.84%	7.83%	8.70%	0.0061%
LEVEL 3 COMMUNICATIONS INC								N/A	N/A	N/A
12 LYONDELLBASELL INDU-CL A LYB 50,231,43 0.26% 2,71% 6,50% 9,30% 0.0246%					•	,				
35 MACYS INC					·					
38 MASTERCARD INC-CLASS A MA 109.547.92 0.58% 0.68% 17.33% 18.07% 0.1011% 17.33% MACERICH COTHE MAC 12.034.26 0.066% 3.47% 6.22% 9.80% 0.0662% 38 MARRIOTT INTERNATIONAL-CL A MAR 20.941.57 0.11% 1.14% 14.12% 15.35% 0.0169% 39 MASCO CORP MAS 9,555.03 0.059% 1.30% 12.98% 14.37% 0.0072% 14.00 MATTELINC MAT 9,006.60 0.059% 5.72% 9.00% 14.37% 0.0072% 14.00 MATTELINC MAT 9,006.60 0.059% 5.72% 9.00% 14.37% 0.0072% 14.00 MATTELINC MAT 9,006.60 0.059% 2.87% 6.20% 9.15% 0.0073% 14.00 MATTELINC MCIPP 9,982.63 0.059% 2.87% 6.20% 9.15% 0.0048% 14.00 MATTELINC MCIPP 9,982.63 0.059% 2.87% 6.20% 9.15% 0.0048% 14.00 MCIPP 9,982.63 0.059% 2.87% 6.20% 9.15% 0.0048% 14.00 MCIPP 9,982.63 0.059% 2.87% 6.20% 9.15% 0.0048% 14.00 MCIPP 9,982.63 0.059% 0.44% 12.23% 12.70% 0.0356% 14.00 MCIPP 9,982.63 0.059% 1.96% 13.86% 0.02076 14.00 MCIPP 9,982.63 0.059% 1.96% 1.96% 7.639% 9.689% 0.0444% 12.03% 0.0423% 14.00 MCIPP 9,982.63 0.056% 1.96% 1.96% 7.639% 9.689% 0.05449% 14.00 MCIPP 9,982.63 0.059% 1.96% 1.96% 7.639% 9.689% 0.05449% 14.00 MCIPP 9,982.63 0.059% 1.96% 1.96% 7.639% 9.689% 0.05449% 14.00 MCIPP 9,982.63 0.059% 1.96% 1.96% 7.639% 9.689% 0.05449% 14.00 MCIPP 9,982.63 0.059% 1.96% 1.96% 7.639% 9.689% 0.05449% 14.00 MCIPP 9,982.63 0.059% 1.96% 1.96% 7.639% 9.689% 0.05449% 1.96% 0.0520% 1.96% 1.96% 7.639% 9.689% 0.05449% 1.96% 0.0520% 1.96% 1.96% 7.639% 9.959% 0.05449% 1.96% 0.0520% 1.96% 0.0520% 1.96% 1.96% 0.0520% 1.96% 1.96% 0.0520% 1.96% 1.96% 0.0520% 1.96% 1.96% 0.0520% 1.96% 0.0520% 1.96% 0.0520% 0.0520% 1.96% 0.0520% 0.0520% 0.0520% 0.0520% 0.0520% 0.0520% 0.0520% 0.0520% 0.0520% 0.0520% 0.					·					
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		71	NAVIENT CORP	NÀVI	7,218.29	N/A	3.45%	N/A	N/A	

Ex-Ante Market Risk Premium Market DCF Method Based - Bloomberg

[3]

Implied Market Risk Premium 10.38%

 S&P 500
 Current 30-Year

 Est. Required
 Treasury (30-day

 Market Return
 average)

 13.43%
 3.05%

6			[4]	[5]	[6]	[7]	[8]	[9]
7	Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
	NODLE ENERGY INC	NDI	47.000.44	0.000/	4.0007	4.4004		
8 9	NOBLE ENERGY INC	NBL	17,388.11	0.09%	1.60%	4.19%	5.82%	0.0053%
10	NASDAQ OMX GROUP/THE NOBLE CORP PLC	NDAQ	8,424.16	0.04%	1.84%	8.90%	10.81%	0.0048%
11	NEXTERA ENERGY INC	NE	3,600.41	0.02%	10.09%	1.95%	12.14%	0.0023%
12	NEWMONT MINING CORP	NEE NEM	43,519.69 12,665.36	0.23% 0.07%	3.16%	6.25%	9.51%	0.0218%
13	NETFLIX INC	NFLX	40,268.39	0.07%	0.42% 0.00%	2.08%	2.50%	0.0017%
14	NEWFIELD EXPLORATION CO	NFX	6,126.20	0.03%	0.00%	34.99%	34.99%	0.0741%
15	NISOURCE INC	Ni	14,770.76	0.08%	2.31%	11.00% 6.00%	11.00% 8.38%	0.0035%
16	NIKE INC -CL B	NKE	90,462.64	N/A	1.13%	0.00% N/A		0.0065%
17	NIELSEN NV	NLSN	16,772.32	0.09%	2.39%	14.00%	N/A 16.55%	N/A 0.0146%
18	NORTHROP GRUMMAN CORP	NOC	31,418.31	0.17%	1.84%	6.57%	8.47%	0.0140%
19	NATIONAL OILWELL VARCO INC	NOV	18,993.89	0.10%	3.75%	-2.00%	1.71%	0.0017%
20	NRG ENERGY INC	NRG	8,123.93	N/A	2.37%	-2.00% N/A	N/A	0.0017% N/A
21	NORFOLK SOUTHERN CORP	NSC	27,058.44	0.14%	2.67%	9.12%	11.91%	0.0169%
22	NETAPP INC	NTAP	9,956.05	0.05%	2.21%	10.68%	13.01%	0.0068%
23	NORTHERN TRUST CORP	NTRS	18,130.40	0.10%	1.81%	12.94%	14.87%	
24	NUCOR CORP	NUE	15,095.08	0.08%	3.15%	13.03%	16.39%	0.0142%
25	NVIDIA CORP	NVDA	11,389.46	0.06%	1.79%	8.16%	10.02%	0.0130%
26	NEWELL RUBBERMAID INC	NWL	11,110.75	0.06%	1.83%	9.43%		0.0060%
27	NEWS CORP - CLASS A	NWSA	8,495.35	0.04%			11.34%	0.0066%
28	REALTY INCOME CORP	0	10,329.38	0.05%	0.20%	7.90%	8.11%	0.0036%
29	OWENS-ILLINOIS INC	OI	3,824.86	0.02%	5.11% 0.00%	3.41%	8.61%	0.0047%
30	ONEOK INC	OKE	8,206.37	0.04%		3.31%	3.31%	0.0007%
31	OMNICOM GROUP	OMC	17,253.32	0.04%	6.22%	9.45%	15.97%	0.0069%
32	ORACLE CORP				2.93%	5.00%	8.00%	0.0073%
33	O'REILLY AUTOMOTIVE INC	ORCL ORLY	179,311.89	0.94%	1.35%	8.09%	9.49%	0.0896%
34	OCCIDENTAL PETROLEUM CORP		23,406.44	0.12%	0.00%	17.18%	17.18%	0.0212%
35	PAYCHEX INC	OXY	60,320.41	0.32%	3.77%	6.50%	10.40%	0.0330%
36		PAYX	17,518.50	0.09%	3.15%	10.28%	13.59%	0.0125%
37	PEOPLE'S UNITED FINANCIAL	PBCT PBI	5,066.30	N/A	4.08%	N/A	N/A	N/A
38	PITNEY BOWES INC		4,322.07	0.02%	3.50%	14.00%	17.74%	0.0040%
	PACCAR INC	PCAR	22,824.07	0.12%	3.01%	8.80%	11.94%	0.0143%
39	P G & E CORP	PCG	23,806.69	0.13%	3.71%	5.20%	9.01%	0.0113%
40	PLUM CREEK TIMBER CO	PCL	7,176.09	0.04%	4.30%	8.20%	12.68%	0.0048%
41	PRICELINE GROUP INC/THE	PCLN	59,570.38	0.31%	0.00%	19.57%	19.57%	0.0613%
42	PRECISION CASTPARTS CORP	PCP	28,226.35	0.15%	0.06%	10.90%	10.96%	0.0163%
43	PATTERSON COS INC	PDCO	5,024.80	0.03%	1.84%	8.62%	10.54%	0.0028%
44	PUBLIC SERVICE ENTERPRISE GP	PEG	19,799.46	0.10%	3.99%	5.07%	9.16%	0.0095%
45	PEPSICO INC	PEP	139,973.90	0.74%	2.88%	5.86%	8.83%	0.0650%
46	PFIZER INC	PFE	209,483.93	1.10%	3.29%	3.81%	7.17%	0.0790%
47	PRINCIPAL FINANCIAL GROUP	PFG	15,331.62	0.08%	2.91%	11.50%	14.58%	0.0118%
48	PROCTER & GAMBLE CO/THE	PG	215,384.72	1.13%	3.25%	6.57%	9.93%	0.1125%
49	PROGRESSIVE CORP	PGR	16,527.98	0.09%	2.33%	7.70%	10.12%	0.0088%
50	PARKER HANNIFIN CORP	PH	16,397.14	0.09%	2.00%	9.89%	11.99%	0.0103%
51	PULTEGROUP INC	PHM	7,445.25	0.04%	1.67%	13.00%	14.78%	0.0058%
52	PERKINELMER INC	PKI	6,113.59	0.03%	0.52%	11.24%	11.78%	0.0038%
53	PROLOGIS INC	PLD	19,971.43	0.11%	3.78%	8.20%	12.14%	0.0128%
54	PALL CORP	PLL	13,291.76	0.07%	0.94%	11.06%	12.05%	0.0084%
55	PHILIP MORRIS INTERNATIONAL	PM	125,945.50	0.66%	4.99%	4.51%	9.61%	0.0637%
56	PNC FINANCIAL SERVICES GROUP	PNC	50,445.44	0.27%	2.07%	7.01%	9.15%	0.0243%
57	PENTAIR PLC	PNR	11,439.40	0.06%	2,00%	15.83%	17.99%	0.0108%
58	PINNACLE WEST CAPITAL	PNW	6,236.27	0.03%	4.30%	5.32%	9.73%	0.0032%
59	PEPCO HOLDINGS INC	POM	6,772.21	0.04%	4.04%	6.67%	10.84%	0.0039%
60	PPG INDUSTRIES INC	PPG	32,007.84	0.17%	1.15%	6.96%	8.15%	0.0137%
61	PPL CORP	PPL	19,802.70	0.10%	5.10%	3.28%	8.46%	0.0088%
62	PERRIGO CO PLC	PRGO	27,675.99	N/A	N/A	13.95%	N/A	N/A
63	PRUDENTIAL FINANCIAL INC	PRU	40,647.69	0.21%	2.64%	10.67%	13.45%	0.0288%
64	PUBLIC STORAGE	PSA	31,747.14	0.17%	3.54%	5.14%	8.77%	0.0146%
65	PHILLIPS 66	PSX	42,729.35	0.22%	2.65%	6.99%	9.73%	0.0219%
66	PVH CORP	PVH	9,612.91	0.05%	0.14%	9.51%	9.66%	0.0049%
67	QUANTA SERVICES INC	PWR	5,969.30	N/A	N/A	9.95%	N/A	N/A
68	PRAXAIR INC	PX .	35,234,39	0.19%	2.34%	9.30%	11.75%	0.0218%
69	PIONEER NATURAL RESOURCES CO	PXD	21,236.27	0.11%	0.06%	8.73%	8.79%	0.0098%
70	QUALCOMM INC	QCOM	106,384.31	0.56%	2.67%	10.03%	12.84%	0.0719%
71	QEP RESOURCES INC	QEP	3,294.73	0.02%	0.43%	15.00%	15.46%	0.0027%

3

4 5

Ex-Ante Market Risk Premium Market DCF Method Based - Bloomberg

 [1]
 [2]
 [3]

 S&P 500
 Current 30-Year
 Implied Market

 Est. Required Market Return
 Treasury (30-day average)
 Implied Market

 August
 Risk Premium
 13.43%

 3.05%
 10.38%

6			[4]	[5]	[6]	[7]	[8]	[9]
			Market		Estimated	Long-Term Growth		Weighted
7	Company	Ticker	Capitalization	Weight in Index	Dividend Yield	Est.	DCF Result	DCF Result
_	0.071/0.1110	0=140						
8	QORVO INC	QRVO	12,698.89	N/A	N/A	19.86%	N/A	N/A
9	RYDER SYSTEM INC	R	4,780.77	0.03%	1.68%	13.18%	14.97%	0.0038%
10	REYNOLDS AMERICAN INC	RAI	54,541.38	0.29%	3.92%	10.56%	14.69%	0.0422%
11	ROYAL CARIBBEAN CRUISES LTD	RCL	17,581.78	0.09%	1.59%	20.22%	21.97%	0.0203%
12	REGENERON PHARMACEUTICALS	REGN	53,625.80	0.28%	0.00%	20.64%	20,64%	0.0582%
13	REGIONS FINANCIAL CORP	RF	14,167.56	0.07%	2.18%	2.77%	4.98%	0.0037%
14	ROBERT HALF INTL INC	RHI	7,566.94	0.04%	1.39%	16.37%	17.87%	0.0071%
15	RED HAT INC	RHT	14,516.49	0.08%	0.00%	17.22%	17.22%	0.0132%
16	TRANSOCEAN LTD	RIG	5,813.61	N/A	7.55%	N/A	N/A	N/A
17	RALPH LAUREN CORP	RL	11,670.84	0.06%	1.50%	10.63%	12.21%	0.0075%
18	ROCKWELL AUTOMATION INC	ROK	16,689.98	0.09%	2.07%	8.69%	10.85%	0.0095%
19	ROPER TECHNOLOGIES INC	ROP	17,600.26	0.09%	0.53%	13.43%	14.00%	0.0130%
20	ROSS STORES INC	ROST	20,481.48	0.11%	0.84%	13.70%	14.60%	0.0157%
21	RANGE RESOURCES CORP	RRC	8,629.45	0.05%	0.31%	27.00%	27.36%	0.0124%
22	REPUBLIC SERVICES INC	RSG	13,930.92	0.07%	2.87%	5.15%	8.09%	0.0059%
23	RAYTHEON COMPANY	RTN	29,977.15	0.16%	2.72%	5.85%	8.65%	0.0136%
24	STARBUCKS CORP	SBUX	81,132.04	0.43%	1.14%	17.68%	18,92%	0.0808%
25	SCANA CORP	SCG	7,177.29	0.04%	4.34%	6.00%	10.47%	0.0040%
26	SCHWAB (CHARLES) CORP	SCHW	43,674.52	0.23%	0.76%	22.52%	23.37%	0.0537%
27	SPECTRA ENERGY CORP	SE	21,851.70	0.11%	4.55%	5.85%	10.53%	0.0121%
28	SEALED AIR CORP	SEE	10,897.09	0.06%	1.01%	9.89%	10.95%	0.0063%
29	SHERWIN-WILLIAMS CO/THE	SHW	26,334.45	0.14%	0.95%	16.23%	17.26%	0.0239%
30	SIGMA-ALDRICH	SIAL	16,673.21	0.09%	0.65%	5.13%	5.80%	0.0051%
31	JM SMUCKER CO/THE	SJM	13,274,20	0.07%	2.33%	7.38%	9,79%	0.0068%
32	SCHLUMBERGER LTD	SLB	110,047.22	0,58%	2.27%	14.77%	17,21%	0.0996%
33	SL GREEN REALTY CORP	SLG	11,307.25	0.06%	2.12%	5.66%	7.84%	0.0047%
34	SNAP-ON INC	SNA	9,322,31	0.05%	1.30%	6.95%	8.30%	0.0041%
35	SANDISK CORP	SNDK	13,169.72	0.07%	1.94%	5.20%	7.19%	0.0050%
36	SCRIPPS NETWORKS INTER-CL A	SNI	8,560,36	0.05%	1.33%	10.66%	12.06%	0.0054%
37	SOUTHERN CO/THE	so	37,792.76	0.20%	5,19%	3.98%	9.26%	0.0184%
38	SIMON PROPERTY GROUP INC	SPG	53,650.29	0.28%	3.45%	7.34%	10.92%	0.0308%
39	STAPLES INC	SPLS	10,141.55	0.05%	3.03%	0.15%	3.18%	0.0017%
40	STERICYCLE INC	SRCL	11,482.20	N/A	N/A	15.33%	N/A	N/A
41	SEMPRA ENERGY	SRE	24,609,46	0.13%	2.81%	8.96%	11.89%	0.0154%
42	SUNTRUST BANKS INC	STI	22,615.57	0.12%	2.10%	4.56%	6.71%	0.0080%
43	ST JUDE MEDICAL INC	STJ	20,989.89	0.11%	1.56%	10.45%	12.09%	0.0134%
44	STATE STREET CORP	STT	32,382.71	0.17%	1.68%	9.89%	11.65%	0.0198%
45	SEAGATE TECHNOLOGY	STX	16,088.07	0.08%	4.03%	6.80%	10.97%	
70	SE ISITE LEGINOLOGI	UIA	10,000.07	0.0070	4.00/0	0.0076	10.57 70	0.0093%

3

Ex-Ante Market Risk Premium Market DCF Method Based - Bloomberg

 [1]
 [2]
 [3]

 S&P 500
 Current 30-Year
 Implied Market

 Est. Required Market Return
 Treasury (30-day average)
 Implied Market

 13.43%
 3.05%
 10.38%

CONSTELLATION BRANDS INC.A STZ 23,030 db 0.12% 0.93% 10,07% 11,04% 0.05% 0.0	6			[4]	[5]	[6]	[7]	[8]	[9]
CONSTELLATION BRANDS INC-A STZ 23,030,46 0.12% 0.93% 10,07% 11,04% 0.05							Long-Term Growth		Weighted
9 STANLEY BLACK & DECKER INC SKYW SOLUTIONS INC SKYWS SOLUTIONS INC SWGS SOLUTIONS SOLUTIONS INC SWGS SWGS SOLUTIONS SOLUTIONS SWGS SWGS SOLUTIONS SWGS SWGS SOLUTIONS SWGS SWGS SOLUTIONS SWGS SWGS SWGS SWGS SWGS SWGS SWGS SWG	7	Company	Ticker	Capitalization	Weight in Index	Dividend Yield	Est.	DCF Result	DCF Result
9 STANLEY BLACK & DECKER INC SKYW SOLUTIONS INC SKYWS SOLUTIONS INC SWGS SOLUTIONS SOLUTIONS INC SWGS SWGS SOLUTIONS SOLUTIONS SWGS SWGS SOLUTIONS SWGS SWGS SOLUTIONS SWGS SWGS SOLUTIONS SWGS SWGS SWGS SWGS SWGS SWGS SWGS SWG		OCHOTELL ATION BRANDS WAS A							
19 SOLTHWESTERN ENRERY CO SWN SUBSES 89 0.11% 0.50% 22.28% 22.81% 0.00% 6.46% 6.46% 0.00% 6.46% 6.46% 0.00% 6.46% 6.46% 0.00% 6.46% 0.00% 6.46% 0.00% 6.46% 0.00% 6.46% 0.00% 6.46% 0.00% 6.46% 0.00% 6.46% 0.00% 6.46% 0.00% 6.46% 0.00% 6.46% 0.00% 0.00% 0.25% 0.00% 0.25% 0.00% 0.25% 0.00% 0.25% 0.00% 0.				•					0.0134%
11 SOUTHWESTERN ENERGY CO SWM SPERCORP SYK SA64756 109% 1.43% 1.43% 1.597% 1.16% 1.074% 1.075% 1.074% 1.075									0.0106%
12 STYMER CORP SYM 36.497.56 0.19% 1.43% 96.7% 11.16% 0.00% 93.5%				,					0.0252%
13 SYMANTEC CORP				.,					0.0031%
14 SYSCO CORP				•					0.0214%
15 MAISON CORP BREWING CO # TAP 13,407 56 0.07% 5.22% 3.00% 9.22% 0.07% 170% 3.98% 0.07% 170% 3.98% 0.07% 170% 3.98% 0.07% 170% 3.98% 0.00% 19.55% 9.35% 0.00% 19.55% 9.35% 0.00% 19.55% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 19.35% 0.00% 19.35% 0.00% 19.35% 0.00% 19.35% 0.00% 19.35% 0.00% 19.35% 0.00% 19.35% 0.00% 19.35% 0.00% 19.3									0.0093%
16 MOLSON COORS BREWING CO-8 TAP				•					0.0146%
17 TERADATA CORP TDC 5.327.84 0.03% 0.00% 9.35% 9.35% 0.028 18 TECO DENERGY INC TE 4,166.38 0.02% 5.08% 7.56% 10.729% 0.00 19 INTEGRYS ENERGY GROUP INC TEG 5.611.81 0.03% 3.88% 7.56% 11.52% 0.00 11.52% 0.00 11.52% 0.				•					0.0912%
TECO ENERGY INC									0.0028%
19 INTEGRY'S ENERGY GROUP INC TEG 5,611.81 0.03% 3.88% 7,58% 11,58% 0.00									0.0026%
TE CONNECTIVITY LTD									0.0023%
21 TARGET CORP TOT \$3,982.55 0.28% 2.48% 8.99% 11,52% 0.00 22 TENET HEALTHCARE CORP THC \$5,977.35 0.03% 0.00% 1.75% 12,11% 13,97% 0.00 23 TIFFANY & CO TIF 12,081.49 0.06% 1.75% 12,11% 13,97% 0.00 24 TAX COMPANIES INC TAX 45,783.11 0.24% 12,49% 12,13% 13,44% 0.00 25 TORCHMARK CORP TMK 7,401.29 0.04% 0.92% 5.12% 6.07% 0.00 26 THERMO FISHER SCIENTIFIC INC TMO \$2,356.43 0.28% 0.46% 11,15% 11,63% 0.00 27 TRIPLADVISOR INC TRIP 12,651.80 N/A N/A 23.36% N/A 11,63% 0.00 28 TROWE PRICE GROUP INC TROW 20,341.25 0.11% 5.22% 12,25% 17,78% 0.00 29 TRAVELERS COS INCTHE TRV 31,171.88 0.16% 2.42% 7.62% 10,13% 0.00 30 TRACTOR SUPPLY COMPANY TSCO 12,646.76 0.07% 0.00% 3.15% 10,00% 20,00% 20,00% 22,				·					0.0034%
TENET HEALTHCARE CORP									0.0176%
23 TIFFANY & CO TIF 12,081,49 0.06% 1.75% 12,11% 13,97% 0.00 24 TLX COMPANIES INC TLX 45,783.11 0.24% 1.24% 12,13% 13,44% 0.00 25 TORCHMARK CORP TMK 7,401,29 0.04% 0.92% 5,12% 6,07% 0.00 26 THERMO FISHER SCIENTIFIC INC TMO 52,356,43 0.28% 0.46% 11,15% 11,63% 0.0 27 TRIPHADVISOR INC TRIP 12,5518.00 N/A N/A 23,36% N/A 1.28 TROWE PRICE GROUP INC TROW 20,341,25 0.11% 5,22% 12,25% 17,78% 0.0 28 TRAVELERS COS INCTHE TRV 31,171.88 0.16% 2,42% 7,62% 10,13% 0.0 30 TRACTOR SUPPLY COMPANY TSCO 12,646,76 0.07% 0.70% 15,32% 16,08% 0.0 31 TYSON FOODS INC-CL A TSN 18,119,60 0.10% 0.88% 9,15% 10,07% 0.0 32 TESORO CORP TSO 10,777.50 0.06% 2.00% 20,07% 22,27% 33 TOTAL SYSTEM SERVICES INC TSS 7,833.26 0.04% 0.94% 11,10% 11,99% 0.0 34 TIME WARNER INC TVX 72,729.93 0.38% 1.59% 11,75% 13,57% 0.0 35 TIME WARNER INC TXN 72,729.93 0.38% 1.59% 11,59% 11,06% 12,04% 0.0 37 TEXTRON INC TXN 55,966.35 0.29% 2.22% 9.20% 12,00% 13,44% 0.0 38 TYCO INTERNATIONAL PLC TYC 16,569.88 0.09% 2.02% 12,30% 14,44% 0.0 39 UNIDER ARMOUR INC-CLASS A UA 18,361.28 0.10% 0.09% 2.23% 9.29% 9.49% 0.0 30 TYCO INTERNATIONAL PLC TYC 16,569.88 0.06% 2.02% 12,30% 14,44% 0.0 30 UNIDER ARMOUR INC-CLASS A UA 18,361.28 0.10% 0.09% 2.22% 9.20% 14,30% 10,50% 0.0 31 TYCO INTERNATIONAL PLC TYC 16,569.88 0.06% 2.02% 12,30% 14,44% 0.0 32 UNIDER ARMOUR INC-CLASS A UA 18,361.28 0.10% 0.00% 2.3,34% 2.3,34% 0.0 34 UNIDER ARMOUR INC-CLASS A UA 18,361.28 0.10% 0.00% 2.3,34% 2.3,34% 0.0 35 TYCO INTERNATIONAL PLC TYC 16,569.88 0.06% 2.02% 12,30% 14,44% 0.0 36 UNIDER ARMOUR INC-CLASS A UA 18,361.28 0.10% 0.00% 2.3,34% 2.3,34% 0.0 37 TYCO INTERNATIONAL PLC TYC 16,569.88 0.06% 2.02% 12,30% 14,44% 0.0 39 UNDER ARMOUR INC-CLASS A UA 18,361.28 0.10% 0.00% 12,27% 13,34% 0.0 30 UNIDER ARMOUR INC-CLASS A UA 18,361.28 0.10% 0.00% 12,27% 13,34% 0.0 31 TYCO INTERNATIONAL PLC TYC 16,569.88 0.00% 2.22% 12,30% 14,40% 0.0 32 TYCO INTERNATIONAL PLC TYC 16,569.88 0.00% 2.22% 12,30% 14,40% 0.0 34 TYCO INTERNATIONAL PLC TYC 16,569.88 0.00% 2.22% 12,30									0.0327%
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53 VALERO ENERGY CORP VLO 30,674.96 0.16% 2.68% -2.22% 0.43% 0.0 54 VULCAN MATERIALS CO VMC 11,485.75 0.06% 0.44% 6.00% 6.45% 0.0 55 VORNADO REALTY TRUST VNO 18,885.48 0.10% 2.63% 9.59% 12.34% 0.0 56 VERISIGN INC VRSN 7,367.97 0.04% 0.00% 10.67% 10.67% 0.0 57 VERTEX PHARMACEUTICALS INC VRTX 31,285.60 0.16% 0.00% 24.92% 24.92% 0.0 58 VENTAS INC VTR 20,455.14 0.11% 5.16% 3.68% 8.93% 0.0 59 VERIZON COMMUNICATIONS INC VZ 193,483.43 1.02% 4.68% 7.66% 12.51% 0.1 60 WATERS CORP WAT 10,768.25 0.06% 0.00% 9.40% 9.40% 0.00 61 WALGREENS BOOTS ALLIANCE INC WBA 94,197.73 0.50%	52	VIACOM INC-CLASS B							0.0178%
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55 VORNADO REALTY TRUST VNO 18,085.48 0.10% 2.63% 9.59% 12.34% 0.0 56 VERISIGN INC VRSN 7,367.97 0.04% 0.00% 10.67% 10.67% 0.0 57 VERTEX PHARMACEUTICALS INC VRTX 31,285.60 0.16% 0.00% 24,92% 24,92% 0.0 58 VENTAS INC VTR 20,455.14 0.11% 5.16% 3.68% 8.93% 0.0 59 VERIZON COMMUNICATIONS INC VZ 193,483.43 1.02% 4.68% 7.66% 12.51% 0.1 60 WATERS CORP WAT 10,768.25 0.06% 0.00% 9.40% 9.40% 9.0% 61 WALGREENS BOOTS ALLIANCE INC WBA 94,197.73 0.50% 1.55% 15.32% 16.99% 0.0	54	VULCAN MATERIALS CO	VMC						0.0039%
56 VERISIGN INC VRSN 7,367.97 0.04% 0.00% 10.67% 10.67% 0.0 57 VERTEX PHARMACEUTICALS INC VRTX 31,285.60 0.16% 0.00% 24,92% 24,92% 0.0 58 VENTAS INC VTR 20,455.14 0.11% 5.16% 3.68% 8.93% 0.0 59 VERIZON COMMUNICATIONS INC VZ 193,483.43 1.02% 4.68% 7.66% 12.51% 0.1 60 WATERS CORP WAT 10,768.25 0.06% 0.00% 9.40% 9.40% 0.00 61 WALGREENS BOOTS ALLIANCE INC WBA 94,197.73 0.50% 1.55% 15.32% 16.99% 0.00	55	VORNADO REALTY TRUST	VNO						0.0117%
57 VERTEX PHARMACEUTICALS INC VRTX 31,285.60 0.16% 0.00% 24,92% 24,92% 0.0 58 VENTAS INC VTR 20,455.14 0.11% 5.16% 3.68% 8.93% 0.0 59 VERIZON COMMUNICATIONS INC VZ 193,483.43 1.02% 4.68% 7.66% 12.51% 0.1 60 WATERS CORP WAT 10,768.25 0.06% 0.00% 9.40% 9.40% 0.00 61 WALGREENS BOOTS ALLIANCE INC WBA 94,197.73 0.50% 1.55% 15.32% 16.99% 0.00	56								0.0041%
58 VENTAS INC VTR 20,455.14 0.11% 5.16% 3.68% 8.93% 0.01 59 VERIZON COMMUNICATIONS INC VZ 193,483.43 1.02% 4.68% 7.66% 12.51% 0.1 60 WATERS CORP WAT 10,768.25 0.06% 0.00% 9.40% 9.40% 0.00 61 WALGREENS BOOTS ALLIANCE INC WBA 94,197.73 0.50% 1.55% 15.32% 16.99% 0.00	57	VERTEX PHARMACEUTICALS INC	VRTX	31,285,60					0.0410%
59 VERIZON COMMUNICATIONS INC VZ 193,483.43 1.02% 4.68% 7.66% 12.51% 0.1 60 WATERS CORP WAT 10,768.25 0.06% 0.00% 9.40% 9.40% 0.00 61 WALGREENS BOOTS ALLIANCE INC WBA 94,197.73 0.50% 1.55% 15.32% 16.99% 0.00	58								0.0096%
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61 WALGREENS BOOTS ALLIANCE INC WBA 94,197.73 0.50% 1.55% 15.32% 16.99% 0.00	60	WATERS CORP	WAT	10,768.25	0.06%	0.00%			0.0053%
OR MEGTERNI DOCTAL CORP.	61	WALGREENS BOOTS ALLIANCE INC	WBA	94,197.73	0.50%	1.55%			0.0842%
	62	WESTERN DIGITAL CORP	WDC	19,846.89					0.0074%
	63	WISCONSIN ENERGY CORP							0.0045%
04 14/511 0 54 50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	64	WELLS FARGO & CO	WFC	294,380.05					0.2310%
AT ANIMALE FOOD MADE TO THE STATE OF THE STA	65	WHOLE FOODS MARKET INC	WFM						0.0108%
00 MUID 000 0000	66	WHIRLPOOL CORP	WHR						0.0160%
AT 14/10/FE 11/14 OF 1/F/17 010	67	WASTE MANAGEMENT INC				3.29%			0.0128%
46 14/11/14/2 000 11/0	68	WILLIAMS COS INC	WMB	41,380.12					0.0180%
AC VIVI MART OWNER NICE	69	WAL-MART STORES INC	WMT	231,428.63					0.1238%
TO AMERICAN AND AND AND AND AND AND AND AND AND A	70	WESTERN UNION CO	WU	10,775.41	0.06%	2.97%			0.0061%
	71	WEYERHAEUSER CO	WY	16,495.36	0.09%	3.67%	2.73%	6.46%	0.0056%

3

5

Ex-Ante Market Risk Premium Market DCF Method Based - Bloomberg

[1] [2] S&P 500 Est. Required Market Return Current 30-Year Treasury (30-day Implied Market Risk Premium average) 13.43% 10.38%

6			[4]	[5]	[6]	[7]	[8]	[9]
			Market		Estimated	Long-Term Growth		Weighted
7	Company	Ticker	Capitalization	Weight in Index	Dividend Yield	Est.	DCF Result	DCF Result
8	WYNDHAM WORLDWIDE CORE	P WYN	9,979.37	0.05%	2.02%	10.00%	12.12%	0.0064%
9	WYNN RESORTS LTD	WYNN	9.949.59	0.05%	3.09%			
-			.,			9.50%	12.74%	0.0067%
10	CIMAREX ENERGY CO	XEC	10,947.48	0.06%	0.55%	-1.68%	-1.13%	-0.0007%
11	XCEL ENERGY INC	XEL	16,180.71	0.09%	4.01%	5.00%	9.11%	0.0078%
12	XL GROUP PLC	XL	11,526.43	0.06%	1.76%	5.87%	7.67%	0.0047%
13	XILINX INC	XLNX	11,816.43	0.06%	2.68%	8.86%	11.66%	0.0072%
14	EXXON MOBIL CORP	XOM	350,920.42	1,85%	3.44%	10.64%	14.26%	0.2632%
15	DENTSPLY INTERNATIONAL IN	C XRAY	7,316.52	0.04%	0.58%	9.36%	9.97%	0.0038%
16	XEROX CORP	XRX	12,154.45	0.06%	2.50%	9.15%	11.76%	0.0075%
17	XYLEM INC	XYL	6,703.48	0.04%	1.51%	9.93%	11.52%	0.0041%
18	YAHOO! INC	YH00	38,537.15	0.20%	0.00%	10.60%	10.60%	0.0215%
19	YUM! BRANDS INC	YUM	39,512.78	0.21%	1.86%	11.21%	13.18%	0.0274%
20	ZIONS BANCORPORATION	ZION	6,545.37	0.03%	0.68%	8.47%	9.18%	0.0032%
21	ZIMMER HOLDINGS INC	ZMH	19,301.45	0.10%	0.82%	11.67%	12.54%	0.0127%
22	ZOETIS INC	ZTS	27,688.02	0.15%	0.59%	11.64%	12.27%	0.0179%
23	То	otal Market Capitalization:	19,005,281.01					13.43%

Notes: 24

[1] Equals sum of Col. [9] 25

[2] Source: Bloomberg Professional

27

28

[3] Equals [1] – [2]
[4] Source: Bloomberg Professional
[5] Equals weight in S&P 500 based on market capitalization 29

[6] Source: Bloomberg Professional

31

[7] Source: Bloomberg Professional [8] Equals ([6] x (1 + (0.5 x [7]))) + [7] [9] Equals Col. [5] x Col. [8] 32

Ex-Ante Market Risk Premium Market DCF Method Based - Value Line

[1]	[2]	[3]
S&P 500	Current 30-Year	
Est. Required	Treasury (30-day	Implied Market
Market Return	average)	Risk Premium
12.45%	3.05%	9.39%

6			[4]	[5]	[6]	[7]	[8]	[9]
			Market		Estimated	Long-Term		Weighted
7	Company	Ticker	Capitalization	Weight in Index	Dividend Yield	Growth Est.	DCF Result	DCF Result
	A OU FUT TEOUNIOU OCITO NIO							
8	AGILENT TECHNOLOGIES INC	A	13,294.32	0.07%	1.00%	-3.00%	-2.02%	-0.0015%
9	ALCOA INC	AA	14,569.88	0.08%	1.01%	22.00%	23.12%	0.0182%
10	AMERICAN AIRLINES GROUP INC	AAL	27,738.13	N/A	1.00%	N/A	N/A	N/A
11		AAPL ABBV	736,880.10	3.99%	1.63%	14.50%	16.25%	0.6486%
	AMERICAL IRCEPERCENT CORR		109,890.40	N/A	2.96%	N/A	N/A	N/A
13 14	AMERISOURCEBERGEN CORP ABBOTT LABORATORIES	ABC ABT	24,746.63	0.13%	1.04%	14.00%	15.11%	0.0203%
	ACE LTD	ACE	74,348.53 35,213.86	0.40% 0.19%	1.92% 2.49%	-2.50% 8.00%	-0.60%	-0.0024%
		ACE	60,959.36		2.49%		10.59%	0.0202%
	ADOBE SYSTEMS INC	ADBE	39,698.81	0.33% 0.22%	0.00%	7.50%	9.82%	0.0324%
18	ANALOG DEVICES INC	ADBE	21,414.85	0.12%	2.34%	26.50%	26.50%	0.0570%
	ARCHER-DANIELS-MIDLAND CO	ADM	32,106.25	0.12%	2.18%	12.00% 10.00%	14.48% 12.29%	0.0168%
20	AUTOMATIC DATA PROCESSING	ADIVI	39,845.64	0.22%	2.18%	7.50%	12.29%	0.0214%
	ALLIANCE DATA SYSTEMS CORP	ADS	18,712.48	0.10%	0.00%	14.00%	14.00%	0.0217%
	AUTODESK INC	ADSK	12,329.63	0.07%	0.00%	13.50%	13.50%	0.0142% 0.0090%
	ADT CORP/THE	ADT	6,385.32	0.03%	2.25%	10.50%	12.87%	
24	AMEREN CORPORATION	AEE	9,349.80	0.05%	4.33%	6.00%	10.46%	0.0045% 0.0053%
25	AMERICAN ELECTRIC POWER	AEP	26,862.81	0.15%	4.03%	5.00%	9.13%	0.0033%
26		AES	9,735.15	0.05%	2.89%	7.50%	10.50%	0.0055%
	AETNA INC	AET	43,475.40	0.24%	0.80%	11.00%		
	AFLAC INC	AFL	27,366.61	0.15%	2.54%	4.50%	11.84% 7.10%	0.0279%
29		AGN	118,659.00	0.64%	0.00%	23.50%	23.50%	0.0105% 0.1511%
30		AIG	83,909.43	0.45%	0.80%	5.00%	5.82%	0.0265%
31		AIV	05,303.45	0.45% N/A	3.12%	N/A	0.82% N/A	0.0265% N/A
	ASSURANT INC	AIZ	4,684.01	0.03%	1.75%	4.00%	5.79%	0.0015%
33	AKAMAI TECHNOLOGIES INC	AKAM	13,092.18	0.07%	0.00%	15.00%	15.00%	0.0106%
	ALLSTATE CORP	ALL	27,955.15	0.15%	1.76%	7.50%	9.33%	0.0141%
		ALLE	5,870.80	N/A	0.65%	N/A	N/A	N/A
	ALTERA CORP	ALTR	15,490.75	0.08%	1.40%	4.00%	5.43%	0.0046%
37		ALXN	36,738.34	0.20%	0.00%	25.50%	25.50%	0.0507%
38		AMAT	24,434.90	0.13%	2.02%	26.00%	28.28%	0.0374%
39		AME	13,307.81	0.07%	0.65%	7.50%	8.17%	0.0059%
40		AMG	12,314.86	0.07%	0.00%	13.00%	13.00%	0.0087%
	AMGEN INC	AMGN	121,755.20	0.66%	1.98%	7.50%	9.55%	0.0630%
	AMERIPRISE FINANCIAL INC	AMP	23,538.82	0.13%	2.07%	13.50%	15.71%	0.0200%
	AMERICAN TOWER CORP	AMT	40,691.16	0.22%	1.99%	14.50%	16.63%	0.0367%
44	AMAZON.COM INC	AMZN	204,755.80	N/A	0.00%	N/A	N/A	N/A
45	AUTONATION INC	AN	7,229.23	0.04%	0.00%	11.50%	11.50%	0.0045%
46	ANTHEM INC	ANTM	43,772.90	0.24%	1.51%	9.50%	11.08%	0.0263%
47	AON PLC	AON	29,446.73	0.16%	1.15%	13.50%	14.73%	0.0235%
48	APACHE CORP	APA	21,570.96	0.12%	1.75%	55,50%	57.74%	0.0675%
49	ANADARKO PETROLEUM CORP	APC	42,099.83	0.23%	1.30%	17.50%	18.91%	0.0431%
50	AIR PRODUCTS & CHEMICALS INC	APD	31,557.42	0.17%	2.21%	11.50%	13.84%	0.0237%
51	AMPHENOL CORP-CL A	APH	18,007.08	0.10%	0.86%	10.00%	10.90%	0.0106%
52	AIRGAS INC	ARG	8,003.13	0.04%	2.31%	10.00%	12.43%	0.0054%
53	ALLEGHENY TECHNOLOGIES INC	ATI	3,493.50	0.02%	2.25%	49.00%	51.80%	0.0098%
54	AVALONBAY COMMUNITIES INC	AVB	-	N/A	3.03%	N/A	N/A	N/A
55	AVAGO TECHNOLOGIES LTD	AVGO	37,111.50	0.20%	1.12%	16.50%	17.71%	0.0356%
56	AVERY DENNISON CORP	AVY	5,688.03	0.03%	2.36%	9.50%	11.97%	0.0037%
57	AMERICAN EXPRESS CO	AXP	82,062,32	0.44%	1.44%	6.00%	7.48%	0.0333%
58	AUTOZONE INC	AZO	21,828.30	0.12%	0.00%	13.00%	13.00%	0.0154%
59	BOEING CO/THE	BA	100,894.20	0.55%	2.63%	11.00%	13.77%	0.0753%
60	BANK OF AMERICA CORP	BAC	182,844.60	0.99%	1.15%	28.00%	29.31%	0.2903%
61	BAXTER INTERNATIONAL INC	BAX	37,661.61	0.20%	3.00%	3.50%	6.55%	0.0134%
62	BED BATH & BEYOND INC	BBBY	12,938.50	0.07%	0.00%	7.00%	7.00%	0.0049%
63	BB&T CORP	BBT	29,852.00	0.16%	2.64%	6.50%	9.23%	0.0149%
64	BEST BUY CO INC	BBY	12,366.58	0.07%	2.63%	8.00%	10.74%	0.0072%
65	CR BARD INC	BCR	12,805.04	0.07%	0.56%	10.00%	10.59%	0.0073%
66	BECTON DICKINSON AND CO	BDX	29,483.50	0.16%	1.79%	11.00%	12.89%	0.0206%
67	FRANKLIN RESOURCES INC	BEN	31,792.94	0.17%	1.29%	7.50%	8.84%	0.0152%
68	BROWN-FORMAN CORP-CLASS B	BF/B	21,409.26	0.12%	1.27%	8.50%	9.82%	0.0114%
69	BAKER HUGHES INC	BHI	27,084.60	0.15%	1.09%	8.00%	9.13%	0.0134%

Ex-Ante Market Risk Premium Market DCF Method Based - Value Line

[3]

9.39%

[1] S&P 500 Est. Required Market Return 3 [2] Current 30-Year Treasury (30-day average) Implied Market Risk Premium average) 3.05% 5 12.45%

6			[4]	[5]	[6]	[7]	[8]	[9]
7	Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
8	BIOGEN INC	DUD	04.450.20	0.540	0.000/	10.500/		
9	BANK OF NEW YORK MELLON CORP	BIIB BK	94,456.20 48,527.78	0.51% 0.26%	0.00% 1.57%	16.50%	16.50%	0.0844%
10	BLACKROCK INC	BLK	60,297.27	0.33%	2.42%	11.50% 6.00%	13.16% 8.49%	0.0346%
11	BALL CORP	BLL	9,933.50	0.05%	0.72%	9.50%	10.25%	0.0277% 0.0055%
	BRISTOL-MYERS SQUIBB CO	BMY	111,053.80	0.60%	2.22%	14.50%	16.88%	0.1016%
13	BROADCOM CORP-CL A	BRCM	32,297.98	0.17%	1.04%	6.50%	7.57%	0.0133%
14	BERKSHIRE HATHAWAY INC-CL B	BRK/B	· -	N/A	0.00%	N/A	N/A	N/A
15	BOSTON SCIENTIFIC CORP	BSX	24,147.11	0.13%	0.00%	14.00%	14.00%	0.0183%
16	BORGWARNER INC	BWA	13,781.80	0.07%	0.85%	10.50%	11.39%	0.0085%
17	BOSTON PROPERTIES INC	BXP	-	N/A	2.07%	N/A	N/A	N/A
18	CITIGROUP INC	С	172,217.70	0.93%	0.35%	9.50%	9.87%	0.0920%
	CA INC	CA	13,364.16	0.07%	3.28%	3.50%	6.84%	0.0049%
20	CONAGRA FOODS INC	CAG	16,706.28	0.09%	2.56%	6.50%	9.14%	0.0083%
21	CARDINAL HEALTH INC	CAH	29,740.35	0.16%	1.73%	12.50%	14.34%	0.0231%
22	CAMERON INTERNATIONAL CORP	CAM	10,268.04	0.06%	0.00%	3.50%	3.50%	0.0019%
23 24	CATERPILLAR INC CHUBB CORP	CAT CB	52,782.55	0.29%	3.52%	3.50%	7.08%	0.0202%
25	CBRE GROUP INC - A	CBG	22,832,76	0.12%	2.29%	5.50%	7.85%	0.0097%
26	CBS CORP-CLASS B NON VOTING	CBS	12,522.13 28,962.45	0.07% 0.16%	0.00% 1.03%	10.00% 12.50%	10.00%	0.0068%
27	COCA-COLA ENTERPRISES	CCE	10,488.98	0.06%	2.53%	8.50%	13.59% 11.14%	0.0213%
28	CROWN CASTLE INTL CORP	CCI	27,781.45	0.15%	3.99%	23.50%	27.96%	0.0063% 0.0421%
29	CARNIVAL CORP	CCL	37,826.36	0.20%	2.06%	14.00%	16.20%	0.0332%
30	CELGENE CORP	CELG	92,951.40	0.50%	0.00%	15.50%	15.50%	0.0332 %
31	CERNER CORP	CERN	23,865.79	0.13%	0.00%	17.00%	17.00%	0.0220%
32	CF INDUSTRIES HOLDINGS INC	CF	15,279.16	0.08%	2.02%	6.50%	8.59%	0.0071%
33	CHESAPEAKE ENERGY CORP	CHK	7,882.49	0.04%	2.95%	11.50%	14.62%	0.0062%
34	C.H. ROBINSON WORLDWIDE INC	CHRW	9,449.98	0.05%	2.35%	6.50%	8.93%	0.0046%
35	CIGNA CORP	CI	40,254.77	0.22%	0.03%	14.50%	14.53%	0.0317%
36	CINCINNATI FINANCIAL CORP	CINF	8,486.10	0.05%	3.56%	7.50%	11.19%	0.0051%
37	COLGATE-PALMOLIVE CO	CL	60,759.90	0.33%	2.31%	11.00%	13.44%	0.0442%
38	CLOROX COMPANY	CLX	13,998.74	0.08%	2.93%	7.00%	10.03%	0.0076%
39	COMERICA INC	CMA	9,166.02	0.05%	1.63%	7.50%	9.19%	0.0046%
40	COMCAST CORP-CLASS A CME GROUP INC	CMCSA	152,019.10	0.82%	1.65%	8.00%	9.72%	0.0800%
41 42	CHIPOTLE MEXICAN GRILL INC	CME CMG	32,252.73	0.17%	2.08%	10.00%	12.18%	0.0213%
43	CUMMINS INC	CMI	18,823.72 24,603.74	0.10% 0.13%	0.00% 2.29%	13.00% 10.50%	13.00%	0.0133%
44	CMS ENERGY CORP	CMS	9,052.80	0.05%	3.66%	5.50%	12.91% 9.26%	0.0172% 0.0045%
45	CENTERPOINT ENERGY INC	CNP	8,462.15	0.05%	5.14%	1.00%	6.17%	0.0045%
46	CONSOL ENERGY INC	CNX	5,527.20	0.03%	1.03%	5.50%	6.56%	0.0020%
47	CAPITAL ONE FINANCIAL CORP	COF	48,509.23	0.26%	1.81%	5.00%	6.86%	0.0180%
48	CABOT OIL & GAS CORP	COG	13,888.79	0.08%	0.24%	26.50%	26.77%	0.0201%
49	COACH INC	COH	9,884.38	0.05%	3.77%	1.50%	5.30%	0.0028%
50	ROCKWELL COLLINS INC	COL	12,672.69	0.07%	1.38%	9.00%	10.44%	0.0072%
51	CONOCOPHILLIPS	COP	77,589.29	0.42%	4.64%	1.50%	6.17%	0.0260%
52	COSTCO WHOLESALE CORP	COST	61,784.73	0.33%	1.14%	10.50%	11.70%	0.0392%
	CAMPBELL SOUP CO	CPB	15,002.64	0.08%	2.59%	3.00%	5.63%	0.0046%
54		CRM	49,665.77	N/A	0.00%	N/A	N/A	N/A
	COMPUTER SCIENCES CORP	CSC	9,549.32	0.05%	1.36%	10.50%	11.93%	0.0062%
	CISCO SYSTEMS INC CSX CORP	CSCO	148,766.50	0.81%	2.88%	6.50%	9.47%	0.0763%
	CINTAS CORP	CSX CTAS	35,112,85 9,887,33	0.19%	2.03%	9.50%	11.63%	0.0221%
59	CENTURYLINK INC	CTL	18,300.55	0.05% 0.10%	0.98%	9.50%	10.53%	0.0056%
	COGNIZANT TECH SOLUTIONS-A	CTSH	38,614.13	0.10%	6.68% 0.00%	15.00% 17.00%	22.18% 17.00%	0.0220%
61	CITRIX SYSTEMS INC	CTXS	11,324.91	0.06%	0.00%	9.50%	17.00% 9.50%	0.0356% 0.0058%
	CABLEVISION SYSTEMS-NY GRP-A	CVC	6,738.23	0.04%	2.46%	18.50%	21,19%	0.0058%
	CVS HEALTH CORP	CVS	118,402.60	0.64%	1.33%	10.50%	11.90%	0.0763%
	CHEVRON CORP	CVX	188,517.80	1.02%	4.27%	2.50%	6.82%	0.0697%
	DOMINION RESOURCES INC/VA	D	40,575.38	0.22%	3.92%	8.00%	12.08%	0.0265%
66	DELTA AIR LINES INC	DAL	33,824.30	0.18%	1.31%	16.00%	17.41%	0.0319%
67	DU PONT (E.I.) DE NEMOURS	DD	63,498.58	0.34%	2.79%	8.50%	11.41%	0.0392%
	DEERE & CO	DE	30,916.46	0.17%	2.59%	-1.00%	1.58%	0.0026%
	DISCOVER FINANCIAL SERVICES	DFS	26,122.88	0.14%	1.91%	3.50%	5.44%	0.0077%
70	DOLLAR GENERAL CORP	DG	23,269.50	0.13%	1.20%	14.00%	15.28%	0.0193%

Ex-Ante Market Risk Premium Market DCF Method Based - Value Line

[3]

9.39%

3 [1] S&P 500 Est. Required [2] Current 30-Year Treasury (30-day average) Implied Market Risk Premium Market Return 5 12.45%

Taker	6			[4]	[5]	[6]	[7]	[8]	[9]
9 PHORTON INC	7	Company	Ticker		Weight in Index		-	DCF Result	•
9 PHORTON INC	8	QUEST DIAGNOSTICS INC	DGX	10.491.84	0.06%	2 09%	9.00%	11 18%	0.0064%
0 DARAHER CORP	9								
11 WALT DISNEY COMMUNICATIONS—A DISCA 10 136.50 0.104% 1.1.50% 1.0.00% 1.1.50% 1.0.00% 1.1.50% 1.0.00% 1.1.50% 1.0.00% 1.1.50% 1.0.00% 1.1.50% 1.0.00% 1.1.50% 1.0.00% 1.1.50% 1.0.00% 1.0.00% 1.1.50% 1.0.00% 1.0.00% 1.1.50% 1.0.00%	10								
12 DISCOVERY COMMUNICATIONS-A DISCA 13,138.50 0.10% 0.00% 17.50% 17.50% 0.0172%	11	WALT DISNEY CO/THE	DIS	192,474,00					
13 DELPHI AUTOMOTIVE PLC	12	DISCOVERY COMMUNICATIONS-A							
14 DOLLAR TREE INC DUN & BASSTREET CORP DN & 4,269.60 DOS 3,763.62 DOS 41,44.94 4.00% 4.57% DOVER CORP DOV 1,776.85 DOS 69% DOW CHEMBCAL COTHE DOW 1,786.50 DOS 69% DOW CHEMBCAL COTHE DOW CHE	13	DELPHI AUTOMOTIVE PLC		·					
5 DUAS BRADSTREET CORP DN8 4,829.06 0.03% 1.44% 4,00% 5,47% 0.0010% 17 DUAYER CORP DOV 11,778.85 0.06% 2.18% 5,00% 7,23% 0.0045% 18 DOW CHEMICAL COTHE DOW 61,782.44 0.33% 3,28% 12,50% 15,50% 0.0555% 19 DRY PEPPER SNAPPLE GROUP INC DPS 14,381.41 0.08% 2.60% 8.50% 11,21% 0.0067% 19 DOW CHEMICAL COTHE DOW 61,782.44 0.33% 3,28% 12,50% 8.50% 11,21% 0.0067% 19 DRY PEPPER SNAPPLE GROUP INC DPS 8,898.78 0.05% 3,18% 5,00% 8.11% 0.0067% 21 DITE ENERGY COMPANY DTF 45,948.39 0.25% 3,18% 5,00% 8.19% 0.0065% 22 DIRECTIV DTV 45,948.39 0.25% 0.05% 3,31% 5,00% 8.19% 0.0065% 23 DUKE ENTERGY COMPANY DTF 45,948.39 0.25% 0.05% 3,31% 5,00% 9,44% 0.0067% 24 DAVITA HEALTHCARE PARTNERS DVA 17,554.77 0.09% 4,33% 5,00% 9,44% 0.0076% 25 DIRECTIV DTV 45,948.39 0.25% 0.05%	14	DOLLAR TREE INC							
16 DIMONDO OFFSHORE BRILLING DO	15	DUN & BRADSTREET CORP							
17 DOVER CORP	16								
8 DOW CHEMICAL COTHE DOW 61,782.84 0.33% 3.28% 12.50% 15.99% 0.0553%	17	DOVER CORP		•					
9 DP FEPPER SNAPPLE GROUP INC DARDEN RESTAURANTS INC DAR	18	DOW CHEMICAL CO/THE							
20 DARDEN RESTAURANTS INC	19	DR PEPPER SNAPPLE GROUP INC	DPS						
21 DIE ENERGY COMPANY DTE 13,838.05 0.07% 3.81% 5.00% 8.91% 0.00697% 23 DIMES ENERGY CORP DUK 65,494.83 0.25% 4.03% 5.00% 9.0297% 24 DAVITA HEALTHCARE PARTNERS I DVA 1.7,161.47 0.09% 0.00% 11.50% 11.50% 0.0270% 25 DEVON ENERGY CORP DVN 2.5,251.84 0.14% 1.56% 6.50% 8.11% 0.0111% 26 ELECTRONIC ARTS INC EA 2.023.70 0.11% 0.00% 11.00% 0.1011% 27 EBAY INC EBAY 7.3,439.91 0.40% 0.00% 11.00% 10.10% 0.0438% 28 ECOLABINC ED 17,339.88 0.09% 4.46% 3.00% 7.53% 0.0071% 29 CONSOLIDATED EDISON INC EFX 11,116.77 7.00% 8.21% 0.0075% 31 EDISON INTERNATIONAL EIX 19,177.24 0.10% 2.99% 3.00% 6.03% 8.20% 0.0063% 32 ESTEE LAUDER COMPANIES-CLA EL 3.3425.64	20	DARDEN RESTAURANTS INC							
22 DIRECTY				•					
23 DUKE ENERGY CORP 17, 156,477 18,099% 19,000% 11,50	22	DIRECTV		•					
24 DAVITA HEALTHCARE PARTNERS DVA	23	DUKE ENERGY CORP	DUK	•					
25 DEVON EMERGY CORP DNN 25,251,84 0,14% 1,58% 6,59% 8,11% 0,0011976 ELECTRONIC ARTS INC EA 2,233,70 0,11% 0,00% 11,00% 11,00% 10,0091976 27 EBAY INC EBAY 73,343,91 0,40% 0,00% 11,00% 11,00% 0,0438% ECOLAB INC ECI 33,490,34 3 10,90% 1,13% 3,00% 11,100% 1,13% 0,00% 10,15% 0,00192% 29 CONSCILDATED EDISON INC ED 17,339,88 0,09% 4,48% 3,00% 7,53% 0,0071% EDISON INTERNATIONAL EIX 19,177,24 0,10% 2,99% 3,00% 6,03% 0,0083% 21 EDISON INTERNATIONAL EIX 19,177,24 0,10% 2,99% 3,00% 6,03% 0,0083% 21 EDISON INTERNATIONAL EIX 19,177,24 0,10% 2,99% 3,00% 6,03% 0,0083% 21 ESTEE LAUDER COMPANIES-CL A EL 33,425,64 0,18% 1,09% 9,00% 10,14% 0,0184% 3,0184% 1,0053% 23 ENDIC CORPINA EN CHARLES EN									
26 ELECTRONIC ARTS INC EAA 20,233.70 0.11% 0.00% 11,00% 10,00% 0.0193% 27 FEAN INC EGA 34,304.33 0.19% 1.13% 9.00% 10,10% 10.00% 10.048% 28 CONSOLIDATED EDISON INC ED 17,338.68 0.09% 4.46% 3.00% 7.53% 0.00714 30 EQUIFAX INC EFX 11,616.70 0.09% 1.17% 7.00% 8.21% 0.0053% 31 EDISON INTERNATIONAL EIX 13,167.67 0.09% 1.17% 7.00% 8.21% 0.0053% 32 ESTÉE LAUDER COMPANIES-CLA EL 33,425.64 0.19% 2.99% 3.00% 10.14% 0.0053% 32 ESTÉE LAUDER COMPANIES-CLA EL 33,425.64 0.19% 2.99% 3.00% 10.14% 0.0053% 32 EMERSON ELECTRIC CO EMR 33,4989.16 0.21% 3.20% 6.50% 10.14% 0.0075% 35 EMPESON ELECTRIC CO EMR	25	DEVON ENERGY CORP	DVN						
27 EBAY INC EBAY 7,3,44,91 0,40% 0,00% 11,00% 0,0438% 28 ECOLAB INC ECI 13,490,43 0,09% 1,13% 0,00% 1,19% 0,00% 1,018% 0,00% 1,018% 0,00% 1,018% 0,00% 1,018% 0,00% 1,018% 0,00% 1,018% 0,00% 0,00% 7,53% 0,0071% 0,0073% 0,00% 0,00% 1,17% 0,00%	26	ELECTRONIC ARTS INC	EA						
28 ECOLAB INC			EBAY						
29 CONSOLDATED EDISON INC	28	ECOLAB INC	ECL						
20 EQUIFAX INC	29	CONSOLIDATED EDISON INC	ED						
11 EDISON INTERNATIONAL	30	EQUIFAX INC	EFX	•					
22 ESTEE LAUDER COMPANIES-CLA EL 33,425.64 0.18% 1.09% 5.00% 10.14% 0.0184% 1.80 S.21247 0.29% 1.88% 6.50% 8.23% 0.0237% 14.84 S.20 S.20 S.20 S.20 S.20 S.20 S.20 S.20	31	EDISON INTERNATIONAL							
SA EMC CORPIMA	32	ESTEE LAUDER COMPANIES-CL A	EL						
34 EASTMAN CHEMICAL CO EMN 11,947.64 0,06% 1,99% 9,50% 11,58% 0,0775% 35 EMERSON ELECTRIC CO EMR 39,589.16 0,21% 3,20% 6,50% 9,80% 0,0210% 36 ENDO INTERNATIONAL PLC ENDP 14,885.44 N/A 0,00% N/A N/A N/A 37 EOG RESOURCES INC EOG 48,741.06 0,26% 0,68% 4,00% 24,50% 27,41% 0,0221% 38 EQUINX INC EOR - N/A 3,01% N/A N/A <td>33</td> <td>EMC CORP/MA</td> <td>EMC</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	33	EMC CORP/MA	EMC						
35 EMBERSON ELECTRIC CO EMR 39,589,16 0.21% 3.20% 6.50% 9.80% 0.0210% 8 ENDO INTERNATIONAL PLC ENDO 14,88544 N/A 0.00% N/A N/A N/A 37 EOG RESOURCES INC EOG 48,741.06 0.26% 0.86% 4.00% 4.88% 0.0129% 38 EQUINIX INC EQIX 14,876.56 0.06% 2.59% 24,50% 27,41% 0.0221% 39 EQUITY RESIDENTIAL EQR N/A 0.015% 17,50% 17,50% 17,66% 0.0120% 40 EVERSOURCE ENERGY ES 15,013.06 0.08% 3.60% 8.50% 12,25% 0.0100% 42 EXPRESS SCRIPTS HOLDING CO ESRX 65,337.18 0.33% 0.00% 15,50% 10,50% 10,50% 10,50% 10,50% 10,50% 10,50% 10,50% 10,50% 10,50% 10,50% 10,50% 10,50% 10,50% 10,50% 10,50% 10,50% 10,50% 10,50% <t< td=""><td>34</td><td>EASTMAN CHEMICAL CO</td><td>EMN</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	34	EASTMAN CHEMICAL CO	EMN						
86 ENDO INTERNATIONAL PLC ENDF 14.885.44 N/A 0.00% N/A N/A N/A 37 EOG RESOURCES INC EOG 48,741.06 0.26% 0.86% 4.00% 4.88% 0.0129% 38 EQUINIX INC EQIX 14,876.56 0.00% 2.59% 24,50% 27.41% 0.0221% 39 EQUITY RESIDENTIAL EQR - N/A 3.01% N/A N/A N/A 40 EQT CORP EQT 12,576.16 0.07% 0.15% 17.50% 17.66% 0.0120% 41 EVERSOURCE ENERGY ES 15,013.06 0.08% 3.60% 8.50% 12,25% 0.0100% 42 EXPRESS SCRIPTS HOLDING CO ESSX 5,157.46 0.03% 2.67% N/A N/A 1,1225% 0.01000% 43 ESSEX PROPERTY TRUST INC ESS - N/A 2.07% -2.00% 0.67% 0.0000% 45 ETTRADE FINANCIAL CORP ETTC 8,110.20 0.05%	35	EMERSON ELECTRIC CO	EMR	39,589.16	0.21%				
37 EOG RESOURCESINC EOG 48,741.06 0.26% 0.86% 4.00% 4.88% 0.0129% 38 EQUINX INC EQIX 14,876.56 0.08% 2.59% 24,50% 27,41% 0.0221% 39 EQUITY RESIDENTIAL EQR N/A N/A N/A N/A N/A 40 EOT CORP EQT 12,576.16 0.07% 0.15% 17,50% 17,66% 0.0120% 41 EVERSOURCE ENERGY ES 15,013.06 0.09% 3.65% 8.50% 12,25% 0.0100% 42 EXPRESS SCRIPTS HOLDING CO ESRX 65,337.18 0.35% 0.00% 16,50% 16,50% 0.0584% 44 ENSCO PLC-CLA ESV 5,157.46 0.03% 2.70% -2.00% 0.67% 0.000% 45 ETRADE FINANCIAL CORP ETFC 8,811.02 0.05% 0.00% 34,50% 34,50% 0.0165% 6 EATON CORP PLC ETIN 33,187.46 0.18% 0.00% 16	36	ENDO INTERNATIONAL PLC	ENDP	14,885.44					
38 EQUINY INC EQIX 14,876.56 0.08% 2,59% 24,50% 27,41% 0,021% 39 EQUITY RESIDENTIAL EQR - N/A 3.01% N/A N/A N/A 40 EQT CORP EQT 12,576.16 0.07% 0.15% 17.50% 17.66% 0.0120% 41 EVERSOURCE ENERGY ES 15,013.06 0.08% 3.60% 8.50% 12,25% 0.0100% 42 EXPRESS SCRIPTS HOLDING CO ESS 15,013.06 0.08% 3.60% 16,50% 16,50% 10,002% 43 ESSEX PROPERTY TRUST INC ESS N/A 2,70% -2,00% 0.67% 0.008% 45 ETTRADE FINANCIAL CORP ETFC 8,811.02 0.05% 0.00% 34,50% 34,50% 34,50% 43,50% 0.0166% 46 EATON CORP PLC ETR 12,932.19 0.07% 4,51% 0.50% 5.12% 0.0036% 48 EDWARDS LIFESCIENCES CORP EIT 12,938.62	37	EOG RESOURCES INC	EOG	48,741.06					
98 EQUITY RESIDENTIAL EGR - NA 3.01% NA NIA NIA NIA WA DET CORP EQT 12,576.16 0.07% 0.15% 17.50% 17.66% 0.0120% 1 EVERSOURCE ENERGY ES 15.013.06 0.08% 3.60% 8.50% 12.25% 0.0100% 42 EXPRESS SCRIPTS HOLDING CO ESRX 65,337.18 0.35% 0.00% 16.50% 16.50% 0.0584% 43 ESSEX PROPERTY TRUST INC ESS - NIA NIA NIA NIA NIA 44 ENSCO PLC-CL A ESV 5,157.46 0.03% 2.70% -2.00% 0.67% 0.0002% 45 ETRADE FINANCIAL CORP ETFC 8,811.02 0.05% 0.00% 34,50% 34,50% 0.0165% 46 EATON CORP PLC ETIN 33,187.46 0.18% 3.10% 7.50% 10.72% 0.0153% 47 ENTERGY CORP ETR 12,932.19 0.07% 4.61% 0.50% 51,2% 0.0038% 48 EDWARDS LIFESCIENCES CORP EW 15,598.25 0.08% 0.00% 16.00% 16.00% 16.00% 0.0155% 49 EXELON CORP EXC 29,506.19 0.16% 3.62% 6.00% 9.73% 0.0155% 50 EXPEDITORS INTL WASH INC EXPD 9,254.03 0.05% 1.49% 10.50% 12.07% 0.0068% 45 EXPEDIA INC EXPE 13,881.46 0.08% 0.71% 17.50% 18.27% 0.0088% 51 EXPEDIA INC EXPE 13,881.46 0.08% 0.71% 17.50% 18.27% 0.0088% 52 FORD MOTOR CO FAST 12,760.59 0.37% 0.07% 1.56% 10.00% 12.71% 0.0088% 54 FACEBOOK INC-A FB 232,645.50 1.26% 0.00% 32.00% 32.00% 0.4033% 55 FREEPORT-IMMORAN INC FCX 29,335.20 0.11% 0.99% 11.50% 15.60% 0.0029% 56 FAMILY DOLLAR STORES FDO 9,081.15 0.05% 0.06% 1.00% 4.00% 0.0029% 57 FEDEX CORP FE 1.43,857.3 0.08% 0.05% 1.50% 11.50% 11.50% 0.0089% 58 FIRESTENERGY CORP FE 1.43,857.3 0.08% 0.00% 1.60% 1.50% 0.0089% 59 FS NETWORKS INC FIF 1.43,857.3 0.08% 0.00% 1.60% 1.50% 11.50% 0.0089% 59 FS NETWORKS INC FIF 1.43,857.3 0.08% 0.00% 1.60% 1.50% 0.0089% 56 FIREST ENERGY CORP FE 1.43,857.3 0.08% 0.00% 1.50% 11.50% 0.0089% 57 FEDEX CORP FE 1.43,857.3 0.08% 0.00% 1.50% 11.50% 0.0089% 58 FIREST ENERGY CORP FE 1.43,857.3 0.08% 0.00% 1.50% 11.50% 0.0089% 59 FS NETWORKS INC FIF 1.43,857.3 0.08% 0.00% 1.50% 11.50% 0.0089% 59 FS NETWORKS INC FIF 1.43,857.3 0.08% 0.00% 1.50% 11.50% 0.0089% 50 FIREST ENERGY CORP FE 1.43,857.3 0.08% 0.00% 1.50% 11.50% 0.0089% 50 FIREST ENORTH ORD FIRE 1.43,857.3 0.00% 0.00% 1.50% 11.50% 0.0089% 50 FIREST ENORGY CORP FIRE 1.43,899.57 0.09% 0.00% 1.50% 11.50% 0.0	38	EQUINIX INC	EQIX	•					
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41 EVERSOURCE ENERGY ES 15,013.06 0.08% 3.60% 8.50% 12.25% 0.0100% 42 EXPRESS SCRIPTS HOLDING CO ESRX 65,337.18 0.35% 0.00% 16,50% 16,50% 0.0584% 43 ESSEX PROPERTY TRUST INC ESS - NA 2,67% NIA NIA NIA NIA A 14 ENSCO PLC-CL A ESV 5,157.46 0.03% 2.70% -2.00% 0.67% 0.0002% 45 ETRADE FINANCIAL CORP ETFC 8,811.02 0.055% 0.00% 34,50% 34,50% 0.0165% 46 EATON CORP PLC ETN 33,187.46 0.18% 3.10% 7.50% 10,72% 0.0183% 47 ENTERGY CORP ETR 12,932.19 0.07% 4.61% 0.50% 5.12% 0.0036% 48 EDWARDS LIFESCIENCES CORP EW 15,598.25 0.08% 0.00% 16,00% 16,00% 0.0135% 49 EXELON CORP EXC 29,506.19 0.16% 3.62% 6.00% 9.73% 0.0155% 50 EXPEDITORS INTL WASH INC EXPD 9,254.03 0.05% 1.49% 10,50% 12,07% 0.0060% 51 EXPEDITORS INTL WASH INC EXPD 9,254.03 0.05% 1.49% 10,50% 12,07% 0.0060% 51 EXPEDITORS INTL WASH INC EXPE 13,981.46 0.08% 0.71% 17,50% 18,27% 0.0138% 52 FORD MOTOR CO F 60,186.89 0.33% 3.96% 6.00% 10,08% 0.0029% 53 FASTENAL CO FAST 12,760.59 0.07% 2.55% 10,00% 32,00% 32,00% 0.0038% 54 FACEBOOK INC-A FE 32,2645.05 0.28% 0.00% 32,00% 32,00% 32,00% 0.0038% 54 FACEBOOK INC-A FE 32,2645.05 0.28% 0.00% 32,00% 32,00% 32,00% 0.0038% 54 FACEBOOK INC-A FE 32,2645.05 0.28% 0.00% 32,00% 32,00% 32,00% 0.0038% 55 FREEPORT-MCMORAN INC FCX 20,335.20 0.11% 0.99% 11,50% 12,55% 0.0142% 56 FAMILY DOLLAR STORES FDO 9,081.15 0.05% 0.00% 11,50% 11,50% 0.0029% 57 FEDEX CORP FDX 50,619.24 0.27% 0.56% 15,00% 11,50% 11,25% 0.00428% 58 FIRSTENERGY CORP FE 14,365.73 0.08% 4.26% 7.00% 11,411 0.0089% 59 FS NETWORKS INC FIV 9,095.89 0.05% 0.000% 11,50% 11,20% 0.0061% 61,100 0.0061%	40	EQT CORP	EQT	12,576.16					
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FASTENAL CO FAST FAST FAST FACEBOOK INC-A FB	52	FORD MOTOR CO	F						
54 FACEBOOK INC-A FB 232,645.50 1.26% 0.00% 32.00% 32.00% 0.4033% 55 FREEPORT-MCMORAN INC FCX 20,935.20 0.11% 0.99% 11.50% 12.55% 0.0142% 56 FAMILY DOLLAR STORES FDO 9,081.15 0.05% 0.00% 4.00% 4.00% 0.0020% 57 FEDEX CORP FDX 50,619.24 0.27% 0.56% 15.00% 15.60% 0.0428% 58 FIRSTENERGY CORP FE 14,365.73 0.08% 4.26% 7.00% 11.41% 0.0089% 59 F5 NETWORKS INC FFIV 9,095.89 0.05% 0.00% 11.50% 11.50% 0.0057% 60 FIDELITY NATIONAL INFO SERV FIS 17,961.22 0.10% 1.64% 9.50% 11.22% 0.0109% 61 FISERVINC FIS 17,961.22 0.10% 1.64% 9.50% 11.22% 0.0109% 62 FIFTH THIRD BANCORP FITB 17,224.97 0	53	FASTENAL CO	FAST	12,760.59	0.07%				
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56 FAMILY DOLLAR STORES FDO 9,081.15 0.05% 0.00% 4.00% 4.00% 0.0020% 57 FEDEX CORP FDX 50,619.24 0.27% 0.56% 15.00% 15.60% 0.0428% 58 FIRSTENERGY CORP FE 14,365.73 0.08% 4.26% 7.00% 11.41% 0.0089% 59 F5 NETWORKS INC FFIV 9,095.89 0.05% 0.00% 11.50% 11.50% 0.0057% 60 FIDELITY NATIONAL INFO SERV FIS 17,961.22 0.10% 1.64% 9.50% 11.22% 0.0109% 61 FISERV INC FISV 19,655.41 0.11% 0.00% 8.50% 8.50% 0.0091% 62 FIFTH THIRD BANCORP FITB 17,224.97 0.09% 2.46% 4.00% 6.51% 0.0061% 63 FLIR SYSTEMS INC FLIR 4,399.57 0.02% 1.43% 10.50% 12.01% 0.0029% 64 FLUOR CORP FLR 8,192.44 0.04% 1.51% 7.50% 9.07% 0.0040% 65 FLOWSERVE CORP	55	FREEPORT-MCMORAN INC	FCX	20,935.20	0.11%				
57 FEDEX CORP FDX 50,619.24 0.27% 0.56% 15.00% 15.60% 0.0428% 58 FIRSTENERGY CORP FE 14,365.73 0.08% 4.26% 7.00% 11.41% 0.0089% 59 F5 NETWORKS INC FFIV 9,095.89 0.05% 0.00% 11.50% 11.50% 0.0057% 60 FIDELITY NATIONAL INFO SERV FIS 17,961.22 0.10% 1.64% 9.50% 11.22% 0.0109% 61 FISERV INC FISV 19,655.41 0.11% 0.00% 8.50% 8.50% 0.0091% 62 FIFTH THIRD BANCORP FIITB 17,224.97 0.09% 2.46% 4.00% 6.51% 0.0061% 63 FLIR SYSTEMS INC FLIR 4,399.57 0.02% 1.43% 10.50% 12.01% 0.0029% 64 FLUOR CORP FLR 8,192.44 0.04% 1.51% 7.50% 9.07% 0.0040% 65 FLOWSERVE CORP FLS 7,174.71 0.04%	56	FAMILY DOLLAR STORES	FDO	9,081.15	0.05%	0.00%			
58 FIRSTENERGY CORP FE 14,365.73 0.08% 4.26% 7.00% 11.41% 0.0089% 59 F5 NETWORKS INC FFIV 9,095.89 0.05% 0.00% 11.50% 11.50% 0.0057% 60 FIDELITY NATIONAL INFO SERV FIS 17,961.22 0.10% 1.64% 9.50% 11.22% 0.0109% 61 FISERV INC FIS 19,655.41 0.11% 0.00% 8.50% 8.50% 0.0091% 62 FIFTH THIRD BANCORP FITB 17,224.97 0.09% 2.46% 4.00% 6.51% 0.0061% 63 FLIR SYSTEMS INC FLIR 4,399.57 0.02% 1.43% 10.50% 12.01% 0.0029% 64 FLUOR CORP FLR 8,192.44 0.04% 1.51% 7.50% 9.07% 0.0040% 65 FLOWSERVE CORP FLS 7,174.71 0.04% 1.34% 10.00% 11.41% 0.0044% 66 FMC CORP FMC 7,452.53 0.04% <t< td=""><td>57</td><td>FEDEX CORP</td><td>FDX</td><td>50,619.24</td><td>0.27%</td><td>0.56%</td><td>15.00%</td><td></td><td></td></t<>	57	FEDEX CORP	FDX	50,619.24	0.27%	0.56%	15.00%		
59 F5 NETWORKS INC FFIV 9,095.89 0.05% 0.00% 11.50% 11.50% 0.0057% 60 FIDELITY NATIONAL INFO SERV FIS 17,961.22 0.10% 1.64% 9.50% 11.22% 0.0109% 61 FISERV INC FISV 19,655.41 0.11% 0.00% 8.50% 8.50% 0.0091% 62 FIFTH THIRD BANCORP FITB 17,224.97 0.09% 2.46% 4.00% 6.51% 0.0061% 63 FLIR SYSTEMS INC FLIR 4,399.57 0.02% 1.43% 10.50% 12.01% 0.0029% 64 FLUOR CORP FLR 8,192.44 0.04% 1.51% 7.50% 9.07% 0.0040% 65 FLOWSERVE CORP FLS 7,174.71 0.04% 1.34% 10.00% 11.41% 0.0044% 66 FMC CORP FMC 7,452.53 0.04% 1.22% 9.50% 10.78% 0.0044% 67 FOSSIL GROUP INC FOSL 3,535.73 0.02%	58	FIRSTENERGY CORP	FE	14,365.73	0.08%	4.26%	7.00%		
60 FIDELITY NATIONAL INFO SERV FIS 17,961.22 0.10% 1.64% 9.50% 11.22% 0.0109% 61 FISERV INC FISV 19,655.41 0.11% 0.00% 8.50% 8.50% 0.0091% 62 FIFTH THIRD BANCORP FITB 17,224.97 0.09% 2.46% 4.00% 6.51% 0.0061% 63 FLIR SYSTEMS INC FLIR 4,399.57 0.02% 1.43% 10.50% 12.01% 0.0029% 64 FLOWA CORP FLR 8,192.44 0.04% 1.51% 7.50% 9.07% 0.0040% 65 FLOWSERVE CORP FLS 7,174.71 0.04% 1.34% 10.00% 11.41% 0.0044% 66 FMC CORP FMC 7,452.53 0.04% 1.22% 9.50% 10.78% 0.0044% 67 FOSSIL GROUP INC FOSL 3,535.73 0.02% 0.00% 8.50% 8.50% 0.0016% 68 TWENTY-FIRST CENTURY FOX-A FOXA 67,937.32 0.37% <td>59</td> <td>F5 NETWORKS INC</td> <td>FFIV</td> <td>9,095.89</td> <td>0.05%</td> <td>0.00%</td> <td></td> <td></td> <td></td>	59	F5 NETWORKS INC	FFIV	9,095.89	0.05%	0.00%			
61 FISERV INC FISV 19,655.41 0.11% 0.00% 8.50% 8.50% 0.0091% 62 FIFTH THIRD BANCORP FITB 17,224.97 0.09% 2.46% 4.00% 6.51% 0.0061% 63 FLIR SYSTEMS INC FLIR 4,399.57 0.02% 1.43% 10.50% 12.01% 0.0029% 64 FLUOR CORP FLR 8,192.44 0.04% 1.51% 7.50% 9.07% 0.0040% 65 FLOWSERVE CORP FLS 7,174.71 0.04% 1.34% 10.00% 11.41% 0.0044% 66 FMC CORP FMC 7,452.53 0.04% 1.22% 9.50% 10.78% 0.0044% 67 FOSSIL GROUP INC FOSL 3,535.73 0.02% 0.00% 8.50% 8.50% 0.0016% 68 TWENTY-FIRST CENTURY FOX-A FOXA 67,937.32 0.37% 0.91% 13.50% 14.47% 0.0533% 69 FIRST SOLAR INC FSER 5,239.12 0.03% 0.00% 7.50% 7.50% 0.0021%	60	FIDELITY NATIONAL INFO SERV	FIS	17,961.22	0.10%	1.64%			
62 FIFTH THIRD BANCORP FITB 17,224.97 0.09% 2.46% 4.00% 6.51% 0.0061% 63 FLIR SYSTEMS INC FLIR 4,399.57 0.02% 1.43% 10.50% 12.01% 0.0029% 64 FLUOR CORP FLR 8,192.44 0.04% 1.51% 7.50% 9.07% 0.0040% 65 FLOWSERVE CORP FLS 7,174.71 0.04% 1.34% 10.00% 11.41% 0.0044% 66 FMC CORP FMC 7,452.53 0.04% 1.22% 9.50% 10.78% 0.0044% 67 FOSSIL GROUP INC FOSL 3,535.73 0.02% 0.00% 8.50% 8.50% 0.0016% 68 TWENTY-FIRST CENTURY FOX-A FOXA 67,937.32 0.37% 0.91% 13.50% 14.47% 0.0533% 69 FIRST SOLAR INC FSLR 5,239.12 0.03% 0.00% 7.50% 7.50% 0.0021%	61	FISERV INC	FISV						
63 FLIR SYSTEMS INC FLIR 4,399.57 0.02% 1.43% 10.50% 12.01% 0.0029% 64 FLUOR CORP FLR 8,192.44 0.04% 1.51% 7.50% 9.07% 0.0040% 65 FLOWSERVE CORP FLS 7,174.71 0.04% 1.34% 10.00% 11.41% 0.0044% 66 FMC CORP FMC 7,452.53 0.04% 1.22% 9.50% 10.78% 0.0044% 67 FOSSIL GROUP INC FOSL 3,535.73 0.02% 0.00% 8.50% 8.50% 0.0016% 68 TWENTY-FIRST CENTURY FOX-A FOXA 67,937.32 0.37% 0.91% 13.50% 14.47% 0.0533% 69 FIRST SOLAR INC FSLR 5,239.12 0.03% 0.00% 7.50% 7.50% 0.0021%			FITB						
64 FLUOR CORP FLR 8,192.44 0.04% 1.51% 7.50% 9.07% 0.0040% 65 FLOWSERVE CORP FLS 7,174.71 0.04% 1.34% 10.00% 11.41% 0.0044% 66 FMC CORP FMC 7,452.53 0.04% 1.22% 9.50% 10.78% 0.0044% 67 FOSSIL GROUP INC FOSL 3,535.73 0.02% 0.00% 8.50% 8.50% 0.0016% 68 TWENTY-FIRST CENTURY FOX-A FOXA 67,937.32 0.37% 0.91% 13.50% 14.47% 0.0533% 69 FIRST SOLAR INC FSLR 5,239.12 0.03% 0.00% 7.50% 7.50% 0.0021%	63	FLIR SYSTEMS INC	FLIR	4,399.57					
65 FLOWSERVE CORP FLS 7,174.71 0.04% 1.34% 10.00% 11.41% 0.0044% 66 FMC CORP FMC 7,452.53 0.04% 1.22% 9.50% 10.78% 0.0044% 67 FOSSIL GROUP INC FOSL 3,535.73 0.02% 0.00% 8.50% 8.50% 0.0016% 68 TWENTY-FIRST CENTURY FOX-A FOXA 67,937.32 0.37% 0.91% 13.50% 14.47% 0.0533% 69 FIRST SOLAR INC FSLR 5,239.12 0.03% 0.00% 7.50% 7.50% 0.0021%	64	FLUOR CORP							
66 FMC CORP FMC 7,452.53 0.04% 1.22% 9.50% 10.78% 0.0044% 67 FOSSIL GROUP INC FOSL 3,535.73 0.02% 0.00% 8.50% 8.50% 0.0016% 68 TWENTY-FIRST CENTURY FOX-A FOXA 67,937.32 0.37% 0.91% 13.50% 14.47% 0.0533% 69 FIRST SOLAR INC FSLR 5,239.12 0.03% 0.00% 7.50% 7.50% 0.0021%	65	FLOWSERVE CORP							
67 FOSSIL GROUP INC FOSL 3,535.73 0.02% 0.00% 8.50% 8.50% 0.0016% 68 TWENTY-FIRST CENTURY FOX-A FOXA 67,937.32 0.37% 0.91% 13.50% 14.47% 0.0533% 69 FIRST SOLAR INC FSLR 5,239.12 0.03% 0.00% 7.50% 7.50% 0.0021%	66	FMC CORP							
68 TWENTY-FIRST CENTURY FOX-A FOXA 67,937.32 0.37% 0.91% 13.50% 14.47% 0.0533% 69 FIRST SOLAR INC FSLR 5,239.12 0.03% 0.00% 7.50% 7.50% 0.0021%	67	FOSSIL GROUP INC	FOSL						
69 FIRST SOLAR INC FSLR 5,239.12 0.03% 0.00% 7.50% 7.50% 0.0021%	68	TWENTY-FIRST CENTURY FOX-A	FOXA	67,937.32					
TO FIND TECHNIC COVER NIC	69	FIRST SOLAR INC	FSLR						
	70	FMC TECHNOLOGIES INC	FTI	9,738.55	0.05%	0.00%	5.50%		

Ex-Ante Market Risk Premium Market DCF Method Based - Value Line

3 Si Est. 4 Mark 5 1

_	[1]	[2]	[3]
	S&P 500	Current 30-Year	
Est. Required		Treasury (30-day	Implied Market
	Market Return	average)	Risk Premium
_	12.45%	3.05%	9.39%

6			[4]	[5]	[6]	[7]	[8]	[9]
7	Company	Ticker	Market Conitolization	Moight in Index	Estimated	Long-Term	D0ED #	Weighted
7	Company	rickei	Capitalization	Weight in Index	Dividend Yield	Growth Est.	DCF Result	DCF Result
8	FRONTIER COMMUNICATIONS CORP	FTR	5,014.36	0.03%	8.40%	20.00%	29.24%	0.0079%
9	AGL RESOURCES INC	GAS	5,829.65	0.03%	4.20%	6.50%	10.84%	0.0034%
10	GANNETT CO INC	GCI	8,461.73	0.05%	2.15%	9.50%	11.75%	0.0054%
11	GENERAL DYNAMICS CORP	GD	48,053.19	0.26%	1.89%	9.00%	10.98%	0.0286%
12	GENERAL ELECTRIC CO	GE	275,778 <i>.</i> 20	1.49%	3.36%	8.50%	12.00%	0.1793%
13		GGP	-	N/A	2.57%	N/A	N/A	N/A
14	GILEAD SCIENCES INC GENERAL MILLS INC	GILD	179,027.20	0.97%	1.42%	22.50%	24.08%	0.2335%
15 16	CORNING INC	GIS GLW	33,286.60	0.18%	3.15%	5.50%	8.74%	0.0158%
17		GLW	26,715.98 57,920.00	0.14% 0.31%	2.36%	10.00%	12.48%	0.0181%
18	KEURIG GREEN MOUNTAIN INC	GMCR	12,864.85	0.07%	3.98% 1.38%	8.50% 14.50%	12.65% 15.98%	0.0397%
19	GAMESTOP CORP-CLASS A	GME	4,625.65	0.03%	3.33%	10.50%	14.00%	0.0111% 0.0035%
	GENWORTH FINANCIAL INC-CL A	GNW	3,941.21	0.02%	0.00%	23.00%	23.00%	0.0033%
21	GOOGLE INC-CL C	GOOG	366,227.00	1.98%	0.00%	13.00%	13.00%	0.2579%
22	GENUINE PARTS CO	GPC	14,109.87	0.08%	2.66%	8.50%	11.27%	0.0086%
23	GAP INC/THE	GPS	16,332.62	0.09%	2.39%	9.50%	12.00%	0.0106%
24	GARMIN LTD	GRMN	8,917.17	0.05%	4.38%	5.00%	9.49%	0.0046%
25	GOLDMAN SACHS GROUP INC	GS	96,763.14	0.52%	1.21%	11.00%	12.28%	0.0643%
	GOODYEAR TIRE & RUBBER CO	GT	8,369.69	0.05%	0.77%	10.50%	11.31%	0.0051%
	WW GRAINGER INC	GWW	16,286.99	0.09%	1.92%	9.50%	11.51%	0.0102%
	HALLIBURTON CO	HAL	37,848.42	0.21%	1.62%	9.00%	10.69%	0.0219%
	HARMAN INTERNATIONAL	HAR	8,749.41	0.05%	1.14%	21.50%	22.76%	0.0108%
31	HASBRO INC HUNTINGTON BANCSHARES INC	HAS HBAN	9,404.09	0.05%	2.44%	8.00%	10.54%	0.0054%
	HANESBRANDS INC	HBI	9,306.16 13,468.45	0.05% 0.07%	2.17% 1.19%	8.00%	10.26%	0.0052%
	HCA HOLDINGS INC	HCA	35,043.37	0.19%	0.00%	14.50% 13.50%	15.78% 13.50%	0.0115%
	HUDSON CITY BANCORP INC	HCBK	5,015.85	0.03%	0.00%	11.00%	11.00%	0.0256% 0.0030%
	HEALTH CARE REIT INC	HCN	-	N/A	4.86%	N/A	N/A	0.0030 % N/A
	HCP INC	HCP	-	0.00%	5.88%	89.00%	97.50%	0.0000%
37	HOME DEPOT INC	HD	145,293.20	0.79%	2.16%	12.00%	14.29%	0.1125%
38	HESS CORP	HES	19,649.38	0.11%	1.44%	-10.00%	-8.63%	-0.0092%
39	HARTFORD FINANCIAL SVCS GRP	HIG	17,858.46	0.10%	1.70%	11.00%	12.79%	0.0124%
40	HARLEY-DAVIDSON INC	HOG	12,429.22	0.07%	2.10%	10.50%	12.71%	0.0086%
	HONEYWELL INTERNATIONAL INC	HON	82,493.54	0.45%	1.96%	9.50%	11.55%	0.0516%
	STARWOOD HOTELS & RESORTS	НОТ	14,223.98	0.08%	1.81%	6.50%	8.37%	0.0064%
	HELMERICH & PAYNE	HP	7,836.13	0.04%	3.78%	1.00%	4.80%	0.0020%
	HEWLETT-PACKARD CO	HPQ	57,968.56	N/A	2.18%	N/A	N/A	N/A
	H&R BLOCK INC HORMEL FOODS CORP	HRB	8,359.28	0.05%	2.63%	8.50%	11.24%	0.0051%
	HARRIS CORP	HRL HRS	15,131.83 8,235.95	0.08% 0.04%	1.85%	12.00%	13.96%	0.0114%
	HENRY SCHEIN INC	HSIC	12,167.02	0.07%	2.49% 0.00%	3.50% 8.50%	6.03%	0.0027%
	HOSPIRA INC	HSP	15,311.35	0.08%	0.00%	10.50%	8.50% 10.50%	0.0056% 0.0087%
	HOST HOTELS & RESORTS INC	HST	-	N/A	3.90%	N/A	N/A	0.0087-76 N/A
	HERSHEY CO/THE	HSY	20,215.18	0.11%	2.53%	10.50%	13.16%	0.0144%
52	HUMANA INC	HUM	29,851.35	0.16%	0.58%	10.50%	11.11%	0.0180%
53	INTL BUSINESS MACHINES CORP	IBM	165,681.50	0.90%	3.09%	3.50%	6.64%	0.0596%
54	INTERCONTINENTAL EXCHANGE IN	ICE	26,180.00	0.14%	1.28%	15.50%	16.88%	0.0239%
55	INTL FLAVORS & FRAGRANCES	IFF	9,169.43	0.05%	1.66%	6.50%	8.21%	0.0041%
	INTEL CORP	INTC	153,546.00	0.83%	2.97%	8.50%	11.60%	0.0965%
	INTUIT INC	INTU	28,775.94	0.16%	1.04%	11.00%	12.10%	0.0189%
	INTERNATIONAL PAPER CO	IP.	21,527.14	0.12%	3.14%	15.50%	18.88%	0.0220%
	INTERPUBLIC GROUP OF COS INC	IPG	8,353.72	0.05%	2.37%	12.50%	15.02%	0.0068%
	INGERSOLL-RAND PLC	IR IDM	18,371.18	0.10%	1.67%	15.50%	17.30%	0.0172%
	IRON MOUNTAIN INC INTUITIVE SURGICAL INC	IRM	6,886.34	0.04%	5.81%	6.50%	12.50%	0.0047%
	ILLINOIS TOOL WORKS	ISRG ITW	18,252.80 34,390.14	0.10%	0.00%	5.50%	5.50%	0.0054%
	INVESCO LTD	IVZ	17,012.89	0.19% 0.09%	2.07% 2.73%	10.50% 15.00%	12.68%	0.0236%
	JOHNSON CONTROLS INC	JCI	34,024.96	0.09%	2.73%	15.00%	17.93% 12.61%	0.0165% 0.0232%
	JACOBS ENGINEERING GROUP INC	JEC	5,462.41	0.03%	0.00%	7.00%	7.00%	0.0232%
	JOHNSON & JOHNSON	JNJ	278,586.70	1.51%	2.99%	6.50%	9.59%	0.1447%
	JUNIPER NETWORKS INC	JNPR	11,261.98	0.06%	1.61%	15.00%	16.73%	0.0102%
69	JOY GLOBAL INC	JOY	3,786.05	0.02%	2.06%	4.00%	6.10%	0.0013%
70	JPMORGAN CHASE & CO	JPM	282,337.30	1.53%	2.56%	8.00%	10.66%	0.1631%

Ex-Ante Market Risk Premium Market DCF Method Based - Value Line

[1]	[2]	[3]
S&P 500	Current 30-Year	
Est. Required	Treasury (30-day	Implied Market
Market Return	average)	Risk Premium
12.45%	3.05%	9.39%

6			[4]	[5]	[6]	[7]	[8]	[9]
	0	- .,	Market		Estimated	Long-Term	_	Weighted
7	Company	Ticker	Capitalization	Weight in Index	Dividend Yield	Growth Est.	DCF Result	DCF Result
8	NORDSTROM INC	JWN	14,430.05	0.08%	2.00%	7.00%	9.07%	0.0071%
9	KELLOGG CO	K	22,274.30	0.12%	3.11%	5.00%	8.19%	0.0099%
10	KEYCORP	KEY	13,078.64	0.07%	1.95%	8.00%	10.03%	0.0071%
11	KIMCO REALTY CORP	KIM	-	N/A	4.00%	N/A	N/A	N/A
12	KLA-TENCOR CORP	KLAC	9,307.40	0.05%	3.44%	8.50%	12.09%	0.0061%
	KIMBERLY-CLARK CORP	KMB	39,781.56	0.22%	3.22%	8.00%	11.35%	0.0245%
14	KINDER MORGAN INC	KMI	86,784.55	0.47%	4.79%	16.50%	21.69%	0.1019%
	CARMAX INC	KMX	15,177.66	0.08%	0.00%	13.50%	13.50%	0.0111%
	COCA-COLA CO/THE MICHAEL KORS HOLDINGS LTD	KO KORS	177,234.00 9,242.31	0.96%	3.25%	5.50%	8.84%	0.0849%
18	KROGER CO	KR	35,813.98	0.05% 0.19%	0.00% 1.05%	18.50% 10.00%	18.50%	0.0093%
	KRAFT FOODS GROUP INC	KRFT	51,246.02	0.28%	2.53%	8.50%	11.10% 11.14%	0.0215% 0.0309%
	KOHLS CORP	KSS	12,766.40	0.07%	2.90%	6.50%	9.49%	0.0066%
21	KANSAS CITY SOUTHERN	KSU	10,632.12	0.06%	1.37%	13.00%	14.46%	0.0083%
22	LOEWS CORP	L	14,726.88	0.08%	0.63%	16.50%	17.18%	0.0137%
23	L BRANDS INC	LB	25,135.36	0.14%	2.32%	9.00%	11.42%	0.0156%
24	LEGGETT & PLATT INC	LEG	6,748.42	0.04%	2.53%	11.50%	14.18%	0.0052%
	LENNAR CORP-A	LEN	9,708.15	0.05%	0.34%	18.00%	18.37%	0.0097%
	LABORATORY CRP OF AMER HLDGS	LH	12,084.12	0.07%	0.00%	9.00%	9.00%	0.0059%
	L-3 COMMUNICATIONS HOLDINGS	LLL	9,711.77	0.05%	2.21%	6.00%	8.28%	0.0044%
	LINEAR TECHNOLOGY CORP	LLTC	11,261.10	0.06%	2.55%	8.50%	11.16%	0.0068%
	ELI LILLY & CO	LLY	88,371.16	0.48%	2.41%	2.00%	4.43%	0.0212%
	LEGG MASON INC LOCKHEED MARTIN CORP	LM	6,101.57	0.03%	1.48%	14.50%	16.09%	0.0053%
	LINCOLN NATIONAL CORP	LMT LNC	60,793.35 15,309.73	0.33% 0.08%	3.17%	7.50%	10.79%	0.0355%
	LOWE'S COS INC	LOW	66,432.05	0.36%	1.39% 1.60%	8.00% 15.00%	9.45%	0.0078%
	LAM RESEARCH CORP	LRCX	13,292.14	0.07%	1.43%	23.00%	16.72% 24.59%	0.0602% 0.0177%
	LEUCADIA NATIONAL CORP	LUK	N/A	N/A	0.00%	N/A	N/A	0.0177% N/A
	SOUTHWEST AIRLINES CO	LUV	22,628.50	0.12%	0.71%	24.50%	25.30%	0.0310%
37	LEVEL 3 COMMUNICATIONS INC	LVLT	19,570.38	N/A	0.00%	N/A	N/A	N/A
38	LYONDELLBASELL INDU-CL A	LYB	49,611.31	0.27%	2.98%	10.50%	13.64%	0.0366%
39	MACY'S INC	М	23,764.00	0.13%	2.04%	9.00%	11.13%	0.0143%
40	MASTERCARD INC-CLASS A	MA	109,780.90	0.59%	0.67%	13.50%	14.22%	0.0845%
	MACERICH CO/THE	MAC	-	N/A	3.15%	N/A	N/A	N/A
	MARRIOTT INTERNATIONAL -CL A	MAR	21,592.84	0.12%	1.28%	16.00%	17.38%	0.0203%
	MASCO CORP	MAS	9,500.30	0.05%	1.30%	22.00%	23.44%	0.0121%
	MATTEL INC	MAT	9,136.80	0.05%	5.63%	3.00%	8.71%	0.0043%
	MCDONALD'S CORP	MCD	92,180.29	0.50%	3.54%	4.50%	8.12%	0.0405%
	MICROCHIP TECHNOLOGY INC MCKESSON CORP	MCHP MCK	9,903.94 54,761.28	0.05%	2.92%	10.50%	13.57%	0.0073%
	MOODY'S CORP	MCO	22,242,00	0.30% 0.12%	0.41% 1.24%	14.00%	14.44%	0.0428%
	MONDELEZ INTERNATIONAL INC-A	MDLZ	66,431.41	0.36%	1.54%	10.50% 11.00%	11.81%	0.0142%
	MEDTRONIC PLC	MDT	75,477.14	0.41%	1.72%	6.00%	12.62% 7.77%	0.0454% 0.0318%
51	METLIFE INC	MET	63,228.05	0.34%	2.68%	6.00%	8.76%	0.0300%
52	MCGRAW HILL FINANCIAL INC	MHFI	28,847.98	N/A	1.25%	N/A	N/A	N/A
53	MOHAWK INDUSTRIES INC	MHK	14,007.70	0.08%	0.00%	12.00%	12.00%	0.0091%
54	MEAD JOHNSON NUTRITION CO	MJN	18,610.84	0.10%	1.80%	9.50%	11.39%	0.0115%
	MCCORMICK & CO-NON VTG SHRS	MKC	10,109.07	0.05%	2.10%	8.50%	10.69%	0.0059%
	MARTIN MARIETTA MATERIALS	MLM	9,943.12	0.05%	1.09%	24.00%	25.22%	0.0136%
	MARSH & MCLENNAN COS	MMC	32,193.92	0.17%	2.07%	10.50%	12.68%	0.0221%
	3M CO	MMM	101,253.40	0.55%	2.57%	8.50%	11.18%	0.0613%
	MALLINCKRODT PLC	MNK	14,156.54	N/A	0.00%	N/A	N/A	N/A
	MONSTER BEVERAGE CORP	MNST	22,777.35	0.12%	0.00%	15.50%	15.50%	0.0191%
	ALTRIA GROUP INC MONSANTO CO	MO MON	97,238.36	0.53%	4.21%	9.50%	13.91%	0.0733%
	MOSAIC CO/THE	MOS	55,296.29 16,441.17	0.30% 0.09%	1.71%	9.50%	11.29%	0.0338%
	MARATHON PETROLEUM CORP	MPC	28,255.36	0.09% 0.15%	2.44% 2.12%	6.50% 9.00%	9.02%	0.0080%
	MERCK & CO. INC.	MRK	165,715.30	0.90%	3.07%	3.00%	11.22% 6.12%	0.0172% 0.0549%
	MARATHON OIL CORP	MRO	17,907.75	0.10%	3.17%	-0.50%	2.66%	0.0026%
	MORGAN STANLEY	MS	78,443.72	0.42%	1.51%	24.50%	26.19%	0.0028%
68	MICROSOFT CORP	MSFT	379,039.40	2.05%	2.65%	5.00%	7.72%	0.1584%
69	MOTOROLA SOLUTIONS INC	MSI	12,316.90	0.07%	2.40%	4.50%	6.95%	0.0046%
70	M & T BANK CORP	MTB	16,826.98	0.09%	2.21%	5.00%	7.27%	0.0066%

Ex-Ante Market Risk Premium Market DCF Method Based - Value Line

[1]	[2]	[3]
S&P 500	Current 30-Year	
Est. Required	Treasury (30-day	Implied Market
Market Return	average)	Risk Premium
12.45%	3,05%	9.39%

6			[4]	[5]	[6]	[7]	[8]	[9]
			Market		Estimated	Long-Term		Weighted
7	Company	Ticker	Capitalization	Weight in Index	Dividend Yield	Growth Est,	DCF Result	DCF Result
0	MICRONITECHNOLOGY INC	X ALL	20, 200, 70	0.440/	0.000/	22 500/	00.500/	0.04000/
8 9	MICRON TECHNOLOGY INC MURPHY OIL CORP	MU MUR	26,280.78 7,617.07	0.14% 0.04%	0.00% 3.27%	32.50% -1.50%	32.50% 1.75%	0.0463%
10	MEADWESTVACO CORP	MWV	8,390.30	0.04%	2.00%	-1.50% 11.00%		0.0007%
11		MYL	35,517.61	0.19%	0.00%	19.00%	13.11% 19.00%	0.0060% 0.0366%
	NAVIENT CORP	NAVI	7,960.93	N/A	3.43%	N/A	N/A	
13		NBL	16,450.20	0.09%	1.62%	8.00%	9.68%	N/A 0.0086%
	NASDAQ OMX GROUP/THE	NDAQ	8,662.58	0.05%	1.95%	9.50%	11.54%	0.0054%
	NOBLE CORP PLC	NE	3,796.38	0.02%	9.56%	-0.50%	9.04%	0.0019%
16		NEE	45,416.02	0.25%	3.07%	6.50%	9.67%	0.0238%
	NEWMONT MINING CORP	NEM	12,496.15	0.07%	0.40%	-8.00%	-7.62%	-0.0052%
18		NFLX	40,203.18	0.22%	0.00%	27.00%	27.00%	0.0588%
19	NEWFIELD EXPLORATION CO	NFX	6,010.63	0.03%	0.00%	9.50%	9.50%	0.0031%
20	NISOURCE INC	NI	15,457.93	0.08%	2.14%	9.00%	11.24%	0.0094%
21		NKE	91,160.00	0.49%	1.06%	14.50%	15.64%	0.0772%
22		NLSN	16,874.29	0.09%	2.46%	9.50%	12.08%	0.0110%
23	NORTHROP GRUMMAN CORP	NOC	32,224.53	0.17%	1.94%	6.50%	8.50%	0.0148%
24	NATIONAL OILWELL VARCO INC	NOV	19,393.59	0.11%	3.75%	-5.50%	-1.85%	-0.0019%
25	NRG ENERGY INC	NRG	8,327.35	0.05%	2,32%	28.00%	30.64%	0.0138%
26	NORFOLK SOUTHERN CORP	NSC	28,338.77	0.15%	2.54%	8.00%	10.64%	0.0163%
27	NETAPP INC	NTAP	10,337.00	0.06%	2.13%	6.50%	8.70%	0.0049%
28	NORTHERN TRUST CORP	NTRS	18,132.69	0.10%	1.85%	9.50%	11.44%	0.0112%
29	NUCOR CORP	NUE	15,267.37	0.08%	3.14%	22.50%	25.99%	0.0215%
30	NVIDIA CORP	NVDA	11,803.72	0.06%	1.78%	10.00%	11.87%	0.0076%
31	NEWELL RUBBERMAID INC	NWL	11,183.29	0.06%	1.83%	14.00%	15.96%	0.0097%
32	NEWS CORP - CLASS A	NWSA	8,477.23	N/A	0.69%	N/A	N/A	N/A
33	REALTY INCOME CORP	0	-	0.00%	4.89%	49.00%	55.09%	0.0000%
34	OWENS-ILLINOIS INC	OI	3,884.51	0.02%	0.00%	5.50%	5.50%	0.0012%
35		OKE	8,198.00	0.04%	6.49%	9.50%	16.30%	0.0072%
36	OMNICOM GROUP	OMC	17,773.70	0.10%	2.96%	8.50%	11.59%	0.0112%
37	ORACLE CORP	ORCL	186,902.00	1.01%	1.40%	8.00%	9.46%	0.0957%
38	O'REILLY AUTOMOTIVE INC	ORLY	23,244.95	0.13%	0.00%	11.00%	11.00%	0.0139%
39	OCCIDENTAL PETROLEUM CORP	OXY	60,758.22	0.33%	3.87%	-4.00%	-0.21%	-0.0007%
40		PAYX	17,522.12	0.09%	3.40%	9.00%	12.55%	0.0119%
	PEOPLE'S UNITED FINANCIAL	PBCT	4,858.03	0.03%	4.15%	11.00%	15.38%	0.0040%
	PITNEY BOWES INC	PBI	4,424.55	0.02%	3.42%	4.00%	7.49%	0.0018%
	PACCAR INC	PCAR	22,998.75	0.12%	3.09%	11.00%	14.26%	0.0178%
44		PCG	24,784.84	0.13%	3.52%	8.50%	12.17%	0.0163%
	PLUM CREEK TIMBER CO	PCL	7,345.35	0.04%	4.21%	9.50%	13.91%	0.0055%
	PRICELINE GROUP INC/THE	PCLN	60,851.04	0.33%	0.00%	15.00%	15.00%	0.0494%
	PRECISION CASTPARTS CORP	PCP	29,488.33	0.16%	0.06%	8.00%	8.06%	0.0129%
48	PATTERSON COS INC	PDCO	4,879.83	0.03%	1.82%	10.50%	12.42%	0.0033%
	PUBLIC SERVICE ENTERPRISE GP PEPSICO INC	PEG PEP	20,829,38 140,845.20	0.11%	3.84%	3.50%	7.41%	0.0084%
51		PFE	211,639.10	0.76% 1.15%	2.95% 3.26%	9.50%	12.59%	0.0961%
	PRINCIPAL FINANCIAL GROUP	PFG	15,567.87	0.08%	3.26% 2.87%	8.00% 9.50%	11.39% 12.51%	0.1306% 0.0105%
53		PG	219,264.30	1.19%	3.28%	7.00%	10.39%	0.0105%
	PROGRESSIVE CORP	PGR	16,661.70	0.09%	2.43%	11.50%	14.07%	0.0127%
	PARKER HANNIFIN CORP	PH	16,480.26	0.09%	2.12%	9.00%	11.22%	0.0127%
	PULTEGROUP INC	РНМ	7,147.75	0.04%	1.74%	14.50%	16.37%	0.0063%
	PERKINELMER INC	PKI	6,098.68	0.03%	0.52%	7.00%	7.54%	0.0025%
	PROLOGIS INC	PLD	-	N/A	3.62%	N/A	N/A	0.0025 % N/A
	PALL CORP	PLL	13,278.84	0.07%	0.98%	11.50%	12.54%	0.0090%
	PHILIP MORRIS INTERNATIONAL	PM	128,745.30	0.70%	4.81%	3.00%	7.88%	0.0550%
61		PNC	50,902.80	0.28%	2.08%	4.50%	6.63%	0.0183%
62	PENTAIR PLC	PNR	11,089.05	0.06%	2.07%	15.50%	17.73%	0.0107%
63	PINNACLE WEST CAPITAL	PNW	6,429.97	0.03%	4.20%	4.00%	8.28%	0.0029%
64	PEPCO HOLDINGS INC	POM	6,814.45	0.04%	4.01%	8.00%	12.17%	0.0045%
65	PPG INDUSTRIES INC	PPG	32,026.77	0.17%	1,22%	12.50%	13.80%	0.0239%
66	PPL CORP	PPL	20,578.91	0.11%	4.84%	0.50%	5.35%	0.0060%
67	PERRIGO CO PLC	PRGO	26,509.82	0.14%	0.27%	11.50%	11.79%	0.0169%
68	PRUDENTIAL FINANCIAL INC	PRU	40,706.16	0.22%	2.59%	7.50%	10.19%	0.0225%
	PUBLIC STORAGE	PSA	-	N/A	3.53%	N/A	N/A	N/A
70	PHILLIPS 66	PSX	43,346.81	0.23%	2.90%	5.00%	7.97%	0.0187%

Ex-Ante Market Risk Premium Market DCF Method Based - Value Line

Risk Premium 9.39%

[1] S&P 500 Est. Required Market Return 3 [2] Current 30-Year Treasury (30-day Implied Market **4** 5 average) 3.05% 12.45%

6			[4]	[5]	[6]	[7]	[8]	[9]
_	•	- .	Market		Estimated	Long-Term		Weighted
7	Company	Ticker	Capitalization	Weight in Index	Dividend Yield	Growth Est.	DCF Result	DCF Result
8	PVH CORP	PVH	9,358.32	0.05%	0.13%	8.50%	8.64%	0.0044%
9	QUANTA SERVICES INC	PWR	6,312,27	0.03%	0.00%	12.00%	12,00%	0.0044 %
10		PX	35,689.89	0.19%	2.46%	9.00%	11.57%	0.0224%
11		PXD	21,372.56	0.12%	0.06%	17,50%	17.57%	0.0203%
12		QCOM	109,998.90	0.60%	2.85%	6.50%	9.44%	0.0563%
	QEP RESOURCES INC	QEP	3,277.06	0.02%	0.49%	4.50%	5.00%	0.0009%
14		QRVO	N/A	N/A	0.00%	N/A	N/A	N/A
	RYDER SYSTEM INC	R	4,982,79	0.03%	1.58%	11.50%	13,17%	0.0036%
16	REYNOLDS AMERICAN INC	RAI	40,757.52	0.22%	3.50%	12.00%	15.71%	0.0347%
17	ROYAL CARIBBEAN CRUISES LTD	RCL	17,507.40	0.09%	1.51%	19.00%	20.65%	0.0196%
18		REGN	53,972.79	0.29%	0.00%	22.50%	22.50%	0.0658%
19	REGIONS FINANCIAL CORP	RF	14,101.50	0.08%	2.38%	7.50%	9.97%	0.0076%
	ROBERT HALF INTL INC	RHI	7,635.96	0.04%	1.39%	12.50%	13.98%	0.0058%
21		RHT	14,406.92	0.08%	0.00%	15,50%	15.50%	0.0121%
22	TRANSOCEAN LTD	RIG	6,165.98	0.03%	3.54%	-11.50%	-8.16%	-0.0027%
23	RALPH LAUREN CORP	RL	12,178.35	0.07%	1.43%	7.50%	8.98%	0.0059%
24	ROCKWELL AUTOMATION INC	ROK	16,901.15	0.09%	2.07%	9.00%	11.16%	0.0102%
25	ROPER TECHNOLOGIES INC	ROP	17,793.22	0.10%	0.57%	9.00%	9.60%	0.0092%
	ROSS STORES INC	ROST	20,633.67	0.11%	0.94%	7.50%	8.48%	0.0095%
27	RANGE RESOURCES CORP	RRC	8,489.27	0.05%	0.31%	22.50%	22.84%	0.0105%
28	REPUBLIC SERVICES INC	RSG	14,279.56	0.08%	2.91%	8.00%	11.03%	0.0085%
29	RAYTHEON COMPANY	RTN	30,969.32	0.17%	2.65%	8.50%	11.26%	0.0189%
30	STARBUCKS CORP	SBUX	81,219.11	0.44%	1.29%	17.50%	18.90%	0.0832%
31	SCANA CORP	SCG	7,390.79	0.04%	4.25%	4.50%	8.85%	0.0035%
32	SCHWAB (CHARLES) CORP	SCHW	43,425.70	0.24%	0.73%	14.50%	15.28%	0.0360%
33	SPECTRA ENERGY CORP	SE	22,153.79	0.12%	4.49%	7.00%	11.65%	0.0140%
34	SEALED AIR CORP	SEE	10,876.52	0.06%	1.01%	19.50%	20.61%	0.0121%
35	SHERWIN-WILLIAMS CO/THE	SHW	26,292,72	0.14%	1.04%	13.00%	14.11%	0.0201%
36	SIGMA-ALDRICH	SIAL	16,679.13	0.09%	0.66%	9.00%	9.69%	0.0088%
37	JM SMUCKER CO/THE	SJM	11,531.78	0.06%	2.26%	7.00%	9.34%	0.0058%
38	SCHLUMBERGER LTD	SLB	112,535.80	0.61%	2.26%	12.00%	14.40%	0.0878%
39	SL GREEN REALTY CORP	SLG	, _	N/A	2.16%	N/A	N/A	N/A
40	SNAP-ON INC	SNA	9,287.11	0.05%	1.33%	9.50%	10.89%	0.0055%
41	SANDISK CORP	SNDK	13,556.38	0.07%	1.84%	12.00%	13.95%	0.0102%
42	SCRIPPS NETWORKS INTER-CL A	SNI	8,691.06	0.05%	1.36%	9.00%	10.42%	0.0049%
43	SOUTHERN CO/THE	SO	39,345.87	0.21%	5.06%	4.50%	9.67%	0.0206%
44	SIMON PROPERTY GROUP INC	SPG	· -	N/A	3.30%	N/A	N/A	N/A
45	STAPLES INC	SPLS	10,526.08	0.06%	2.92%	-1.00%	1.91%	0.0011%
46	STERICYCLE INC	SRCL	11,713.54	0.06%	0.00%	10.00%	10.00%	0.0063%
47	SEMPRA ENERGY	SRE	25,931.54	0.14%	2.71%	8.50%	11.33%	0.0159%
48	SUNTRUST BANKS INC	STI	22,826.40	0.12%	2.37%	9,00%	11.48%	0.0142%
49	ST JUDE MEDICAL INC	STJ	21,250.29	0.12%	1.53%	9.00%	10.60%	0.0122%
50	STATE STREET CORP	STT	32,867.79	0.18%	1.70%	8.50%	10.27%	0.0183%
51	SEAGATE TECHNOLOGY	STX	17,220.63	0.09%	3.99%	3.00%	7.05%	0.0066%

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5

Ex-Ante Market Risk Premium Market DCF Method Based - Value Line

 [1]
 [2]
 [3]

 S&P 500
 Current 30-Year
 Implied Market

 Est. Required
 Treasury (30-day
 Implied Market

 Market Return
 average)
 Risk Premium

 12.45%
 3.05%
 9.39%

6 [4] [5] [6] [7] [8] [9] Market Estimated Long-Term Weighted Capitalization Company Ticker Weight in Index Dividend Yield Growth Est DCF Result DCF Result 8 CONSTELLATION BRANDS INC-A STZ 23,259.26 0.13% 1.10% 16.00% 17.19% 0.0217% STANLEY BLACK & DECKER INC **SWK** 16,380,94 0.09% 1.95% 10,00% 12.05% 0.0107% SKYWORKS SOLUTIONS INC. 10 SWKS 21,006,18 0.11% 0.95% 28.00% 29.08% 0.0331% 11 SOUTHWESTERN ENERGY CO SWN 8,876.39 0.05% 0.00% 6.50% 6.50% 0.0031% 12 STRYKER CORP SYK 36,762.43 0.20% 1 42% 17.00% 18.54% 0.0369% SYMANTEC CORP 13 SYMC 16,691,01 0.09% 2.45% 4.00% 6.50% 0.0059% 14 SYSCO CORP SYY 22,189.95 0.12% 3.21% 10.00% 13.37% 0.0161% 15 AT&T INC 181.860.70 0.99% 5.43% Т 5.00% 10.57% 0.1041% MOLSON COORS BREWING CO -B TAP 16 13,726,66 0.07% 2.23% 9.00% 11.33% 0.0084% 17 TERADATA CORP TDC 5,536.94 0.03% 0.00% 3.50% 3.50% 0.0010% **TECO ENERGY INC** TE 4,304.41 0.02% 4.98% 5.50% 10.62% 0.0025% INTEGRYS ENERGY GROUP INC 19 5.689.86 TEG 0.03% 3.80% 2.00% 5.84% 0.0018% 20 TE CONNECTIVITY LTD TEL 28,361.54 0.15% 1.90% 9.50% 11.49% 0.0177% TARGET CORP 21 TGT 53,109.16 0.29% 2.69% 7.50% 10.29% 0.0296% 22 TENET HEALTHCARE CORP THC 5.163.47 0.03% 0.00% 30.00% 30.00% 0.0084% TIFFANY & CO 23 TIF 12,031.07 0.07% 1.72% 12.50% 14.33% 0.0093% 24 TJX COMPANIES INC TJX 45,694.66 0.25% 1.25% 11.00% 12,32% 0.0305% 25 TORCHMARK CORP TMK 7 456 03 0.04% 0.92% 6.50% 7.45% 0.0030% THERMO FISHER SCIENTIFIC INC 26 TMO 51,619.90 0.28% 0.46% 14.50% 14.99% 0.0419% 27 TRIPADVISOR INC TRIP 13,011.51 0.07% 0.00% 25.00% 25.00% 0.0176% 28 T ROWE PRICE GROUP INC TROW 20,752,19 0.11% 2.65% 9.50% 12.28% 0.0138% 29 TRAVELERS COS INC/THE TRV 32,338,49 0.18% 2.41% 4.50% 6.96% 0.0122% 30 TRACTOR SUPPLY COMPANY **TSCO** 12.679.87 0.07% 0.90% 15.50% 16 47% 0.0113% 31 TYSON FOODS INC-CL A TSN 17,167,71 0.09% 1.02% 12.50% 13.58% 0.0126% TESORO CORP 32 TSO 10,673.30 0.06% 1.99% 9.00% 11.08% 0.0064% 33 TOTAL SYSTEM SERVICES INC TSS 7,821.86 0.04% 0.94% 9.50% 10.48% 0.0044% TIME WARNER CABLE 34 TWC 50.210.72 0.27% 1.69% 7.00% 8.75% 0.0238% 35 TIME WARNER INC TWX 72.944.05 0.40% 1.59% 12.00% 13.69% 0.0541% 36 TEXAS INSTRUMENTS INC TXN 56,628.13 0.31% 2.51% 11.50% 14.15% 0.0434% 37 **TEXTRON INC** TXT 12,895.29 0.07% 0.17% 17 00% 17.18% 0.0120% 38 TYCO INTERNATIONAL PLC TYC 17,024,27 0.09% 2.03% 12.50% 14.66% 0.0135% 39 UNDER ARMOUR INC-CLASS A UA 18,040.36 0.10% 0.00% 23.50% 23.50% 0.0230% UNIVERSAL HEALTH SERVICES-B 40 UHS 13,089.59 0.07% 0.30% 11 50% 11.82% 0.0084% 41 UNITEDHEALTH GROUP INC UNH 115,087,30 0.62% 1.65% 11.50% 13.24% 0.0826% 42 UNUM GROUP UNM 9,168.43 0.05% 2.01% 11.00% 13.12% 0.0065% UNION PACIFIC CORP 43 UNP 89,764.03 0.49% 2.15% 12.00% 14.28% 0.0694% 44 UNITED PARCEL SERVICE-CL B UPS 91,462,80 0.50% 2.88% 10.50% 13.53% 0.0670% URBAN OUTFITTERS INC 45 URBN 4,630.31 0.03% 0.00% 14.50% 14.50% 0.0036% 46 UNITED RENTALS INC URI 8,973.59 0.05% 0.00% 20.00% 20.00% 0.0097% 47 **US BANCORP** USB 79 708 40 0.43% 2.28% 6.00% 8.35% 0.0360% UNITED TECHNOLOGIES CORP 48 UTX 103,174.30 0.56% 2.21% 9.50% 11.81% 0.0660% 49 VISA INC-CLASS A SHARES 154,915.50 0.84% 0.75% 11.50% 12.29% 0.1032% VARIAN MEDICAL SYSTEMS INC VAR 8,788.63 0.05% 0.00% 6.50% 6.50% 0.0031% 51 VF CORE **VFC** 29,866.47 0.16% 1.82% 10.50% 12.42% 0.0201% 52 VIACOM INC-CLASS B VIAB 26.780.43 0.15% 2.37% 11.00% 13.50% 0.0196% VALERO ENERGY CORP **VLO** 30.756.80 0.17% 2.66% 10.00% 12.79% 0.0213% VUI CAN MATERIALS CO 54 VMC 11,790.82 0.06% 0.45% 45.00% 45.55% 0.0291% 55 **VORNADO REALTY TRUST** VNO 19,070.07 0.10% 2.49% 6.50% 9.07% 0.0094% VERISIGN INC VRSN 7.524.81 0.04% 0.00% 11,00% 11.00% 0.0045% VERTEX PHARMACEUTICALS INC 57 VRTX 31,088.12 N/A 0.00% N/A N/A N/A 58 VENTAS INC VTR N/A 4.85% N/A N/A N/A VERIZON COMMUNICATIONS INC ٧Z 194,806.00 1.06% 4.61% 7.00% 11.77% 0.1242% 60 WATERS CORP WAT 11,288,69 0.06% 0.00% 8.50% 8.50% 0.0052% WALGREENS BOOTS ALLIANCE INC 61 WBA 95,944.51 0.52% 1.54% 14.50% 16.15% 0.0839% WESTERN DIGITAL CORP 62 WDC 21,349.02 0.12% 2.16% 2 50% 4.69% 0.0054% 63 WISCONSIN ENERGY CORP WEC 10,598.31 0.06% 3.75% 6.00% 9.86% 0.0057% 64 WELLS FARGO & CO WEC 297,901.70 1.61% 2.60% 6.50% 9.18% 0.1482% WHOLE FOODS MARKET INC 65 WFM 14,754.28 0.08% 1.37% 12.00% 13.45% 0.0108% WHIRLPOOL CORP 66 WHR 14,605,50 0.08% 1.92% 13.50% 15.55% 0.0123% 67 WASTE MANAGEMENT INC WM 22,111.74 0.12% 3.23% 6.50% 9.83% 0.0118% WILLIAMS COS INC 68 **WMB** 36,629.56 0.20% 5.23% 17.00% 22,67% 0.0450% 69 WAL-MART STORES INC WMT 235.506.50 1 28% 2.69% 5.00% 7.76% 0.0990% 70 WESTERN UNION CO WU 11,001.76 0.06% 2.91% 6.00% 9.00% 0.0054%

Ex-Ante Market Risk Premium Market DCF Method Based - Value Line

3

[1]	[2]	[3]
S&P 500	Current 30-Year	
Est. Required	Treasury (30-day	Implied Market
Market Return	average)	Risk Premium
12.45%	3.05%	9.39%

6			[4]	[5]	[6]	[7]	[8]	[9]
			Market		Estimated	Long-Term		Weighted
7	Company	Ticker	Capitalization	Weight in Index	Dividend Yield	Growth Est.	DCF Result	DCF Result
8	WEYERHAEUSER CO	WY	16,967.82	0.09%	3.55%	12.50%	16.27%	0.0150%
9	WYNDHAM WORLDWIDE CORP	WYN	10,176.00	0.06%	1.98%	8.50%	10.56%	0.0058%
10	WYNN RESORTS LTD	WYNN	10,645.47	0.06%	1.90%	11.00%	13.00%	0.0075%
11	CIMAREX ENERGY CO	XEC	10,444.49	0.06%	0.54%	7.00%	7.56%	0.0043%
12	XCEL ENERGY INC	XEL	16,745.21	0.09%	3.93%	4.50%	8.52%	0.0077%
13	XL GROUP PLC	XL	9,842.41	0.05%	1.66%	9.00%	10.73%	0.0057%
14	XILINX INC	XLNX	12,313.48	0.07%	2.63%	7.50%	10.23%	0.0068%
15	EXXON MOBIL CORP	XOM	357,401.10	1.94%	3.42%	4.50%	8.00%	0.1548%
16	DENTSPLY INTERNATIONAL INC	XRAY	7,438.48	0.04%	0.55%	8.00%	8.57%	0.0035%
17	XEROX CORP	XRX	12,278.16	0.07%	2.51%	3.50%	6.05%	0.0040%
18	XYLEM INC	XYL	6,689.97	0.04%	1.52%	9.50%	11.09%	0.0040%
19	YAHOO! INC	YHOO	38,342.29	0.21%	0.00%	3.50%	3.50%	0.0073%
20	YUM! BRANDS INC	YUM	40,130.44	0.22%	1.90%	9.50%	11.49%	0.0250%
21	ZIONS BANCORPORATION	ZION	6,506.21	0.04%	0.75%	7.50%	8.28%	0.0029%
22	ZIMMER HOLDINGS INC	ZMH	19,306.32	0.10%	0.85%	10.00%	10.89%	0.0114%
23	ZOETIS INC	ZTS	25,268.53	N/A	0.65%	N/A	N/A	N/A
24	Total Market Capitalization:		18,460,544.95					12.45%

²⁵ Notes:

26 [1] Equals sum of Col. [9] 27 [2] Source: Bloomberg Professional

28 [3] Equals [1] - [2]

29 [4] Source: Value Line

[6] Fourier Value Line
[7] Source: Value Line
[8] Source: Value Line

33 [8] Equals ([6] x (1 + (0.5 x [7]))) + [7] 34 [9] Equals Col. [5] x Col. [8]

Bloomberg and Value Line Beta Coefficients

PNM Exhibit RBH-7

Is contained in the following 1 page.

Bloomberg and Value Line Beta Coefficients

2			[1]	[2]
3	Company	Ticker	Bloomberg	Value Line
4	ALLETE, Inc.	ALE	0,723	0.80
5	Alliant Energy Corporation	LNT	0.748	0.80
6	Ameren Corporation	AEE	0.741	0.75
7	American Electric Power Company, Inc.	AEP	0.680	0.70
8	Avista Corporation	AVA	0,671	0.80
9	Black Hills Corporation	BKH	1.006	0.95
10	CenterPoint Energy, Inc.	CNP	0.770	0.80
11	CMS Energy Corporation	CMS	0.703	0.75
12	Consolidated Edison, Inc.	ED	0.552	0.60
13	Dominion Resources, Inc.	D	0.782	0.70
14	DTE Energy Company	DTE	0.738	0.75
15	Duke Energy Corporation	DUK	0.516	0.60
16	Empire District Electric Company	EDE	0.629	0.70
17	Eversource Energy	ES	0.655	0.75
18	FirstEnergy Corp.	FE	0.695	0.70
19	Great Plains Energy Inc.	GXP	0.741	0.85
20	IDACORP, Inc.	IDA	0.819	0.80
21	NorthWestern Corporation	NWE	0.761	0.70
22	OGE Energy Corp.	OGE	0.781	0.90
23	Otter Tail Corporation	OTTR	0.889	0.90
24	Pinnacle West Capital Corporation	PNW	0.732	0.70
25	Portland General Electric Company	POR	0.714	0.80
26	SCANA Corporation	SCG	0.724	0.75
27	Southern Company	SO	0.512	0.60
28	TECO Energy, Inc.	TE	0.770	0.85
29	Westar Energy, Inc.	WR	0.668	0.75
30	Xcel Energy Inc.	XEL	0.635	0.65
31	Mean		0.717	0.756

33 [1] Source: Bloomberg Professional34 [2] Source: Value Line

CAPM Analysis

PNM Exhibit RBH-8

Is contained in the following 1 page.

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

← ⊘

4 u							
 		Risk-Free Rata	Average Beta	Bloomberg Market DCF	Value Line Market DCF	Bloomberg	Value Line
מטט					3		
	PROXY GROUP AVERAGE BLOOMBERG BETA COEFFICIENT	OEFFICIEN	7				
e Cu	Surrent 30-Year Treasury [7]	3.05%	0.717	10.38%	9.39%	10.49%	9.79%
7 Pro	Projected 30-Year Treasury [8]	3.57%	0.717	10.38%	9.39%	11.01%	10.30%
8 Me	Mean					10.75%	10.04%
		! -	Average	Bloomberg	Value Line		
<u>ග</u>		Risk-Free Rate	Beta Coefficient	Market DCF Derived	Market DCF Derived	Bloomberg MRP	Value Line MRP
10 P.F.	PROXY GROUP AVERAGE VALUE LINE AVERAGE BETA COEFFICIENT	E BETA COI	EFFICIENT				
11 Cu	Current 30-Year Treasury [7]	3.05%	0.756	10.38%	9.39%	10.90%	10.15%
12 Pro	Projected 30-Year Treasury [8]	3.57%	0.756	10.38%	9.39%	11.41%	10.66%
13 Me	Mean					11.15%	10.41%

[1] See Note [7] 14 116 118 119 22 22

[2] Source: PNM Exhibit RBH-7 [3] Source: PNM Exhibit RBH-6

[4] Source: PNM Exhibit RBH-6 [5] Equals Col. [1] + (Col. [2] × Col. [3]) [6] Equals Col. [1] + (Col. [2] × Col. [4]) [7] Source: Bloomberg Professional [8] Source: Blue Chip Financial Forecasts, Vol. 34, No. 7, July 1, 2015, at 2

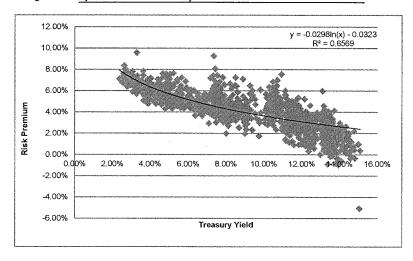
Bond Yield Plus Risk Premium Analysis

PNM Exhibit RBH-9

Is contained in the following 25 pages.

Bond Yield Plus Risk Premium

	[1]	[2]	[3] 30-Year	[4]	[5]
	Constant	Slope	Treasury Yield	Risk Premium	Return on Equity
	-3.23%	-2.98%		***	
	Current 30-Ye	ear Treasury	3.05%	7.18%	10.24%
Near-Term P	rojected 30-Ye	ear Treasury	3.57%	6.72%	10.29%
Long-Term P	rojected 30-Ye	ear Treasury	4.90%	5.77%	10.67%



8 Notes:

14

1

2

3

- 9 [1] Constant of regression equation
- 10 [2] Slope of regression equation
- 11 [3] Source: Current = Bloomberg Professional,
- Near Term Projected = Blue Chip Financial Forecasts, Vol. 34, No. 7, July 1, 2015, at 2, Long Term Projected = Blue Chip Financial Forecasts, Vol. 34, No. 6, June 1, 2014, at 14
 - [4] Equals [1] + In([3]) x [2]
- 15 [5] Equals [3] + [4]
- 16 [6] Source: SNL Financial
- 17 [7] Source: SNL Financial
- 18 [8] Source: Bloomberg Professional, equals 201-trading day average (i.e. lag period)
- 19 [9] Equals [7] [8]

1	Boi	nd Yield Plus	Risk Premiu	ım
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	1/1/1980	14.50% 14.39%	10.17%	4.33%
5 6	1/7/1980 1/9/1980	15.00%	10.32% 10.28%	4.08% 4.73%
7	1/14/1980	15.00%	10.26%	4.73% 4.77%
8	1/17/1980	13.17 %	10.40%	3.39%
9	1/23/1980	15.50%	10.78%	4.73%
10	1/30/1980	13.86%	11.10%	2.76%
11	1/31/1980	12.61%	11.16%	1.45%
12	2/6/1980	13.71%	11.74%	1.97%
13	2/13/1980	12.80%	11.86%	0.94%
14	2/14/1980	13.00%	12.01%	1.00%
15	2/19/1980	13.50%	12.59%	0.91%
16	2/27/1980	13.75%	12.53%	1.23%
17	2/29/1980	13.75%	12.29%	1.47%
18	2/29/1980	14.00%	12.29%	1.72%
19 20	2/29/1980 3/7/1980	14.77% 12.70%	12.29% 12.38%	2.49%
21	3/14/1980	13.50%	12.36%	0.33% 1.30%
22	3/26/1980	14.16%	12.53%	1.63%
23	3/27/1980	14.24%	12.43%	1.82%
24	3/28/1980	14.50%	12.33%	2.17%
25	4/11/1980	12.75%	11.52%	1.24%
26	4/14/1980	13.85%	11.49%	2.37%
27	4/16/1980	15.50%	10.95%	4.55%
28	4/22/1980	13.25%	10.98%	2.27%
29	4/22/1980	13.90%	10.98%	2.92%
30	4/24/1980	16.80%	11.16%	5.65%
31	4/29/1980	15.50%	10.89%	4.61%
32 33	5/6/1980	13.70% 15.00%	10.21%	3.49%
34	5/7/1980 5/8/1980	13.75%	10.27% 10.38%	4.74% 3.38%
35	5/9/1980	14.35%	10.33%	3.93%
36	5/13/1980	13.60%	10.48%	3.33%
37	5/15/1980	13.25%	10.50%	2.76%
38	5/19/1980	13.75%	10.58%	3.18%
39	5/27/1980	13.62%	10.16%	3.46%
40	5/27/1980	14.60%	10.16%	4.44%
41	5/29/1980	16.00%	10.35%	5.66%
42	5/30/1980	13.80%	10.41%	3.39%
43	6/2/1980	15.63%	10.37%	5.26%
44	6/9/1980	15.90%	9.82%	6.09%
45	6/10/1980	13.78%	9.84%	3.95%
46 47	6/12/1980 6/19/1980	14.25% 13.40%	9.55%	4.71%
48	6/30/1980	13.40%	9.54% 10.06%	3.87% 2.95%
49	6/30/1980	13.40%	10.06%	2.95 % 3.35 %
50	7/9/1980	14.75%	10.18%	4.58%
51	7/10/1980	15.00%	10.26%	4.75%
52	7/15/1980	15.80%	10.12%	5.68%
53	7/18/1980	13.80%	10.15%	3.65%
54	7/22/1980	14.10%	10.17%	3.94%
55	7/24/1980	15.00%	10.29%	4.72%
56	7/25/1980	13.48%	10.38%	3.11%
57	7/31/1980	14.58%	10.78%	3.80%
58	8/8/1980	13.50%	10.98%	2.53%
59	8/8/1980	14.00%	10.98%	3.03%
60 61	8/8/1980 8/11/1980	15.45% 14.85%	10.98%	4.48%
62	8/11/1980	14.85%	11.03% 10.87%	3.82% 3.14%
63	8/14/1980	16.25%	10.87%	5.39%
64	8/25/1980	13.75%	11.18%	2.57%
65	8/27/1980	13.80%	11.38%	2.42%
66	8/29/1980	12.50%	11.18%	1.33%

1	Boi	nd Yield Plus	Risk Premiu	ım
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	9/15/1980	13.50%	11.36%	2.15%
5	9/15/1980	13.93%	11.36%	2.58%
6	9/15/1980	15.80%	11.36%	4.45%
7	9/24/1980	12.50%	11.60%	0.91%
8	9/24/1980	15.00%	11.60%	3.41%
9	9/26/1980	13.75%	11.87%	1.88%
10	9/30/1980	14.10%	11.70%	2.41%
11	9/30/1980	14.20%	11.70%	2.51%
12	10/1/1980	13.90%	11.68%	2.23%
13 14	10/3/1980	15.50% 12.50%	11.30%	4.21%
15	10/7/1980 10/9/1980	13.25%	11.34%	1.16%
16	10/9/1980	14.50%	11.24% 11.24%	2.02% 3.27%
17	10/9/1980	14.50%	11.24%	3.27%
18	10/5/1980	16.10%	11.24 %	4.75%
19	10/17/1980	14.50%	11.44%	3.06%
20	10/31/1980	13.75%	12.23%	1.53%
21	10/31/1980	14.25%	12.23%	2.03%
22	11/4/1980	15.00%	12.29%	2.71%
23	11/5/1980	13.75%	12.48%	1.28%
24	11/5/1980	14.00%	12.48%	1.53%
25	11/8/1980	13.75%	12.65%	1.10%
26	11/10/1980	14.85%	12.49%	2.37%
27	11/17/1980	14.00%	12.45%	1.56%
28	11/18/1980	14.00%	12.24%	1.76%
29	11/19/1980	13.00%	12.21%	0.80%
30	11/24/1980	14.00%	12.31%	1.70%
31	11/26/1980	14.00%	12.30%	1.71%
32	12/8/1980	14.15%	12.55%	1.60%
33	12/8/1980	15.10%	12.55%	2.55%
34	12/9/1980	15.35%	12.74%	2.61%
35	12/12/1980	15.45%	12.84%	2.61%
36	12/17/1980	13.25%	12.68%	0.57%
37	12/18/1980	15.80%	12.42%	3.38%
38	12/19/1980	14.50%	11.99%	2.51%
39	12/19/1980	14.64%	11.99%	2.65%
40	12/22/1980	13.45%	11.84%	1.61%
41	12/22/1980	15.00%	11.84%	3.16%
42 43	12/30/1980	14.50%	11.97%	2.53%
44	12/30/1980	14.95% 13.39%	11.97%	2.98%
45	12/31/1980 1/2/1981	15.39%	12.00% 11.84%	1.39%
46	1/7/1981	14.30%	11.90%	3.41% 2.40%
47	1/19/1981	15.25%	12.18%	3.07%
48	1/23/1981	13.10%	12.10%	0.77%
49	1/23/1981	14.40%	12.33%	2.07%
50	1/26/1981	15.25%	12.30%	2.95%
51	1/27/1981	15.00%	12.32%	2.68%
52	1/31/1981	13.47%	12.37%	1.10%
53	2/3/1981	15.25%	12.55%	2.70%
54	2/5/1981	15.75%	12.72%	3.03%
55	2/11/1981	15.60%	13.11%	2.49%
56	2/20/1981	15.25%	12.68%	2.57%
57	3/11/1981	15.40%	12.67%	2.73%
58	3/12/1981	14.51%	12.51%	2.00%
59	3/12/1981	16.00%	12.51%	3.49%
60	3/13/1981	13.02%	12.42%	0.60%
61	3/18/1981	16.19%	12.22%	3.97%
62	3/19/1981	13.75%	12.31%	1.44%
63	3/23/1981	14.30%	12.78%	1.52%
64	3/25/1981	15.30%	12.85%	2.45%
65	4/1/1981	14.53%	12.73%	1.80%
66	4/3/1981	19.10%	13.11%	5.99%

1	Bo	nd Yield Plus	Risk Premiu	m
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium 1 01%
5	4/9/1981 4/9/1981	15.00% 15.30%	13.09% 13.09%	1.91% 2.21%
6	4/9/1981	16.50%	13.09%	3.41%
7	4/9/1981	17.00%	13.09%	3.91%
8	4/10/1981	13.75%	13.19%	0.56%
9	4/13/1981	13.57%	13.18%	0.39%
10	4/15/1981	15.30%	13.31%	1.99%
11	4/16/1981	13.50%	13.25%	0.25%
12	4/17/1981	14.10%	13.25%	0.85%
13	4/21/1981	14.00%	13.23%	0.77%
14 15	4/21/1981	16.80% 16.00%	13.23%	3.57%
16	4/24/1981 4/27/1981	12.50%	13.37% 13.39%	2.63% -0.89%
17	4/27/1981	13.61%	13.39%	0.22%
18	4/29/1981	13.65%	13.58%	0.07%
19	4/30/1981	13.50%	13.62%	-0.12%
20	5/4/1981	16.22%	14.05%	2.17%
21	5/5/1981	14.40%	14.04%	0.36%
22	5/7/1981	16.25%	13.80%	2.45%
23	5/7/1981	16.27%	13.80%	2.47%
24	5/8/1981	13.00%	13.83%	-0.83%
25	5/8/1981	16.00%	13.83%	2.17%
26 27	5/12/1981 5/15/1981	13.50% 15.75%	13.95%	-0.45%
28	5/18/1981	14.88%	13.45% 13.39%	2.30% 1.49%
29	5/20/1981	16.00%	13.49%	2.51%
30	5/21/1981	14.00%	13.45%	0.55%
31	5/26/1981	14.90%	13.25%	1.65%
32	5/27/1981	15.00%	13.19%	1.81%
33	5/29/1981	15.50%	13.06%	2.44%
34	6/1/1981	16.50%	13.10%	3.40%
35	6/3/1981	14.67%	13.06%	1.61%
36	6/5/1981	13.00%	12.99%	0.01%
37 38	6/10/1981 6/17/1981	16.75% 14.40%	12.83% 12.86%	3.92%
39	6/18/1981	16.33%	12.06%	1.54% 3.39%
40	6/25/1981	14.75%	13.14%	1.61%
41	6/26/1981	16.00%	13.13%	2.87%
42	6/30/1981	15.25%	13.39%	1.86%
43	7/1/1981	15.50%	13.41%	2.09%
44	7/1/1981	17.50%	13.41%	4.09%
45	7/10/1981	16.00%	13.29%	2.71%
46	7/14/1981	16.90%	13.42%	3.48%
47 48	7/15/1981	16.00%	13.40%	2.60%
49	7/17/1981 7/20/1981	15.00% 15.00%	13.64% 13.86%	1.36% 1.14%
50	7/20/1981	14.00%	13.86%	0.14%
51	7/28/1981	13.48%	13.86%	-0.38%
52	7/31/1981	13.50%	14.12%	-0.62%
53	7/31/1981	15.00%	14.12%	0.88%
54	7/31/1981	16.00%	14.12%	1.88%
55	8/5/1981	15.71%	14.10%	1.61%
56	8/10/1981	14.50%	13.76%	0.74%
57	8/11/1981	15.00%	13.73%	1.27%
58	8/20/1981	13.50%	14.11%	-0.61%
59 60	8/20/1981	16.50% 15.00%	14.11%	2.39%
61	8/24/1981 8/28/1981	15.00% 15.00%	14.59% 14.64%	0.41%
62	9/3/1981	14.50%	14.83%	0.36% -0.33%
63	9/10/1981	14.50%	14.59%	-0.09%
64	9/11/1981	16.00%	14.50%	1.50%
65	9/16/1981	16.00%	14.34%	1.66%
66	9/17/1981	16.50%	14.24%	2.26%

1	Вог	nd Yield Plus	Risk Premiu	m
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	9/23/1981	15.85%	14.65%	1.20%
5	9/28/1981	15.50%	15.11%	0.39%
6	10/9/1981	15.75%	14.31%	1.44%
7	10/15/1981	16.25%	14.47%	1.78%
8 9	10/16/1981	15.50% 16.50%	14.54%	0.96%
10	10/16/1981 10/19/1981	14.25%	14.54% 14.59%	1.96% -0.34%
11	10/19/1981	15.25%	14.80%	0.45%
12	10/20/1981	17.00%	14.80%	2.20%
13	10/23/1981	16.00%	15.01%	0.99%
14	10/27/1981	10.00%	15.06%	-5.06%
15	10/29/1981	14.75%	14.51%	0.24%
16	10/29/1981	16.50%	14.51%	1.99%
17	11/3/1981	15.17%	14.19%	0.98%
18	11/5/1981	16.60%	13.96%	2.64%
19	11/6/1981	15.17%	13.71%	1.46%
20	11/24/1981	15.50%	12.93%	2.57%
21	11/25/1981	15.25%	12.80%	2.45%
22	11/25/1981	15.35%	12.80%	2.55%
23	11/25/1981	16.10%	12.80%	3.30%
24	11/25/1981	16.10%	12.80%	3.30%
25 26	12/1/1981	15.70% 16.00%	13.14%	2.56%
27	12/1/1981 12/1/1981	16.49%	13.14%	2.86% 3.35%
28	12/1/1981	16.49%	13.14% 13.14%	3.36%
29	12/4/1981	16.00%	13.08%	2.92%
30	12/11/1981	16.25%	13.45%	2.80%
31	12/14/1981	14.00%	13.32%	0.68%
32	12/15/1981	15.81%	13.31%	2.50%
33	12/15/1981	16.00%	13.31%	2.69%
34	12/16/1981	15.25%	13.40%	1.85%
35	12/17/1981	16.50%	13.39%	3.11%
36	12/18/1981	15.45%	13.43%	2.02%
37	12/30/1981	14.25%	13.76%	0.49%
38	12/30/1981	16.00%	13.76%	2.24%
39	12/30/1981	16.25%	13.76%	2.49%
40	12/31/1981	16.15%	13.90%	2.25%
41 42	1/4/1982	15.50%	13.90%	1.60%
43	1/11/1982 1/11/1982	14.50% 17.00%	14.35% 14.35%	0.15% 2.65%
44	1/13/1982	14.75%	14.35%	0.36%
45	1/14/1982	15.75%	14.36%	1.39%
46	1/15/1982	15.00%	14.34%	0.66%
47	1/15/1982	16.50%	14.34%	2.16%
48	1/22/1982	16.25%	14.22%	2.03%
49	1/27/1982	16.84%	14.08%	2.76%
50	1/28/1982	13.00%	13.95%	-0.95%
51	1/29/1982	15.50%	14.12%	1.38%
52	2/1/1982	15.85%	14.30%	1.55%
53	2/3/1982	16.44%	14.48%	1.96%
54	2/8/1982	15.50%	14.77%	0.73%
55	2/11/1982	16.00%	14.44%	1.56%
56 57	2/11/1982	16.20% 15.00%	14.44%	1.76%
58	2/17/1982 2/19/1982	15.00%	14.18% 13.84%	0.82% 1.33%
59	2/19/1982	15.17%	13.84%	1.52%
60	3/1/1982	15.25%	13.73%	1.52%
61	3/1/1982	16.00%	13.54%	2.46%
62	3/3/1982	15.00%	13.37%	1.63%
63	3/8/1982	17.10%	13.46%	3.64%
64	3/12/1982	16.25%	13.61%	2.64%
65	3/17/1982	17.30%	13.52%	3.78%
66	3/22/1982	15.10%	13.37%	1.73%

1	Boi	nd Yield Plus	Risk Premiu	m
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	3/27/1982	15.40%	13.72%	1.68%
5	3/30/1982	15.50%	13.75%	1.75%
6	3/31/1982	17.00%	13.64%	3.36%
7	4/1/1982	14.70%	13.61%	1.09%
8	4/1/1982	16.50%	13.61%	2.89%
9	4/2/1982	15.50%	13.67%	1.83%
10	4/5/1982	15.50%	13.73%	1.77%
11	4/8/1982	16.40%	13.39%	3.01%
12	4/13/1982	14.50% -	13.37%	1.13%
13	4/23/1982	15.75%	13.17%	2.58%
14 .	4/27/1982	15.00%	13.23%	1.77%
15	4/28/1982	15.75%	13.33%	2.42%
16	4/30/1982	14.70%	13.42%	1.28%
17	4/30/1982	15.50%	13.42%	2.08%
18		16.60%	13.41%	3.19%
19	5/4/1982	16.00%	13.36%	2.64%
20	5/14/1982	15.50%	13.23%	2.27%
21	5/18/1982	15.42%	13.28%	2.14%
22	5/19/1982	14.69%	13.24%	1.45%
23	5/20/1982	15.00%	13.17%	1.83%
24	5/20/1982	15.10%	13.17%	1.93%
25	5/20/1982	15.50%	13.17%	2.33%
26	5/20/1982	16.30%	13.17%	3.13%
27	5/21/1982	17.75%	13.18%	4.57%
28	5/27/1982	15.00%	13.38%	1.62%
29	5/28/1982	15.50%	13.53%	1.97%
30	5/28/1982	17.00%	13.53%	3.47%
31	6/1/1982	13.75%	13.63%	0.12%
32	6/1/1982	16.60%	13.63%	2.97%
33	6/9/1982	17.86%	13.72%	4.14%
34	6/14/1982	15.75%	13.88%	1.87%
35	6/15/1982	14.85%	13.89%	0.96%
36	6/18/1982	15.50%	14.17%	1.33%
37	6/21/1982	14.90%	14.18%	0.72%
38	6/23/1982	16.00%	14.23%	1.77%
39 40	6/23/1982	16.17%	14.23%	1.94%
41	6/24/1982	14.85% 14.70%	14.22%	0.63%
42	6/25/1982	16.00%	14.22%	0.48%
43	7/1/1982 7/2/1982		13.97%	2.03%
44		15.62%	14.02%	1.60%
45	7/2/1982	17.00%	14.02%	2.98%
46	7/13/1982	14.00% 16.80%	13.65%	0.35%
47	7/13/1982		13.65%	3.15%
48	7/14/1982	15.76% 16.02%	13.63%	2.13%
49	7/14/1982 7/19/1982	16.50%	13.63%	2.39%
50	7/19/1982	14.50%	13.29%	3.21%
51	7/22/1982	17.00%	13.23%	1.27%
52	7/27/1982	16.75%	13.23%	3.77%
53		16.75%	13.53% 13.47%	3.22%
54	7/29/1982 8/11/1982	17.50%		3.03% 4.29%
55	8/18/1982	17.07%	13.21%	
56		15.73%	12.45%	4.62%
57	8/20/1982 8/25/1982	16.00%	12.22% 12.26%	3.51% 3.74%
58	8/26/1982	15.50%	12.43%	3.74%
59	8/30/1982	15.00%		3.07%
60	9/3/1982	16.20%	12.52% 12.18%	2.48%
61	9/8/1982	15.00%	12.18%	4.02% 2.81%
62	9/15/1982	13.00%	12.19%	
63	9/15/1982	16.25%	12.22%	0.86% 4.03%
64	9/16/1982	16.23%	12.22%	
65	9/16/1982	15.25%	12.15%	3.85% 3.17%
66	9/17/1982	17.17%		
	314311902	17.17.70	11.82%	5.35%

1	Bor	nd Yield Plus	Risk Premiu	ım
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	9/24/1982	14.50%	11.85%	2.65%
5	9/27/1982	15.25%	11.79%	3.46%
6	10/1/1982	15.50%	11.74%	3.76%
7 8	10/15/1982	15.90%	10.97%	4.93%
9	10/22/1982 10/22/1982	15.75% 17.15%	11.14% 11.14%	4.61% 6.01%
10	10/22/1982	15.54%	10.93%	4.61%
11	11/1/1982	15.50%	10.78%	4.72%
12	11/3/1982	17.20%	10.70%	6.51%
13	11/4/1982	16.25%	10.63%	5.62%
14	11/5/1982	16.20%	10.60%	5.60%
15	11/9/1982	16.00%	10.41%	5.59%
16	11/23/1982	15.50%	10.49%	5.01%
17	11/23/1982	15.85%	10.49%	5.36%
18	11/30/1982	16.50%	10.70%	5.80%
19	12/1/1982	17.04%	10.66%	6.38%
20	12/6/1982	15.00%	10.43%	4.57%
21	12/6/1982	16.35%	10.43%	5.92%
22	12/10/1982	15.50%	10.60%	4.90%
23	12/13/1982	16.00%	10.53%	5.47%
24	12/14/1982	15.30%	10.52%	4.78%
25	12/14/1982	16.40%	10.52%	5.88%
26	12/20/1982	16.00%	10.65%	5.35%
27 28	12/21/1982	14.75%	10.54%	4.21%
29	12/21/1982 12/22/1982	15.85% 16.25%	10.54% 10.53%	5.31% 5.72%
30	12/22/1982	16.58%	10.53%	6.05%
31	12/22/1982	16.75%	10.53%	6.22%
32	12/29/1982	14.90%	10.48%	4.42%
33	12/29/1982	16.25%	10.48%	5.77%
34	12/30/1982	16.00%	10.45%	5.55%
35	12/30/1982	16.35%	10.45%	5.90%
36	12/30/1982	16.77%	10.45%	6.32%
37	1/5/1983	17.33%	10.49%	6.84%
38	1/11/1983	15.90%	10.47%	5.43%
39	1/12/1983	14.63%	10.46%	4.17%
40	1/12/1983	15.50%	10.46%	5.04%
41	1/20/1983	17.75%	10.72%	7.03%
42	1/21/1983	15.00%	10.83%	4.17%
43	1/24/1983	14.50%	10.85%	3.65%
44	1/24/1983	15.50%	10.85%	4.65%
45 46	1/25/1983 1/27/1983	15.85% 16.14%	10.87%	4.98%
47	2/1/1983	18.50%	10.88% 10.95%	5.26% 7.55%
48	2/4/1983	14.00%	11.11%	2.89%
49	2/10/1983	15.00%	10.95%	4.05%
50	2/21/1983	15.50%	10.71%	4.79%
51	2/22/1983	15.50%	10.63%	4.87%
52	2/23/1983	15.10%	10.62%	4.48%
53	2/23/1983	16.00%	10.62%	5.38%
54	3/2/1983	15.25%	10.46%	4.79%
55	3/9/1983	15.20%	10.66%	4.54%
56	3/15/1983	13.00%	10.65%	2.35%
57	3/18/1983	15.25%	10.71%	4.54%
58	3/23/1983	15.40%	10.63%	4.77%
59	3/24/1983	15.00%	10.66%	4.34%
60	3/29/1983	15.50%	10.66%	4.84%
61	3/30/1983	16.71%	10.67%	6.04%
62	3/31/1983	15.00%	10.68%	4.32%
63 64	4/4/1983	15.20% 15.50%	10.61% 10.52%	4.59%
65	4/8/1983 4/11/1983	15.50%	10.52% 10.46%	4.98% 4.35%
66	4/11/1983	14.51%	10.46%	4.35% 4.03%
55	COCINCIA	17.50 /0	10.77/0	7.00/0

1	Bond Yield Plus Risk Premium			
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	4/20/1983	16.00%	10.51%	5.49%
5	4/29/1983	16.00%	10.39%	5.61%
6	5/1/1983	14.50%	10.39%	4.11%
7	5/9/1983	15.50%	10.34%	5.16%
8	5/11/1983	16.46%	10.37%	6.09%
9	5/12/1983	14.14%	10.39%	3.75%
10	5/18/1983	15.00%	10.64%	4.36%
11	5/23/1983	14.90%	10.70%	4.20%
12	5/23/1983	15.50%	10.70%	4.80%
13	5/25/1983	15.50%	10.74%	4.76%
14	5/27/1983	15.00%	10.87%	4.13%
15 16	5/31/1983	14.00%	10.91%	3.09%
17	5/31/1983	15.50% 14.50%	10.91%	4.59%
18	6/2/1983 6/17/1983	15.03%	10.93% 10.80%	3.58% 4.23%
19	7/1/1983	14.80%	11.18%	4.23% 3.62%
20	7/1/1983	14.90%	11.18%	3.72%
21	7/8/1983	16.25%	11.28%	4.97%
22	7/13/1983	13.20%	11.38%	1.82%
23	7/19/1983	15.00%	11.29%	3.71%
24	7/19/1983	15.10%	11.29%	3.81%
25	7/25/1983	16.25%	11.46%	4.79%
26	7/28/1983	15.90%	11.75%	4.15%
27	8/3/1983	16.34%	11.85%	4.49%
28	8/3/1983	16.50%	11.85%	4.65%
29	8/19/1983	15.00%	11.57%	3.43%
30	8/22/1983	15.50%	11.53%	3.97%
31	8/22/1983	16.40%	11.53%	4.87%
32	8/31/1983	14.75%	11.94%	2.81%
33	9/7/1983	15.00%	11.70%	3.30%
34	9/14/1983	15.78%	11.73%	4.05%
35	9/16/1983	15.00%	11.67%	3.33%
36	9/19/1983	14.50%	11.58%	2.92%
37	9/20/1983	16.50%	11.58%	4.92%
38	9/28/1983	14.50%	11.45%	3.05%
39	9/29/1983	15.50%	11.42%	4.08%
40	9/30/1983	15.25%	11.42%	3.83%
41	9/30/1983	16.15%	11.42%	4.73%
42	10/4/1983	14.80%	11.37%	3.43%
43	10/7/1983	16.00%	11.49%	4.51%
44 45	10/13/1983	15.52% 15.50%	11.58%	3.94% 3.99%
46	10/17/1983	14.50%	11.51%	
47	10/18/1983 10/19/1983	16.25%	11.52% 11.49%	2.98% 4.76%
48	10/19/1983	16.50%	11.49%	5.01%
49	10/19/1983	15.00%	11.72%	3.28%
50	10/27/1983	15.20%	11.71%	3.49%
51	11/1/1983	16.00%	11.75%	4.25%
52	11/9/1983	14.90%	11.77%	3.13%
53	11/10/1983	14.35%	11.69%	2.66%
54	11/23/1983	16.00%	11.62%	4.38%
55	11/23/1983	16.15%	11.62%	4.53%
56	11/30/1983	15.00%	11.65%	3.35%
57	12/5/1983	15.25%	11.78%	3.47%
58	12/6/1983	15.07%	11.80%	3.27%
59	12/8/1983	15.90%	11.90%	4.00%
60	12/9/1983	14.75%	11.91%	2.84%
61	12/12/1983	14.50%	11.95%	2.55%
62	12/15/1983	15.56%	11.97%	3.59%
63	12/19/1983	14.80%	11.93%	2.87%
64	12/20/1983	14.69%	11.93%	2.76%
65	12/20/1983	16.00%	11.93%	4.07%
66	12/20/1983	16.25%	11.93%	4.32%

1	Bond Yield Plus Risk Premium			
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	12/22/1983	14.75%	11.84%	2.91%
5	12/22/1983	15.75%	11.84%	3.91%
6	1/3/1984	14.75%	11.87%	2.88%
7	1/10/1984	15.90%	11.79%	4.11%
8	1/12/1984	15.60%	11.72%	3.88%
9	1/18/1984	13.75%	11.66%	2.09%
10	1/19/1984	15.90%	11.66%	4.24%
11	1/30/1984	16.10%	11.73%	4.37%
12	1/31/1984	15.25%	11.73%	3.52%
13	2/1/1984	14.80%	11.70%	3.10%
14	2/6/1984	13.75%	11.77%	1.98%
15	2/6/1984	14.75%	11.77%	2.98%
16	2/9/1984	15.25%	11.88%	3.38%
17	2/15/1984	15.70%	11.93%	3.77%
18	2/20/1984	15.00%	12.01%	2.99%
19	2/20/1984	15.00%	12.01%	2.99%
20	2/22/1984	14.75%	12.10%	2.65%
21	2/28/1984	14.50%	12.18%	2.32%
22	3/2/1984	14.25%	12.12%	2.13%
23	3/20/1984	16.00%	12.54%	3.46%
24	3/23/1984	15.50%	12.48%	3.02%
25	3/26/1984	14.71%	12.47%	2.24%
26	4/2/1984	15.50%	12.59%	2.91%
27	4/6/1984	14.74%	12.50%	2.24%
28	4/11/1984	15.72%	12.43%	3.29%
29	4/17/1984	15.00%	12.66%	2.34%
30	4/18/1984	16.20%	12.75%	3.45%
31	4/25/1984	14.64%	12.71%	1.93%
32 33	4/30/1984	14.40%	12.86%	1.54%
34	5/16/1984	14.69%	13.53%	1.16%
35	5/16/1984 5/22/1984	15.00% 14.40%	13.53%	1.47%
36	5/29/1984	15.10%	13.54% 13.87%	0.86% 1.23%
37	6/13/1984	15.10%	13.87%	2.00%
38	6/15/1984	15.60%	13.13%	2.47%
39	6/22/1984	16.25%	13.51%	2.74%
40	6/29/1984	15.25%	13.63%	1.62%
41	7/2/1984	13.35%	13.54%	-0.19%
42	7/10/1984	16.00%	13.28%	2.72%
43	7/12/1984	16.50%	13.10%	3.40%
44	7/13/1984	16.25%	13.09%	3.16%
45	7/17/1984	14.14%	13.10%	1.04%
46	7/18/1984	15.30%	13.08%	2.22%
47	7/18/1984	15.50%	13.08%	2.42%
48	7/19/1984	14.30%	13.13%	1.17%
49	7/24/1984	16.79%	13.02%	3.77%
50	7/31/1984	16.00%	12.75%	3.25%
51	8/3/1984	14.25%	12.55%	1.70%
52	8/17/1984	14.30%	12.41%	1.89%
53	8/20/1984	15.00%	12.34%	2.66%
54	8/27/1984	16.30%	12.55%	3.75%
55	8/31/1984	15.55%	12.55%	3.00%
56	9/6/1984	16.00%	12.45%	3.55%
57	9/10/1984	14.75%	12.33%	2.43%
58	9/13/1984	15.00%	12.12%	2.88%
59	9/17/1984	17.38%	12.15%	5.23%
60	9/26/1984	14.50%	12.16%	2.34%
61	9/28/1984	15.00%	12.30%	2.71%
62	9/28/1984	16.25%	12.30%	3.96%
63	10/9/1984	14.75%	12.14%	2.61%
64	10/12/1984	15.60%	12.12%	3.48%
65	10/22/1984	15.00%	11.61%	3.39%
66	10/26/1984	16.40%	11.71%	4.69%

1	Bond Yield Plus Risk Premium			
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	10/31/1984	16.25%	11.51%	4.74%
5	11/7/1984	15.60%	11.70%	3.90%
6	11/9/1984	16.00%	11.68%	4.32%
7	11/14/1984	15.75%	11.75%	4.00%
8	11/20/1984	15.25%	11.48%	3.77%
9	11/20/1984	15.92%	11.48%	4.44%
10	11/23/1984	15.00%	11.31%	3.69%
11	11/28/1984	16.15%	11.43%	4.72%
12	12/3/1984	15.80%	11.51%	4.29%
13 14	12/4/1984	16.50%	11.52%	4.98%
15	12/18/1984 12/19/1984	16.40% 14.75%	11.37% 11.37%	5.03% 3.38%
16	12/19/1984	15.00%	11.37%	3.63%
17	12/20/1984	16.00%	11.36%	4.64%
18	12/28/1984	16.00%	11.50%	4.50%
19	1/3/1985	14.75%	11.61%	3.14%
20	1/10/1985	15.75%	11.58%	4.17%
21	1/11/1985	16.30%	11.63%	4.67%
22	1/23/1985	15.80%	11.23%	4.57%
23	1/24/1985	15.82%	11.16%	4.66%
24	1/25/1985	16.75%	11.17%	5.58%
25	1/30/1985	14.90%	11.16%	3.74%
26	1/31/1985	14.75%	11.26%	3.49%
27	2/8/1985	14.47%	11.29%	3.18%
28	3/1/1985	13.84%	11.84%	2.00%
29	3/8/1985	16.85%	11.71%	5.14%
30	3/14/1985	15.50%	11.90%	3.60%
31	3/15/1985	15.62%	11.90%	3.72%
32	3/29/1985	15.62%	11.64%	3.98%
33	4/3/1985	14.60%	11.67%	2.93%
34	4/9/1985	15.50%	11.56%	3.94%
35	4/16/1985	15.70% 14.00%	11.30%	4.40%
36 37	4/22/1985 4/26/1985	15.50%	11.26% 11.46%	2.74% 4.04%
38	4/20/1985	15.00%	11.46%	4.04% 3.51%
39	5/2/1985	14.68%	11.32%	3.36%
40	5/8/1985	15.62%	11.35%	4.27%
41	5/10/1985	16.50%	11.18%	5.32%
42	5/29/1985	14.61%	10.69%	3.93%
43	5/31/1985	16.00%	10.47%	5.53%
44	6/14/1985	15.50%	10.30%	5.20%
45	7/9/1985	15.00%	10.31%	4.69%
46	7/16/1985	14.50%	10.32%	4.18%
47	7/26/1985	14.50%	10.75%	3.75%
48	8/2/1985	14.80%	10.75%	4.06%
49	8/7/1985	15.00%	10.68%	4.32%
50	8/28/1985	14.25%	10.36%	3.89%
51	8/28/1985	15.50%	10.36%	5.14%
52	8/29/1985	14.50%	10.41%	4.09%
53	9/9/1985	14.60%	10.70%	3.90%
54 55	9/9/1985	14.90%	10.70%	4.20%
56	9/17/1985 9/23/1985	14.90% 15.00%	10.64% 10.60%	4.26% 4.40%
57	9/27/1985	15.50%	10.55%	4.40%
58	9/27/1985	15.80%	10.55%	5.25%
59	10/2/1985	14.00%	10.55%	3.43%
60	10/2/1985	14.75%	10.57%	4.18%
61	10/3/1985	15.25%	10.60%	4.65%
62	10/24/1985	15.40%	10.42%	4.98%
63	10/24/1985	15.82%	10.42%	5.40%
64	10/24/1985	15.85%	10.42%	5.43%
65	10/28/1985	16.00%	10.42%	5.58%
66	10/29/1985	16.65%	10.30%	6.36%

1	Bond Yield Plus Risk Premium			
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	10/31/1985	15.06%	10.24%	4.82%
5 6	11/4/1985	14.50%	10.18%	4.32%
7	11/7/1985 11/8/1985	15.50% 14.30%	10.15% 10.08%	5.35% 4.22%
8	12/12/1985	14.75%	9.53%	4.22% 5.22%
9	12/18/1985	15.00%	9.39%	5.61%
10	12/20/1985	14.50%	9.33%	5.17%
11	12/20/1985	14.50%	9.33%	5.17%
12	12/20/1985	15.00%	9.33%	5.67%
13	1/24/1986	15.40%	9.39%	6.02%
14	1/31/1986	15.00%	9.28%	5.72%
15	2/5/1986	15.00%	9.27%	5.73%
16	2/5/1986	15.75%	9.27%	6.48%
17 18	2/10/1986	13.30% 12.50%	9.18%	4.12%
19	2/11/1986 2/14/1986	14.40%	9.14% 8.92%	3.36% 5.48%
20	2/14/1986	16.00%	8.90%	7.10%
21	2/24/1986	14.50%	8.62%	5.88%
22	2/26/1986	14.00%	8.38%	5.62%
23	3/5/1986	14.90%	8.22%	6.68%
24	3/11/1986	14.50%	7.92%	6.58%
25	3/12/1986	13.50%	7.93%	5.57%
26	3/27/1986	14.10%	7.52%	6.58%
27	3/31/1986	13.50%	7.45%	6.05%
28	4/1/1986	14.00%	7.42%	6.58%
29	4/2/1986	15.50%	7.43%	8.07%
30 31	4/4/1986	15.00% 13.40%	7.56%	7.44%
32	4/14/1986 4/23/1986	15.40%	7.30% 7.53%	6.10% 7.47%
33	5/16/1986	14.50%	7.66%	6.84%
34	5/16/1986	14.50%	7.66%	6.84%
35	5/29/1986	13.90%	7.72%	6.18%
36	5/30/1986	15.10%	7.83%	7.27%
37	6/2/1986	12.81%	7.86%	4.95%
38	6/11/1986	14.00%	7.68%	6.32%
39	6/24/1986	16.63%	7.35%	9.28%
40	6/26/1986	12.00%	7.31%	4.69%
41	6/26/1986	14.75%	7.31%	7.44%
42 43	6/30/1986	13.00%	7.21%	5.79%
44	7/10/1986 7/11/1986	14.34% 12.75%	7.15%	7.19%
45	7/11/1986	12.70%	7.16% 7.13%	5.59% 5.48%
46	7/17/1986	12.40%	7.18%	5.22%
47	7/25/1986	14.25%	7.49%	6.76%
48	8/6/1986	13.50%	7.55%	5.95%
49	8/14/1986	13.50%	7.28%	6.22%
50	9/16/1986	12.75%	7.65%	5.10%
51	9/19/1986	13.25%	7.80%	5.45%
52	10/1/1986	14.00%	7.61%	6.39%
53	10/3/1986	13.40%	7.53%	5.88%
54	10/31/1986	13.50%	7.59%	5.91%
55	11/5/1986	13.00%	7.57%	5.43%
56 57	12/3/1986 12/4/1986	12.90% 14.44%	7.29% 7.31%	5.61% 7.13%
58	12/16/1986	13.60%	7.31% 7.38%	6.22%
59	12/10/1986	13.80%	7.35%	6.45%
60	12/30/1986	13.00%	7.46%	5.54%
61	1/2/1987	13.00%	7.37%	5.63%
62	1/12/1987	12.40%	7.35%	5.05%
63	1/27/1987	12.71%	7.47%	5.24%
64	3/2/1987	12.47%	7.47%	5.00%
65	3/3/1987	13.60%	7.45%	6.15%
66	3/4/1987	12.38%	7.43%	4.95%

1	Bond Yield Plus Risk Premium			
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	3/10/1987	13.50%	7.52%	5.98%
5	3/13/1987	13.00%	7.50%	5.50%
6	3/31/1987	13.00%	7.89%	5.11%
7	4/6/1987	13.00%	7.89%	5.12%
8	4/14/1987	12.50%	8.33%	4.17%
9	4/16/1987	14.50%	8.29%	6.21%
10	4/27/1987	12.00%	8.54%	3.46%
11	5/5/1987	12.85%	8.69%	4.16%
12	5/12/1987	12.65%	8.70%	3.95%
13	5/28/1987	13.50%	8.67%	4.83%
14	6/15/1987	13.20%	8.44%	4.76%
15	6/29/1987	15.00%	8.48%	6.52%
16	6/30/1987	12.50%	8.49%	4.02%
17	7/8/1987	12.00%	8.48%	3.52%
18	7/10/1987	12.90%	8.50%	4.40%
19	7/15/1987	13.50%	8.59%	4.91%
20	7/16/1987	13.50%	8.57%	4.93%
21	7/16/1987	15.00%	8.57%	6.43%
22	7/27/1987	13.00%	8.84%	4.16%
23	7/27/1987	13.40%	8.84%	4.56%
24	7/27/1987	13.50%	8.84%	4.66%
25	7/31/1987	12.98%	8.95%	4.03%
26	8/26/1987	12.63%	9.05%	3.58%
27	8/26/1987	12.75%	9.05%	3.70%
28	8/27/1987	13.25%	9.15%	4.10%
29	9/9/1987	13.00%	9.59%	3.41%
30	9/30/1987	12.75%	9.76%	2.99%
31	9/30/1987	13.00%	9.76%	3.24%
32	10/2/1987	11.50%	9.74%	1.76%
33	10/15/1987	13.00%	10.20%	2.80%
34	11/2/1987	13.00%	9.07%	3.93%
35	11/19/1987	13.00%	8.88%	4.12%
36	11/30/1987	12.00%	9.12%	2.88%
37	12/3/1987	14.20%	9.08%	5.12%
38	12/15/1987	13.25%	9.17%	4.08%
39	12/16/1987	13.50%	9.14%	4.36%
40	12/16/1987	13.72%	9.14%	4.58%
41	12/17/1987	11.75%	9.03%	2.72%
42	12/18/1987	13.50%	8.96%	4.54%
43	12/21/1987	12.01%	9.03%	2.98%
44	12/22/1987	12.00%	8.98%	3.03%
45	12/22/1987	12.00%	8.98%	3.03%
46	12/22/1987	12.75%	8.98%	3.78%
47	12/22/1987	13.00%	8.98%	4.03%
48	1/20/1988	13.80%	8.74%	5.06%
49	1/26/1988	13.90%	8.62%	5.28%
50	1/29/1988	13.20%	8.42%	4.78%
51	2/4/1988	12.60%	8.36%	4.24%
52	3/1/1988	11.56%	8.33%	3.23%
53	3/23/1988	12.87%	8.73%	4.14%
54	3/24/1988	11.24%	8.70%	2.54%
55	3/30/1988	12.72%	8.76%	3.96%
56	4/1/1988	12.50%	8.81%	3.69%
57 58	4/7/1988	13.25%	8.73%	4.52%
58	4/25/1988	10.96%	9.00%	1.96%
59	5/3/1988	12.91%	9.10%	3.81%
60	5/11/1988	13.50%	9.21%	4.29%
61	5/16/1988	13.00%	9.17%	3.83%
62	6/30/1988	12.75%	8.87%	3.88%
63	7/1/1988	12.75%	8.85%	3.90%
64	7/20/1988	13.40%	9.24%	4.16%
65 66	8/5/1988	12.75% 11.70%	9.11%	3.64%
00	8/23/1988	11.70%	9.39%	2.31%

1	Bond Yield Plus Risk Premium			
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	8/29/1988	12.75%	9.33%	3.42%
5	8/30/1988	13.50%	9.31%	4.19%
6	9/8/1988	12.60%	9.00%	3.60%
7	10/13/1988	13.10%	8.91%	4.19%
8	12/19/1988	13.00%	8.99%	4.01%
9 10	12/20/1988	12.25%	8.94%	3.31%
11	12/20/1988 12/21/1988	13.00% 12.90%	8.94% 8.94%	4.06%
12	12/27/1988	13.00%	8.98%	3.96% 4.02%
13	12/28/1988	13.10%	9.00%	4.10%
14	12/30/1988	13.40%	9.04%	4.37%
15	1/27/1989	13.00%	8.79%	4.21%
16	1/31/1989	13.00%	8.81%	4.19%
17	2/17/1989	13.00%	9.05%	3.95%
18	2/20/1989	12.40%	9.05%	3.35%
19	3/1/1989	12.76%	9.15%	3.61%
20	3/8/1989	13.00%	9.05%	3.95%
21 :	3/30/1989	14.00%	9.12%	4.88%
22	4/5/1989	14.20%	9.03%	5.17%
23	4/18/1989	13.00%	8.94%	4.06%
24	5/5/1989	12.40%	8.97%	3.43%
25	6/2/1989	13.20%	8.44%	4.76%
26	6/8/1989	13.50%	8.22%	5.28%
27	6/27/1989	13.25%	8.11%	5.14%
28 29	6/30/1989	13.00%	8.05%	4.95%
30	8/14/1989 9/28/1989	12.50% 12.25%	8.20% 8.24%	4.30% 4.01%
31	10/24/1989	12.50%	7.89%	4.61%
32	11/9/1989	13.00%	7.90%	5.11%
33	12/15/1989	13.00%	7.85%	5.16%
34	12/20/1989	12.90%	7.85%	5.05%
35	12/21/1989	12.90%	7.86%	5.04%
36	12/27/1989	12.50%	7.97%	4.53%
37	12/27/1989	13.00%	7.97%	5.03%
38	1/10/1990	12.80%	8.10%	4.70%
39	1/11/1990	12.90%	8.14%	4.76%
40	1/17/1990	12.80%	8.29%	4.51%
41	1/26/1990	12.00%	8.55%	3.45%
42	2/9/1990	12.10%	8.38%	3.72%
43	2/24/1990	12.86%	8.52%	4.34%
44 45	3/30/1990 4/4/1990	12.90%	8.63%	4.27%
46	4/12/1990	15.76% 12.52%	8.51% 8.59%	7.25% 3.94%
47	4/12/1990	12.75%	8.90%	3.86%
48	5/21/1990	12.10%	8.65%	3.45%
49	5/29/1990	12.40%	8.61%	3.79%
50	5/31/1990	12.00%	8.50%	3.50%
51	6/4/1990	12.90%	8.44%	4.46%
52	6/6/1990	12.25%	8.43%	3.82%
53	6/15/1990	13.20%	8.44%	4.76%
54	6/20/1990	12.92%	8.50%	4.42%
55	6/27/1990	12.90%	8.46%	4.44%
56	6/29/1990	12.50%	8.40%	4.10%
57	7/6/1990	12.10%	8.53%	3.58%
58	7/6/1990	12.35%	8.53%	3.83%
59	8/10/1990	12.55%	8.79%	3.76%
60	8/16/1990	13.21%	8.93%	4.28%
61 62	8/22/1990 8/24/1990	13.10% 13.00%	9.09%	4.01%
63	9/26/1990	13.00%	9.08% 9.07%	3.92% 2.38%
64	10/2/1990	13.00%	9.07% 8.85%	2.36% 4.16%
65	10/5/1990	12.84%	8.80%	4.04%
66	10/19/1990	13.00%	8.75%	4.25%
	,		0 /0	

1	Bond Yield Plus Risk Premium			
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4 5	10/25/1990 11/21/1990	12.30%	8.76%	3.54%
6	12/13/1990	12.70% 12.30%	8.42% 8.16%	4.28% 4.14%
7	12/13/1990	12.87%	8.14%	4.74%
8	12/18/1990	13.10%	8.13%	4.97%
9	12/19/1990	12.00%	8.21%	3.79%
10	12/20/1990	12.75%	8.26%	4.49%
11	12/21/1990	12.50%	8.32%	4.18%
12	12/27/1990	12.79%	8.27%	4.52%
13	1/2/1991	13.10%	8.18%	4.92%
14	1/4/1991	12.50%	8.26%	4.24%
15	1/15/1991	12.75%	8.40%	4.35%
16	1/25/1991	11.70%	8.22%	3.48%
17	2/4/1991	12.50%	8.04%	4.46%
18 19	2/7/1991	12.50% 13.00%	8.01%	4.49%
20	2/12/1991 2/14/1991	12.72%	7.96% 7.98%	5.04% 4.74%
21	2/22/1991	12.72%	8.06%	4.74%
22	3/6/1991	13.10%	8.25%	4.85%
23	3/8/1991	12.30%	8.27%	4.03%
24	3/8/1991	13.00%	8.27%	4.73%
25	4/22/1991	13.00%	8.28%	4.72%
26	5/7/1991	13.50%	8.24%	5.26%
27	5/13/1991	13.25%	8.30%	4.95%
28	5/30/1991	12.75%	8.24%	4.51%
29	6/12/1991	12.00%	8.53%	3.47%
30	6/25/1991	11.70%	8.51%	3.19%
31	6/28/1991	12.50%	8.42%	4.08%
32	7/1/1991	12.00%	8.44%	3.56%
33 34	7/3/1991 7/19/1991	12.50% 12.10%	8.42% 8.47%	4.08%
35	8/1/1991	12.10%	8.30%	3.63% 4.60%
36	8/16/1991	13.20%	8.10%	5.10%
37	9/27/1991	12.50%	7.82%	4.69%
38	9/30/1991	12.25%	7.80%	4.45%
39	10/17/1991	13.00%	7.99%	5.01%
40	10/23/1991	12.50%	8.05%	4.45%
41	10/23/1991	12.55%	8.05%	4.50%
42	10/31/1991	11.80%	7.92%	3.88%
43	11/1/1991	12.00%	7.94%	4.06%
44	11/5/1991	12.25%	8.01%	4.24%
45	11/12/1991	12.50%	7.83%	4.68%
46 47	11/12/1991 11/25/1991	13.25% 12.40%	7.83%	5.43%
48	11/25/1991	11.60%	7.97% 7.96%	4.43% 3.64%
49	11/26/1991	12.50%	7.96%	4.54%
50	11/27/1991	12.10%	7.97%	4.13%
51	12/18/1991	12.25%	7.71%	4.54%
52	12/19/1991	12.60%	7.62%	4.98%
53	12/19/1991	12.80%	7.62%	5.18%
54	12/20/1991	12.65%	7.56%	5.09%
55	1/9/1992	12.80%	7.44%	5.36%
56	1/16/1992	12.75%	7.64%	5.11%
57	1/21/1992	12.00%	7.60%	4.40%
58	1/22/1992	13.00%	7.68%	5.32%
59	1/27/1992	12.65%	7.69%	4.96%
60	1/31/1992	12.00%	7.79%	4.21%
61 62	2/11/1992	12.40% 12.50%	7.80%	4.60%
63	2/25/1992 3/16/1992	12.50%	7.90% 8.04%	4.60% 3.39%
64	3/18/1992	12.28%	7.99%	3.39% 4.29%
65	4/2/1992	12.20%	7.89%	4.21%
66	4/9/1992	11.45%	7.88%	3.58%
				2.2070

1	Bond Yield Plus Risk Premium			m
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	4/10/1992	11.50%	7.87%	3.63%
5	4/14/1992	11.50%	7.87%	3.63%
6	5/5/1992	11.50%	7.98%	3.52%
7	5/12/1992	11.87%	7.87%	4.01%
8	5/12/1992	12.46%	7.87%	4.60%
9	6/1/1992	12.30%	7.87%	4.43%
10	6/12/1992	10.90%	7.85%	3.05%
11	6/26/1992	12.35%	7.77%	4.58%
12	6/29/1992	11.00%	7.77%	3.23%
13	6/30/1992	13.00%	7.76%	5.24%
14	7/13/1992	11.90%	7.68%	4.22%
15	7/13/1992	13.50%	7.68%	5.82%
16	7/22/1992	11.20%	7.58%	3.62%
17	8/3/1992	12.00%	7.44%	4.56%
18	8/6/1992	12.50%	7.43%	5.07%
19	9/22/1992	12.00%	7.48%	4.52%
20	9/28/1992	11.40%	7.35%	4.05%
21	9/30/1992	11.75%	7.35%	4.40%
22	10/2/1992	13.00%	7.34%	5.66%
23	10/12/1992	12.20%	7.52%	4.68%
24	10/16/1992	13.16%	7.55%	5.61%
25	10/30/1992	11.75%	7.64%	4.11%
26	11/3/1992	12.00%	7.67%	4.33%
27	12/3/1992	11.85%	7.52%	4.33%
28	12/15/1992	11.00%	7.44%	3.56%
29	12/16/1992	11.90%	7.43%	4.47%
30	12/16/1992	12.40%	7.43%	4.97%
31	12/17/1992	12.00%	7.42%	4.58%
32	12/22/1992	12.30%	7.35%	4.95%
33	12/22/1992	12.40%	7.35%	5.05%
34	12/29/1992	12.25%	7.37%	4.88%
35	12/30/1992	12.00%	7.39%	4.61%
36	12/31/1992	11.90%	7.36%	4.54%
37	1/12/1993	12.00%	7.45%	4.55%
38	1/21/1993	11.25%	7.30%	3.95%
39	2/2/1993	11.40%	7.23%	4.17%
40	2/15/1993	12.30%	7.13%	5.17%
41	2/24/1993	11.90%	6.89%	5.01%
42	2/26/1993	11.80%	6.87%	4.93%
43	2/26/1993	12.20%	6.87%	5.33%
44	4/23/1993	11.75%	6.81%	4.94%
45	5/11/1993	11.75%	6.83%	4.92%
46	5/14/1993	11.50%	6.95%	4.55%
47 48	5/25/1993	11.50% 11.00%	6.96%	4.54%
	5/28/1993		6.98%	4.02%
49 50	6/3/1993	12.00% 11.50%	6.88%	5.12%
	6/16/1993		6.81%	4.69%
51 52	6/18/1993	12.10% 11.67%	6.79%	5.31%
53	6/25/1993	11.38%	6.68%	4.99%
54	7/21/1993 7/23/1993		6.64%	4.74%
55	8/24/1993	10.46% 11.50%	6.69% 6.18%	3.77%
56	-			5.32%
57	9/21/1993 9/29/1993	10.50% 11.47%	6.11% 6.01%	4.39% 5.46%
58	9/29/1993	11.47%		5.46% 5.50%
59			6.01%	5.59% 4.71%
60	11/2/1993 11/12/1993	10.80% 12.00%	6.09% 6.15%	4.71% 5.85%
61	11/12/1993	11.00%	6.15% 6.24%	5.85% 4.76%
62	12/14/1993	10.55%	6.24% 6.30%	4.76% 4.25%
63	12/14/1993	10.55%		
64	12/16/1993	11.30%	6.29% 6.27%	4.31% 5.03%
65	1/4/1994	10.07%	6.38%	5.03% 3.69%
66	1/13/1994	11.00%	6.28%	3.69% 4.72%
	11 101 1004	11.00/0	0.2070	7.12/0

1	Bond Yield Plus Risk Premium			
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	1/21/1994	11.00%	6.29%	4.71%
5	1/28/1994	11.35%	6.23%	5.12%
6	2/3/1994	11.40%	6.33%	5.07%
7	2/17/1994	10.60%	6.58%	4.02%
8	2/25/1994	11.25%	6.69%	4.56%
9	2/25/1994	12.00%	6.69%	5.31%
10	3/1/1994	11.00%	6.78%	4.22%
11	3/4/1994	11.00%	6.82%	4.18%
12	4/25/1994	11.00%	7.12%	3.88%
13	5/10/1994	11.75%	7.55%	4.20%
14	5/13/1994	10.50%	7.47%	3.03%
15	6/3/1994	11.00%	7.25%	3.76%
16	6/27/1994	11.40%	7.49%	3.91%
17	8/5/1994	12.75%	7.54%	5.21%
18	10/31/1994	10.00%	8.02%	1.98%
19	11/9/1994	10.85%	8.13%	2.72%
20	11/9/1994	10.85%	8.13%	2.72%
21	11/18/1994	11.20%	8.13%	3.07%
22	11/22/1994	11.60%	8.00%	3.60%
23	11/28/1994	11.06%	8.01%	3.05%
24	12/8/1994	11.50%	7.86%	3.64%
25	12/8/1994	11.70%	7.86%	3.84%
26	12/14/1994	10.95%	7.87%	3.08%
27	12/15/1994	11.50%	7.86%	3.64%
28	12/19/1994	11.50%	7.84%	3.66%
29	12/28/1994	12.15%	7.83%	4.32%
30	1/9/1995	12.28%	7.88%	4.40%
31	1/31/1995	11.00%	7.72%	3.28%
32 33	2/10/1995	12.60%	7.67%	4.93%
34	2/17/1995	11.90% 11.50%	7.59%	4.31%
35	3/9/1995 3/20/1995	12.00%	7.49% 7.42%	4.01%
36	3/23/1995	12.81%	7.42% 7.40%	4.58% 5.41%
37	3/29/1995	11.60%	7.40%	4.21%
38	4/6/1995	11.10%	7.39 % 7.37%	3.73%
39	4/7/1995	11.00%	7.39%	3.61%
40	4/19/1995	11.00%	7.35%	3.65%
41	5/12/1995	11.63%	6.97%	4.66%
42	5/25/1995	11.20%	6.73%	4.47%
43	6/9/1995	11.25%	6.71%	4.54%
44	6/21/1995	12.25%	6.51%	5.74%
45	6/30/1995	11.10%	6.62%	4.48%
46	9/11/1995	11.30%	6.54%	4.76%
47	9/27/1995	11.30%	6.58%	4.72%
48	9/27/1995	11.50%	6.58%	4.92%
49	9/27/1995	11.75%	6.58%	5.17%
50	9/29/1995	11.00%	6.49%	4.51%
51	11/9/1995	11.38%	6.31%	5.07%
52	11/9/1995	12.36%	6.31%	6.05%
53	11/17/1995	11.00%	6.24%	4.76%
54	12/4/1995	11.35%	6.04%	5.31%
55	12/11/1995	11.40%	6.05%	5.35%
56	12/20/1995	11.60%	6.11%	5.49%
57	12/27/1995	12.00%	6.00%	6.00%
58	2/5/1996	12.25%	6.14%	6.11%
59	3/29/1996	10.67%	6.65%	4.02%
60	4/8/1996	11.00%	6.85%	4.15%
61	4/11/1996	12.59%	6.87%	5.72%
62	4/11/1996	12.59%	6.87%	5.72%
63	4/24/1996	11.25%	6.81%	4.44%
64	4/30/1996	11.00%	6.91%	4.09%
65	5/13/1996	11.00%	6.87%	4.13%
66	5/23/1996	11.25%	6.85%	4.40%

1	Bond Yield Plus Risk Premium			
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	6/25/1996	11.25%	7.04%	4.21%
5	6/27/1996	11.20%	6.93%	4.27%
6	8/12/1996	10.40%	6.74%	3.66%
7	9/27/1996	11.00%	6.92%	4.08%
8	10/16/1996	12.25%	6.83%	5.43%
9	11/5/1996	11.00%	6.60%	4.40%
10 11	11/26/1996 12/18/1996	11.30% 11.75%	6.44%	4.86%
12	12/16/1996	11.75%	6.64% 6.64%	5.11% 4.86%
13	1/3/1997	10.70%	6.75%	3.95%
14	2/13/1997	11.80%	6.58%	5.23%
15	2/20/1997	11.80%	6.65%	5.15%
16	3/31/1997	10.02%	7.09%	2.93%
17	4/2/1997	11.65%	7.07%	4.58%
18	4/28/1997	11.50%	7.05%	4.45%
19	4/29/1997	11.70%	6.97%	4.73%
20	7/17/1997	12.00%	6.51%	5.49%
21	12/12/1997	11.00%	5.95%	5.05%
22	12/23/1997	11.12%	5.89%	5.23%
23	2/2/1998	12.75%	5.87%	6.88%
24	3/2/1998	11.25%	6.04%	5.21%
25	3/6/1998	10.75%	5.99%	4.76%
26	3/20/1998	10.50%	5.88%	4.62%
27	4/30/1998	12.20%	5.94%	6.26%
28	7/10/1998	11.40%	5.66%	5.74%
29	9/15/1998	11.90%	5.24%	6.66%
30 31	11/30/1998	12.60%	5.05%	7.55%
32	12/10/1998	12.20% 12.10%	4.99%	7.21%
33	12/17/1998 2/5/1999	10.30%	5.01% 5.35%	7.10% 4.96%
34	3/4/1999	10.50%	5.65%	4.85%
35	4/6/1999	10.94%	5.51%	5.43%
36	7/29/1999	10.75%	6.09%	4.66%
37	9/23/1999	10.75%	5.98%	4.77%
38	11/17/1999	11.10%	6.15%	4.95%
39	1/7/2000	11.50%	6.57%	4.94%
40	1/7/2000	11.50%	6.57%	4.94%
41	2/17/2000	10.60%	6.19%	4.41%
.42	3/28/2000	11.25%	5.98%	5.27%
43	5/24/2000	11.00%	6.15%	4.85%
44	7/18/2000	12.20%	5.91%	6.29%
45	9/29/2000	11.16%	5.90%	5.26%
46	11/28/2000	12.90%	5.66%	7.24%
47	11/30/2000	12.10%	5.62%	6.48%
48 49	1/23/2001	11.25%	5.66%	5.59%
50	2/8/2001 5/8/2001	11.50% 10.75%	5.46% 5.70%	6.04%
51	6/26/2001	11.00%	5.70% 5.64%	5.05% 5.37%
52	7/25/2001	11.02%	5.58%	5.44%
53	7/25/2001	11.02%	5.58%	5.44%
54	7/31/2001	11.00%	5.52%	5.48%
55	8/31/2001	10.50%	5.37%	5.13%
56	9/7/2001	10.75%	5.40%	5.35%
57	9/10/2001	11.00%	5.43%	5.57%
58	9/20/2001	10.00%	5.60%	4.40%
59	10/24/2001	10.30%	5.32%	4.98%
60	11/28/2001	10.60%	5.29%	5.31%
61	12/3/2001	12.88%	5.22%	7.66%
62	12/20/2001	12.50%	5.43%	7.07%
63	1/22/2002	10.00%	5.43%	4.57%
64	3/27/2002	10.10%	5.78%	4.32%
65 .	4/22/2002	11.80%	5.67%	6.13%
66	5/28/2002	10.17%	5.64%	4.53%

1	Bond Yield Plus Risk Premium			
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
_	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4 5	6/10/2002	12.00% 11.16%	5.58%	6.42%
6	6/18/2002 6/20/2002	11.00%	5.42% 5.41%	5.74% 5.59%
7	6/20/2002	12.30%	5.41%	6.89%
8	7/15/2002	11.00%	5.41%	5.59%
9	9/12/2002	12.30%	4.79%	7.51%
10	9/26/2002	10.45%	4.70%	5.75%
11	12/4/2002	11.55%	4.99%	6.56%
12	12/13/2002	11.75%	4.98%	6.77%
13	12/20/2002	11.40%	4.89%	6.51%
14	1/8/2003	11.10%	5.01%	6.09%
15	1/31/2003	12.45%	4.84%	7.61%
16 17	2/28/2003 3/6/2003	12.30% 10.75%	4.67% 4.69%	7.63%
18	3/7/2003	9.96%	4.66%	6.06% 5.30%
19	3/20/2003	12.00%	4.98%	7.02%
20	4/3/2003	12.00%	4.95%	7.05%
21	4/15/2003	11.15%	4.93%	6.22%
22	6/25/2003	10.75%	4.51%	6.24%
23	6/26/2003	10.75%	4.57%	6.18%
24	7/9/2003	9.75%	4.70%	5.05%
25	7/16/2003	9.75%	4.89%	4.86%
26	7/25/2003	9.50%	5.16%	4.34%
27	8/26/2003	10.50%	5.29%	5.21%
28 29	12/17/2003	9.85%	4.98%	4.87%
30	12/17/2003 12/18/2003	10.70% 11.50%	4.98% 4.95%	5.72% 6.55%
31	12/19/2003	12.00%	4.97%	7.03%
32	12/19/2003	12.00%	4.97%	7.03%
33	12/23/2003	10.50%	5.02%	5.48%
34	1/13/2004	12.00%	4.91%	7.09%
35	3/2/2004	10.75%	4.90%	5.85%
36	3/26/2004	10.25%	4.79%	5.46%
37	4/5/2004	11.25%	5.02%	6.23%
38	5/18/2004	10.50%	5.46%	5.04%
39	5/25/2004	10.25%	5.39%	4.86%
40 41	5/27/2004 6/2/2004	10.25% 11.22%	5.33% 5.42%	4.92% 5.80%
42 .	6/30/2004	10.50%	5.42 % 5.29%	5.21%
43	6/30/2004	10.50%	5.29%	5.21%
44	7/16/2004	11.60%	5.11%	6.49%
45	8/25/2004	10.25%	5.03%	5.22%
46	9/9/2004	10.40%	4.99%	5.41%
47	11/9/2004	10.50%	4.95%	5.55%
48	11/23/2004	11.00%	4.84%	6.16%
49	12/14/2004	10.97%	4.74%	6.23%
50	12/21/2004	11.25%	4.81%	6.44%
51 52	12/21/2004	11.50% 10.70%	4.81%	6.69%
53	12/22/2004 12/22/2004	10.70%	4.83% 4.83%	5.87% 6.67%
54	12/22/2004	9.85%	4.91%	4.94%
55	1/6/2005	10.70%	4.84%	5.86%
56	2/18/2005	10.30%	4.65%	5.65%
57	2/25/2005	10.50%	4.68%	5.82%
58	3/10/2005	11.00%	4.79%	6.21%
59	3/24/2005	10.30%	4.84%	5.46%
60	4/4/2005	10.00%	4.74%	5.26%
61	4/7/2005	10.25%	4.78%	5.47%
62	5/18/2005	10.25%	4.44%	5.81%
63	5/25/2005	10.75%	4.43%	6.32%
64	5/26/2005	9.75%	4.43%	5.32%
65 66	6/1/2005 7/19/2005	9.75% 11.50%	4.24%	5.51%
00	111912000	11.50%	4.41%	7.09%

1	Bond Yield Plus Risk Premium			
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	8/5/2005	11.75%	4.59%	7.16%
5	8/15/2005	10.13%	4.45%	5.68%
6	9/28/2005	10.00%	4.52%	5.48%
7	10/4/2005	10.75%	4.58%	6.17%
8	12/12/2005	11.00%	4.73%	6.27%
9	12/13/2005	10.75%	4.69%	6.06%
10	12/21/2005	10.29%	4.64%	5.65%
11 12	12/21/2005 12/22/2005	10.40% 11.00%	4.64% 4.58%	5.76%
13	12/22/2005	11.15%	4.58%	6.42% 6.57%
14	12/28/2005	10.00%	4.52%	5.48%
15	12/28/2005	10.00%	4.52%	5.48%
16	1/5/2006	11.00%	4.55%	6.45%
17	1/27/2006	9.75%	4.70%	5.05%
18	3/3/2006	10.39%	4.70%	5.69%
19	4/17/2006	10.20%	5.08%	5.12%
20	4/26/2006	10.60%	5.18%	5.42%
21	5/17/2006	11.60%	5.22%	6.38%
22	6/6/2006	10.00%	5.08%	4.92%
23	6/27/2006	10.75%	5.26%	5.49%
24	7/6/2006	10.20%	5.20%	5.00%
25	7/24/2006	9.60%	5.11%	4.49%
26	7/26/2006	10.50%	5.10%	5.40%
27	7/28/2006	10.05%	5.07%	4.98%
28 29	8/23/2006	9.55%	4.94%	4.61%
30	9/1/2006 9/14/2006	10.54% 10.00%	4.87% 4.91%	5.67% 5.09%
31	10/6/2006	9.67%	4.83%	5.09% 4.84%
32	11/21/2006	10.08%	4.65%	5.43%
33	11/21/2006	10.08%	4.65%	5.43%
34	11/21/2006	10.12%	4.65%	5.47%
35	12/1/2006	10.25%	4.54%	5.71%
36	12/1/2006	10.50%	4.54%	5.96%
37	12/7/2006	10.75%	4.63%	6.12%
38	12/21/2006	10.90%	4.72%	6.18%
39	12/21/2006	11.25%	4.72%	6.53%
40	12/22/2006	10.25%	4.76%	5.49%
41	1/5/2007	10.00%	4.74%	5.26%
42	1/11/2007	10.10%	4.84%	5.26%
43	1/11/2007	10.10%	4.84%	5.26%
44 45	1/11/2007	10.90% 10.10%	4.84%	6.06%
46	1/12/2007 1/13/2007	10.10%	4.86% 4.86%	5.24% 5.54%
47	1/19/2007	10.40%	4.85%	5.95%
48	3/21/2007	11.35%	4.75%	6.60%
49	3/22/2007	9.75%	4.79%	4.96%
50	5/15/2007	10.00%	4.88%	5.12%
51	5/17/2007	10.25%	4.94%	5.31%
52	5/17/2007	10.25%	4.94%	5.31%
53	5/22/2007	10.20%	4.99%	5.21%
54	5/22/2007	10.50%	4.99%	5.51%
55	5/23/2007	10.70%	5.00%	5.70%
56	5/25/2007	9.67%	5.00%	4.67%
57	6/15/2007	9.90%	5.26%	4.64%
58	6/21/2007	10.20%	5.28%	4.92%
59 60	6/22/2007	10.50% 10.75%	5.23% 5.16%	5.27% 5.50%
61	6/28/2007 7/12/2007	10.75% 9.67%	5.16% 5.20%	5.59% 4.47%
62	7/12/2007	10.00%	5.20% 5.08%	4.47% 4.92%
63	7/19/2007	10.00%	5.08%	4.92% 4.92%
64	8/15/2007	10.40%	4.99%	5.41%
65	10/9/2007	10.00%	4.86%	5.14%
66	10/17/2007	9.10%	4.80%	4.30%

1	Bor	nd Yield Plus	Risk Premiu	m
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	10/31/2007	9.96%	4.69%	5.27%
5	11/29/2007	10.90%	4.36%	6.54%
6	12/6/2007	10.75%	4.52%	6.23%
7	12/13/2007	9.96%	4.63%	5.33%
8	12/14/2007	10.70%	4.62%	6.08%
9	12/14/2007	10.80%	4.62%	6.18%
10	12/19/2007	10.20%	4.46%	5.74%
11	12/20/2007	10.20%	4.53%	5.67%
12	12/20/2007	11.00%	4.53%	6.47%
13	12/28/2007	10.25%	4.47%	5.78%
14	12/31/2007	11.25%	4.45%	6.80%
15	1/8/2008	10.75%	4.33%	6.42%
16	1/17/2008	10.75%	4.27%	6.48%
17 18	1/28/2008	9.40% 10.00%	4.32%	5.08%
19	1/30/2008 1/31/2008	10.71%	4.35%	5.65% 6.39%
20	2/29/2008	10.71%	4.32%	5.83%
21	3/12/2008	10.25%	4.42% 4.43%	5.82%
22	3/25/2008	9.10%	4.30%	4.80%
23	4/22/2008	10.25%	4.47%	5.78%
24	4/24/2008	10.10%	4.57%	5.53%
25	5/1/2008	10.70%	4.54%	6.16%
26	5/19/2008	11.00%	4.55%	6.45%
27	5/27/2008	10.00%	4.66%	5.34%
28	6/10/2008	10.70%	4.70%	6.00%
29	6/27/2008	10.50%	4.52%	5.98%
30	6/27/2008	11.04%	4.52%	6.52%
31	7/10/2008	10.43%	4.48%	5.95%
32	7/16/2008	9.40%	4.60%	4.80%
33	7/30/2008	10.80%	4.61%	6.19%
34	7/31/2008	10.70%	4.57%	6.13%
35	8/11/2008	10.25%	4.57%	5.68%
36	8/26/2008	10.18%	4.38%	5.80%
37	9/10/2008	10.30%	4.22%	6.08%
38	9/24/2008	10.65%	4.41%	6.24%
39	9/24/2008	10.65%	4.41%	6.24%
40	9/24/2008	10.65%	4.41%	6.24%
41	9/30/2008	10.20%	4.26%	5.94%
42	10/8/2008	10.15%	4.08%	6.07%
43	11/13/2008	10.55%	4.29%	6.26%
44	11/17/2008	10.20%	4.15%	6.05%
45	12/1/2008	10.25%	3.19%	7.06%
46	12/23/2008	11.00%	2.63%	8.37%
47	12/29/2008	10.00%	2.59%	7.41%
48	12/29/2008	10.20%	2.59%	7.61%
49	12/31/2008	10.75%	2.68%	8.07%
50	1/14/2009	10.50%	2.88%	7.62%
51 52	1/21/2009 1/21/2009	10.50% 10.50%	3.21% 3.21%	7.29%
53	1/21/2009	10.50%		7.29%
54	1/27/2009	10.76%	3.21% 3.33%	7.29%
55	1/30/2009	10.70%	3.54%	7.43% 6.96%
56	2/4/2009	8.75%	3.66%	5.09%
57	3/4/2009	10.50%	3.58%	6.92%
58	3/12/2009	11.50%	3.64%	7.86%
59	4/2/2009	11.10%	3.64%	7.46%
60	4/21/2009	10.61%	3.77%	6.84%
61	4/24/2009	10.00%	3.86%	6.14%
62	4/30/2009	11.25%	4.05%	7.20%
63	5/4/2009	10.74%	4.06%	6.68%
64	5/20/2009	10.25%	4.23%	6.02%
65	5/28/2009	10.50%	4.41%	6.09%
66	6/22/2009	10.00%	4.40%	5.60%

1	Bor	nd Yield Plus	Risk Premiu	ım
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	6/24/2009	10.80%	4.38%	6.42%
5	7/8/2009	10.63%	4.25%	6.38%
6	7/17/2009	10.50%	4.52%	5.98%
7	8/31/2009	10.25%	4.19%	6.06%
8 9	10/14/2009	10.70% 10.88%	4.28%	6.42%
10	10/23/2009 11/2/2009	10.70%	4.33% 4.29%	6.55% 6.41%
11	11/3/2009	10.70%	4.29%	6.34%
12	11/24/2009	10.75%	4.24%	6.01%
13	11/25/2009	10.75%	4.23%	6.52%
14	11/30/2009	10.35%	4.23%	6.12%
15	12/3/2009	10.50%	4.36%	6.14%
16	12/7/2009	10.70%	4.38%	6.32%
17	12/16/2009	10.90%	4.47%	6.43%
18	12/16/2009	11.00%	4.47%	6.53%
19	12/18/2009	10.40%	4.51%	5.89%
20	12/18/2009	10.40%	4.51%	5.89%
21	12/22/2009	10.20%	4.61%	5.59%
22	12/22/2009	10.40%	4.61%	5.79%
23	12/22/2009	10.40%	4.61%	5.79%
24	12/30/2009	10.00%	4.63%	5.37%
25	1/4/2010	10.80%	4.63%	6.17%
26	1/11/2010	11.00%	4.67%	6.33%
27	1/26/2010	10.13%	4.56%	5.57%
28 29	1/27/2010	10.40%	4.56%	5.84%
30	1/27/2010 1/27/2010	10.40% 10.70%	4.56% 4.56%	5.84% 6.14%
31	2/9/2010	9.80%	4.61%	5.19%
32	2/18/2010	10.60%	4.72%	5.88%
33	2/24/2010	10.18%	4.61%	5.57%
34	3/2/2010	9.63%	4.58%	5.05%
35	3/4/2010	10.50%	4.60%	5.90%
36	3/5/2010	10.50%	4.66%	5.84%
37	3/11/2010	11.90%	4.65%	7.25%
38	3/17/2010	10.00%	4.58%	5.42%
39	3/25/2010	10.15%	4.75%	5.40%
40	4/2/2010	10.10%	4.82%	5.28%
41	4/27/2010	10.00%	4.60%	5.40%
42	4/29/2010	9.90%	4.55%	5.35%
43	4/29/2010	10.06%	4.55%	5.51%
44	4/29/2010	10.26%	4.55%	5.71%
45	5/12/2010	10.30%	4.45%	5.85%
46 47	5/12/2010 5/28/2010	10.30%	4.45%	5.85%
48	5/28/2010	10.10% 10.20%	4.21% 4.21%	5.89% 5.99%
49	6/7/2010	10.30%	4.10%	6.20%
50	6/16/2010	10.00%	4.15%	5.85%
51	6/28/2010	9.67%	3.97%	5.70%
52	6/28/2010	10.50%	3.97%	6.53%
53	6/30/2010	9.40%	3.89%	5.51%
54	7/1/2010	10.25%	3.92%	6.33%
55	7/15/2010	10.53%	3.96%	6.57%
56	7/15/2010	10.70%	3.96%	6.74%
57	7/30/2010	10.70%	4.03%	6.68%
58	8/4/2010	10.50%	4.07%	6.44%
59	8/6/2010	9.83%	4.01%	5.82%
60	8/25/2010	9.90%	3.54%	6.36%
61	9/3/2010	10.60%	3.78%	6.82%
62	9/14/2010	10.70%	3.84%	6.86%
63	9/16/2010	10.00%	3.91%	6.09%
64 65	9/16/2010	10.00%	3.91%	6.09%
65 66	9/30/2010	9.75% 10.35%	3.70%	6.05% 6.40%
66	10/14/2010	10.35%	3.95%	6.40%

1	Bond Yield Plus Risk Premiu							
2	[6]	[7]	[8]	[9]				
	Date of		30-Year					
_	Electric	Return on	Treasury	Risk				
3	Rate Case	Equity	Yield	Premium				
4 5	10/28/2010	10.70%	4.02%	6.68%				
6	11/2/2010 11/4/2010	10.38% 10.70%	3.98% 4.10%	6.40% 6.60%				
7	11/19/2010	10.70%	4.10%	5.98%				
8	11/22/2010	10.00%	4.20%	5.80%				
9	12/1/2010	10.13%	4.25%	5.88%				
10	12/6/2010	9.86%	4.30%	5.56%				
11	12/9/2010	10.25%	4.41%	5.84%				
12	12/13/2010	10.70%	4.47%	6.23%				
13	12/14/2010	10.13%	4.56%	5.57%				
14	12/15/2010	10.44%	4.56%	5.88%				
15	12/17/2010	10.00%	4.44%	5.56%				
16 17	12/20/2010	10.60%	4.43%	6.17%				
17 18	12/21/2010 12/27/2010	10.30% 9.90%	4.43% 4.47%	5.87%				
19	12/27/2010	11.15%	4.47%	5.43% 6.72%				
20		10.15%	4.53%	5.62%				
21	1/12/2011	10.30%	4.51%	5.79%				
22	1/13/2011	10.30%	4.51%	5.79%				
23	1/18/2011	10.00%	4.55%	5.45%				
24	1/20/2011	9.30%	4.59%	4.71%				
25	1/20/2011	10.13%	4.59%	5.54%				
26	1/31/2011	9.60%	4.59%	5.01%				
27	2/3/2011	10.00%	4.70%	5.30%				
28	2/25/2011	10.00%	4.50%	5.50%				
29	3/25/2011	9.80%	4.50%	5.30%				
30	3/30/2011	10.00%	4.50%	5.50%				
31 32	4/12/2011	10.00% 10.74%	4.56%	5.44%				
33	4/25/2011 4/26/2011	9.67%	4.42% 4.42%	6.32% 5.25%				
34	4/27/2011	10.40%	4.43%	5.97%				
35	5/4/2011	10.00%	4.29%	5.71%				
36	5/4/2011	10.00%	4.29%	5.71%				
37	5/24/2011	10.50%	4.27%	6.23%				
38	6/8/201 1	10.75%	4.20%	6.55%				
39	6/16/2011	9.20%	4.19%	5.01%				
40	6/17/2011	9.95%	4.20%	5.75%				
41	7/13/2011	10.20%	4.21%	5.99%				
42	8/1/2011	9.20%	3.99%	5.21%				
43	8/8/2011	10.00%	3.64%	6.36%				
44 45	8/11/2011	10.00% 10.35%	3.75%	6.25%				
46	8/12/2011 8/19/2011	10.35%	3.75% 3.41%	6.60% 6.84%				
47	9/2/2011	12.88%	3.30%	9.58%				
48	9/22/2011	10.00%	2.85%	7.15%				
49	10/12/2011	10.30%	3.17%	7.13%				
50	10/20/2011	10.50%	3.24%	7.26%				
51	11/30/2011	10.90%	3.07%	7.83%				
52	11/30/2011	10.90%	3.07%	7.83%				
53	12/14/2011	10.00%	2.91%	7.09%				
54	12/14/2011	10.30%	2.91%	7.39%				
55	12/20/2011	10.20%	2.96%	7.24%				
56	12/21/2011	10.20%	2.99%	7.21%				
57 59	12/22/2011	9.90%	3.02%	6.88%				
58 59	12/22/2011	10.40%	3.02%	7.38%				
60	12/23/2011 1/25/2012	10.19% 10.50%	3.06% 3.12%	7.13% 7.38%				
61	1/25/2012	10.50%	3.12%	7.36% 7.47%				
62	2/15/2012	10.20%	3.03 %	7.47%				
63	2/23/2012	9.90%	3.12%	6.78%				
64	2/27/2012	10.25%	3.06%	7.19%				
65	2/29/2012	10.40%	3.12%	7.28%				
66	3/29/2012	10.37%	3.30%	7.07%				

1	Bor	nd Yield Plus	Risk Premiu	ım
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4	4/4/2012	10.00%	3.34%	6.66%
5 6	4/26/2012 5/2/2012	10.00% 10.00%	3.12% 3.12%	6.88%
7	5/7/2012	9.80%	3.12% 3.05%	6.88% 6.75%
8	5/15/2012	10.00%	2.91%	7.09%
9	5/29/2012	10.05%	2.78%	7.27%
10	6/7/2012	10.30%	2.74%	7.56%
11	6/14/2012	9.40%	2.71%	6.69%
12	6/15/2012	10.40%	2.67%	7.73%
13	6/18/2012	9.60%	2.70%	6.90%
14	6/19/2012	9.25%	2.73%	6.52%
15	6/26/2012	10.10%	2.70%	7.40%
16	6/29/2012	10.00%	2.72%	7.28%
17	7/9/2012	10.20%	2.61%	7.59%
18	7/16/2012	9.80%	2.58%	7.22%
19 20	7/20/2012 7/20/2012	9.31% 9.81%	2.52%	6.79%
21	9/13/2012	9.80%	2.52% 3.01%	7.29% 6.79%
22	9/19/2012	9.80%	2.95%	6.85%
23	9/19/2012	10.05%	2.95%	7.10%
24	9/26/2012	9.50%	2.81%	6.69%
25	10/12/2012	9.60%	2.84%	6.76%
26	10/23/2012	9.75%	2.93%	6.82%
27	10/24/2012	10.30%	2.96%	7.34%
28	11/9/2012	10.30%	2.74%	7.56%
29	11/28/2012	10.40%	2.80%	7.60%
30	11/29/2012	9.75%	2.80%	6.95%
31	11/29/2012	9.88%	2.80%	7.08%
32	12/5/2012	9.71%	2.78%	6.93%
33	12/5/2012	10.40%	2.78%	7.62%
34	12/12/2012	9.80%	2.90%	6.90%
35 36	12/13/2012	9.50%	2.88%	6.62%
37	12/13/2012 12/14/2012	10.50% 10.40%	2.88% 2.90%	7.62% 7.50%
38	12/14/2012	9.71%	2.98%	6.73%
39	12/19/2012	10.25%	2.98%	7.27%
40	12/20/2012	9.50%	2.96%	6.54%
41	12/20/2012	9.80%	2.96%	6.84%
42	12/20/2012	10.25%	2.96%	7.29%
43	12/20/2012	10.25%	2.96%	7.29%
44	12/20/2012	10.30%	2.96%	7.34%
45	12/20/2012	10.40%	2.96%	7.44%
46	12/20/2012	10.45%	2.96%	7.49%
47	12/21/2012	10.20%	2.93%	7.27%
48	12/26/2012	9.80%	2.92%	6.88%
49 50	1/9/2013	9.70% 9.70%	3.07%	6.63%
51	1/9/2013 1/9/2013	9.70%	3.07% 3.07%	6.63%
52	1/16/2013	9.60%	3.04%	6.63% 6.56%
53	1/16/2013	9.60%	3.04%	6.56%
54	2/13/2013	10.20%	3.21%	6.99%
55	2/22/2013	9.75%	3.11%	6.64%
56	2/27/2013	10.00%	3.09%	6.91%
57	3/14/2013	9.30%	3.23%	6.07%
58	3/27/2013	9.80%	3.10%	6.70%
59	5/1/2013	9.84%	2.82%	7.02%
60	5/15/2013	10.30%	3.13%	7.17%
61	5/30/2013	10.20%	3.28%	6.92%
62	5/31/2013	9.00%	3.27%	5.73%
63	6/11/2013	10.00%	3.34%	6.66%
64 65	6/21/2013	9.75% 9.80%	3.56%	6.19%
66	6/25/2013	9.80% 9.36%	3.60%	6.20% 5.75%
00	7/12/2013	3.50 /0	3.61%	5.75%

1	Bor	nd Yield Plus	Risk Premiu	m
2	[6]	[7]	[8]	[9]
	Date of		30-Year	
	Electric	Return on	Treasury	Risk
3	Rate Case	Equity	Yield	Premium
4 5	8/8/2013	9.83%	3.65%	6.18%
6	8/14/2013 9/11/2013	9.15% 10.20%	3.78% 3.85%	5.37% 6.35%
7	9/11/2013	10.25%	3.85%	6.40%
8	9/24/2013	10.20%	3.67%	6.53%
9	10/3/2013	9.65%	3.71%	5.94%
10	11/6/2013	10.20%	3.74%	6.46%
11	11/21/2013	10.00%	3.86%	6.14%
12	11/26/2013	10.00%	3.81%	6.19%
13	12/3/2013	10.25%	3.87%	6.38%
14	12/4/2013	9.50%	3.91%	5.59%
15	12/5/2013	10.20%	3.90%	6.30%
16	12/9/2013	8.72%	3.85%	4.87%
17	12/9/2013	9.75%	3.85%	5.90%
18 19	12/13/2013	9.75%	3.88%	5.87%
20	12/16/2013 12/16/2013	9.95% 9.95%	3.88%	6.07%
21	12/16/2013	10.12%	3.88% 3.88%	6.07% 6.24%
22	12/17/2013	9.50%	3.89%	5.61%
23	12/17/2013	10.95%	3.89%	7.06%
24	12/18/2013	8.72%	3.91%	4.81%
25	12/18/2013	9.80%	3.91%	5.89%
26	12/19/2013	10.15%	3.87%	6.28%
27	12/30/2013	9.50%	3.93%	5.57%
28	2/20/2014	9.20%	3.71%	5.49%
29	2/26/2014	9.75%	3.61%	6.14%
30	3/17/2014	9.55%	3.62%	5.93%
31	3/26/2014	9.40%	3.53%	5.87%
32 33	3/26/2014	9.96%	3.53%	6.43%
34	4/2/2014 5/16/2014	9.70% 9.80%	3.64% 3.37%	6.06% 6.43%
35	5/30/2014	9.70%	3.35%	6.35%
36	6/6/2014	10.40%	3.44%	6.96%
37	6/30/2014	9.55%	3.38%	6.17%
38	7/2/2014	9.62%	3.47%	6.15%
39	7/10/2014	9.95%	3.35%	6.60%
40	7/23/2014	9.75%	3.28%	6.47%
41	7/29/2014	9.45%	3.27%	6.18%
42	7/31/2014	9.90%	3.30%	6.60%
43	8/20/2014	9.75%	3.20%	6.55%
44	8/25/2014	9.60%	3.15%	6.45%
45	8/29/2014	9.80%	3.08%	6.72%
46 47	9/11/2014 9/15/2014	9.60% 10.25%	3.31%	6.29%
48	10/9/2014	9.80%	3.35% 3.03%	6.90% 6.77%
49	11/6/2014	9.56%	3.07%	6.49%
50	11/6/2014	10.20%	3.07%	7.13%
51	11/14/2014	10.20%	3.06%	7.14%
52	11/26/2014	9.70%	2.95%	6.75%
53	11/26/2014	10.20%	2.95%	7.25%
54	12/4/2014	9.68%	2.95%	6.73%
55	12/10/2014	9.25%	2.82%	6.43%
56	12/10/2014	9.25%	2.82%	6.43%
57	12/11/2014	10.07%	2.77%	7.30%
58	12/12/2014	10.20%	2.74%	7.46%
59	12/17/2014	9.17%	2.77%	6.40%
60 61	12/18/2014	9.83% 9.50%	2.79%	7.04%
62	1/23/2015 2/24/2015	9.50% 9.83%	2.39% 2.58%	7.11% 7.25%
63	3/18/2015	9.03% 9.75%	2.58% 2.52%	7.25% 7.23%
64	3/25/2015	9.50%	2.52 % 2.54%	6.96%
65	3/26/2015	9.72%	2.56%	7.16%
66	4/23/2015	10.20%	2.63%	7.57%
			0070	, 0

1	Bond Yield Plus Risk Premium									
2	[6]	[9]								
	Date of		30-Year							
	Electric	Return on	Treasury	Risk						
3	Rate Case	Equity	Yield	Premium						
4	4/29/2015	9.53%	2.62%	6.91%						
5	5/1/2015	9.60%	2.66%	6.94%						
6	5/26/2015	9.75%	2.99%	6.76%						
7	6/17/2015	9.00%	3.08%	5.92%						
8	6/17/2015	9.00%	3.08%	5.92%						
9			# of Cases:	1,454						
10			Average:	4.52%						

Capital Structure Analysis

PNM Exhibit RBH-10

Is contained in the following 6 pages.

Proxy Group Capital Structure

2				% Common Equity								
3	Company	Ticker	2014Q4	2014Q3	2014Q2	2014Q1	2013Q4	2013Q3	2013Q2	2013Q1	Average	
4	ALLETE, Inc.	ALE	56.98%	EC 400/	FF 020/	FC 700/	CC 070/	E0 000/	F7 000/		67.4404	
4 5	Alliant Energy Corporation	LNT	48.81%	56.18%	55.83%	56,79%	56.37%	58.08%	57.90%	58.79%	57.11%	
6	9, 1			52.72%	51.46%	51.33%	50.88%	51.92%	50.90%	50.85%	51.11%	
7	American Floration	AEE	52.21%	53.88%	53.18%	55.37%	54.09%	54.67%	54.05%	53.99%	53.93%	
	American Electric Power Company, Inc.	AEP	52.11%	52.27%	52.31%	52.34%	52.36%	53.51%	53.61%	53.71%	52.78%	
8	Avista Corporation	AVA	51.39%	52.62%	51.19%	49.76%	49.15%	48.07%	49.82%	49.63%	50.20%	
9	Black Hills Corporation	BKH	76.12%	79.36%	78.46%	78.25%	77.94%	77.62%	77.57%	77.32%	77.83%	
10	CenterPoint Energy, Inc.	CNP	36.22%	36.45%	36.33%	35.40%	35.64%	35.45%	34.61%	34.97%	35.63%	
11	CMS Energy Corporation	CMS	50.03%	49.81%	53.23%	52.42%	51.15%	50.99%	52,50%	52.43%	51.57%	
12	Consolidated Edison, Inc.	ED	65.96%	66.68%	66.63%	66.61%	66.44%	66.51%	66.27%	66.29%	66.42%	
13	Dominion Resources, Inc.	D	52.94%	53.09%	52.80%	52.80%	54.16%	53.92%	55.23%	54.84%	53.72%	
14	DTE Energy Company	DTE	50.39%	49.32%	50.30%	50.54%	50.25%	47.48%	47.70%	47.61%	49.20%	
15	Duke Energy Corporation	DUK	57.62%	56.60%	56.03%	55.25%	56.09%	55.83%	56.41%	55.95%	56.22%	
16	Empire District Electric Company	EDE	51.28%	53.31%	52.82%	52.73%	52.30%	52.37%	51.52%	53.36%	52.46%	
17	Eversource Energy	ES	53.22%	53.03%	51.65%	50.84%	52.46%	54.08%	52.65%	52.43%	52.54%	
18	FirstEnergy Corp.	FE	51.69%	51.49%	50.74%	50.66%	50.33%	50.94%	48.12%	46.34%	50.04%	
19	Great Plains Energy Inc.	GXP	50.87%	50.92%	50.10%	49.93%	49.91%	49.99%	49.54%	50.35%	50,20%	
20	IDACORP, Inc.	IDA	52.94%	52.92%	52.03%	51.72%	51.61%	50.51%	49.74%	51.66%	51.64%	
21	Northwestern Corporation	NWE	47.06%	47.78%	47.45%	48.19%	47.15%	48.77%	48.72%	48.04%	47.89%	
22	OGE Energy Corp.	OGE	53.08%	55.43%	52,94%	52.53%	55.16%	55.33%	54.15%	56.63%	54.41%	
23	Otter Tail Corporation	OTTR	49.80%	49.32%	47.60%	47.20%	53.72%	52.37%	52.35%	52.69%	50.63%	
24	Pinnacle West Capital Corporation	PNW	57.54%	58.43%	57,32%	55.67%	57.39%	57.62%	55.94%	55,84%	56.97%	
25	Portiand General Electric Company	POR	43.31%	44.86%	46.64%	49.21%	48.70%	50.43%	50.37%	51.78%	48.16%	
26	SCANA Corporation	SCG	53.46%	53.47%	52.85%	54.36%	53.90%	53.68%	53.08%	54,43%	53.65%	
27	Southern Company	SO	46.98%	46.31%	46.98%	46.80%	48.45%	46.59%	44.66%	45.18%	46.49%	
28	TECO Energy, Inc.	TE	53.15%	52.85%	52,46%	55.05%	55.21%	55.08%	53.99%	53.57%	53.92%	
29	Westar Energy, Inc.	WR	65.73%	65.95%	66.62%	63.45%	63.22%	61.28%	61.87%	60.32%	63.56%	
30	Xcel Energy Inc.	XEL	54.62%	54.54%	53.41%	54.88%	54.92%	54.29%	54.35%	54.30%	54.41%	
31	Mean		53.17%	53.69%	53.31%	53.34%	53.67%	53,61%	53.25%	53.45%	53.43%	
32	Minimum		36.22%	36.45%	36.33%	35.40%	35.64%	35.45%	34.61%	34.97%	35.63%	
33	Maximum		76.12%	79.36%	78.46%	78.25%	77.94%	77.62%	77.57%	77.32%	77.83%	

						% Comm	on Equity					
Operating Compar	ny	Parent	2014Q4	2014Q3	2014Q2	2014Q1	2013Q4	2013Q3	2013Q2	2013		
Ameren Illinois Co	mpany	AEE	53.22%	56.14%	55.41%	58.42%	55.67%	57.85%	57.23%	57.0		
Union Electric Cor		AEE	51.20%	51.63%	50.94%	52.31%	52.51%	51.49%	50.87%	50.9		
AEP Texas Centra	al Company	AEP	42.39%	43.93%	43.18%	47.56%	46.75%	46.62%	47.89%	51.2		
AEP Texas North	Company	AEP	46.96%	47.06%	46.79%	46.82%	46.68%	46.03%	50.34%	49.8		
Appalachian Powe	er Company	AEP	45.83%	46.29%	46.00%	44.13%	43.52%	47.39%	45.29%	45.3		
Indiana Michigan F	Power Company	AEP	51.36%	51.45%	51.39%	51.63%	50.80%	48.27%	47.77%	46.8		
Kentucky Power C	ompany	AÉP	44.74%	46.25%	48.23%	50.30%	52.83%	46.02%	47.18%	47.1		
Kingsport Power C	Company	AEP	61.00%	60.55%	60.91%	58.88%	60.85%	60.73%	60.33%	60.8		
Ohio Power Comp		AEP	48.96%	46.03%	44.79%	42.54%	39.71%	57.01%	56.06%	56.0		
	mpany of Oklahoma	AEP	49.69%	49.43%	48.30%	47.51%	48.51%	50.46%	49.49%	49.0		
	ctric Power Company	AEP	50.46%	50.60%	51.26%	51.18%	51.21%	50.22%	50.52%	50.5		
Wheeling Power C		AEP	79.75%	81.14%	82.27%	82.89%	82.79%	82.32%	81.26%	79.9		
ALLETE (Minneso	•	ALE	55.24%	53.98%	53.01%	55.16%	55.93%	54.90%	54.13%	56.0		
•	ight and Power Company	ALE	58.72%	58.39%	58.65%	58.42%	56.81%	61.25%	61.67%	61.4		
Avista Corporation		AVA	51.39%	52.62%	51.19%	49.76%	49.15%	48.07%	49.82%	49.6		
Black Hills Power,	do Electric Utility Company, LP	BKH BKH	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.0		
Consumers Energy		CMS	52.23% 50.03%	58.72%	56.93%	56.49%	55.88%	55.23%	55.13%	54.6		
CenterPoint Energ		CNP	36.22%	49.81% 36.45%	53.23% 36.33%	52.42% 35.40%	51.15%	50.99% 35.45%	52.50%	52.4		
-	nd Power Company	D	52.94%	53.09%	52.80%	52.80%	35.64% 54.16%	35.45% 53.92%	34.61% 55.23%	34.9		
DTE Electric Comp	• •	DTE	50.39%	49.32%	50.30%	50.54%	50.25%	55.92% 47.48%	47.70%	54.8		
Duke Energy Caro	•	DUK	57.84%	56.60%	55.90%	55.56%	55.18%	53.80%	53.57%	47.6 53.7		
Duke Energy Florid		DUK	53.90%	50.98%	49.96%	49.22%	50.47%	50.61%	49.57%	51.0		
Duke Energy India		DUK	50.28%	49.88%	50.69%	51.57%	50.85%	50.31%	51.11%	50.5		
Duke Energy Kent		DUK	56.58%	54.78%	54.36%	54.16%	53.23%	52.56%	54.56%	54.1		
Duke Energy Ohio		DUK	76.64%	76.40%	74.55%	70.11%	74.27%	74.25%	79.06%	75.9		
Duke Energy Prog		DUK	50.48%	50.99%	50.75%	50.85%	52.54%	53.43%	50.62%	50.2		
	on Company of New York, Inc.	ED	49.94%	52.34%	51.84%	51.19%	52.43%	52.41%	51.90%	51.4		
Orange and Rockla		ED	51.91%	52.66%	52.21%	52.25%	51.73%	50.93%	50.45%	50.5		
_	and Power Company	ED	61.98%	61.71%	62.46%	62.98%	61.61%	62.71%	62.73%	63.1		
Rockland Electric		ED	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.0		
Empire District Ele	ectric Company	EDE	51.28%	53.31%	52.82%	52.73%	52.30%	52.37%	51.52%	53.3		
Connecticut Light :	and Power Company	ES	52.02%	51.63%	49,49%	51.20%	50.87%	50.29%	48.86%	48.5		
NSTAR Electric Co	ompany	ES	57.26%	56.59%	55,37%	50.94%	56.77%	56.20%	55.06%	57.8		
Public Service Cor	mpany of New Hampshire	ES	53.29%	53.92%	52.44%	52.27%	51.90%	55.78%	55.52%	52.4		
Western Massach	usetts Electric Company	ES	50.31%	49.97%	49.29%	48.96%	50.31%	54.03%	51.15%	50.8		
Cleveland Electric	Illuminating Company	FE	44.99%	45.28%	44.88%	44.64%	45.74%	45.99%	42.06%	38.4		
Jersey Central Po	wer & Light Company	FE	54.77%	55.24%	54.49%	54.20%	53.94%	54.28%	60.62%	60.3		
Monongahela Pow	er Company	FE	47.04%	46.86%	46.27%	45.74%	44.74%	50.86%	49.54%	48.2		
Ohio Edison Comp	•	FE	63.05%	57.70%	56.35%	55.35%	53.98%	56.53%	46.95%	42.1		
Pennsylvania Elec		FE	47.66%	48.17%	47.74%	51.17%	50.77%	44.28%	44.74%	44.2		
Potomac Edison C	• •	FE	51.05%	51.96%	51.17%	50.46%	49.09%	50.14%	49.12%	48.0		
Toledo Edison Cor	, -	FE	50.74%	51.51%	50.70%	50.11%	51.86%	52.45%	39.89%	38.1		
West Penn Power		FE	54.20%	55.21%	54.31%	53.62%	52.51%	52.99%	52.02%	51.1		
Great Plains Energ	•••	GXP	52.21%	52.31%	51.53%	51.40%	51.36%	51.41%	51.38%	52.0		
-	r & Light Company	GXP	49.53%	49.54%	48.67%	48.46%	48.46%	48.57%	47.70%	48.6		
Idaho Power Co.		IDA	52.94%	52.92%	52.03%	51.72%	51.61%	50.51%	49.74%	51.6		
Interstate Power a		LNT	47.30%	51.00%	49.10%	48.92%	48.39%	50.72%	49.19%	49.1		
	and Light Company	LNT	50.32%	54.45%	53.82%	53.74%	53.37%	53.12%	52.61%	52.5		
NorthWestern Cor		NWE	47.06%	47.78%	47.45%	48.19%	47.15%	48.77%	48.72%	48.0		
	d Electric Company	OGE	53.08%	55.43%	52.94%	52.53%	55.16%	55.33%	54.15%	56.6		
Otter Tail Power C		OTTR	49.80%	49.32%	47.60%	47.20%	53.72%	52.37%	52.35%	52.6		
Arizona Public Ser		PNW	57.54%	58.43%	57.32%	55.67%	57.39%	57.62%	55.94%	55.8		
Portland General E		POR	43.31%	44.86%	46.64%	49.21%	48.70%	50.43%	50.37%	51.7		
South Carolina Ele Alabama Power Co		SCG	53.46%	53.47%	52.85%	54.36%	53.90%	53.68%	53.08%	54.4		
		SO SO	43.96%	44.00%	44.71%	44.51%	44.24%	44.86%	44.25%	44.0		
Georgia Power Co Gulf Power Compa		SO SO	50.86%	50.39% 45.14%	49.72%	49.40%	51.96%	50.27%	48.52%	48.2		
Mississippi Power	•	SO SO	46.22%	45.14% 45.72%	48.11%	48.24%	47.10% 50.51%	46.91%	45.03%	47.4		
Tampa Electric Co		SO TE	46.87% 53.15%	45.72% 52.85%	45.40%	45.04% 55.05%	50.51%	44.33%	40.84%	40.9		
Kansas Gas and E		WR	53.15%	52.85%	52.46%	55.05%	55.21%	55.08%	53.99%	53.5		
Westar Energy (KF	, ,	WR	71.99% 59.48%	72.65% 59.26%	77.67%	69.73% 57.17%	69.54% 56.90%	65.91%	65.08%	62.2		
,	ower Company - MN				55.58% 52.49%	57.17%	56.90% 53.54%	56.66%	58.66%	58.4		
	ower company - IVIIV	XEL	52.89%	52.84%	52.49%	54.32%	53.54%	52.54%	52.04%	54.6		
	WALCOMPONY - MI	VE:										
Northern States Po	ower Company - WI mpany of Colorado	XEL XEL	55.18% 56.79%	55.01% 56.51%	52.92% 56.12%	57.06% 54.21%	56.42% 56.53%	55.77% 56.38%	55.29% 55.83%	54.06 55.66		

Proxy Group Capital Structure

2						% L	ong-Term D	Debt			
3	Company	Ticker	2014Q4	2014Q3	2014Q2	2014Q1	2013Q4	2013Q3	2013Q2	2013Q1	Average
4	ALLETE, Inc.	ALE	43.02%	43.82%	44.17%	43.21%	43.63%	41.92%	42.10%	41.21%	42.89%
5	Alliant Energy Corporation	LNT	48.59%	44.49%	45.70%	45.82%	46.24%	45.03%	45.94%	45.94%	45.97%
6	Ameren Corporation	AEE	46.64%	44.92%	45.61%	43.35%	44.65%	44.08%	44.68%	44.74%	44.83%
7	American Electric Power Company, Inc.	AEP	47.89%	47.73%	47.69%	47.66%	47.64%	46.49%	46.39%	46.29%	47.22%
8	Avista Corporation	AVA	48.61%	47.38%	48.81%	50.24%	50.85%	51.93%	50.18%	50.37%	49.80%
9	Black Hills Corporation	BKH	23.88%	20.64%	21.54%	21.75%	22.06%	22.38%	22.43%	22.68%	22.17%
10	CenterPoint Energy, Inc.	CNP	63.78%	63.55%	63.67%	64.60%	64.36%	64.55%	65.39%	65.03%	64.37%
11	CMS Energy Corporation	CMS	49.61%	49.83%	46.39%	47.19%	48.46%	48.61%	47.09%	47.08%	48.03%
12	Consolidated Edison, Inc.	ED	34.04%	33.32%	33.37%	33.39%	33.56%	33.49%	33.73%	33.71%	33.58%
13	Dominion Resources, Inc.	D	47.06%	46.20%	46.49%	46.49%	44.40%	44.64%	43.27%	43.65%	45.28%
14	DTE Energy Company	DTE	49.61%	50.68%	49.70%	49.46%	49.75%	52.52%	52.30%	52.39%	50.80%
15	Duke Energy Corporation	DUK	42.38%	43.40%	43.97%	44.75%	43.91%	44,17%	43.59%	44.05%	43.78%
16	Empire District Electric Company	EDE	48.72%	46.69%	47.18%	47.27%	47.70%	47.63%	48.48%	46.64%	47.54%
17	Eversource Energy	ES	46.02%	46.20%	47.58%	48.37%	46.74%	45.12%	46.54%	46.75%	46.66%
18	FirstEnergy Corp.	FE	48.31%	48.51%	49.26%	49.34%	49.67%	49.06%	51.88%	53.66%	49.96%
19	Great Plains Energy Inc.	GXP	49.13%	49.08%	49.90%	50.07%	50.09%	50.01%	50.46%	49.65%	49.80%
20	IDACORP, Inc.	IDA	47.06%	47.08%	47.97%	48.28%	48.39%	49.49%	50.26%	48.34%	48.36%
21	Northwestern Corporation	NWE	52.94%	52.22%	52.55%	51.81%	52.85%	51,23%	51.28%	51.96%	52.11%
22	OGE Energy Corp.	OGE	46.92%	44.57%	47.06%	47.47%	44.84%	44.67%	45.85%	43.37%	45.59%
23	Otter Tail Corporation	OTTR	50.20%	50.68%	52.40%	52.80%	46.28%	47.63%	47.65%	47.31%	49.37%
24	Pinnacle West Capital Corporation	PNW	42.46%	41.57%	42.68%	44.33%	42.61%	42.38%	44.06%	44.16%	43.03%
25	Portland General Electric Company	POR	56.69%	55.14%	53.36%	50.79%	51.30%	49.57%	49.63%	48.22%	51.84%
26	SCANA Corporation	SCG	46.54%	46.53%	47.15%	45.64%	46,10%	46.32%	46.92%	45,56%	46.35%
27	Southern Company	SO	49.84%	50.53%	49.71%	49.86%	48.15%	50.01%	51.96%	51.85%	50.24%
28	TECO Energy, Inc.	TE	46.85%	47.15%	47.54%	44.95%	44.79%	44.92%	46.01%	46.43%	46.08%
29	Westar Energy, Inc.	WR	34.27%	34.05%	33.38%	36.55%	36.78%	38.72%	38.13%	39.68%	36.44%
30	Xcel Energy Inc.	XEL.	45.38%	45.46%	46.59%	45.12%	45.08%	45.71%	45.65%	45.70%	45.59%
31	Mean		46.53%	45.98%	46.35%	46.32%	45.96%	46.01%	46.36%	46.16%	46.21%
32	Minimum		23.88%	20.64%	21.54%	21.75%	22.06%	22.38%	22.43%	22.68%	22.17%
33	Maximum		63.78%	63.55%	63.67%	64.60%	64.36%	64.55%	65.39%	65.03%	64.37%

1		Ор	erating Com	pany Capita	l Structure					
2 3	Operation Communic	D1	004404	201100		•	Term Debt			
3	Operating Company	Parent	2014Q4	2014Q3	2014Q2	2014Q1	2013Q4	2013Q3	2013Q2	2013Q1
4	Ameren Illinois Company	AEE	45.52%	42.50%	43.20%	40.11%	42.89%	40.69%	41.28%	41.44%
5	Union Electric Company	AEE	47.76%	47.34%	48.01%	46.60%	46.41%	47.47%	48.08%	48.04%
6	AEP Texas Central Company	AEP	57.61%	56.07%	56.82%	52.44%	53.25%	53.38%	52.11%	48.74%
7	AEP Texas North Company	AEP	53.04%	52.94%	53.21%	53.18%	53.32%	53.97%	49.66%	50.11%
-8	Appalachian Power Company	AEP	54.17%	53.71%	54.00%	55.87%	56.48%	52.61%	54.71%	54.63%
9 10	Indiana Michigan Power Company Kentucky Power Company	AEP	48.64%	48.55%	48.61%	48.37%	49,20%	51.73%	52.23%	53.12%
11	Kingsport Power Company	AEP AEP	55.26% 39.00%	53.75% 39.45%	51.77% 39.09%	49.70%	47.17%	53.98%	52.82%	52.83%
12	Ohio Power Company	AEP	51.04%	53.97%	55.21%	41.12% 57.46%	39.15% 60.29%	39.27% 42.99%	39.67% 43.94%	39.16% 43.91%
13	Public Service Company of Oklahoma	AEP	50.31%	50.57%	51.70%	52.49%	51.49%	49.54%	50.51%	50.91%
14	Southwestern Electric Power Company	AEP	49.54%	49.40%	48.74%	48.82%	48.79%	49.78%	49.48%	49.46%
15	Wheeling Power Company	AEP	20.25%	18.86%	17.73%	17.11%	17.21%	17.68%	18.74%	20.01%
16	ALLETE (Minnesota Power)	ALE	44.76%	46.02%	46.99%	44.84%	44.07%	45.10%	45.87%	43.91%
17	Superior Water, Light and Power Company	ALE	41.28%	41.61%	41.35%	41.58%	43.19%	38,75%	38.33%	38.52%
18	Avista Corporation	AVA	48.61%	47.38%	48.81%	50.24%	50.85%	51.93%	50.18%	50.37%
19 20	Black Hills Colorado Electric Utility Company, LP	BKH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
21	Black Hills Power, Inc. Consumers Energy Company	BKH CMS	47.77% 49.61%	41.28% 49.83%	43.07% 46.39%	43.51% 47.19%	44.12% 48.46%	44.77% 48.61%	44.87% 47.09%	45.37%
22	CenterPoint Energy, Inc.	CNP	63.78%	63.55%	63.67%	64.60%	64.36%	48.61% 64.55%	47.09% 65.39%	47.08% 65.03%
23	Virginia Electric and Power Company	D	47.06%	46.20%	46.49%	46.49%	44.40%	44.64%	43.27%	43.65%
24	DTE Electric Company	DTE	49.61%	50.68%	49.70%	49.46%	49.75%	52.52%	52.30%	52.39%
25	Duke Energy Carolinas, LLC	DUK	42.16%	43.40%	44.10%	44.44%	44.82%	46.20%	46.43%	46.26%
26	Duke Energy Florida, Inc.	DUK	46.10%	49.02%	50.04%	50.78%	49.53%	49.39%	50.43%	48.94%
27	Duke Energy Indiana, Inc.	DUK	49.72%	50.12%	49.31%	48.43%	49.15%	49.69%	48.89%	49.43%
28	Duke Energy Kentucky, Inc.	DUK	43.42%	45.22%	45.64%	45.84%	46.77%	47.44%	45.44%	45.87%
29 30	Duke Energy Ohio, Inc. Duke Energy Progress, Inc.	DUK DUK	23.36% 49.52%	23.60%	25.45%	29.89%	25.73%	25.75%	20.94%	24.05%
31	Consolidated Edison Company of New York, Inc.	ED	50.06%	49.01% 47.66%	49.25% 48.16%	49.15% 48.81%	47.46% 47.57%	46.57% 47.59%	49.38% 48.10%	49.75%
32	Orange and Rockland Utilities, Inc.	ED	48.09%	47.34%	47.79%	47.75%	48.27%	49.07%	49.55%	48.53% 49.47%
33	Pike County Light and Power Company	ED	38.02%	38.29%	37.54%	37.02%	38.39%	37.29%	37.27%	36.82%
34	Rockland Electric Company	ED	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
35	Empire District Electric Company	EDE	48.72%	46.69%	47.18%	47.27%	47.70%	47.63%	48.48%	46.64%
36	Connecticut Light and Power Company	ES	45.92%	46.30%	48.46%	46.63%	46.95%	47.49%	48.96%	49.23%
37	NSTAR Electric Company	ES	41.74%	42,39%	43.59%	48.07%	42.22%	42.77%	43.89%	41.01%
38 39	Public Service Company of New Hampshire Western Massachusetts Electric Company	ES ES	46.71% 49.69%	46.08%	47.56%	47.73%	48.10%	44.22%	44.48%	47.59%
40	Cleveland Electric Illuminating Company	FE	55.01%	50.03% 54.72%	50.71% 55.12%	51.04% 55.36%	49.69% 54.26%	45.97% 54.01%	48.85%	49.15%
41	Jersey Central Power & Light Company	FE	45.23%	44.76%	45.51%	45.80%	46.06%	45.72%	57.94% 39.38%	61.54% 39.70%
42	Monorigahela Power Company	FE	52.96%	53.14%	53.73%	54.26%	55.26%	49.14%	50.46%	51.74%
43	Ohio Edison Company	FE	36.95%	42.30%	43.65%	44.65%	46.02%	43.47%	53.05%	57.88%
44	Pennsylvariia Electric Company	FE	52.34%	51.83%	52.26%	48.83%	49.23%	55.72%	55.26%	55.71%
45	Potomac Edison Company	FE	48.95%	48.04%	48.83%	49.54%	50.91%	49.86%	50.88%	51.97%
46	Toledo Edison Company	FE	49.26%	48.49%	49.30%	49.89%	48.14%	47.55%	60.11%	61.88%
47	West Penn Power Company Great Plains Energy Inc.	FE	45.80%	44.79%	45.69%	46.38%	47.49%	47.01%	47.98%	48.84%
48 49	Kansas City Power & Light Company	GXP GXP	47.79% 50.47%	47.69% 50.46%	48.47% 51.33%	48.60% 51.54%	48.64% 51.54%	48.59% 51.43%	48.62%	47.98%
50	Idaho Power Co.	IDA	47.06%	47.08%	47.97%	48.28%	48.39%	51.43% 49.49%	52.30% 50.26%	51.32% 48.34%
51	Interstate Power and Light Company	LNT	47,49%	43.42%	45.23%	45.38%	45.85%	43.49%	44.48%	44.41%
52	Wisconsin Power and Light Company	LNT	49.68%	45.55%	46.18%	46.26%	46,63%	46.88%	47.39%	47.48%
53	NorthWestern Corporation	NWE	52.94%	52.22%	52.55%	51.81%	52.85%	51.23%	51.28%	51.96%
54	Oklahoma Gas and Electric Company	OGE	46.92%	44.57%	47.06%	47.47%	44.84%	44.67%	45.85%	43.37%
55 50	Otter Tail Power Company	OTTR	50.20%	50.68%	52.40%	52.80%	46.28%	47.63%	47.65%	47.31%
56 57	Arizona Public Service Company	PNW	42.46%	41.57%	42.68%	44.33%	42.61%	42.38%	44.06%	44.16%
57 58	Portland General Electric Company South Carolina Electric & Gas Co.	POR SCG	56.69% 46.54%	55.14% 46.53%	53.36% 47.15%	50.79% 45.64%	51.30% 46.10%	49.57%	49.63%	48.22%
59	Alabama Power Company	SO.	50.70%	50.66%	47.15% 49.72%	45.64% 49.90%	46.10% 50.14%	46.32% 49.54%	46.92% 50.09%	45.56% 50.30%
60	Georgia Power Company	so	47.83%	48.25%	48.90%	49.21%	46.58%	48.32%	50.05%	50.30%
61	Gulf Power Company	so	48.47%	49.70%	46.31%	46.15%	47.16%	47.38%	49.42%	48.69%
62	Mississippi Power Company	so	52.38%	53.52%	53.91%	54.18%	48.72%	54.81%	58.28%	58.13%
63	Tampa Electric Company	TE	46.85%	47.15%	47.54%	44.95%	44.79%	44.92%	46.01%	46.43%
64	Kansas Gas and Electric Company	WR	28.01%	27.35%	22.33%	30.27%	30.46%	34.09%	34.92%	37.78%
65 66	Westar Energy (KPL)	WR	40.52%	40.74%	44.42%	42.83%	43.10%	43.34%	41.34%	41.59%
66 67	Northern States Power Company - MN Northern States Power Company - WI	XEL XEL	47.11% 44.82%	47.16%	47.51%	45.68%	46.46%	47.46%	47.96%	45.38%
68	Public Service Company of Colorado	XEL	43.21%	44.99% 43.49%	47.08% 43.88%	42.94% 45.79%	43.58% 43.47%	44.23% 43.62%	44.71% 44.17%	45.94% 44.34%
69	Southwestern Public Service Company	XEL	46.38%	46.19%	47.90%	46.08%	46.80%	47.52%	44.17% 45.76%	44.34% 47.14%
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Proxy Group Capital Structure

2						% Prefeп	ed Equity				
3	Company	Ticker	2014Q4	2014Q3	2014Q2	2014Q1	2013Q4	2013Q3	2013Q2	2013Q1	Average
4	ALLETE, Inc.	ALE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
5	Alliant Energy Corporation	LNT	2.61%	2.79%	2.84%	2.85%	2.88%	3.05%	3.16%	3.20%	2.92%
6	Ameren Corporation	AEE	1.15%	1.20%	1.22%	1.28%	1.26%	1.25%	1.27%	1.27%	1.24%
7	American Electric Power Company, Inc.	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
8	Avista Corporation	AVA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9	Black Hills Corporation	BKH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
10	CenterPoint Energy, Inc.	CNP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
11	CMS Energy Corporation	CMS	0.36%	0.36%	0.38%	0.39%	0.40%	0.40%	0.41%	0.49%	0.40%
12	Consolidated Edison, Inc.	ED	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
13	Dominion Resources, Inc.	D	0.00%	0.71%	0.71%	0.71%	1.43%	1.44%	1.50%	1.51%	1.00%
14	DTE Energy Company	DTE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
15	Duke Energy Corporation	DUK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
16	Empire District Electric Company	EDE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
17	Eversource Energy	ES	0.76%	0.77%	0.77%	0.79%	0.80%	0.81%	0.81%	0.82%	0.79%
18	FirstEnergy Corp.	FE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
19	Great Plains Energy Inc.	GXP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
20	IDACORP, Inc.	IDA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
21	Northwestern Corporation	NWE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
22	OGE Energy Corp.	OGE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
23	Otter Tail Corporation	OTTR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
24	Pinnacle West Capital Corporation	PNW	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
25	Portland General Electric Company	POR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
26	SCANA Corporation	SCG	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
27	Southern Company	so	3.18%	3.15%	3.31%	3.34%	3.40%	3.39%	3.37%	2.97%	3.26%
28	TECO Energy, Inc.	TE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
29	Westar Energy, Inc.	WR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
30	Xcel Energy Inc.	XEL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
31	Mean		0.30%	0.33%	0.34%	0.35%	0.38%	0.38%	0.39%	0.38%	0.36%
32	Minimum		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
33	Maximum		3.18%	3.15%	3.31%	3.34%	3.40%	3.39%	3.37%	3.20%	3.26%

1	Sportating Company Suprair Structure									
2 3	Operating Company	Doront	201404	201402	201402	% Prefer		204222	004000	001001
3	Operating Company	Parent	2014Q4	2014Q3	2014Q2	2014Q1	2013Q4	2013Q3	2013Q2	2013Q1
4	Ameren Illinois Company	AEE	1.26%	1.36%	1.38%	1.48%	1.44%	1.47%	1.49%	1.49%
5	Union Electric Company	AEE	1.04%	1.03%	1.05%	1.09%	1.08%	1.04%	1.05%	1.05%
6	AEP Texas Central Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7	AEP Texas North Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
8	Appalachian Power Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9	Indiana Michigan Power Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
10	Kentucky Power Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
11	Kingsport Power Company	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
12	Ohio Power Company	AEP	0.00%	0,00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
13 14	Public Service Company of Oklahoma	AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
15	Southwestern Electric Power Company Wheeling Power Company	AEP AEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
16	ALLETE (Minnesota Power)	ALE	0.00% 0.00%	0.00% 0.00%	0.00% 0.00%	0.00% 0.00%	0.00% 0.00%	0.00% 0.00%	0.00%	0.00%
17	Superior Water, Light and Power Company	ALE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00% 0.00%	0.00% 0.00%
18	Avista Corporation	AVA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
19	Black Hills Colorado Electric Utility Company	вкн	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
20	Black Hills Power, Inc.	вкн	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
21	Consumers Energy Company	CMS	0.36%	0.36%	0.38%	0.39%	0.40%	0.40%	0.41%	0.49%
22	CenterPoint Energy, Inc.	CNP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
23	Virginia Electric and Power Company	D	0.00%	0.71%	0.71%.	0.71%	1.43%	1.44%	1.50%	1.51%
24	DTE Electric Company	DTE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
25	Duke Energy Carolinas, LLC	DUK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
26	Duke Energy Florida, Inc.	DUK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
27	Duke Energy Indiana, Inc.	DUK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
28	Duke Energy Kentucky, Inc.	DŲK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
29	Duke Energy Ohio, Inc.	DUK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
30	Duke Energy Progress, Inc.	DUK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
31	Consolidated Edison Company of New York,	ED	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
32	Orange and Rockland Utilities, Inc.	ED	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
33	Pike County Light and Power Company	ED	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
34 35	Rockland Electric Company	ED	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
36	Empire District Electric Company Connecticut Light and Power Company	EDE ES	0.00% 2.06%	0.00% 2.07%	0.00% 2.05%	0.00% 2.17%	0.00%	0.00%	0.00%	0.00%
37	NSTAR Electric Company	ES	1.00%	1.02%	1.05%	0.99%	2.19% 1.01%	2.21% 1.02%	2.17% 1.05%	2.18% 1.11%
38	Public Service Company of New Hampshire	ES	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
39	Western Massachusetts Electric Company	ES	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
40	Cleveland Electric Illuminating Company	FE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
41	Jersey Central Power & Light Company	FE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
42	Monongahela Power Company	FE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
43	Ohio Edison Company	FE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
44	Pennsylvania Electric Company	FE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
45	Potomac Edison Company	FE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
46	Toledo Edison Company	FE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
47	West Penn Power Company	FE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
48	Great Plains Energy Inc.	GXP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
49	Kansas City Power & Light Company	GXP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
50	Idaho Power Co.	IDA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
51	Interstate Power and Light Company	LNT	5.21%	5.58%	5.67%	5.69%	5.76%	6.10%	6.32%	6.41%
52	Wisconsin Power and Light Company	LNT	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
53	NorthWestern Corporation	NWE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
54 55	Oklahoma Gas and Electric Company	OGE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
55 56	Otter Tail Power Company Arizona Public Service Company	OTTR PNW	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
57	Portland General Electric Company	POR	0.00% 0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
58	South Carolina Electric & Gas Co.	SCG	0.00%	0.00% 0.00%	0.00% 0.00%	0.00%	0.00% 0.00%	0.00%	0.00% 0.00%	0.00%
59	Alabama Power Company	SO	5.34%	5.34%	5,57%	0.00% 5.59%	5.62%	0.00% 5.60%	0.00% 5.66%	0.00% 5.68%
60	Georgia Power Company	so	1.32%	1.36%	1.38%	1.39%	1.46%	1.41%	1.41%	5.68% 1.41%
61	Gulf Power Company	so	5.31%	5.16%	5.57%	5.61%	5.74%	5.70%	5.55%	3.91%
62	Mississippi Power Company	so	0.75%	0.76%	0.70%	0.77%	0.78%	0.86%	0.88%	0.88%
63	Tampa Electric Company	TE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
64	Kansas Gas and Electric Company	WR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
65	Westar Energy (KPL)	WR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
66	Northern States Power Company - MN	XEL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
67	Northern States Power Company - WI	XEL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
68	Public Service Company of Colorado	XEL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
69	Southwestern Public Service Company	XEL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Recently Authorized ROEs for Vertically-Integrated Electric Utilities

PNM Exhibit RBH-11

Is contained in the following 1 page.

2013-2015 Reported Authorized Returns on Equity, Vertically Integrated Electric Utitlity Rate Cases

		2010-2013 Nepolied Additionized Net	Parent	, vertically integrated Liectric	Ollully Nate Cases		
			Company			,	Authorized
2	State	Utility	Ticker	Case Identification	Date Authorize	d	ROE
3	Missouri	Kansas City Power & Light	GXP	C-ER-2012-0174	1/9/2013		9.70
4	Missouri	KCP&L Greater Missouri Op Co	GXP	C-ER-2012-0175 (MPS)	1/9/2013		9.70
5 6	Missouri Indiana	KCP&L Greater Missouri Op Co	GXP	C-ER-2012-0175 (L&P)	1/9/2013		9.70
7	Louisiana	Indiana Michigan Power Co. Southwestern Electric Power Co	AEP AEP	Ca-44075 D-U-32220	2/13/2013 2/27/2013		10.20 10.00
8	Idaho	Avista Corp.	AVA	C-AVU-E-12-08	3/27/2013		9.80
9	Michigan	Consumers Energy Co.	CMS	C-U-17087	5/15/2013		10,30
10	North Carolina	Duke Energy Progress Inc.	DUK	D-E-2, Sub 1023	5/30/2013		10.20
11	Hawaii	Maui Electric Company Ltd	HE	D-2011-0092	5/31/2013		9.00
12	Arizona	Tucson Electric Power Co.	FTS	D-E-01933A-12-0291	6/11/2013		10.00
13	Washington	Puget Sound Energy Inc.	-	D-UE-130137	6/25/2013		9.80
14	Minnesota	Northern States Power Co MN	XEL	D-E-002/GR-12-961	8/8/2013		9.83
15	Connecticut	United Illuminating Co.	UIL	D-13-01-19	8/14/2013		9.15
16	South Carolina	Duke Energy Carolinas LLC	DUK	D-2013-59-E	9/11/2013		10.20
17	Florida	Tampa Electric Co.	TE	D-130040-EI	9/11/2013		10.25
18	North Carolina	Duke Energy Carolinas LLC	DUK	D-E-7, Sub 1026	9/24/2013		10.20
19	Texas	Southwestern Electric Power Co	AEP	D-40443	10/3/2013		9.65
20	Wisconsin Kansas	Wisconsin Public Service Corp.	TEG	D-6690-UR-122 (Elec)	11/6/2013		10.20
21 22	Virginia	Westar Energy Inc.	WR D	D-13-WSEE-629-RTS	11/21/2013		10.00
23	Florida	Virginia Electric & Power Co. Gulf Power Co.	\$O	C-PUE-2013-00020 D-130140-El	11/26/2013 12/3/2013		10.00 10.25
24	Washington	PacifiCorp	BRK.A	D-130140-E1 D-UE-130043	12/4/2013		9.50
25	Wisconsin	Northern States Power Co - WI	XEL	D-4220-UR-119 (Elec)	12/5/2013		10.20
26	Oregon	Portland General Electric Co.	POR	D-UE-262	12/9/2013		9.75
27	Louisiana	Entergy Gulf States LA LLC	ETR	D-U-32707	12/16/2013		9.95
28	Louisiana	Entergy Louisiana LLC	ETR	D-U-32708	12/16/2013		9.95
29	Nevada	Sierra Pacific Power Co.	BRK.A	D-13-06002	12/16/2013		10.12
30	Arizona	UNS Electric Inc.	FTS	D-E-04204A-12-0504	12/17/2013		9.50
31	Georgia	Georgia Power Co.	SO	D-36989	12/17/2013		10.95
32	Oregon	PacifiCorp	BRK.A	D-UE-263	12/18/2013		9.80
33	Michigan	Upper Peninsula Power Co.	-	C-U-17274	12/19/2013		10.15
34	Arkansas	Entergy Arkansas Inc.	ETR	D-13-028-U ¹	12/30/2013		9.50
35	North Dakota	Northern States Power Co MN	XEL	C-PU-12-813	2/26/2014		9.75
36	New Mexico	Southwestern Public Service Co	XEL	C-12-00350-UT	3/26/2014		9.96
37	Texas	Entergy Texas Inc.	ETR	D-41791	5/16/2014		9.80
38	Wisconsin	Wisconsin Power and Light Co	LNT	D-6680-UR-119 (Elec)	6/6/2014		10.40
39 40	Louisiana	Entergy Louisiana LLC	ETR BKH	D-UD-13-01	7/10/2014		9.95
41	Wyoming Vermont	Cheyenne Light Fuel Power Co. Green Mountain Power Corp.	ВКП	D-20003-132-ER-13 D-8190, 8191	7/31/2014 8/25/2014		9.90 9.60
42	Utah	PacifiCorp	BRK.A	D-13-035-184	8/29/2014		9.80
43	Florida	Florida Public Utilities Co.	CPK	D-140025-El	9/15/2014		10,25
44	Nevada	Nevada Power Co.	BRK.A	D-14-05004	10/9/2014		9,80
45	Illinois	MidAmerican Energy Co.	BRK.A	D-14-0066	11/6/2014		9.56
46	Wisconsin	Wisconsin Public Service Corp.	WEC	D-6690-UR-123 (Elec)	11/6/2014		10,20
47	Wisconsin	Wisconsin Electric Power Co.	WEC	D-05-UR-107 (WEP-Élec)	11/14/2014		10,20
48	Virginia	Appalachian Power Co.	AEP	C-PUE-2014-00026	11/26/2014		9.70
49	Wisconsin	Madison Gas and Electric Co.	MGEE	D-3270-UR-120 (Elec)	11/26/2014		10.20
50	Oregon	Portland General Electric Co.	POR	D-UE-283	12/4/2014		9.68
51	Mississippi	Entergy Mississippi Inc.	ETR	D-2014-UN-0132	12/11/2014		10.07
52	Wisconsin	Northern States Power Co - WI	XEL	D-4220-UR-120 (Elec)	12/12/2014		10.20
53	Colorado	Black Hills Colorado Electric	BKH	D-14AL-0393E	12/18/2014		9.83
54 ==	Wyoming Colorado	PacifiCorp	BRK.A	D-20000-446-ER-14	1/23/2015		9.50
55 56		Public Service Co. of CO PacifiCorp	XEL	D-14AL-0660E	2/24/2015		9.83
56 57	Washington Minnesota	Northern States Power Co MN	BRK.A XEL	D-UE-140762 D-E-002/GR-13-868	3/25/2015 3/26/2015		9.50
58	Michigan	Wisconsin Public Service Corp.	WEC	C-U-17669	4/23/2015		9.72 10.20
59	Missouri	Union Electric Co.	AEE	C-ER-2014-0258	4/29/2015		9.53
60	West Virginia	Appalachian Power Co.	AEP	C-14-1152-E-42T	5/26/2015		9.75
	ŭ						
61	Source: SNL Financial				Aver	rage	9.90
62						dian	9.87
63	Note:				Minin	num	9.00
64		aring issued Aug. 15, 2014, the Arkar	isas PSC ame	nded its authorized ROE for	**		40.05
64	Entergy to 9.5%, from 9	1.3 /0			Maxin	num	10.95

DuPont Analysis

PNM Exhibit RBH-12

Is contained in the following 12 pages.

			TO THE OWNER OF THE OWNER OWNER OF THE OWNER OWN				
2	Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Change in Revenue/Net Plant
3	ALE	2006	767.10	921.60	83.24%		
4	ALE	2007	841.70	1104.50	76.21%	19.85%	-8.44%
5	ALE	2008	801,00	1387.30	57.74%	25.60%	-24,23%
6	ALE	2009	759.10	1622.70	46.78%	16,97%	-18.98%
7	ALE	2010	907.00	1805.60	50.23%	11.27%	7.38%
8	ALE	2011	928.20	1982.70	46.81%	9.81%	-6.80%
9	ALE	2012	961.20	2347.60	40.94%	18.40%	-12.54%
10	ALE	2013	1018.40	2576.50	39.53%	9.75%	-3.46%
11	ALE	2014	1136.80	3286.40	34.59%	27.55%	-12.49%
12	ALE	2015	1340.00	3565,00	37.59%	8.48%	8.66%
13	ALE	2016	1440.00	3640.00	39.56%	2.10%	5.25%
14	ALE	2018-2020	1700.00	3975.00	42.77%	11.50%	13.78%
15	LNT	2005	3279.60	4866.20	67.40%	11.50%	13.70%
16	LNT	2006	3359.40	4944.90		4 600/	0.000/
		2007			67.94%	1.62%	0.80%
17	LNT	2007	3437.60	4679.90	73.45%	-5.36%	8.12%
18	LNT		3681.70	5353,50	68.77%	14.39%	-6.38%
19	LNT	2009	3432.80	6203.00	55.34%	15.87%	-19.53%
20	LNT	2010	3416.10	6730,60	50.75%	8.51%	-8.29%
21	LNT	2011	3665,30	7037.10	52.09%	4.55%	2.62%
22	LNT	2012	3094.50	7838.00	39.48%	11,38%	-24.20%
23	LNT	2013	3276.80	7147.30	45.85%	-8.81%	16.12%
24	LNT	2014	3350.30	6442.00	52.01%	-9.87%	13.44%
25	LNT	2015	3400.00	8000.00	42.50%	24.19%	-18.28%
26	LNT	2016	3500.00	8000,00	43.75%	0.00%	2.94%
27	LNT	2018-2020	4000.00	9000.00	44.44%	12.50%	4.58%
28	AEE	2005	6780.00	13572.00	49.96%		
29	AEE	2006	6880,00	14286.00	48.16%	5.26%	-3.60%
30	AEE	2007	7546.00	15069.00	50.08%	5.48%	3.98%
31	AEE	2008	7839.00	16567.00	47.32%	9.94%	-5.51%
32	AEE	2009	7090.00	17610.00	40.26%	6.30%	-14.91%
33	AEE	2010	7638.00	17853.00	42.78%	1.38%	6.26%
34	AEE	2011	7531.00	18127.00	41.55%	1.53%	-2.89%
35	AEE	2012	6828.00	16096.00	42.42%	-11.20%	2.11%
36	AEE	2013	5838.00	16205.00	36.03%	0.68%	-15.07%
37	AEE	2014	6053.00	17424.00	34.74%	7.52%	
38	AEE	2015	6250.00	18525.00	33.74%	6.32%	-3.57%
39	AEE	2015	6500.00				-2.88%
40		2018-2020		19350.00	33.59%	4.45%	-0.43%
	AEE	2010-2020	7400.00	21500.00	34.42%	16.06%	2.02%
41	AEP		14555.00	21684.00	67.12%	4.500/	4.5504
42	AEP	2003	14545.00	22029,00	66.03%	1.59%	-1.63%
43	AEP	2004	14057.00	22801.00	61.65%	3.50%	-6.63%
44	AEP	2005	12111.00	24284.00	49.87%	6.50%	-19.11%
45	AEP	2006	12622.00	26781.00	47.13%	10.28%	-5.50%
46	AEP	2007	13380.00	29870.00	44.79%	11.53%	-4.96%
47	AEP	2008	14440.00	32987.00	43.77%	10.44%	-2.28%
48	AEP	2009	13489.00	34344.00	39.28%	4.11%	-10.28%
49	AEP	2010	14427.00	35674.00	40.44%	3.87%	2.97%
50	AEP	2011	15116.00	36971.00	40.89%	3.64%	1.10%
51	AEP	2012	14945.00	38763.00	38.55%	4.85%	-5.70%
52	AEP	2013	15357.00	40997.00	37.46%	5.76%	-2.84%
53	AEP	2014	17020.00	44117.00	37.97%	7.61%	1.38%
54	AEP	2015	17400.00	46650.00	37.30%	5.74%	-1.78%
55	AEP	2016	17750.00	48475.00	36.62%	3.91%	-1.83%
56	AEP	2018-2020	20500.00	53900.00	38.03%	15.54%	1.97%
57	AVA	2005	1359.60	1900.80	71.53%		
58	AVA	2006	1506.30	1980.10	76.07%	4.17%	6.35%
59	AVA	2007	1417,80	2351.30	60.30%	18.75%	-20.73%
60	AVA	2008	1676.80	2492.20	67.28%	5.99%	11.58%
61	AVA	2009	1512.60	2607.00	58.02%	4.61%	-13.76%
62	AVA	2010	1558.70	2714.20	57.43%	4.11%	-1.02%
63	AVA	2011	1619.80	2860.80	56.62%	5.40%	-1.41%
64	AVA	2012	1547.00	3023.70	51.16%	5.69%	-9.64%
65	AVA	2013	1618.50	3202.40	50.54%	5.91%	-1.22%
66	AVA	2014	1472.60	3620.00	40.68%	13.04%	-1.22 %
67	AVA	2015	1575.00	3860.00	40.80%	6.63%	
68		2015	1650.00	4065.00			0.30%
	AVA				40.59%	5.31%	-0.52%
69 70	AVA	2018-2020 2005	1925.00	4625.00	41.62%	19.82%	2.01%
70 71	BKH		1391.60	1435.40	96.95%	4 4 7001	F
71	BKH	2006	656,90	1646.40	39.90%	14.70%	-58.85%
72	BKH	2007	695.90	1823,50	38.16%	10.76%	-4.35%
73	BKH	2008	1005.80	2022.20	49.74%	10.90%	30.33%
74	BKH	2009	1269.60	2160.70	58.76%	6.85%	18.14%

						, , , , , , , , , , , , , , , , , , ,	Change in
2	Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Revenue/Net Plant
3	BKH	2010	1307.30	2495.40	52.39%	15.49%	-10.84%
4	BKH	2011	1272.20	2789.60	45.61%	11.79%	-12.95%
5 6	BKH BKH	2012 2013	1173.90 1275,90	2742.70 2990.30	42.80%	-1.68%	-6.15%
7	BKH	2013	1393.60	3239.40	42.67% 43.02%	9.03% 8.33%	-0.31% 0.83%
8	BKH	2015	1420.00	3540.00	40.11%	9.28%	-6.76%
9	BKH	2016	1460.00	3830.00	38.12%	8.19%	-4.97%
10	вкн	2018-2020	1620.00	4400.00	36.82%	24.29%	-8.21%
11	CNP	2005	9722.00	8492.00	114.48%		
12	CNP	2006	9319.00	9204.00	101.25%	8.38%	-11.56%
13	CNP	2007	9623.00	9740.00	98.80%	5.82%	-2.42%
14	CNP	2008	11322.00	10296.00	109.97%	5.71%	11.30%
15 16	CNP CNP	2009 2010	8281.00 8785.00	10788.00 11732.00	76.76% 74.88%	4.78%	-30.19%
17	CNP	2011	8450.00	12402.00	68.13%	8.75% 5.71%	-2.45% -9.01%
18	CNP	2012	7452.00	13597.00	54.81%	9.64%	-19.56%
19	CNP	2013	8106.00	9593.00	84.50%	-29,45%	54.18%
20	CNP	2014	9226.00	10502.00	87.85%	9.48%	3.97%
21	CNP	2015	8400.00	11325.00	74.17%	7.84%	-15.57%
22	CNP	2016	8600.00	12075.00	71.22%	6.62%	-3.98%
23	CNP	2018-2020	10000.00	14000.00	71.43%	23.62%	-3.70%
24	CMS	2005	6288.00	7845.00	80.15%		
25 26	CMS CMS	2006 2007	6810.00 6519.00	7976.00 8728.00	85.38% 74.69%	1.67% 9.43%	6.52%
27	CMS	2007	6821.00	9190.00	74.09% 74.22%	5.29%	-12.52% -0.63%
28	CMS	2009	6205.00	9682.00	64.09%	5.35%	-13.65%
29	CMS	2010	6432.00	10069.00	63.88%	4.00%	-0.33%
30	CMS	2011	6503.00	10633,00	61.16%	5.60%	-4.26%
31	CMS	2012	6312.00	11551.00	54.64%	8.63%	-10.65%
32	CMS	2013	6566.00	12246.00	53.62%	6.02%	-1.88%
33	CMS	2014	7179.00	13412.00	53.53%	9.52%	-0.17%
34 35	CMS CMS	2015 2016	6900.00 7050.00	14325.00	48.17%	6.81%	-10.01%
36	CMS	2018-2020	7900.00	15225.00 17200.00	46.31% 45.93%	6.28% 20.07%	-3.87% -4.64%
37	ED	2005	11690.00	17200.00	68.31%	20.07 %	-4.04%
38	ED	2006	12137.00	18445.00	65.80%	7.79%	-3.68%
39	ED	2007	13120.00	19914.00	65.88%	7.96%	0.13%
40	ED	2008	13583.00	20874.00	65.07%	4.82%	-1.23%
41	ED	2009	13032.00	22464.00	58.01%	7.62%	-10.85%
42	ED	2010	13325.00	23863.00	55.84%	6.23%	-3.75%
43	ED	2011	12938.00	25093.00	51.56%	5.15%	-7.66%
44 45	ED ED	2012 2013	12188.00 12381.00	26939.00 28436.00	45.24% 43.54%	7.36%	-12.25%
46	ED	2013	12919.00	29827.00	43.31%	5.56% 4.89%	-3.76% -0.52%
47	ED	2015	13100.00	31575.00	41.49%	5.86%	-4.21%
48	ED	2016	13500.00	33525.00	40.27%	6.18%	-2.94%
49	ED	2018-2020	14750.00	38700.00	38.11%	22,57%	-8.13%
50	D	2005	18041.00	28940.00	62.34%		
51	D	2006	16482.00	29382.00	56.10%	1.53%	-10.02%
52	D	2007	15674.00	21352.00	73.41%	-27.33%	30.86%
53 54	D	2008	16290.00	23274.00	69.99%	9.00%	-4.65%
54 55	D D	2009 2010	15131.00 15197.00	25592.00 26713.00	59.12% 56.89%	9.96% 4.38%	-15.53% -3.78%
56	D	2010	14379.00	29670.00	48.46%	4.38% 11.07%	-3.78% -14.81%
57	D	2012	13093.00	30773.00	42.55%	3.72%	-12.21%
58	D	2013	13120.00	32628,00	40.21%	6.03%	-5.49%
59	D	2014	12436.00	36270.00	34.29%	11.16%	-14.73%
60	D	2015	12300.00	40425,00	30.43%	11.46%	-11.26%
61	D	2016	12600,00	44250.00	28.47%	9.46%	-6.42%
62	D	2018-2020	13500.00	51700.00	26.11%	27.89%	-14.18%
63 64	DTE DTE	2005 2006	9022.00 9022.00	10830.00	83.31% 78.70%	£ 700/.	E 400/
65	DTE	2006	9022.00 8861.00	11451.00 11408.00	78.79% 77.67%	5.73% -0.38%	-5.42% -1.41%
66	DTE	2008	9329.00	12231.00	76.27%	-0.36% 7.21%	-1.41%
67	DTE	2009	8014.00	12431.00	64.47%	1.64%	-15.48%
68	DTE	2010	8557.00	12992,00	65.86%	4.51%	2.17%
69	DTE	2011	8897.00	13746.00	64.72%	5.80%	-1.73%
70	DTE	2012	8791,00	14684.00	59.87%	6.82%	-7.50%
71	DTE	2013	9661.00	15800.00	61.15%	7.60%	2.13%
72	DTE	2014	12301.00	16820.00	73.13%	6.46%	19.61%
73 74	DTE DTE	2015 2016	11200.00 11700.00	17950.00	62.40% 61.50%	6.72%	-14.68%
,4	DIE	2010	11700.00	19025.00	61.50%	5.99%	-1.44%

2	Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Change in Revenue/Net Plant
3	DTE	2018-2020	13400.00	22000.00	60.91%	22.56%	-2,38%
4	DUK	2006	10607.00	41447.00	25.59%		
5	DUK	2007	12720.00	31110.00	40.89%	-24.94%	59.77%
6	DUK	2008	13207.00	34036.00	38.80%	9.41%	-5.10%
7	DUK	2009	12731.00	37950.00	33.55%	11,50%	-13.55%
8	DUK	2010	14272.00	40344.00	35.38%	6.31%	5.45%
9	DUK	2011	14529.00	42661.00	34.06%	5.74%	-3.73%
10	DUK	2012	19624.00	68558.00	28.62%	60.70%	
11	DUK	2013	24598.00	69490.00	35.40%		-15.95%
12	DUK	2014	23925.00			1.36%	23.67%
				70046.00	34.16%	0.80%	-3.51%
13	DUK	2015	24250.00	74050.00	32.75%	5.72%	-4.12%
14	DUK	2016	25250.00	78500.00	32.17%	6.01%	-1.78%
15	DUK	2018-2020	28750.00	90700.00	31.70%	22.48%	-3.21%
16	EDE	2002	305.90	794.10	38.52%		
17	EDE	2003	325.50	833.90	39.03%	5.01%	1.33%
18	EDE	2004	325.50	857.00	37.98%	2.77%	-2.70%
19	EDE	2005	386.20	896.00	43.10%	4.55%	13.48%
20	EDE	2006	413.50	1031.00	40.11%	15.07%	-6.95%
21	EDE	2007	490.20	1178.90	41.58%	14.35%	3.68%
22	EDE	2008	518.20	1342.80	38.59%	13.90%	-7.19%
23-	EDE	2009	497.20	1459.00	34.08%	8.65%	-11.69%
24	EDE	2010	541.30	1519.10	35.63%	4.12%	4.56%
25	EDE	2011	576.90	1563.70	36.89%	2.94%	3.54%
26	EDE	2012	557.10	1657.60	33.61%	6.00%	-8.90%
27	EDE	2013	594.30	1751.90	33.92%	5.69%	0.94%
28	EDE	2014	652,30	1910.30	34.15%	9.04%	0.66%
29	EDE	2015	665.00	2000.00	33.25%	4.70%	-2.63%
30	EDE	2016	710.00	2020.00	35.15%	1.00%	5.71%
31	EDE	2018-2020	830.00	2125.00	39.06%	6.25%	
32	ES	2018-2020	5216.30			0.25%	17.47%
		2002		4728.40	110.32%	44.0404	4 = = = 1
33	ES		6069.20	5429.90	111.77%	14.84%	1.32%
34	ES	2004	6686.70	5864.20	114.03%	8.00%	2.01%
35	ES	2005	5507.30	6417.20	85.82%	9.43%	-24.74%
36	ES	2006	6884.40	6242.20	110.29%	-2.73%	28.51%
37	ES	2007	5822.20	7229.90	80.53%	15.82%	-26.98%
38	ES	2008	5800,10	8207.90	70.66%	13.53%	-12.25%
39	ES	2009	5439.40	8840.00	61.53%	7.70%	-12.92%
40	ES	2010	4898.20	9567.70	51.20%	8.23%	-16.80%
41	ES	2011	4465.70	10403.00	42.93%	8.73%	-16.15%
42	ES	2012	6273.80	16605.00	37.78%	59.62%	-11.98%
43	ES	2013	7301.20	17576.00	41.54%	5.85%	9.95%
44	ES	2014	7741.90	18647.00	41.52%	6.09%	-0.05%
45	ES	2015	8150.00	19900.00	40.95%	6.72%	-1.36%
46	ES	2016	8300,00	21350.00	38.88%	7.29%	-5.08%
47	ES	2018-2020	9050.00	25500.00	35.49%	28.14%	-13.34%
48	FE	2005	11989.00	13998.00	85.65%		
49	FE	2006	11501.00	14667.00	78.41%	4.78%	-8.45%
50	FE	2007	12802.00	15383.00	83.22%	4.88%	6.13%
51	FE	2008	13627.00	17723.00	76.89%	15,21%	-7.61%
52	FE	2009	12712.00	19164.00	66.33%	8.13%	-13.73%
53	FE	2010	13339.00	19788.00	67.41%	3.26%	1.62%
54	FE	2011	16258.00	30337.00	53.59%	53.31%	-20.50%
55	FE	2012	15294.00	32903.00	46.48%	8.46%	-13.27%
56	FE	2013	14903.00	33252.00	44.82%		
57	FE	2014	15049.00	35783.00		1.06%	-3.58%
		2015			42.06%	7.61%	-6.16%
58	FE		15100.00	37100.00	40.70%	3.68%	-3.22%
59	FE	2016	15550.00	38400.00	40.49%	3.50%	-0.51%
60	FE	2018-2020	17000.00	42200.00	40.28%	13.75%	-1.02%
61	GXP	2002	1861.90	2604.10	71.50%		
62	GXP	2003	2149.50	2700.90	79.58%	3.72%	11.31%
63	GXP	2004	2464.00	2765.60	89.09%	2.40%	11.95%
64	GXP	2005	2604.90	2765.60	94.19%	0.00%	5.72%
65	GXP	2006	2675.30	3066.20	87.25%	10.87%	-7.37%
66	GXP	2007	3267,10	3444.50	94.85%	12.34%	8.71%
67	GXP	2008	1670.10	6081.30	27.46%	76.55%	-71.05%
68	GXP	2009	1965.00	6651.10	29.54%	9.37%	7.58%
69	GXP	2010	2255.50	6892.30	32.72%	3.63%	10.77%
70	GXP	2011	2318.00	7053,50	32.86%	2.34%	0.42%
71	GXP	2012	2309.90	7402.10	31.21%	4.94%	-5.04%
72	GXP	2013	2446.30	7746.40	31.58%	4.65%	1.20%
73	GXP	2014	2568.20	8279.60	31.02%	6.88%	-1.78%
74	GXP	2015	2650.00	8680.00	30.53%	4.84%	-1.76%
• •	5,4		2000.00	3330.00	55.5570	7.07/0	-1.37 /0

2	Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Change in Revenue/Net Plant
3	GXP	2016	2850.00	8835.00	32.26%	1.79%	5.66%
4	GXP	2018-2020	3200.00	9000.00	35.56%	3.69%	16.46%
5	IDA	2002	928.80	1906.50	48.72%		
6	IDA	2003	782.70	2088.30	37.48%	9.54%	-23.07%
7	IDA	2004	844.50	2209.50	38.22%	5.80%	1.98%
8	IDA	2005	859.50	2314.30	37.14%	4.74%	-2.83%
9	IDA	2006	926.30	2419.10	38.29%	4.53%	3.10%
10	IDA	2007	879.40	2616.60	33.61%	8.16%	-12.23%
11	IDA	2008	960.40	2758,20	34.82%	5.41%	
12		2009					3.60%
	IDA		1049.80	2917.00	35.99%	5.76%	3.36%
13	IDA	2010	1036.00	3161.40	32.77%	8.38%	-8.94%
14	IDA	2011	1026.80	3406.60	30.14%	7.76%	-8.02%
15	IDA	2012	1080.70	3536.00	30.56%	3.80%	1.40%
16	IDA	2013	1246.20	3665.00	34.00%	3.65%	11.26%
17	IDA	2014	1282.50	3833.50	33.46%	4.60%	-1.61%
18	IDA	2015	1295.00	4095.00	31.62%	6.82%	<i>-</i> 5. 4 7%
19	IDA	2016	1310.00	4300,00	30.47%	5.01%	-3.66%
20	IDA	2018-2020	1405.00	4975.00	28.24%	21.49%	-10.70%
21	NWE	2005	1165.80	1409.20	82.73%		141141
22	NWE	2006	1132.70	1491.90	75.92%	5.87%	-8.23%
23	NWE	2007	1200.10	1770.90	67.77%	18.70%	
24	NWE	2008	1260.80	1839.70			-10.74%
					68.53%	3.89%	1.13%
25	NWE	2009	1141.90	1964,10	58.14%	6.76%	-15.17%
26	NWE	2010	1110.70	2118.00	52.44%	7.84%	-9.80%
27	NWE	2011	1117.30	2213.30	50.48%	4.50%	-3.74%
28	NWE	2012	1070.30	2435.60	43.94%	10.04%	-12.95%
29	NWE	2013	1154.50	2690.10	42.92%	10.45%	-2.34%
30	NWE	2014	1204.90	3758.00	32.06%	39.70%	-25.29%
31	NWE	2015	1300.00	3920.00	33.16%	4.31%	3.43%
32	NWE	2016	1400.00	4070.00	34.40%	3.83%	3.72%
33	NWE	2018-2020	1575.00	4375.00	36.00%	11.61%	8.55%
34	OGE	2005	5948.20	3567.40	166.74%	11.0170	0.5570
35	OGE	2006	4005.60	3867.50	103.57%	8.41%	27 000/
	OGE	2007	3797.60				-37.88%
36		2007		4246.30	89.43%	9.79%	-13.65%
37	OGE		4070.70	5249.80	77.54%	23.63%	-13.30%
38	OGE	2009	2869.70	5911.60	48.54%	12.61%	-37.40%
39	OGE	2010	3716.90	6464.40	57.50%	9.35%	18.45%
40	OGE	2011	3915.90	7474.00	52.39%	15.62%	-8.88%
41	OGE	2012	3671.20	8344.80	43.99%	11.65%	-16.03%
42	OGE	2013	2867.70	6672.80	42.98%	-20.04%	-2.31%
43	OGE	2014	2453.10	6979.90	35.15%	4.60%	-18.22%
44	OGE	2015	2450.00	7245.00	33.82%	3.80%	-3.78%
45	OGE	2016	2650.00	7530.00	35.19%	3.93%	4.07%
46	OGE	2018-2020	3000.00	8300.00	36.14%	14.56%	6.88%
47	OTTR	2002	710.10	587.90	120.79%	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.0070
48	OTTR	2003	753.20	633.30	118.93%	7.72%	-1.53%
49	OTTR	2004	882.30	682,10	129.35%	7.71%	8.76%
		2005					
50	OTTR		1046.40	697.10	150.11%	2.20%	16.05%
51	OTTR	2006	1105.00	718.60	153.77%	3.08%	2.44%
52	OTTR	2007	1238.90	854.00	145.07%	18.84%	-5.66%
53	OTTR	2008	1311.20	1037.60	126.37%	21.50%	-12.89%
54	OTTR	2009	1039.50	1098.60	94.62%	5.88%	-25.12%
55	OTTR	2010	1119.10	1108.70	100.94%	0.92%	6.68%
56	OTTR	2011	1077.90	1077.50	100.04%	-2.81%	-0.89%
57	OTTR	2012	859.20	1049.50	81.87%	-2.60%	-18,16%
58	OTTR	2013	893.30	1167.00	76.55%	11.20%	-6.50%
59	OTTR	2014	799.30	1268.50	63.01%	8.70%	-17.68%
60	OTTR	2015	830.00	1350.00	61.48%	6.42%	-2.43%
61	OTTR	2016	900.00	1450.00	62.07%	7.41%	
		2018-2020					0.96%
62	OTTR		1240.00	1750.00	70.86%	29.63%	15.25%
63	PNW	2002	2637.30	6479.40	40.70%		_
64	PNW	2003	2817.90	7480.10	37.67%	15.44%	-7.45%
65	PNW	2004	2899.70	7535.50	38.48%	0.74%	2.15%
66	PNW	2005	2988.00	7577.10	39.43%	0.55%	2.48%
67	PNW	2006	3401.70	7881.90	43.16%	4.02%	9.44%
68	PNW	2007	3523.60	8436.40	41.77%	7.04%	-3.22%
69	PNW	2008	3367.10	8916.70	37.76%	5.69%	-9.59%
70	PNW	2009	3297.10	9257.80	35.61%	3.83%	-5.69%
71	PNW	2010	3263.60	9578.80			
					34.07%	3.47%	-4.33%
72	PNW	2011	3241.40	9962.30	32.54%	4.00%	-4.50%
73	PNW	2012	3301.80	10396.00	31.76%	4.35%	-2.39%
74	PNW	2013	3454.60	10889.00	31.73%	4.74%	-0.11%

4 PP 5 6 PP 7 8 PP 10 PP 11 PP 11 PP 11 PP 12 PP 13 PP 14 PP 15 PP 16 PP 17 PP 18 PP 19 PP 20 PP 22 SS S	PNW PNW POR	2014 2015 2016 2018-2020 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2010 2011 2011 2012 2013 2014 2015 2016 2017 2018 2018 2019 2010 2011 2011 2012 2013 2014 2015 2016 2017 2018 2018 2019 2010 2011 2011 2012 2013 2014 2015 2016 2017 2018 2019 2010 2011 2011 2012 2013 2014 2015 2016 2017 2018 2019 2010 2011 2011 2012 2013 2014 2015 2016 2017 2018 2019 2010 2011 2011 2012 2013 2014 2015 2016 2017 2018 2018 2019 2019 2010 2011 2011 2012 2013 2014 2015 2016 2016 2017 2016 2018 2019 2016 2018 2019 2016 2016 2016 2017 2016 2018 2019 2016 2016 2017 2016 2018 2019 2016 2016 2016 2017 2016 2016 2016 2016 2016 2007 2008 2009 2016 2009 2009 2009 2009 2009 2009 2009 200	3491.60 3600.00 3750.00 4400.00 1454.00 1454.00 1520.00 1743.00 1745.00 1804.00 1783.00 1813.00 1805.00 1810.00 1900.00 1975.00 2250.00 4777.00 4563.00 4621.00 5319.00 4237.00 4601.00 4409.00 4176.00 4495.00 4951.00 4600.00 4800.00 15355.00 11952.00 11952.00 11952.00 11952.00 113554.00 11356.00 115553.00	11194.00 11785.00 12530.00 14100.00 2275.00 2436.00 2718.00 3066.00 3301.00 3858.00 4133.00 4285.00 4392.00 4880.00 5679.00 6025.00 6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 112232.00 13100.00 14500.00 17750.00 24642.00 27534.00 29480.00 31092.00	31.19% 30.55% 29.93% 31.21% 63.91% 59.36% 55.92% 56.85% 52.86% 46.76% 43.14% 42.31% 41.10% 37.09% 33.46% 32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	2.80% 5.28% 6.32% 19.64% 7.08% 11.58% 12.80% 7.66% 16.87% 7.13% 3.68% 2.50% 11.11% 16.37% 6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50%	-1.68% -2.07% -2.03% 2.16% -7.12% -5.79% 1.66% -7.01% -11.54% -7.74% -1.92% -2.87% -9.75% -9.80% -2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96%
5 Pi Fi	PNW PNW POR	2016 2018-2020 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	3750.00 4400.00 1454.00 1446.00 1520.00 1743.00 1745.00 1804.00 1813.00 1813.00 1813.00 1805.00 1810.00 1975.00 2250.00 4777.00 4563.00 4621.00 5319.00 4237.00 4409.00 4176.00 4495.00 4951.00 4800.00 5550.00 10549.00 11251.00 13554.00 14356.00	12530.00 14100.00 2275.00 2436.00 2718.00 3066.00 3301.00 3858.00 4133.00 4285.00 4392.00 4880.00 5679.00 6025.00 6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	29.93% 31.21% 63.91% 59.36% 55.92% 56.85% 52.86% 46.76% 43.14% 42.31% 41.10% 37.09% 33.46% 32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	6.32% 19.64% 7.08% 11.58% 12.80% 7.66% 16.87% 7.13% 3.68% 2.50% 11.11% 16.37% 6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50%	-2.03% 2.16% -7.12% -5.79% 1.66% -7.01% -11.54% -7.74% -1.92% -2.87% -9.75% -9.80% -2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
6 P P P 8 P P 10 P P 11 P P 12 P P 13 P P 16 P P 17 P P 18 P P 19 P P 20 P P 21 S 22 S S S 24 S S S 25 S S S S S S S S S S S S S S S	PNW POR POR POR POR POR POR POR POR POR POR	2018-2020 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2018-2020 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	4400.00 1454.00 1446.00 1520.00 1743.00 1745.00 1804.00 1805.00 1813.00 1805.00 1810.00 1975.00 2075.00 2250.00 4777.00 4563.00 4621.00 5319.00 4409.00 4409.00 4476.00 4495.00 4951.00 4800.00 5550.00 10549.00 11251.00 11902.00 13554.00 14356.00	14100.00 2275.00 2436.00 2718.00 3066.00 3301.00 3858.00 4133.00 4285.00 4392.00 4880.00 5679.00 6025.00 6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	31.21% 63.91% 59.36% 59.36% 55.92% 56.85% 52.86% 46.76% 43.14% 42.31% 41.10% 37.09% 33.46% 32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	19.64% 7.08% 11.58% 12.80% 7.66% 16.87% 7.13% 3.68% 2.50% 11.11% 16.37% 6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50%	2.16% -7.12% -5.79% 1.66% -7.01% -11.54% -7.74% -1.92% -2.87% -9.75% -9.80% -2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96%
7 8 9 P P 10 P P 11 12 13 14 15 16 P P P P S S S S S S S S S S S S S S S	POR	2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2010 2011 2012 2013 2014 2015 2016 2010 2010 2011 2012 2013 2014 2015 2016 2016 2017 2018 2019 2010 2010 2011 2011 2012 2013 2014 2015 2016 2016 2017 2018 2019 2010 2010 2011 2011 2012 2013 2014 2015 2016 2016 2017 2018 2019 2010 2010 2011 2011 2012 2013 2014 2015 2016 2016 2017 2018 2019 2010 2010 2011 2011 2012 2013 2014 2015 2016 2016 2017 2018 2019 2010 2010 2011 2011 2015 2016 2016 2017 2018 2019 2010 2010 2011 2015 2016 2016 2017 2018 2018 2019 2019 2010 2011 2015 2016 2016 2017 2018 2019 2010 2011 2015 2016 2016 2017 2018 2019 2010 2010 2011 2015 2016 2016 2016 2017 2016 2016 2016 2016 2016 2016 2016 2016	1454.00 1446.00 1520.00 1743.00 1745.00 1804.00 1783.00 1813.00 1805.00 1810.00 1900.00 1975.00 2250.00 4777.00 4563.00 4621.00 5319.00 4409.00 4495.00 4495.00 4495.00 4495.00 15550.00 10549.00 11251.00 11902.00 13554.00 14356.00	2275.00 2436.00 2718.00 3066.00 3301.00 3858.00 4133.00 4285.00 4392.00 4880.00 5679.00 6025.00 6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	63.91% 59.36% 55.92% 56.85% 52.86% 46.76% 43.14% 42.31% 41.10% 37.09% 33.46% 32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	7.08% 11.58% 12.80% 7.66% 16.87% 7.13% 3.68% 2.50% 11.11% 16.37% 6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50%	-7.12% -5.79% 1.66% -7.01% -11.54% -7.74% -1.92% -2.87% -9.75% -9.80% -2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
8 P 9 P 10 P P 11 P P P 11 P P P 12 P P P 12 P P P 12 P P P P	POR POR POR POR POR POR POR POR POR POR	2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2005 2006 2007 2011 2012 2013 2014 2015 2016 2018-2020 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	1446.00 1520.00 1743.00 1745.00 1804.00 1783.00 1813.00 1813.00 1810.00 1900.00 1975.00 2250.00 4777.00 4563.00 4621.00 5319.00 4237.00 4601.00 4495.00 4495.00 4800.00 5550.00 10549.00 11251.00 13554.00 14356.00	2436.00 2718.00 3066.00 3301.00 3858.00 4133.00 4285.00 4392.00 4880.00 5679.00 6025.00 6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 27534.00 28361.00 29480.00 31092.00	59.36% 55.92% 56.85% 52.86% 46.76% 43.14% 42.31% 41.10% 37.09% 33.46% 32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	11.58% 12.80% 7.66% 16.87% 7.13% 3.68% 2.50% 11.11% 16.37% 6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50%	-5.79% 1.66% -7.01% -11.54% -7.74% -1.92% -2.87% -9.75% -9.80% -2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
9 P P 110 P P	POR POR POR POR POR POR POR POR POR POR	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	1520.00 1743.00 1743.00 1745.00 1804.00 1783.00 1813.00 1813.00 1810.00 1900.00 1975.00 2075.00 2250.00 4777.00 4563.00 4621.00 5319.00 4237.00 4601.00 4495.00 4495.00 4951.00 4800.00 5550.00 10549.00 11251.00 13554.00 14356.00	2718.00 3066.00 3301.00 3858.00 4133.00 4285.00 4392.00 4880.00 5679.00 6025.00 6025.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	55.92% 56.85% 52.86% 46.76% 43.14% 42.31% 41.10% 37.09% 33.46% 32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	11.58% 12.80% 7.66% 16.87% 7.13% 3.68% 2.50% 11.11% 16.37% 6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50%	-5.79% 1.66% -7.01% -11.54% -7.74% -1.92% -2.87% -9.75% -9.80% -2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
10 P 111 P 112 P 113 P 114 P 115 P 116 P 117 P 118 P 119 P 120 S 122 S 122 S 123 S 124 S 125 S 126 S 127 S 128 S 129 S 130 S 131 S 132 S 133 S 133 S 133 S 134 S 135 S 136 S 137 S 138 S 138 S 139 S 140 S 141 S 142 S 143 S 144 S 155 S 156 S 157 S 1	POR POR POR POR POR POR POR POR POR POR	2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	1743.00 1745.00 1804.00 1783.00 1813.00 1805.00 1810.00 1900.00 1975.00 2075.00 2250.00 4777.00 4563.00 4621.00 5319.00 4409.00 4416.00 4495.00 4951.00 4800.00 5550.00 10549.00 11251.00 13554.00 14356.00	3066.00 3301.00 3858.00 4133.00 4285.00 4392.00 4880.00 5679.00 6025.00 6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 27534.00 28361.00 29480.00 31092.00	56.85% 52.86% 46.76% 43.14% 42.31% 41.10% 37.09% 33.46% 32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	12.80% 7.66% 16.87% 7.13% 3.68% 2.50% 11.11% 16.37% 6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50%	1.66% -7.01% -11.54% -7.74% -1.92% -2.87% -9.75% -9.80% -2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
11 P 12 P 13 P 14 P 15 P 16 P 17 P 18 P 19 P 18 P 19 P 18 P 19 P 19 P 19	POR POR POR POR POR POR POR POR POR POR	2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	1745.00 1804.00 1783.00 1813.00 1813.00 1805.00 1810.00 1900.00 1975.00 2250.00 4777.00 4563.00 4621.00 5319.00 4237.00 4409.00 4176.00 4495.00 4951.00 4800.00 5550.00 10549.00 11251.00 13554.00 14356.00	3301.00 3858.00 4133.00 4285.00 4392.00 4880.00 5679.00 6025.00 6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	52.86% 46.76% 43.14% 42.31% 41.10% 37.09% 33.46% 32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	7.66% 16.87% 7.13% 3.68% 2.50% 11.11% 16.37% 6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50%	-7.01% -11.54% -7.74% -1.92% -2.87% -9.75% -9.80% -2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
12 P 13 P 14 P 15 P 16 P 17 P 18 P 19 P 20 P 21 S 22 S 22 S 23 S 24 S 25 S 26 S 27 S 28 S 30 S 31 S 32 S 33 S 34 S 35 S 36 S 37 S 38 S 39 S 30 S 31 S 32 S 33 S 34 S 35 S 36 S 37 S 38 S 39 S 30 S 31 S 32 S 33 S 34 S 35 S 36 S 37 S 38 S 39 S 30 S 31 S 32 S 33 S 34 S 35 S 36 S 37 S 38 S 39 S 30 S 31 S 32 S 33 S 34 S 35 S 36 S 37 S 38 S 39 S 30 S 31 S 32 S 33 S 34 S 35 S 36 S 37 S 38 S 39 S 30 S 30 S 31 S 32 S 33 S 35 S 36 S 37 S 38 S 39 S 30 S 30 S 31 S 32 S 33 S 35 S 36 S 37 S 38 S 39 S 30	POR POR POR POR POR POR POR POR POR POR	2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	1804.00 1783.00 1813.00 1805.00 1810.00 1900.00 1975.00 2075.00 2250.00 4777.00 4563.00 4621.00 5319.00 4409.00 4476.00 4495.00 4495.00 4951.00 4800.00 5550.00 10549.00 11251.00 13554.00 14356.00	3858.00 4133.00 4285.00 4392.00 4880.00 5679.00 6025.00 6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	46.76% 43.14% 42.31% 41.10% 37.09% 33.46% 32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	16.87% 7.13% 3.68% 2.50% 11.11% 16.37% 6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50%	-11.54% -7.74% -1.92% -2.87% -9.75% -9.80% -2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
13 P 14 P 15 P 16 P 17 P 18 P 19 P 20 S 21 S 22 S 23 S 24 S 25 S 26 S 27 S 33 S 33 S 33 S 33 S 33 S 34 S 35 S 36 S 37 S 38 S 38 S 38 S 39 S 40 S 41 S 42 S 43 S 44 S 45 S 46 S 47 S 48 S 49 S 50 S 51 S 52 S 53 S 54 S 55 S	POR POR POR POR POR POR POR POR POR POR	2010 2011 2012 2013 2014 2015 2016 2018-2020 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 202 2003 2004 2005 2006 2007	1783.00 1813.00 1813.00 1805.00 1810.00 1900.00 1975.00 2075.00 2250.00 4777.00 4563.00 4621.00 5319.00 4409.00 4476.00 4495.00 4495.00 4951.00 4800.00 5550.00 10549.00 11251.00 11902.00 13554.00 14356.00	4133.00 4285.00 4392.00 4880.00 5679.00 6025.00 6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	43.14% 42.31% 41.10% 37.09% 33.46% 32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	7.13% 3.68% 2.50% 11.11% 16.37% 6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	-7.74% -1.92% -2.87% -9.75% -9.80% -2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
14 P P 15 P P 16 P P 17 P P 18 P P P 18 P P 18 P P P 18 P P P 18 P P P P	POR	2011 2012 2013 2014 2015 2016 2018-2020 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	1813.00 1805.00 1810.00 1900.00 1975.00 2075.00 2250.00 4777.00 4563.00 4621.00 5319.00 4237.00 4601.00 4409.00 4476.00 4495.00 4800.00 5550.00 10549.00 11251.00 11902.00 13554.00 14356.00	4285.00 4392.00 4880.00 5679.00 6025.00 6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	42.31% 41.10% 37.09% 33.46% 32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	3.68% 2.50% 11.11% 16.37% 6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	-1.92% -2.87% -9.75% -9.80% -2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96%
15 P 16 P 17 P 18 P 19 P 19 20 P 21 S 22 S S S S S S S S S S S S S S S S	POR	2012 2013 2014 2015 2016 2018-2020 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005	1805.00 1810.00 1900.00 1975.00 2075.00 2250.00 4777.00 4563.00 4621.00 5319.00 4237.00 4601.00 4409.00 4476.00 4495.00 4800.00 5550.00 10549.00 11251.00 13554.00 14356.00	4392.00 4880.00 5679.00 6025.00 6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	41.10% 37.09% 33.46% 32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	2.50% 11.11% 16.37% 6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	-2.87% -9.75% -9.80% -2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
16 P 17 P 18 P 19 P 20 P 20 S 22 S S 22 S S S 22 S S S S S S S S	POR POR POR POR POR POR POR SCG SCG SCG SCG SCG SCG SCG SCG SCG SCG	2013 2014 2015 2016 2018-2020 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006	1810.00 1900.00 1975.00 2075.00 2250.00 4777.00 4563.00 4621.00 5319.00 4237.00 4601.00 4409.00 4476.00 4495.00 4951.00 4800.00 5550.00 10549.00 11251.00 13554.00 14356.00	4880.00 5679.00 6025.00 6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	37.09% 33.46% 32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	11.11% 16.37% 6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	-9.75% -9.80% -2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
17 P P 18 P P 18 P P 19 P 19 P 19 P 19 P 19 P P 19	POR	2014 2015 2016 2018-2020 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	1900.00 1975.00 2075.00 2250.00 4777.00 4563.00 4621.00 5319.00 4237.00 4601.00 4409.00 4176.00 4495.00 4951.00 4600.00 15550.00 10549.00 11251.00 13554.00 14356.00	5679.00 6025.00 6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	33.46% 32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	16.37% 6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	-9.80% -2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
18 P P 19 P P 20 P P 20 P P 21 S 22 S S 224 S S 225 S S 226 S S 227 S S 33 S S 33 S S 33 S S 33 S S 34 S S 35 S S 36 S S 37 S S 36 S S 37 S S 36 S S 37 S S 36 S S S 37 S S S S S S S S S S S S S S S	POR	2015 2016 2018-2020 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	1975.00 2075.00 2250.00 4777.00 4563.00 4621.00 5319.00 4237.00 4601.00 4409.00 4176.00 4495.00 4951.00 4800.00 5550.00 10549.00 11251.00 11902.00 13554.00 14356.00	6025.00 6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	32.78% 33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	6.09% 1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	-2.02% 3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
19 P P 20 P 20 P 20 P 20 P 21 S 22	POR	2016 2018-2020 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	2075.00 2250.00 4777.00 4563.00 4621.00 5319.00 4237.00 4601.00 4409.00 4476.00 4495.00 4951.00 4800.00 5550.00 10549.00 11902.00 13554.00 14356.00	6125.00 6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	33.88% 37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	1.66% 0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	3.35% 13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96%
20 P P 21 S 22 S S S S 22 S S S S S S S S S S	POR 500 500 500 500 500 500 500 500 500 50	2018-2020 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	2250.00 4777.00 4563.00 4621.00 5319.00 4237.00 4601.00 4409.00 4476.00 4495.00 4951.00 4800.00 5550.00 10549.00 11251.00 11902.00 13554.00 14356.00	6050.00 6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	37.19% 70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	0.41% 4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	13.45% -8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
21 S 22 S 22 S 23 S 3 S 24 S 25 S 26 S 27 S 28 S 30 S 31 S 33 S 34 S 35 S 36 S 37 S 38 S 34 S 35 S 36 S 37 S 38	SCG SCG SCG SCG SCG SCG SCG SCG SCG SCG	2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	4777.00 4563.00 4563.00 4621.00 5319.00 4237.00 4601.00 4409.00 4476.00 4495.00 4951.00 4600.00 4800.00 5550.00 10549.00 11251.00 11902.00 13554.00 14356.00	6734.00 7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	70.94% 65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	4.05% 7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	-8.20% -5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96%
22 S S S S S S S S S S S S S S S S S S	SCG SCG SCG SCG SCG SCG SCG SCG SCG SCG	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	4563.00 4621.00 5319.00 4237.00 4601.00 4409.00 4176.00 4951.00 4800.00 4800.00 5550.00 10549.00 11251.00 11902.00 13554.00	7007.00 7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	65.12% 61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50%	-5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96%
23 S S 24 S S 25 S S S S S S S S S S S S S S S S	SCG SCG SCG SCG SCG SCG SCG SCG SCG SCG	2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	4621.00 5319.00 4237.00 4601.00 4409.00 4176.00 4495.00 4951.00 4600.00 4800.00 5550.00 10549.00 11902.00 13554.00 14356.00	7538.00 8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	61.30% 64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	7.58% 10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50%	-5.86% 4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96%
24 S S S S S S S S S S S S S S S S S S S	SCG SCG SCG SCG SCG SCG SCG SCG SCG SCG	2008 2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	5319.00 4237.00 4601.00 4409.00 4176.00 4495.00 4951.00 4600.00 5550.00 10549.00 11251.00 13554.00 14356.00	8305.00 9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	64.05% 47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	10.18% 8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	4.47% -26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96%
25 S S 26 S S 27 S S S S S S S S S S S S S S S S	SCG SCG SCG SCG SCG SCG SCG SCG SCG SCG	2009 2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	4237.00 4601.00 4409.00 4176.00 4495.00 4951.00 4600.00 5550.00 10549.00 11251.00 11902.00 13554.00	9009.00 9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	47.03% 47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	8.48% 7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	-26.57% 1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96%
26 S S 27 S S S S S S S S S S S S S S S S	SCG SCG SCG SCG SCG SCG SCG SCG SCG SCG	2010 2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	4601.00 4409.00 4176.00 4495.00 4951.00 4600.00 4800.00 5550.00 10549.00 11251.00 11902.00 13554.00 14356.00	9662.00 10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	47.62% 43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	7.25% 3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	1.25% -7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
27 S 28 S 29 S 30 S 31 S 33 S 34 S 33 S 36 S 37 S 38 S 34 S 38 S 39 S 40 S 41 S 42 S 44 S 50 S 51 S 51 S 52 S 55 S 55 S 55 S 55 S 55	SCG SCG SCG SCG SCG SCG SCG SCG SC SC SCO SCO SCO SCO SCO SCO SCO SCO S	2011 2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	4409.00 4176.00 4495.00 4951.00 4600.00 4800.00 5550.00 10549.00 11251.00 11902.00 13554.00 14356.00	10047.00 10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	43.88% 38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	3.98% 8.45% 6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	-7.85% -12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
28 S S 29 S 30 S 31 S 32 S 33 S 5 S 36 S 37 S 38 S 34 S 35 S 36 S 37 S 38 S 39	SCG SCG SCG SCG SCG SCG SCO SO SO SO	2012 2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	4176.00 4495.00 4951.00 4600.00 4800.00 5550.00 10549.00 11251.00 11902.00 13554.00 14356.00	10896.00 11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	38.33% 38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	8.45% 6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	-12.66% 0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
29 S S 30 S S 31 S S S S S S S S S S S S S S S S	SCG SCG SCG SCG SCG SCG SC SO SO SO SO	2013 2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	4495.00 4951.00 4600.00 4800.00 5550.00 10549.00 11251.00 11902.00 13554.00 14356.00	11643.00 12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	38.61% 40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	6.86% 5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	0.73% 4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
30 S S 31 S 32 S S 33 S 34 S S 35 S S 36 S S 37 S S 36 S S 37 S S 36 S S S S S S S S S S S S S S S S	SCG SCG SCG SCG SO SO SO SO SO	2014 2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	4951.00 4600.00 4800.00 5550.00 10549.00 11251.00 11902.00 13554.00 14356.00	12232.00 13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	40.48% 35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	5.06% 7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	4.84% -13.25% -5.73% -10.96% -4.55% 2.70%
31 S 32 S 33 S 34 S 35 S 36 S 37 S 38 S 39 S 34 S 39 S 34 S 39 S 34 S 39 S 39	SCG SCG SCG SO SO SO SO SO	2015 2016 2018-2020 2002 2003 2004 2005 2006 2007	4600.00 4800.00 5550.00 10549.00 11251.00 11902.00 13554.00 14356.00	13100.00 14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	35.11% 33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	7.10% 10.69% 35.50% 11.74% 3.00% 3.95%	-13.25% -5.73% -10.96% -4.55% 2.70%
32 S S 33 S 34 S 35 S 36 S 37 S 38 S 39 S 39 S 30 S 30 S 30 S 30 S 30 S 30	SCG SCG SO SO SO SO SO	2016 2018-2020 2002 2003 2004 2005 2006 2007	4800.00 5550.00 10549.00 11251.00 11902.00 13554.00 14356.00	14500.00 17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	33.10% 31.27% 42.81% 40.86% 41.97% 45.98%	10.69% 35.50% 11.74% 3.00% 3.95%	-5.73% -10.96% -4.55% 2.70%
33 S S S S S S S S S S S S S S S S S S	SCG SO SO SO SO SO SO	2018-2020 2002 2003 2004 2005 2006 2007	5550.00 10549.00 11251.00 11902.00 13554.00 14356.00	17750.00 24642.00 27534.00 28361.00 29480.00 31092.00	31.27% 42.81% 40.86% 41.97% 45.98%	35.50% 11.74% 3.00% 3.95%	-10.96% -4.55% 2.70%
34	\$0 \$0 \$0 \$0 \$0 \$0	2002 2003 2004 2005 2006 2007	10549.00 11251.00 11902.00 13554.00 14356.00	24642.00 27534.00 28361.00 29480.00 31092.00	42.81% 40.86% 41.97% 45.98%	11.74% 3.00% 3.95%	-4.55% 2.70%
35	\$0 \$0 \$0 \$0 \$0 \$0	2003 2004 2005 2006 2007	11251.00 11902.00 13554.00 14356.00	27534.00 28361.00 29480.00 31092.00	40.86% 41.97% 45.98%	3.00% 3.95%	2.70%
36	SO SO SO SO	2004 2005 2006 2007	11902.00 13554.00 14356.00	28361.00 29480.00 31092.00	41.97% 45.98%	3.00% 3.95%	2.70%
37	SO SO SO	2005 2006 2007	13554.00 14356.00	29480.00 31092.00	45.98%	3.95%	
38	SO SO	2006 2007	14356.00	31092.00			9.56%
39	SO	2007			40.470/		7.00,0
40 \$ 41 \$ 42 \$ 43 \$ 44 \$ 45 \$ 46 \$ 47 \$ 48 \$ 49 \$ 50 \$ 51 55 \$ 55 \$ 55 \$ 55 \$ 55 \$ 55 \$			15353.00	00007.00	46.17%	5.47%	0.43%
41 \$42 \$43 \$44 \$45 \$47 \$48 \$49 \$50 \$51 \$52 \$53 \$54 \$55		2008		33327.00	46.07%	7.19%	-0.23%
42 \$ 43 \$ 44 \$ 5 \$ 6 \$ 6 \$ 6 \$ 6 \$ 6 \$ 6 \$ 6 \$ 6 \$ 6	so		17127.00	35878.00	47.74%	7.65%	3.62%
43	SO	2009	15743.00	39230.00	40.13%	9.34%	-15.93%
44	SO	2010	17456.00	42002.00	41.56%	7.07%	3.56%
45	SO	2011	17657.00	45010.00	39.23%	7.16%	-5.61%
46	so	2012	16537.00	48390.00	34.17%	7.51%	-12.88%
47	SO	2013	17087.00	51208.00	33.37%	5.82%	-2.36%
48	SO	2014	18467.00	54868.00	33.66%	7.15%	0.87%
49 5 50 5 51 5 52 5 53 5 54 5 55	SO	2015	18500.00	59175.00	31.26%	7.85%	-7.11%
50 51 52 53 54 55	SO	2016	19350.00	62175.00	31.12%	5.07%	-0.45%
51 52 53 54 55 55	SO	2018-2020	22000,00	69500,00	31.65%	17.45%	1.25%
52 53 54 55	TE	2005	3010.10	4566.90	65.91%		
53 54 55 55	ΤE	2006	3448.10	4766.90	72.33%	4.38%	9.74%
54 ⁷ 55	TE	2007	3536.10	4888.20	72.34%	2.54%	0.01%
55	TE	2008	3375.30	5221.30	64.64%	6.81%	-10.64%
	TE	2009	3310.50	5544.10	59.71%	6.18%	-7.63%
56	TE	2010	3487.90	5841.00	59.71%	5.36%	0.00%
	TE	2011	3343.40	5967.80	56.02%	2.17%	-6.18%
57	TE	2012	2996.60	5990.10	50.03%	0.37%	-10.71%
58	TE	2013	2851.30	6170.10	46.21%	3.00%	-7.62%
59	TE	2014	2566.40	7088.20	36.21%	14.88%	-21.65%
60	TE	2015	2850.00	7495.00	38.03%	5.74%	5.02%
61 -	TE	2016	2975.00	7835.00	37.97%	4.54%	-0.14%
62	TE	2018-2020	3450.00	8200.00	42.07%	9.41%	10.65%
	WR	2002	1771.10	3995.40	44.33%		
	WR	2003	1461.10	3909.50	37.37%	-2.15%	-15.69%
	WR	2004	1464.50	3911.00	37.45%	0.04%	0.19%
		2005	1583.30	3947.70	40.11%	0.94%	7.11%
	WR	2006	1605.70	4071.60	39.44%	3.14%	-1.67%
	WR WR	2007	1726.80	4803.70	35.95%	17.98%	-8.85%
	WR		1839.00	5533.50	33.23%	15.19%	-7.55%
	WR WR	2008	1858.20	5771.70	32.20%	4.30%	-3.13%
	WR WR WR	2008 2009		6309.50	32.59%	9.32%	1.22%
	WR WR WR WR	2009	2056 20		32.18%	6.91%	-1.24%
	WR WR WR WR WR	2009 2010	2056.20 2171.00	6745 40		0.0170	-1.24% -4.21%
73 V 74 V	WR WR WR WR	2009	2056.20 2171.00 2261.50	6745.40 7335.70	30.83%	8.75%	

DuPont Formula

							Change in
2	Ticker	Year	Revenue	Net Plant	Revenue/Net Plant	Change in Net Plant	Revenue/Net Plant
3	WR	2014	2601.70	8441.50	30.82%	7.56%	2.03%
4	WR	2015	2580.00	8500.00	30.35%	0.69%	-1.52%
5	WR	2016	2665.00	8500.00	31.35%	0.00%	3.29%
6	WR	2018-2020	2800.00	9000.00	31.11%	5.88%	2.50%
7	XEL	2005	9625.50	14696.00	65.50%		
8	XEL	2006	9840.30	15549.00	63.29%	5.80%	-3.38%
9	XEL	2007	10034.00	16676.00	60.17%	7.25%	-4.92%
10	XEL	2008	11203.00	17689.00	63.33%	6.07%	5.26%
11	XEL	2009	9644,30	18508.00	52.11%	4.63%	-17.72%
12	XEL	2010	10311.00	20663.00	49.90%	11.64%	-4.24%
13	XEL	2011	10655.00	22353.00	47.67%	8.18%	-4.48%
14	XEL	2012	10128.00	23809.00	42.54%	6.51%	-10.76%
15	XEL	2013	10915.00	26122.00	41.78%	9.71%	-1.77%
16	XEL	2014	11686.00	28757.00	40.64%	10.09%	-2.75%
17	XEL	2015	12000.00	30825.00	38.93%	7.19%	-4.20%
18	XEL	2016	12500.00	32225.00	38.79%	4.54%	-0.36%
19	XEL	2018-2020	14000.00	36000.00	38.89%	16.79%	-0.10%

Source: Value Line as of June 19, 2015

		Dupont Formula	- Regression An	alysis		
SUMMARY OUTPUT						
Regression S	tatistics					
Multiple R	0.515021534					
R Square	0.265247181					
Adjusted R Square	0.263135822					
Standard Error	0.099526962					
Observations	350					
ANOVA	df	SS	MS	F	Significance F	
Regression	1	1.244429384	4.044400004			
	_	1.244429384	1.244429384	125.6286693	4.2094E-25	
Residual	348	3.447154443	0.009905616	125.6286693	4.2094E-25	
Residual Total	_		_	125.6286693	4.2094E-25	
	348	3.447154443	_	125.6286693 P-value	4.2094E-25 Lawer 95%	Upper 95%
	348 349	3.447154443 4.691583827	0.009905616			<i>Upper 95%</i> 0.02920259

1		DuPont	Formula - Regression A	nalysis
2	Ticker	Year	Change in Net Plant	Change in Revenue/Net Plant
3	ALE	2007	19.85%	-8.44%
4	ALE	2008	25.60%	-24.23%
5	ALE	2009	16.97%	-18.98%
6	ALE	2010	11.27%	7.38%
7	ALE	2011	9.81%	-6.80%
8	ALE	2012	18.40%	-12.54%
9	ALE	2013	9.75%	-3.46%
10	ALE	2014	27.55%	-12.49%
11	ALE	2015	8.48%	8.66%
12	ALE	2016	2.10%	5.25%
13	ALE	2018-2020	11.50%	13.78%
14	LNT	2006	1.62%	0.80%
15	LNT	2007	-5.36%	8.12%
16	LNT	2008	14.39%	-6.38%
17	LNT	2009	15.87%	-19.53%
18	LNT	2010	8.51%	-8,29%
19	LNT	2011	4.55%	2.62%
20	LNT	2012	11.38%	-24.20%
21	LNT	2013	-8.81%	16.12%
22	LNT	2014	-9.87%	13.44%
23	LNT	2015	24.19%	-18.28%
24	LNT	2016	0.00%	2.94%
25	LNT	2018-2020	12.50%	4.58%
26	AEE	2006	5.26%	-3.60%
27	AEE	2007	5.48%	3.98%
28	AEE	2008	9.94%	-5.51%
29	AEE	2009	6.30%	-14.91%
30	AEE	2010	1.38%	6.26%
31	AEE	2011	1.53%	-2.89%
32	AEE	2012	-11.20%	2.11%
33	AEE	2013	0.68%	-15.07%
34 35	AEE AEE	2014 2015	7.52% 6.32%	-3.57% -2.88%
36	AEE	2015	4.45%	-2.66% -0.43%
37	AEE	2018-2020	16.06%	2.02%
38	AEP	2003	1.59%	-1.63%
39	AEP	2004	3.50%	-6.63%
40	AEP	2005	6.50%	-19.11%
41	AEP	2006	10.28%	-5.50%
42	AEP	2007	11.53%	-4.96%
43	AEP	2008	10.44%	-2.28%
44	AEP	2009	4.11%	-10.28%
45	AEP	2010	3.87%	2.97%
46 47	AEP AEP	2011 2012	3.64% 4.85%	1.10% -5.70%
48	AEP	2012	5.76%	-2.84%
49	AEP	2014	7.61%	1.38%
50	AEP	2015	5.74%	-1.78%
51	AEP	2016	3.91%	-1.83%
52	AEP	2018-2020	15.54%	1.97%
53	AVA	2006	4.17%	6.35%
54	AVA	2007	18.75%	-20.73%
55	AVA	2008	5.99%	11.58%
56	AVA	2009	4.61%	-13.76%
57	AVA	2010	4.11%	-1.02%
58	AVA	2011	5.40%	-1.41%
59 60	AVA AVA	2012 2013	5.69% 5.91%	-9.64% -1.22%
61	AVA	2013	13.04%	-19.51%
62	AVA	2014	6.63%	0.30%
63	AVA	2016	5.31%	-0.52%
64	AVA	2018-2020	19.82%	2.01%
65	вкн	2006	14.70%	-58.85%
66	BKH	2007	10.76%	-4.35%
67	BKH	2008	10.90%	30.33%
68	BKH	2009	6.85%	18.14%
69	BKH	2010	15.49%	-10.84%
70	BKH	2011	11.79%	-12.95%
71	BKH	2012	-1.68%	-6.15%
72 73	BKH BKH	2013 2014	9.03% 8.33%	-0.31% 0.83%
73 74	BKH	2014	8.33% 9.28%	0.83% -6.76%
, +	אולם	2013	3,20 /0	-0.1070

1	DuPont Formula - Regression Analysis		nalysis	
2	Ticker	Year	Change in Net Plant	Change in Revenue/Net Plant
3	BKH	2016	8.19%	-4.97%
4	BKH	2018-2020	24.29%	-8.21%
5	CNP	2006	8.38%	-11,56%
6	CNP	2007	5.82%	-2.42%
7 8	CNP CNP	2008 2009	5.71% 4.78%	11.30% -30.19%
9	CNP	2010	8.75%	-2.45%
10	CNP	2011	5.71%	-9.01%
11	CNP	2012	9.64%	-19.56%
12	CNP	2013	-29.45%	54.18%
13	CNP	2014	9.48%	3.97%
14 15	CNP CNP	2015 2016	7.8 4 % 6.62%	-15.57% -3.98%
16	CNP	2018-2020	23.62%	-3.70%
17	CMS	2006	1.67%	6.52%
18	CMS	2007	9.43%	-12.52%
19	CMS	2008	5.29%	-0.63%
20 21	CMS CMS	2009 2010	5.35% 4.00%	-13.65% -0.33%
22	CMS	2010	5.60%	-4.26%
23	CMS	2012	8.63%	-10.65%
24	CMS	2013	6.02%	-1.88%
25	CMS	2014	9.52%	-0.17%
26 27	CMS CMS	2015	6.81%	-10.01%
28	CMS	2016 2018-2020	6.28% 20.07%	-3.87% -4.64%
29	ED	2006	7.79%	-3.68%
30	ED	2007	7.96%	0.13%
31	ED	2008	4.82%	-1.23%
32	ED	2009	7.62%	-10.85%
33 34	ED ED	2010 2011	6.23% 5.15%	-3.75% -7.66%
35	ED	2012	7.36%	-12.25%
36	ED	2013	5.56%	-3.76%
37	ED	2014	4.89%	-0.52%
38	ED	2015	5.86%	-4.21%
39 40	ED ED	2016 2018-2020	6.18% 22.57%	-2.94%
41	D	2016-2020	1.53%	-8.13% -10.02%
42	D	2007	-27.33%	30.86%
43	D	2008	9.00%	-4.65%
44	D	2009	9.96%	-15.53%
45 46	D D	2010 2011	4.38% 11.07%	-3.78% -14.81%
47	D	2011	3,72%	-14.61% -12.21%
48	D	2013	6.03%	-5.49%
49	D	2014	11.16%	-14.73%
50	D	2015	11.46%	-11.26%
51 52	D D	2016 2018-2020	9.46%	-6.42%
53	DTE	2016-2020	27.89% 5.73%	-14.18% -5.42%
54	DTE	2007	-0.38%	-1.41%
55	DTE	2008	7.21%	-1.80%
56	DTE	2009	1.64%	-15.48%
57 58	DTE DTE	2010	4.51%	2.17%
59	DTE	2011 2012	5.80% 6.82%	-1.73% -7.50%
60	DTE	2013	7.60%	2.13%
61	DTE	2014	6.46%	19.61%
62	DTE	2015	6.72%	-14.68%
63 64	DTE	2016	5.99%	-1.44%
65	DTE DUK	2018-2020 2007	22.56% -24.94%	-2.38% 59.77%
66	DUK	2008	9.41%	-5.10%
67	DUK	2009	11.50%	-13.55%
68	DUK	2010	6.31%	5.45%
69 70	DUK	2011	5.74%	-3.73%
70 71	DUK DUK	2012 2013	60.70% 1.36%	-15.95% 23.67%
72	DUK	2014	0.80%	-3.51%
73	DUK	2015	5.72%	-4.12%
74	DUK	2016	6.01%	-1.78%
75 70	DUK	2018-2020	22.48%	-3.21%
76	EDE	2003	5.01%	1.33%

1	DuPont Formula - Regression Analysis				
2	Ticker	Year	Change in Net Plant	Change in Revenue/Net Plant	
3	EDE	2004	2.77%	-2.70%	
4	EDE	2005	4.55%	13.48%	
5	EDE	2006	15.07%	-6.95%	
6	EDE	2007	14.35%	3.68%	
7	EDE	2008	13.90%	-7.19%	
8	EDE	2009	8.65%	-11.69%	
9	EDE	2010	4.12%	4.56%	
10	EDE	2011	2.94%	3.54%	
11 12	EDE EDE	2012 2013	6.00% 5.69%	-8.90% 0.94%	
13	EDE	2013	9.04%	0.66%	
14	EDE	2015	4.70%	-2.63%	
15	EDE	2016	1.00%	5.71%	
16	EDE	2018-2020	6.25%	17.47%	
17	ES	2003	14.84%	1.32%	
18	ES	2004	8.00%	2.01%	
19	ES	2005	9.43%	-24.74%	
20	ES	2006	-2.73%	28.51%	
21	ES	2007	15.82%	-26.98%	
22	ES	2008	13.53%	-12.25%	
23	ES	2009	7.70%	-12.92%	
24 25	ES ES	2010 2011	8.23% 8.73%	-16.80% -16.15%	
26	ES	2011	59.62%	-10.15% -11.98%	
27	ES	2012	5.85%	9.95%	
28	ES	2014	6.09%	-0.05%	
29	ES	2015	6.72%	-1,36%	
30	ES	2016	7.29%	-5.08%	
31	ES	2018-2020	28.14%	-13.34%	
32	FE	2006	4.78%	-8.45%	
33	FE	2007	4.88%	6.13%	
34	FE	2008	15.21%	-7.61%	
35	FE	2009	8.13%	-13.73%	
36	FE	2010	3.26%	1.62%	
37 38	FE FE	2011 2012	53.31% 8.46%	-20.50% -13.27%	
39	FE	2012	1.06%	-3.58%	
40	FE	2014	6.74%	-5.39%	
41	FE	2015	3.68%	-3.22%	
42	FE	2016	3.50%	-0.51%	
43	FE	2018-2020	13.75%	-1.02%	
44	GXP	2003	3.72%	11.31%	
45	GXP	2004	2.40%	11.95%	
46	GXP	2005	0.00%	5.72%	
47	GXP	2006	10.87%	-7.37%	
48 49	GXP GXP	2007 2008	12.34% 76.55%	8.71% -71.05%	
50	GXP	2009	9.37%	7.58%	
51	GXP	2010	3.63%	10.77%	
52	GXP	2011	2.34%	0.42%	
53	GXP	2012	4.94%	-5.04%	
54	GXP	2013	4.65%	1.20%	
55	GXP	2014	6.88%	-1.78%	
56	GXP	2015	4.84%	-1.57%	
57	GXP	2016	1.79%	5.66%	
58	GXP	2018-2020 2003	3.69%	16.46%	
59 60	IDA IDA	2003	9.54% 5.80%	-23.07% 1.98%	
61	IDA	2005	4.74%	-2.83%	
62	IDA	2006	4.53%	3,10%	
63	IDA	2007	8.16%	-12.23%	
64	IDA	2008	5.41%	3,60%	
65	IDA	2009	5.76%	3.36%	
66	IDA	2010	8.38%	-8.94%	
67	IDA	2011	7.76%	-8.02%	
68	IDA	2012	3.80%	1.40%	
69	IDA	2013	3.65%	11.26%	
70 71	IDA	2014	4.60%	-1.61%	
71 72	IDA IDA	2015 2016	6.82% 5.01%	-5.47% -3.66%	
73	IDA	2018-2020	21.49%	-3.66% -10.70%	
74	NWE	2010-2020	5.87%	-8.23%	
75	NWE	2007	18.70%	-10.74%	
76	NWE	2008	3.89%	1.13%	

1	DuPont Formula - Regression Analysis					
_	- .	.,	0	Change in		
2 3	Ticker_ NWE	Year	Change in Net Plant	Revenue/Net Plant		
4	NWE	2009 2010	6.76% 7.84%	-15.17% -9.80%		
5	NWE	2011	4.50%	-3.74%		
6	NWE	2012	10.04%	-12.95%		
7	NWE	2013	10.45%	-2.34%		
8	NWE	2014	39.70%	-25.29%		
9 10	NWE NWE	2015 2016	42.13% 3.83%	-24.09% 3.72%		
11	NWE	2018-2020	11.61%	8.55%		
12	OGE	2006	8.41%	-37.88%		
13	OGE	2007	9.79%	-13.65%		
14	OGE	2008	23.63%	-13.30%		
15 16	OGE OGE	2009 2010	12.61% 9.35%	-37.40% 18.45%		
17	OGE	2010	15.62%	-8.88%		
18	OGE	2012	11.65%	-16.03%		
19	OGE	2013	-20.04%	-2.31%		
20	OGE	2014	4.60%	-18.22%		
21 22	OGE OGE	2015 2016	3.80% 3.93%	-3.78% 4.07%		
23	OGE	2018-2020	14.56%	6.88%		
24	OTTR	2003	7.72%	-1.53%		
25	OTTR	2004	7.71%	8.76%		
26	OTTR	2005	2.20%	16.05%		
27 28	OTTR OTTR	2006 2007	3.08%	2.44% -5.66%		
29	OTTR	2007	18.84% 21.50%	-5.66% -12.89%		
30	OTTR	2009	5.88%	-25.12%		
31	OTTR	2010	0.92%	6.68%		
32	OTTR	2011	-2.81%	-0.89%		
33	OTTR	2012	-2.60%	-18.16%		
34 35	OTTR OTTR	2013 2014	11.20% 8.70%	-6.50% -17.68%		
36	OTTR	2015	6.42%	-2.43%		
37	OTTR	2016	7.41%	0.96%		
38	OTTR	2018-2020	29.63%	15.25%		
39	PNW	2003	15.44%	-7.45%		
40 41	PNW PNW	2004 2005	0.74% 0.55%	2.15% 2.48%		
42	PNW	2006	4.02%	9.44%		
43	PNW	2007	7.04%	-3.22%		
44	PNW	2008	5.69%	-9.59%		
45	PNW	2009	3.83%	-5.69%		
46 47	PNW PNW	2010 2011	3.47% 4.00%	-4.33% -4.50%		
48	PNW	2012	4.35%	-2.39%		
49	PNW	2013	4.74%	-0.11%		
50	PNW	2014	2.80%	-1.68%		
51	PNW	2015	5.28%	-2.07%		
52 53	PNW PNW	2016 2018-2020	6.32% 19.64%	-2.03% 2.16%		
54	POR	2010-2020	7.08%	-7.12%		
55	POR	2006	11.58%	-5.79%		
56	POR	2007	12.80%	1.66%		
57	POR POR	2008 2009	7.66%	-7.01%		
58 59	POR	2009	16.87% 7.13%	-11.54% -7.74%		
60	POR	2011	3.68%	-1.92%		
61	POR	2012	2.50%	-2.87%		
62	POR	2013	11.11%	-9.75%		
63 64	POR	2014	16.37%	-9.80% 2.03%		
64 65	POR POR	2015 2016	6.09% 1.66%	-2.02% 3.35%		
66	POR	2018-2020	0.41%	13.45%		
67	SCG	2006	4.05%	-8.20%		
68	SCG	2007	7.58%	-5.86%		
69	SCG	2008	10.18%	4.47%		
70 71	SCG SCG	2009 2010	8.48% 7.25%	-26.57% 1.25%		
72	SCG	2010	3.98%	-7.85%		
73	SCG	2012	8.45%	-12.66%		
74	SCG	2013	6.86%	0.73%		
75 76	SCG	2014	5.06%	4.84%		
76	SCG	2015	7.10%	-13.25%		

1	DuPont Formula - Regression Analysis					
2	Ticker	Year	Change in Net Plant	Change in Revenue/Net Plant		
3	SCG	2016	10.69%	-5.73%		
4	SCG	2018-2020	35.50%	-10.96%		
5	so	2003	11.74%	-4.55%		
6	SO	2004	3.00%	2.70%		
7	SO	2005	3.95%	9.56%		
8	SO	2006	5.47%	0.43%		
9	SO	2007	7.19%	-0.23%		
10	so	2008	7.65%	3.62%		
11	so	2009	9.34%	-15.93%		
12	so	2010	7.07%	3.56%		
13	so	2011	7.16%	-5.61%		
14	so	2012	7.51%	-12.88%		
15	so	2013	5.82%	-2.36%		
16	so	2014	7.15%	0.87%		
17	so	2015	7.85%	-7.11%		
18	so	2016	5.07%	-0.45%		
19	so	2018-2020	17.45%	1.25%		
20	TE	2006	4.38%	9.74%		
21	TE	2007	2.54%	0.01%		
22	TE	2008	6.81%	-10.64%		
23	TE	2009	6.18%	-7.63%		
24	TE	2010	5.36%	0.00%		
25	TE	2011	2.17%	-6.18%		
26	TE	2012	0.37%	-10.71%		
27	TE	2013	3.00%	-7.62%		
28	TE	2014	14.88%	-21.65%		
29	TE	2015	5.74%	5.02%		
30	TE	2016	4.54%	-0.14%		
31	TE	2018-2020	9.41%	10.65%		
32	WR	2003	-2.15%	-15.69%		
33	WR	2004	0.04%	0.19%		
34	WR	2005	0.94%	7.11%		
35	WR	2006	3.14%	-1.67%		
36	WR	2007	17.98%	-8.85%		
37	WR	2008	15.19%	-7.55%		
38	WR	2009	4.30%	-3.13%		
39	WR	2010	9.32%	1.22%		
40	WR	2011	6.91%	-1.24%		
41	WR	2012	8.75%	-4.21%		
42	WR	2013	6.99%	-2.02%		
43	WR	2014	7.56%	2.03%		
44	WR	2015	0.69%	-1.52%		
45	WR	2016	0.00%	3.29%		
46	WR	2018-2020	5.88%	2.50%		
47 48	XEL XEL	2006 2007	5.80%	-3.38%		
49	XEL	2007	7.25% 6.07%	-4.92% 5.26%		
50	XEL	2009	4.63%			
51	XEL	2010	11.64%	-17.72%		
52	XEL	2010	8.18%	-4.24% -4.48%		
53	XEL	2011	6.51%	-4.46% -10.76%		
54	XEL	2012	9.71%	-10.76% -1.77%		
55	XEL	2013	10.09%	-2.75%		
56	XEL	2015	7.19%	-4.20%		
57	XEL	2016	4.54%	-0.36%		
58	XEL	2018-2020	16.79%	-0.10%		
			= .=			

Size Premium Analysis

PNM Exhibit RBH-13

Is contained in the following 1 page.

Small Size Premium

	[1]	[2]
		(\$Bil)
Public Service Company of New Mexico	0.51	\$1.219
Median Market to Book for Proxy Group		1.49
PNM Implied Market Cap		\$1.82

7			[3]	[4]	[5]
				Market Cap	Market to
8	Company Name	Ticker	Customers (Mil)	(\$Bil)	Book Ratio
9	ALLETE, Inc.	ALE	0.16	\$2.39	1.35
10	Alliant Energy Corporation	LNT	0.99	\$6.72	1.87
11	Ameren Corporation	AEE	2.40	\$9.46	1.41
12	American Electric Power Company, Inc.	AEP	5.30	\$26.73	1.55
13	Avista Corporation	AVA	0.37	\$1.95	1.30
14	Black Hills Corporation	BKH	0.20	\$2.06	1.46
15	CenterPoint Energy, Inc.	CNP	2.27	\$8.48	1.85
16	CMS Energy Corporation	CMS	1.80	\$9.09	2.38
17	Consolidated Edison, Inc.	ED	3.70	\$17.42	1.36
18	Dominion Resources, Inc.	D	2.50	\$40.85	3.38
19	DTE Energy Company	DTE	2.10	\$13.72	1.58
20	Duke Energy Corporation	DUK	7.26	\$51.10	1.27
21	Empire District Electric Company	EDE	0.17	\$1.00	1.26
22	Eversource Energy	ES	3.11	\$15.08	1.49
23	FirstEnergy Corp.	FE	6.00	\$14.57	1.18
24	Great Plains Energy Inc.	GXP	0.84	\$3.90	1.09
25	IDACORP, Inc.	IDA	0.51	\$2.91	1.49
26	Northwestern Corporation	NWE	0.41	\$2.39	1.71
27	OGE Energy Corp.	OGE	0.81	\$6.02	1.86
28	Otter Tail Corporation	OTTR	0.13	\$1.01	1.72
29	Pinnacle West Capital Corporation	PNW	1.16	\$6.50	1.48
30	Portland General Electric Company	POR	0.84	\$2.68	1.38
31	SCANA Corporation	SCG	0.68	\$7.38	1.39
32	Sempra Energy	SRE	1.41	\$25.94	2.25
33	Southern Company	SO	4.42	\$38.94	1.95
34	TECO Energy, Inc.	TE	0.70	\$4.31	1.67
35	Westar Energy, Inc.	WR	0.70	\$4.69	1.42
36	Xcel Energy Inc.	XEL	3.4	\$16.79	1.64
37	MEDIAN		1.1	\$7.05	1.49
38	MEAN		1.9	\$12.29	1.63

9		Market Capitalization (\$Mil) [6]						
.0	Decile		Low		High	Size Premium		
·1	2	\$	10,170.746	\$	24,272.837	0.65%		
2	3	\$	5,864.266	\$	10,105.622	0.94%		
3	4	\$	3,724.624	\$	5,844.592	1.05%		
4	5 .	\$	2,552.441	\$	3,724.186	1.65%		
5	6	\$	1,688.895	\$	2,542.913	1.63%		
5	7	\$	1,011.278	\$	1,686.860	1.77%		
,	8	\$	549.056	\$	1,010.634	2.18%		
l .	9	\$	300.752	\$	548.839	2.64%		
)	10	\$	3.037	\$	300.725	5.72%		

50 Notes

1

2

5 6

51 [1] PNM Resources Inc., SEC Form 10-K for the fiscal year ended December 31, 2014, at A-36

52 [2] Equals Proposed Rate Base x Equity ratio

53 [3] Source: SNL Financial

54 [4] Source: Bloomberg, 30-day average

55 [5] Source: Bloomberg, 30-day average

56 [6] Source: Ibbotson Associates, 2015 Ibbotson SBBI Market Report, at 16

Capital Investment Recovery Mechanisms

PNM Exhibit RBH-14

Is contained in the following 2 pages.

Summary of Investment Tracking Mechanisms Adjustment Clauses

2	Adju	stment C	lauses			
3	Company	Paront	Service	State	Revenue Adjustment Clauses for New Capital	Alternative Regulation / Incentive Plan for Rate Base
3 4	Ameren Illinois (Electric)	AEE	Electric		Investment [1]	Additions
5	,			Illinois		
6	Union Electric (Electric) Southwestern Electric Power Company	AEE	Electric	Missouri	✓	√
7	Indiana Michigan Power Company	AEP AEP	Electric Electric	Arkansas Indiana	•	v
8	Kentucky Power Company	AEP	Electric	Kentucky		v
9	Southwestern Electric Power Company	AEP	Electric	Louisiana		•
10	Indiana Michigan Power Company	AEP	Electric	Michigan		
11	Ohio Power Company	AEP	Electric	Ohio	✓	✓
12	Public Service Company of Oklahoma	AEP	Electric	Oklahoma	· /	,
13	Kingsport Power Company	AEP	Electric	Tennessee	•	•
14	AEP Texas Central Company	AEP	Electric	Texas	✓	✓
15	AEP Texas North Company	AEP	Electric	Texas	✓	· /
16	Southwestern Electric Power Company	AEP	Electric	Texas	· ✓	· /
17	Appalachian Power Company	AEP	Electric	Virginia	✓	✓
18	Appalachian Power Company	AEP	Electric	West Virginia		√
19	Wheeling Power Company	AEP	Electric	West Virginia		✓
20	ALLETE (Minnesota Power)	ALE	Electric	Minnesota		
21	Superior Water, Light and Power Company (Electric)	ALE	Electric	Wisconsin		
22	Alaska Electric Light and Power Company	AVA	Electric	Alaska		
23	Avista Corp. (Electric)	AVA	Electric	ldaho		
24	Avista Corp. (Electric)	AVA	Electric	Washington		
25	Black Hills Colorado	BKH	Electric	Colorado	✓	✓
26	Black Hills Power	вкн	Electric	South Dakota	✓	
27	Cheyenne Light Fuel & Power (Electric)	BKH	Electric	Wyoming	✓	✓
28	Consumers Energy (Electric)	CMS	Electric	Michigan		
29	Centerpoint Energy Houston Electric	CNP	Electric	Texas	✓	✓
30	Virginia Electric and Power Company	D	Electric	Virginia	✓	✓
31	DTE Electric Company	DTE	Electric	Michigan		
32	Duke Energy Florida, Inc.	DUK	Electric	Florida	✓	✓
33	Duke Energy Indiana, Inc.	DUK	Electric	Indiana	✓	✓
34	Duke Energy Kentucky (Electric)	DUK	Electric	Kentucky		
35	Duke Energy Carolinas, LLC	DUK	Electric	North Carolina		
36	Duke Energy Progress, Inc.	DUK	Electric	North Carolina		
37	Duke Energy Ohio, Inc.	DUK	Electric	Ohio	✓	
38	Carolina Power & Light (Duke Energy Progress)	DUK	Electric	South Carolina		
39	Duke Energy Carolinas, LLC	DUK	Electric	South Carolina		,
40	Rockland Electric Company	ED	Electric	New Jersey		✓
41 42	Consolidated Edison Company of New York, Inc. (Electric)	ED	Electric	New York		
43	Orange and Rockland Utilities, Inc. (Electric) Pike County Light and Power Company	ED	Electric	New York		
44	Empire District Electric	ED EDE	Electric Electric	Pennsylvania		,
45	Empire District Electric	EDE	Electric	Kansas Missouri		•
46	Connecticut Light and Power Company	ES	Electric	Connecticut		
47	NSTAR Electric Company	ES	Electric	Massachusetts		
48	Western Massachusetts Electric Company	ES	Electric	Massachusetts	✓	
49	Public Service Company of New Hampshire	ES	Electric	New Hampshire	· •	
50	Potomac Edison Company	FE	Electric	Maryland	·	
51	Jersey Central Power & Light Company	FE	Electric	New Jersey		✓
52	Cleveland Electric Illuminating Company	FE	Electric	Ohio	✓	· /
53	Ohio Edison Company	FE	Electric	Ohio	✓	✓
54	Toledo Edison Company	FE	Electric	Ohio	✓	✓
55	Metropolitan Edison Company	FE	Electric	Pennsylvania		
56	Pennsylvania Electric Company	FE	Electric	Pennsylvania		
57	Pennsylvania Power Company	FE	Electric	Pennsylvania		
58	West Penn Power Company	FE	Electric	Pennsylvania		
59	Monongahela Power Company	FE	Electric	West Virginia		✓
60	Potomac Edison Company	FE	Electric	West Virginia		✓
61	Kansas City Power & Light	GXP	Electric	Kansas		✓
62	Kansas City Power & Light	GXP	Electric	Missouri		

Summary of Investment Tracking Mechanisms Adjustment Clauses

2

3	Company	Parent	Service	State	Revenue Adjustment Clauses for New Capital Investment [1]	Alternative Regulation / Incentive Plan for Rate Base Additions
4	KCP&L Greater Missouri Operations	GXP	Electric	Missouri		
5	Idaho Power	IDA	Electric	ldaho		
6	Idaho Power	IDA	Electric	Oregon		✓
7	Interstate Power & Light (Electric)	LNT	Electric	Iowa		
8	Interstate Power & Light	LNT	Electric	Minnesota		
9	Wisconsin Power & Light (Electric)	LNT	Electric	Wisconsin		
10	Northwest Energy	NWE	Electric	Montana		
11	Oklahoma Gas & Electric	OGE	Electric	Arkansas	✓	
12	Oklahoma Gas & Electric	OGE	Electric	Oklahoma	✓	✓
13	Otter Tail Power Company	OTTR	Electric	Minnesota		
14	Otter Tail Power Company	OTTR	Electric	North Dakota		
15	Otter Tail Power Company	OTTR	Electric	South Dakota		
16	Arizona Public Service Company	P N W	Electric	Arizona	✓	
17	Portland General Electric Company	POR	Electric	Oregon	✓	✓
18	South Carolina Electric & Gas (Electric)	SCG	Electric	South Carolina	✓	✓
19	Alabama Power Company	SO	Electric	Alabama	✓	✓
20	Gulf Power Company	SO	Electric	Florida	✓	
21	Georgia Power Company	SO	Electric	Georgia	✓	✓
22	Mississippi Power Company	so	Electric	Mississippi		
23	Tampa Electric Company	TE	Electric	Florida	✓	✓
24	Kansas Gas and Electric Company	WR	Electric	Kansas		✓
25	Westar Energy (KPL)	WR	Electric	Kansas		✓
26	Public Service Co. of Colorado (Electric)	XEL	Electric	Colorado	✓	✓
27	Northern States Power-Minnesota (Electric)	XEL	Electric	Minnesota		
28	Southwestern Public Service	XEL	Electric	New Mexico		
29	Northern States Power-Minnesota (Electric)	XEL	Electric	North Dakota		
30	Northern States Power - Minnesota	XEL	Electric	South Dakota	✓	
31	Southwestern Public Service	XEL	Electric	Texas		✓
32	Northern States Power-Wisconsin (Electric)	XEL	Electric	Wisconsin		

^{13 [1]} Includes recovery of costs related to targeted new generation projects, infrastructure replacement, system integrity/hardening, AMI smart metering, and other capital expenditures.

Sources: Edison Electric Institute, <u>Alternative Regulation for Evolving Utility Challenges: An Updated Survey</u>, Table 2, January 2013; Company SEC Form 10-K Reports; 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)
OF PUBLIC SERVICE COMPANY OF NEW)
MEXICO FOR REVISION OF ITS RETAIL) Case No. 15-00261-UT
ELECTRIC RATES PURSUANT TO ADVICE	
NOTICE NO. 513,)
)
PUBLIC SERVICE COMPANY OF NEW MEXICO,)
Applicant.)
	_)

AFFIDAVIT

STATE OF MASSACHUSETTS)
) ss
COUNTY OF MIDDLESEX)

ROBERT B. HEVERT, Managing Partner of Sussex Economic, 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 12th day of August, 2015.

ROBERT B. HEVERT

SUBSCRIBED AND SWORN to before me this _____ day of August, 2015.

NOTARY PUBLIC IN AND FOR THE COMMONWEALTH OF MASSACHUSETTS

My Commission Expires:

March 11, 2022