BEFORE THE PUBLIC SERVICE COMMISSION

OF SOUTH CAROLINA

DIRECT TESTIMONY

OF

ROBERT B. HEVERT

ON BEHALF OF

SOUTH CAROLINA ELECTRIC & GAS COMPANY

DOCKET NO. 2012-218-E

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I. INTRODUCTION

1	Q.	PLEASE STATE YOUR NAME, AFFILIATION AND BUSINESS ADDRESS.
2	A.	My name is Robert B. Hevert. I am Managing Partner of Sussex Economic Advisors,
3		LLC ("Sussex"). My business address is 161 Worcester Road, Suite 503, Framingham,
4		Massachusetts 01701.
5	Q.	ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?
6	A.	I am submitting this direct testimony ("Direct Testimony") before the Public Service
7		Commission of South Carolina ("Commission") on behalf of South Carolina Electric &
8		Gas Company, referred to throughout my testimony as "SCE&G," or the "Company."
9	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.
10	A.	I hold a Bachelor's degree in Business and Economics from the University of Delaware,
11		and an MBA with a concentration in Finance from the University of Massachusetts. I
12		also hold the Chartered Financial Analyst designation.
13	Q.	PLEASE DESCRIBE YOUR EXPERIENCE IN THE ENERGY AND UTILITY
14		INDUSTRIES.
15	A.	I have worked in regulated industries for over twenty five years, having served as an
16		executive and manager with consulting firms, a financial officer of a publicly-traded
17		natural gas utility (at the time, Bay State Gas Company), and an analyst at a
18		telecommunications utility. In my role as a consultant, I have advised numerous energy
19		and utility clients on a wide range of financial and economic issues including corporate
20		and asset-based transactions, asset and enterprise valuation, transaction due diligence,
21		and strategic matters. As an expert witness, I have provided testimony in over 80
22		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 Attachment A to my Direct Testimony.

II. PURPOSE AND OVERVIEW OF TESTIMONY

4 Q.

. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my Direct Testimony is to present evidence and provide the Commission
with a recommendation regarding the Company's return on equity ("ROE")¹ and to
provide my determinations and opinions regarding the reasonableness of SCE&G's
capital structure. My analyses and conclusions are supported by the data presented in
Exhibit No. (RBH-1) through Exhibit No. (RBH-8), which have been prepared by
me or under my direction.

11 Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE APPROPRIATE COST

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OF EQUITY AND CAPITAL STRUCTURE FOR THE COMPANY?

A. My analyses indicate that the Company's Cost of Equity currently is in the range of 10.75 percent to 11.50 percent. Based on the quantitative and qualitative analyses discussed throughout my Direct Testimony, I conclude that the Company's proposed ROE of 10.95 percent is at the low end of a reasonable range of estimates of its Cost of Equity. With respect to the Company's capital structure, I conclude that the Company's proposed capital structure, consisting of 52.18 percent common equity and 47.82 percent long-term debt, is reasonable.

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

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1Q.PLEASE PROVIDE A BRIEF OVERVIEW OF THE ANALYSES THAT LED TO2YOUR ROE RECOMMENDATION.

A. As discussed in more detail in Section VI, in light of recent market conditions, and given 3 4 the fact that equity analysts and investors tend to use multiple methodologies in developing their return requirements, it is important to consider the results of several 5 analytical approaches in determining the Company's ROE. In order to develop my ROE 6 7 recommendation, I therefore applied the Constant Growth Discounted Cash Flow ("DCF") model, the Capital Asset Pricing Model ("CAPM"), and the Bond Yield Plus 8 9 Risk Premium ("Risk Premium") approach. In addition to those analyses, it is important 10 to consider a range of factors, both quantitative and qualitative, in arriving at an ROE determination. 11

In addition to the methodologies noted above, my recommendation also takes into consideration: (1) the incremental risks associated with the Company's need to fund substantial capital expenditures including its investment in new nuclear generation facilities; (2) the risks associated with the Company's comparatively small size; and (3) flotation costs associated with equity issuances. While I did not make any explicit adjustments to my ROE estimates for those factors, I did take them into consideration in determining the Company's Cost of Equity.

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Q.

HOW IS THE REMAINDER OF YOUR DIRECT TESTIMONY ORGANIZED?

- 20 A. The remainder of my Direct Testimony is organized as follows:
- 21 <u>Section III</u> Provides a summary of my conclusions and recommendations;
- 22 <u>Section IV</u> Discusses the regulatory guidelines and financial considerations
 23 pertinent to the development of the cost of capital;

1	Section V -	Explains my selection of the proxy group of electric utilities used
2	to develop my	v analytical results;
3	Section VI –	Explains my analyses and the analytical bases for my ROE
4	recommendati	ion;
5	Section VII -	Provides a discussion of specific business risks that have a direct
6	bearing on the	e Company's Cost of Equity;
7	Section VIII -	- Highlights the current capital market conditions and the effect of
8	those conditio	ns on the Company's Cost of Equity;
9	Section IX –	Addresses the reasonableness of the Company's proposed capital
10	structure; and	
11	Section X –	Summarizes my conclusions and recommendations.

III. SUMMARY OF CONCLUSIONS

12 Q. WHAT ARE THE KEY FACTORS CONSIDERED IN YOUR ANALYSES AND

13 UPON WHICH YOU BASE YOUR RECOMMENDED ROE?

14 A. My analyses and recommendations considered the following:

2

• The *Hope* and *Bluefield* decisions² that established the standards for determining a fair and reasonable allowed return on equity including: consistency of the allowed return with other businesses having similar risk; adequacy of the return to provide access to capital and support credit quality; and that the end result must lead to just and reasonable rates.

Bluefield Waterworks & Improvement Co. v. Public Service Comm'n of West Virginia, 262 U.S. 679 (1923); Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944).

- The effect of the current capital market conditions on investors' return requirements, and in particular, the Company's accelerating need to access the capital markets.
- 4

5

- The Company's business risks relative to the proxy group of comparable companies and the implications of those risks in arriving at the appropriate ROE.
- 6

Q. WHAT ARE THE RESULTS OF YOUR ANALYSES?

A. The results of my analyses are summarized in Exhibit No.___(RBH-1) through Exhibit No.___(RBH-8). Based on the analytical results, and in light of the considerations discussed throughout the balance of my Direct Testimony regarding the Company's business risks relative to the proxy group, it is my view that a reasonable range of estimates is from 10.75 percent to 11.50 percent, and within that range, an ROE of 11.25 percent is reasonable and appropriate. In that regard, the Company's proposed 10.95 percent ROE is, in my view, quite conservative.

IV. REGULATORY GUIDELINES AND FINANCIAL CONSIDERATIONS

14 Q. PLEASE PROVIDE Α BRIEF **SUMMARY** OF THE GUIDELINES ESTABLISHED BY THE UNITED STATES SUPREME COURT (THE 15 "COURT") FOR THE PURPOSE OF DETERMINING THE RETURN ON 16 17 EQUITY.

- A. The Court established the guiding principles for establishing a fair return for capital in
 two cases: (1) Bluefield Water Works and Improvement Co. v. Public Service Comm'n of
 West Virginia ("Bluefield"); and (2) Federal Power Comm'n v. Hope Natural Gas Co.
- 21 ("*Hope*"). In *Bluefield*, the Court stated:

A public utility is entitled to such rates as will permit it to earn a return on 1 the value of the property which it employs for the convenience of the 2 3 public equal to that generally being made at the same time and in the same 4 general part of the country on investments in other business undertakings 5 which are attended by corresponding risks and uncertainties; but it has no 6 constitutional right to profits such as are realized or anticipated in highly 7 profitable enterprises or speculative ventures. The return should be 8 reasonably sufficient to assure confidence in the financial soundness of the 9 utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the 10 money necessary for the proper discharge of its public duties.³ 11

- 12 The Court therefore recognizes that: (1) a regulated public utility cannot remain
- 13 financially sound unless the return it is allowed to earn on its invested capital is at least
- 14 equal to the cost of capital (the principle relating to the demand for capital); and (2) a
- 15 regulated public utility will not be able to attract capital if it does not offer investors an
- 16 opportunity to earn a return on their investment equal to the return they expect to earn on
- 17 other investments of similar risk (the principle relating to the supply of capital).
- 18 In *Hope*, the Court reiterates the financial integrity and capital attraction
- 19 principles of the *Bluefield* case:
- From the investor or company point of view it is important that there be 20 21 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 22 23 the stock.... By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having 24 25 corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its 26 credit and to attract capital.⁴ 27
- In summary, the Court clearly has recognized that the fair rate of return on equity should
- 29

be: (1) comparable to returns investors expect to earn on other investments of similar

³ Bluefield Water Works and Improvement Co. v. Public Service Comm'n of West Virginia, 262 U.S. 679, 692 (1923).

⁴ Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591, 603 (1944).

1		risk; (2) sufficient to assure confidence in the company's financial integrity; and (3)
2		adequate to maintain and support the company's credit and to attract capital.
3	Q.	DOES SOUTH CAROLINA PROVIDE SIMILAR GUIDANCE?
4	A.	Yes. The Commission and the South Carolina courts uphold the precedents of the Hope
5		and Bluefield cases. Specifically, the standards established in the Hope and Bluefield
6		decisions were acknowledged by the Commission in an Order issued in 2010. ⁵ That
7		Order outlines four principal guidelines regarding the determination of the rate of return:
8 9		(1) The rate of return should be sufficient to allow SCE&G the opportunity to earn a return equal to firms facing similar risks;
10 11 12 13		(2) The rate of return should be adequate to assure investors of the financial soundness of the utility and to support the utility's credit and ability to raise capital needed for on-going utility operations at reasonable cost;
14 15		(3) The rate of return should be determined with due regard for the present business and capital market conditions facing the utility;
16 17 18		(4) The rate of return is not formula-based, but requires an informed expert judgment by the Commission balancing the interests of shareholders and customers. ^{6}
19		The Hope and Bluefield standards were also recognized by the Supreme Court of South
20		Carolina in Southern Bell Tel. & Tel. Co. v. Public Service Comm'n of South Carolina. ⁷

⁵ Public Service Comm'n of South Carolina, Docket No. 2009-489-E, Order No. 2010-471 dated July 15, 2010, pp. 83-85.

⁶ *Ibid.*, at 30 *citing* Docket No. 2004-178-E, Order No. 2005-2 dated January 6, 2005, p. 85.

⁷ Southern Bell Tel. & Tel. Co. v. Public Service Comm'n of South Carolina, 244 S.E.2d 278 (1978).

1Q.ASIDE FROM THE STANDARDS ESTABLISHED BY THE COMMISSION AND2THE COURTS, IS IT IMPORTANT FOR A PUBLIC UTILITY TO BE3ALLOWED THE OPPORTUNITY TO EARN A RETURN THAT IS ADEQUATE4TO ATTRACT EQUITY CAPITAL AT REASONABLE TERMS?

Yes, it is. A return that is adequate to attract capital at reasonable terms, under varying 5 A. market conditions, will enable the subject utility to provide safe and reliable electric 6 7 service while maintaining its financial integrity. While the "capital attraction" and "financial integrity" standards are important principles in normal economic conditions, 8 the practical implications of those standards are even more pronounced when, as with 9 10 SCE&G, the subject company has substantial capital expenditure plans. As discussed in more detail in Section VIII, sustained increases in the incremental spread on utility debt 11 12 (*i.e.*, the difference in debt yields of utilities varying credit ratings) has intensified the importance of maintaining a strong financial profile; the incremental cost of a downgrade 13 in bond rating is more expensive now than it historically has been.⁸ Consequently, 14 preserving SCE&G's current credit profile is an important consideration in enabling the 15 Company to access the capital markets, as needed and at reasonable cost rates. 16

V. PROXY GROUP SELECTION

Q. AS A PRELIMINARY MATTER, WHY IS IT NECESSARY TO SELECT A GROUP OF PROXY COMPANIES TO DETERMINE THE COST OF EQUITY FOR SCE&G?

A. First, it is important to bear in mind that the Cost of Equity for a given enterprise depends
on the risks attendant to the business in which the company is engaged. According to

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See Section VIII, Chart 3.

1 financial theory, the value of a given company is equal to the aggregate market value of 2 its constituent business units. The value of the individual business units reflects the risks and opportunities inherent in the business sectors in which those units operate. In this 3 proceeding, we are focused on estimating the Cost of Equity for SCE&G, which is an 4 operating subsidiary of SCANA Corporation. Since the ROE is a market-based concept 5 and SCE&G is not a publicly traded entity, it is necessary to establish a group of 6 7 companies that are both publicly traded and reasonably comparable to the Company in certain fundamental respects to serve as its "proxy" in the ROE estimation process. 8

9 Even if SCE&G were a publicly traded entity, it is possible that short-term events 10 could bias its market value in one way or another during a given period of time. A 11 significant benefit of using a proxy group, therefore, is that it serves to moderate the 12 effects of anomalous, temporary events that may be associated with any one company.

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

A. Not necessarily. The DCF approach is based on the theory that a stock's current price represents the present value of its future expected cash flows. The Constant Growth form of the DCF model is defined as the sum of the expected dividend yield and projected long-term growth. Notwithstanding the care taken to ensure risk comparability, market expectations with respect to future risks and growth opportunities will vary from company to company. Therefore, even within a group of similarly situated companies, it is common for analytical results to reflect a seemingly wide range. At issue, then, is how to estimate a Company's ROE from within that range. That determination necessarily
must be based on the informed judgment and experience of the analyst.

-

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A.

3 Q. PLEASE PROVIDE A SUMMARY PROFILE OF SCE&G.

A. SCE&G provides electric generation, transmission and distribution services in central,
southern and southwestern portions of South Carolina to approximately 660,000 retail
customers.⁹ SCANA's current long-term issuer credit rating from Standard & Poor's
("S&P") is BBB+ (outlook: Stable), Baa3 (outlook: Stable) from Moody's Investors
Service ("Moody's") and BBB+ (outlook: Stable) from FitchRatings ("Fitch"). SCE&G
currently is rated BBB+ (outlook: Stable) by S&P and Baa2 (outlook: Stable) by
Moody's and BBB+ (outlook: Stable) by Fitch.¹⁰

11 Q. HOW DID YOU SELECT THE COMPANIES INCLUDED IN YOUR PROXY 12 GROUP?

With the objective of selecting a proxy group that is highly representative of the risks and

14 prospects faced by SCE&G, I used the following criteria:

- I began with the universe of companies that Value Line classifies as Electric
 Utilities, which includes a group of 48 domestic U.S. utilities;
- I excluded companies that do not consistently pay quarterly cash dividends;
- All of the companies in my proxy group have been covered by at least two utility
 industry equity analysts;
- All of the companies in my proxy group have investment grade senior bond
 and/or corporate credit ratings from S&P;

⁹ SCANA Corp., 2011 SEC Form 10-K, at 28.

¹⁰ Source: SNL Financial.

1		• I only selected proxy companies that are vertically integrated utilities (<i>i.e.</i> , utilities
2		that own and operate regulated generating assets);
3		• I excluded companies whose regulated operating income over the three most
4		recently reported fiscal years comprised less than 60.00 percent of the respective
5		totals for that company;
6		• I excluded companies whose regulated electric operating income over the three
7		most recently reported fiscal years represented less than 90.00 percent of total
8		regulated operating income;
9		• I excluded companies whose coal-fired generation constituted less than 10.00
10		percent of net generation; and
11		• I eliminated companies that are currently known to be party to a merger, or other
12		significant transaction.
13	Q.	DID YOU INCLUDE SCANA CORPORATION IN YOUR ANALYSIS?
14	A.	No, in order to avoid the circular logic that otherwise would occur, it has been my
15		consistent practice to exclude the subject company (or its parent) from the proxy group.
16		In any event, SCANA would not meet my electric utility operating income screens.
17	Q.	WHY IS IT IMPORTANT TO CONSIDER ONLY COMPANIES WHOSE
18		RESOURCE PORTFOLIOS INCLUDE COAL-FIRED GENERATING ASSETS
19		OF AT LEAST 10.00 PERCENT OF NET GENERATION?
20	A.	SCE&G's operations are heavily dependent on coal-fired generation (approximately
21		50.00 percent of the Company's generation). ¹¹ In general, capital-intensive base load
22		generation assets, such as coal-fired plants, face risks associated with capital recovery in

SCA

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SCANA Corp., 2011 SEC Form 10-K, at 9.

1 the event of market structure changes or plant failure, or replacement cost recovery in the event of extended or unplanned outages. To that point, in a recent report regarding the 2 effect of environmental regulations on electric utilities. Fitch Ratings stated that electric 3 utilities will face increasing operating and capital costs, both of which would be a "credit 4 negative." And while Fitch believes the risks may be "manageable," the increasing 5 number of coal unit retirements will inject "a measure of risk for investors."¹² As to the 6 7 effect of environmental regulations on coal unit retirements, Fitch recently estimated that some 80 gigawatts of coal-fired generating capacity are at risk of early retirement.¹³ 8

Federal environmental regulations creating emissions control requirements have 9 10 been issued in recent years. Compliance with new regulations can require substantial capital investment, or add operational costs. For instance, the Environmental Protection 11 12 Agency ("EPA") recently implemented regulations, including the Mercury and Air Toxics Standards ("MATS," previously known as the Utility MACT Rule) and the Cross-13 State Air Pollution Rule ("CSAPR").¹⁴ While the United States Court of Appeals for the 14 District of Columbia rejected the latest iteration of the EPA's CSAPR, it is expected that 15 the EPA will re-issue revised cross-state standards, and the stringency of the required 16 emissions reductions creates substantial challenges that would require additional 17 spending to meet emissions limits. In addition to the rules recently implemented, the 18 EPA has proposed several regulations, such as the Coal Combustion Residuals rule and 19 20 rules under section 316(b) of the Clean Water Act governing cooling water intake structures, which could also have a material effect on coal-fired generation operators. As 21

 I_{14}^{13} Ibid.

¹² SNL Financial, *Fitch: Coal retirements a credit risk, but one that can be managed*, March 2, 2012.

As discussed in the Direct Testimony of Stephen A. Byrne, SCE&G installed scrubbers at Wateree Station and Williams Station to meet current Clean Air Interstate Rule ("CAIR") requirements and the MATS standards.

a result of the increased likelihood of carbon emissions regulations, as well as other emissions regulations, investors see coal generation as being more risky going forward.

Given the increasing regulatory and legislative focus on, and the costs associated with, environmental compliance for companies such as SCE&G that are dependent on coal-fired generation, it is important to exclude companies that do not have a meaningful amount of coal-fired generation in their resource portfolio.

7 Q. WHAT COMPANIES MET THOSE SCREENING CRITERIA?

1

2

A. The criteria discussed above resulted in an initial proxy group of the following thirteen
 companies:

Company	Ticker
American Electric Power Company, Inc.	AEP
Cleco Corporation	CNL
Edison International	EIX
Empire District Electric Company	EDE
Great Plains Energy, Inc.	GXP
IDACORP, Inc.	IDA
Integrys Energy Group, Inc.	TEG
Otter Tail Corporation	OTTR
Pinnacle West Capital Corporation	PNW
PNM Resources, Inc.	PNM
Portland General Electric Company	POR
Southern Company	SO
Westar Energy, Inc.	WR

 Table 1: Initial Screening Results

10 Q. IS THIS YOUR FINAL PROXY GROUP?

A. No, it is not. I examined the operating profile of each of the thirteen companies that met
 my initial screens to be certain that none displayed characteristics that were inconsistent

1 with my intent to produce a proxy group that is fundamentally similar to the Company. As a result, I excluded two companies based on recently published 2011 financial 2 information. First, Edison International ("EIX") experienced significant unregulated 3 operating losses in 2009 and 2011. In 2009, those operating losses were the result of a 4 global tax settlement and payment to the Internal Revenue Service ("IRS"), which caused 5 the company's unregulated marketing and trading segment to incur over \$1.00 billion in 6 payments to settle a claim with the IRS.¹⁵ In 2011, EIX recorded a loss of \$1.09 billion 7 in its competitive power generation segment¹⁶ resulting from an after-tax earnings charge 8 (recorded in the fourth quarter of 2011) relating to the impairment of its Homer City, 9 Fisk, Crawford and Waukegan power plants, wind related charges, and other expenses.¹⁷ 10 Given the extent of those losses, it is difficult to assess the degree to which regulated 11 12 electric utility operations would be expected to contribute to the company's consolidated financial performance in the near and longer terms. Consequently, I have excluded EIX 13 from my final proxy group. 14

In addition, Integrys Energy Group, Inc. ("Integrys") experienced a 2009 operating loss of \$114.6 million in its Natural Gas Utility Segment due primarily to a non-cash goodwill impairment loss of \$284.6 million.¹⁸ Given that (1) Integrys' operating results since 2009 indicate that its gas utility operations consistently comprise approximately 50.00 percent of total regulated income, and (2) the company's 2009 results may not necessarily reflect its current and future operations, I have excluded Integrys from the proxy group.

r = 58 = 5

¹⁵ Edison International, 2009 SEC Form 10-K, at 129.

¹⁶ Edison International, 2011 SEC Form 10-K, at 53.

¹⁷ *Ibid.*, at 54.

¹⁸ Integrys, 2009 SEC Form 10-K, at 35.

1 Q. BASED ON THE CRITERIA AND ISSUES DISCUSSED ABOVE, WHAT IS THE

COMPOSITION OF YOUR PROXY GROUP? 2

The final proxy group is presented in Table 2 (below). 3 A.

Company	Ticker
American Electric Power Company, Inc.	AEP
Cleco Corporation	CNL
Empire District Electric Company	EDE
Great Plains Energy Inc.	GXP
IDACORP, Inc.	IDA
Otter Tail Corporation	OTTR
Pinnacle West Capital Corporation	PNW
PNM Resources, Inc.	PNM
Portland General Electric Company	POR
Southern Company	SO
Westar Energy, Inc.	WR

Table 2: Final Proxy Group

Q. WHY DID YOU NOT INCLUDE A SCREEN REGARDING THE PRESENCE OF 4

5

NUCLEAR GENERATION IN A COMPANY'S RESOURCE PORTFOLIO?

6 A. Imposing a screen for nuclear generation (similar to the coal generation screen) of 10.00 percent would have reduced the number of proxy companies from eleven to only six. In 7 my judgment, rather than including a proxy group of six companies, it is more 8 appropriate to adjust my recommended return on equity based on the incremental risks 9 implicit in the construction and operation of nuclear generating capacity.¹⁹ 10

Risks associated with nuclear ownership are further discussed in Section VII.

VI. COST OF EQUITY ESTIMATION

1Q.PLEASE BRIEFLY DISCUSS THE ROE IN THE CONTEXT OF THE2REGULATED RATE OF RETURN.

A. Regulated utilities primarily use common stock and long-term debt to finance their permanent property, plant, and equipment. The overall rate of return ("ROR") for a regulated utility is based on its weighted average cost of capital, in which the cost rates of the individual sources of capital are weighted by their respective book values. While the cost of debt and cost of preferred stock can be directly observed, the Cost of Equity is market-based and, therefore, must be estimated based on observable market information.

9

Q. HOW IS THE REQUIRED ROE DETERMINED?

10 A. The required ROE is estimated by using one or more analytical techniques that rely on market-based data to quantify investor expectations regarding required equity returns, 11 adjusted for certain incremental costs and risks. By their very nature, quantitative models 12 13 produce a range of results from which the market required ROE must be estimated. As 14 discussed throughout my Direct Testimony, that estimation must be based on a comprehensive review of relevant data and information, and does not necessarily lend 15 16 itself to a strict mathematical solution. Consequently, the key consideration in 17 determining the Cost of Equity is to ensure that the methodologies employed reasonably 18 reflect investors' view of the financial markets in general and the subject company (in the 19 context of the proxy group) in particular.

Q. WHAT METHODS DID YOU USE TO ESTIMATE THE COMPANY'S COST OF EQUITY?

A. I used the Constant Growth DCF model as my initial approach and considered the results
of the CAPM and Risk Premium approach in developing my ROE recommendation. In
light of the capital market conditions discussed in Section VIII, I have relied primarily on
the Constant Growth DCF model, and used the CAPM and Risk Premium approaches as
corroborating methodologies in arriving at my ROE recommendation.

WHY DO YOU BELIEVE IT IS IMPORTANT TO USE MORE THAN ONE

8 **Q.**

9

ANALYTICAL APPROACH?

10 А Because the Cost of Equity is not directly observable, it must be estimated based on both quantitative and qualitative information. As a result, a number of models have been 11 12 developed to estimate the Cost of Equity. As a practical matter, however, all of the models available for estimating the Cost of Equity are subject to limiting assumptions or 13 other methodological constraints. Consequently, many finance texts recommend using 14 multiple approaches when estimating the Cost of Equity. When faced with the task of 15 estimating the Cost of Equity, analysts and investors are inclined to gather and evaluate 16 as much relevant data as reasonably can be analyzed and, therefore, are inclined to rely 17 on multiple analytical approaches. 18

In essence, practitioners and academics recognize that financial models simply 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 1 arriving at ROE determinations. Thus, a reasonable ROE estimate appropriately 2 considers alternate methodologies and the reasonableness of their individual and 3 collective results.

Consequently, I believe it is both prudent and appropriate to use multiple methodologies in order to mitigate the effects of assumptions and inputs associated with relying exclusively on any single approach. Such use, however, must be tempered with due caution as to the results generated by each individual approach.

Constant Growth DCF Model

8 Q. ARE DCF MODELS WIDELY USED IN REGULATORY PROCEEDINGS?

9 A. Yes, in my experience the Constant Growth DCF model is widely recognized in
10 regulatory proceedings, as well as in financial literature. Nonetheless, neither the DCF
11 nor any other model should be applied without considerable judgment in the selection of
12 data and the interpretation of results.

13 Q. PLEASE DESCRIBE THE DCF APPROACH.

A. The DCF approach is based on the theory that a stock's current price represents the present value of all expected future cash flows.²⁰ In its simplest form, the DCF model expresses the Cost of Equity as the sum of the expected dividend yield and long-term growth rate, and is expressed as follows:

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

18 19

²⁰ Importantly in this proceeding, this Commission has also recognized the Constant Growth DCF model as a reasonable methodology to use in estimating the Cost of Equity. *See* Public Service Commission of South Carolina, Docket No. 2004-178-E, Order No. 2005-2 dated January 6, 2005, pp.93-95.

where P represents the current stock price, $D_1 \dots D_\infty$ represent expected future dividends, 1 2 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: 3 4 $k = \frac{D_0 (1+g)}{p} + g$ [2] 5 6 Equation [2] often is referred to as the "Constant Growth DCF" model, in which the first 7 8 term is the expected dividend yield and the second term is the expected long-term annual 9 growth rate. WHAT ASSUMPTIONS ARE REQUIRED FOR THE CONSTANT GROWTH 10 **O**. **DCF MODEL?** 11 The Constant Growth DCF model requires the following assumptions: (1) a constant 12 A. 13 average annual growth rate for earnings and dividends; (2) a stable dividend payout ratio; (3) a constant price-to-earnings multiple; and (4) a discount rate greater than the expected 14 growth rate. 15 16 **Q**. WHAT MARKET DATA DID YOU USE TO CALCULATE THE DIVIDEND 17 **YIELD COMPONENT OF YOUR DCF MODEL?** The dividend yield is based on the proxy companies' current annualized dividend, and 18 A. 19 average closing stock prices over the 30, 90, and 180-trading day periods as of August 20 17, 2012. 21 Q. WHY DID YOU USE THREE AVERAGING PERIODS TO CALCULATE AN 22 **AVERAGE STOCK PRICE?** 23 A. I did so to ensure that the model's results are not skewed by anomalous events that may affect stock prices on any given trading day. At the same time, the averaging period 24 25 should be reasonably representative of expected capital market conditions over the long DOCKET NO. 2012-218-E ROBERT B. HEVERT

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term. In my view, the use of the 30-, 90-, and 180-day averaging periods reasonably
balances those concerns.

3 Q. DID YOU MAKE ANY ADJUSTMENTS TO THE DIVIDEND YIELD TO 4 ACCOUNT FOR PERIODIC GROWTH IN DIVIDENDS?

5 A. Yes, I did. Since utility companies tend to increase their quarterly dividends at different 6 times throughout the year, it is reasonable to assume that dividend increases will be 7 evenly distributed over calendar quarters. Given that assumption, it is appropriate to 8 calculate the expected dividend yield by applying one-half of the long-term growth rate 9 to the current dividend yield.²¹ That adjustment ensures that the expected dividend yield 10 is, on average, representative of the coming twelve-month period, and does not overstate 11 the dividends to be paid during that time.

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

A. Yes. In its Constant Growth form, the DCF model (*i.e.*, as presented in Equation [2] above) assumes a single growth estimate in perpetuity. In order to reduce the long-term growth rate to a single measure, one must assume a constant payout ratio, and that earnings per share, dividends per share, and book value per share all grow at the same constant rate. Over the long term, however, dividend growth can only be sustained by earnings growth. Consequently, it is important to incorporate a variety of measures of long-term earnings growth into the Constant Growth DCF model.

²¹ See Exhibit No.__(RBH-1).

1Q.PLEASE SUMMARIZE YOUR INPUTS TO THE CONSTANT GROWTH DCF2MODEL.

- A. I applied the DCF model to the proxy group of integrated electric utility companies using
 the following inputs for the price and dividend terms:
- 51. The average daily closing prices for the 30-trading days, 90-trading days, and6180-trading days ended August 17, 2012, for the term P₀; and
- 7 2. The annualized dividend per share as of August 17, 2012, for the term D_0 .
- 8 I then calculated my DCF results using each of the following growth terms:
 - 1. The Zacks consensus long-term earnings growth estimates;

9

11

- 10 2. The First Call consensus long-term earnings growth estimates; and
 - 3. The Value Line long-term earnings growth estimates.

12 Q. HOW DID YOU CALCULATE THE HIGH AND LOW DCF RESULTS?

I calculated the proxy group mean and median high DCF results using the maximum EPS 13 A. growth rate as reported by Value Line, Zack's, and First Call for each proxy group 14 company in combination with the dividend yield for each of the proxy group companies. 15 16 The proxy group mean and median high results then reflect the average maximum DCF 17 result for the proxy group as a whole. I used a similar approach to calculate the proxy group mean and median low results using instead the minimum growth rate as reported 18 by Value Line, Zack's, and First Call for each proxy group company. However, the 19 20 mean and median low results are below reasonable estimates of investors' required rate of return for investment in vertically integrated electric utilities of comparable risk to 21 SCE&G. 22

1 **Q.**

WHAT ARE THE RESULTS OF YOUR DCF ANALYSIS?

A. My Constant Growth DCF results are summarized in Exhibit No. (RBH-1). The mean
DCF results for my proxy group are 10.54 percent, 10.71 percent, and 10.79 percent for
the 30-, 90-, and 180-trading day periods, respectively. The mean high DCF results for
the 30-, 90-, and 180-day averaging periods are 13.03 percent, 13.21 percent, and 13.29
percent respectively.²²

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

9 A. Yes. As noted earlier, I also applied the CAPM and Risk Premium analysis in estimating
10 the Company's Cost of Equity.

CAPM Analysis

11 Q. PLEASE BRIEFLY DESCRIBE THE GENERAL FORM OF THE CAPM 12 ANALYSIS.

A. The CAPM analysis is a risk premium approach 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 shown in Equation [3], the CAPM is defined by four components, each of which theoretically must be a forward-looking estimate:

$$k = r_f + \beta (r_m - r_f) [3]$$

18Where:19k = the required market ROE;20 $\beta =$ Beta coefficient of an individual security;

² DCF results are unadjusted (*i.e.*, prior to any adjustment for flotation costs).

22

1 r_f = the risk-free rate of return; and

2

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

In Equation [3], the term $(r_m - r_f)$ represents the Market Risk Premium.²³ According to the theory underlying the CAPM, since unsystematic risk can be diversified away by adding securities to their investment portfolio, investors should be concerned only with systematic or non-diversifiable risk. Non-diversifiable risk is measured by the Beta coefficient, which is defined as:

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

8 where σ_j is the standard deviation of returns for company "*j*," σ_m is the standard 9 deviation of returns for the broad market (as measured, for example, by the S&P 500 10 Index), and $\rho_{j,m}$ is the correlation of returns in between company *j* and the broad market. 11 Thus, the Beta coefficient represents both relative volatility (*i.e.*, the standard deviation) 12 of returns, and the correlation in returns between the subject company and the overall 13 market.

14 **Q.**

Q. HAS THE CAPM BEEN AFFECTED BY RECENT ECONOMIC CONDITIONS?

A. Yes, recent economic conditions have affected all three components of the model. First, as noted above, the risk-free rate, " r_{f_5} " in the CAPM formula is represented by the yield on long-term U.S. Treasury securities. As discussed in Section VIII (below), during periods of increased equity market volatility investors tend to allocate their capital to low-risk securities such as Treasury bonds. In addition, since the 2008 Lehman Brothers bankruptcy filing, the Federal Reserve has focused on maintaining low long-term interest rates. Consequently, the first term in the model (*i.e.* the risk-free rate) is lower than it

²³

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

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would have been absent the elevated degree of risk aversion and government intervention that has, at least in part, resulted in historically low Treasury yields.

However, the capital markets continue to change, by some measures quite significantly. For example, in the 90 trading days ended August 17, 2012, the 30-year Treasury yield ranged from a low of 2.46 percent to a high of 3.22 percent.²⁴ In that regard, it is important to recognize that several capital market indices may continue to be quite volatile. As also discussed in Section VIII, the persistently high level of correlations between electric utility stocks and the broad market has put upward pressure on Beta coefficients (that is, the second term in the model).

Finally, as a result of the extraordinary loss in equity values during 2008, the Market Risk Premium, when measured on a historical basis, actually decreased from the prior year, even though other measures of risk sentiment, in particular market volatility, indicated extremely high levels of risk aversion. That result is, of course, counterintuitive. While the subsequent market rally resulted in a somewhat higher historical average Market Risk Premium, it still remains below its pre-financial crisis level.

Q. WITH THOSE OBSERVATIONS IN MIND, WHAT ASSUMPTIONS DID YOU INCLUDE IN YOUR CAPM ANALYSIS?

A. Since utility assets represent long-term investments, I used three different estimates of the risk-free rate component of the CAPM analysis: (1) the current 30-day average yield on 30-year Treasury bonds (*i.e.*, 2.65 percent); (2) the near-term projected 30-year Treasury

²⁴ 30-year Treasury yield range is based on daily data reported by the Federal Reserve at www.federalreserve.gov

yield (*i.e.*, 3.00 percent);²⁵ and (3) the long-term projected 30-year Treasury yield (*i.e.*,
 5.30 percent).²⁶

3 Q. WHAT MARKET RISK PREMIUM DID YOU USE IN YOUR CAPM 4 ANALYSIS?

5 A. For the reasons discussed above, I did not use a historical average; rather, I developed 6 two forward-looking (*ex-ante*) estimates of the Market Risk Premium.

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

The first approach is based on the market required return, less the current 30-year 9 A. 10 Treasury bond yield. To estimate the market required return, I calculated the market capitalization weighted average ROE based on the Constant Growth DCF model. To do 11 so, I relied on data from two sources: (1) Bloomberg and (2) Capital IQ. For both 12 Bloomberg and Capital IQ, I calculated the market capitalization weighted expected 13 dividend yield (using the same one-half growth rate assumption described earlier) and 14 combined that amount with the market capitalization weighted projected earnings growth 15 rate to arrive at the market capitalization weighted average DCF result. I then subtracted 16 the current 30-year Treasury yield from that amount to arrive at the market DCF-derived 17 ex-ante Market Risk Premium estimate. The results of those two calculations are 18 provided in Exhibit No. (RBH-2). 19

²⁵ <u>Blue Chip Financial Forecasts</u>, Vol. 31, No. 8, August 1, 2012, at 2. Consensus projections of the 30-year Treasury yield for the six quarters ending December 2013. As noted above, the 30-year Treasury yield ranged from 2.46 percent to 3.22 percent in the 90 trading days ending August 17, 2012.

²⁶ <u>Blue Chip Financial Forecasts</u>, Vol. 31, No. 6, June 1, 2012, at 14. Consensus projections of the 30-year Treasury yield for the period 2014-2023.

1 Q. PLEASE NOW DESCRIBE THE SECOND EX-ANTE APPROACH.

A. The second approach assumes a constant Sharpe Ratio, which is the ratio of the Risk Premium relative to the risk, or standard deviation of a given security or index of securities. The Sharpe Ratio is relied upon by financial professionals to assess the incremental return received for holding a risky (*i.e.*, more volatile) asset rather than a risk-free (*i.e.*, less volatile) asset. The formula for calculating the Sharpe Ratio is expressed as follows:

8
$$S_x = \frac{(R_x - R_f)}{\sigma_x} \quad [5]$$

9 where:

0	S_x = Sharpe Ratio for	r security "x"
10	$S_x = \text{Snarpe Ratio for}$	r security x

11
$$R_x$$
 = the average return of "x";

12 R_f = the rate of return of a risk-free security; and

13
$$\sigma_x$$
 = the standard deviation of r_x .

As shown in Exhibit No.___(RBH-2), the constant Sharpe Ratio is the ratio of the historical Market Risk Premium of 6.60 percent (the numerator of Equation [5] above) and the historical market volatility of 20.30 percent (the denominator of Equation [5]).²⁷ The expected Market Risk Premium is then calculated as the product of the Sharpe Ratio and the expected market volatility. For the purpose of that calculation, I used the 30-day average of the Chicago Board Options Exchange's ("CBOE") three-month volatility index (*i.e.*, the VXV) and the average of settlement prices over the same 30-day period of

²⁷ The standard deviation is calculated from data provided by Morningstar in its annual Valuation Yearbook. (*See*, Morningstar Inc., <u>Ibbotson SBBI 2011 Valuation Yearbook</u>, Large Company Stocks: Total Returns Table B-1, at 162-163). I recognize that the VIX forward settlement prices are liquid for approximately six to eight months; nonetheless, that data represents a market-based measure of expected volatility that should be considered in estimating the *ex-ante* Market Risk Premium.

1 futures on the CBOE's one-month volatility index (*i.e.*, the VIX) for January 2013 2 through March 2013.

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

5 A. I relied on each of the *ex-ante* Market Risk Premia discussed above, together with the 6 current, near-term projected, and long-term projected 30-year Treasury bond yields as 7 inputs to my CAPM analyses.

8 Q. WHAT BETA COEFFICIENTS DID YOU USE IN YOUR CAPM MODEL?

9 A. I considered two methods of calculation. My first approach simply employs the average 10 reported Beta coefficient from Bloomberg and Value Line for each of the proxy group While both of those services adjust their calculated (or "raw") Beta 11 companies. 12 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 13 Bloomberg's calculation is based on two years of data. I also calculated Beta coefficients 14 over a more recent time period to provide a more current view as to investors' 15 perspectives with respect to the systematic risk represented by the proxy group 16 companies. 17

18 Q. PLEASE DESCRIBE HOW YOU CALCULATED THE MEAN ADJUSTED BETA 19 COEFFICIENT FOR YOUR PROXY GROUP.

A. As shown in Equation [4], the Beta coefficient is calculated as the ratio of the standard deviation of returns for the subject company and the market, respectively, multiplied by the correlation of returns between the two. I therefore calculated the "raw" Beta coefficient for each member of the proxy group, based on Equation [4], and adjusted those raw Beta coefficients to address the tendency to regress toward the market Beta coefficient of unity. For the purpose of that calculation, I used weekly returns and calculated the standard deviation and correlations over the 12-month period ended August 17, 2012. Averaging those results produces an adjusted Beta coefficient of 0.70.

5

Q. HOW AND WHY DID YOU ADJUST THE RAW BETA COEFFICIENT?

A. I adjusted my raw Beta coefficient consistent with the methodology used by Bloomberg,
 which multiplies the raw Beta coefficient by 0.67, and adds 0.33 to that product. The
 purpose of that adjustment is to reflect the results of substantial academic research
 indicating that, over time, raw Beta coefficients tend to regress to the market mean of
 1.00.²⁸

Q. PLEASE EXPLAIN WHY YOU RELIED ON A 12-MONTH ESTIMATE OF THE PROXY GROUP MEAN ADJUSTED BETA COEFFICIENT.²⁹

A. As noted in Section VIII, while volatility in the broad market and the utility sector recently have begun to moderate, the correlation in returns has remained at historically elevated levels. And, as discussed above, the Market Risk Premium tends to change over time. In my view, the use of Beta coefficients calculated over shorter periods is consistent with the notion that market conditions, and the risk premium required by

The regression tendency of Beta coefficients to converge to 1.0 over time has been widely accepted in academic literature and financial practice, and the compensating adjustment made to the Beta coefficient is often known as the Blume adjustment. (*See, e.g.*, Blume, Marshall E., *On the Assessment of Risk*, <u>The Journal of Finance</u>, Vol. 26, No. 1, March 1971, at 1-10). Please note that Value Line uses a similar adjustment methodology.

There is no specific time period for the calculation of the Beta coefficient that best balances the need for current data with the desire to smooth out fluctuations from short-term market dynamics. Bloomberg and Value Line use two-year and five-year time periods, respectively. A more near-term calculation of the Beta coefficient enables the analyst to reflect current investor expectations and incorporate the current relationship between the proxy group companies and the market. Note, in the Company's last rate case, Docket No. 2009-489-E, I calculated the Beta coefficient over a six-month period.

investors in response to those conditions, also may change over shorter periods.³⁰ In any
 case, by relying on both Value Line and Bloomberg, my CAPM analysis reflects Beta
 Coefficients calculated over longer periods, as well.

4

4 Q. IS YOUR CALCULATED BETA COEFFICIENT REASONABLE RELATIVE TO 5 THOSE CALCULATED BY VALUE LINE AND BLOOMBERG?

A. Yes, it is. As shown in Exhibit No.___(RBH-3), the proxy group average Value Line,
Bloomberg, and Calculated Beta Coefficients are 0.74, 0.69, and 0.70, respectively. In
light of the market dynamics noted earlier, the calculated Beta coefficient reasonably
reflects current conditions, although it is not materially different than those provided by
Value Line and Bloomberg.

11 Q. WHAT ARE THE RESULTS OF YOUR CAPM ANALYSES?

A. The results of my CAPM analysis are summarized in Exhibit No.___(RBH-4). Applying the 12-month Beta coefficient estimate suggests a range of returns from 8.25 percent to 12.74 percent with a mean result of 10.43 percent. Relying on the Bloomberg estimates of the Beta coefficient, the results of my CAPM analysis suggest a range of returns from 8.17 percent to 12.63 percent with a mean result of 10.33 percent. Finally, applying the Value Line estimates of the Beta coefficient, the results of my CAPM analysis produces a range of results from 8.55 percent to 13.14 percent with a mean result of 10.79 percent.

³⁰ See Felicia Marston, Robert Harris, Peter Crawford, *Risk and Return in Equity Markets: Evidence Using Financial Analysts' Forecasts*, in J. Guerard and M. Gultekin (eds), <u>Handbook of Security Analysts Forecasting and Asset Allocation</u> (JAI Press, 1999).

1 Q. DOES YOUR RECOMMENDATION SUBSTANTIALLY RELY ON THE CAPM 2 RESULTS?

A. No, it does not. While I have calculated the CAPM using the approaches and
 assumptions discussed above, I did not give any specific weight to those results. Rather,
 I used the CAPM results to assess the DCF results discussed earlier.

Bond Yield Plus Risk Premium Approach

Q. PLEASE GENERALLY DESCRIBE THE BOND YIELD PLUS RISK PREMIUM 7 APPROACH.

In general terms, this approach is based on the fundamental principle that equity investors 8 A. 9 bear the residual risk associated with ownership and therefore require a premium over the 10 return they would have earned as a bondholder. That is, since returns to equity holders are more risky than returns to bondholders, equity investors must be compensated for 11 bearing that risk. Risk premium approaches, therefore, estimate the cost of equity as the 12 sum of the Equity Risk Premium³¹ and the yield on a particular class of bonds. As noted 13 14 in my discussion of the CAPM, since the Equity Risk Premium is not directly observable, 15 it typically is estimated using a variety of approaches, some of which incorporate *ex-ante*, 16 or forward-looking estimates of the cost of equity, and others that consider historical, or 17 *ex-post*, estimates. An alternative approach is to use actual authorized returns for electric 18 utilities to estimate the Equity Risk Premium.

³¹ The Equity Risk Premium is defined as the incremental return that an equity investment provides over a risk-free rate.

Q. PLEASE EXPLAIN HOW YOU PERFORMED YOUR BOND YIELD PLUS RISK PREMIUM ANALYSIS.

A. As discussed above, I first defined the Risk Premium as the difference between the authorized ROE and the then-prevailing level of long-term (*i.e.*, 30-year) Treasury yield. 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 202 days).

9 Because the data covers a number of economic cycles,³² the analysis also may be 10 used to assess the stability of the Equity Risk Premium. Prior research, for example, has 11 shown that the Equity Risk Premium is inversely related to the level of interest rates.³³ 12 That analysis is particularly relevant given the historically low level of current Treasury 13 yields.

14 Q. HOW DID YOU MODEL THE RELATIONSHIP BETWEEN INTEREST RATES

15

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 (the post-Lehman bankruptcy period).

³² National Bureau of Economic Research, U.S. Business Cycle Expansion and Contractions.

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

1 Therefore, to account for this variability I used the semi-log regression, in which the 2 Equity Risk Premium is expressed as a function of the natural log of the 30-year Treasury 3 yield:

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

As shown on Chart 1 (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 1: Equity Risk Premium



7 As Chart 1 illustrates, over time there has been a statistically significant, negative 8 relationship between the 30-year Treasury yield and the Equity Risk Premium. 9 Consequently, simply applying the long-term average Equity Risk Premium of 4.33 percent (see Exhibit No. (RBH-5)) would significantly understate the Cost of Equity 10 and produce results well below any reasonable estimate. Based on the regression 11 12 coefficients in Chart 1, however, the implied ROE is between 10.27 percent and 10.87 percent (see Exhibit No. (RBH-5)). In any event, the analysis demonstrates that there 13 DOCKET NO. 2012-218-E ROBERT B. HEVERT

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has been a significant inverse relationship between the 30-year Treasury yield and the
 Equity Risk Premium.

VII. BUSINESS RISKS

Q. DO THE MEAN DCF AND CAPM RESULTS FOR THE PROXY GROUP PROVIDE AN APPROPRIATE ESTIMATE OF THE COST OF EQUITY FOR SCE&G?

No, the mean results do not necessarily provide an appropriate estimate of the Company's 6 A. 7 Cost of Equity. In my view, there are several additional factors that must be taken into 8 consideration when determining where the Company's Cost of Equity falls within the 9 range of results. These factors include the Company's planned capital investment 10 program, the Company's investment in new nuclear generation facilities, the Company's comparatively small size, and the costs associated with the flotation of common stock. 11 These risk factors, which are discussed below, should be considered in terms of their 12 13 overall effect on the Company's business risk.

Planned Capital Expenditures

14 Q. PLEASE BRIEFLY SUMMARIZE THE COMPANY'S CAPITAL INVESTMENT 15 PLANS.

A. As shown on Tables 3 and 4 below, SCE&G expects approximately \$4.00 billion of
 additional capital needs over 2012 – 2014.

ESTIMATED CASH OUTLAYS (IN \$MILLIONS)			
	2012	2013	2014
SCE&G – Normal			
Generation	\$143	\$96	\$79
Transmission & Distribution	\$197	\$217	\$190
Other	\$26	\$14	\$21
Common	\$14	\$18	\$13
Total SCE&G	\$380	\$345	\$303

Table 3: SCE&G Capital Expenditure Estimate³⁴

As described in the Direct Testimony of Jimmy E. Addison, SCE&G must finance improvements to its system and meet the other capital obligations required to operate a reliable and efficient electric system accounting for more than \$1.00 billion in planned capital expenditures. In addition, the expected cash outlays for SCE&G associated with new nuclear construction are provided in Table 4.

 Table 4: SCE&G Nuclear Construction Capital Expenditure Estimate³⁵

ESTIMATED CASH OUTLAYS FOR NUCLEAR CONSTRUCTION				
(IN \$MILLIONS)				
	2012	2013	2014	
New Nuclear	\$711	\$970	\$998	

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7 Q. DO CREDIT RATING AGENCIES RECOGNIZE RISKS ASSOCIATED WITH

8 INCREASED CAPITAL EXPENDITURES?

9 A. Yes, they do. From a credit perspective, the additional pressure on cash flows associated
10 with high levels of capital expenditures exerts corresponding pressure on credit metrics
11 and, therefore, credit ratings. S&P has noted several long-term challenges for utilities'
12 financial health including heavy construction programs to address demand growth,

³⁵ *Ibid*.

³⁴ SCANA Corporation, Investor Presentation September 2012, at 10.
- 1 declining capacity margins, and aging infrastructure and regulatory responsiveness to
- 2 mounting requests for rate increases. S&P further noted that:

To sustain their current credit quality in the face of these long-lived 3 4 challenges, utilities need to have established-and be able to maintain-a 5 firm credit foundation. This will require a strong and effective working 6 relationship among management, regulators, and increasingly legislators 7 and governors, in the planning and execution of strategies. А 8 comprehensive vetting and understanding of the risks associated with the 9 regulatory mechanisms under which the utility will recover its investment, which could include a cash return during construction and timely 10 recognition of volatile costs, will be paramount in preserving 11 creditworthiness.³⁶ 12

- 13 In its recent report on SCE&G, S&P specifically noted the risks associated with
- 14 significant capital expenditures resulting from the construction of two nuclear power
- 15 plants. In that regard, S&P stated:

27

16 The new units, while they are evolutions of existing plant designs, have significant first-of-a-kind risk. The scope of the project is material relative 17 to the size of SCANA's overall operations and balance sheet and has a 18 long-term horizon, necessitating that not only the construction of the two 19 proposed nuclear units is completed on schedule and on budget, but that 20 all other aspects of the company perform favorably and that regulatory 21 22 support for the remaining regulated utility operations is sustained. Standard & Poor's believes that the proposed construction increases 23 business risk through the associated construction risk, stresses the 24 company's financial risk profile, and pressures the consolidated credit 25 profile.37 26

- 28 The rating agency views noted above also are consistent with certain observations made
- 29 earlier in my Direct Testimony: (1) the benefits of maintaining a strong financial profile
- 30 are significant when capital access is required and become particularly acute during
- 31 periods of market instability; and (2) the Commission's decision in this proceeding will

³⁷ Standard & Poor's, *Summary: South Carolina Electric & Gas Co.*, RatingsDirect, May 23, 2012, at 2.

³⁶ Standard & Poor's, *Industry Report Card: Utility Sectors In the Americas Remain Stable, While Challenges Beset European, Australian, and New Zealand Counterparts,* RatingsDirect, June 27, 2008, at 4.

have a direct bearing on the Company's credit profile and its ability to access the capital
 needed to fund its investments.

3 Q. ARE EQUITY INVESTORS ALSO CONCERNED WITH COMPARATIVELY

4

HIGH LEVELS OF CAPITAL EXPENDITURES?

- 5 A. Yes, equity investors also recognize the pressure on cash flows associated with relatively
- 6 high levels of capital expenditures. For example, KeyBanc Capital Markets ("KeyBanc")
- 7 conducts a quarterly review of the electric utility industry. In a recent report, KeyBanc
- 8 noted that:

9 Credit and liquidity concerns have driven many companies to revisit capital spending plans and reassess operational efficiencies. The primary 10 response has generally been to delay projects, as opposed to outright 11 cancellation. Initially, reductions in capital programs were a function of 12 lower growth, which eliminated the need for growth-related capital 13 spending on items such as line extensions and new substations. However, 14 15 as difficult economic conditions persist, the cuts have grown more extensive, with deferrals in non-core maintenance spending, reevaluating 16 the cost-effectiveness of running older inefficient power plants and 17 pursuing company restructurings or mergers.³⁸ 18

19 More recently, KeyBanc noted that:

20 While recent prices may have come off of their earlier highs due to the global economic crisis slowing construction demand, we believe the long-21 term trend of rising construction materials costs could resume as the 22 global economy rebounds. The cost of building new generation remains a 23 24 moving target, as worldwide demand for construction materials commodities (steel, concrete and copper), labor and components (turbines 25 26 and boilers) would remain fundamentally strong, driven by a rebound in 27 the U.S. and Chinese economies and required compliance with future U.S. 28 environmental regulations. We believe this presents challenges to both unregulated and regulated investment in new generation plants. 29 In 30 particular, on the regulated side, there exists a chicken-and-egg problem in that securing pricing without a regulatory buy-in is as difficult as receiving 31 regulatory pre-approval without firm pricing.³⁹ 32

³⁸ KeyBanc Capital Markets Inc., *Electric Utilities Quarterly 4Q10*, March 2011, at 7.

³⁹ KeyBanc Capital Markets Inc., *Electric Utilities Quarterly 3Q11*, December 2011, at 17.

1 **O**. HAVE EQUITY INVESTORS COMMENTED ON THE RISKS ASSOCIATED 2 WITH THE COMPANY'S NUCLEAR CONSTRUCTION PLANS? A. Yes. Investors have observed the risks associated with the Company's nuclear plant 3 construction. In particular, Bank of America-Merrill Lynch observed: 4 [SCANA] has a regulatory framework for the new nuclear plants, 5 providing up-front prudence decisions and real-time cost recovery. 6 Despite these protections, we see a higher risk profile for [SCANA] given 7 1) the new technology nature of new nuclear, 2) the risk of rising 8 9 construction costs and delays, and 3) the high concentration of its growth focused on one asset 40 10 As noted, due to the nature of the planned capital expenditures, investors perceive an 11 incremental level of risk despite the risk mitigating effect of the regulatory framework in 12 13 place. 14 **O**. DO THE PROXY GROUP COMPANIES DISPLAY A SIMILAR RISK **PROFILE?** 15 No, they do not. Of the eleven companies in my final proxy group, only Southern 16 A. 17 Company is sponsoring the development and construction of a new nuclear generating 18 facility. While the Company has a cost recovery mechanism in place, this mechanism is 19 not an explicit guarantee; therefore, the investment community still views such capital 20 spending as an incremental risk. This perceived risk should be factored into the 21 Commission's authorized ROE in order to provide investors with a fair return on their 22 invested capital. Based on this review and the fact that the majority of companies in my 23 proxy group are not exposed to the risks inherent in sponsoring a new nuclear generating 24 facility, I believe that the Company's nuclear investment program must be considered in determining where within the range of analytical results the ROE appropriately falls. 25

⁴⁰ Bank of America Merrill Lynch, *SCANA Corp, Analyst Day takeaways: it's all about nuclear*, June 5, 2012, at 2.

1Q.WHAT ARE YOUR CONCLUSIONS REGARDING THE EFFECT OF THE2COMPANY'S CAPITAL SPENDING PLANS ON ITS RISK PROFILE?

It is clear that on a relative basis, the Company's capital expenditure program is A. 3 significant. It also is clear that the financial community recognizes the additional risks 4 associated with substantial capital expenditures and, particularly, capital expenditures for 5 new nuclear generation. In my view, these factors suggest the financial community 6 views SCE&G as having a comparatively high level of risk relative to the proxy group. 7 This is one reason that suggests that an authorized ROE at the higher end of my estimated 8 range of reasonableness is appropriate, and the Company's proposed ROE is, in my view, 9 10 conservative.

Small Size Premium

11 Q. PLEASE EXPLAIN THE RISK ASSOCIATED WITH SMALL SIZE.

Both the financial and academic communities have long accepted the proposition that the 12 A. Cost of Equity for small firms is subject to a "size effect."⁴¹ While empirical evidence of 13 14 the size effect often is based on studies of industries beyond regulated utilities, utility 15 analysts also have noted the risks associated with small market capitalizations. 16 Specifically, Ibbotson Associates noted that "[f]or small utilities, investors face additional 17 obstacles, such as smaller customer base, limited financial resources, and a lack of diversification across customers, energy sources, and geography. These obstacles imply 18 a higher investor return."⁴² Small size, therefore, leads to two categories of increased risk 19 20 for investors: (1) liquidity risk (i.e., the risk of not being able to sell one's shares in a

⁴¹ *See* Mario Levis, The record on small companies: A review of the evidence, <u>Journal of Asset Management</u>, March 2002, for a review of literature relating to the size effect.

⁴² Michael Annin, *Equity and the Small-Stock Effect*, <u>Public Utilities Fortnightly</u>, October 15, 1995.

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timely manner due to the relatively thin market for the securities); and (2) fundamental business risks.

3 Q. HOW DOES SCE&G COMPARE IN SIZE TO THE PROXY COMPANIES?

4 А SCE&G is smaller than the average for the proxy group companies both in terms of 5 number of customers and annual revenues. Exhibit No. (RBH-6) estimates the implied market capitalization for SCE&G (i.e., the implied market capitalization if 6 7 SCE&G were a stand-alone, publicly traded entity). That is, because SCE&G is not a separately traded entity, an estimated stand-alone market capitalization for SCE&G must 8 9 be calculated. The implied market capitalization of SCE&G is calculated by applying the 10 median market-to-book ratio for the proxy group of 1.36 to the Company's implied total common equity of \$2.54 billion.⁴³ The implied market capitalization based on that 11 12 calculation is \$3.46 billion, compared to the proxy group average of \$7.69 billion, which indicates SCE&G is approximately half the size of the proxy group average on a market 13 capitalization basis. 14

Q. HOW DOES THE COMPARATIVELY SMALL SIZE OF SCE&G AFFECT ITS BUSINESS RISKS RELATIVE TO THE PROXY GROUP OF COMPANIES?

A. In general, smaller companies are less able to withstand adverse events that affect their
 revenues and expenses. 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 reduction. These
 risks affect the return required by investors for smaller companies.

Equity value of SCE&G estimated from proposed rate base and recommended capital structure.

Q. HAVE YOU CONSIDERED THE COMPARATIVELY SMALL SIZE OF SCE&G IN YOUR RECOMMENDED RETURN ON COMMON EQUITY?

A. Yes. Rather than proposing a specific premium, I have considered the small size of SCE&G in my assessment of business risks in order to determine where, within a reasonable range of returns, SCE&G's required ROE appropriately falls. In that regard, SCE&G's comparatively small size further supports my conclusion that an ROE at the higher end of my recommended range is reasonable and appropriate, and the Company's proposed ROE is, in my view, conservative.

9

Q. HOW DID YOU EVALUATE THE RISKS ASSOCIATED WITH SMALL SIZE?

10 A. In its Risk Premia Over Time Report: 2012, Morningstar Inc. ("Morningstar") presents its calculation of the size premium for deciles of market capitalizations relative to the S&P 11 12 500 Index. As shown on Exhibit No. (RBH-6), based on recent market data, the average market capitalization of the proxy group is approximately \$7.69 billion, and the 13 median market capitalization of the proxy group is \$2.62 billion, which correspond to the 14 second and fourth deciles, respectively, of Morningstar's market capitalization data. 15 Based on the Morningstar analysis, the proxy group has a size premium of 0.78 percent to 16 17 1.17 percent. The implied market capitalization for SCE&G is approximately \$3.46 billion, which falls within the fourth decile and corresponds to a size premium of 1.17 18 percent, suggesting that a size premium as high as 39 basis points (1.17 percent - 0.78)19 percent) is expected for SCE&G relative to the proxy group. However, rather than 20 propose a specific adjustment, I considered the effect of small size in determining where 21 the Company's ROE falls within the range of results. 22

Flotation Costs

1 **Q**

Q. WHAT ARE FLOTATION COSTS?

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

5 Q. WHY IS IT IMPORTANT TO RECOGNIZE FLOTATION COSTS IN THE 6 ALLOWED RETURN ON EQUITY?

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

12 Q. ARE FLOTATION COSTS PART OF THE UTILITY'S INVESTED COSTS OR 13 PART OF THE UTILITY'S EXPENSES?

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

allow such cost recovery may deny the Company the opportunity to earn its required rate
 of return in the future.

3 Q. IS THE NEED TO CONSIDER FLOTATION COSTS ELIMINATED BECAUSE 4 THE COMPANY IS A SUBSIDIARY OF SCANA?

5 A. No. Although the Company is a wholly-owned subsidiary of SCANA, it is appropriate 6 to consider flotation costs because wholly-owned subsidiaries receive equity capital from 7 their parents and provide returns on the capital that roll up to the parent, which is 8 designed to attract and raise capital based on the returns of those subsidiaries. To deny 9 recovery of issuance costs associated with the capital that is invested in the subsidiaries 10 ultimately will penalize the investors that fund the utility operations and will inhibit the 11 utility's ability to obtain new equity capital at a reasonable cost.

Q. DOES THE DCF MODEL OR THE CAPM ALREADY INCORPORATE INVESTOR EXPECTATIONS OF A RETURN THAT COMPENSATES FOR FLOTATION COSTS?

A. No. All the models used to estimate the appropriate ROE assume no "friction" or
 transaction costs, as these costs are not reflected in the market price (in the case of the
 DCF model) or risk premium (in the case of the CAPM). Therefore, it is appropriate to
 consider flotation costs when determining where within the range of reasonable results
 the Company's return should fall.

20 Q. IS THE NEED TO CONSIDER FLOTATION COSTS RECOGNIZED BY THE

21 ACADEMIC AND FINANCIAL COMMUNITIES?

A. Yes. Several economists have recognized that the flotation cost adjustment is made not
 to reflect current or future financing costs, but rather to compensate investors for costs

incurred for all past issuances comprising the total equity portion of the Company's 1 capitalization. An article in *The Journal of Finance*, for example, observed that: 2 Under the conventional approach, in other words, the flotation cost 3 4 adjustment is not made to reflect current or future financing costs.... [I]t 5 is made to compensate investors for costs incurred in *preceding* stock issues.44 6 The need to reimburse for equity issuance costs is justified by the academic and 7 8 financial communities in the same spirit that investors are reimbursed for the costs of 9 issuing debt. This treatment is consistent with the philosophy of a fair rate of return. According to Dr. Shannon Pratt: 10 11 Flotation costs occur when a company issues new stock. The business usually incurs several kinds of flotation or transaction costs, which reduce 12 the actual proceeds received by the business. Some of these are direct out-13 of-pocket outlays, such as fees paid to underwriters, legal expenses, and 14 prospectus preparation costs. Because of this reduction in proceeds, the 15 business's required returns must be greater to compensate for the 16 additional costs. Flotation costs can be accounted for either by amortizing 17 the cost, thus reducing the net cash flow to discount, or by incorporating 18 the cost into the cost of equity capital. Since flotation costs typically are 19 not applied to operating cash flow, they must be incorporated into the cost 20 of equity capital.⁴⁵ 21 HOW DID YOU CALCULATE THE FLOTATION COST RECOVERY 22 **Q**. **ADJUSTMENT?** 23 I modified the DCF calculation to provide a dividend yield that would reimburse 24 А 25 investors for issuance costs. My flotation cost adjustment recognizes the costs of issuing equity that were incurred by the proxy group companies in their most recent two common 26 equity issuances. Based on the issuance costs provided in Exhibit No. (RBH-7), an 27

⁴⁴ Patterson, Cleveland S., *Flotation Cost Allowance in Rate of Return Regulation: Comment*, <u>The Journal of Finance</u>, Vol. XXXVIII, No. 4, September 1983, at 1337.

⁴⁵ Shannon P. Pratt, Roger J. Grabowski, <u>Cost of Capital: Applications and Examples</u>, 4th ed. (John Wiley & Sons, Inc., 2010), at 586.

adjustment of 0.14 percent (*i.e.*, 14 basis points) reasonably represents flotation costs for
 the Company.

Q. IS YOUR CALCULATION OF FLOTATION COSTS CONSISTENT WITH THE 4 COMMISSION'S PRIOR DETERMINATIONS?

5 A. The Commission previously agreed that flotation costs are an ongoing expense and 6 approved a 20 basis point adjustment.⁴⁶ My calculation of a 14 basis point adjustment is 7 consistent with this determination.

8 Q. ARE YOU PROPOSING TO ADJUST YOUR RECOMMENDED ROE BY 14 9 BASIS POINTS TO REFLECT THE EFFECT OF FLOTATION COSTS ON THE 10 COMPANY'S ROE?

11 A. No, I am not. Rather, I have considered the effect of flotation costs, in addition to the 12 Company's other business risks, in determining where its ROE falls within the range of 13 results.

VIII. CAPITAL MARKET ENVIRONMENT

14 Q. DO ECONOMIC CONDITIONS INFLUENCE THE REQUIRED COST OF

- 15 CAPITAL AND REQUIRED RETURN ON COMMON EQUITY?
- A. Yes. As discussed in Section VI, the models used to estimate the Cost of Equity are
 meant to reflect, and therefore are influenced by, current and expected capital market
 conditions.

⁴⁶ Public Service Commission of South Carolina, Docket No. 2002-223-E Order No. 2003-38 dated January 31, 2003, pp. 73-74.

1Q.HAVE YOU REVIEWED ANY SPECIFIC INDICES TO ASSESS THE2RELATIONSHIP BETWEEN CURRENT MARKET CONDITIONS AND3INVESTOR RETURN REQUIREMENTS?

A Yes, I considered several measures of capital market risk, including: (1) the relationship
between treasury yields and the Cost of Equity; (2) incremental credit spreads on
investment grade utility debt; (3) the relationship between electric utility dividend yields
and long-term Treasury yields; and (4) equity market volatility and correlations. As
discussed below, each of those measures provide information that is relevant to the
implementation of models used to estimate the Cost of Equity and in the interpretation of
the model results.

Relationship Between Historically Low Treasury Yields and the Cost of Equity

11 Q. AS A PRELIMINARY MATTER, HAS THE COST OF EQUITY FALLEN IN 12 TANDEM WITH THE RECENT DECLINE IN LONG-TERM TREASURY 13 YIELDS?

A. No, it has not. The fear of taking the risks of equity ownership, for example, has motivated many investors to move their capital into the relative safety of Treasury securities. In doing so, investors have bid down yields to the point that they currently are receiving yields on ten-year Treasury bonds that are below the rate of inflation.⁴⁷ In effect, those investors are willing to accept a *negative* real return on Treasury bonds rather than be subject to the risk of owning equity securities.

20 At the same time, the Federal Reserve's policy of buying longer-dated Treasury 21 securities and selling short-term securities also may have had the effect of lowering long-

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See, for example, Treasurys Slide After Lackluster Sale, The Wall Street Journal, August 8, 2012.

term Treasury yields. That is, of course, the objective of the Federal Reserve's "maturity 1 extension program" which began in June 2011.⁴⁸ As the Federal Reserve noted: 2 Under the maturity extension program, the Federal Reserve intends to sell 3 4 or redeem a total of \$667 billion of shorter-term Treasury securities by the 5 end of 2012 and use the proceeds to buy longer-term Treasury securities. 6 This will extend the average maturity of the securities in the Federal 7 Reserve's portfolio. 8 9 By reducing the supply of longer-term Treasury securities in the market, this action should put downward pressure on longer-term interest rates, 10 including rates on financial assets that investors consider to be close 11 substitutes for longer-term Treasury securities. The reduction in longer-12 term interest rates, in turn, will contribute to a broad easing in financial 13 14 market conditions that will provide additional stimulus to support the economic recovery.49 15 Consequently, two factors are at work: (1) the continued focus on capital preservation on 16 the part of investors has caused them to reallocate capital to the relative safety of 17 Treasury securities, thereby bidding up the price and bidding down the yield; and (2) the 18 Federal Reserve's continued policy of buying long-term Treasury securities in order to 19 lower the yield. As the Federal Reserve noted in its June 2012 Open Market Committee 20 meeting minutes, the effect of those two factors has been a continued decline in Treasury 21 22 vields: 23 Yields on longer-dated nominal and inflation-protected Treasury securities 24 moved down substantially, on net, over the intermeeting period. The yield on nominal 10-year Treasury securities reached a historically low level 25 26 immediately following the release of the May employment report. A 27 sizable portion of the decline in longer-term Treasury rates over the period 28 appeared to reflect greater safe-haven demands by investors, along with some increase in market participants' expectations of further Federal 29 Reserve balance sheet actions.⁵⁰ 30 31

⁴⁸ On September 13, 2012 the Federal Reserve announced that, in addition to continuing the maturity extension program announced in June, they would also begin buying mortgage-backed securities at a pace of \$40 billion per month. *See* Federal Reserve Press Release, dated September 13, 2012.

⁴⁹ http://www.federalreserve.gov/monetarypolicy/maturityextensionprogram.htm

⁵⁰ Minutes of the Federal Open Market Committee June 19–20, 2012, at 4.

1 At issue, then, is whether those two factors – the continuing tendency of investors to seek 2 the relative safety of long-term Treasury securities and the Federal Reserve's policy of lowering long-term Treasury yields – have caused the required return on equity to fall in 3 a fashion similar to the recent decline in interest rates. In large measure, that issue 4 becomes a question of whether the premium required by debt and equity investors also 5 has remained constant as Treasury yields have decreased. To the extent that the risk 6 7 premium has increased, the higher premium has offset, at least to some degree, the decline in Treasury yields, indicating that the Cost of Equity has not fallen in lock step 8 9 with the decline in interest rates.

10 One method of performing that analysis is to analyze the implied required market return of the S&P 500 companies on a "build-up" basis. From that perspective, the 11 12 required market return represents the sum of: (1) long-term Treasury yields; (2) the credit spread (*i.e.*, the incremental return required by debt investors over Treasury yields; 13 and (3) the Equity Risk Premium (*i.e.*, the incremental return required by equity investors 14 over the cost of debt). As shown on Chart 2 (below), that has been the case: both debt 15 and equity investors have required increased risk premiums as long-term Treasury yields 16 have fallen. In fact, this analysis demonstrates that despite Treasury yields decreasing in 17 recent years, the overall expected market return for the S&P 500 has actually increased. 18



3 As discussed above, the proposition that the risk premium has increased even as Treasury yields have declined makes practical sense: as investors seek the safety of Treasury 4 securities they require higher equity returns to overcome the currently perceived risk of 5 equity markets vis-à-vis Treasury securities. Even if the decrease in Treasury yields is 6 driven by investors' expectations of continued buying on the part of the Federal Reserve, 7 that expectation does not affect the fundamental assessment of risks associated with 8 9 equity investments in utility companies. If anything, the uncertainty surrounding the timing and degree of continued Federal intervention introduces an additional element of 10 11 uncertainty, which increases investment risk and, therefore, the required return.

2

⁵¹ Source: Bloomberg Professional.

1Q.HAVE YOU REVIEWED SPECIFIC MARKET INDICES THAT ALSO2SUPPORT THE POSITION THAT COST OF EQUITY HAS NOT FALLEN IN3TANDEM WITH LONG-TERM INTEREST RATES?

A. Yes. As noted above, I have considered Incremental Credit Spreads, the relationship
between dividend yields and Treasury yields (that is, the "Yield Spread"), and measures
of both market volatility and the correlation in returns between utility stocks and the
broad market. Each of those measures, which are discussed below, supports the position
that the Cost of Equity has not fallen in lock step with the decrease in Treasury yields.

Incremental Credit Spreads

9 **Q.**

10

HOW HAVE CREDIT SPREADS BEEN AFFECTED BY CURRENT MARKET CONDITIONS?

The "credit spread" is the return required by debt investors to take on the default risk 11 A. associated with securities of differing credit quality. For a given credit rating, the credit 12 13 spread is measured by reference to a Treasury security of similar tenure. That is, the credit spread on A-rated utility bonds may be measured by reference to the 30-year 14 Treasury Bond yield; the same would be true of Baa-rated securities.⁵² Because lower 15 16 credit ratings reflect higher levels of risk, credit spreads typically are higher for lower-17 rated securities. In that regard, the incremental credit spread (e.g., the difference between the credit spreads associated with A and Baa-rated securities, respectively) is an 18

⁵² The minimum maturity for the bonds in this index is 20 years, with an average of 30 years. Moody's Long-Term Corporate Bond Yield Averages are derived from pricing data on a regularly replenished population of nearly 100 seasoned corporate bonds in the U.S. market, each with current outstandings over \$100 million. The bonds have maturities as close as possible to 30 years and are dropped from the list if their remaining life falls below 20 years, if they are susceptible to redemption, or if their ratings change. All yields are yield-to-maturity calculated on a semi-annual basis. Each observation is an unweighted average, with Average Corporate yields representing the unweighted average of the corresponding Average Industrial and Average Public Utility observations. *See* Bloomberg.com.

indication of incremental return required by investors to take on additional levels of risk.
 As Chart 3 demonstrates, since the beginning of 2010, the Moody's Utility Bond Index
 Baa/A credit spread has steadily increased, indicating that debt investors have increased
 their marginal return requirements.

5



Chart 3: Moody's Utility Bond Index Baa-A Credit Spread⁵³

6 It is also interesting to note that the incremental credit spread has increased as long-term 7 Treasury yields have decreased. In fact, as Chart 4 demonstrates, even since January 8 2010, changes in the incremental credit spread are negatively correlated with changes in 9 the 30-year Treasury yield.

⁵³ Source: Bloomberg Professional.



Chart 4: Moody's Utility Bond Index Baa-A Credit Spread

WHAT ARE THE IMPLICATIONS OF THOSE FINDINGS IN ASSESSING THE 3 **O**. **COMPANY'S COST OF EOUITY?** 4

The implications are twofold. First, the recent decline in long-term Treasury yields has 5 A. been accompanied by an increase in the premium required by investors to accept 6 incremental levels of credit risk. That is, the incremental credit spread has increased as 7 the level of Treasury yields have decreased. While that inverse relationship applies to the 8 9 cost of debt, prior academic research has demonstrated that the Equity Risk Premium likewise is inversely related to interest rates.⁵⁴ Consequently, neither the Cost of Equity 10 nor the cost of debt has decreased in lock step with Treasury yields. 11

12

Those results also demonstrate the importance of maintaining a financial and credit profile that supports the Company's current BBB+ rating. Because incremental credit 13

1

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⁵⁴ Robert S. Harris and Felicia C. Marston, Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts, Financial Management, Summer 1992; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, The Risk Premium Approach to Measuring a Utility's Cost of Equity, Financial Management, Spring 1985, at 33-45; and Farris M. Maddox, Donna T. Pippert, and Rodney N. Sullivan, An Empirical Study of Ex Ante Risk Premiums for the Electric Utility Industry, Financial Management, Autumn 1995, at 89-95.

1	spreads have steadily increased, the benefit of maintaining a BBB+ rating is greater in the
2	current market than it has been, even over the past two years. That conclusion is
3	consistent with recent findings by Fitch, which noted that:
4 5 6 7 8	While it appears that the credit spread differential between the rating categories has a relatively small impact during times of economic stability, during recent periods of economic stress, a higher credit rating produces a meaningful difference in credit spreads and provides more assured access to capital. ⁵⁵
9	Since regulatory actions affect credit ratings in several, often significant ways, the
10	Commission's decision in this proceeding will directly affect the Company's credit
11	profile and influence its ability to maintain a credit profile that enables continued access
12	to capital at reasonable costs. Given the Company's substantial capital investment plans
13	and external funding needs, the benefits of reliable and cost-effective capital access are
14	significant.

Yield Spreads

15 Q. PLEASE BRIEFLY DEFINE THE TERM "YIELD SPREAD" AND EXPLAIN ITS

16

MEANING IN ASSESSING CAPITAL MARKET CONDITIONS.

A. The "yield spread" is the difference between the yield on long-term Treasury securities on the one hand, and common stock dividend yields on the other. Investors often consider yield spreads in their assessment of security valuation and capital market conditions. As explained below, to the extent that yield spreads materially deviate from long-term relationships, it may be an indication of continuing dislocations within the capital market.

Fitch's Review of Utility ROE Trends, FitchRatings, March 22, 2010, at 3.

1Q.HAVE YOU REVIEWED THE CURRENT AND HISTORICAL YIELD SPREAD2FOR ELECTRIC UTILITY COMPANIES?

A. Yes, I have. As shown in Chart 5, for much of the period from January 2000 through 3 4 August 17, 2012, the 30-year Treasury yield has exceeded the dividend yield on electric utility stocks (as measured by the SNL Electric Company Index). In fact, over that time, 5 the yield spread averaged approximately 64 basis points.⁵⁶ That period, however, 6 7 includes the 2002 – 2003 credit contraction, during which period the Treasury yields and utility dividend yields were essentially equal, and the post-Lehman Brothers bankruptcy 8 period, during which the yields inverted, such that the electric utility index dividend yield 9 exceeded the 30-year Treasury yield. Excluding those two periods, the average yield 10 spread was 129 basis points (that is, on average, the 30-year Treasury yield exceeded the 11 12 dividend yield by 129 basis points).



Chart 5: Treasury/Dividend Yield Spread⁵⁷

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⁵⁷ Source: SNL Financial.

⁵⁶ That is to say that on average, the 30-year Treasury yield exceeded the electric utility dividend yield by 64 basis points.

1		As Chart 5 also demonstrates, the yield spread inverted shortly after the September
2		15, 2008 Lehman Brothers bankruptcy, and has essentially remained inverted since that
3		time. In fact, since August 2011, the yields have remained inverted, such that the SNL
4		Electric Company Index average dividend yield exceeded the 30-year Treasury yield by
5		96 basis points. The continuing instability in the yield spread also has been observed by
6		The Wall Street Journal, which noted that historically, "dividend yields have tended to
7		track the yield on 10-year Treasurys closely." ⁵⁸ The article went on to note that:
8 9 10 11 12		Regulated utilities' dividend yields decoupled from Treasury yields in December 2007, as the U.S. recession began. After the initial flight to quality cut yields on Treasurys, particularly after Lehman Brothers collapsed in September 2008, the Federal Reserve's policy of buying up government debt has helped keep them low.
13	Q.	HOW DOES SUCH DATA ENTER INTO YOUR ASSESSMENT OF THE
13 14	Q.	HOW DOES SUCH DATA ENTER INTO YOUR ASSESSMENT OF THE COMPANY'S COST OF EQUITY?
13 14 15	Q. A.	HOW DOES SUCH DATA ENTER INTO YOUR ASSESSMENT OF THECOMPANY'S COST OF EQUITY?As noted above, investors often look to the relationships among financial metrics to
13 14 15 16	Q. A.	HOW DOES SUCH DATA ENTER INTO YOUR ASSESSMENT OF THE COMPANY'S COST OF EQUITY? As noted above, investors often look to the relationships among financial metrics to assess current and expected levels of market stability. As also noted above, to the extent
13 14 15 16 17	Q. A.	HOW DOES SUCH DATA ENTER INTO YOUR ASSESSMENT OF THE COMPANY'S COST OF EQUITY? As noted above, investors often look to the relationships among financial metrics to assess current and expected levels of market stability. As also noted above, to the extent that current relationships among such indices materially deviate from long-term norms, it
13 14 15 16 17 18	Q. A.	HOW DOES SUCH DATA ENTER INTO YOUR ASSESSMENT OF THE COMPANY'S COST OF EQUITY? As noted above, investors often look to the relationships among financial metrics to assess current and expected levels of market stability. As also noted above, to the extent that current relationships among such indices materially deviate from long-term norms, it may be an indication of continuing or expected market instability. Moreover, such data
 13 14 15 16 17 18 19 	Q.	HOW DOES SUCH DATA ENTER INTO YOUR ASSESSMENT OF THE COMPANY'S COST OF EQUITY? As noted above, investors often look to the relationships among financial metrics to assess current and expected levels of market stability. As also noted above, to the extent that current relationships among such indices materially deviate from long-term norms, it may be an indication of continuing or expected market instability. Moreover, such data provide market-based methods by which to assess the implications of the currently low
 13 14 15 16 17 18 19 20 	Q. A.	HOW DOES SUCH DATA ENTER INTO YOUR ASSESSMENT OF THE COMPANY'S COST OF EQUITY? As noted above, investors often look to the relationships among financial metrics to assess current and expected levels of market stability. As also noted above, to the extent that current relationships among such indices materially deviate from long-term norms, it may be an indication of continuing or expected market instability. Moreover, such data provide market-based methods by which to assess the implications of the currently low Treasury yields for the Company's Cost of Equity. If, for example, the currently low
 13 14 15 16 17 18 19 20 21 	Q. A.	HOW DOES SUCH DATA ENTER INTO YOUR ASSESSMENT OF THE COMPANY'S COST OF EQUITY? As noted above, investors often look to the relationships among financial metrics to assess current and expected levels of market stability. As also noted above, to the extent that current relationships among such indices materially deviate from long-term norms, it may be an indication of continuing or expected market instability. Moreover, such data provide market-based methods by which to assess the implications of the currently low Treasury yields for the Company's Cost of Equity. If, for example, the currently low level Treasury yields indicated a correspondingly low Cost of Equity, the average

⁵⁸ Denning, Liam, A Short Circuit in the Stock Market, <u>The Wall Street Journal</u>, October 23, 2009, at C10. I note that while this article referred to ten-year Treasury yields, the fundamental conclusion, that the utility yield spread has deviated from its long-term relationship, remains.

 ⁵⁹ 2.01 percent equals 2.65 percent, less the long-term average yield spread of 64 basis points. Excluding the post-Lehman Brothers bankruptcy period, and the 2002 – 2003 credit contraction, implies a yield spread of 129 basis points, suggesting an implied dividend yield of less than 1.36 percent (assumes a constant growth rate).

1	No(RBH-1), however, the current (proxy group) average dividend yield is
2	approximately 3.96 percent. Again, low Treasury yields are not necessarily indicative of
3	correspondingly low equity return requirements.

Equity Market Volatility and Return Correlations

4 Q. PLEASE BRIEFLY DEFINE THE TERM "VOLATILITY" AND EXPLAIN ITS 5 RELEVANCE TO DETERMINING THE COST OF EQUITY.

A. In finance, "volatility" is a statistical measure of the dispersion of returns for a given
security or market index. Securities for which returns are more broadly dispersed (that is,
they have a higher degree of deviation from the mean) are thought to be less certain and,
therefore, more risky than securities whose returns historically have been less dispersed.
The most common measure of such dispersion is the standard deviation,⁶⁰ which (as
discussed in Section VI) is an important variable in certain Cost of Equity estimation
models.

Q. PLEASE DEFINE THE TERM "CORRELATION" AND EXPLAIN ITS RELEVANCE TO DETERMINING THE COST OF EQUITY.

A. "Correlation" is a measure of the extent to which two variables tend to move in relation to each other. By definition, correlation (as measured by correlation coefficients) ranges from -1.00 to 1.00; a negative correlation indicates that the returns on two securities move in opposite directions, while a positive correlation suggests that they move together. The closer the correlation coefficient is to -1.00 or 1.00, the stronger that relationship.

⁶⁰ See, for example, Ross, Westerfield, Jaffe and Jordon, <u>Corporate Finance; Core Principals & Applications</u>, 2nd Ed., McGraw-Hill Irwin, 2009, at 313.

1 Because securities with low or negative correlations are less likely to move in 2 tandem, investors consider such investments to offer certain diversification benefits; highly correlated securities do not. As discussed in Section VI, under portfolio-based 3 Cost of Equity techniques such as the Capital Asset Pricing Model, stocks with high 4 correlations to the broad market tend to represent greater risk (and therefore require 5 higher returns) than stocks with lower market correlations.⁶¹ 6

7 0. HAVE YOU REVIEWED THE RECENT AND HISTORICAL DEGREES OF **VOLATILITY AND CORRELATION FOR ELECTRIC UTILITY STOCKS?** 8

9 A. Yes, I have. The purpose of my analysis was to examine the current degrees of volatility 10 and correlation for the broad market (as measured by the S&P 500 Index) and electric utilities (measured by the SNL Electric Company Index) relative to their historical 11 averages. My analysis also reviewed the relationship between volatility and correlations 12 for those indices. As discussed in more detail below, although market volatility recently 13 has moderated, electric utility stocks have been increasingly correlated with the broad 14 market. Because both volatility and correlations are factors underlying the Cost of 15 Equity, it is not necessarily true that moderating market volatility implies significantly 16 lower common equity return requirements. It also is interesting to note that correlations 17 tend to increase during periods of high market volatility. Consequently, during such 18 periods, investors return requirements would be higher still. 19

20 **O**. PLEASE SUMMARIZE YOUR REVIEW OF MARKET VOLATILITY.

21 For the purpose of my review, I calculated the standard deviation of daily returns for the A. S&P 500 and the SNL Electric Company Indices, respectively, for the period January 3, 22

⁶¹ As discussed in Section VI, the Beta coefficient factor of the Capital Asset Pricing Model reflects both the degree of correlation between the subject company and the overall market, and measures of volatility.

1 2000 through August 17, 2012 (*see* Chart 6, below). As Chart 6 demonstrates, the 2 volatility of returns (for both indices) increased significantly during the 2002 – 2003 3 credit contraction, the 2008 – 2009 recent financial crisis, and, most recently, during the 4 latter part of 2011. Market estimates of future volatility still remain somewhat above the 5 long-term average.⁶²

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8 Q. TURNING NOW TO RETURN CORRELATIONS, HOW HAVE THE SNL 9 ELECTRIC COMPANY INDEX RETURNS MOVED RELATIVE TO THE S&P 10 500?

A. Since 2000, the correlation between SNL Electric Company returns and the S&P 500
returns have been trending upward, as shown by the linear trend in Chart 7, below.
Despite correlations moderating in the near term, the prevailing long-term trend remains
toward increased correlation between the two indices.

⁶² See Exhibit No.__(RBH-2).

⁶³ Represents standard deviation of daily returns over 90-day period. Source: SNL Financial.





2

Q. HAS THE INCREASED CORRELATION OF RETURNS BEEN NOTED BY THE FINANCIAL COMMUNITY?

5 Yes, it has. A January 4, 2012 article in The Wall Street Journal, for example, noted that A. 6 "[a] fact of life for investors in recent years, especially in the stock market, has been the 7 dramatic rise in correlations. One surprise of 2011 was the degree to which correlations within and across financial markets returned with a vengeance."⁶⁵ Citing a study by BCA 8 9 Research, the article concluded by noting that: ... in order for correlations to decline dramatically to pre-Lehman levels, 10 investors will likely need some sense that the headwinds facing the U.S. 11 economy have largely dissipated, and that the expansion has successfully 12

13transitioned to a sustainable, self-reinforcing phase (i.e. the recovery will14not fall apart in the absence of continual shots of monetary or fiscal15stimulus). It may be years before such a realization occurs, suggesting16that the "high vol/high correlation" world is likely to persist, even if we17have seen the worst for this cycle.⁶⁶

⁶⁶ Ibid.

⁶⁴ Correlation of daily returns calculated over a 90-day period. Source: SNL Financial.

⁶⁵ *High Correlations Could Be Here To Stay*, <u>The Wall Street Journal</u>, January 4, 2012.

1 My findings, that electric utility stocks remain somewhat more volatile than their 2 historical average but are far more correlated with the broad market than they historically 3 have been, are consistent with the observations noted by <u>The Wall Street Journal</u>.

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Q. WHAT CONCLUSIONS DO YOU DRAW FROM THOSE ANALYSES?

5 A. First, it is important to recognize the relationships among financial measures relied upon 6 by investors and to reflect those relationships in Cost of Equity estimates. Simply observing, for example, that long-term Treasury rates are at historically low levels is not 7 a sufficient level of analysis to conclude that the Cost of Equity is at a commensurately 8 9 low level. As noted above, for example, if investors believed that the current level of 10 long-term Treasury yields is indicative of the Cost of Equity, electric utility dividend yields would be almost 200 basis points below their current levels. Similarly, both sector 11 12 and market-wide volatility should not be viewed in isolation; rather, they should be considered together with the correlation of returns. Recognizing that volatility, and the 13 interaction among key indices, provides a more complete perspective and enables a more 14 accurate determination of the Cost of Equity. 15

IX. CAPITAL STRUCTURE

16 Q. WHAT IS THE COMPANY'S PROPOSED CAPITAL STRUCTURE?

- 17 A. In its application filed in this docket, the Company has proposed a capital structure
- 18 comprised of 52.18 percent common equity and 47.82 percent long-term debt.⁶⁷

Public Service Commission of South Carolina, Docket No. 2012-218-E South Carolina Electric & Gas Company's Application dated June 29, 2012, Exhibit C-7.

1Q.IS THERE A GENERALLY ACCEPTED APPROACH TO DEVELOPING THE2APPROPRIATE CAPITAL STRUCTURE FOR A REGULATED ELECTRIC3UTILITY?

4 A. Yes, there are a number of approaches to developing the appropriate capital structure. 5 The reasonableness of the approach depends on the nature and circumstances of the subject company. In cases where the subject company does not issue its own securities, it 6 7 may be reasonable to look to the parent's capital structure or to develop a "hypothetical" capital structure based on the proxy group companies or other industry data. Regardless 8 9 of the approach taken, however, it is important to consider the resulting capital structure in light of industry norms and investor requirements. That is, the capital structure should 10 enable the subject company to maintain its financial integrity, thereby enabling access to 11 12 capital at competitive rates under a variety of economic and financial market conditions.

13 Q. HOW DOES THE CAPITAL STRUCTURE AFFECT THE COST OF EQUITY?

14 A. The capital structure relates to a company's financial risk, which represents the risk that a 15 company may not have adequate cash flows to meet its financial obligations, and is a function of the percentage of debt (or financial leverage) in its capital structure. In that 16 regard, as the percentage of debt in the capital structure increases, so do the fixed 17 obligations for the repayment of that debt. Consequently, as the degree of financial 18 leverage increases, the risk of financial distress (*i.e.*, financial risk) also increases. Since 19 the capital structure can affect the subject company's overall level of risk,⁶⁸ it is an 20 important consideration in establishing a just and reasonable rate of return. 21

See Roger A. Morin, New Regulatory Finance, Public Utility Reports, Inc., 2006, at 45-46.

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1Q.IS THERE SUPPORT FOR THE PROPOSITION THAT THE CAPITAL2STRUCTURE IS A KEY CONSIDERATION IN ESTABLISHING AN3APPROPRIATE RETURN ON EQUITY?

A. Yes. The United States Supreme Court and various utility commissions have long
recognized the role of capital structure in the development of a just and reasonable rate of
return for a regulated utility. In particular, a utility's leverage, or debt ratio, has been
explicitly recognized as an important element in determining a just and reasonable rate of

8 return:

9 Although the determination of whether bonds or stocks should be issued is 10 for management, the matter of debt ratio is not exclusively within its 11 province. Debt ratio substantially affects the manner and cost of obtaining 12 new capital. It is therefore an important factor in the rate of return and 13 must necessarily be considered by and come within the authority of the 14 body charged by law with the duty of fixing a just and reasonable rate of 15 return.⁶⁹

- 16 Perhaps the ultimate authority for balancing the issues of cost and financial
- 17 integrity is the Supreme Court's decision in *Hope* that was cited and applied by
- 18 the U.S. Court of Appeals for the D.C. Circuit in 1977:

19The rate-making process under the Act, i.e., the fixing of "just and20reasonable rates, involves a balancing of the investor and the consumer21interests." 320 U.S. at 603, 64 S. Ct. at 288. The equity investor's stake is22made less secure as the Company's debt rises, but the consumer rate-23payer's burden is alleviated.⁷⁰

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 ⁶⁹ New England Telephone & Telegraph Co. v. State, 97 A.2d 213, 220 (N.H. 1953) (citing New England Tel. & Tel. Co. v. Department of Pub. Util., 97 N.E. 2d 509, 514 (Mass. 1951) and Petitions of New England Tel. & Tel. Co., 80 A.2d 671 (Vt. 1953)).

⁷⁰ *Communications Satellite Corp. v. FCC*, 611 F.2d 883, 904 (D.C. Cir. 1977).

1 Consequently, the principles of fairness and reasonableness with respect to the allowed 2 rate of return and capital structure are considered at both the federal and state levels.

3 Q. PLEASE DISCUSS YOUR ANALYSIS OF THE CAPITAL STRUCTURES OF 4 THE PROXY GROUP COMPANIES.

A. I calculated the average capital structure for each of the proxy group companies over the last eight quarters. As shown in Exhibit No.___(RBH-8), the mean of the proxy group actual capital structures is 51.50 percent common equity and 48.50 percent long-term debt. The common equity ratios range from 48.09 percent to 59.90 percent. Based on that review, it is apparent that the Company's proposed capital structure is generally consistent with the capital structures of the proxy group companies.

Q. WHAT IS THE BASIS FOR USING AVERAGE CAPITAL COMPONENTS RATHER THAN A POINT-IN-TIME MEASUREMENT?

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

17 Q. WHAT IS YOUR CONCLUSION REGARDING AN APPROPRIATE CAPITAL

- 18 STRUCTURE FOR SCE&G?
- A. Considering the average actual equity ratio of 51.50 percent for the proxy group
 companies, I believe that SCE&G's proposed common equity ratio of 52.18 percent is
 appropriate as it is consistent with the proxy group companies.

X. CONCLUSIONS AND RECOMMENDATION

1Q.WHAT IS YOUR CONCLUSION REGARDING THE COMPANY'S COST OF2EQUITY?

3 A. I believe that a rate of return on common equity in the range of 10.75 percent to 11.50 percent represents the range of equity investors' required rate of return for investment in 4 5 integrated electric utilities similar to SCE&G in today's capital markets. Within that 6 range, an ROE of 11.25 percent is reasonable and appropriate. Consequently, the Company's proposed 10.95 percent ROE is, in my view, quite conservative. 7 My recommendation also takes into consideration the Company's risk profile relative to the 8 9 proxy group analytical results with respect to: (1) the incremental risks associated with 10 the Company's need to fund substantial capital expenditures including its investment in new nuclear generation facilities; (2) the risks associated with the Company's 11 12 comparatively small size; and (3) flotation costs associated with equity issuances. As 13 such, a rate of return on common equity in the range of 10.75 percent to 11.50 percent 14 reasonably represents the return required to invest in a company with a risk profile 15 comparable to SCE&G. Exhibit No. (RBH-1) through Exhibit No. (RBH-8) 16 summarize my analytical results. Finally, I conclude that the Company's proposed 17 capital structure, which consists of 52.18 percent common equity and 47.82 percent long-18 term debt, is reasonable.

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19 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

20 A. Yes, it does.

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

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

REPRESENTATIVE PROJECT EXPERIENCE

Litigation Support and Expert Testimony

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

Financial and Economic Advisory Services

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

Specific divestiture-related services have included advising both buy and sell-side clients in transactions for physical and contractual electric generation resources. Sell-side services have included: development and implementation of key aspects of asset divestiture programs such as marketing, offering memorandum development, development of transaction terms and conditions, bid process management, bid evaluation, 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	
Arizona Corporation Commission					
Southwest Gas Corporation	11/10	Southwest Gas Corporation	Docket No. G-01551A- 10-0458	Return on Equity	
Arkansas Public Service Commission					
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Arkansas Gas	01/07	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Arkansas Gas	Docket No. 06-161-U	Return on Equity	
Colorado Public Utilities Commissi	on				
Public Service Company of Colorado	11/11	Public Service Company of Colorado	Docket No. 11AL-947E	Return on Equity (electric)	
Xcel Energy, Inc.	12/10	Public Service Company of Colorado	Docket No. 10AL-963G	Return on Equity (electric)	
Atmos Energy Corporation	07/09	Atmos Energy Colorado-Kansas Division	Docket No. 09AL-507G	Return on Equity (gas)	
Xcel Energy, Inc.	12/06	Public Service Company of Colorado	Docket No. 06S-656G	Return on Equity (gas)	
Xcel Energy, Inc.	04/06	Public Service Company of Colorado	Docket No. 06S-234EG	Return on Equity (electric)	
Xcel Energy, Inc.	08/05	Public Service Company of Colorado	Docket No. 05S-369ST	Return on Equity (steam)	
Xcel Energy, Inc.	05/05	Public Service Company of Colorado	Docket No. 05S-264G	Return on Equity (gas)	
Connecticut Department of Public Utility Control					
Southern Connecticut Gas Company	09/08	Southern Connecticut Gas Company	Docket No. 08-08-17	Return on Equity	
Southern Connecticut Gas Company	12/07	Southern Connecticut Gas Company	Docket No. 05-03- 17PH02	Return on Equity	

Sponsor	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT		
Connecticut Natural Gas Corporation	12/07	Connecticut Natural Gas Corporation	Docket No. 06-03- 04PH02	Return on Equity		
Delaware Public Service Commission						
Delmarva Power & Light Company	12/11	Delmarva Power & Light Company	Case No. 11-528	Return on Equity		
District of Columbia Public Service	District of Columbia Public Service Commission					
Potomac Electric Power Company	07/11	Potomac Electric Power Company	Formal Case No. FC1087	Return on Equity		
Federal Energy Regulatory Commi	ission	-				
Public Service Company of New Mexico	10/10	Public Service Company of New Mexico	Docket No. ER11-1915- 000	Return on Equity		
Portland Natural Gas Transmission System	05/10	Portland Natural Gas Transmission System	Docket No. RP10-729- 000	Return on Equity		
Florida Gas Transmission Company, LLC	10/09	Florida Gas Transmission Company, LLC	Docket No. RP10-21-000	Return on Equity		
Maritimes and Northeast Pipeline, LLC	07/09	Maritimes and Northeast Pipeline, LLC	Docket No. RP09-809- 000	Return on Equity		
Spectra Energy	02/08	Saltville Gas Storage	Docket No. RP08-257- 000	Return on Equity		
Panhandle Energy Pipelines	08/07	Panhandle Energy Pipelines	Docket No. PL07-2-000	Response to draft policy statement regarding inclusion of MLPs in proxy groups for determination of gas pipeline ROEs		
Southwest Gas Storage Company	08/07	Southwest Gas Storage Company	Docket No. RP07-541- 000	Return on Equity		
Southwest Gas Storage Company	06/07	Southwest Gas Storage Company	Docket No. RP07-34-000	Return on Equity		

Sponsor	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT	
Sea Robin Pipeline LLC	06/07	Sea Robin Pipeline LLC	Docket No. RP07-513- 000	Return on Equity	
Transwestern Pipeline Company	09/06	Transwestern Pipeline Company	Docket No. RP06-614- 000	Return on Equity	
GPU International and Aquila	11/00	GPU International	Docket No. EC01-24-000	Market Power Study	
Georgia Public Service Commission	1				
Atlanta Gas Light Company	05/10	Atlanta Gas Light Company	Docket No. 31647-U	Return on Equity	
Hawaiian					
Hawaiian 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	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)	
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					
Delmarva Power & Light Company	12/11	Delmarva Power & Light Company	Case No. 9285	Return on Equity	
Potomac Electric Power Company	12/11	Potomac Electric Power Company	Case No. 9286	Return on Equity	
Delmarva Power & Light Company	12/10	Delmarva Power & Light Company	Case No. 9249	Return on Equity	

Sponsor	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT					
Massachusetts Department of Public Utilities									
National Grid	08/09	Massachusetts Electric Company d/b/a National Grid	DPU 09-39	Revenue Decoupling and Return on Equity					
National Grid	08/09	Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid	DPU 09-38	Return on Equity – Solar Generation					
Bay State Gas Company	04/09	Bay State Gas Company	DTE 09-30	Return on Equity					
NSTAR Electric	09/04	NSTAR Electric	DTE 04-85	Divestiture of Power Purchase Agreement					
NSTAR Electric	08/04	NSTAR Electric	DTE 04-78	Divestiture of Power Purchase Agreement					
NSTAR Electric	07/04	NSTAR Electric	DTE 04-68	Divestiture of Power Purchase Agreement					
NSTAR Electric	07/04	NSTAR Electric	DTE 04-61	Divestiture of Power Purchase Agreement					
NSTAR Electric	06/04	NSTAR Electric	DTE 04-60	Divestiture of Power Purchase Agreement					
Unitil Corporation	01/04	Fitchburg Gas and Electric	DTE 03-52	Integrated Resource Plan; Gas Demand Forecast					
Minnesota Public Utilities Commission									
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					
Sponsor	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT					
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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	NSP-Minnesota Docket No. E-002/GR- 05-1428		Return on Equity (electric)					
Xcel Energy, Inc.	09/04	NSP Minnesota	NSP Minnesota Docket No. G-002/GR-04-1511						
Mississippi Public Service Commission									
CenterPoint Energy Resources, Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Mississippi Gas	07/09	CenterPoint Energy Mississippi Gas	Docket No. 09-UN-334	Return on Equity					
Missouri Public Service Commissio	n								
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)					
Nevada Public Utilities Commission	ı								
Southwest Gas Corporation	04/12	Southwest Gas Corporation	Docket No. 12-04005	Return on Equity (gas)					
Nevada Power Company	06/11	Nevada Power Company	Docket No. 11-06006	Return on Equity (electric)					
New Hampshire Public Utilities Co	mmission								
EnergyNorth Natural Gas d/b/a National Grid NH	02/10	EnergyNorth Natural Gas d/b/a National Grid NH	Docket No. DG 10-017	Return on Equity					

Sponsor	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Unitil Energy Systems, Inc. ("Unitil"), EnergyNorth Natural Gas, Inc. d/b/a National Grid NH, Granite State Electric Company d/b/a National Grid, and Northern Utilities, Inc. – New Hampshire Division	08/08	Unitil Energy Systems, Inc. ("Unitil"), EnergyNorth Natural Gas, Inc. d/b/a National Grid NH, Granite State Electric Company d/b/a National Grid, and Northern Utilities, Inc. – New Hampshire Division	Docket No. DG 07-072	Carrying Charge Rate on Cash Working Capital
New Jersey Board of Public Utilitie	s			
Atlantic City Electric Company	08/11	Atlantic City Electric Company	Docket No. ER11080469	Return on Equity
Pepco Holdings, Inc.	09/06	Atlantic City Electric Company	Docket No. EMO6090638	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 Con	nmission			
Southwestern Public Service Company	02/11	Southwestern Public Service Company	Case No. 10-00395-UT	Return on Equity (electric)
Public Service Company of New Mexico	06/10	Public Service Company of New Mexico	Case No. 10-00086-UT	Return on Equity (electric)
Public Service Company of New Mexico	09/08	Public Service Company of New Mexico	Case No. 08-00273-UT	Return on Equity (electric)
Xcel Energy, Inc.	07/07	Southwestern Public Service Company	Case No. 07-00319-UT	Return on Equity (electric)

Sponsor	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT	
New York State Public Service Con	nmission			= 	
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	
Niagara Mohawk Corporation d/b/a National Grid for Gas Service	04/12	Niagara Mohawk Corporation d/b/a National Grid for Gas ServiceCase No. 12-G-0202		Return on Equity	
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	onsolidated Edison Company of Case No. 09-G-0795 I ew York, Inc.		Return on Equity (gas)	
Consolidated Edison Company of New York, Inc.	11/09	Consolidated Edison Company of New York, Inc.	Case No. 09-S-0794	Return on Equity (steam)	
Niagara Mohawk Power Corporation	07/01	Niagara Mohawk Power Corporation	Case No. 01-E-1046	Power Purchase and Sale Agreement; Standard Offer Service Agreement	
North Carolina Utilities Commissio	n				
Dominion North Carolina Power	03/12	Dominion Resources	Docket No. E-22, Sub 479	Return on Equity (electric)	
Duke Energy Carolinas, LLC	07/11	Duke Energy Carolinas, LLC	Docket No. E-7, Sub 989	Return on Equity (electric)	
North Dakota Public Service Comm	nission				
Otter Tail Power Company	11/08	Otter Tail Power Company	Docket No. 08-862	Return on Equity (electric)	

Sponsor	DATE	CASE/APPLICANT	DOCKET NO.	Subject						
Oklahoma Corporation Commissio	n		2							
Oklahoma Gas & Electric Company	07/11	Oklahoma Gas & Electric Company	Cause No. PUD201100087	Return on Equity						
CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Oklahoma Gas	03/09	CenterPoint Energy Oklahoma Gas PUD200900055		Return on Equity						
Rhode Island Public Utilities Commission										
The Narragansett Electric Company d/b/a National Grid	04/12	The Narragansett Electric Company d/b/a National Grid	Docket No. 4323	Return on Equity (electric & gas)						
National Grid RI – Gas	08/08	National Grid RI – Gas	ional Grid RI – Gas Docket No. 3943							
South Carolina Public Service Com	South Carolina Public Service Commission									
Duke Energy Carolinas, LLC	08/11	Duke Energy Carolinas, LLC	Docket No. 2011-271-E	Return on Equity (electric)						
South Carolina Electric & Gas	03/10	South Carolina Electric & Gas	Docket No. 2009-489-E	Return on Equity						
South Dakota Public Utilities Com	nission	-								
Otter Tail Power Company	08/10	Otter Tail Power Company	Docket No. EL10-011	Return on Equity (electric)						
Northern States Power Company	06/09	South Dakota Division of Northern States Power	Docket No. EL09-009	Return on Equity (electric)						
Otter Tail Power Company	10/08	Otter Tail Power Company	Fail Power CompanyDocket No. EL08-030							
Texas Public Utility Commission										
Wind Energy Texas Transmission, LLC	08/12	Wind Energy Texas Transmission, LLC	Docket No. 40606	Return on Equity						

Sponsor	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Southwestern Electric Power Company	07/12	Southwestern Electric Power Company	Docket No. 40443	Return on Equity
Oncor Electric Delivery Company, LLC	01/11	Oncor Electric Delivery Company, LLC	Docket No. 38929	Return on Equity
Texas-New Mexico Power Company	08/10	Texas-New Mexico Power Company	Docket No. 38480	Return on Equity (electric)
CenterPoint Energy Houston Electric LLC	07/10	CenterPoint Energy Houston Electric LLC	Docket No. 38339	Return on Equity
Xcel Energy, Inc.	05/10	Southwestern Public Service Company	Docket No. 38147	Return on Equity (electric)
Texas-New Mexico Power Company	08/08	Texas-New Mexico Power Company	Docket No. 36025	Return on Equity (electric)
Xcel Energy, Inc.	05/06	Southwestern Public Service Company	Docket No. 32766	Return on Equity (electric)
Texas Railroad Commission				
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
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	07/09	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	GUD 9902	Return on Equity

Sponsor	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT				
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Texas Gas	03/08	CenterPoint Energy ResourcesGUD 9791Corp.d/b/a CenterPoint Energy TexasGas		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 Commi	ssion							
Columbia Gas Of Virginia, Inc.	06/06	Columbia Gas Of Virginia, Inc.	Case No. PUE-2005- 00098	Merger Synergies				
Dominion Resources	10/01	Virginia Electric and Power Company	Case No. PUE000584	Corporate Structure and Electric Generation Strategy				

Constant Growth Discounted Cash Flow Model 30 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
			Average		Expected	Zacks	First Call	Value Line	Average			
		Annualized	Stock	Dividend	Dividend	Earnings	Earnings	Earnings	Earnings	Low	Mean	High
Company	Ticker	Dividend	Price	Yield	Yield	Growth	Growth	Growth	Growth	ROE	ROE	ROE
American Electric Power Company, Inc.	AEP	\$1.88	\$42.19	4.46%	4.54%	3.60%	3.37%	4.50%	3.82%	7.90%	8.36%	9.06%
Cleco Corp.	CNL	\$1.35	\$43.09	3.13%	3.21%	N/A	3.00%	6.50%	4.75%	6.18%	7.96%	9.73%
Empire District Electric	EDE	\$1.00	\$21.46	4.66%	4.85%	N/A	10.20%	6.00%	8.10%	10.80%	12.95%	15.10%
Great Plains Energy Inc.	GXP	\$0.85	\$22.07	3.85%	3.98%	7.75%	6.50%	5.50%	6.58%	9.46%	10.56%	11.75%
IDACORP, Inc.	IDA	\$1.32	\$42.56	3.10%	3.16%	5.00%	4.00%	2.00%	3.67%	5.13%	6.82%	8.18%
Otter Tail Corporation	OTTR	\$1.19	\$23.38	5.09%	5.38%	5.00%	5.00%	24.00%	11.33%	10.22%	16.71%	29.70%
Pinnacle West Capital Corp.	PNW	\$2.10	\$53.21	3.95%	4.06%	5.90%	6.52%	5.00%	5.81%	9.05%	9.87%	10.60%
PNM Resources, Inc.	PNM	\$0.58	\$20.43	2.84%	3.00%	9.30%	9.30%	16.00%	11.53%	12.27%	14.54%	19.07%
Portland General Electric Company	POR	\$1.08	\$27.26	3.96%	4.05%	4.13%	3.63%	5.50%	4.42%	7.66%	8.47%	9.57%
Southern Company	SO	\$1.96	\$47.30	4.14%	4.25%	5.06%	5.38%	5.00%	5.15%	9.25%	9.40%	9.64%
Westar Energy, Inc.	WR	\$1.32	\$30.37	4.35%	4.47%	6.09%	4.80%	6.50%	5.80%	9.25%	10.27%	10.99%
PROXY GROUP MEAN				3.96%	4.09%	5.76%	5.61%	7.86%	6.45%	8.83%	10.54%	13.03%
PROXY GROUP MEDIAN				3.96%	4.06%	5.06%	5.00%	5.50%	5.80%	9.25%	9.87%	10.60%

Notes:

[1] Source: Bloomberg Professional

[2] Source: Bloomberg Professional, equals 30-trading day average as of August 17, 2012

[3] Equals [1] / [2]

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

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

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

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

[10] Equals [4] + [8]

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

Constant Growth Discounted Cash Flow Model 90 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
			Average		Expected	Zacks	First Call	Value Line	Average			
		Annualized	Stock	Dividend	Dividend	Earnings	Earnings	Earnings	Earnings	Low	Mean	High
Company	Ticker	Dividend	Price	Yield	Yield	Growth	Growth	Growth	Growth	ROE	ROE	ROE
American Electric Power Company, Inc.	AEP	\$1.88	\$39.94	4.71%	4.80%	3.60%	3.37%	4.50%	3.82%	8.16%	8.62%	9.31%
Cleco Corp.	CNL	\$1.35	\$41.52	3.25%	3.33%	N/A	3.00%	6.50%	4.75%	6.30%	8.08%	9.86%
Empire District Electric	EDE	\$1.00	\$20.82	4.80%	5.00%	N/A	10.20%	6.00%	8.10%	10.95%	13.10%	15.25%
Great Plains Energy Inc.	GXP	\$0.85	\$20.92	4.06%	4.20%	7.75%	6.50%	5.50%	6.58%	9.67%	10.78%	11.97%
IDACORP, Inc.	IDA	\$1.32	\$40.88	3.23%	3.29%	5.00%	4.00%	2.00%	3.67%	5.26%	6.95%	8.31%
Otter Tail Corporation	OTTR	\$1.19	\$22.37	5.32%	5.62%	5.00%	5.00%	24.00%	11.33%	10.45%	16.95%	29.96%
Pinnacle West Capital Corp.	PNW	\$2.10	\$50.64	4.15%	4.27%	5.90%	6.52%	5.00%	5.81%	9.25%	10.07%	10.80%
PNM Resources, Inc.	PNM	\$0.58	\$19.25	3.01%	3.19%	9.30%	9.30%	16.00%	11.53%	12.45%	14.72%	19.25%
Portland General Electric Company	POR	\$1.08	\$26.13	4.13%	4.22%	4.13%	3.63%	5.50%	4.42%	7.84%	8.64%	9.75%
Southern Company	SO	\$1.96	\$46.50	4.22%	4.32%	5.06%	5.38%	5.00%	5.15%	9.32%	9.47%	9.71%
Westar Energy, Inc.	WR	\$1.32	\$29.28	4.51%	4.64%	6.09%	4.80%	6.50%	5.80%	9.42%	10.44%	11.15%
PROXY GROUP MEAN				4.13%	4.26%	5.76%	5.61%	7.86%	6.45%	9.01%	10.71%	13.21%
PROXY GROUP MEDIAN				4.15%	4.27%	5.06%	5.00%	5.50%	5.80%	9.32%	10.07%	10.80%

Notes:

[1] Source: Bloomberg Professional

[2] Source: Bloomberg Professional, equals 90-trading day average as of August 17, 2012

[3] Equals [1] / [2]

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

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

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

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

[10] Equals [4] + [8]

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

Constant Growth Discounted Cash Flow Model 180 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
			Average		Expected	Zacks	First Call	Value Line	Average			
		Annualized	Stock	Dividend	Dividend	Earnings	Earnings	Earnings	Earnings	Low	Mean	High
Company	Ticker	Dividend	Price	Yield	Yield	Growth	Growth	Growth	Growth	ROE	ROE	ROE
American Electric Power Company, Inc.	AEP	\$1.88	\$39.72	4.73%	4.82%	3.60%	3.37%	4.50%	3.82%	8.18%	8.65%	9.34%
Cleco Corp.	CNL	\$1.35	\$39.85	3.39%	3.47%	N/A	3.00%	6.50%	4.75%	6.44%	8.22%	10.00%
Empire District Electric	EDE	\$1.00	\$20.67	4.84%	5.03%	N/A	10.20%	6.00%	8.10%	10.98%	13.13%	15.28%
Great Plains Energy Inc.	GXP	\$0.85	\$20.81	4.09%	4.22%	7.75%	6.50%	5.50%	6.58%	9.70%	10.80%	11.99%
IDACORP, Inc.	IDA	\$1.32	\$41.08	3.21%	3.27%	5.00%	4.00%	2.00%	3.67%	5.25%	6.94%	8.29%
Otter Tail Corporation	OTTR	\$1.19	\$22.07	5.39%	5.70%	5.00%	5.00%	24.00%	11.33%	10.53%	17.03%	30.04%
Pinnacle West Capital Corp.	PNW	\$2.10	\$48.99	4.29%	4.41%	5.90%	6.52%	5.00%	5.81%	9.39%	10.22%	10.95%
PNM Resources, Inc.	PNM	\$0.58	\$18.67	3.11%	3.29%	9.30%	9.30%	16.00%	11.53%	12.55%	14.82%	19.36%
Portland General Electric Company	POR	\$1.08	\$25.50	4.24%	4.33%	4.13%	3.63%	5.50%	4.42%	7.94%	8.75%	9.85%
Southern Company	SO	\$1.96	\$45.64	4.29%	4.41%	5.06%	5.38%	5.00%	5.15%	9.40%	9.55%	9.79%
Westar Energy, Inc.	WR	\$1.32	\$28.62	4.61%	4.75%	6.09%	4.80%	6.50%	5.80%	9.52%	10.54%	11.26%
PROXY GROUP MEAN				4.20%	4.34%	5.76%	5.61%	7.86%	6.45%	9.08%	10.79%	13.29%
PROXY GROUP MEDIAN				4.29%	4.41%	5.06%	5.00%	5.50%	5.80%	9.40%	10.22%	10.95%

Notes:

[1] Source: Bloomberg Professional

[2] Source: Bloomberg Professional, equals 180-trading day average as of August 17, 2012

[3] Equals [1] / [2]

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

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

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

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

[10] Equals [4] + [8]

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

[1]	[2]	[3]	[4]	[5]
			Historical	
			Sharpe	
RP _h	Vol _h	VOL _e	Ratio	RP _e
6.60%	20.30%	24.64%	32.52%	8.01%
	[6]	[7]	[8]	[9]
		Jan 13 VIX	Feb 13 VIX	Mar 13 VIX
Date	VXV	Futures	Futures	Futures
8/17/2012	18.35	24.95	26.05	26.70
8/16/2012	18.55	25.10	26.10	26.75
8/15/2012	18.86	25.20	26.15	26.80
8/14/2012	18.51	25.15	26.20	26.85
8/13/2012	18.07	24.70	25.80	26.45
8/10/2012	18.14	24.85	25.85	26.45
8/9/2012	18.23	25.10	26.05	26.65
8/8/2012	18.58	25.15	26.05	26.65
8/7/2012	18.81	25.40	26.35	26.95
8/6/2012	18.74	25.20	26.10	26.65
8/3/2012	18.68	25.30	26.25	26.70
8/2/2012	20.23	26.15	26.95	27.40
8/1/2012	20.67	26.25	27.00	27.35
7/31/2012	20.78	26.05	26.80	27.25
7/30/2012	20.13	25.75	26.50	27.00
7/27/2012	19.66	25.60	26.25	26.70
7/26/2012	20.24	25.45	26.15	26.70
7/25/2012	21.88	26.50	27.15	27.65
7/24/2012	22.26	26.70	27.40	27.85
7/23/2012	21.18	26.45	27.10	27.55
7/20/2012	19.64	25.55	26.30	26.75
7/19/2012	18.61	25.25	25.90	26.25
7/18/2012	18.94	25.45	26.05	26.45
7/17/2012	18.92	25.25	25.85	26.35
7/16/2012	19.61	25.80	26.30	26.70
7/13/2012	19.39	25.75	26.30	26.70
7/12/2012	20.69	26.35	26.85	27.20
7/11/2012	20.25	26.20	26.65	27.00
7/10/2012	20.87	26.55	27.00	27.40
7/9/2012	20.37	26.40	26.90	27.40
Average:		24	4.64	-

Sharpe Ratio Derived *Ex-Ante* Market Risk Premium

Notes:

[1] Source: Morningstar, Inc.

 RP_h = historical arithmetic average Risk Premium

[2] Source: Morningstar, Inc.

 Vol_h = historical market volatility

[3] Vol_e = expected market volatility (average of Cols. [6] to [9])

[4] Equals [1] / [2]

[5] Equals [3] x [4]

[6] Source: Bloomberg Professional

[7] Source: Bloomberg Professional

[8] Source: Bloomberg Professional

[9] Source: Bloomberg Professional

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
13.29%	2.65%	10.64%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market	Weight in Index	Estimated	Long-Term Growth		Weighted
Company	HCKEI	Capitalization	weight in muex	Dividend Heid	۵۱.	Der Result	Der Result
3M Co	MMM	64818.11	0.50%	2.33%	12.00%	14.47%	0.0722%
Abbott Laboratories	ABT	102885.52	0.79%	3.12%	9.96%	13.23%	0.1048%
Abercrombie & Fitch Co	ANF	3067.67	0.02%	1.90%	18.11%	20.18%	0.0048%
Accenture PLC	ACN	42743.65	0.33%	2.10%	13.25%	15.49%	0.0510%
ACE Ltd	ACE	25086.05	0.19%	2.49%	7.56%	10.14%	0.0196%
Adobe Systems Inc	ADBE	16670.75	0.13%	0.00%	11.17%	11.17%	0.0143%
Action of the Ac		8729 11	0.02%	0.00%	8.75%	0.75% 0.10%	0.0020%
Aetna Inc	AET	13378.03	0.10%	1.71%	10.60%	12.40%	0.0128%
Aflac Inc	AFL	21858.92	0.17%	2.85%	13.33%	16.37%	0.0275%
Agilent Technologies Inc	А	12899.23	0.10%	0.74%	10.87%	11.65%	0.0116%
AGL Resources Inc	GAS	4712.39	0.04%	4.56%	4.00%	8.65%	0.0031%
Air Products & Chemicals Inc	APD	17904.01	0.14%	2.96%	9.99%	13.10%	0.0180%
Airgas Inc	ARG	6426.86	0.05%	1.78%	12.89%	14.79%	0.0073%
Akamai Technologies Inc	AKAM	6645.45	0.05%	0.00%	14.25%	14.25%	0.0073%
Alcoa Inc		9516.68	0.07%	1.35%	10.00%	11.41%	0.0084%
		3643.92	0.15%	0.00%	40.36%	40.36%	0.0609%
Allergan Inc/I Inited States	AGN	26592 54	0.03%	0.23%	14 50%	14 75%	0.0040%
Allstate Corp/The	ALL	18596.93	0.14%	2.29%	9.00%	11.40%	0.0163%
Alpha Natural Resources Inc	ANR	1551.29	0.01%	0.00%	5.00%	5.00%	0.0006%
Altera Corp	ALTR	11549.10	0.09%	0.93%	12.29%	13.27%	0.0118%
Altria Group Inc	MO	71117.79	0.55%	4.88%	7.64%	12.71%	0.0696%
Amazon.com Inc	AMZN	108473.05	0.83%	0.00%	29.34%	29.34%	0.2450%
Ameren Corp	AEE	8171.94	0.06%	4.74%	-4.00%	0.65%	0.0004%
American Electric Power Co Inc	AEP	20763.53	0.16%	4.43%	4.33%	8.86%	0.0142%
American Express Co	AXP	64436.59 56027.10	0.50%	1.39%	10.23%	10.22%	0.0580%
		27775.66	0.43%	1.26%	20.86%	22.35%	0.0552 %
Ameriprise Financial Inc	AMP	11659.61	0.09%	2.34%	10.55%	13.01%	0.0117%
AmerisourceBergen Corp	ABC	9547.10	0.07%	1.31%	12.00%	13.39%	0.0098%
Amgen Inc	AMGN	64312.96	0.49%	1.80%	10.58%	12.48%	0.0618%
Amphenol Corp	APH	10053.64	0.08%	0.64%	15.00%	15.69%	0.0121%
Anadarko Petroleum Corp	APC	34887.59	0.27%	0.52%	9.92%	10.46%	0.0281%
Analog Devices Inc	ADI	12112.52	0.09%	2.85%	12.33%	15.36%	0.0143%
Aon PLC	AON	17048.86	0.13%	1.18%	8.33%	9.56%	0.0125%
Apache Corp		34802.52	0.27%	0.77%	7.83%	8.02% 12.20%	0.0231%
Apollo Group Inc	APOL	3274 27	0.03%	2.90 %	9.20%	9 78%	0.0030%
Apple Inc	AAPL	614638.38	4.73%	0.40%	21.75%	22.20%	1.0501%
Applied Materials Inc	AMAT	15239.57	0.12%	2.80%	8.67%	11.59%	0.0136%
Archer-Daniels-Midland Co	ADM	17503.62	0.13%	2.67%	10.00%	12.81%	0.0173%
Assurant Inc	AIZ	2825.80	0.02%	2.32%	10.33%	12.78%	0.0028%
AT&T Inc	Т	211549.22	1.63%	4.82%	6.71%	11.69%	0.1904%
Autodesk Inc	ADSK	7978.66	0.06%	0.00%	12.40%	12.40%	0.0076%
Automatic Data Processing Inc	ADP	28533.22	0.22%	2.82%	10.20%	13.16%	0.0289%
AutoZone Inc	A70	13688 44	0.04%	0.00%	16 57%	16 57%	0.0077 %
AvalonBay Communities Inc	AVB	13732.11	0.11%	2.74%	10.14%	13.02%	0.0138%
Avery Dennison Corp	AVY	3250.90	0.03%	3.36%	7.00%	10.47%	0.0026%
Avon Products Inc	AVP	6982.22	0.05%	5.62%	-0.06%	5.56%	0.0030%
Baker Hughes Inc	BHI	21002.08	0.16%	1.25%	23.00%	24.40%	0.0394%
Ball Corp	BLL	6610.09	0.05%	0.93%	10.00%	10.98%	0.0056%
Bank of America Corp	BAC	88802.07	0.68%	0.51%	13.45%	13.99%	0.0956%
Bank of New York Mellon Corp/The	BK	27098.98	0.21%	2.27%	17.63%	20.10%	0.0419%
	BAX	32352.31	0.25%	2.37%	8.80%	12 14%	0.0281%
Beam Inc	BEAM	22210.30 9213.87	0.17%	2.40%	12.81%	14.31%	0.0225 %
Becton Dickinson and Co	BDX	15311 85	0.12%	2 30%	8.00%	10.39%	0.0122%
Bed Bath & Beyond Inc	BBBY	15361.59	0.12%	0.00%	14.67%	14.67%	0.0173%
Bemis Co Inc	BMS	3181.04	0.02%	3.30%	6.00%	9.40%	0.0023%
Berkshire Hathaway Inc	BRK/B	212298.70	N/A	0.00%	N/A	N/A	N/A
Best Buy Co Inc	BBY	6050.28	0.05%	3.71%	7.72%	11.57%	0.0054%
Big Lots Inc	BIG	2472.36	0.02%	0.00%	10.78%	10.78%	0.0021%
Biogen Idec Inc	RIIR	34062.32	0.26%	0.00%	14.70%	14.70%	0.0385%
BIACK COCK THU		31011.08 6758.09	0.24%	3.34% 0.00%	10.20%	10.05%	0.0383%
Boeing Co/The	BA	55542.80	0.43%	2.37%	11.83%	14.34%	0.0613%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Vield	Long-Term Growth	DCE Result	Weighted
Company	TICKEI	Capitalization	Weight in mdex	Dividend field	Lot.	Der Result	Der Result
BorgWarner Inc	BWA	8080.69	0.06%	0.13%	20.05%	20.20%	0.0126%
Boston Properties Inc	BXP	16773.89	0.13%	1.99%	5.41%	7.45%	0.0096%
Boston Scientific Corp	BSX	8074.01	0.06%	0.00%	9.25%	9.25%	0.0057%
Bristol-Myers Squibb Co	BMY	53308.95	0.41%	4.31%	7.90%	12.38%	0.0508%
Brown-Forman Corp	BRCIVI BE/B	13009 13	0.15% N/A	1.12%	N/A	N/A	0.0246% N/A
CA Inc	CA	12185.67	0.09%	3.89%	10.00%	14.08%	0.0132%
Cablevision Systems Corp	CVC	4185.78	0.03%	3.90%	6.80%	10.83%	0.0035%
Cabot Oil & Gas Corp	COG	8853.12	N/A	0.21%	N/A	N/A	N/A
Cameron International Corp	CAM	13488.62	0.10%	0.00%	17.00%	17.00%	0.0176%
Campbell Soup Co	CPB	11054.35	0.09%	3.37%	6.50%	9.98%	0.0085%
Cardinal Health Inc	СОР	13784 20	0.25%	2.03%	9.72%	12.63%	0.0257%
CareEusion Corp	CEN	6020.58	0.05%	0.00%	10.42%	10.42%	0.0048%
CarMax Inc	KMX	6777.43	0.05%	0.00%	13.16%	13.16%	0.0069%
Carnival Corp	CCL	28169.32	0.22%	2.88%	16.77%	19.89%	0.0431%
Caterpillar Inc	CAT	59636.90	0.46%	2.12%	13.33%	15.59%	0.0716%
CBRE Group Inc	CBG	5973.59	0.05%	0.00%	13.33%	13.33%	0.0061%
Celgene Corp	CELC	23244.28	0.18%	1.19%	10.96%	12.22%	0.0219%
CenterPoint Energy Inc	CNP	8787.06	0.07%	3.93%	5.33%	9.37%	0.0063%
CenturyLink Inc	CTL	26026.75	0.20%	6.94%	3.14%	10.19%	0.0204%
Cerner Corp	CERN	12204.99	0.09%	0.00%	19.14%	19.14%	0.0180%
CF Industries Holdings Inc	CF	13974.97	0.11%	0.75%	6.54%	7.32%	0.0079%
CH Robinson Worldwide Inc	CHRW	9302.55	0.07%	2.32%	14.80%	17.29%	0.0124%
Charles Schwab Corp/The	SCHW	17022.06	0.13%	1.77%	16.00%	17.92%	0.0235%
Chesapeake Energy Corp	CHK	13321.42	0.10%	1.37%	8.89%	10.32%	0.0106%
Chipotle Mexican Grill Inc	CMG	220956.59 9433.07	0.07%	0.00%	-1.11%	21.67%	0.0338%
Chubb Corp/The	CB	19609.02	0.15%	2.25%	7.44%	9.78%	0.0148%
Cigna Corp	CI	12881.20	0.10%	0.08%	10.45%	10.53%	0.0104%
Cincinnati Financial Corp	CINF	6390.35	0.05%	4.11%	5.00%	9.22%	0.0045%
Cintas Corp	CTAS	5234.54	0.04%	1.43%	11.17%	12.68%	0.0051%
Cisco Systems Inc	csco	102905.64	0.79%	2.77%	9.56%	12.46%	0.0987%
Citigroup Inc	CTYS	90144.53	0.09%	0.16%	8.33%	8.50%	0.0589%
Cliffs Natural Resources Inc	CLF	5907.74	0.05%	5.34%	11.00%	16.63%	0.0076%
Clorox Co/The	CLX	9407.81	0.07%	3.62%	8.42%	12.19%	0.0088%
CME Group Inc	CME	17895.18	0.14%	4.65%	12.67%	17.61%	0.0243%
CMS Energy Corp	CMS	6160.94	0.05%	4.10%	6.00%	10.22%	0.0048%
Coach Inc	COH	16009.43	0.12%	2.02%	13.57%	15.73%	0.0194%
Coca-Cola Enterprises Inc	CCE	8986.04	1.37%	2.78%	6 12%	8 32%	0.1449%
Cognizant Technology Solutions Corp	CTSH	19418 68	0.07%	0.00%	18 67%	18 67%	0.0030%
Colgate-Palmolive Co	CL	50342.59	0.39%	2.30%	8.64%	11.03%	0.0427%
Comcast Corp	CMCSA	91658.84	0.71%	1.82%	16.81%	18.79%	0.1325%
Comerica Inc	CMA	6056.41	0.05%	1.78%	12.20%	14.08%	0.0066%
Computer Sciences Corp	CSC	5158.91	0.04%	2.41%	8.00%	10.50%	0.0042%
Conagra Foods Inc	CAG	10155.41	0.08% N/A	4.02%	7.00% N/A	11.16% N/A	0.0087% N/A
CONSOL Energy Inc	CNX	7700.68	0.06%	1.48%	12.00%	13.57%	0.0080%
Consolidated Edison Inc	ED	18059.74	0.14%	3.92%	3.26%	7.25%	0.0101%
Constellation Brands Inc	STZ	5737.66	0.04%	0.00%	10.82%	10.82%	0.0048%
Cooper Industries PLC	CBE	11814.97	0.09%	1.66%	12.40%	14.16%	0.0129%
Corning Inc	GLW	17763.99	0.14%	2.51%	9.50%	12.13%	0.0166%
Costco Wholesale Corp	CUSI	41388.37	0.32%	1.06%	13.70%	14.84%	0.0473%
Covidien PLC	COV	27274 30	0.04%	1.54%	10.80%	12 42%	0.0058%
CR Bard Inc	BCR	8268.91	0.06%	0.80%	9.75%	10.59%	0.0067%
Crown Castle International Corp	CCI	18294.33	0.14%	0.00%	38.93%	38.93%	0.0548%
CSX Corp	CSX	24316.30	0.19%	2.32%	15.00%	17.49%	0.0327%
Cummins Inc	CMI	19850.26	0.15%	1.63%	12.25%	13.98%	0.0214%
CVS Caremark Corp		58204.79	0.45%	1.40%	13.50%	14.99%	0.0672%
Darden Restaurants Inc	DRI	6887.46	0.29%	0.10%	12 74%	15.20%	0.0439%
DaVita Inc	DVA	9126.06	0.07%	0.00%	12.57%	12.57%	0.0088%
Dean Foods Co	DF	3003.64	0.02%	0.00%	6.50%	6.50%	0.0015%
Deere & Co	DE	31075.10	0.24%	2.21%	14.67%	17.04%	0.0408%
Dell Inc	DELL	21775.19	0.17%	1.29%	7.17%	8.50%	0.0142%
Denbury Resources Inc	DNR	6235.29	N/A	0.00%	N/A	N/A	N/A
		5399.17 24286 19	0.04%	U.55% 1 30%	6 20%	12.08% 7.54%	0.0050%
DeVrv Inc		24200.18 1303.44	0.19%	1.50%	9 48%	7.0 4 // 11 11%	0.00141%
Diamond Offshore Drilling Inc	DO	9463.76	0.07%	5.23%	17.33%	23.01%	0.0168%
DIRECTV	DTV	32447.47	0.25%	0.00%	18.19%	18.19%	0.0454%
Discover Financial Services	DFS	19160.02	0.15%	1.16%	10.67%	11.89%	0.0175%
Discovery Communications Inc	DISCA	19288.11	0.15%	0.00%	20.75%	20.75%	0.0308%
Dollar Tree Inc		11101.68	0.09%	0.00%	17.54%	17.54%	0.0150%
Dominion Resources Inc/VA		50912.49	0.24 /0	3.00%	+.00 /0	0.02 /0	0.021070

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Company	Ticker	Market	Weight in Index	Estimated Dividend Vield	Long-Term Growth		Weighted
Company	TICKET	Capitalization	weight in muex	Dividend Heid	Lot.	Der Result	Der Result
Dover Corp	DOV	10590.00	0.08%	2.23%	14.33%	16.73%	0.0136%
Dow Chemical Co/The	DOW	36470.38	0.28%	3.90%	5.33%	9.34%	0.0262%
DR Horton Inc	DHI	5852.69	0.05%	0.74%	4.00%	4.76%	0.0021%
Dr Pepper Snapple Group Inc	DPS	9571.82	0.07%	2.98%	7.30%	10.38%	0.0077%
DIE Energy Co	DIE	10332.77	0.08%	4.06%	5.00%	9.16%	0.0073%
Duke Energy Corp	DUK	40494.91	0.36%	4.02%	4.25%	8.90%	0.0321%
E*TRADE Financial Corp	ETFC	2517.38	0.02%	0.00%	26.00%	26.00%	0.0050%
Eastman Chemical Co	EMN	7723.04	0.06%	1.84%	7.50%	9.41%	0.0056%
Eaton Corp	ETN	15542.93	0.12%	3.30%	10.00%	13.46%	0.0161%
eBay Inc	EBAY	59021.09	0.45%	0.00%	12.75%	12.75%	0.0579%
Ecolab Inc	ECL	19349.69	0.15%	1.21%	13.60%	14.89%	0.0222%
Edison International	EIX	14498.60	0.11%	2.93%	-0.37%	2.56%	0.0029%
Edwards Lifesciences Corp	EVV	11547.08	0.09%	0.00%	20.17%	20.17%	0.0179%
El du Pont de Nemours & Co	FA	47 100.52	0.36%	0.00%	16 55%	16.55%	0.0390%
Eli Lilly & Co	LLY	49144.02	0.38%	4.63%	-1.40%	3.20%	0.0121%
EMC Corp/MA	EMC	55448.18	0.43%	0.00%	15.00%	15.00%	0.0640%
Emerson Electric Co	EMR	38359.05	0.30%	3.03%	12.33%	15.55%	0.0459%
Ensco PLC	ESV	13269.88	0.10%	2.66%	16.67%	19.55%	0.0200%
Entergy Corp	ETR	12281.13	0.09%	4.82%	2.00%	6.87%	0.0065%
EOG Resources Inc	EOG	29608.08	0.23%	0.62%	10.55%	11.19%	0.0255%
EQT Corp	EQI	8553.82	0.07%	1.54%	30.00%	31.77%	0.0209%
Equity Residential	ECR	18160 21	0.04%	2.91%	7 78%	10.80%	0.0055%
Estee Lauder Cos Inc/The	FI	23492.62	0.14%	1 17%	14 07%	15.33%	0.0277%
Exelon Corp	EXC	32171.18	0.25%	5.57%	-1.85%	3.67%	0.0091%
Expedia Inc	EXPE	7057.17	0.05%	0.79%	11.73%	12.57%	0.0068%
Expeditors International of Washington I	EXPD	8133.26	0.06%	1.44%	9.33%	10.84%	0.0068%
Express Scripts Holding Co	ESRX	49415.21	0.38%	0.00%	16.88%	16.88%	0.0642%
Exxon Mobil Corp	XOM	405602.63	3.12%	2.47%	3.44%	5.95%	0.1857%
F5 Networks Inc	FFIV	8054.49	0.06%	0.00%	18.67%	18.67%	0.0116%
Family Dollar Stores Inc	FDU	12050 91	0.00%	1.20%	13.90%	15.25%	0.0088%
Federated Investors Inc	FAST	2106 37	0.10%	4.84%	8.00%	13 03%	0.0208%
FedEx Corp	FDX	28740.93	0.22%	0.62%	13.14%	13.80%	0.0305%
Fidelity National Information Services I	FIS	9471.75	0.07%	1.87%	12.40%	14.38%	0.0105%
Fifth Third Bancorp	FITB	13305.86	0.10%	2.40%	5.00%	7.46%	0.0076%
First Horizon National Corp	FHN	2149.72	0.02%	0.60%	8.33%	8.96%	0.0015%
First Solar Inc	FSLR	2139.45	0.02%	0.00%	-1.00%	-1.00%	-0.0002%
FirstEnergy Corp	FE	19179.41	0.15%	4.80%	0.33%	5.14%	0.0076%
FISERV INC	FISV	9612.19	0.07%	0.00%	12.43%	12.43%	0.0092%
Flowserve Corp	FLIK	6531.83	0.02 /₀ N/Δ	1.33%	N/A	N/A	0.0027 /6 N/A
Fluor Corp	FLR	9129.83	0.07%	1.01%	13.30%	14.38%	0.0101%
FMC Corp	FMC	7563.47	0.06%	0.72%	10.45%	11.20%	0.0065%
FMC Technologies Inc	FTI	11444.84	0.09%	0.00%	13.00%	13.00%	0.0115%
Ford Motor Co	F	36690.55	0.28%	2.08%	8.62%	10.79%	0.0305%
Forest Laboratories Inc	FRX	9153.15	0.07%	0.00%	10.64%	10.64%	0.0075%
Fossil Inc	FOSL	5351.62	0.04%	0.00%	18.45%	18.45%	0.0076%
Franklin Resources Inc	BEN	20348.00	0.20%	2.58%	9.00% N/A	N/A	0.0228% N/A
Frontier Communications Corp	FTR	4658 12	0.04%	8.57%	-9.05%	-0.86%	-0.0003%
GameStop Corp	GME	2415.30	0.02%	2.09%	8.45%	10.63%	0.0020%
Gannett Co Inc	GCI	3600.91	0.03%	4.76%	6.00%	10.90%	0.0030%
Gap Inc/The	GPS	17240.03	0.13%	1.38%	11.18%	12.64%	0.0168%
General Dynamics Corp	GD	23459.75	0.18%	3.00%	6.60%	9.70%	0.0175%
General Electric Co	GE	222183.69	1.71%	3.22%	11.50%	14.90%	0.2549%
General Mills Inc	GIS	25139.28	0.19%	3.38%	8.00%	11.52%	0.0223%
Genworth Einancial Inc	GNW	2718 72	0.08%	0.00%	5.23%	5.00%	0.0088 %
Gilead Sciences Inc	GILD	42935.26	0.33%	0.00%	18.06%	18.06%	0.0597%
Goldman Sachs Group Inc/The	GS	52713.78	0.41%	1.62%	11.03%	12.74%	0.0517%
Goodyear Tire & Rubber Co/The	GT	2978.35	0.02%	0.10%	46.30%	46.42%	0.0106%
Google Inc	GOOG	218455.28	1.68%	0.00%	16.23%	16.23%	0.2729%
H&R Block Inc	HRB	4637.51	0.04%	4.72%	11.00%	15.98%	0.0057%
Halliburton Co	HAL	32740.31	0.25%	1.03%	20.50%	21.64%	0.0545%
Harman International Industrios Inc	ноg нар	9/88.31 3003 FP	0.08% 0.02%	1.44% 1.00%	13.00%	14.04% 21 10%	0.0110%
Harris Corp	HRS	5295 22	0.02%	2.90%	4.00%	6.96%	0.0028%
Hartford Financial Services Group Inc.	HIG	8141.02	0.06%	2.18%	9.50%	11.79%	0.0074%
Hasbro Inc	HAS	4966.94	0.04%	3.69%	9.00%	12.86%	0.0049%
HCP Inc	HCP	19478.90	0.15%	4.42%	5.23%	9.77%	0.0146%
Health Care REIT Inc	HCN	13682.03	0.11%	4.96%	6.09%	11.20%	0.0118%
Helmerich & Payne Inc	HP	5218.05	0.04%	0.57%	8.00%	8.59%	0.0034%
Hershey Co/The	HSY	16481.85	0.13%	2.05%	8.08%	10.21%	0.0130%
Hewlett-Backard Co	HES	1/311.27	0.13%	0.81%	5.13%	5.96%	0.0079%
HJ Heinz Co	HNZ	17883 44	0.14%	2.41%	4.20%	11.85%	0.0205%
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		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market	Weight in Index	Estimated Dividend Vield	Long-Term Growth	DCE Result	VVeignted
Company	TICKCI	Odpitalization	Weight in macx	Dividend field	Lot.	Dor Result	Dor Result
Home Depot Inc/The	HD	86375.27	0.66%	2.16%	15.75%	18.08%	0.1202%
Honeywell International Inc	HON	46330.07	0.36%	2.54%	15.00%	17.73%	0.0632%
Hormel Foods Corp	HRL	7542.57	0.06%	2.35%	11.00%	13.48%	0.0078%
Hospira Inc	HSP	5665.01	0.04%	0.00%	3.35%	3.35%	0.0015%
Host Hotels & Resorts Inc	HSI	11207.29	0.09%	1.71%	13.30%	15.12%	0.0130%
Hudson City Bancorp Inc	HUM	3490.24	0.03%	4.80%	0.50%	5.32% 10.56%	0.0014%
Huntington Bancshares Inc/OH	HBAN	5609.65	0.09%	2 46%	5.33%	7 86%	0.0090%
Illinois Tool Works Inc	ITW	27796.20	0.21%	2.48%	7.65%	10.23%	0.0219%
Ingersoll-Rand PLC	IR	14561.84	0.11%	1.32%	11.00%	12.39%	0.0139%
Integrys Energy Group Inc	TEG	4434.23	0.03%	4.80%	4.30%	9.21%	0.0031%
Intel Corp	INTC	130878.48	1.01%	3.30%	10.76%	14.24%	0.1434%
IntercontinentalExchange Inc	ICE	9838.12	0.08%	0.00%	14.00%	14.00%	0.0106%
International Business Machines Corp	IBM	227697.84	1.75%	1.63%	9.67%	11.38%	0.1994%
International Flavors & Fragrances Inc	IFF	5039.30	0.04%	2.07%	3.00%	5.10%	0.0020%
International Paper Co	IP	15280.45	0.02%	3.01%	5.00%	8.08%	0.0035%
Internutional Paper Co	IPG	5075.05	0.04%	2 14%	9.33%	11 57%	0.0045%
Intuit Inc	INTU	17347.03	0.13%	0.63%	15.14%	15.82%	0.0211%
Intuitive Surgical Inc	ISRG	20360.02	0.16%	0.00%	21.17%	21.17%	0.0332%
Invesco Ltd	IVZ	10806.59	0.08%	2.82%	12.00%	14.99%	0.0125%
Iron Mountain Inc	IRM	5679.54	0.04%	3.25%	13.67%	17.14%	0.0075%
Jabil Circuit Inc	JBL	4886.36	0.04%	1.32%	12.00%	13.40%	0.0050%
Jacobs Engineering Group Inc	JEC	5408.91	0.04%	0.00%	13.23%	13.23%	0.0055%
JC Penney Co Inc	JCP	5347.28	0.04%	1.61%	21.93%	23.72%	0.0098%
JDS Uniphase Corp	JDSU	2790.04	0.02%	0.00%	14.00%	14.00%	0.0030%
JM Smucker Co/The	SJIVI	9331.90	0.07%	2.41%	8.00%	10.51%	0.0075%
Johnson Controls Inc		18595 49	0.14%	2.50%	16 95%	19.66%	0.1441%
Joy Global Inc	JOY	6163.29	0.05%	1.21%	18.50%	19.82%	0.0094%
JPMorgan Chase & Co	JPM	145758.17	1.12%	3.10%	7.33%	10.55%	0.1183%
Juniper Networks Inc	JNPR	9636.56	0.07%	0.00%	15.00%	15.00%	0.0111%
Kellogg Co	К	18484.18	0.14%	3.35%	8.16%	11.65%	0.0166%
KeyCorp	KEY	7906.22	0.06%	2.16%	7.01%	9.24%	0.0056%
Kimberly-Clark Corp	KMB	33336.70	0.26%	3.49%	8.44%	12.08%	0.0310%
Kimco Realty Corp	KIM	8289.67	0.06%	3.75%	11.52%	15.48%	0.0099%
Kinder Morgan Inc/Delaware	KIVII	39556.55	0.30%	4.02%	7.00%	11.16%	0.0340%
Kohl's Corp	KSS	12380.22	0.07%	2.80 %	12 83%	15.47%	0.0087 %
Kraft Foods Inc	KET	72929 20	0.56%	2.40%	7 75%	10.73%	0.0602%
Kroger Co/The	KR	12053.78	0.09%	2.16%	9.46%	11.73%	0.0109%
L-3 Communications Holdings Inc	LLL	6745.26	0.05%	2.79%	1.67%	4.48%	0.0023%
Laboratory Corp of America Holdings	LH	8544.69	0.07%	0.00%	12.25%	12.25%	0.0081%
Lam Research Corp	LRCX	7083.12	0.05%	0.00%	10.00%	10.00%	0.0055%
Legg Mason Inc	LM	3504.73	0.03%	1.72%	11.00%	12.82%	0.0035%
Leggett & Platt Inc	LEG	3332.09	0.03%	4.73%	15.00%	20.08%	0.0051%
Leuradia National Corp		5512.80	0.04%	0.50%	4.50%	5.01% N/A	0.0022% N/A
Lexmark International Inc	LOK	1474 63	0.01%	5.55%	-9.00%	-3 70%	-0.0004%
Life Technologies Corp	LIFE	8168.76	0.06%	0.00%	8.73%	8.73%	0.0055%
Lincoln National Corp	LNC	6778.34	0.05%	1.35%	5.40%	6.79%	0.0035%
Linear Technology Corp	LLTC	7583.02	0.06%	3.09%	10.00%	13.24%	0.0077%
Lockheed Martin Corp	LMT	30375.09	0.23%	4.38%	6.88%	11.40%	0.0267%
Loews Corp	L	16061.22	N/A	0.62%	N/A	N/A	N/A
Lorillard Inc		16821.81	0.13%	4.73%	9.51%	14.46%	0.0187%
		30297.00 4337.83	0.23%	2.40%	15.00%	15.19%	0.0446%
Ltd Brands Inc	LTD	13970.79	0.11%	4.18%	12.54%	16.99%	0.0183%
M&T Bank Corp	MTB	11091.43	0.09%	3.20%	15.58%	19.03%	0.0162%
Macy's Inc	М	15990.06	0.12%	2.02%	10.27%	12.39%	0.0153%
Marathon Oil Corp	MRO	19230.09	0.15%	2.49%	-0.42%	2.06%	0.0031%
Marathon Petroleum Corp	MPC	16749.08	0.13%	2.51%	11.00%	13.65%	0.0176%
Marriott International Inc/DE	MAR	12396.16	0.10%	1.18%	19.01%	20.31%	0.0194%
Marsh & McLennan Cos Inc	MMC	18497.21	0.14%	2.65%	8.08%	10.83%	0.0154%
Masco Corp	MAS	4938.69	0.04%	2.18%	10.00%	12.29%	0.0047%
Mattel Inc	MAT	12140 49	0.41%	3.48%	9.00%	12.64%	0.0744 %
McCormick & Co Inc/MD	MKC	8041.97	0.06%	2.03%	9.50%	11.63%	0.0072%
McDonald's Corp	MCD	89387.35	0.69%	3.23%	9.96%	13.34%	0.0918%
McGraw-Hill Cos Inc/The	MHP	13527.48	0.10%	2.06%	9.50%	11.65%	0.0121%
McKesson Corp	MCK	20554.01	0.16%	0.74%	14.33%	15.13%	0.0239%
Mead Johnson Nutrition Co	MJN	14626.23	0.11%	1.67%	11.40%	13.16%	0.0148%
MeadWestvaco Corp	MWV	4991.30	0.04%	3.48%	10.00%	13.65%	0.0052%
Medtronic Inc	MDT	42385.60	0.33%	2.52%	7.57%	10.18%	0.0332%
Met ife Inc		131845.42	1.01%	3.85%	4.50%	8.44%	0.0856%
MetroPCS Communications Inc		3670 50	0.29%	∠. 3 0% ∩ ∩∩%	9.00% 14 76%	14 76%	0.0300%
Microchip Technoloav Inc	MCHP	6808 29	0.05%	4.01%	10.00%	14.21%	0,0074%
Micron Technology Inc	MU	6644.49	0.05%	0.00%	11.28%	11.28%	0.0058%

		[4]	[5]	[6]	[7]	[8]	[9]
C	Tieleen	Market	Mainht in Index	Estimated	Long-Term Growth		Weighted
Company	licker	Capitalization	weight in Index	Dividend Yield	ESt.	DCF Result	DCF Result
Microsoft Corp	MSET	258208 61	1 00%	2 71%	9.96%	12 80%	0.2544%
Molex Inc	MOLX	4816 69	0.04%	3 18%	11 67%	15.00%	0.0056%
Molson Coors Brewing Co	TAP	8015.00	0.06%	3.08%	3.34%	6.47%	0.0040%
Monsanto Co	MON	47112.79	0.36%	1.39%	9.65%	11.11%	0.0403%
Monster Beverage Corp	MNST	10709.24	0.08%	0.00%	17.50%	17.50%	0.0144%
Moody's Corp	MCO	8571.89	0.07%	1.66%	12.00%	13.76%	0.0091%
Morgan Stanley	MS	29790.65	0.23%	1.36%	11.00%	12.43%	0.0285%
Mosaic Co/The	MOS	25160.09	0.19%	1.69%	5.51%	7.25%	0.0140%
Motorola Solutions Inc	MSI	13822.88	N/A	2.17%	N/A	N/A	N/A
Murphy Oil Corp	MUR	10775.42	0.08%	2.12%	10.00%	12.22%	0.0101%
Mylan Inc/PA	MYL	9688.54	0.07%	0.00%	10.05%	10.05%	0.0075%
Nabors Industries Ltd	NBR	4744.91	0.04%	0.00%	8.00%	8.00%	0.0029%
NASDAQ OMX Group Inc/The	NDAQ	3975.35	0.03%	1.75%	9.00%	10.83%	0.0033%
National Oilwell Varco Inc	NOV	33512.52	0.26%	0.59%	18.00%	18.64%	0.0481%
NetApp Inc		12200.02	0.09%	0.00%	14.25%	14.25%	0.0134%
Neural Bubbarmaid Inc		3020.28	0.03%	0.00%	0.01%	11.00%	0.0031%
Newfield Exploration Co		5145.00 4247.91	0.04%	2.09%	9.01%	11.19%	0.0044%
Newment Mining Corp		4347.01	0.03%	0.00%	2 00%	0.05%	0.0036%
News Corp		55650 23	0.19%	0.81%	-5.00 %	17 31%	0.0001%
NextEra Energy Inc	NEE	29064 60	0.22%	3 47%	5 13%	8 69%	0.0194%
NIKE Inc	NKE	44090 42	0.34%	1 59%	13.83%	15 53%	0.0527%
NiSource Inc	NI	6983.04	N/A	3.85%	N/A	N/A	N/A
Noble Corp	NE	9722.73	0.07%	1.36%	13.00%	14.44%	0.0108%
Noble Energy Inc	NBL	15766.21	0.12%	0.98%	7.00%	8.01%	0.0097%
Nordstrom Inc	JWN	11781.71	0.09%	1.80%	12.59%	14.50%	0.0131%
Norfolk Southern Corp	NSC	24053.22	0.19%	2.54%	14.67%	17.39%	0.0322%
Northeast Utilities	NU	12072.06	0.09%	3.39%	6.71%	10.22%	0.0095%
Northern Trust Corp	NTRS	11414.94	0.09%	2.59%	8.74%	11.44%	0.0101%
Northrop Grumman Corp	NOC	17262.69	0.13%	3.05%	3.75%	6.86%	0.0091%
NRG Energy Inc	NRG	5035.38	0.04%	0.51%	-6.84%	-6.35%	-0.0025%
Nucor Corp	NUE	12949.12	0.10%	3.57%	8.50%	12.23%	0.0122%
NVIDIA Corp	NVDA	9046.92	0.07%	0.00%	15.60%	15.60%	0.0109%
NYSE Euronext	NYX	6445.20	0.05%	4.58%	8.50%	13.27%	0.0066%
O'Reilly Automotive Inc	ORLY	10228.06	0.08%	0.00%	18.25%	18.25%	0.0144%
Occidental Petroleum Corp	OXY	71842.33	0.55%	2.37%	-1.92%	0.42%	0.0023%
Omnicom Group Inc	OMC	13899.79	0.11%	2.28%	8.00%	10.37%	0.0111%
ONEOK Inc	OKE	9202.92	0.07%	2.89%	16.00%	19.12%	0.0135%
Oracle Corp	ORCL	155751.94	1.20%	0.74%	13.31%	14.10%	0.1690%
Owens-Illinois Inc	OI	3098.35	0.02%	0.00%	8.67%	8.67%	0.0021%
PACCAR Inc	PCAR	14638.65	0.11%	3.38%	10.75%	14.31%	0.0161%
Pall Corp	PLL	6435.29	0.05%	1.39%	12.05%	13.53%	0.0067%
Parker Hannifin Corp	PH	12553.86	0.10%	2.04%	6.00%	8.10%	0.0078%
Patterson Cos Inc	PDCO	3985.50	0.03%	1.18%	10.22%	12.99%	0.0040%
Peabody Epergy Corp	BTH	6448.03	0.09%	3.92 /0 1 /1 10/	12.00%	13.50%	0.0133%
People's United Einancial Inc	PRCT	4260 78	0.03%	5.27%	7.67%	13 14%	0.0007 %
Penco Holdings Inc	POM	4435.81	0.03%	5.57%	6.00%	11 74%	0.0040%
PensiCo Inc	PEP	113981 55	0.88%	2 90%	9.27%	12 30%	0.1079%
PerkinElmer Inc	PKI	3142.66	0.02%	1.02%	10.96%	12.03%	0.0029%
Perrigo Co	PRGO	10146.10	0.08%	0.27%	11.63%	11.91%	0.0093%
Pfizer Inc	PFE	177400.23	1.37%	3.67%	3.48%	7.21%	0.0985%
PG&E Corp	PCG	18969.06	0.15%	4.11%	2.85%	7.01%	0.0102%
Philip Morris International Inc	PM	157696.38	1.21%	3.52%	10.33%	14.03%	0.1703%
Phillips 66	PSX	26493.75	0.20%	0.95%	10.00%	10.99%	0.0224%
Pinnacle West Capital Corp	PNW	5766.39	0.04%	4.06%	5.00%	9.16%	0.0041%
Pioneer Natural Resources Co	PXD	12072.27	N/A	0.11%	N/A	N/A	N/A
Pitney Bowes Inc	PBI	2768.81	N/A	10.82%	N/A	N/A	N/A
Plum Creek Timber Co Inc	PCL	6591.76	0.05%	4.12%	5.00%	9.22%	0.0047%
PNC Financial Services Group Inc	PNC	33214.91	0.26%	2.48%	3.86%	6.39%	0.0163%
PPG Industries Inc	PPG	16519.32	0.13%	2.15%	7.00%	9.23%	0.0117%
PPL Corp	PPL	17108.48	0.13%	4.88%	-8.00%	-3.32%	-0.0044%
Praxair Inc	PA	32133.94	0.25%	2.04%	11.00%	13.81%	0.0342%
priecision Casiparts Corp		24031.00	0.10%	0.07%	12.03%	12.70%	0.0235%
Principal Einancial Group Inc	PCLN	29370.07	0.23%	2 73%	20.90%	20.90%	0.0474%
Procter & Gamble Co/The	PC	184701 64	1 42%	3 42%	7 52%	11 06%	0 1573%
Progressive Corn/The	PCR	12140 53	0.09%	1 65%	7 75%	9.46%	0.0088%
Prologis Inc	PID	15524 85	0.12%	3 45%	3 08%	6.58%	0.0000%
Prudential Financial Inc	PRU	25769 80	0.20%	2.97%	11.00%	14.13%	0.0280%
Public Service Enterprise Group Inc	PEG	16468 20	0.13%	4.36%	0.30%	4.67%	0.0059%
Public Storage	PSA	25650.76	0.20%	3.09%	5.25%	8.42%	0.0166%
PulteGroup Inc	PHM	4992.65	0.04%	0.00%	5.00%	5.00%	0.0019%
QEP Resources Inc	QEP	4995.32	0.04%	0.27%	15.00%	15.29%	0.0059%
QUALCOMM Inc	QCOM	105897.20	0.82%	1.46%	15.50%	17.07%	0.1391%
Quanta Services Inc	PWR	5209.73	0.04%	0.00%	16.83%	16.83%	0.0067%
Quest Diagnostics Inc	DGX	9672.70	0.07%	1.07%	11.38%	12.50%	0.0093%
Ralph Lauren Corp	RL	14293.83	0.11%	0.83%	12.33%	13.21%	0.0145%
Range Resources Corp	RRC	11036.01	0.08%	0.24%	10.00%	10.25%	0.0087%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est	DCF Result	DCF Result
Company	TICKCI	Capitalization	Weight in macx	Dividend field	Lot.	Don Result	Dor Result
Raytheon Co	RTN	18772.36	0.14%	3.48%	7.75%	11.36%	0.0164%
Red Hat Inc	RHT	11236.06	0.09%	0.00%	17.00%	17.00%	0.0147%
Regions Financial Corp	RF	10063.01	0.08%	0.56%	8.00%	8.58%	0.0066%
Republic Services Inc	RSG	10304.45	0.08%	3.19%	6.60%	9.90%	0.0078%
Reynolds American Inc	RAI	26146.37	0.20%	5.04%	7.68%	12.91%	0.0260%
Robert Half International Inc	RHI	4103.79	0.03%	2.05%	12.67%	14.85%	0.0047%
Rockwell Collins Inc	COL	7256.84	0.08%	2.37%	8.64%	10.82%	0.0139%
Roper Industries Inc	ROP	10265.04	0.08%	0.50%	14.00%	14.53%	0.0115%
Ross Stores Inc	ROST	15704.74	0.12%	0.79%	13.29%	14.13%	0.0171%
Rowan Cos Plc	RDC	4477.26	0.03%	0.00%	18.33%	18.33%	0.0063%
RR Donnelley & Sons Co	RRD	2269.98	0.02%	8.26%	5.00%	13.47%	0.0024%
Ryder System Inc	R	2142.57	0.02%	2.99%	8.93%	12.06%	0.0020%
Safeway Inc	SWY	3841.58	0.03%	4.04%	10.19%	14.43%	0.0043%
SAIC Inc	SAI	4078.42	0.03%	4.02%	3.87%	7.96%	0.0025%
Salestorce.com Inc		20630.66	0.16%	0.00%	25.78%	25.78%	0.0409%
	SNDK	10415.40	0.08%	0.00%	13.43%	13.43%	0.0108%
Schlumberger I td	SLB	99129.00	0.05%	4.07 %	4.34 %	19 58%	0.0042 %
Scripps Networks Interactive Inc	SNI	8667.98	0.07%	0.81%	15.64%	16.51%	0.0110%
Seagate Technology PLC	STX	13654.11	0.11%	3.51%	7.77%	11.42%	0.0120%
Sealed Air Corp	SEE	2615.34	0.02%	3.79%	7.00%	10.92%	0.0022%
Sears Holdings Corp	SHLD	6055.15	N/A	0.00%	N/A	N/A	N/A
Sempra Energy	SRE	16541.92	0.13%	3.25%	7.00%	10.36%	0.0132%
Sherwin-Williams Co/The	SHW	14156.07	0.11%	1.12%	18.97%	20.20%	0.0220%
Sigma-Aldrich Corp	SIAL	8630.76	0.07%	1.12%	6.78%	7.93%	0.0053%
Simon Property Group Inc	SPG	48852.89	0.38%	2.59%	5.23%	7.89%	0.0296%
SLM Corp	SLM	/3/9.00	N/A	3.18%	N/A 10.00%	N/A 10.00%	N/A
Southern Co/The	SNA	4077.03	0.03%	0.00%	5.67%	10.00%	0.0031%
Southwest Airlines Co		7036.88	0.05%	0.23%	19 25%	19.50%	0.0310%
Southwestern Energy Co	SWN	11370.99	N/A	0.00%	N/A	N/A	N/A
Spectra Energy Corp	SE	19063.82	0.15%	3.90%	5.00%	9.00%	0.0132%
Sprint Nextel Corp	S	15541.96	0.12%	0.00%	5.00%	5.00%	0.0060%
St Jude Medical Inc	STJ	12031.33	0.09%	2.28%	9.89%	12.28%	0.0114%
Stanley Black & Decker Inc	SWK	11370.74	0.09%	2.65%	13.00%	15.83%	0.0139%
Staples Inc	SPLS	7669.90	0.06%	3.83%	8.23%	12.22%	0.0072%
Starbucks Corp	SBUX	36632.00	0.28%	1.44%	18.08%	19.65%	0.0554%
Starwood Hotels & Resorts Worldwide Inc	HOT	10/31.18	0.08%	1.04%	20.34%	21.49%	0.0178%
State Street Corp	511	20151.17	0.16%	2.20%	7.40%	9.68%	0.0150%
Stercycle inc	SYK	20863.56	0.00%	1 14%	10.00%	11 93%	0.0090 %
Sunoco Inc	SUN	4913.04	0.04%	1.68%	-2.09%	-0.43%	-0.0002%
SunTrust Banks Inc	STI	13758.27	0.11%	0.80%	7.67%	8.50%	0.0090%
Symantec Corp	SYMC	12646.08	0.10%	0.00%	7.67%	7.67%	0.0075%
Sysco Corp	SYY	17760.04	0.14%	3.72%	10.00%	13.90%	0.0190%
T Rowe Price Group Inc	TROW	15902.63	0.12%	2.17%	13.33%	15.65%	0.0192%
Target Corp	TGT	42416.36	0.33%	1.97%	12.58%	14.67%	0.0479%
TE Connectivity Ltd	IEL	15452.48	0.12%	2.16%	15.00%	17.32%	0.0206%
Teco Energy Inc		3667.07	0.03%	4.91%	3.07%	8.07%	0.0026%
Teradata Corp	TDC	12725.03	0.02%	0.00%	14.40%	14.40%	0.0019%
Teradyne Inc	TER	2969 59	0.02%	0.00%	11 75%	11 75%	0.0027%
Tesoro Corp	TSO	5513.54	0.04%	0.65%	29.10%	29.84%	0.0127%
Texas Instruments Inc	TXN	33825.54	0.26%	2.28%	9.50%	11.89%	0.0310%
Textron Inc	TXT	7734.31	0.06%	0.29%	31.29%	31.62%	0.0188%
Thermo Fisher Scientific Inc	TMO	20807.22	0.16%	0.79%	10.84%	11.67%	0.0187%
Tiffany & Co	TIF	7532.58	0.06%	2.09%	13.37%	15.60%	0.0090%
Time Warner Cable Inc	IWC	27545.32	0.21%	2.49%	11.61%	14.24%	0.0302%
Time warner Inc		40462.11	0.31%	2.42%	12.99%	15.57%	0.0485%
TIX Cos Inc		2280.31	0.02%	2.03%	15.00%	17.18%	0.0030%
Torchmark Corp	TMK	4876 78	0.04%	1 12%	9.00%	10.17%	0.0038%
Total System Services Inc	TSS	4406.46	0.03%	1.66%	9.71%	11.45%	0.0039%
Travelers Cos Inc/The	TRV	25098.37	0.19%	2.79%	7.75%	10.64%	0.0206%
TripAdvisor Inc	TRIP	4923.27	0.04%	0.00%	16.80%	16.80%	0.0064%
Tyco International Ltd	TYC	26314.06	0.20%	1.81%	13.00%	14.93%	0.0302%
Tyson Foods Inc	TSN	5599.21	0.04%	1.07%	7.33%	8.45%	0.0036%
Union Pacific Corp	UNP	59276.74	0.46%	1.94%	13.00%	15.07%	0.0688%
United Parcel Service Inc	UPS	73547.15	0.57%	2.97%	9.10%	12.21%	0.0691%
United Technologics Corp		3351.59	0.03%	U.80%	0.00%	12 26%	0.0019%
UnitedHealth Group Inc		12019.10 55600 20	0.30%	∠.50% 1 ∡∩%	10.03%	13.20% 12.48%	0.0744% 0.0534%
Unum Group	UNM	5527 20	0.4%	2 34%	9.50%	11.95%	0.0051%
Urban Outfitters Inc	URBN	5347.80	0.04%	0.00%	19.76%	19.76%	0.0081%
US Bancorp	USB	63113.45	0.49%	2.33%	14.14%	16.63%	0.0808%
Valero Energy Corp	VLO	16652.98	0.13%	2.10%	6.13%	8.29%	0.0106%
Varian Medical Systems Inc	VAR	6699.38	0.05%	0.00%	12.67%	12.67%	0.0065%
Ventas Inc	VTR	18971.94	0.15%	3.87%	5.21%	9.18%	0.0134%

		[4]	[5]	[6]	[7]	[8]	[9]
		Market		Estimated	Long-Term Growth		Weighted
Company	Ticker	Capitalization	Weight in Index	Dividend Yield	Est.	DCF Result	DCF Result
VeriSign Inc	VRSN	7434.99	0.06%	0.00%	14.17%	14.17%	0.0081%
Verizon Communications Inc	VZ	122592.47	0.94%	4.68%	6.13%	10.95%	0.1033%
VF Corp	VFC	16491.37	0.13%	1.95%	13.00%	15.08%	0.0191%
Viacom Inc	VIAB	26244.34	0.20%	2.05%	14.75%	16.95%	0.0342%
Visa Inc	V	85700.41	0.66%	0.68%	18.71%	19.46%	0.1283%
Vornado Realty Trust	VNO	15365.03	0.12%	3.37%	-3.44%	-0.13%	-0.0002%
Vulcan Materials Co	VMC	5185.92	0.04%	0.10%	9.67%	9.77%	0.0039%
Wal-Mart Stores Inc	WMT	243479.59	1.87%	2.24%	9.78%	12.13%	0.2273%
Walgreen Co	WAG	33746.76	0.26%	2.58%	13.20%	15.95%	0.0414%
Walt Disney Co/The	DIS	89677.85	0.69%	1.19%	12.15%	13.42%	0.0926%
Washington Post Co/The	WPO	2670.11	N/A	0.00%	N/A	N/A	N/A
Waste Management Inc	WM	16015.92	0.12%	4.12%	4.00%	8.20%	0.0101%
Waters Corp	WAT	6690.71	0.05%	0.00%	10.02%	10.02%	0.0052%
Watson Pharmaceuticals Inc	WPI	10022.72	0.08%	0.00%	11.40%	11.40%	0.0088%
WellPoint Inc	WLP	18773.02	0.14%	1.97%	10.80%	12.87%	0.0186%
Wells Fargo & Co	WFC	182552.34	1.40%	2.46%	25.38%	28.15%	0.3955%
Western Digital Corp	WDC	10971.02	0.08%	0.00%	2.72%	2.72%	0.0023%
Western Union Co/The	WU	10728.61	0.08%	2.25%	11.10%	13.47%	0.0111%
Weyerhaeuser Co	WY	13148.42	0.10%	2.45%	5.00%	7.51%	0.0076%
Whirlpool Corp	WHR	5724.41	N/A	2.71%	N/A	N/A	N/A
Whole Foods Market Inc	WFM	17571.10	0.14%	0.59%	18.76%	19.40%	0.0262%
Williams Cos Inc/The	WMB	20360.19	0.16%	3.80%	12.00%	16.02%	0.0251%
Windstream Corp	WIN	5662.39	0.04%	10.38%	-3.21%	7.01%	0.0031%
Wisconsin Energy Corp	WEC	8884.04	0.07%	3.11%	4.67%	7.85%	0.0054%
WPX Energy Inc	WPX	2939.77	N/A	0.00%	N/A	N/A	N/A
WW Grainger Inc	GWW	14280.15	0.11%	1.50%	14.03%	15.63%	0.0172%
Wyndham Worldwide Corp	WYN	7285.70	0.06%	1.80%	20.00%	21.98%	0.0123%
Wynn Resorts Ltd	WYNN	10666.40	0.08%	1.87%	9.00%	10.95%	0.0090%
Xcel Energy Inc	XEL	13841.65	0.11%	3.76%	4.58%	8.43%	0.0090%
Xerox Corp	XRX	9686.37	N/A	2.29%	N/A	N/A	N/A
Xilinx Inc	XLNX	8971.46	0.07%	2.57%	14.00%	16.75%	0.0116%
XL Group PLC	XL	7184.08	0.06%	1.91%	8.33%	10.32%	0.0057%
Xylem Inc/NY	XYL	4741.92	0.04%	1.59%	15.00%	16.70%	0.0061%
Yahoo! Inc	YHOO	17715.96	0.14%	0.00%	11.14%	11.14%	0.0152%
Yum! Brands Inc	YUM	29880.97	0.23%	1.81%	11.50%	13.42%	0.0309%
Zimmer Holdings Inc	ZMH	10914.93	0.08%	0.44%	10.25%	10.72%	0.0090%
Zions Bancorporation	ZION	3618.51	0.03%	0.21%	7.75%	7.97%	0.0022%
 To	otal Market Capitalization:	12,993,144.50					13.29%

 Notes:
 Total Market Capitalization

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

 [3] Equals [1] – [2]
 [4] Source: Bloomberg Professional

 [5] Equals weight in S&P 500 based on market capitalization
 [6] Source: Bloomberg Professional

 [7] Source: Bloomberg Professional
 [7] Source: Bloomberg Professional

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

Ex-Ante Market Risk Premium Market DCF Method Based - Capital IQ

[1]	[2]	[3]
S&P 500	Current 30-Year	
Est. Required	Treasury (30-day	Implied Market
Market Return	average)	Risk Premium
13.07%	2.65%	10.43%

	[4]	[5]	[6]	[7]	[8]	[9]
	Market		Estimated	Long-Term		Weighted
Company (Ticker)	Capitalization	Weight in Index	Dividend Yield	Growth Est.	DCF Result	DCF Result
3M CO. (NYSE:MMM)	64,804.20	0.48%	2.52%	10.90%	13.56%	0.07%
Abbott Laboratories (NYSE:ABT)	104,250.90	0.78%	3.07%	8.73%	11.93%	0.09%
Apercromble & Filch Co. (NTSE.ANF)	2,923.70	0.02%	1.90%	21.70%	23.09%	0.01%
Accellule pic (NTSE.ACN)	30,010.10	0.29%	2.21%	7 5 4 9/	10.94%	0.04%
Adobe Systems Inc. (NasdarGS:ADBE)	24,024.90	0.19%	2.06%	10.00%	10.32%	0.02%
Advanced Micro Devices Inc. (NYSE:AMD)	2 950 50	0.12%	0.00%	10.00 %	10.00%	0.01%
Aetna Inc. (NYSE:AET)	12 756 40	0.02%	1.83%	11 10%	13.03%	0.00%
AFLAC Inc. (NYSE:AFL)	21 493 70	0.16%	2.88%	9.92%	12.94%	0.02%
Agilent Technologies Inc. (NYSE:A)	12,909,70	0.10%	1.08%	13.20%	14.35%	0.01%
AGL Resources Inc. (NYSE:GAS)	4.706.50	0.04%	4.59%	4.50%	9.19%	0.00%
Air Products & Chemicals Inc. (NYSE:APD)	17.925.20	0.13%	3.02%	11.60%	14.80%	0.02%
Airgas, Inc. (NYSE:ARG)	6,473.80	0.05%	1.90%	14.00%	16.03%	0.01%
Akamai Technologies, Inc. (NasdagGS:AKAM)	6,703.90	0.05%	0.00%	14.20%	14.20%	0.01%
Alcoa, Inc. (NYSE:AA)	9,356.60	0.07%	1.37%	7.10%	8.52%	0.01%
Alexion Pharmaceuticals, Inc. (NasdaqGS:ALXN)	20,002.80	0.15%	0.00%	30.40%	30.40%	0.05%
Allegheny Technologies Inc. (NYSE:ATI)	3,479.90	0.03%	2.22%	15.00%	17.39%	0.00%
Allergan Inc. (NYSE:AGN)	26,598.70	0.20%	0.23%	13.00%	13.25%	0.03%
Alpha Natural Resources, Inc. (NYSE:ANR)	1,447.10	0.01%	0.00%	5.00%	5.00%	0.00%
Altera Corp. (NasdaqGS:ALTR)	11,737.90	0.09%	1.09%	14.70%	15.87%	0.01%
Altria Group Inc. (NYSE:MO)	72,074.70	0.54%	4.63%	7.91%	12.72%	0.07%
Amazon.com Inc. (NasdaqGS:AMZN)	109,196.30	0.82%	0.00%	37.90%	37.90%	0.31%
Ameren Corporation (NYSE:AEE)	8,205.90	0.06%	4.73%	-4.05%	0.58%	0.00%
American Electric Power Co., Inc. (NYSE:AEP)	20,972.10	0.16%	4.35%	3.49%	7.92%	0.01%
American Express Company (NYSE:AXP)	65,037.40	0.49%	1.39%	12.00%	13.47%	0.07%
American International Group, Inc. (NYSE:AIG)	56,418.40	0.42%	0.00%	16.50%	16.50%	0.07%
American Tower Corporation (NYSE:AMT)	28,076.00	0.21%	1.24%	17.00%	18.35%	0.04%
Ameriprise Financial Inc. (NYSE:AMP)	11,577.50	0.09%	2.55%	14.00%	16.73%	0.01%
AmerisourceBergen Corporation (NYSE:ABC)	9,456.50	0.07%	1.38%	11.80%	13.26%	0.01%
Amgen Inc. (NasdaqGS:AMGN)	64,050.90	0.48%	1.73%	10.40%	12.22%	0.06%
Amphenol Corporation (NYSE:APH)	10,034.30	0.07%	0.67%	14.30%	15.02%	0.01%
Anadarko Petroleum Corporation (NYSE:APC)	35,462.20	0.26%	0.51%	5.28%	5.80%	0.02%
Analog Devices, Inc. (NasdaqGS:ADI)	12,187.10	0.09%	2.94%	11.30%	14.41%	0.01%
Aon Corporation (NYSE:AON)	17,103.70	0.13%	1.19%	9.18%	10.42%	0.01%
Apache Corp. (NYSE:APA)	34,673.40	0.26%	0.77%	3.79%	4.57%	0.01%
Apartment Investment & Management Co. (NYSE:AIV)	3,814.70	0.03%	3.05%	8.87%	12.06%	0.00%
Apollo Group Inc. (NasdaqGS:APOL)	3,253.90	0.02%	0.00%	12.80%	12.80%	0.00%
Apple Inc. (NasdaqGS:AAPL)	596,508.90	4.46%	1.67%	23.00%	24.86%	1.11%
Applied Materials Inc. (NasdaqGS:AMAT)	15,354.90	0.11%	3.01%	8.67%	11.81%	0.01%
Archer Daniels Midland Company (NYSE:ADM)	17,332.40	0.13%	2.66%	10.00%	12.79%	0.02%
Assurant Inc. (NYSE:AIZ)	2,790.90	0.02%	2.44%	8.50%	11.04%	0.00%
AT&T, Inc. (NYSE:T)	214,837.60	1.60%	4.73%	6.82%	11.71%	0.19%
Autodesk, Inc. (NasdaqGS:ADSK)	7,967.20	0.06%	0.00%	12.40%	12.40%	0.01%
Automatic Data Processing, Inc. (NasdaqGS:ADP)	28,577.20	0.21%	2.70%	9.74%	12.57%	0.03%
	4,813.40	0.04%	0.00%	16.50%	16.50%	0.01%
AutoZone Inc. (NYSE:AZO)	13,422.00	0.10%	0.00%	15.80%	15.80%	0.02%
Avaionbay Communities Inc. (NYSE:AVB)	13,643.00	0.10%	2.76%	11.60%	14.52%	0.01%
Avery Dennison Corporation (NYSE:AVY)	3,230.60	0.02%	3.39%	9.25%	12.80%	0.00%
Avon Products Inc. (NYSE:AVP)	6,874.20	0.05%	5.78%	-5.10%	0.53%	0.00%
Baker Hughes Incorporated (NTSE.BHI)	20,799.90	0.10%	1.27%	20.70%	22.10%	0.03%
Bank of America Corporation (NVSE:BAC)	85 461 20	0.03%	0.55%	7 50%	8 02%	0.01%
Barter International Inc. (NVSE:BAX)	32 242 00	0.04%	3.05%	8 60%	11 87%	0.03%
BR&T Corporation (NVSE-BRT)	22,242.90	0.24%	2 52%	10 50%	13 15%	0.03%
Beam Inc (NYSE: BEAM)	22,210.30	0.17%	1 36%	12.60%	14.05%	0.02 %
Becton Dickinson and Company (NYSE BDX)	15 144 20	0.07 %	2.37%	8 53%	11.00%	0.01%
Bed Bath & Beyond Inc. (Nasdar GS:BBBY)	14 944 20	0.11%	0.00%	14 30%	14.30%	0.02%
Bemis Company, Inc. (NYSE:BMS)	3 154 20	0.02%	3.27%	7 15%	10.54%	0.02%
Berkshire Hathaway Inc. (NYSE BRK A)	211 025 80	1.58%	0.00%	8.60%	8 60%	0.14%
Best Buy Co. Inc. (NYSE BBY)	6 937 40	0.05%	3 14%	7.30%	10.55%	0.01%
Big Lots Inc. (NYSE:BIG)	2,448,10	0.02%	0.00%	11.70%	11.70%	0.00%
Biogen Idec Inc. (NasdagGS:BIIB)	34,705,20	0.26%	0.00%	15.20%	15.20%	0.04%
BlackRock, Inc. (NYSE:BLK)	30.641.50	0.23%	3.39%	12.40%	16.00%	0.04%
BMC Software Inc. (NasdagGS:BMC)	6.761.30	0.05%	0.00%	9.53%	9.53%	0.00%
BorgWarner Inc. (NYSE:BWA)	8,166.50	0.06%	0.00%	19.70%	19.70%	0.01%
Boston Properties Inc. (NYSE:BXP)	16.883.90	0.13%	1.96%	6.40%	8.42%	0.01%
Boston Scientific Corporation (NYSE:BSX)	7.818.60	0.06%	0.00%	6.57%	6.57%	0.00%
Bristol-Myers Squibb Company (NYSE:BMY)	53.594.40	0.40%	4.26%	4.40%	8.75%	0.04%
Broadcom Corp. (NasdagGS:BRCM)	20.135.20	0.15%	1.11%	14.10%	15.29%	0.02%
Brown-Forman Corporation (NYSE:BF.B)	13.037.50	0.10%	1.00%	9.15%	10.20%	0.01%
CA Technologies (NasdaqGS:CA)	12,091.90	0.09%	3.88%	9.67%	13.74%	0.01%
Cablevision Systems Corporation (NYSE:CVC)	4,012.00	0.03%	3.98%	13.70%	17.95%	0.01%

	[4]	[5]	[6]	[7]	[8]	[9]
Compony (Ticker)	Market	Weight in Index	Estimated	Long-Term		Weighted
Company (Ticker)	Capitalization	weight in index	Dividend field	Glowin Esi.	DCF Result	DCF Result
Cabot Oil & Gas Corporation (NYSE:COG)	9 092 50	0.07%	0 19%	35.00%	35 22%	0.02%
Cameron International Corporation (NYSE:CAM)	13,094.60	0.10%	0.00%	18.90%	18.90%	0.02%
Campbell Soup Co. (NYSE:CPB)	10,996.80	0.08%	3.33%	4.46%	7.86%	0.01%
Capital One Financial Corp. (NYSE:COF)	25,595.10	0.19%	0.36%	9.56%	9.93%	0.02%
Cardinal Health, Inc. (NYSE:CAH)	13,675.40	0.10%	2.38%	10.90%	13.41%	0.01%
CareFusion Corporation (NYSE:CFN)	5,969.50	0.04%	0.00%	10.20%	10.20%	0.00%
Carnival Corporation (NYSE-CCL)	26 471 00	0.03%	2.94%	12 50%	15.62%	0.03%
Caterpillar Inc. (NYSE:CAT)	57,873.10	0.43%	2.35%	16.30%	18.84%	0.08%
CBRE Group, Inc (NYSE:CBG)	5,870.10	0.04%	0.00%	13.20%	13.20%	0.01%
CBS Corporation (NYSE:CBS)	23,087.90	0.17%	1.11%	12.80%	13.98%	0.02%
Celgene Corporation (NasdaqGS:CELG)	30,303.20	0.23%	0.00%	22.20%	22.20%	0.05%
CenterPoint Energy, Inc. (NYSE:CNP)	8,727.20	0.07%	3.97%	5.22%	9.29%	0.01%
Cerner Corporation (NasdardGS:CERN)	12 624 40	0.20%	0.91%	19 20%	19.20%	0.03%
CF Industries Holdings, Inc. (NYSE:CF)	13.548.20	0.10%	0.74%	12.30%	13.09%	0.01%
CH Robinson Worldwide Inc. (NasdaqGS:CHRW)	9,150.80	0.07%	2.33%	14.60%	17.10%	0.01%
Chesapeake Energy Corporation (NYSE:CHK)	12,221.60	0.09%	1.84%	5.78%	7.67%	0.01%
Chevron Corporation (NYSE:CVX)	222,349.70	1.66%	3.18%	-5.80%	-2.71%	-0.05%
Chipotle Mexican Grill, Inc. (NYSE:CMG)	9,498.30	0.07%	0.00%	22.20%	22.20%	0.02%
Cigna Corp. (NYSE:CI) Cincippati Financial Corp. (NasdagGS:CINE)	12,829.30	0.10%	0.09%	7 50%	10.49%	0.01%
Cintas Corporation (NasdagGS:CTAS)	5.213.00	0.04%	1.31%	10.70%	12.08%	0.00%
Cisco Systems, Inc. (NasdaqGS:CSCO)	101,887.80	0.76%	1.68%	10.20%	11.97%	0.09%
Citigroup, Inc. (NYSE:C)	84,514.20	0.63%	0.14%	8.64%	8.79%	0.06%
Citrix Systems, Inc. (NasdaqGS:CTXS)	14,368.30	0.11%	0.00%	17.60%	17.60%	0.02%
Cliffs Natural Resources Inc. (NYSE:CLF)	6,044.60	0.05%	5.89%	8.33%	14.47%	0.01%
CME Group Inc. (NasdaqGS:CME)	17,772.20	0.13%	3.34%	10.00%	13.51%	0.02%
Coach Inc (NYSE:COH)	0,170.30	0.05%	4.10%	0.02%	10.24%	0.00%
Coca-Cola Enterprises Inc. (NYSE:CCE)	8.658.30	0.06%	2.18%	8.00%	10.27%	0.01%
Cognizant Technology Solutions Corporation (NasdaqGS:CTSH)	19,382.90	0.14%	0.00%	19.00%	19.00%	0.03%
Colgate-Palmolive Co. (NYSE:CL)	50,181.40	0.37%	2.34%	8.56%	11.00%	0.04%
Comcast Corporation (NasdaqGS:CMCS.A)	90,856.30	0.68%	1.90%	15.80%	17.85%	0.12%
Comerica Incorporated (NYSE:CMA)	5,975.20	0.04%	1.94%	9.60%	11.63%	0.01%
Computer Sciences Corporation (NYSE:CSC)	4,981.50	0.04%	2.49%	8.67%	11.27%	0.00%
ConocoPhillins (NYSE:COP)	69 897 30	0.07%	3.89% 4.59%	-5.39%	-0.92%	0.01%
CONSOL Energy Inc. (NYSE:CNX)	7,329.70	0.05%	1.55%	12.00%	13.64%	0.01%
Consolidated Edison Inc. (NYSE:ED)	18,100.70	0.14%	7.83%	3.34%	11.30%	0.02%
Constellation Brands Inc. (NYSE:STZ)	5,653.20	0.04%	0.00%	9.44%	9.44%	0.00%
Cooper Industries plc (NYSE:CBE)	11,845.00	0.09%	1.67%	13.00%	14.78%	0.01%
Corning Inc. (NYSE:GLW)	17,496.00	0.13%	2.55%	7.88%	10.53%	0.01%
Coventry Health Care Inc. (NXSE:CV/H)	41,712.00	0.31%	1.14%	12.90%	14.11%	0.04%
Covidien plc (NYSE:COV)	27 648 80	0.03%	1.56%	9.78%	11.00 %	0.00%
CR Bard Inc. (NYSE:BCR)	8,244.60	0.06%	0.81%	9.03%	9.88%	0.01%
Crown Castle International Corp. (NYSE:CCI)	18,199.00	0.14%	0.00%	31.10%	31.10%	0.04%
CSX Corp. (NYSE:CSX)	24,117.30	0.18%	2.41%	13.30%	15.87%	0.03%
Cummins Inc. (NYSE:CMI)	19,578.00	0.15%	1.95%	13.00%	15.08%	0.02%
Danaher Corp. (NYSE:DHR)	56,932.60 37 125 00	0.43%	1.45%	12.10%	13.64%	0.06%
Darden Restaurants, Inc. (NYSE:DRI)	6.903.80	0.05%	3.71%	12.30%	16.24%	0.01%
DaVita Inc. (NYSE:DVA)	9,298.20	0.07%	0.00%	12.20%	12.20%	0.01%
Dean Foods Company (NYSE:DF)	3,027.70	0.02%	0.00%	17.90%	17.90%	0.00%
Deere & Company (NYSE:DE)	30,033.00	0.22%	2.44%	13.30%	15.90%	0.04%
Dell Inc. (NasdaqGS:DELL)	21,474.70	0.16%	0.00%	7.92%	7.92%	0.01%
DENTSEL V International Inc. (NasdagGS:YEAY)	6,069.40 5 530 50	0.05%	0.00%	30.30%	30.30%	0.01%
Devon Energy Corporation (NYSE:DVN)	23 821 00	0.18%	1.36%	-1 63%	-0.28%	0.01%
DeVry, Inc. (NYSE:DV)	1,295.70	0.01%	1.50%	12.00%	13.59%	0.00%
Diamond Offshore Drilling, Inc. (NYSE:DO)	9,427.60	0.07%	5.16%	13.50%	19.01%	0.01%
DIRECTV (NasdaqGS:DTV)	32,334.50	0.24%	0.00%	18.60%	18.60%	0.04%
Discover Financial Services (NYSE:DFS)	19,468.80	0.15%	1.06%	10.70%	11.82%	0.02%
Discovery Communications, Inc. (NasdaqGS:DISC.A)	19,620.80	0.15%	0.00%	20.10%	20.10%	0.03%
Dominion Resources Inc. (NYSE:D)	30,932,30	0.08%	3.91%	5 18%	9 19%	0.02%
Dover Corporation (NYSE:DOV)	10,637.50	0.08%	2.17%	13.60%	15.92%	0.01%
DR Horton Inc. (NYSE:DHI)	6,041.10	0.05%	0.79%	38.60%	39.55%	0.02%
Dr Pepper Snapple Group, Inc. (NYSE:DPS)	9,456.00	0.07%	3.03%	8.58%	11.74%	0.01%
DTE Energy Co. (NYSE:DTE)	10,372.30	0.08%	4.11%	4.65%	8.86%	0.01%
Duke Energy Corporation (NYSE:DUK)	46,958.10	0.35%	4.59%	4.00%	8.68%	0.03%
E*TRADE Financial Corporation (NasdanGS:FTFC)	3,749.90 2 439 40	0.03%	0.00%	18.30%	18,30%	0.00%
E. I. du Pont de Nemours and Company (NYSE:DD)	47.039.70	0.35%	3.40%	8.17%	11.71%	0.04%
Eastman Chemical Co. (NYSE:EMN)	8,382.20	0.06%	1.90%	7.67%	9.64%	0.01%
Eaton Corporation (NYSE:ETN)	15,546.50	0.12%	3.30%	12.70%	16.21%	0.02%
eBay Inc. (NasdaqGS:EBAY)	59,008.20	0.44%	0.00%	14.00%	14.00%	0.06%
Ecolab Inc. (NYSE:ECL)	19,531.00	0.15%	1.20%	15.20%	16.49%	0.02%
	14,684.30	0.11%	∠.88% 0.00%	1.49%	4.39%	0.00%
Electronic Arts Inc. (NasdagGS:EA)	4.397.00	0.03%	0.00%	18.60%	18.60%	0.01%
Eli Lilly & Co. (NYSE:LLY)	47,358.10	0.35%	4.58%	-6.45%	-2.02%	-0.01%

	[4]	[5]	[6]	[7]	[8]	[9]
Compony (Ticker)	Market	Weight in Index	Estimated	Long-Term		Weighted
Company (Ticker)	Capitalization	weight in muex	Dividenta fiela	GIOWIII ESI.	DCF Result	DUF Result
EMC Corporation (NYSE:EMC)	55,112,40	0.41%	0.00%	15.40%	15.40%	0.06%
Emerson Electric Co. (NYSE:EMR)	37,886.30	0.28%	3.07%	12.20%	15.46%	0.04%
Ensco plc (NYSE:ESV)	13,173.00	0.10%	2.64%	14.30%	17.13%	0.02%
Entergy Corporation (NYSE:ETR)	12,346.70	0.09%	4.77%	4.50%	9.38%	0.01%
EOG Resources, Inc. (NYSE:EOG)	29,970.00	0.22%	0.61%	16.00%	16.66%	0.04%
EQT Corporation (NYSE:EQT)	8,387.80	0.06%	1.57%	19.70%	21.42%	0.01%
Equitax Inc. (NYSE:EFX)	5,5/3./0	0.04%	1.55%	11.60%	13.24%	0.01%
Equily Residential (NTSE.EQR)	17,900.00	0.13%	2.20%	0.00%	10.69%	0.01%
Exelon Corporation (NYSE:EXC)	31 991 90	0.10%	5.60%	1 72%	7.37%	0.03%
Expedia Inc. (NasdagGS:EXPE)	7.088.40	0.05%	1.00%	13.30%	14.36%	0.01%
Expeditors International of Washington Inc. (NasdaqGS:EXPD)	8,065.90	0.06%	1.46%	11.30%	12.84%	0.01%
Express Scripts Holding Company (NasdaqGS:ESRX)	49,366.60	0.37%	0.00%	16.90%	16.90%	0.06%
Exxon Mobil Corporation (NYSE:XOM)	409,295.30	3.06%	2.57%	4.41%	7.04%	0.22%
F5 Networks, Inc. (NasdaqGS:FFIV)	8,222.90	0.06%	0.00%	20.80%	20.80%	0.01%
Family Dollar Stores Inc. (NYSE:FDO)	7,564.50	0.06%	1.30%	14.40%	15.79%	0.01%
Fastenal Company (NasdaqGS:FAST)	12,844.20	0.10%	1.75%	16.60%	18.50%	0.02%
Federated Investors, Inc. (NYSE:FII)	2,119.90	0.02%	4.72%	8.07%	12.98%	0.00%
Fedex Colporation (INTSE.FDA)	20,102.00	0.21%	0.02%	13.50%	14.17%	0.03%
Fifth Third Bancorn (NasdardGS:FITB)	13 168 00	0.07 %	2.39%	7 16%	9 47%	0.01%
First Horizon National Corporation (NYSE:FHN)	2,149,70	0.02%	0.46%	11.60%	12.09%	0.00%
First Solar, Inc. (NasdaqGS:FSLR)	1.869.00	0.01%	0.00%	-3.00%	-3.00%	0.00%
FirstEnergy Corp. (NYSE:FE)	19,229.60	0.14%	4.78%	1.00%	5.80%	0.01%
Fiserv, Inc. (NasdaqGS:FISV)	9,698.40	0.07%	0.00%	11.80%	11.80%	0.01%
FLIR Systems, Inc. (NasdaqGS:FLIR)	3,144.90	0.02%	1.34%	9.44%	10.84%	0.00%
Flowserve Corp. (NYSE:FLS)	6,623.40	0.05%	1.11%	10.30%	11.47%	0.01%
Fluor Corporation (NYSE:FLR)	9,104.80	0.07%	1.17%	15.30%	16.56%	0.01%
FMC Corp. (NYSE:FMC)	7,632.10	0.06%	0.65%	10.70%	11.38%	0.01%
FMC Technologies, Inc. (NYSE:FTI)	11,390.00	0.09%	0.00%	20.70%	20.70%	0.02%
Ford Motor Co. (NYSE:F)	36,576.10	0.27%	2.09%	5.84%	7.99%	0.02%
Forest Laboratories Inc. (NYSE:FRX)	9,023.00	0.07%	0.00%	5.38%	5.38%	0.00%
Fossii, Inc. (NasdaqGS:FOSL)	5,341.30	0.04%	0.00%	20.30%	20.30%	0.01%
Frankill Resources Inc. (NTSE.BEN)	20,403.00	0.19%	0.90%	2 9 5 0/	7 46%	0.02%
Frontier Communications Corporation (NasdagGS:ETP)	4 653 10	0.23%	3.54 % 8 58%	J.05%	13 22%	0.02%
GameSton Corp. (NYSE:GME)	2 238 50	0.03%	3.34%	940%	12.90%	0.00%
Gannett Co., Inc. (NYSE:GCI)	3.591.70	0.03%	5.15%	7.23%	12.57%	0.00%
Gap Inc. (NYSE:GPS)	16,799,70	0.13%	1.46%	10.40%	11.94%	0.01%
General Dynamics Corp. (NYSE:GD)	23,057.60	0.17%	3.12%	6.72%	9.94%	0.02%
General Electric Company (NYSE:GE)	222,263.70	1.66%	3.23%	12.70%	16.14%	0.27%
General Mills, Inc. (NYSE:GIS)	24,952.40	0.19%	3.43%	7.22%	10.77%	0.02%
Genuine Parts Company (NYSE:GPC)	9,929.60	0.07%	3.09%	8.23%	11.45%	0.01%
Genworth Financial Inc. (NYSE:GNW)	2,541.70	0.02%	0.00%	5.00%	5.00%	0.00%
Gilead Sciences Inc. (NasdaqGS:GILD)	42,887.60	0.32%	0.00%	18.40%	18.40%	0.06%
Goodyear Tire & Rubber Co. (NYSE:GT)	2,880.50	0.02%	0.00%	46.30%	46.30%	0.01%
Google Inc. (NasdaqGS:GOOG)	220,050.90	1.64%	0.00%	16.80%	16.80%	0.28%
HAR DIUCK, IIIC. (NTSE. HRD)	4,407.50	0.03%	4.00%	6 0.00/	10.00%	0.01%
Halliburton Company (NYSE:HAL)	32 749 60	0.13%	1 02%	20.30%	21 / 29/	0.01%
Harley-Davidson Inc. (NYSE:HOG)	9 693 20	0.07%	1.02%	13 50%	15.06%	0.03%
Harman International Industries, Incorporated (NYSE:HAR)	3.080.80	0.02%	1.31%	20.00%	21.44%	0.00%
Harris Corp. (NYSE:HRS)	5,233.80	0.04%	2.87%	3.30%	6.22%	0.00%
Hasbro Inc. (NasdaqGS:HAS)	4,980.00	0.04%	3.77%	8.87%	12.81%	0.00%
HCP, Inc. (NYSE:HCP)	19,453.10	0.15%	4.42%	5.49%	10.03%	0.01%
Health Care REIT, Inc. (NYSE:HCN)	13,640.00	0.10%	4.92%	6.39%	11.47%	0.01%
Helmerich & Payne Inc. (NYSE:HP)	5,130.30	0.04%	0.58%	10.40%	11.01%	0.00%
Hess Corporation (NYSE:HES)	16,879.80	0.13%	0.80%	4.21%	5.03%	0.01%
Hewlett-Packard Company (NYSE:HPQ)	38,490.20	0.29%	2.70%	2.38%	5.11%	0.01%
Honeywell International Inc. (NYSE:HON)	45,866.20	0.34%	2.54%	12.90%	15.60%	0.05%
Hormel Foods Corp. (NYSE:HRL)	7,476.70	0.06%	2.11%	10.30%	12.52%	0.01%
Host Hotels & Resorts Inc. (NYSE:HST)	11 294 00	0.04%	1 79%	14 50%	16.42%	0.00%
Hudson City Bancoro, Inc. (NasdagGS:HCBK)	3 316 80	0.00%	4 79%	-2 43%	2.30%	0.01%
Humana Inc. (NYSE-HUM)	10 985 10	0.08%	1.53%	9.11%	10 71%	0.01%
Huntington Bancshares Incorporated (NasdagGS:HBAN)	5.553.90	0.04%	2.47%	6.08%	8.63%	0.00%
Illinois Tool Works Inc. (NYSE:ITW)	27,974.40	0.21%	2.41%	9.72%	12.25%	0.03%
Ingersoll-Rand Plc (NYSE:IR)	14,272.70	0.11%	1.38%	12.40%	13.87%	0.01%
Integrys Energy Group, Inc. (NYSE:TEG)	4,441.80	0.03%	4.77%	7.00%	11.94%	0.00%
Intel Corporation (NasdaqGS:INTC)	133,029.80	0.99%	3.38%	10.10%	13.65%	0.14%
IntercontinentalExchange, Inc. (NYSE:ICE)	9,868.70	0.07%	0.00%	12.20%	12.20%	0.01%
International Business Machines Corporation (NYSE:IBM)	229,514.90	1.71%	1.69%	11.20%	12.98%	0.22%
International Flavors & Fragrances Inc. (NYSE:IFF)	5,072.70	0.04%	2.18%	5.85%	8.09%	0.00%
International Game Lechnology (NYSE:IGT)	3,151.80	0.02%	2.03%	12.40%	14.56%	0.00%
International Paper Company (NYSE:IP)	15,254.20	0.11%	3.01%	6.00%	9.10%	0.01%
Intuitive Surgical Inc. (NasdagOS:INTU)	17,640.70	0.13%	1.00%	15.10%	16.17%	0.02%
Invesco Ltd. (NVSE:IV7)	20,004.00	0.10%	0.00%	∠0.40% 10.70%	∠0.40% 13 70%	0.03%
Iron Mountain Inc. (NYSE-IRM)	5 725 00	0.00%	2.01%	14 10%	17 57%	0.01%
J. C. Penney Company, Inc. (NYSE: ICP)	5 313 80	0.04%	0.00%	24.70%	24.70%	0.01%
Jabil Circuit Inc. (NYSE:JBL)	4.734.30	0.04%	1.39%	13.50%	14,98%	0.01%
Jacobs Engineering Group Inc. (NYSE:JEC)	5,303.80	0.04%	0.00%	14.70%	14.70%	0.01%
JDS Uniphase Corporation (NasdaqGS:JDSU)	2,740.40	0.02%	0.00%	12.00%	12.00%	0.00%

	[4]	[5]	[6]	[7]	[8]	[9]
Company (Ticker)	Market	Weight in Index	Estimated	Long-Term		Weighted
Company (Ticker)	Capitalization	weight in index	Dividend field	Glowin Esi.	DCF Result	DCF Result
Johnson & Johnson (NYSE: JNJ)	188 030 20	1 40%	3 58%	671%	10 41%	0 15%
Johnson Controls Inc. (NYSE:JCI)	18,465.50	0.14%	2.67%	16.50%	19.39%	0.03%
Joy Global, Inc. (NYSE:JOY)	5,925.10	0.04%	1.25%	17.30%	18.66%	0.01%
JPMorgan Chase & Co. (NYSE:JPM)	141,227.30	1.05%	3.23%	5.70%	9.02%	0.10%
Juniper Networks, Inc. (NYSE:JNPR)	9,789.30	0.07%	0.00%	16.10%	16.10%	0.01%
Kellogg Company (NYSE:K)	18,283.80	0.14%	3.44%	7.45%	11.02%	0.02%
KeyCorp (NYSE:KEY)	7,859.00	0.06%	2.40%	5.49%	7.96%	0.00%
Kimberly-Clark Corporation (NYSE:KIMB)	32,953.70	0.25%	3.55%	8.44%	12.14%	0.03%
Kinder Morgan, Inc. (NYSE:KMI)	35 752 30	0.00%	4.06%	10.00%	14.26%	0.01%
KI A-Tencor Corporation (NasdagGS:KI AC)	8 877 00	0.07%	3.00%	10.00%	13 15%	0.04%
Kohl's Corp. (NYSE:KSS)	12,315.50	0.09%	2.49%	13.70%	16.36%	0.02%
Kraft Foods Inc. (NasdaqGS:KFT)	72,228.20	0.54%	2.85%	9.28%	12.26%	0.07%
L-3 Communications Holdings Inc. (NYSE:LLL)	6,666.10	0.05%	2.90%	3.08%	6.02%	0.00%
Laboratory Corp. of America Holdings (NYSE:LH)	8,544.70	0.06%	0.00%	11.80%	11.80%	0.01%
Lam Research Corporation (NasdaqGS:LRCX)	7,174.00	0.05%	0.00%	10.00%	10.00%	0.01%
Legg Mason Inc. (NYSE:LM)	3,469.60	0.03%	1.71%	14.70%	16.54%	0.00%
Leggett & Platt, Incorporated (NYSE:LEG)	3,322.30	0.02%	4.74%	15.00%	20.10%	0.00%
Lennar Corp. (NYSE:LEN)	5,932.30	0.04%	0.49%	8.00%	8.51%	0.00%
Leucaula National Corp. (NYSE:LUK)	5,434.00 1 303 70	0.04%	5.01%	0.00%	5.03%	0.00%
Life Technologies Corporation (NasdagGS:LIFE)	8 293 20	0.06%	0.00%	9 44%	9 44%	0.00%
Limited Brands, Inc. (NYSE:LTD)	14,224,10	0.11%	8.19%	12.70%	21.41%	0.02%
Lincoln National Corporation (NYSE:LNC)	6,700.20	0.05%	1.33%	8.55%	9.94%	0.00%
Linear Technology Corp. (NasdaqGS:LLTC)	7,665.90	0.06%	3.00%	8.63%	11.76%	0.01%
Lockheed Martin Corporation (NYSE:LMT)	29,678.40	0.22%	4.35%	5.90%	10.38%	0.02%
Loews Corporation (NYSE:L)	16,029.60	0.12%	0.62%	0.00%	0.62%	0.00%
Lorillard, Inc. (NYSE:LO)	16,849.20	0.13%	4.81%	8.84%	13.86%	0.02%
Lowe's Companies Inc. (NYSE:LOW)	32,301.00	0.24%	2.33%	15.90%	18.42%	0.04%
LSI Corporation (NYSE:LSI)	4,354.60	0.03%	0.00%	16.20%	16.20%	0.01%
M&T Bank Corporation (NYSE:MTB)	11,001.50	0.08%	3.22%	10.90%	14.30%	0.01%
Macy's, Inc. (NYSE:M)	16,005.40	0.12%	2.07%	12.50%	14.70%	0.02%
Marathon Oil Corporation (NYSE:MRO)	19,288.80	0.14%	2.49%	-3.61%	-1.16%	0.00%
Marathon Petroleum Corporation (NYSE:MPC)	16,816.70	0.13%	2.82%	10.70%	13.67%	0.02%
Marriott International, Inc. (NYSE:MAR)	12,204.00	0.09%	1.38%	19.30%	20.81%	0.02%
Marsh & McLennan Companies, Inc. (NYSE:MMC)	18,589.70	0.14%	2.09%	11.20%	14.04%	0.02%
Mastercard Incorporated (NYSE:MA)	53 478 60	0.04%	0.28%	18 30%	18.61%	0.00%
Mattel Inc (Nasdar GS:MAT)	12 160 90	0.40%	3.48%	8 60%	12 23%	0.01%
McCormick & Company, Incorporated (NYSE:MKC)	7,934,50	0.06%	2.07%	9.08%	11.24%	0.01%
McDonald's Corp. (NYSE:MCD)	88,197,40	0.66%	3.20%	9.74%	13.10%	0.09%
McKesson Corporation (NYSE:MCK)	20,926.90	0.16%	0.90%	13.60%	14.56%	0.02%
Mead Johnson Nutrition Company (NYSE:MJN)	14,891.10	0.11%	1.64%	11.50%	13.23%	0.01%
MeadWestvaco Corporation (NYSE:MWV)	4,987.80	0.04%	3.48%	10.00%	13.65%	0.01%
Medtronic, Inc. (NYSE:MDT)	41,483.40	0.31%	2.57%	6.99%	9.65%	0.03%
Merck & Co. Inc. (NYSE:MRK)	133,825.10	1.00%	3.82%	4.60%	8.51%	0.09%
MetLife, Inc. (NYSE:MET)	36,732.60	0.27%	2.14%	12.60%	14.87%	0.04%
MetroPCS Communications, Inc. (NYSE:PCS)	3,467.10	0.03%	0.00%	12.60%	12.60%	0.00%
Microchip Technology Inc. (NasdaqGS:MCHP)	6,897.40	0.05%	3.94%	9.00%	13.12%	0.01%
Micron Lechnology Inc. (NasdagGS:MU)	6,725.90	0.05%	0.00%	11.70%	11.70%	0.01%
Microsoft Corporation (NasuagGS.MGFT)	200,041.00	0.03%	2.00%	9.13%	11.00%	0.23%
Moleon Coors Brewing Company (NYSE-TAP)	8 015 60	0.05%	2.89%	3 34%	6 28%	0.00%
Monsanto Co. (NYSE:MON)	47 070 10	0.35%	1.36%	14 60%	16.06%	0.06%
Monster Beverage Corporation (NasdagGS:MNST)	10.631.60	0.08%	0.00%	18.70%	18.70%	0.01%
Moody's Corp. (NYSE:MCO)	8,718.60	0.07%	1.63%	14.40%	16.15%	0.01%
Morgan Stanley (NYSE:MS)	28,822.70	0.22%	1.37%	12.10%	13.55%	0.03%
Motorola Solutions, Inc. (NYSE:MSI)	13,791.40	0.10%	2.16%	18.90%	21.26%	0.02%
Murphy Oil Corporation (NYSE:MUR)	10,641.40	0.08%	2.28%	5.40%	7.74%	0.01%
Mylan, Inc. (NasdaqGS:MYL)	9,635.80	0.07%	0.00%	10.90%	10.90%	0.01%
Nabors Industries Ltd. (NYSE:NBR)	4,707.20	0.04%	0.00%	11.30%	11.30%	0.00%
Nasdaq OMX Group Inc. (NasdaqGS:NDAQ)	3,908.60	0.03%	2.22%	8.86%	11.18%	0.00%
National Oliwell Varco, Inc. (NYSE:NOV)	33,350.50	0.25%	0.61%	18.40%	19.07%	0.05%
Netflix Inc. (NasuagGS:NTAP)	2 571 40	0.09%	0.00%	10.40%	13.90%	0.01%
Newell Rubbermaid Inc. (NYSE:NIMI.)	3,371.40	0.03%	0.00%	8 16%	19.40%	0.01%
Newfield Exploration Co. (NYSE:NEX)	4,359.80	0.03%	0.00%	6.35%	6.35%	0.00%
Newmont Mining Corp. (NYSE:NEM)	23.612.40	0.18%	2.94%	-3.00%	-0.10%	0.00%
News Corp. (NasdagGS:NWSA)	55,686.40	0.42%	0.72%	17.10%	17.88%	0.07%
NextEra Energy, Inc. (NYSE:NEE)	29,415.50	0.22%	3.45%	5.85%	9.40%	0.02%
Nike Inc. (NYSE:NKE)	43,018.20	0.32%	1.52%	13.60%	15.22%	0.05%
NiSource Inc. (NYSE:NI)	7,071.40	0.05%	3.87%	8.00%	12.02%	0.01%
Noble Corp. (NYSE:NE)	9,725.30	0.07%	1.39%	10.10%	11.56%	0.01%
Noble Energy, Inc. (NYSE:NBL)	16,048.60	0.12%	0.97%	7.17%	8.17%	0.01%
Nordstrom Inc. (NYSE:JWN)	11,396.80	0.09%	1.91%	12.20%	14.23%	0.01%
Norfolk Southern Corp. (NYSE:NSC)	23,864.70	0.18%	2.68%	14.10%	16.97%	0.03%
Northeast Utilities (NYSE:NU)	12,166.20	0.09%	3.54%	6.08%	9.73%	0.01%
Northern Trust Corporation (NasdaqGS:NTRS)	11,347.60	0.08%	2.54%	12.70%	15.40%	0.01%
NOCENERAL INCOMPOSITION (NYSE:NOC)	17,005.60	0.13%	3.20%	1.25%	4.47%	0.01%
Nucor Corporation (NVSE:NUE)	4,782.50	0.04%	1.12%	6.25%	13.52%	0.00%
NVIDIA Corporation (NasdagGS/NVDA)	145.00	0.09%	0.00%	0.30% 12 60%	10.1∠% 12.60%	0.01%
NYSE Euronext, Inc. (NYSE:NYX)	6.307 40	0.05%	4.68%	7.99%	12.86%	0.01%
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	[4]	[5]	[6]	[7]	[8]	[9]
	Market		Estimated	Long-Term		Weighted
Company (Ticker)	Capitalization	weight in Index	Dividend Yield	Growth Est.	DCF Result	DCF Result
O'Bailly Automative Inc. (NacdagCS:OBLX)	10 269 20	0.099/	0.00%	16 70%	16 70%	0.01%
Occidental Petroleum Corporation (NYSE:OXY)	72 295 90	0.08%	2.42%	-5 76%	-3.41%	-0.02%
Omnicom Group Inc. (NYSE:OMC)	13 711 20	0.04%	2.32%	9.97%	12 41%	0.01%
ONEOK Inc. (NYSE:OKE)	9.131.10	0.07%	2.96%	16.10%	19.30%	0.01%
Oracle Corporation (NasdagGS:ORCL)	156.386.70	1.17%	0.75%	12.50%	13.30%	0.16%
Owens-Illinois, Inc. (NYSE:OI)	3.095.00	0.02%	0.00%	10.30%	10.30%	0.00%
PACCAR Inc. (NasdagGS:PCAR)	14,748.20	0.11%	3.60%	16.90%	20.80%	0.02%
Pall Corp. (NYSE:PLL)	6,391.10	0.05%	1.53%	12.70%	14.33%	0.01%
Parker Hannifin Corporation (NYSE:PH)	12,558.40	0.09%	1.97%	5.00%	7.02%	0.01%
Patterson Companies, Inc. (NasdaqGS:PDCO)	3,906.80	0.03%	1.56%	10.60%	12.24%	0.00%
Paychex, Inc. (NasdaqGS:PAYX)	12,072.60	0.09%	3.85%	10.10%	14.14%	0.01%
Peabody Energy Corp. (NYSE:BTU)	6,002.60	0.04%	1.52%	11.50%	13.11%	0.01%
People's United Financial Inc. (NasdaqGS:PBCT)	4,131.60	0.03%	5.27%	10.30%	15.84%	0.00%
Pepco Holdings, Inc. (NYSE:POM)	4,442.70	0.03%	5.56%	6.63%	12.37%	0.00%
Pepsico, Inc. (NYSE:PEP)	114,510.70	0.86%	2.92%	5.43%	8.43%	0.07%
PerkinElmer Inc. (NYSE:PKI)	3,114.10	0.02%	1.03%	11.80%	12.89%	0.00%
Perrigo Co. (NasoaqGS:PRGO)	10,185.50	0.08%	0.29%	13.50%	13.81%	0.01%
PIZEI IIIC. (NYSE.PFE)	179,417.00	1.34%	3.00%	2.79%	0.00%	0.09%
PG&E CUIP. (NTSE.PCG) Bhilin Marria International Inc. (NVSE:DM)	16,255.90	0.14%	4.11%	0.00% 10.50%	10.11%	0.01%
	25 816 70	0.10%	1 04%	7 85%	0.87%	0.10%
Pinnacle West Capital Corporation (NYSE:PNW)	5 843 10	0.19%	3.94%	7.03%	11 10%	0.02 %
Pioneer Natural Resources Co. (NYSE PXD)	12 312 20	0.09%	0.08%	17.30%	17.39%	0.02%
Pitney Bowes Inc. (NYSE:PBI)	2.698.60	0.02%	11.20%	0.00%	11.20%	0.00%
Plum Creek Timber Co. Inc. (NYSE:PCL)	6.525.50	0.05%	4.16%	5.00%	9.26%	0.00%
PNC Financial Services Group Inc. (NYSE:PNC)	32,584.90	0.24%	2.60%	5.40%	8.07%	0.02%
PPG Industries Inc. (NYSE:PPG)	16,801.80	0.13%	2.14%	9.18%	11.42%	0.01%
PPL Corporation (NYSE:PPL)	17,131.70	0.13%	4.88%	5.83%	10.85%	0.01%
Praxair Inc. (NYSE:PX)	32,411.30	0.24%	2.02%	11.50%	13.64%	0.03%
Precision Castparts Corp. (NYSE:PCP)	23,533.30	0.18%	0.07%	14.20%	14.28%	0.03%
priceline.com Incorporated (NasdaqGS:PCLN)	29,236.80	0.22%	0.00%	20.70%	20.70%	0.05%
Principal Financial Group Inc. (NYSE:PFG)	7,882.60	0.06%	2.70%	14.10%	16.99%	0.01%
Procter & Gamble Co. (NYSE:PG)	184,536.40	1.38%	3.36%	6.93%	10.41%	0.14%
Progressive Corp. (NYSE:PGR)	12,061.30	0.09%	2.06%	6.76%	8.89%	0.01%
Prologis, Inc. (NYSE:PLD)	15,543.30	0.12%	3.32%	8.11%	11.56%	0.01%
Prudential Financial, Inc. (NYSE:PRU)	25,308.50	0.19%	2.67%	12.00%	14.83%	0.03%
Public Service Enterprise Group Inc. (NYSE:PEG)	16,421.40	0.12%	4.37%	2.24%	6.66%	0.01%
Public Storage (NYSE:PSA)	24,870.10	0.19%	3.04%	5.47%	8.59%	0.02%
OEB Passurana Inc. (NYSE:OED)	5,219.10	0.04%	0.00%	20.40%	20.40%	0.01%
QEF RESources, Inc. (NTSE.QEF)	4,7 10.00	0.04%	1.60%	15 10%	16 82%	0.00%
Quanta Services Inc. (NYSE:PWR)	5 345 10	0.00%	0.00%	16.80%	16.80%	0.13%
Quest Diagnostics Inc. (NYSE:DGX)	9 525 10	0.07%	1 13%	11 20%	12.39%	0.01%
R.R. Donnelley & Sons Company (NasdagGS:RRD)	2.238.90	0.02%	8.37%	5.20%	13.79%	0.00%
Ralph Lauren Corporation (NYSE:RL)	13,891.80	0.10%	1.05%	14.50%	15.63%	0.02%
Range Resources Corporation (NYSE:RRC)	10,936.10	0.08%	0.23%	-2.45%	-2.22%	0.00%
Raytheon Co. (NYSE:RTN)	18,732.50	0.14%	3.54%	7.42%	11.09%	0.02%
Red Hat, Inc. (NYSE:RHT)	11,241.80	0.08%	0.00%	19.00%	19.00%	0.02%
Regions Financial Corp. (NYSE:RF)	10,091.30	0.08%	0.56%	7.60%	8.18%	0.01%
Republic Services, Inc. (NYSE:RSG)	10,556.50	0.08%	3.25%	8.40%	11.79%	0.01%
Reynolds American Inc. (NYSE:RAI)	26,395.20	0.20%	5.06%	7.34%	12.59%	0.02%
Robert Half International Inc. (NYSE:RHI)	4,112.30	0.03%	2.07%	17.40%	19.65%	0.01%
Rockwell Automation Inc. (NYSE:ROK)	10,284.10	0.08%	2.58%	13.00%	15.75%	0.01%
ROCKWEII COIIINS INC. (NYSE:COL)	7,110.40	0.05%	2.40%	8.82%	11.33%	0.01%
Roper industries inc. (NYSE:ROP)	10,348.20	0.08%	0.52%	14.00%	14.50%	0.01%
ROSS Stoles Inc. (NasuayGS.ROST) Rowan Companies plc (NVSE: PDC)	15,445.10	0.12%	0.02%	14.30%	10.10%	0.02%
Ryder System Inc. (NYSE:R)	2 126 70	0.03%	2 98%	11 20%	14 35%	0.01%
Safeway Inc. (NYSE:SWY)	3 846 40	0.03%	4.36%	9.67%	14 24%	0.00%
SAIC. Inc. (NYSE:SAI)	4.088.70	0.03%	4.01%	5.50%	9.62%	0.00%
salesforce.com, inc (NYSE:CRM)	20,280.50	0.15%	0.00%	26.20%	26.20%	0.04%
SanDisk Corp. (NasdaqGS:SNDK)	10,314.00	0.08%	0.00%	12.50%	12.50%	0.01%
SCANA Corp. (NYSE:SCG)	6,381.10	0.05%	4.07%	4.35%	8.51%	0.00%
Schlumberger Limited (NYSE:SLB)	99,500.60	0.74%	1.47%	20.70%	22.32%	0.17%
Scripps Networks Interactive, Inc. (NYSE:SNI)	8,731.00	0.07%	0.82%	13.20%	14.07%	0.01%
Seagate Technology Public Limited Company (NasdaqGS:STX)	13,753.40	0.10%	3.70%	21.20%	25.29%	0.03%
Sealed Air Corporation (NYSE:SEE)	2,687.20	0.02%	3.76%	8.43%	12.35%	0.00%
Sears Holdings Corporation (NasdaqGS:SHLD)	6,418.20	0.05%	0.00%	0.00%	0.00%	N/A
Sempra Energy (NYSE:SRE)	16,534.60	0.12%	3.48%	5.20%	8.77%	0.01%
Sigma-Aldrich Corporation (NasdaqGS:SIAL)	8,731.00	0.07%	1.11%	8.21%	9.37%	0.01%
SIM Corporation (NasdagGS:SLM)	48,444.80	0.30%	∠.03% 3.110/	0.91%	9.09%	0.04%
Shan-on Inc. (NYSE-SNA)	1,040.00	0.00%	1 95%	10 00%	0.49%	0.00%
Southern Company (NYSE:SO)	4,003.10	0.00%	4 25%	5 52%	9 80%	0.00%
Southwest Airlines Co. (NYSE-LUV)	+0,301.90 6 730 70	0.00%	0.44%	39 70%	40 23%	0.03%
Southwestern Energy Co. (NYSE:SWN)	11 357 40	0.08%	0.00%	11 90%	11.90%	0.01%
Spectra Energy Corp. (NYSE:SE)	19.155.20	0.14%	3.82%	5.25%	9.17%	0.01%
Sprint Nextel Corp. (NYSE:S)	15.452.00	0.12%	0.00%	-98.70%	-98.70%	-0.11%
St. Jude Medical Inc. (NYSE:STJ)	11,576.10	0.09%	2.50%	9.65%	12.27%	0.01%
Stanley Black & Decker, Inc. (NYSE:SWK)	11,396.00	0.09%	2.89%	10.10%	13.14%	0.01%
Staples, Inc. (NasdaqGS:SPLS)	7,765.40	0.06%	3.87%	8.87%	12.91%	0.01%
Starbucks Corporation (NasdaqGS:SBUX)	36,784.00	0.27%	1.40%	18.60%	20.13%	0.06%
Starwood Hotels & Resorts Worldwide Inc. (NYSE:HOT)	10,855.00	0.08%	0.91%	20.80%	21.80%	0.02%

	[4]	[5]	[6]	[7]	[8]	[9]
Company (Ticker)	Market	Woight in Index	Estimated	Long-Term		Weighted
Company (Ticker)	Capitalization	weight in index	Dividend field	Growin Esi.	DCF Result	DCF Result
State Street Corporation (NYSE:STT)	19 916 40	0 15%	2.31%	10 70%	13 13%	0.02%
Stericycle, Inc. (NasdagGS:SRCL)	7,838.00	0.06%	0.00%	16.60%	16.60%	0.01%
Stryker Corporation (NYSE:SYK)	20,734.20	0.15%	1.56%	10.60%	12.24%	0.02%
Sunoco, Inc. (NYSE:SUN)	4,983.20	0.04%	1.68%	-2.09%	-0.43%	0.00%
SunTrust Banks, Inc. (NYSE:STI)	13,447.00	0.10%	0.79%	16.50%	17.36%	0.02%
Symantec Corporation (NasdaqGS:SYMC)	12,646.10	0.09%	0.00%	8.51%	8.51%	0.01%
Sysco Corp. (NYSE:SYY)	17,807.30	0.13%	3.55%	7.45%	11.13%	0.01%
I. Rowe Price Group, Inc. (NasdaqGS: I ROW)	15,902.60	0.12%	2.17%	13.00%	15.31%	0.02%
Target Corp. (NYSE:TGT)	41,790.70	0.31%	2.25%	11.90%	14.28%	0.04%
TECO Epergy Inc. (NYSE-TE)	15,255.70	0.11%	2.30%	13.00%	0.27%	0.02%
Tenet Healthcare Corp. (NYSE:THC)	2 204 60	0.03%	0.00%	11 20%	11 20%	0.00%
Teradata Corporation (NYSE:TDC)	12,758.00	0.10%	0.00%	15.80%	15.80%	0.02%
Teradyne Inc. (NYSE:TER)	2.980.80	0.02%	0.00%	12.40%	12.40%	0.00%
Tesoro Corporation (NYSE:TSO)	5,379.80	0.04%	1.24%	20.70%	22.07%	0.01%
Texas Instruments Inc. (NasdaqGS:TXN)	34,439.90	0.26%	2.25%	9.66%	12.02%	0.03%
Textron Inc. (NYSE:TXT)	7,585.40	0.06%	0.30%	29.90%	30.24%	0.02%
The AES Corporation (NYSE:AES)	8,818.90	0.07%	1.36%	8.20%	9.62%	0.01%
The Allstate Corporation (NYSE:ALL)	18,301.10	0.14%	2.33%	9.17%	11.61%	0.02%
The Bank of New York Mellon Corporation (NYSE:BK)	26,591.00	0.20%	2.31%	9.70%	12.12%	0.02%
The Boeing Company (NYSE:BA)	55,362.40	0.41%	2.39%	10.20%	12.71%	0.05%
The Chubb Corporation (NYSE:CR)	10,950.40	0.13%	1.00%	0.07%	13.30%	0.02%
The Clorox Company (NYSE:CLX)	9,292.70	0.14%	2.20%	9.07% 7.29%	10.97%	0.02%
The Coca-Cola Company (NYSE:KO)	178 051 10	1.33%	2 58%	8 86%	11 55%	0.15%
The Dow Chemical Company (NYSE:DOW)	36 003 10	0.27%	4 26%	8 88%	13.33%	0.04%
The Goldman Sachs Group, Inc. (NYSE:GS)	51,372.40	0.38%	1.78%	23.90%	25.89%	0.10%
The Hartford Financial Services Group, Inc. (NYSE:HIG)	7,748.80	0.06%	2.25%	13.50%	15.90%	0.01%
The Hershey Company (NYSE:HSY)	16,159.00	0.12%	2.10%	9.38%	11.58%	0.01%
The Home Depot, Inc. (NYSE:HD)	86,191.60	0.64%	2.06%	14.50%	16.71%	0.11%
The Interpublic Group of Companies, Inc. (NYSE:IPG)	4,843.40	0.04%	2.17%	16.40%	18.75%	0.01%
The J. M. Smucker Company (NYSE:SJM)	8,721.20	0.07%	2.43%	7.60%	10.12%	0.01%
The Kroger Co. (NYSE:KR)	12,053.80	0.09%	2.08%	8.38%	10.55%	0.01%
The McGraw-Hill Companies, Inc. (NYSE:MHP)	13,763.40	0.10%	2.08%	11.30%	13.50%	0.01%
The Mosaic Company (NYSE:MOS)	25,375.10	0.19%	1.68%	11.60%	13.38%	0.03%
The TIX Companies Inc. (NYSE:TIX)	14,279.20	0.11%	1.12%	11.80%	12.99%	0.01%
The Travelers Companies, Inc. (NYSE-TR)/)	24 674 50	0.25%	2.87%	10.60%	14.29%	0.04%
The Washington Post Company (NYSE:WPO)	2 591 30	0.10%	2.82%	0.00%	2 82%	0.00%
The Western Union Company (NYSE:WU)	10.680.40	0.08%	2.26%	11.00%	13.38%	0.01%
Thermo Fisher Scientific. Inc. (NYSE:TMO)	20.672.00	0.15%	0.92%	11.80%	12.77%	0.02%
Tiffany & Co. (NYSE:TIF)	7,556.70	0.06%	2.15%	13.40%	15.69%	0.01%
Time Warner Cable Inc. (NYSE:TWC)	27,435.00	0.20%	2.50%	18.60%	21.33%	0.04%
Time Warner Inc. (NYSE:TWX)	40,348.20	0.30%	2.45%	12.30%	14.90%	0.04%
Titanium Metals Corporation (NYSE:TIE)	2,226.80	0.02%	2.36%	15.00%	17.54%	0.00%
Torchmark Corp. (NYSE:TMK)	4,856.80	0.04%	1.18%	9.22%	10.45%	0.00%
Total System Services, Inc. (NYSE: ISS)	4,462.90	0.03%	1.69%	10.50%	12.28%	0.00%
TupAdvisor Inc. (NasuaqGS.TRIP)	4,017.90	0.04%	0.00%	15.00%	17.60%	0.01%
Tyson Foods Inc. (NYSE:TSN)	5 523 20	0.20%	1.05%	7 33%	8 42%	0.04%
U.S. Bancorn (NYSE:USB)	62 942 90	0.47%	2.35%	8.67%	11 12%	0.05%
Union Pacific Corporation (NYSE:UNP)	59,163,10	0.44%	1.92%	15.60%	17.67%	0.08%
United Parcel Service, Inc. (NYSE:UPS)	73,196.10	0.55%	2.99%	11.30%	14.46%	0.08%
United States Steel Corp. (NYSE:X)	3,279.40	0.02%	0.88%	5.33%	6.23%	0.00%
United Technologies Corp. (NYSE:UTX)	71,821.50	0.54%	2.72%	10.90%	13.77%	0.07%
Unitedhealth Group, Inc. (NYSE:UNH)	55,136.20	0.41%	1.59%	12.50%	14.19%	0.06%
Unum Group (NYSE:UNM)	5,501.90	0.04%	2.65%	9.40%	12.17%	0.01%
Urban Outfitters Inc. (NasdaqGS:URBN)	4,486.20	0.03%	0.00%	18.00%	18.00%	0.01%
V.F. Corporation (NYSE:VFC)	16,599.10	0.12%	1.91%	12.50%	14.53%	0.02%
Varian Medical Systems Inc. (NIXSE-VLO)	6 565 40	0.12%	2.41%	12 10%	12 10%	0.01%
Ventas, Inc. (NYSE:VTR)	18,989,70	0.14%	3.86%	5.48%	9.45%	0.01%
VeriSign, Inc. (NasdagGS:VRSN)	7.469.40	0.06%	5.76%	15.00%	21.19%	0.01%
Verizon Communications Inc. (NYSE:VZ)	125,692.50	0.94%	4.53%	8.15%	12.86%	0.12%
Viacom, Inc. (NasdaqGS:VIAB)	25,758.40	0.19%	2.20%	15.60%	17.97%	0.03%
Visa, Inc. (NYSE:V)	86,744.90	0.65%	0.68%	19.00%	19.74%	0.13%
Vornado Realty Trust (NYSE:VNO)	15,175.50	0.11%	3.38%	-4.41%	-1.10%	0.00%
Vulcan Materials Company (NYSE:VMC)	5,152.40	0.04%	0.10%	9.75%	9.85%	0.00%
W.W. Grainger, Inc. (NYSE:GWW)	14,363.70	0.11%	1.55%	14.40%	16.06%	0.02%
wai-wart Stores Inc. (NYSE:WMT)	244,122.50	1.82%	2.20%	9.82%	12.13%	0.22%
Walt Dispey Co. (NYSE:DIS)	33,454.80	0.25%	3.10% 1.10%	17.70%	14.98%	0.04%
Waste Management Inc. (NYSE-WM)	16 530 70	0.12%	3.98%	5.95%	10.05%	0.03%
Waters Corp. (NYSE:WAT)	6 678 40	0.05%	0.00%	9,99%	9,99%	0.00%
Watson Pharmaceuticals. Inc. (NYSE:WPI)	10.174.60	0.08%	0.00%	13.50%	13.50%	0.01%
WellPoint Inc. (NYSE:WLP)	18.808.80	0.14%	1.99%	10.00%	12.09%	0.02%
Wells Fargo & Company (NYSE:WFC)	180,281.00	1.35%	2.87%	10.40%	13.42%	0.18%
Western Digital Corp. (NasdaqGS:WDC)	11,807.80	0.09%	0.00%	6.75%	6.75%	0.01%
Weyerhaeuser Co. (NYSE:WY)	13,073.10	0.10%	2.45%	5.00%	7.51%	0.01%
Whirlpool Corp. (NYSE:WHR)	5,724.40	0.04%	2.71%	0.00%	2.71%	0.00%
Whole Foods Market, Inc. (NasdaqGS:WFM)	17,715.10	0.13%	0.58%	19.90%	20.54%	0.03%
vviiliams Companies, Inc. (NYSE:WMB)	20,460.40	0.15%	3.67%	13.00%	16.91%	0.03%
winustream Corporation (NasdaqGS:WIN)	5,650.60	0.04%	10.40%	-1.12%	9.22%	0.00%

	[4]	[5]	[6]	[7]	[8]	[9]
	Market		Estimated	Long-Term		Weighted
Company (Ticker)	Capitalization	Weight in Index	Dividend Yield	Growth Est.	DCF Result	DCF Result
Wisconsin Energy Corp. (NYSE:WEC)	8.881.40	0.07%	3.11%	5.37%	8.56%	0.01%
WPX Energy, Inc. (NYSE:WPX)	2,903.90	0.02%	0.00%	0.00%	0.00%	N/A
Wyndham Worldwide Corporation (NYSE:WYN)	7,446.40	0.06%	1.76%	20.20%	22.14%	0.01%
Wynn Resorts Ltd. (NasdagGS:WYNN)	12,955.60	0.10%	6.72%	24.80%	32.35%	0.03%
Xcel Energy Inc. (NYSE:XEL)	13,929.40	0.10%	3.78%	5.31%	9.19%	0.01%
Xerox Corp. (NYSE:XRX)	9,517.10	0.07%	2.32%	5.40%	7.78%	0.01%
Xilinx Inc. (NasdaqGS:XLNX)	8,942.60	0.07%	2.58%	12.70%	15.44%	0.01%
XL Group plc (NYSE:XL)	7,171.90	0.05%	1.88%	8.75%	10.71%	0.01%
Xylem Inc. (NYSE:XYL)	4,628.70	0.03%	1.62%	11.00%	12.71%	0.00%
Yahoo! Inc. (NasdaqGS:YHOO)	17,757.40	0.13%	0.00%	13.80%	13.80%	0.02%
Yum! Brands, Inc. (NYSE:YUM)	30,145.40	0.23%	1.72%	13.00%	14.83%	0.03%
Zimmer Holdings, Inc. (NYSE:ZMH)	10,806.60	0.08%	1.16%	9.61%	10.83%	0.01%
Zions Bancorp. (NasdaqGS:ZION)	3,541.20	0.03%	0.21%	11.50%	11.72%	0.00%
Total Market Capitalization:	13,387,935.60					13.07%

 Total Market Capitali

 Notes:

 [1] Equals sum of Col. [9]

 [2] Source: Boomberg Professional

 [3] Equals [1] – [2]

 [4] Source: Capital IQ

 [5] Equals weight in S&P 500 based on market capitalization

 [6] Source: Capital IQ

 [7] Source: Capital IQ

 [8] Equals ([6] x (1 + (0.5 x [7]))) + [7]

 [9] Equals Col. [5] x Col. [8]

		[1]	[2]	[3]
Company	Ticker	Bloomberg	Value Line	Calculated
American Electric Power Company, Inc.	AEP	0.589	0.70	0.642
Cleco Corp.	CNL	0.723	0.65	0.750
Empire District Electric	EDE	0.719	0.70	0.734
Great Plains Energy Inc.	GXP	0.744	0.75	0.732
IDACORP, Inc.	IDA	0.771	0.70	0.784
Otter Tail Corporation	OTTR	0.779	0.90	0.803
Pinnacle West Capital Corp.	PNW	0.689	0.70	0.667
PNM Resources, Inc.	PNM	0.694	0.95	0.704
Portland General Electric Company	POR	0.716	0.75	0.729
Southern Company	SO	0.495	0.55	0.497
Westar Energy, Inc.	WR	0.660	0.75	0.648
Mean		0.689	0.74	0.699

Bloomberg, Value Line, and Calculated Beta Coefficients

Notes:

[1] Source: Bloomberg Professional

[2] Source: Value Line

[3] Data Source: Bloomberg Professional; Beta coefficients calculated over 12-months based on weekly returns

Capital Asset Pricing Model Results Sharpe Ratio, Bloomberg, and Capital IQ Derived Market Risk Premium

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
			Ex-Ant	e Market Risk	Premium		CAPM Resu	t
		Average	Sharpe	Bloomberg	Capital IQ	Sharpe	Bloomberg	Capital IQ
	Risk-Free	Beta	Ratio	Market DCF	Market DCF	Ratio	Market DCF	Market DCF
	Rate	Coefficient	Derived	Derived	Derived	Derived	Derived	Derived
PROXY GROUP 12-MONTH BETA COEFFICIENT								
Current 30-Year Treasury (30-day average) [9]	2.65%	0.699	8.01%	10.64%	10.43%	8.25%	10.09%	9.94%
Near-Term Projected 30-Year Treasury [10]	3.00%	0.699	8.01%	10.64%	10.43%	8.60%	10.44%	10.29%
Long-Term Projected 30-Year Treasury [11]	5.30%	0.699	8.01%	10.64%	10.43%	10.90%	12.74%	12.59%
Mean						9.25%	11.09%	10.94%
			Ex-Ant	e Market Risk	Premium		CAPM Resu	t
		Average	Sharpe	Bloomberg	Capital IQ	Sharpe	Bloomberg	Capital IQ
	Risk-Free	Beta	Ratio	Market DCF	Market DCF	Ratio	Market DCF	Market DCF
	Rate	Coefficient	Derived	Derived	Derived	Derived	Derived	Derived
PROXY GROUP BLOOMBERG BETA COEFFICIE	NT							
Current 30-Year Treasury (30-day average) [9]	2.65%	0.689	8.01%	10.64%	10.43%	8.17%	9.98%	9.83%
Near-Term Projected 30-Year Treasury [10]	3.00%	0.689	8.01%	10.64%	10.43%	8.52%	10.33%	10.19%
Long-Term Projected 30-Year Treasury [11]	5.30%	0.689	8.01%	10.64%	10.43%	10.82%	12.63%	12.49%
Mean					l	9.17%	10.98%	10.83%
			F A4	- Market Diale	Deservices			
		A	Ex-Ant	e Market Risk	Premium	01		
	Diele Free	Average	Sharpe	Bioomberg		Sharpe	Bioomberg	
	RISK-Free	Beta	Ratio	Market DCF	Market DCF	Ratio	Market DCF	Market DCF
	Rate	Coefficient	Derived	Derived	Derived	Derived	Derived	Derived
PROXY GROUP VALUE LINE AVERAGE BETA CO	OFFEICIENT	r						
Current 30-Year Treasury (30-day average) [9]	2.65%	0.736	8.01%	10.64%	10.43%	8.55%	10.48%	10.33%
Near-Term Projected 30-Year Treasury [10]	3.00%	0.736	8.01%	10.64%	10.43%	8.90%	10.84%	10.68%
Long-Term Projected 30-Year Treasury [11]	5.30%	0.736	8.01%	10.64%	10.43%	11.20%	13.14%	12.98%
Mean	0.0073	0.100	5.0175	10.0170	10.1070	9.55%	11.49%	11.33%
					L	0.0075	11110/0	

 Notes:

 [1] See Notes [9], [10], and [11]

 [2] Source: Exhibit No. RBH-3

 [3] Source: Exhibit No. RBH-2

 [4] Source: Exhibit No. RBH-2

 [5] Source: Exhibit No. RBH-2

 [6] Equals Col. [1] + (Col. [2] x Col. [3])

 [7] Equals Col. [1] + (Col. [2] x Col. [4])

 [8] Equals Col. [1] + (Col. [2] x Col. [5])

 [9] Source: Bloomberg Professional

 [10] Source: Blue Chip Financial Forecasts, Vol. 31, No. 8, August 1, 2012, at 2

 [11] Source: Blue Chip Financial Forecasts, Vol. 31, No. 6, June 1, 2012, at 14



8.00%

30-Year Treasury Yield



4.00%

[1] Constant of regression equation

[2] Slope of regression equation

2.00%

-2.00%

[3] Source: Bloomberg Professional, Blue Chip Financial Forecasts, Vol. 31, No. 8, August 1, 2011, at 2, and Blue Chip Financial Forecasts, Vol. 31, No. 6, June 1, 2012, at 14

10.00%

12.00%

14.00%

16.00%

[4] Equals [1] + [2] x ln([3])

6.00%

[5] Equals [3] + [4]
[6] Source: SNL Financial
[7] Source: SNL Financial

[8] Source: Bloomberg Professional, equals 202-trading day average (i.e. lag period) as of August 17, 2012

[9] Equals [7] - [8]

[6]	[7]	[8]	[9]
		Average	
Date of		30-Year	
Electric Rate	Return on	Treasury	Risk
Case	Equity	Yield	Premium
1/1/1980	14.50%	9.36%	5.14%
1/7/1980	14.39%	9.38%	5.01%
1/9/1980	15.00%	9.39%	5.61%
1/14/1980	15.17%	9.41%	5.76%
1/17/1980	13.93%	9.43%	4.50%
1/23/1980	15.50%	9.47%	6.03%
1/30/1980	13.86%	9.52%	4.34%
1/31/1980	12.61%	9.53%	3.08%
2/6/1980	13.71%	9.58%	4.13%
2/13/1980	12.80%	9.63%	3.17%
2/14/1980	13.00%	9.64%	3.36%
2/19/1980	13.50%	9.68%	3.82%
2/27/1980	13.75%	9.78%	3.97%
2/29/1980	13.75%	9.81%	3.94%
2/29/1980	14.00%	9.81%	4.19%
2/29/1980	14.77%	9.81%	4.96%
3/7/1980	12.70%	9.89%	2.81%
3/14/1980	13.50%	9.96%	3.54%
3/26/1980	14.16%	10.09%	4.07%
3/27/1980	14.24%	10.11%	4.13%
3/28/1980	14.50%	10.13%	4.37%
4/11/1980	12.75%	10.27%	2.48%
4/14/1980	13.85%	10.28%	3.57%
4/16/1980	15.50%	10.30%	5.20%
4/22/1980	13.25%	10.34%	2.91%
4/22/1980	13.90%	10.34%	3.56%
4/24/1980	16.80%	10.37%	6.43%
4/29/1980	15.50%	10.40%	5.10%
5/6/1980	13.70%	10.44%	3.26%
5/7/1980	15.00%	10.45%	4.55%
5/8/1980	13.75%	10.45%	3.30%
5/9/1980	14.35%	10.46%	3.89%

5/13/1980	13.60%	10.47%	3.13%
5/15/1980	13.25%	10.49%	2.76%
5/19/1980	13.75%	10.50%	3.25%
5/27/1980	13.02%	10.53%	3.09% 4.07%
5/29/1980	16.00%	10.55%	5 45%
5/30/1980	13.80%	10.56%	3.24%
6/2/1980	15.63%	10.56%	5.07%
6/9/1980	15.90%	10.59%	5.31%
6/10/1980	13.78%	10.59%	3.19%
6/12/1980	14.25%	10.60%	3.65%
6/19/1980	13.40%	10.61%	2.79%
6/30/1980	13.00%	10.64%	2.36%
6/30/1980	13.40%	10.64%	2.76%
7/9/1980	14.75%	10.07%	4.08%
7/15/1980	15.00%	10.07 %	4.33%
7/18/1980	13.80%	10.00%	3 10%
7/22/1980	14.10%	10.71%	3.39%
7/24/1980	15.00%	10.72%	4.28%
7/25/1980	13.48%	10.73%	2.75%
7/31/1980	14.58%	10.75%	3.83%
8/8/1980	13.50%	10.77%	2.73%
8/8/1980	14.00%	10.77%	3.23%
8/8/1980	15.45%	10.77%	4.68%
8/11/1980	14.85%	10.78%	4.07%
8/14/1980	14.00%	10.79%	5.21%
8/25/1980	13 75%	10.79%	2 93%
8/27/1980	13.80%	10.83%	2.97%
8/29/1980	12.50%	10.83%	1.67%
9/15/1980	13.50%	10.87%	2.63%
9/15/1980	13.93%	10.87%	3.06%
9/15/1980	15.80%	10.87%	4.93%
9/24/1980	12.50%	10.92%	1.58%
9/24/1980	15.00%	10.92%	4.08%
9/26/1980	13.75%	10.94%	2.81%
9/30/1980	14.10%	10.96%	3.14%
9/30/1980	13 00%	10.90%	3.24% 2 0/%
10/3/1980	15.50%	10.90%	4 52%
10/7/1980	12.50%	10.99%	1.51%
10/9/1980	13.25%	11.00%	2.25%
10/9/1980	14.50%	11.00%	3.50%
10/9/1980	14.50%	11.00%	3.50%
10/16/1980	16.10%	11.02%	5.08%
10/17/1980	14.50%	11.03%	3.47%
10/31/1980	13.75%	11.10%	2.65%
10/31/1980	14.25%	11.10%	3.15%
11/4/1980	13.00%	11.11%	2.63%
11/5/1980	14.00%	11 12%	2.00%
11/8/1980	13.75%	11.14%	2.61%
11/10/1980	14.85%	11.15%	3.70%
11/17/1980	14.00%	11.18%	2.82%
11/18/1980	14.00%	11.19%	2.81%
11/19/1980	13.00%	11.19%	1.81%
11/24/1980	14.00%	11.21%	2.79%
11/26/1980	14.00%	11.21%	2.79%
12/8/1980	14.15%	11.23%	2.92%
12/0/1900	15.10%	11.23%	3.07% 4 12%
12/12/1980	15.35%	11.23%	4.12/0
12/17/1980	13.25%	11.24%	2.01%
12/18/1980	15.80%	11.24%	4.56%
12/19/1980	14.50%	11.24%	3.26%
12/19/1980	14.64%	11.24%	3.40%
12/22/1980	13.45%	11.24%	2.21%
12/22/1980	15.00%	11.24%	3.76%
12/30/1980	14.50%	11.22%	3.28%
12/30/1980	14.95%	11.22%	3.73%
1/2/1001	13.39%	11.22%	2.11%
1/7/1081	14 30%	11 21%	3 00%
1/19/1981	15.25%	11.20%	4.05%
1/23/1981	13.10%	11.20%	1.90%
1/23/1981	14.40%	11.20%	3.20%
1/26/1981	15.25%	11.21%	4.04%
1/27/1981	15.00%	11.21%	3.79%

1/31/1981	13.47%	11.22%	2.25%
2/3/1981	15.25%	11.23%	4.02%
2/5/1981	15.75%	11.24%	4.51%
2/11/1981	15.60%	11.28%	4.32%
2/20/1981	15.25%	11.33%	3.92%
3/11/1981	15.40%	11,49%	3.91%
3/12/1981	14 51%	11 50%	3 01%
3/12/1081	16.00%	11 50%	4 50%
3/12/1901	10.00%	11.50%	4.30 %
3/13/1981	13.02%	11.51%	1.51%
3/18/1981	16.19%	11.54%	4.65%
3/19/1981	13.75%	11.55%	2.20%
3/23/1981	14.30%	11.57%	2.73%
3/25/1981	15.30%	11.60%	3.70%
4/1/1981	14.53%	11.67%	2.86%
4/3/1981	19.10%	11.70%	7.40%
4/9/1981	15 00%	11 77%	3 23%
4/9/1981	15 30%	11 77%	3 53%
1/0/1081	16 50%	11 77%	1 73%
4/0/1001	17.00%	11.77/0	F 220/
4/9/1901	17.00%	11.77%	5.23%
4/10/1981	13.75%	11.79%	1.96%
4/13/1981	13.57%	11.81%	1.76%
4/15/1981	15.30%	11.84%	3.46%
4/16/1981	13.50%	11.86%	1.64%
4/17/1981	14.10%	11.86%	2.24%
4/21/1981	14.00%	11.89%	2.11%
4/21/1981	16.80%	11.89%	4.91%
4/24/1981	16.00%	11.94%	4.06%
4/27/1981	12 50%	11 96%	0.54%
4/27/1981	13.61%	11 96%	1 65%
4/20/1081	13.65%	11 00%	1.66%
4/20/1001	12.00/	12 010/	1.00%
4/30/1901	13.50%	12.01%	1.49%
5/4/1981	16.22%	12.04%	4.18%
5/5/1981	14.40%	12.06%	2.34%
5/7/1981	16.25%	12.10%	4.15%
5/7/1981	16.27%	12.10%	4.17%
5/8/1981	13.00%	12.12%	0.88%
5/8/1981	16.00%	12.12%	3.88%
5/12/1981	13.50%	12.15%	1.35%
5/15/1981	15.75%	12.21%	3.54%
5/18/1981	14.88%	12.22%	2.66%
5/20/1981	16.00%	12.25%	3.75%
5/21/1981	14 00%	12 27%	1 73%
5/26/1981	14 90%	12 29%	2 61%
5/27/1981	15.00%	12 31%	2.69%
5/20/1091	15.00%	12.01/0	2.03%
6/1/1001	16.50%	12.00/0	4 160/
0/1/1901	10.50%	12.34%	4.10%
6/3/1981	14.07%	12.30%	2.31%
6/5/1981	13.00%	12.38%	0.62%
6/10/1981	16.75%	12.41%	4.34%
6/17/1981	14.40%	12.45%	1.95%
6/18/1981	16.33%	12.46%	3.87%
6/25/1981	14.75%	12.51%	2.24%
6/26/1981	16.00%	12.52%	3.48%
6/30/1981	15.25%	12.54%	2.71%
7/1/1981	15 50%	12 55%	2 95%
7/1/1981	17 50%	12 55%	4 95%
7/10/1981	16.00%	12.61%	3 39%
7/14/1091	16.00%	12.0170	4 27%
7/14/1901	10.90%	12.03/0	4.27 /0
7/17/1901	10.00%	12.04%	0.00%
7/17/1981	15.00%	12.66%	2.34%
7/20/1981	15.00%	12.67%	2.33%
7/21/1981	14.00%	12.68%	1.32%
7/28/1981	13.48%	12.73%	0.75%
7/31/1981	13.50%	12.77%	0.73%
7/31/1981	15.00%	12.77%	2.23%
7/31/1981	16.00%	12.77%	3.23%
8/5/1981	15.71%	12.82%	2.89%
8/10/1981	14.50%	12.86%	1.64%
8/11/1981	15 00%	12.87%	2 13%
8/20/1081	13 50%	12 0/0/	0.56%
8/20/1001	16 500/0	12.34/0	3 560/
0/20/1301	16.00%	12.34/0	2 0 40/
0/24/1901	15.00%	12.90%	2.04%
0/28/1981	15.00%	13.01%	1.99%
9/3/1981	14.50%	13.05%	1.45%
9/10/1981	14.50%	13.10%	1.40%
9/11/1981	16.00%	13.11%	2.89%
9/16/1981	16.00%	13.14%	2.86%
9/17/1981	16.50%	13.15%	3.35%
9/23/1981	15.85%	13.19%	2.66%

9/28/1981	15.50%	13.23%	2.27%
10/9/1981	15.75%	13.32%	2.43%
10/15/1981	16.25%	13.36%	2.89%
10/16/1981	15.50%	13.37%	2.13%
10/16/1981	16.50%	13.37%	3.13%
10/19/1981	14 25%	13 38%	0.87%
10/20/1981	15 25%	13 40%	1.85%
10/20/1981	17.00%	13 40%	3.60%
10/20/1901	16.00%	12 4 4 9/	2 560/
10/23/1901	10.00%	13.44%	2.30%
10/27/1981	10.00%	13.48%	-3.48%
10/29/1981	14.75%	13.50%	1.25%
10/29/1981	16.50%	13.50%	3.00%
11/3/1981	15.17%	13.53%	1.64%
11/5/1981	16.60%	13.55%	3.05%
11/6/1981	15.17%	13.55%	1.62%
11/24/1981	15.50%	13.60%	1.90%
11/25/1981	15.25%	13.60%	1.65%
11/25/1981	15.35%	13.60%	1.75%
11/25/1981	16.10%	13.60%	2.50%
11/25/1981	16 10%	13 60%	2 50%
12/1/1981	15 70%	13.61%	2.00%
12/1/1001	16.00%	12 61%	2.00%
12/1/1901	10.00%	13.01%	2.00/
12/1/1981	16.49%	13.01%	2.88%
12/1/1981	16.50%	13.61%	2.89%
12/4/1981	16.00%	13.61%	2.39%
12/11/1981	16.25%	13.62%	2.63%
12/14/1981	14.00%	13.62%	0.38%
12/15/1981	15.81%	13.63%	2.18%
12/15/1981	16.00%	13.63%	2.37%
12/16/1981	15.25%	13.63%	1.62%
12/17/1981	16.50%	13.63%	2.87%
12/18/1981	15 45%	13 63%	1 82%
12/30/1981	14 25%	13.66%	0.59%
12/20/1001	16.00%	12.66%	2 2/10/
12/30/1901	16.00%	13.00%	2.34 /0
12/30/1901	10.23%	13.00%	2.09%
12/31/1981	16.15%	13.67%	2.48%
1/4/1982	15.50%	13.67%	1.83%
1/11/1982	14.50%	13.72%	0.78%
1/11/1982	17.00%	13.72%	3.28%
1/13/1982	14.75%	13.74%	1.01%
1/14/1982	15.75%	13.74%	2.01%
1/15/1982	15.00%	13.75%	1.25%
1/15/1982	16.50%	13.75%	2.75%
1/22/1982	16.25%	13.79%	2.46%
1/27/1982	16.84%	13.81%	3.03%
1/28/1982	13 00%	13.81%	-0.81%
1/20/1082	15 50%	13.81%	1 69%
2/1/1082	15.85%	13.82%	2 03%
2/1/1902	16.449/	12 020/	2.0370
2/3/1902	10.44%	13.03%	2.01%
2/8/1982	15.50%	13.85%	1.65%
2/11/1982	16.00%	13.87%	2.13%
2/11/1982	16.20%	13.87%	2.33%
2/17/1982	15.00%	13.88%	1.12%
2/19/1982	15.17%	13.89%	1.28%
2/26/1982	15.25%	13.89%	1.36%
3/1/1982	15.03%	13.89%	1.14%
3/1/1982	16.00%	13.89%	2.11%
3/3/1982	15.00%	13.88%	1.12%
3/3/1982	15.00%	13.88%	1 12%
3/8/1082	17 10%	13.88%	3 22%
2/12/1092	16.25%	12 99%	2 270/
3/12/1902	10.20%	13.00%	2.3770
3/17/1982	17.30%	13.88%	3.42%
3/22/1982	15.10%	13.88%	1.22%
3/27/1982	15.40%	13.89%	1.51%
3/30/1982	15.50%	13.90%	1.60%
3/31/1982	17.00%	13.90%	3.10%
4/1/1982	14.70%	13.91%	0.79%
4/1/1982	16.50%	13.91%	2.59%
4/2/1982	15.50%	13.91%	1.59%
4/5/1982	15,50%	13.91%	1.59%
4/8/1982	16 40%	13 93%	2 47%
4/13/1082	14 50%	13 03%	0.57%
1/22/1002	15 750/	13 0/0/	1 910/
4/23/1802	15.75%	10.04%	1.01%
4/27/1982	10.00%	13.94%	1.06%
4/28/1982	15.75%	13.94%	1.81%
4/30/1982	14.70%	13.94%	0.76%
4/30/1982	15.50%	13.94%	1.56%
5/3/1982	16.60%	13.94%	2.66%
5/4/1982	16.00%	13.94%	2.06%

5/14/1982	15.50%	13.92%	1.58%
5/18/1982	15.42%	13.92%	1.50%
5/19/1982	14.69%	13.91%	0.78%
5/20/1982	15.00%	13.91%	1.09%
5/20/1982	15.10%	13.91%	1.19%
5/20/1982	15.50%	13.91%	1.59%
5/20/1982	16.30%	13.91%	2.39%
5/21/1982	17.75%	13.91%	3.84%
5/27/1982	15.00%	13.89%	1.11%
5/28/1982	15.50%	13.89%	1.61%
5/28/1982	17.00%	13.89%	3.11%
6/1/1982	13.75%	13.89%	-0.14%
6/1/1982	16.60%	13.89%	2.71%
6/9/1982	17 86%	13 88%	3.98%
6/14/1982	15 75%	13.88%	1 87%
6/15/1982	14 85%	13.88%	0.97%
6/18/1082	15 50%	13.87%	1 63%
6/21/1082	1/ 00%	13.87%	1.03%
6/22/1092	16.00%	12 97%	2 120/
6/23/1902	16.00%	13.07 /0	2.13/0
0/23/1902	10.17%	13.07 %	2.30%
6/24/1982	14.85%	13.86%	0.99%
6/25/1982	14.70%	13.86%	0.84%
7/1/1982	16.00%	13.85%	2.15%
7/2/1982	15.62%	13.84%	1.78%
7/2/1982	17.00%	13.84%	3.16%
7/13/1982	14.00%	13.82%	0.18%
7/13/1982	16.80%	13.82%	2.98%
7/14/1982	15.76%	13.82%	1.94%
7/14/1982	16.02%	13.82%	2.20%
7/19/1982	16.50%	13.80%	2.70%
7/22/1982	14.50%	13.78%	0.72%
7/22/1982	17.00%	13.78%	3.22%
7/27/1982	16.75%	13.75%	3.00%
7/29/1982	16.50%	13.74%	2.76%
8/11/1982	17.50%	13.69%	3.81%
8/18/1982	17.07%	13.64%	3.43%
8/20/1982	15 73%	13 61%	2 12%
8/25/1982	16.00%	13 57%	2 43%
8/26/1982	15 50%	13 56%	1 94%
8/30/1982	15.00%	13 55%	1.01%
9/3/1982	16.00%	13 53%	2.67%
0/8/1082	15.00%	13.52%	1 / 8%
0/15/1092	12.00%	12.52%	0.42%
9/15/1902	16.25%	13.50%	2 75%
9/15/1902	16.00%	12 50%	2.7570
9/10/1902	16.00%	13.30 %	2.00 /0
9/17/1902	17 170/	13.49/0	2 700/
9/23/1902	11.17%	13.47%	3.70%
9/24/1982	14.50%	13.46%	1.04%
9/27/1982	15.25%	13.46%	1.79%
10/1/1982	15.50%	13.42%	2.08%
10/15/1982	15.90%	13.32%	2.58%
10/22/1982	15.75%	13.25%	2.50%
10/22/1982	17.15%	13.25%	3.90%
10/29/1982	15.54%	13.17%	2.37%
11/1/1982	15.50%	13.15%	2.35%
11/3/1982	17.20%	13.13%	4.07%
11/4/1982	16.25%	13.12%	3.13%
11/5/1982	16.20%	13.10%	3.10%
11/9/1982	16.00%	13.06%	2.94%
11/23/1982	15.50%	12.89%	2.61%
11/23/1982	15.85%	12.89%	2.96%
11/30/1982	16.50%	12.82%	3.68%
12/1/1982	17.04%	12.79%	4.25%
12/6/1982	15.00%	12.74%	2.26%
12/6/1982	16.35%	12.74%	3.61%
12/10/1982	15.50%	12.67%	2.83%
12/13/1982	16.00%	12.65%	3.35%
12/14/1982	15 30%	12 63%	2 67%
12/14/1982	16 40%	12 63%	3 77%
12/20/1082	16.00%	12.55%	3 120/
12/21/1002	1/ 75%	12.50 /0	0. 1 ∠/0 2.100/
12/21/1002	15 850/	12.50 /0	2.13/0
12/22/1002	16.00%	12.00%	3.23%
12/22/1902	10.20%	12.00%	3.70%
12/22/1982	10.58%	12.00%	4.03%
12/22/1982	16.75%	12.55%	4.20%
12/29/1982	14.90%	12.49%	2.41%
12/29/1982	16.25%	12.49%	3.76%
12/30/1982	16.00%	12.47%	3.53%
12/30/1982	16.35%	12.47%	3.88%

12/30/1982	16.77%	12.47%	4.30%
1/5/1983	17.33%	12.41%	4.92%
1/11/1983	15.90%	12.35%	3.55%
1/12/1983	14.63%	12.34%	2.29%
1/12/1903	17 75%	12.34%	5.10%
1/21/1983	15.00%	12.24%	2 77%
1/24/1983	14.50%	12.21%	2.29%
1/24/1983	15.50%	12.21%	3.29%
1/25/1983	15.85%	12.20%	3.65%
1/27/1983	16.14%	12.17%	3.97%
2/1/1983	18.50%	12.14%	6.36%
2/4/1983	14.00%	12.10%	1.90%
2/10/1983	15.00%	12.06%	2.94%
2/21/1983	15.50%	11.99%	3.51%
2/22/1983	15.50%	11.98%	3.52%
2/23/1983	15.10%	11.96%	3.14%
2/23/1983	16.00%	11.96%	4.04%
3/2/1983	15.25%	11.90%	3.35%
3/9/1983	15.20%	11.83%	3.37%
3/15/1983	13.00%	11.78%	1.22%
3/18/1983	15.25%	11.74%	3.51%
3/23/1983	15.40%	11.70%	3.70%
3/24/1903	15.00%	11.00%	3.32%
3/29/1903	16.71%	11.04%	5.00%
3/31/1083	15.00%	11.02 //	3 30%
<i>A/A/</i> 1983	15.00%	11.01%	3.61%
4/8/1983	15.50%	11.52%	3.98%
4/11/1983	14.81%	11.50%	3.31%
4/19/1983	14.50%	11.39%	3.11%
4/20/1983	16.00%	11.37%	4.63%
4/29/1983	16.00%	11.26%	4.74%
5/1/1983	14.50%	11.26%	3.24%
5/9/1983	15.50%	11.16%	4.34%
5/11/1983	16.46%	11.13%	5.33%
5/12/1983	14.14%	11.12%	3.02%
5/18/1983	15.00%	11.06%	3.94%
5/23/1983	14.90%	11.02%	3.88%
5/23/1983	15.50%	11.02%	4.48%
5/25/1983	15.50%	11.00%	4.50%
5/27/1983	15.00%	10.97%	4.03%
5/31/1903	14.00%	10.90%	3.04%
6/2/1983	14 50%	10.90%	3 56%
6/17/1983	15.03%	10.34%	4 18%
7/1/1983	14.80%	10.78%	4.02%
7/1/1983	14.90%	10.78%	4.12%
7/8/1983	16.25%	10.76%	5.49%
7/13/1983	13.20%	10.76%	2.44%
7/19/1983	15.00%	10.75%	4.25%
7/19/1983	15.10%	10.75%	4.35%
7/25/1983	16.25%	10.74%	5.51%
7/28/1983	15.90%	10.74%	5.16%
8/3/1983	16.34%	10.75%	5.59%
8/3/1983	16.50%	10.75%	5.75%
8/19/1983	15.00%	10.80%	4.20%
0/22/1903	16.40%	10.80%	4.70%
8/31/1983	14 75%	10.84%	3 91%
9/7/1983	15.00%	10.86%	4 14%
9/14/1983	15.00%	10.89%	4 89%
9/16/1983	15.00%	10.90%	4.10%
9/19/1983	14.50%	10.91%	3.59%
9/20/1983	16.50%	10.91%	5.59%
9/28/1983	14.50%	10.94%	3.56%
9/29/1983	15.50%	10.94%	4.56%
9/30/1983	15.25%	10.95%	4.30%
9/30/1983	16.15%	10.95%	5.20%
10/4/1983	14.80%	10.96%	3.84%
10/7/1983	16.00%	10.97%	5.03%
10/13/1983	15.52%	10.98%	4.54%
10/17/1983	13.50%	10.99%	4.51%
10/10/1983	14.50%	11.00%	3.50%
10/19/1903	10.20%	11.00%	J.20%
10/26/1983	15.00%	11.00%	3 97%
10/27/1983	15.20%	11.04%	4.16%
11/1/1983	16.00%	11.06%	4.94%

11/9/1983	14.90%	11.09%	3.81%
11/10/1983	14.35%	11.10%	3.25%
11/23/1983	16.00%	11.13%	4.87%
11/23/1983	16.15%	11.13%	5.02%
11/30/1983	15.00%	11.14%	3.86%
12/5/1983	15.25%	11.15%	4.10%
12/6/1983	15.07%	11.15%	3.92%
12/8/1983	15.90%	11.16%	4.74%
12/9/1983	14.75%	11.17%	3.58%
12/12/1983	14.50%	11.17%	3.33%
12/15/1983	15.56%	11.19%	4.37%
12/19/1983	14.80%	11.21%	3.59%
12/20/1983	14.69%	11.21%	3.48%
12/20/1983	16.00%	11.21%	4.79%
12/20/1983	16.25%	11.21%	5.04%
12/22/1983	14,75%	11.23%	3.52%
12/22/1983	15 75%	11 23%	4 52%
1/3/1984	14 75%	11 26%	3 49%
1/10/1984	15 90%	11 29%	4 61%
1/12/1984	15.60%	11.20%	4 30%
1/18/1984	13 75%	11 32%	2 43%
1/10/1004	15.00%	11.32 /0	2.4370
1/10/1004	16 10%	11.35%	4.57 /0
1/30/1904	16.10%	11.30 /6	2 000/
0/4/4004	13.23%	11.37%	3.00%
2/1/1984	14.80%	11.38%	3.42%
2/6/1984	13.75%	11.40%	2.35%
2/6/1984	14.75%	11.40%	3.35%
2/9/1984	15.25%	11.42%	3.83%
2/15/1984	15.70%	11.44%	4.26%
2/20/1984	15.00%	11.45%	3.55%
2/20/1984	15.00%	11.45%	3.55%
2/22/1984	14.75%	11.47%	3.28%
2/28/1984	14.50%	11.50%	3.00%
3/2/1984	14.25%	11.53%	2.72%
3/20/1984	16.00%	11.64%	4.36%
3/23/1984	15.50%	11.66%	3.84%
3/26/1984	14.71%	11.67%	3.04%
4/2/1984	15.50%	11.71%	3.79%
4/6/1984	14.74%	11.75%	2.99%
4/11/1984	15.72%	11.77%	3.95%
4/17/1984	15.00%	11.80%	3.20%
4/18/1984	16.20%	11.81%	4.39%
4/25/1984	14.64%	11.85%	2.79%
4/30/1984	14.40%	11.87%	2.53%
5/16/1984	14.69%	11.98%	2.71%
5/16/1984	15.00%	11.98%	3.02%
5/22/1984	14.40%	12.02%	2.38%
5/29/1984	15.10%	12.06%	3.04%
6/13/1984	15 25%	12 15%	3 10%
6/15/1984	15 60%	12 17%	3 43%
6/22/1984	16 25%	12 21%	4 04%
6/29/1984	15 25%	12.21%	3.00%
7/2/108/	13 35%	12.20%	1 00%
7/10/1984	16.00%	12.20%	3.69%
7/12/1984	16.50%	12.31%	/ 18%
7/12/1904	16.30%	12.32%	3 02%
7/17/109/	1/ 1/0/	12.35%	1 70%
7/17/1904	14.14/0	12.33 /0	2 050/
7/10/1904	15.30%	12.33 /0	2.90/0
7/10/1904	13.30%	12.35%	3.15%
7/19/1984	14.30%	12.30%	1.94%
7/24/1984	16.79%	12.39%	4.40%
7/31/1984	16.00%	12.42%	3.58%
8/3/1984	14.25%	12.44%	1.81%
8/17/1984	14.30%	12.48%	1.82%
8/20/1984	15.00%	12.49%	2.51%
8/27/1984	16.30%	12.50%	3.80%
8/31/1984	15.55%	12.52%	3.03%
9/6/1984	16.00%	12.53%	3.47%
9/10/1984	14.75%	12.54%	2.21%
9/13/1984	15.00%	12.55%	2.45%
9/17/1984	17.38%	12.55%	4.83%
9/26/1984	14.50%	12.57%	1.93%
9/28/1984	15.00%	12.57%	2.43%
9/28/1984	16.25%	12.57%	3.68%
10/9/1984	14.75%	12.58%	2.17%
10/12/1984	15.60%	12.58%	3.02%
10/22/1984	15.00%	12.58%	2.42%
10/26/1984	16.40%	12.58%	3.82%
10/31/1984	16 25%	12 58%	3 67%

11/7/1984	15.60%	12.58%	3.02%
11/9/1984	16.00%	12.58%	3.42%
11/14/1984	15.75%	12.58%	3.17%
11/20/1984	15.25%	12.57%	2.68%
11/20/1984	15.92%	12.57%	3.35%
11/23/1984	15.00%	12.57%	2.43%
11/28/1984	16.15%	12.56%	3.59%
12/3/1984	15.80%	12.56%	3.24%
12/4/1984	16.50%	12.56%	3.94%
12/18/1984	16.40%	12.53%	3.87%
12/19/1984	14.75%	12.53%	2.22%
12/19/1984	15.00%	12.53%	2.47%
12/20/1984	16.00%	12.52%	3.48%
12/28/1984	16.00%	12.50%	3.50%
1/3/1985	14.75%	12.49%	2.26%
1/10/1985	15.75%	12.47%	3.28%
1/11/1985	16.30%	12.46%	3.84%
1/23/1985	15.80%	12.43%	3.37%
1/24/1985	15.82%	12.43%	3.39%
1/25/1985	16.75%	12.42%	4.33%
1/30/1985	14.90%	12.40%	2.50%
1/31/1985	14.75%	12.39%	2.36%
2/8/1985	14.47%	12.36%	2.11%
3/1/1985	13.84%	12.31%	1.53%
3/8/1985	16.85%	12.29%	4.56%
3/14/1985	15.50%	12.26%	3.24%
3/15/1985	15.62%	12.26%	3.36%
3/29/1985	15.62%	12.17%	3.45%
4/3/1985	14.60%	12.14%	2.46%
4/9/1985	15.50%	12.11%	3.39%
4/16/1985	15.70%	12.06%	3.64%
4/22/1985	14.00%	12.02%	1.98%
4/26/1985	15.50%	11.99%	3.51%
4/29/1985	15.00%	11.98%	3.02%
5/2/1985	14.68%	11.94%	2.74%
5/8/1985	15.62%	11.90%	3.72%
5/10/1985	16.50%	11.88%	4.62%
5/29/1985	14.61%	11.74%	2.87%
5/31/1985	16.00%	11.72%	4.28%
6/14/1985	15.50%	11.61%	3.89%
7/9/1985	15.00%	11.45%	3.55%
7/16/1985	14.50%	11.40%	3.10%
7/26/1985	14.50%	11.33%	3.17%
8/2/1985	14.80%	11.29%	3.51%
8/7/1985	15.00%	11.27%	3.73%
8/28/1985	14.25%	11.15%	3.10%
8/28/1985	15.50%	11.15%	4.35%
8/29/1985	14.50%	11.15%	3.35%
9/9/1985	14.60%	11.11%	3.49%
9/9/1985	14.90%	11.11%	3.79%
9/17/1985	14.90%	11.09%	3.81%
9/23/1985	15.00%	11.07%	3.93%
9/27/1985	15.50%	11.05%	4.45%
9/27/1985	15.80%	11.05%	4.75%
10/2/1985	14.00%	11.04%	2.96%
10/2/1985	14.75%	11.04%	3.71%
10/3/1985	15.25%	11.03%	4.22%
10/24/1985	15.40%	10.96%	4.44%
10/24/1985	15.82%	10.96%	4.86%
10/24/1985	15.85%	10.96%	4.89%
10/28/1985	16.00%	10.95%	5.05%
10/29/1985	16.65%	10.95%	5.70%
10/31/1985	15.06%	10.93%	4.13%
11/4/1985	14.50%	10.92%	3.58%
11/7/1985	15.50%	10.90%	4.60%
11/8/1985	14.30%	10.89%	3.41%
12/12/1985	14.75%	10.73%	4.02%
12/18/1985	15.00%	10.70%	4.30%
12/20/1985	14.50%	10.68%	3.82%
12/20/1985	14.50%	10.68%	3.82%
12/20/1985	15.00%	10.68%	4.32%
1/24/1986	15.40%	10.41%	4.99%
1/31/1986	15.00%	10.36%	4.64%
2/5/1986	15.00%	10.33%	4.67%
2/5/1986	15.75%	10.33%	5.42%
2/10/1986	13.30%	10.30%	3.00%
2/11/1986	12.50%	10.28%	2.22%
2/14/1986	14.40%	10.25%	4.15%
2/18/1986	16.00%	10.24%	5.76%

2/24/1986	14.50%	10.18%	4.32%
2/26/1986	14.00%	10.16%	3.84%
3/5/1986	14.90%	10.08%	4.82%
3/11/1986	14.50%	10.02%	4.48%
3/12/1986	13.50%	10.01%	3.49%
3/27/1986	14.10%	9.86%	4.24%
3/31/1986	13.50%	9.84%	3.66%
4/1/1986	14.00%	9.83%	4.17%
4/2/1986	15.50%	9.81%	5.69%
4/4/1986	15.00%	9.78%	5.22%
4/14/1986	13.40%	9.69%	3.71%
4/23/1986	15.00%	9.58%	5.42%
5/16/1986	14.50%	9.33%	5.17%
5/16/1986	14.50%	9.33%	5.17%
5/29/1986	13.90%	9.20%	4.70%
5/30/1986	15.10%	9.19%	5.91%
6/2/1986	12.81%	9.17%	3.64%
6/11/1986	14.00%	9.08%	4.92%
6/24/1986	16.63%	8.94%	7.69%
6/26/1986	12 00%	8.91%	3 09%
6/26/1986	14 75%	8.91%	5 84%
6/30/1986	13.00%	8 88%	4 12%
7/10/1986	14.34%	8 76%	5 58%
7/11/1986	12 75%	8 74%	4 01%
7/1//1086	12.00%	8 72%	3 88%
7/17/1096	12.00%	9.67%	2 720/
7/25/1096	14.25%	9 5 9 %	5.67%
9/6/1096	12.20%	0.30%	5.07%
0/0/1900	13.50%	0.43%	5.05%
0/14/1900	13.30%	0.30%	0.14%
9/10/1980	12.75%	8.07%	4.08%
9/19/1980	13.25%	8.04%	0.21%
10/1/1986	14.00%	7.96%	6.04%
10/3/1986	13.40%	7.94%	5.46%
10/31/1986	13.50%	7.78%	5.72%
11/5/1986	13.00%	7.76%	5.24%
12/3/1986	12.90%	7.59%	5.31%
12/4/1986	14.44%	7.58%	6.86%
12/16/1986	13.60%	7.53%	6.07%
12/22/1986	13.80%	7.51%	6.29%
12/30/1986	13.00%	7.49%	5.51%
1/2/1987	13.00%	7.49%	5.51%
1/12/1987	12.40%	7.47%	4.93%
1/27/1987	12.71%	7.46%	5.25%
3/2/1987	12.47%	7.47%	5.00%
3/3/1987	13.60%	7.47%	6.13%
3/4/1987	12.38%	7.47%	4.91%
3/10/1987	13.50%	7.47%	6.03%
3/13/1987	13.00%	7.47%	5.53%
3/31/1987	13.00%	7.47%	5.53%
4/6/1987	13.00%	7.47%	5.53%
4/14/1987	12.50%	7.49%	5.01%
4/16/1987	14.50%	7.50%	7.00%
4/27/1987	12.00%	7.54%	4.46%
5/5/1987	12.85%	7.58%	5.27%
5/12/1987	12.65%	7.62%	5.03%
5/28/1987	13.50%	7.70%	5.80%
6/15/1987	13.20%	7.78%	5.42%
6/29/1987	15.00%	7.83%	7.17%
6/30/1987	12.50%	7.84%	4.66%
7/8/1987	12.00%	7.86%	4.14%
7/10/1987	12.90%	7.86%	5.04%
7/15/1987	13.50%	7.88%	5.62%
7/16/1987	13.50%	7.88%	5.62%
7/16/1987	15.00%	7.88%	7.12%
7/27/1987	13.00%	7.92%	5.08%
7/27/1987	13.40%	7.92%	5.48%
7/27/1987	13.50%	7.92%	5.58%
7/31/1987	12.98%	7.94%	5.04%
8/26/1987	12.63%	8.05%	4.58%
8/26/1987	12.75%	8.05%	4.70%
8/27/1987	13.25%	8.06%	5.19%
9/9/1987	13.00%	8.13%	4.87%
9/30/1987	12.75%	8.30%	4.45%
9/30/1987	13.00%	8.30%	4,70%
10/2/1987	11 50%	8.33%	3 17%
10/15/1987	13 00%	8 43%	4 57%
11/2/1987	13 00%	8 54%	4 46%
11/19/1987	13 00%	8 63%	4 37%
11/30/1987	12.00%	8.68%	3.32%

12/3/1987	14.20%	8.70%	5.50%
12/15/1987	13.25%	8.77%	4.48%
12/16/1987	13.50%	8.78%	4.72%
12/16/1987	13.72%	8.78%	4.94%
12/17/1987	11.75%	8.78%	2.97%
12/18/1987	13.50%	8.79%	4.71%
12/21/1987	12.01%	8.80%	3.21%
12/22/1987	12.00%	8.81%	3.19%
12/22/1987	12.00%	8.81%	3.19%
12/22/1987	12.75%	8.81%	3.94%
12/22/1987	13.00%	8.81%	4.19%
1/20/1988	13.80%	8.93%	4.87%
1/26/1988	13.90%	8.95%	4.95%
1/29/1988	13.20%	8.95%	4.25%
2/4/1988	12.60%	8.96%	3.64%
3/1/1988	11.56%	8.94%	2.62%
3/23/1988	12.87%	8.92%	3.95%
3/24/1988	11.24%	8.92%	2.32%
3/30/1988	12.72%	8.92%	3.80%
4/1/1988	12.50%	8.92%	3.58%
4/7/1988	13 25%	8.93%	4 32%
4/25/1988	10.96%	8.95%	2 01%
5/3/1988	12 91%	8 97%	3 94%
5/11/1988	13 50%	8 99%	4 51%
5/16/1088	13.00%	8 99%	4.01%
6/20/1099	10.00%	0.00%	2 75%
7/1/1000	12.75/0	9.00%	3.75%
7/1/1900	12.75%	9.00%	3.75%
0/5/1000	13.40%	0.97%	4.43%
8/5/1988	12.75%	8.92%	3.83%
8/23/1988	11.70%	8.93%	2.11%
8/29/1988	12.75%	8.94%	3.81%
8/30/1988	13.50%	8.94%	4.56%
9/8/1988	12.60%	8.95%	3.65%
10/13/1988	13.10%	8.93%	4.17%
12/19/1988	13.00%	9.01%	3.99%
12/20/1988	12.25%	9.02%	3.23%
12/20/1988	13.00%	9.02%	3.98%
12/21/1988	12.90%	9.02%	3.88%
12/27/1988	13.00%	9.03%	3.97%
12/28/1988	13.10%	9.03%	4.07%
12/30/1988	13.40%	9.03%	4.37%
1/27/1989	13.00%	9.05%	3.95%
1/31/1989	13.00%	9.05%	3.95%
2/17/1989	13.00%	9.05%	3.95%
2/20/1989	12.40%	9.05%	3.35%
3/1/1989	12.76%	9.05%	3.71%
3/8/1989	13.00%	9.05%	3.95%
3/30/1989	14.00%	9.05%	4.95%
4/5/1989	14.20%	9.05%	5.15%
4/18/1989	13.00%	9.05%	3.95%
5/5/1989	12.40%	9.05%	3.35%
6/2/1989	13.20%	9.01%	4.19%
6/8/1989	13.50%	8.98%	4.52%
6/27/1989	13.25%	8.92%	4.33%
6/30/1989	13.00%	8.90%	4.10%
8/14/1989	12.50%	8.77%	3.73%
9/28/1989	12.25%	8.63%	3.62%
10/24/1989	12.50%	8.54%	3.96%
11/9/1989	13.00%	8.49%	4.51%
12/15/1989	13.00%	8.34%	4.66%
12/20/1989	12.90%	8.32%	4.58%
12/21/1989	12.90%	8.32%	4.58%
12/27/1989	12.50%	8.30%	4.20%
12/27/1989	13.00%	8.30%	4.70%
1/10/1990	12.80%	8.25%	4.55%
1/11/1990	12.90%	8.24%	4.66%
1/17/1990	12.80%	8.22%	4.58%
1/26/1990	12.00%	8.20%	3.80%
2/9/1990	12.10%	8.18%	3.92%
2/24/1990	12 86%	8 15%	4.71%
3/30/1990	12 90%	8 16%	4 74%
4/4/1990	15 76%	8 17%	7 50%
4/12/1000	12 52%	8 18%	4 3/10/
1/10/1000	12.52/0	8 200/	
+/13/133U	12.10%	0.20%	4.00%
5/21/1990	12.10%	0.∠ŏ%	J.0∠%
5/29/1990	12.40%	0.30%	4.10%
6/4/4000	12.00%	0.30%	3.10%
6/4/1990	12.90%	0.30%	4.00%
0/0/1990	12.25%	0.31%	3.94%
6/15/1990	13.20%	8.31%	4.89%
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6/20/1990	12.92%	8.32%	4.60%
6/27/1990	12.90%	8.33%	4.57%
6/29/1990	12.50%	8.33%	4.17%
7/6/1990	12.10%	8.34%	3.76%
7/6/1990	12.35%	8.34%	4.01%
8/10/1990	12.00%	8.40% 9.42%	4.15%
8/22/1000	13.21%	8 1 1%	4.79%
8/24/1990	13.00%	8 46%	4.00%
9/26/1990	11 45%	8 59%	2.86%
10/2/1990	13.00%	8.61%	4.39%
10/5/1990	12.84%	8.62%	4.22%
10/19/1990	13.00%	8.66%	4.34%
10/25/1990	12.30%	8.67%	3.63%
11/21/1990	12.70%	8.69%	4.01%
12/13/1990	12.30%	8.67%	3.63%
12/17/1990	12.87%	8.67%	4.20%
12/18/1990	13.10%	8.67%	4.43%
12/19/1990	12.00%	8.66%	3.34%
12/20/1990	12.75%	0.00% 9.66%	2 94%
12/21/1990	12.30%	8.66%	3.04 // 4 13%
1/2/1991	13 10%	8.65%	4 45%
1/4/1991	12 50%	8 65%	3 85%
1/15/1991	12.75%	8.64%	4.11%
1/25/1991	11.70%	8.63%	3.07%
2/4/1991	12.50%	8.61%	3.89%
2/7/1991	12.50%	8.59%	3.91%
2/12/1991	13.00%	8.58%	4.42%
2/14/1991	12.72%	8.57%	4.15%
2/22/1991	12.80%	8.55%	4.25%
3/6/1991	13.10%	8.53%	4.57%
3/8/1991	12.30%	8.52% 9.52%	3.78%
4/22/1991	13.00%	8 49%	4.51%
5/7/1991	13.50%	8.47%	5.03%
5/13/1991	13.25%	8.47%	4.78%
5/30/1991	12.75%	8.44%	4.31%
6/12/1991	12.00%	8.41%	3.59%
6/25/1991	11.70%	8.39%	3.31%
6/28/1991	12.50%	8.38%	4.12%
7/1/1991	12.00%	8.38%	3.62%
7/10/1001	12.30%	0.37%	4.13%
8/1/1991	12.90%	8.32%	4.58%
8/16/1991	13.20%	8.29%	4.91%
9/27/1991	12.50%	8.23%	4.27%
9/30/1991	12.25%	8.23%	4.02%
10/17/1991	13.00%	8.20%	4.80%
10/23/1991	12.50%	8.20%	4.30%
10/23/1991	12.55%	8.20%	4.35%
10/31/1991	11.80%	8.19%	3.61%
11/1/1991	12.00%	8.19% 9.10%	3.81%
11/12/1991	12.25%	8 18%	4.32%
11/12/1991	13.25%	8.18%	5.07%
11/25/1991	12.40%	8.18%	4.22%
11/26/1991	11.60%	8.18%	3.42%
11/26/1991	12.50%	8.18%	4.32%
11/27/1991	12.10%	8.18%	3.92%
12/18/1991	12.25%	8.15%	4.10%
12/19/1991	12.60%	8.15%	4.45%
12/19/1991	12.80%	8.15%	4.65%
1/0/1002	12.00%	8.14% 8.00%	4.51%
1/16/1992	12.00 %	8.07%	4.71%
1/21/1992	12.00%	8.06%	3.94%
1/22/1992	13.00%	8.06%	4.94%
1/27/1992	12.65%	8.06%	4.59%
1/31/1992	12.00%	8.05%	3.95%
2/11/1992	12.40%	8.03%	4.37%
2/25/1992	12.50%	8.01%	4.49%
3/16/1992	11.43%	7.99%	3.44%
3/18/1992	12.28%	7.98%	4.30%
4/2/1992 2/9/1992	12.10% 11.45%	7.90% 7.04%	4.10% 3.51%
4/10/1992	11.50%	7.94%	3.56%
4/14/1992	11.50%	7.93%	3.57%

5/5/1992	11.50%	7.90%	3.60%
5/12/1992	11.87%	7.89%	3.98%
5/12/1992	12.46%	7.89%	4.57%
6/1/1992	12.30%	7.87%	4.43%
6/12/1992	10.90%	7.86%	3.04%
6/26/1992	12.35%	7.85%	4.50%
6/29/1992	11.00%	7.85%	3.15%
6/30/1992	13.00%	7.85%	5.15%
7/13/1992	11.90%	7.84%	4.06%
7/13/1992	13.50%	7.84%	5.66%
7/22/1992	11.20%	7.83%	3.37%
8/3/1992	12.00%	7.81%	4.19%
8/6/1992	12.50%	7.80%	4.70%
9/22/1992	12.00%	7.71%	4.29%
9/28/1992	11.40%	7.71%	3.69%
9/30/1992	11.75%	7.70%	4.05%
10/2/1992	13.00%	7.70%	5.30%
10/12/1992	12.20%	7.70%	4.50%
10/16/1992	13.16%	7.70%	5.46%
10/30/1992	11.75%	7.71%	4.04%
11/3/1992	12.00%	7.71%	4.29%
12/3/1992	11.85%	7.68%	4.17%
12/15/1992	11.00%	7.66%	3.34%
12/16/1992	11.90%	7.66%	4.24%
12/16/1992	12.40%	7.66%	4.74%
12/17/1992	12.00%	7.66%	4.34%
12/22/1992	12.30%	7.65%	4.65%
12/22/1992	12.40%	7.65%	4.75%
12/29/1992	12.25%	7.63%	4.62%
12/30/1992	12.00%	7.63%	4.37%
12/31/1992	11.90%	7.63%	4.27%
1/12/1993	12.00%	7.61%	4.39%
1/21/1993	11.25%	7.59%	3.66%
2/2/1993	11.40%	7.56%	3.84%
2/15/1993	12.30%	7.52%	4.78%
2/24/1993	11.90%	7.49%	4.41%
2/26/1993	11.80%	7.48%	4.32%
2/26/1993	12.20%	7.48%	4.72%
4/23/1993	11.75%	7.29%	4.40%
5/11/1993	11.75%	7.25%	4.30 %
5/25/1003	11.50%	7.24/0	4.20%
5/28/1993	11.00%	7 22%	3 78%
6/3/1993	12.00%	7.21%	4.79%
6/16/1993	11.50%	7.19%	4.31%
6/18/1993	12.10%	7.18%	4.92%
6/25/1993	11.67%	7.17%	4.50%
7/21/1993	11.38%	7.10%	4.28%
7/23/1993	10.46%	7.09%	3.37%
8/24/1993	11.50%	6.96%	4.54%
9/21/1993	10.50%	6.81%	3.69%
9/29/1993	11.47%	6.77%	4.70%
9/30/1993	11.60%	6.76%	4.84%
11/2/1993	10.80%	6.61%	4.19%
11/12/1993	12.00%	6.57%	5.43%
11/26/1993	11.00%	6.52%	4.48%
12/14/1993	10.55%	6.48%	4.07%
12/16/1993	10.60%	6.48%	4.12%
12/21/1993	11.30%	6.47%	4.83%
1/4/1994	10.07%	6.45%	3.62%
1/13/1994	11.00%	6.42%	4.58%
1/21/1994	11.00%	6.40%	4.60%
1/28/1994	11.35%	6.39%	4.96%
2/3/1994	11.40%	6.38%	5.02%
2/17/1994	10.60%	0.30%	4.24%
2/25/1994	12.00%	6 26%	4.09%
3/1/100/	11 00%	6 35%	1 65%
3/4/100/	11 00%	6.35%	4 65%
4/25/1994	11 00%	6 41%	4 59%
5/10/1994	11 75%	6 45%	5 30%
5/13/1994	10.50%	6.46%	4.04%
6/3/1994	11.00%	6.53%	4.47%
6/27/1994	11.40%	6.64%	4.76%
8/5/1994	12.75%	6.87%	5.88%
10/31/1994	10.00%	7.32%	2.68%
11/9/1994	10.85%	7.38%	3.47%
11/9/1994	10.85%	7.38%	3.47%
11/18/1994	11.20%	7.45%	3.75%

11/22/1994	11.60%	7.46%	4.14%
11/28/1994	11.06%	7.49%	3.57%
12/8/1994	11.50%	7.54%	3.96%
12/8/1994	11.70%	7.54%	4.16%
12/14/1994	10.95%	7.56%	3.39%
12/13/1994	11.50%	7.57%	3.93%
12/19/1994	12 15%	7.57%	3.93 % 4 54%
1/0/1005	12.13%	7.64%	4 64%
1/31/1995	11.00%	7.68%	3.32%
2/10/1995	12 60%	7 70%	4 90%
2/17/1995	11.90%	7.70%	4.20%
3/9/1995	11.50%	7.71%	3.79%
3/20/1995	12.00%	7.72%	4.28%
3/23/1995	12.81%	7.72%	5.09%
3/29/1995	11.60%	7.72%	3.88%
4/6/1995	11.10%	7.71%	3.39%
4/7/1995	11.00%	7.71%	3.29%
4/19/1995	11.00%	7.70%	3.30%
5/12/1995	11.63%	7.68%	3.95%
5/25/1995	11.20%	7.65%	3.55%
6/9/1995	11.25%	7.60%	3.65%
6/21/1995	12.25%	7.50%	4.09%
0/30/1995	11.10%	7.32%	3.00%
9/11/1995	11.30%	7.21%	4.09%
9/27/1995	11.50%	7.13%	4.17 /0
9/27/1995	11.30%	7.13%	4 62%
9/29/1995	11.00%	7 12%	3.88%
11/9/1995	11.38%	6.90%	4.48%
11/9/1995	12.36%	6.90%	5.46%
11/17/1995	11.00%	6.86%	4.14%
12/4/1995	11.35%	6.78%	4.57%
12/11/1995	11.40%	6.75%	4.65%
12/20/1995	11.60%	6.70%	4.90%
12/27/1995	12.00%	6.67%	5.33%
2/5/1996	12.25%	6.48%	5.77%
3/29/1996	10.67%	6.42%	4.25%
4/8/1996	11.00%	6.42%	4.58%
4/11/1996	12.59%	6.43%	6.16%
4/11/1990	12.39%	0.43% 6.44%	0.10%
4/24/1990	11.25%	6.43%	4.01%
5/13/1996	11.00%	6 44%	4 56%
5/23/1996	11.25%	6.44%	4.81%
6/25/1996	11.25%	6.48%	4.77%
6/27/1996	11.20%	6.48%	4.72%
8/12/1996	10.40%	6.57%	3.83%
9/27/1996	11.00%	6.70%	4.30%
10/16/1996	12.25%	6.76%	5.49%
11/5/1996	11.00%	6.80%	4.20%
11/26/1996	11.30%	6.83%	4.47%
12/18/1996	11.75%	6.83%	4.92%
12/31/1996	11.50%	6.83%	4.67%
2/12/1997	11.70%	0.03% 6.92%	3.87%
2/13/1997	11.80%	6.82%	4.90 %
3/31/1997	10.02%	6.80%	3 22%
4/2/1997	11.65%	6.80%	4.85%
4/28/1997	11.50%	6.81%	4.69%
4/29/1997	11.70%	6.81%	4.89%
7/17/1997	12.00%	6.77%	5.23%
12/12/1997	11.00%	6.61%	4.39%
12/23/1997	11.12%	6.57%	4.55%
2/2/1998	12.75%	6.40%	6.35%
3/2/1998	11.25%	6.29%	4.96%
3/6/1998	10.75%	6.27%	4.48%
3/20/1998	10.50%	6.23%	4.27%
4/30/1998	12.20%	6.12%	6.08%
0/15/1009	11.40%	5.94% 5.70%	5.46% 6 1 0%
3/13/1398 11/30/1009	12 60%	5 5 8 %	0.12% 7.∩2%
12/10/1998	12.00%	5.55%	6 65%
12/17/1998	12.10%	5.52%	6.58%
2/5/1999	10.30%	5.39%	4.91%
3/4/1999	10.50%	5.34%	5.16%
4/6/1999	10.94%	5.32%	5.62%
7/29/1999	10.75%	5.51%	5.24%
9/23/1999	10.75%	5.70%	5.05%

11/17/1999	11.10%	5.89%	5.21%
1/7/2000	11.50%	6.04%	5.46%
1/7/2000	11.50%	6.04%	5.46%
2/17/2000	10.60%	6.17%	4.43%
3/28/2000	11.25%	6.19%	5.06%
5/24/2000	11.00%	6.18%	4.82%
7/18/2000	12.20%	6.16%	6.04%
9/29/2000	11 16%	6.03%	5 13%
11/28/2000	12 90%	5 89%	7 01%
11/20/2000	12.00%	5 88%	6.22%
1/22/2000	11.00%	5.00%	0.2270 E 460/
1/23/2001	11.20%	5.79%	5.40%
2/0/2001	11.50%	5.77%	5.75%
5/8/2001	10.75%	5.62%	5.13%
6/26/2001	11.00%	5.62%	5.38%
7/25/2001	11.02%	5.60%	5.42%
7/25/2001	11.02%	5.60%	5.42%
7/31/2001	11.00%	5.59%	5.41%
8/31/2001	10.50%	5.56%	4.94%
9/7/2001	10.75%	5.55%	5.20%
9/10/2001	11.00%	5.55%	5.45%
9/20/2001	10.00%	5.55%	4.45%
10/24/2001	10.30%	5.54%	4.76%
11/28/2001	10.60%	5.49%	5.11%
12/3/2001	12 88%	5 49%	7 39%
12/20/2001	12.00%	5 50%	7.00%
1/22/2001	12.30%	5.50%	1.00%
1/22/2002	10.00%	5.50%	4.50%
3/27/2002	10.10%	5.45%	4.65%
4/22/2002	11.80%	5.45%	6.35%
5/28/2002	10.17%	5.46%	4.71%
6/10/2002	12.00%	5.47%	6.53%
6/18/2002	11.16%	5.48%	5.68%
6/20/2002	11.00%	5.48%	5.52%
6/20/2002	12.30%	5.48%	6.82%
7/15/2002	11.00%	5.47%	5.53%
9/12/2002	12.30%	5.45%	6.85%
9/26/2002	10 45%	5 41%	5 04%
12/4/2002	11 55%	5 29%	6 26%
12/13/2002	11.00%	5 27%	6.48%
12/20/2002	11.70%	5 25%	6 15%
1/9/2002	11.40%	5.25%	0.1370 E 010/
1/0/2003	10.10%	5.19%	7 2 2 2 0/
1/31/2003	12.45%	5.13%	7.32%
2/28/2003	12.30%	5.05%	7.25%
3/6/2003	10.75%	5.03%	5.72%
3/7/2003	9.96%	5.02%	4.94%
3/20/2003	12.00%	4.99%	7.01%
4/3/2003	12.00%	4.96%	7.04%
4/15/2003	11.15%	4.94%	6.21%
6/25/2003	10.75%	4.79%	5.96%
6/26/2003	10.75%	4.79%	5.96%
7/9/2003	9.75%	4.79%	4.96%
7/16/2003	9.75%	4.79%	4.96%
7/25/2003	9.50%	4.80%	4.70%
8/26/2003	10 50%	4 83%	5 67%
12/17/2003	9.85%	4 93%	4 92%
12/17/2003	10 70%	4.03%	5 77%
12/17/2003	11 50%	4.93%	6.56%
12/10/2003	12.00%	4.04%	7.060/
12/19/2003	12.00%	4.94%	7.00%
12/19/2003	12.00%	4.94%	7.06%
12/23/2003	10.50%	4.94%	5.56%
1/13/2004	12.00%	4.95%	7.05%
3/2/2004	10.75%	4.98%	5.77%
3/26/2004	10.25%	5.02%	5.23%
4/5/2004	11.25%	5.03%	6.22%
5/18/2004	10.50%	5.07%	5.43%
5/25/2004	10.25%	5.08%	5.17%
5/27/2004	10.25%	5.08%	5.17%
6/2/2004	11.22%	5.08%	6.14%
6/30/2004	10 50%	5 10%	5 40%
6/30/2004	10.50%	5 10%	5 40%
7/16/2004	11 60%	5 1 1 0/0	6 100/
0/25/2004	10.00%	0.11% E 100/	0.49%
0/20/2004	10.20%	5.10%	5.15%
9/9/2004	10.40%	5.10%	5.30%
11/9/2004	10.50%	5.06%	5.44%
11/23/2004	11.00%	5.06%	5.94%
12/14/2004	10.97%	5.06%	5.91%
12/21/2004	11.25%	5.07%	6.18%
12/21/2004	11.50%	5.07%	6.43%
12/22/2004	10.70%	5.07%	5.63%
12/22/2004	11.50%	5.07%	6.43%

12/29/2004	9.85%	5.07%	4.78%
1/6/2005	10.70%	5.08%	5.62%
2/18/2005	10.30%	4.98%	5.32%
2/25/2005	10.50%	4.96%	5.54%
3/10/2005	11.00%	4.93%	6.07%
3/24/2005	10.30%	4.90%	5.40%
4/4/2005	10.00%	4.88%	5.12%
4/7/2005	10.25%	4.87%	5.38%
5/18/2005	10.25%	4.78%	5.47%
5/25/2005	10.75%	4.77%	5.98%
5/26/2005	9.75%	4.76%	4.99%
6/1/2005	9.75%	4.75%	5.00%
7/19/2005	11.50%	4.65%	6.85%
8/5/2005	11.75%	4.62%	7.13%
8/15/2005	10.13%	4.62%	5.51%
9/28/2005	10.00%	4.54%	5.46%
10/4/2005	10.75%	4.54%	6.21%
12/12/2005	11.00%	4.55%	6.45%
12/13/2005	10.75%	4.55%	6.20%
12/21/2005	10.29%	4.55%	5.74%
12/21/2005	10.40%	4.55%	5.85%
12/22/2005	11.00%	4.54%	6.46%
12/22/2005	11.15%	4.54%	6.61%
12/28/2005	10.00%	4.54%	5.46%
12/28/2005	10.00%	4.54%	5.46%
1/5/2006	11.00%	4.53%	6.47%
1/27/2006	9.75%	4.52%	5.23%
3/3/2006	10.39%	4 53%	5 86%
4/17/2006	10 20%	4 61%	5 59%
4/26/2006	10.60%	4 64%	5.96%
5/17/2006	11.60%	4 69%	6 91%
6/6/2006	10.00%	4 74%	5 26%
6/27/2006	10.00%	4 80%	5 95%
7/6/2006	10.70%	4.82%	5 38%
7/24/2006	9.60%	4.86%	4 74%
7/26/2006	10 50%	4.86%	5.64%
7/28/2006	10.00%	4.86%	5 19%
8/23/2006	0.55%	4.00%	1 66%
9/1/2006	10 54%	4.03%	5 65%
9/1/2000	10.04%	4.03%	5 10%
10/6/2006	9.67%	4.30%	1 75%
11/20/2006	9.07 %	4.52 /0	4.75%
11/21/2006	10.08%	4.00%	5 13%
11/21/2000	10.00%	4.00%	5 13%
11/21/2000	10.00%	4.35%	5 17%
12/1/2006	10.12%	4.35%	5 30%
12/1/2000	10.20%	4.35%	5 55%
12/1/2000	10.30%	4.35%	5 80%
12/1/2000	10.75%	4.05%	5.00%
12/21/2000	11.30%	4.95%	6 20%
12/21/2000	10.25%	4.95%	5 20%
1/5/2007	10.20%	4.95%	5.05%
1/11/2007	10.00%	4.95%	5.05%
1/11/2007	10.10%	4.95%	5 15%
1/11/2007	10.10%	4.95%	5.15%
1/11/2007	10.90%	4.95%	5.95% E 1E0/
1/12/2007	10.10%	4.95%	5.15%
1/13/2007	10.40%	4.95%	5.45%
2/21/2007	10.00%	4.94%	0.00% 6.400/
3/21/2007	0.75%	4.07 /0	4 000/
5/22/2007	9.75%	4.07 %	4.00%
5/15/2007	10.00%	4.01%	5.19%
5/17/2007	10.25%	4.81%	5.44%
5/17/2007	10.25%	4.81%	5.44%
5/22/2007	10.20%	4.81%	5.39%
5/22/2007	10.50%	4.81%	5.69%
5/23/2007	10.70%	4.81%	5.89%
5/25/2007	9.67%	4.81%	4.80%
6/24/2007	9.90%	4.02% 1.02%	5.08% F 370/
6/22/2007	10.20%	4.03%	5.31% F 670/
6/20/2007	10.30%	4.03%	J.U/%
0/20/2007	10.75%	4.04%	0.91%
7/12/2007	9.01%	4.00%	4.01%
7/19/2007	10.00%	4.07%	J.13%
7/19/2007	10.00%	4.87%	5.13%
8/15/2007	10.40%	4.88%	5.52%
10/9/2007	10.00%	4.91%	5.09%
10/17/2007	9.10%	4.91%	4.19%
10/31/2007	9.96%	4.90%	5.06%
11/29/2007	10.90%	4.87%	6.03%

12/6/2007	10.75%	4.86%	5.89%
12/13/2007	9.90%	4.86%	5.04%
12/13/2007	9.96%	4.86%	5.10%
12/14/2007	10.70%	4.86%	5.84%
12/14/2007	10.80%	4.86%	5.94%
12/19/2007	10.20%	4.85%	5.35%
12/20/2007	10.20%	4.85%	5.35%
12/20/2007	11.00%	4.85%	6.15%
12/28/2007	10.25%	4.85%	5.40%
12/31/2007	11.25%	4.85%	6.40%
1/8/2008	10.75%	4.83%	5.92%
1/17/2008	10.75%	4.82%	5.93%
1/28/2008	9.40%	4.80%	4.60%
1/30/2008	10.00%	4.79%	5.21%
1/31/2008	10.71%	4.79%	5.92%
2/29/2008	10.25%	4.75%	5.50%
3/12/2008	10.25%	4.73%	5.52%
3/25/2008	9.10%	4.69%	4.41%
3/31/2008	12.12%	4.67%	7.45%
4/22/2008	10.25%	4.61%	5.64%
4/24/2008	10.10%	4.60%	5.50%
5/1/2008	10.70%	4.59%	6.11%
5/19/2008	11.00%	4.57%	6.43%
5/27/2008	10.00%	4.55%	5.45%
6/10/2008	10.70%	4.54%	6.16%
6/27/2008	10.50%	4.54%	5.96%
6/27/2008	11.04%	4.54%	6.50%
7/10/2008	10.43%	4.52%	5.91%
7/16/2008	9.40%	4.52%	4.88%
7/30/2008	10.80%	4.51%	6.29%
7/31/2008	10.70%	4.51%	6.19%
8/11/2008	10.25%	4.51%	5.74%
8/26/2008	10.18%	4.50%	5.68%
9/10/2008	10.30%	4.50%	5.80%
9/24/2008	10.65%	4.48%	6.17%
9/24/2008	10.65%	4.48%	6.17%
9/24/2008	10.65%	4.48%	6.17%
9/30/2008	10.20%	4.48%	5.72%
10/8/2008	10.15%	4.46%	5.69%
10/15/2008	10.10%	4.46%	5.64%
11/13/2008	10.55%	4.45%	6.10%
11/17/2008	10.20%	4.44%	5.76%
12/1/2008	10.25%	4.40%	5.85%
12/23/2008	11.00%	4.27%	6.73%
12/29/2008	10.00%	4.24%	5.76%
12/29/2008	10.20%	4.24%	5.96%
12/31/2008	10.75%	4.22%	6.53%
1/14/2009	10.50%	4.15%	6.35%
1/14/2009	10.60%	4.15%	6.45%
1/21/2009	10.50%	4.12%	6.38%
1/21/2009	10.50%	4.12%	6.38%
1/21/2009	10.50%	4.12%	6.38%
1/27/2009	10.76%	4.09%	6.67%
1/30/2009	10.50%	4.08%	6.42%
2/4/2009	8.75%	4.06%	4.69%
3/4/2009	10.50%	3.97%	6.53%
3/12/2009	11.50%	3.93%	7.57%
4/2/2009	11.10%	3.86%	7.24%
4/21/2009	10.61%	3.80%	6.81%
4/24/2009	10.00%	3.79%	6.21%
4/30/2009	11.25%	3.78%	7.47%
5/4/2009	10.74%	3.77%	6.97%
5/20/2009	10.25%	3.75%	6.50%
5/28/2009	10.50%	3.75%	6.75%
5/29/2009	10.50%	3.75%	6.75%
6/22/2009	10.00%	3.77%	6.23%
6/24/2009	10.80%	3.77%	7.03%
7/8/2009	10.63%	3.77%	6.86%
7/17/2009	10.50%	3.78%	6.72%
8/31/2009	10.25%	3.82%	6.43%
10/14/2009	10.70%	4.01%	6.69%
10/23/2009	10.88%	4.05%	6.83%
11/2/2009	10.70%	4.09%	6.61%
11/3/2009	10.70%	4.09%	6.61%
11/24/2009	10.25%	4.15%	6.10%
11/25/2009	10.75%	4.15%	6.60%
11/30/2009	10.35%	4.16%	6.19%
12/3/2009	10.50%	4.17%	6.33%
12/7/2009	10.70%	4.18%	6.52%

12/16/2009	10.90%	4.21%	6.69%
12/16/2009	11.00%	4.21%	6.79%
12/18/2009	10.40%	4.22%	6.18%
12/18/2009	10.40%	4.22%	6.18%
12/22/2009	10.20%	4.23%	5.97%
12/22/2009	10.40%	4.23%	6.17%
12/22/2009	10.40%	4.23%	6.17%
12/30/2009	10.00%	4.26%	5.74%
1/4/2010	10.80%	4.21%	0.03% 6 70%
1/11/2010	10.12%	4.30%	5 79%
1/20/2010	10.13%	4.35%	6.05%
1/27/2010	10.40%	4.35%	6.05%
1/27/2010	10.70%	4.35%	6.35%
2/9/2010	9.80%	4.38%	5.42%
2/18/2010	10.60%	4.40%	6.20%
2/24/2010	10.18%	4.41%	5.77%
3/2/2010	9.63%	4.41%	5.22%
3/4/2010	10.50%	4.41%	6.09%
3/5/2010	10.50%	4.41%	6.09%
3/11/2010	11.90%	4.42%	7.48%
3/11/2010	12.30%	4.42%	7.88%
3/11/2010	12.30%	4.42%	7.88%
3/17/2010	10.00%	4.42%	5.58%
3/25/2010	10.15%	4.42%	5.73%
4/2/2010	10.10%	4.43%	5.67%
4/27/2010	10.00%	4.46%	5.54%
4/29/2010	9.90%	4.40%	5.44%
4/29/2010	10.00%	4.40%	5.00%
4/29/2010 5/12/2010	10.20%	4.40%	5.84%
5/12/2010	10.30%	4 46%	5.84%
5/28/2010	10.00%	4 44%	5.66%
5/28/2010	10.20%	4.44%	5.76%
6/7/2010	10.30%	4.44%	5.86%
6/16/2010	10.00%	4.44%	5.56%
6/28/2010	9.67%	4.43%	5.24%
6/28/2010	10.50%	4.43%	6.07%
6/30/2010	9.40%	4.43%	4.97%
7/1/2010	10.25%	4.43%	5.82%
7/15/2010	10.53%	4.43%	6.10%
7/15/2010	10.70%	4.43%	6.27%
7/30/2010	10.70%	4.41%	6.29%
8/4/2010	10.50%	4.41%	6.09%
8/25/2010	9.03%	4.41%	5.53%
9/3/2010	10.60%	4.35%	6 25%
9/14/2010	10.70%	4.33%	6.37%
9/16/2010	10.00%	4.33%	5.67%
9/16/2010	10.00%	4.33%	5.67%
9/30/2010	9.75%	4.29%	5.46%
9/30/2010	11.00%	4.29%	6.71%
10/14/2010	10.35%	4.24%	6.11%
10/28/2010	10.70%	4.21%	6.49%
11/2/2010	10.38%	4.20%	6.18%
11/4/2010	10.70%	4.20%	6.50%
11/19/2010	10.20%	4.18%	6.02%
11/22/2010	10.00%	4.18%	5.82%
12/1/2010	10.13%	4.16%	5.97%
12/6/2010	9.86%	4.16%	5.70%
12/9/2010	10.25%	4.15%	6.10%
12/13/2010	10.70%	4.15%	5.98%
12/15/2010	10.10%	4 15%	6 29%
12/17/2010	10.00%	4.15%	5.85%
12/20/2010	10.60%	4.15%	6.45%
12/21/2010	10.30%	4.15%	6.15%
12/27/2010	9.90%	4.14%	5.76%
12/29/2010	11.15%	4.14%	7.01%
1/5/2011	10.15%	4.13%	6.02%
1/12/2011	10.30%	4.13%	6.17%
1/13/2011	10.30%	4.13%	6.17%
1/18/2011	10.00%	4.12%	5.88%
1/20/2011	9.30%	4.12%	5.18%
1/20/2011	10.13%	4.12%	6.01%
1/31/2011	9.00%	4.1∠% / 1.2%	5.48%
2/3/2011	10.00%	+.1∠% 1/10/	5.26%
3/22/2011	12.30%	4.17%	8,13%
			2

2/22/2011	12 200/	1 1 70/	0 1 2 0/
3/22/2011	12.30%	4.17 /0	0.13/0 E COV
3/25/2011	9.80%	4.18%	5.62%
3/30/2011	10.00%	4.18%	5.82%
4/12/2011	10.00%	4.21%	5.79%
4/25/2011	10.74%	4.23%	6.51%
4/26/2011	9.67%	4.23%	5.44%
4/27/2011	10.40%	4.23%	6.17%
5/4/2011	10.00%	4.24%	5.76%
5/4/2011	10.00%	4 24%	5 76%
5/12/2011	11 25%	4.25%	7 10%
5/13/2011	10.50%	4.23 /0	6.000/
5/24/2011	10.50%	4.27%	6.23%
6/8/2011	10.75%	4.30%	6.45%
6/16/2011	9.20%	4.31%	4.89%
6/17/2011	9.95%	4.31%	5.64%
7/13/2011	10.20%	4.36%	5.84%
8/1/2011	9.20%	4.38%	4.82%
8/8/2011	10 00%	4 38%	5 62%
8/11/2011	10.00%	4 37%	5 63%
9/12/2011	10.25%	4.37%	5 09%
0/12/2011	10.35%	4.37 /0	5.90%
8/19/2011	10.25%	4.36%	5.89%
9/2/2011	12.88%	4.32%	8.56%
9/22/2011	10.00%	4.24%	5.76%
10/12/2011	10.30%	4.14%	6.16%
10/20/2011	10.50%	4.10%	6.40%
11/30/2011	10.90%	3.88%	7.02%
12/14/2011	10 00%	3 80%	6 20%
12/14/2011	10 30%	3 80%	6 50%
12/14/2011	10.00%	2 770/	6 420/
12/20/2011	10.20%	3.77 /0	0.4370
12/21/2011	10.20%	3.76%	0.44%
12/22/2011	9.90%	3.75%	6.15%
12/22/2011	10.40%	3.75%	6.65%
12/23/2011	10.19%	3.75%	6.44%
1/3/2012	11.40%	3.69%	7.71%
1/25/2012	10.50%	3.57%	6.93%
1/27/2012	10.50%	3.56%	6.94%
2/2/2012	11.40%	3.53%	7.87%
2/15/2012	10 20%	3 48%	6 72%
2/10/2012	0.00%	2 1 1 9/	6 /6%
2/23/2012	9.90 %	3.44 /0	0.40 /0
2/27/2012	10.25%	3.43%	0.82%
2/29/2012	10.40%	3.42%	6.98%
3/16/2012	12.40%	3.36%	9.04%
3/20/2012	11.40%	3.35%	8.05%
3/23/2012	11.40%	3.34%	8.06%
3/29/2012	10.37%	3.32%	7.05%
4/4/2012	10.00%	3.30%	6.70%
4/26/2012	10 00%	3 21%	6 79%
5/2/2012	10.00%	3 19%	6.81%
5/2/2012	0.00%	2 1 70/	6 6 20/
5/1/2012	9.00%	3.17%	0.03%
5/15/2012	10.00%	3.15%	6.85%
5/29/2012	10.05%	3.11%	6.94%
6/7/2012	10.30%	3.08%	7.22%
6/14/2012	9.40%	3.06%	6.34%
6/15/2012	10.40%	3.06%	7.34%
6/18/2012	9.60%	3.06%	6.54%
6/19/2012	9 25%	3 05%	6 20%
6/26/2012	10 10%	3.04%	7.06%
6/20/2012	10.00%	3 0/1%	6 060/0
7/0/2012	10.00%	3.04%	0.90%
7/9/2012	10.20%	3.03%	7.17%
//16/2012	9.80%	3.02%	6.78%
7/20/2012	9.31%	3.01%	6.30%
7/20/2012	9.81%	3.01%	6.80%
Average			4.33%
Number of Cases			1,357

Small Size Premium

	[1]	[2]	
	Customers (Mil)	(\$Bil)	
South Carolina Electric & Gas	0.7	\$2.54	_
Median Market to Book for Comp Group		1.36	
SCE&G Implied Market Capitalization		\$3.46	

		[3]	[4]	[5]
			Market Cap	Market to
Company Name	Ticker	Customers (Mil)	(\$Bil)	Book Ratio
American Electric Power Company, Inc.	AEP	4.3	\$20.45	1.36
Cleco Corporation	CNL	0.3	\$2.62	1.79
Empire District Electric Company	EDE	0.2	\$0.91	1.30
Great Plains Energy Inc.	GXP	0.8	\$3.11	1.04
IDACORP, Inc.	IDA	0.5	\$2.13	1.26
Otter Tail Corporation	OTTR	0.1	\$0.85	1.57
Pinnacle West Capital Corporation	PNW	1.1	\$5.83	1.54
PNM Resources, Inc.	PNM	0.7	\$1.63	1.02
Portland General Electric Company	POR	0.8	\$2.06	1.21
Southern Company	SO	4.4	\$41.18	2.28
Westar Energy, Inc.	WR	0.7	\$3.83	1.38
MEDIAN		0.7	\$2.62	1.36
MEAN		1.3	\$7.69	1.43

	Market Capitalization (\$Mil) [6]				
Deeile		Low		Lliab	
Declie		LOW		⊓ign	Size Premium
2	\$	6,927.557	\$	15,408.314	0.78%
3	\$	3,596.535	\$	6,896.389	0.94%
4	\$	2,366.464	\$	3,577.774	1.17%
5	\$	1,621.096	\$	2,362.532	1.74%
6	\$	1,090.652	\$	1,620.860	1.75%
7	\$	683.059	\$	1,090.515	1.77%
8	\$	422.999	\$	682.750	2.51%
9	\$	206.802	\$	422.811	2.80%
10	\$	1.028	\$	206.795	6.10%

Notes:

- [1] SEC Form 10-K for the Year Ended December 31, 2011
- [2] Application for Increase in Rates
- [3] Source: SNL Financial
- [4] Source: Bloomberg, 30-day average
- [5] Source: Bloomberg, 30-day average

[6] Source: Ibbotson Associates, 2012 Valuation Yearbook, "Key Variables in Estimating Cost of Capital."

Flotation Cost Adjustment

Two most recent open market common stock	issuances per company, if available
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						Net	Total			
		Shares	Offering	Underwriting	Offering	Proceeds Per	Flotation	Gross Equity Issue		Flotation Cost
Company	Date	Issued	Price	Discount	Expense	Share	Costs	Before Costs	Net Proceeds	Percentage
SCANA Corporation	5/11/2010	8 222 500	\$37.00	\$1 2050	\$350.000	\$35.66	\$10 008 138	\$304 232 500	\$203 234 363	3 615%
SCANA Corporation	12/31/2008	2 875 000	\$35.50	\$0.5325	\$350,000	\$34.85	\$1 880 938	\$102,062,500	\$100 181 563	1 843%
	12/01/2000	2,010,000	<i>\\</i> 00.00	\$0.00 <u>2</u> 0	<i>Q</i> OOOOOOOOOOOOO	\$0 1100	\$1,000,000	\$10 <u>2</u> ,00 <u>2</u> ,000	\$100,101,000	1101070
American Electric Power Company, Inc.	4/1/2009	69,000,000	\$24.50	\$0.7350	\$400,000	\$23.76	\$51,115,000	\$1,690,500,000	\$1,639,385,000	3.024%
American Electric Power Company, Inc.	2/27/2003	57,500,000	\$20.95	\$0.6285	\$550,000	\$20.31	\$36,688,750	\$1,204,625,000	\$1,167,936,250	3.046%
Cleco Corp.	8/14/2006	6,900,000	\$23.75	\$0.8900	\$225,000	\$22.83	\$6,366,000	\$163,875,000	\$157,509,000	3.885%
Cleco Corp.	11/9/2004	2,000,000	\$18.50	\$0.6475	\$200,000	\$17.75	\$1,495,000	\$37,000,000	\$35,505,000	4.041%
Empire District Electric	12/6/2007	3,450,000	\$23.00	\$0.9775	\$250,000	\$21.95	\$3,622,375	\$79,350,000	\$75,727,625	4.565%
Empire District Electric	6/15/2006	3,795,000	\$20.25	\$0.8600	\$250,000	\$19.32	\$3,513,700	\$76,848,750	\$73,335,050	4.572%
Great Plains Energy Inc.	5/12/2009	11,500,000	\$14.00	\$0.4900	\$500,000	\$13.47	\$6,135,000	\$161,000,000	\$154,865,000	3.811%
Great Plains Energy Inc.	5/17/2006	7,002,450	\$27.50	\$0.8938	\$500,000	\$26.53	\$6,758,790	\$192,567,375	\$185,808,585	3.510%
IDACORP, Inc.	12/9/2004	4,025,000	\$30.00	\$1.2000	\$300,000	\$28.73	\$5,130,000	\$120,750,000	\$115,620,000	4.248%
Otter Tail Corporation	9/19/2008	5,175,000	\$30.00	\$1.0875	\$400,000	\$28.84	\$6,027,813	\$155,250,000	\$149,222,188	3.883%
Otter Tail Corporation	12/7/2004	3,335,000	\$25.45	\$0.9500	\$300,000	\$24.41	\$3,468,250	\$84,875,750	\$81,407,500	4.086%
Pinnacle West Capital Corp.	4/8/2010	6,900,000	\$38.00	\$1.3300	\$190,000	\$36.64	\$9,367,000	\$262,200,000	\$252,833,000	3.572%
Pinnacle West Capital Corp.	4/27/2005	6,095,000	\$42.00	\$1.3650	\$250,000	\$40.59	\$8,569,675	\$255,990,000	\$247,420,325	3.348%
PNM Resources, Inc.	12/6/2006	5,750,000	\$30.79	\$1.0780	\$250,000	\$29.67	\$6,448,500	\$177,042,500	\$170,594,000	3.642%
PNM Resources, Inc.	3/23/2005	3,910,000	\$26.76	\$0.8697	\$200,000	\$25.84	\$3,600,527	\$104,631,600	\$101,031,073	3.441%
Portland General Electric Company	3/5/2009	12,477,500	\$14.10	\$0.4935	\$375,000	\$13.58	\$6,532,646	\$175,932,750	\$169,400,104	3.713%
Portland General Electric Company	6/12/2007	23,658,106	\$26.00	\$0.7800	\$700,000	\$25.19	\$19,153,323	\$615,110,756	\$595,957,433	3.114%
Southern Company	12/6/2000	28,750,000	\$28.50	\$0.9200	\$490,000	\$27.56	\$26,940,000	\$819,375,000	\$792,435,000	3.288%
Westar Energy, Inc.	11/4/2010	8,625,000	\$25.54	\$0.8939	\$250,000	\$24.62	\$7,959,888	\$220,282,500	\$212,322,613	3.613%
Westar Energy, Inc.	5/29/2008	6,900,000	\$24.28	\$0.8498	\$325,000	\$23.38	\$6,188,620	\$167,532,000	\$161,343,380	3.694%
Mean							\$10,816,360	\$325 956 090		

WEIGHTED AVERAGE FLOTATION COSTS: 3.318%

Constant Crowth Discounted Cook Flow Medal Adjusted for Eletation Costs 20 Day Au	vorogo Ctool Drigo
Constant Growth Discounted Cash Flow Model Adjusted for Flotation Costs - 30 Day Av	

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
			Average		Expected [Dividend Yield	Zacks	First Call	Value Line	Average		Flotation
		Annualized	Stock	Dividend		Adjusted for	Earnings	Earnings	Earnings	Earnings		Adjusted
Company	Ticker	Dividend	Price	Yield	Current	Flot. Costs	Growth	Growth	Growth	Growth	DCF k(e)	DCF k(e)
Amorican Electric Power Company, Inc.	AED	¢1 00	¢42.10	1 169/	1 5 1 9/	4 70%	2 60%	2 270/	4 50%	2 0 20/	0 260/	9 5 2 9/
American Electric Power Company, Inc.	ALF	\$1.00 \$1.05	\$42.19 \$40.00	4.40 %	4.04 /0	4.70%	3.00 %	3.37 %	4.50%	3.02 /0	0.30%	0.52 %
Cleco Corp.	CNL	\$1.35	\$43.09	3.13%	3.21%	3.32%	N/A	3.00%	6.50%	4.75%	7.96%	8.07%
Empire District Electric	EDE	\$1.00	\$21.46	4.66%	4.85%	5.01%	N/A	10.20%	6.00%	8.10%	12.95%	13.11%
Great Plains Energy Inc.	GXP	\$0.85	\$22.07	3.85%	3.98%	4.11%	7.75%	6.50%	5.50%	6.58%	10.56%	10.70%
IDACORP, Inc.	IDA	\$1.32	\$42.56	3.10%	3.16%	3.27%	5.00%	4.00%	2.00%	3.67%	6.82%	6.93%
Otter Tail Corporation	OTTR	\$1.19	\$23.38	5.09%	5.38%	5.56%	5.00%	5.00%	24.00%	11.33%	16.71%	16.90%
Pinnacle West Capital Corp.	PNW	\$2.10	\$53.21	3.95%	4.06%	4.20%	5.90%	6.52%	5.00%	5.81%	9.87%	10.01%
PNM Resources, Inc.	PNM	\$0.58	\$20.43	2.84%	3.00%	3.11%	9.30%	9.30%	16.00%	11.53%	14.54%	14.64%
Portland General Electric Company	POR	\$1.08	\$27.26	3.96%	4.05%	4.19%	4.13%	3.63%	5.50%	4.42%	8.47%	8.61%
Southern Company	SO	\$1.96	\$47.30	4.14%	4.25%	4.40%	5.06%	5.38%	5.00%	5.15%	9.40%	9.54%
Westar Energy, Inc.	WR	\$1.32	\$30.37	4.35%	4.47%	4.63%	6.09%	4.80%	6.50%	5.80%	10.27%	10.42%

PROXY GROUP MEAN

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

 Ifolation cost). The flotation cost adjustment and the DCF result adjusted for flotation costs.
Source: Bloomberg Professional
Equals [1] / [2]
Equals [3] x (1 + 0.5 x [9])
Equals [4] / (1 - 0.0332)
Source: Zacke [6] Source: Zacks [7] Source: Yahoo! Finance [8] Source: Value Line [8] Source: Value Line [9] Equals Average([6], [7], [8]) [10] Equals [4] + [9] [11] Equals [5] + [9] [12] Equals average [11] - average [10]

10.54% 10.68%

DCF Result Adjusted For Flotation Costs: 10.68%

DCF Result Unadjusted For Flotation Costs: 10.54%

Difference (Flotation Cost Adjustment): 0.14% [12]

Proxy Group Capital Structure

	% Long-Term Debt									
Company	Ticker	2012Q2	2012Q1	2011Q4	2011Q3	2011Q2	2011Q1	2010Q4	2010Q3	Average
American Electric Power Company, Inc.	AEP	47.82%	48.54%	47.06%	47.29%	49.15%	49.93%	50.02%	46.44%	48.28%
Cleco Corporation	CNL	49.62%	51.62%	51.71%	52.48%	52.25%	53.02%	52.67%	48.86%	51.53%
Empire District Electric Company	EDE	47.50%	47.09%	47.71%	48.05%	49.04%	48.97%	49.07%	49.01%	48.31%
Great Plains Energy Inc.	GXP	50.51%	48.14%	48.07%	48.87%	47.00%	46.41%	47.77%	47.66%	48.05%
IDACORP, Inc.	IDA	49.63%	49.09%	49.41%	49.56%	51.05%	51.16%	53.39%	53.78%	50.88%
Otter Tail Corporation	OTTR	49.77%	49.52%	49.72%	46.64%	46.83%	46.76%	46.84%	47.00%	47.88%
Pinnacle West Capital Corporation	PNW	45.40%	45.64%	45.54%	47.94%	47.56%	47.43%	47.03%	47.02%	46.70%
PNM Resources, Inc.	PNM	49.60%	49.57%	50.07%	47.85%	48.62%	48.45%	48.45%	47.49%	48.76%
Portland General Electric Company	POR	50.53%	50.63%	51.06%	52.10%	52.22%	52.26%	53.17%	53.27%	51.91%
Southern Company	SO	52.78%	53.52%	52.57%	48.86%	49.78%	49.41%	50.73%	51.25%	51.11%
Westar Energy, Inc.	WR	40.62%	39.95%	38.64%	39.34%	40.38%	40.76%	40.63%	40.52%	40.10%
Mean		48.53%	48.48%	48.32%	48.09%	48.54%	48.60%	49.07%	48.39%	48.50%

Operating Company Capital Structure											
					% Long-T	erm Debt					
Operating Company	Parent	2012Q2	2012Q1	2011Q4	2011Q3	2011Q2	2011Q1	2010Q4	2010Q3		
Appalachian Power Company	AEP	55.27%	55.38%	55.93%	55.81%	56.86%	58.47%	55.79%	56.13%		
AEP Texas Central Company	AEP	51.09%	54.22%	36.23%	39.16%	52.74%	55.01%	55.15%	55.24%		
Indiana Michigan Power Company	AEP	50.58%	50.45%	50.87%	50.90%	50.94%	51.14%	51.53%	53.20%		
Kentucky Power Company	AEP	53.88%	54.24%	54.39%	54.38%	54.58%	54.50%	55.16%	55.79%		
Ohio Power Company	AEP	46.06%	46.51%	47.88%	46.08%	45.66%	45.48%	46.57%	47.63%		
Public Service Company of Oklahoma	AEP	51.07%	51.60%	51.48%	51.44%	52.49%	54.79%	53.55%	53.35%		
Southwestern Electric Power Company	AEP	50.73%	51.45%	48.15%	48.01%	49.68%	50.42%	50.85%	50.93%		
AEP Texas North Company	AEP	52.76%	52.71%	53.07%	53.65%	53.92%	54.12%	54.48%	54.82%		
Kingsport Power Company	AEP	40.06%	39.65%	40.44%	41.33%	41.00%	40.88%	42.04%	0.00%		
Wheeling Power Company	AEP	26.74%	29.22%	32.13%	32.12%	33.66%	34.47%	35.11%	37.27%		
Cleco Power LLC	CNL	49.62%	51.62%	51.71%	52.48%	52.25%	53.02%	52.67%	48.86%		
Empire District Electric Company	EDE	47.50%	47.09%	47.71%	48.05%	49.04%	48.97%	49.07%	49.01%		
KCP&L Greater Missouri Operations Company	GXP	52.74%	47.76%	47.72%	47.58%	48.41%	45.48%	48.45%	48.48%		
Kansas City Power & Light Company	GXP	48.27%	48.52%	48.41%	50.16%	45.59%	47.34%	47.10%	46.84%		
Idaho Power Co.	IDA	49.63%	49.09%	49.41%	49.56%	51.05%	51.16%	53.39%	53.78%		
Otter Tail Power Company	OTTR	49.77%	49.52%	49.72%	46.64%	46.83%	46.76%	46.84%	47.00%		
Arizona Public Service Company	PNW	45.40%	45.64%	45.54%	47.94%	47.56%	47.43%	47.03%	47.02%		
Public Service Company of New Mexico	PNM	49.60%	49.57%	50.07%	47.85%	48.62%	48.45%	48.45%	47.49%		
Portland General Electric Company	POR	50.53%	50.63%	51.06%	52.10%	52.22%	52.26%	53.17%	53.27%		
Georgia Power Company	SO	52.10%	49.83%	48.27%	48.06%	49.27%	48.83%	48.68%	49.78%		
Alabama Power Company	SO	53.19%	54.43%	53.47%	52.71%	53.29%	53.54%	53.46%	52.94%		
Gulf Power Company	SO	51.69%	51.65%	52.39%	52.21%	52.55%	52.48%	53.29%	54.60%		
Mississippi Power Company	SO	54.12%	58.18%	56.17%	42.46%	44.01%	42.79%	47.49%	47.70%		
Kansas Gas and Electric Company	WR	41.70%	42.15%	42.45%	42.30%	43.23%	43.48%	43.00%	42.76%		
Westar Energy (KPL)	WR	39.54%	37.74%	34.82%	36.37%	37.53%	38.04%	38.26%	38.28%		

Source: SNL Financial

Proxy Group Capital Structure

	% Common Equity									
Company	Ticker	2012Q2	2012Q1	2011Q4	2011Q3	2011Q2	2011Q1	2010Q4	2010Q3	Average
American Electric Power Company, Inc.	AEP	52.18%	51.46%	52.94%	52.71%	50.85%	50.07%	49.98%	53.56%	51.72%
Cleco Corporation	CNL	50.38%	48.38%	48.29%	47.52%	47.75%	46.98%	47.33%	51.14%	48.47%
Empire District Electric Company	EDE	52.50%	52.91%	52.29%	51.95%	50.96%	51.03%	50.93%	50.99%	51.69%
Great Plains Energy Inc.	GXP	49.49%	51.86%	51.93%	51.13%	53.00%	53.59%	52.23%	52.34%	51.95%
IDACORP, Inc.	IDA	50.37%	50.91%	50.59%	50.44%	48.95%	48.84%	46.61%	46.22%	49.12%
Otter Tail Corporation	OTTR	50.23%	50.48%	50.28%	53.36%	53.17%	53.24%	53.16%	53.00%	52.12%
Pinnacle West Capital Corporation	PNW	54.60%	54.36%	54.46%	52.06%	52.44%	52.57%	52.97%	52.98%	53.30%
PNM Resources, Inc.	PNM	50.40%	50.43%	49.93%	52.15%	51.38%	51.55%	51.55%	52.51%	51.24%
Portland General Electric Company	POR	49.47%	49.37%	48.94%	47.90%	47.78%	47.74%	46.83%	46.73%	48.09%
Southern Company	SO	47.22%	46.48%	47.43%	51.14%	50.22%	50.59%	49.27%	48.75%	48.89%
Westar Energy, Inc.	WR	59.38%	60.05%	61.36%	60.66%	59.62%	59.24%	59.37%	59.48%	59.90%
Mean		51.47%	51.52%	51.68%	51.91%	51.46%	51.40%	50.93%	51.61%	51.50%

Operating Company Capital Structure										
					% Comm	on Equity				
Operating Company	Parent	2012Q2	2012Q1	2011Q4	2011Q3	2011Q2	2011Q1	2010Q4	2010Q3	
Appalachian Power Company	AEP	44.73%	44.62%	44.07%	44.19%	43.14%	41.53%	44.21%	43.87%	
AEP Texas Central Company	AEP	48.91%	45.78%	63.77%	60.84%	47.26%	44.99%	44.85%	44.76%	
Indiana Michigan Power Company	AEP	49.42%	49.55%	49.13%	49.10%	49.06%	48.86%	48.47%	46.80%	
Kentucky Power Company	AEP	46.12%	45.76%	45.61%	45.62%	45.42%	45.50%	44.84%	44.21%	
Ohio Power Company	AEP	53.94%	53.49%	52.12%	53.92%	54.34%	54.52%	53.43%	52.37%	
Public Service Company of Oklahoma	AEP	48.93%	48.40%	48.52%	48.56%	47.51%	45.21%	46.45%	46.65%	
Southwestern Electric Power Company	AEP	49.27%	48.55%	51.85%	51.99%	50.32%	49.58%	49.15%	49.07%	
AEP Texas North Company	AEP	47.24%	47.29%	46.93%	46.35%	46.08%	45.88%	45.52%	45.18%	
Kingsport Power Company	AEP	59.94%	60.35%	59.56%	58.67%	59.00%	59.12%	57.96%	100.00%	
Wheeling Power Company	AEP	73.26%	70.78%	67.87%	67.88%	66.34%	65.53%	64.89%	62.73%	
Cleco Power LLC	CNL	50.38%	48.38%	48.29%	47.52%	47.75%	46.98%	47.33%	51.14%	
Empire District Electric Company	EDE	52.50%	52.91%	52.29%	51.95%	50.96%	51.03%	50.93%	50.99%	
KCP&L Greater Missouri Operations Company	GXP	47.26%	52.24%	52.28%	52.42%	51.59%	54.52%	51.55%	51.52%	
Kansas City Power & Light Company	GXP	51.73%	51.48%	51.59%	49.84%	54.41%	52.66%	52.90%	53.16%	
Idaho Power Co.	IDA	50.37%	50.91%	50.59%	50.44%	48.95%	48.84%	46.61%	46.22%	
Otter Tail Power Company	OTTR	50.23%	50.48%	50.28%	53.36%	53.17%	53.24%	53.16%	53.00%	
Arizona Public Service Company	PNW	54.60%	54.36%	54.46%	52.06%	52.44%	52.57%	52.97%	52.98%	
Public Service Company of New Mexico	PNM	50.40%	50.43%	49.93%	52.15%	51.38%	51.55%	51.55%	52.51%	
Portland General Electric Company	POR	49.47%	49.37%	48.94%	47.90%	47.78%	47.74%	46.83%	46.73%	
Georgia Power Company	SO	47.90%	50.17%	51.73%	51.94%	50.73%	51.17%	51.32%	50.22%	
Alabama Power Company	SO	46.81%	45.57%	46.53%	47.29%	46.71%	46.46%	46.54%	47.06%	
Gulf Power Company	SO	48.31%	48.35%	47.61%	47.79%	47.45%	47.52%	46.71%	45.40%	
Mississippi Power Company	SO	45.88%	41.82%	43.83%	57.54%	55.99%	57.21%	52.51%	52.30%	
Kansas Gas and Electric Company	WR	58.30%	57.85%	57.55%	57.70%	56.77%	56.52%	57.00%	57.24%	
Westar Energy (KPL)	WR	60.46%	62.26%	65.18%	63.63%	62.47%	61.96%	61.74%	61.72%	