

Direct Testimony and Schedules
Mr. Robert B. Hevert

Before the New York Public Service Commission

In the Matter of the Application of Consolidated Edison Company of New York to Increase
Rates for Steam Service in New York

Case No. 09-S-XXXX

Return on Equity

November 4, 2009

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I. INTRODUCTION AND QUALIFICATIONS

1 Q. PLEASE STATE YOUR NAME, AFFILIATION, AND BUSINESS ADDRESS.

2 A. My name is Robert B. Hevert. I am President of Concentric Energy Advisors, Inc.
3 (“Concentric”), located at 293 Boston Post Road West, Suite 500, Marlborough,
4 Massachusetts 01752.

5
6 Q. ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?

7 A. I am submitting this testimony on behalf of Consolidated Edison Company of New
8 York, Inc., a New York corporation (“CECONY” or the “Company”) and wholly owned
9 subsidiary of Consolidated Edison, Inc. (“CEI”).

10

11 Q. PLEASE DESCRIBE YOUR EXPERIENCE IN THE ENERGY AND UTILITY INDUSTRIES.

12 A. I received my Bachelors of Science degree in Finance from the University of Delaware,
13 and a Masters degree in Business Administration from the University of Massachusetts.
14 In addition, I hold the Chartered Financial Analyst designation. I have served as an
15 executive and manager with other consulting firms (REED Consulting Group and
16 Navigant Consulting, Inc.), and as a financial officer of Bay State Gas Company. I have
17 provided testimony regarding strategic and financial matters, including the cost of capital,
18 before several state utility regulatory agencies as well as the Federal Energy Regulatory
19 Commission (“FERC”), and have advised numerous energy and utility clients on a wide
20 range of financial and economic issues including both asset and corporate-based
21 transactions. Many of those assignments have included the determination of the cost of

1 capital for valuation purposes. A summary of my professional and educational
2 background is provided as Attachment A.

3
4 Q. PLEASE DESCRIBE CONCENTRIC'S ACTIVITIES IN ENERGY AND UTILITY ENGAGEMENTS.

5 A. Concentric provides financial and economic advisory services to a large number of energy
6 and utility clients across North America. Our regulatory economic and market analysis
7 services include: utility ratemaking and regulatory advisory services; energy market
8 assessments; market entry and exit analysis; corporate and business unit strategy
9 development; and energy contract negotiations. Our financial advisory activities include:
10 merger, acquisition, and divestiture assignments; due diligence and valuation assignments;
11 project and corporate finance services; and transaction support services. In addition, we
12 provide litigation support services on a wide range of financial economic issues for clients
13 throughout North America.

14
II. PURPOSE AND OVERVIEW OF TESTIMONY

15 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

16 A. The purpose of my direct testimony in this proceeding ("Direct Testimony") is to present
17 evidence and provide a recommendation regarding the Company's cost of equity
18 (sometimes referred to as the Return on Equity or "ROE" for rate-setting purposes) for
19 its gas utility operations, and to provide an assessment of the capital structure to be used
20 for ratemaking purposes, as proposed in the direct testimony of the Company
21 Accounting Panel. My analysis and recommendations are supported by the data
22 presented in Exhibit No. __ (RBH-1) through (RBH-8).

1 Finally, I note that the cost of equity, which is the return required by equity investors to
2 assume the risks of ownership, is a market-based concept. As discussed further in my
3 testimony, as opposed to the return on common equity, which is an accounting construct
4 that can be observed in historical data, the cost of equity is unobservable and must be
5 estimated based on observable capital market data. As a consequence, there may be
6 differences of opinion among analysts as to the data, assumptions and models used in the
7 estimation process. I further am aware that in prior proceedings, the New York Public
8 Service Commission ("Commission") has noted its preferences with respect to certain
9 methodologies. As such, my testimony has been developed to note and explain any areas
10 in which the approach taken may differ from the Commission's prior practices.

11
12 Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE APPROPRIATE COST OF EQUITY FOR
13 THE COMPANY?

14 A. Based on the quantitative and qualitative analyses discussed throughout my Direct
15 Testimony, I conclude that an ROE of 10.80 percent is reasonable and appropriate. If
16 the Company's proposed four-year rate period is accepted by the Commission, I conclude
17 that a Return on Equity of 11.40 percent is reasonable. With respect to the Company's
18 capital structure, I conclude that the proposed capital structure, consisting of 48.15
19 percent common equity, 49.53 percent long-term debt, 1.04 percent preferred equity, and
20 1.28 percent customer deposits is reasonable.

21

1 Q. PLEASE PROVIDE A BRIEF OVERVIEW OF THE ANALYSIS THAT LED TO YOUR ROE
2 RECOMMENDATION.

3 A. As discussed in more detail in Section VI, in light of recent market conditions, and given
4 the fact that equity analysts and investors tend to use multiple methodologies in
5 developing their return requirements, it is extremely important to consider the results of
6 several analytical approaches in determining the Company's ROE. In order to develop
7 my ROE recommendation, I therefore applied two forms of the Discounted Cash Flow
8 ("DCF") model, and two forms of the Capital Asset Pricing Model ("CAPM"). While I
9 recognize that in prior proceedings, the Commission has applied specific weighting
10 factors to the DCF and CAPM models, for the reasons discussed later in my Direct
11 Testimony, it is my view that for the purpose of this proceeding the CAPM should be
12 afforded less weight than traditionally has been the case. Nonetheless, I have produced a
13 set of analyses reflecting the Commission's weighting factors, *i.e.*, two-thirds weight
14 applied to DCF results, and one-third weight applied to CAPM results.

15

16 In addition to the DCF and CAPM analyses, I also considered the effect of flotation costs
17 on the Company's cost of equity, and made a specific adjustment to my analytical results
18 to reflect those costs. Finally, I considered the effect of certain business risks, most
19 notably the Company's substantial capital expenditure plans.

20

21 Q. HOW IS THE REMAINDER OF YOUR DIRECT TESTIMONY ORGANIZED?

22 A. The remainder of my Direct Testimony is organized in seven sections: Section III
23 discusses the regulatory guidelines and financial considerations pertinent to the
24 development of the cost of capital; Section IV briefly discusses the current capital market

1 conditions and the effect of those conditions on the Company's cost of equity; Section V
2 explains my selection of a proxy group of comparable companies used to develop my
3 analytical results; Section VI explains my analysis and the analytical basis for the
4 recommendation of the appropriate ROE for CECONY; Section VII summarizes the
5 Company's business risks; Section VIII provides an assessment of the Company's
6 proposed capital structure; and Section IX summarizes my conclusions and
7 recommendations.
8

III. REGULATORY GUIDELINES AND FINANCIAL CONSIDERATIONS

9 Q. PLEASE DESCRIBE THE GUIDING PRINCIPLES TO BE USED IN ESTABLISHING THE COST OF
10 CAPITAL FOR A REGULATED UTILITY.

11 A. The United States Supreme Court's precedent-setting *Hope* and *Bluefield* cases established
12 the standards for determining the fairness or reasonableness of a utility's allowed ROE.
13 Among the standards established by the Court in those cases are: (1) consistency with
14 other businesses having similar or comparable risks; (2) adequacy of the return to support
15 credit quality and access to capital; and (3) that the means of arriving at a fair return are
16 not important, only that the end result leads to just and reasonable rates.¹
17

18 Based on those standards, the consequence of the Commission's order in this case should
19 be to provide the Company with the opportunity to earn an ROE that is: (i) adequate to
20 attract capital at reasonable terms, thereby enabling it to provide safe, reliable service; (ii)
21 sufficient to support the financial soundness of the Company's operations; and (iii)

¹ Bluefield Waterworks & Improvement Co., v. Public Service Commission of West Virginia, 262 U.S. 679 (1923); Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944).

1 commensurate with returns on equity investments in enterprises having comparable risks.
2 The allowed ROE should enable the Company to finance capital expenditures at
3 reasonable rates and maintain its financial flexibility over the period during which rates
4 are expected to remain in effect.

5
6 Q. WHY IS IT IMPORTANT FOR A UTILITY TO BE ALLOWED THE OPPORTUNITY TO EARN A
7 RETURN ADEQUATE TO ATTRACT EQUITY CAPITAL AT REASONABLE TERMS?

8 A. A return that is adequate to attract capital at reasonable terms enables the Company to
9 provide safe, reliable electric service while maintaining its financial integrity. While the
10 “capital attraction” and “financial integrity” standards are important principles in normal
11 economic conditions, the practical implications of those standards are even more
12 pronounced in the current financial environment. As discussed in more detail in Section
13 IV, continued equity market volatility, together with sustained increases in utility debt
14 credit spreads (that is, the difference in utility debt yields of varying credit ratings) have
15 intensified the importance of maintaining a strong financial profile.

16
17 Q. HOW DOES THE REGULATORY ENVIRONMENT IN WHICH A UTILITY OPERATES AFFECT ITS
18 ACCESS TO AND COST OF CAPITAL?

19 A. The regulatory environment can profoundly affect both the access to, and cost of capital
20 in several ways. First, the proportion and cost of borrowing are influenced by the rating
21 agencies’ assessment of the regulatory environment. As noted by Moody’s Investor
22 Services (“Moody’s”), “the predictability and supportiveness of the regulatory framework
23 in which a regulated utility operates is a key credit consideration and the one that

1 differentiates the industry from most other corporate sectors.”² Moody’s further noted
2 that:

3 For a regulated utility company, we consider the characteristics of the
4 regulatory environment in which it operates. These include how
5 developed the regulatory framework is; its track record for predictability
6 and stability in terms of decision making; and the strength of the
7 regulator’s authority over utility regulatory issues. A utility operating in a
8 stable, reliable, and highly predictable regulatory environment will be
9 scored higher on this factor than a utility operating in a regulatory
10 environment that exhibits a high degree of uncertainty or
11 unpredictability. Those utilities operating in a less developed regulatory
12 framework or one that is characterized by a high degree of political
13 intervention in the regulatory process will receive the lowest scores on
14 this factor.³
15

16 Standard & Poor’s (“S&P”) notes that regulatory commissions should eliminate, or at
17 least greatly reduce, the issue of rate-case lag, especially when a utility engages in a sizable
18 capital expenditure program.⁴ Moody’s agrees that timely cost recovery is an important
19 determinant of credit quality, stating that “[t]he ability to recover prudently incurred costs
20 in a timely manner is perhaps the single most important credit consideration for regulated
21 utilities, as the lack of timely recovery of such costs has caused financial stress for utilities
22 on several occasions”⁵ Indeed, in its recent credit rating downgrade of the Company
23 from A1 to A3, Moody’s noted that:

24 The two notch downgrade reflects the financial profiles of CEI,
25 CECONY and O&R which are considered weak for their previous
26 ratings and Moody’s expectation that the companies are unlikely to be
27 able to significantly strengthen their financial metrics in the near to
28 medium term.

29 ***

30 The downgrade also reflects Moody’s belief that CECONY and O&R
31 will continue to operate in challenging regulatory and operating

² Moody’s Global Infrastructure Finance, *Regulated Electric and Gas Utilities*, August 2009, at 6.

³ *Ibid.*

⁴ Standard and Poor’s, *Assessing Vertically Integrated Utilities’ Business Risk Drivers*, U.S. Utilities and Power Commentary, November 2006, at 10.

⁵ Moody’s, Global Infrastructure Finance, *Regulated Electric and Gas Utilities*, August 2009, at 7.

1 environments for the foreseeable future. Moody's believes that there will
2 be significant upward pressure on customers' utility bills due to high
3 levels of capital spending by the utilities and rising costs of procuring
4 electricity and gas in a carbon constrained world. In the context of a
5 weak economy, Moody's believes that recent and future regulatory
6 decisions are unlikely to permit any significant improvement in the
7 companies' financial metrics as regulators attempt to limit the impact of
8 rising cost pressures on ratepayers.⁶
9

10 It therefore is important to recognize that regulatory decisions regarding the authorized
11 ROE and capital structure have direct consequences for the subject utility's internal cash
12 flow generation (sometimes referred to as "Funds Flow from Operations", or "FFO").
13 Since credit ratings are intended to reflect the ability to meet financial obligations as they
14 come due, the ability to generate the cash flows required to meet those obligations (and
15 to provide an additional amount for unexpected events) is of critical importance to debt
16 investors. Two of the most important metrics used to assess that ability are the ratios of
17 FFO to debt, and FFO to interest expense, both of which are directly affected by
18 regulatory decisions regarding the appropriate rate of return, and capital structure.

19
20 Just as regulatory policy and decision have a direct bearing on the subject utility's financial
21 profile and, therefore, its cost of debt, equity investors also consider regulatory risks in
22 determining their required return (that is, the cost of equity). To that point, in a recent
23 report, Barclays Capital ("Barclays") categorized 49 regulatory jurisdictions (including
24 FERC) into five categories which stratify those jurisdictions from the lowest to highest
25 cost of capital. Among the factors considered in assigning jurisdictions to the various
26 categories are the level of authorized ROEs, and a "Subjective Investor Friendliness
27 Rating". The seven states in "Tier 5" (the "Highest Cost of Capital" states) include:

⁶ See, Rating Action: Moody's downgrades Consolidated Edison, Inc. and utility subs two notches, outlooks stable, Moody's Investors Services, June 29, 2009, at 1.

1 Arizona, Connecticut, Maryland, Montana, New Mexico, New York, and Rhode Island.⁷

2 In order to assess whether or not equity investors assign a higher cost of equity to utilities
3 that operate primarily in those jurisdictions, I calculated the Relative Market to Book ratio
4 for each of the companies in the Value Line universe of electric utilities. I then calculated
5 the average relative market-to-book ratio for the “Tier 5” companies, and found that, on
6 average, those companies trade at a 17.75 percent discount to the companies in Tiers 1
7 through 4. (See Exhibit No. __ (RBH-1)) While this is a fairly simple analysis, the results
8 support Barclay’s observation that utilities in jurisdictions with lower authorized returns
9 actually have a higher cost of capital.

10
11 Q. WHAT ARE YOUR CONCLUSIONS REGARDING REGULATORY GUIDELINES AND CAPITAL
12 MARKET EXPECTATIONS?

13 A. It is important for the ROE authorized in this proceeding to take into consideration the
14 capital market conditions with which the Company must contend, investors’ expectations
15 relative to both risks and returns, and the Company’s ability to maintain adequate levels
16 of internal cash flow generation. Finally, in light of the current capital market conditions
17 and the Company’s continuing and substantial capital investment plans, it is especially
18 important that the Company be afforded the opportunity to earn a reasonable return.

19

⁷ Barclay’s Capital Equity Research, *Utilities Sector View*, July 16, 2009, at 25.

IV. CURRENT CAPITAL MARKET ENVIRONMENT

1 Q. HOW DO ECONOMIC CONDITIONS INFLUENCE THE COST OF CAPITAL AND RETURN ON
2 COMMON EQUITY?

3 A. The market required cost of capital is a function of prevailing and expected market
4 conditions. Consistent with the *Hope* and *Bluefield* decisions, the authorized ROE for a
5 public utility should allow the company to attract investor capital at reasonable cost under
6 a variety of economic and financial market conditions. The ability to attract capital on
7 reasonable terms is especially important for utilities such as CECONY that plan to invest
8 considerable amounts of capital in investments designed to maintain system reliability.
9 As such, the Commission's order regarding both the ROE and the capital structure will
10 have a direct bearing on the Company's financial profile and, therefore, its ability to
11 attract capital at reasonable terms.

12
13 Q. HOW HAVE THE CURRENT CAPITAL MARKET CONDITIONS AFFECTED THE AVAILABILITY
14 AND COST OF CAPITAL?

15 A. The current state of the financial markets has led to a general decrease in the availability
16 of, and an increase in, the cost of both debt and equity capital for all market sectors,
17 including utilities. While the capital market conditions may have moderated somewhat
18 since early 2009, there is no indication that the risks and costs of attracting capital have
19 significantly diminished. As noted by Barclay's, "[i]n the long term, structural headwinds
20 should persist for regulated utilities, owing to risks associated with capital acquisition,
21 construction execution, and regulatory recovery in a rising rate-base environment."⁸
22 Similarly, in a letter to Assemblyman Kevin Cahill in Cases 08-E-0887 and 08-G-0888

⁸ *Ibid.*, at 5.

1 (the “Cahill Letter”), the Commission observed that “[r]ecent market volatility and
2 uncertainty has lead to higher return requirements in order to provide capital.”⁹

3

4 Q. ARE THERE ANY OBSERVABLE BENCHMARKS TO EVALUATE CHANGES IN THE COST OF
5 CAPITAL?

6 A. Yes. A directly observable measure of the increased cost of capital for utilities is credit
7 spreads (*i.e.*, the difference between the yield on corporate debt and the yield on Treasury
8 securities of comparable maturities over time). As shown in Table 1 (below), the credit
9 spread between Baa and A-rated utility debt (Moody’s) increased significantly over the
10 course of 2009. While those credit spreads recently have declined, they remain at levels
11 well above their historical average. In fact, the current Baa-A credit spread is
12 approximately the same level as it was during the peak of the last period of significant
13 economic distress (*i.e.*, from mid-2002 to mid 2003). Even taking that period into
14 consideration (*i.e.*, 2002-2003), the average credit spread currently is nearly three times the
15 average over the 2002-2006 period. This credit market dynamic also was observed by the
16 Commission in the Cahill Letter, which noted that “[i]nvestors are requiring a large
17 premium to invest in these [Baa or BBB rated] instruments.”¹⁰

18 **Table 1: Incremental Credit Spreads on A and Baa Rated Utility Bond Indices**¹¹

	Average 2002 - 2006	Average 2007 - Present	Current (6 Month Avg.)
A-Rated Utility Bond Credit Spread	1.43%	1.85%	1.71%
Baa-Rated Utility Bond Credit Spread	1.76%	2.52%	2.64%
Difference In Credit Spreads	0.33%	0.67%	0.93%
Note: Credit spreads measured against 30 year Treasury Bond yield			

⁹ See, Letter to Assemblyman Kevin A. Cahill, June 30, 2009, New York Public Service Commission, Cases 08-E-0887 and 08-G-0888, at 2.

¹⁰ *Ibid.*

¹¹ Source: Bloomberg. Data represents the average for the noted periods.

1

2 Q. WHAT CONCLUSIONS CAN BE DRAWN FROM THAT DATA?

3 A. The principal conclusion is that the persistently high level of credit spreads is a ready and
4 observable measure of the benefit of maintaining a strong credit profile. Importantly, the
5 potential for increased debt costs arising from lower credit ratings has been quite tangible
6 in the utility segment; Fitch recently reported that in the second quarter of 2009, utility
7 debt downgrades exceeded upgrades by a factor of four.¹² This important and visible
8 market dynamic should be kept in mind in determining the Company's Rate of Return.

9

10 Q. WHAT DOES MARKET VOLATILITY TELL US ABOUT THE PERCEIVED LEVEL OF
11 INVESTMENT RISK AND THE RETURN REQUIREMENTS OF INVESTORS?

12 A. From an equity investor's perspective, increased volatility represents increased investment
13 risk. Since investors require higher returns as compensation for taking on higher levels of
14 risk, periods of marked increases in price and return volatility also are periods of
15 increased return requirements. In that regard, over the last eighteen months, market
16 volatility first increased and subsequently has remained high relative to historical averages.
17 To that point, the Chicago Board Options Exchange ("CBOE") Volatility Index (the
18 "VIX"), which is a widely recognized measure of market volatility, provides important
19 insight into investors' view of expected volatility and, therefore, their return requirements.

20

21 Since its inception in 1990, the VIX measured an average expected volatility of 20.26
22 percent. During the height of the economic and credit crisis, however, the VIX index
23 exceeded 80.00 percent, and the VXV (*i.e.*, the three-month volatility index) approached

¹² As measured by dollar volume, ratings changes reflect a change in an entire rating category. See Fitch Ratings, U.S. Corporate Bond Market: A review of Second-Quarter 2009 Rating and Issuance Activity, at 2, 4.

1 70.00 percent, demonstrating the extreme risk aversion that gripped market participants
2 during this period of unprecedented uncertainty. The 30-day average of the CBOE S&P
3 500 3-Month Volatility Index, (the "VIX"), indicates expected volatility of approximately
4 26.57 percent, indicating that the capital markets expect volatility to remain above its
5 historical average, at least in the near-term. Similarly, the anticipated market price for the
6 VIX in April 2010, as indicated by recent settlement prices of futures contracts associated
7 with the VIX index, is 28.66.¹³ Consequently, investors' return requirements would be
8 expected to be higher in order to compensate them for the risks and uncertainty
9 associated with elevated market volatility.

10
11 Q. DO YOUR PROXY GROUP COMPANIES EXHIBIT SIMILAR VOLATILITY AS THE GENERAL
12 MARKET?

13 A. Yes. Since 2000, the volatility of the total return of my proxy group (as discussed in
14 Section V) on average has been slightly higher than the total return of the S&P 500 Index.
15 The average 30-day coefficient of variation ("CV") of my proxy group was approximately
16 6.77 percent, while that of the S&P 500 was approximately 6.12 percent.¹⁴

17
18 Q. WHAT IS THE COEFFICIENT OF VARIATION AND WHY IS IT AN IMPORTANT MEASURE OF
19 VOLATILITY?

20 A. The CV is the ratio of the standard deviation divided by the mean. It is an important
21 measure because the standard deviation (which is a widely accepted measure of volatility)
22 is normalized with respect to the mean, or average, of the data series. To the extent that
23 the averages of two series, such as the operating revenues of two different companies, are

¹³ See Exhibit No. ___ (RBH-5).

¹⁴ Source: SNL Financial. Data from January 3, 2000 through October 20, 2009.

1 measurably different, a comparison of the standard deviations would be of limited value.
2 By normalizing the standard deviation with respect to the average, the CV provides a
3 basis upon which the dispersions (or volatility) of two data series can be compared.
4

5 Q. HOW HAVE OTHER UTILITIES RESPONDED TO THESE FINANCIAL MARKET CONDITIONS?

6 A. Utilities continue to focus on strengthening their balance sheets, maintaining liquidity,
7 and searching for additional sources of capital. In order to do so, they have placed a high
8 priority on managing internal cash flows, containing both operating and capital costs, and
9 allocating capital to jurisdictions and operations with higher expected returns. For
10 example, utilities that operate in multiple regulatory jurisdictions have focused on
11 allocating capital to operating companies in jurisdictions that are expected to provide
12 more reasonable rates of return. As Mike Morris, Chairman, President, and Chief
13 Executive Officer of AEP noted in a 2009 conference call with financial analysts:

14 ...you can see that we continue to invest strongly in those jurisdictions
15 where the rates of return are reasonable and we continue to be very wise
16 about the capital invested in those jurisdictions where rates of return are
17 not as handsome. We think that's a very appropriate way to manage this
18 portfolio of assets...¹⁵
19

20 Q. WHAT CONCLUSIONS DO YOU DRAW FROM THESE ANALYSES?

21 A. First, it is important to recognize that the assessment of market conditions must be made
22 in the context of multiple indices since any single measure may provide incomplete or
23 misleading conclusions. It would be inappropriate, for example, to view the current level
24 of Treasury yields as indicative of a lower cost of capital when expected volatility remains
25 at elevated levels. Moreover, as a result of the extraordinary conditions recently
26 experienced in the capital markets, it is extremely important to assess the reasonableness

¹⁵ American Electric Power Company, Inc., First Quarter 2009 Earnings Call Transcript, April 24, 2009.

1 of financial model results in the context of observable market data. To the extent that
2 certain estimates are incompatible with such benchmarks, or inconsistent with basic
3 financial principles, it is appropriate to consider whether alternative estimation techniques
4 are likely to provide more meaningful and reliable results.
5

V. PROXY GROUP SELECTION

6 Q. PLEASE EXPLAIN WHY YOU HAVE USED A GROUP OF PROXY COMPANIES TO DETERMINE
7 THE COST OF EQUITY FOR CECONY.

8 A. First, it is important to bear in mind that the cost of equity for a given enterprise depends
9 on the risks attendant to the business in which the company is engaged. According to
10 financial theory, the aggregate risk of a given company is equal to the market value
11 weighted average of the constituent business units. In this proceeding, we are focused on
12 estimating the cost of equity for CECONY, a wholly owned subsidiary of CEI. Since the
13 cost of equity is a market-based concept, and given that CECONY is not publicly traded,
14 it is necessary to establish a group of companies that are both publicly traded and
15 comparable to CECONY in certain fundamental business and financial respects to serve
16 as its “proxy” in the cost of equity estimation process. As discussed later in my Direct
17 Testimony, the proxy companies used in my analyses all possess a set of operating and
18 risk characteristics that are substantially comparable to CECONY, and thus provide a
19 reasonable basis for the derivation and assessment of ROE estimates.
20

21 It is my understanding that since the issuance of the Recommended Decision in the
22 Generic Finance Case approximately 15 years ago, the Commission has endorsed the use

1 of proxy groups for the purposes of determining a utility's ROE.¹⁶ Because proxy
2 companies are used as the basis for estimating CECONY's cost of equity, the primary
3 objective of the screening process is to render a group of companies that are highly
4 comparable with respect to fundamental financial and business risks. As a practical
5 matter, while the determination of an appropriate ROE necessarily requires a degree of
6 informed judgment, the careful selection of a risk-appropriate comparison group serves
7 to mitigate the extent to which subjective assessments must be applied.

8
9 Q. DOES THE RIGOROUS SELECTION OF A PROXY GROUP SUGGEST THAT ANALYTICAL
10 RESULTS WILL BE TIGHTLY CLUSTERED AROUND AVERAGE (I.E., MEAN) RESULTS?

11 A. Not necessarily. As discussed in greater detail in Section VI, the DCF approach is based
12 on the theory that a stock's current price represents the present value of its future
13 expected cash flows. Notwithstanding the care taken to establish risk comparability,
14 market expectations with respect to future risks and growth opportunities will vary from
15 company to company. Therefore, even within a group of similarly situated companies, it
16 is common for analytical results to reflect a seemingly wide range. At issue, then, is how
17 to select an ROE estimate in the context of that range. As discussed throughout my
18 Direct Testimony, that determination necessarily must be based on the informed
19 judgment and experience of the analyst.

20
21 Q. PLEASE PROVIDE A SUMMARY PROFILE OF CECONY.

22 A. CECONY generates steam at one steam/electric generating station and five
23 steam-only generating stations and distributes steam to its customers through

¹⁶ Case 91-M-0509, Proceeding on Motion of the Commission to Consider Financial Regulatory Policies for New York State Utilities, Recommended Decision, issued July 19, 1994, at 57.

1 approximately 105 miles of transmission, distribution, and service piping. The Company
2 supplies steam to approximately 1769 New York customers and electric service to
3 approximately 3.26 million New York customers.¹⁷ CECONY's long-term issuer rating
4 issued by Standard and Poor's is A-; by Moody's Investor Services is A3; and by
5 FitchRatings is BBB+.

6
7 Q. HOW DID YOU SELECT THE COMPANIES INCLUDED IN YOUR PROXY GROUP?

8 A. The proxy group was selected based on the following criteria:

- 9 • I began with the group of 54 companies that currently are classified as Electric
10 Utilities by Value Line;
- 11 • I eliminated the companies that are not covered by at least two utility industry
12 equity analysts;
- 13 • I eliminated companies that did not have corporate credit ratings and/or senior
14 unsecured bond ratings of BBB+ to AA according to both Standard and Poor's
15 and Moody's;
- 16 • I eliminated companies that have a recent history of not paying dividends or do
17 not have positive earnings growth projections because such characteristics are
18 incompatible with the DCF model;
- 19 • To ensure that the proxy group consists of companies that are primarily regulated
20 utilities, I have excluded companies with less than 70.00 percent of total revenue
21 *and net operating income derived from regulated utility operations; and*

¹⁷ Consolidated Edison, Inc., SEC Form 10-K for the Period Ending 12/31/08, at 14 and Company provided information.

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- I eliminated companies known to be party to a merger, acquisition, or other transformational transaction.

Q. BASED ON YOUR CRITERIA WHAT WAS THE COMPOSITION OF YOUR PROXY GROUP?

A. The criteria discussed above resulted in a group of thirteen comparable companies:

Table 3: Preliminary Proxy Group

Company	Ticker
ALLETE	ALE
Alliant Energy, Inc.	LNT
Consolidated Edison, Inc.	ED
Dayton Power and Light	DPL
Duke Energy	DUK
NSTAR	NST
Pacific Gas and Electric	PCG
Portland General	POR
Progress Energy	PGN
Southern Company	SO
Vectren	VVC
Wisconsin Energy	WEC
Xcel Energy	XEL

Q. DID YOU INCLUDE CONSOLIDATED EDISON, INC. IN YOUR FINAL PROXY GROUP?

A. No, I did not. While the fact that the screening criteria indicate that CEI is fundamentally comparable to the other proxy companies, in order to avoid the circular logic that otherwise would arise, it has been my consistent practice to exclude the subject company from the final proxy.

1 Q. PLEASE CHARACTERIZE THE CREDIT RATINGS OF YOUR PROXY GROUP COMPANIES.

2 A. The average credit rating of my proxy group falls slightly below an S&P rating of A-. The
3 median credit rating for the proxy group is BBB+. As noted previously, CECONY is
4 rated A- by Standard and Poor's, A3 by Moody's and BBB+ by FitchRatings.

5
6 Q. WHAT WOULD BE THE RESULT OF RELAXING YOUR CREDIT RATING SCREEN TO INCLUDE
7 ALL INVESTMENT GRADE UTILITIES?

8 A. Including utilities with credit ratings as low as BBB- would increase the number of
9 companies in my proxy group to a total of 26, excluding CEI.

10

11 Q. DO YOU BELIEVE THAT A TOTAL OF TWELVE COMPANIES CONSTITUTES A SUFFICIENTLY
12 LARGE PROXY GROUP?

13 A. Yes, I do. The analyses performed in estimating the ROE are more likely to be
14 representative of the subject utility's cost of equity to the extent that the proxy companies
15 are fundamentally comparable to the subject utility. Because all analysts use some form
16 of screening process to arrive at a proxy group, the group, by definition, is not randomly
17 drawn from a larger population. Consequently, there is no reason to place more reliance
18 on the quantitative results of a larger proxy group simply by virtue of the resulting larger
19 number of observations. In fact, a brief search indicates that several regulatory
20 commissions, including Arizona, Florida, Missouri, Minnesota, and New Hampshire,
21 recently have relied on proxy groups that are approximately the same size or smaller than
22 the twelve company group that I have relied upon for CECONY. While this list is not
23 based on an exhaustive search, it does demonstrate that it is not uncommon for
24 regulatory commissions to focus on the comparability of the proxy companies as

1 opposed to the size of the proxy group. To that point, the New Hampshire Public Utility
2 Commission noted that:

3 [T]he DCF is an economic theory for which a more comparable sample,
4 rather than a larger sample, produces results that are more likely to be
5 representative of the subject utility. The size of the sample is irrelevant
6 when, as here, the sample is not random.¹⁸
7

8 In essence, because I am using market-based data, my analytical results will not
9 necessarily be tightly clustered around a central point. Results that may be somewhat
10 dispersed, however, do not suggest that the screening approach is inappropriate, or the
11 results less meaningful than those produced by a larger group. In my view, including
12 companies whose fundamental comparability is tenuous, simply for the purpose of
13 expanding the number of observations, does not add relevant information to the analysis.
14

VI. COST OF EQUITY ESTIMATION

15 Q. PLEASE BRIEFLY DISCUSS THE ROE IN THE CONTEXT OF THE REGULATED RATE OF
16 RETURN.

17 A. Regulated utilities primarily use common stock and long-term debt to finance their
18 permanent property, plant and equipment. The rate of return (“ROR”) for a regulated
19 utility is based on its weighted average cost of capital, in which the cost rates of the
20 individual sources of capital are weighted by their respective book values. While the costs
21 of debt and preferred stock can be directly observed, the cost of equity is market-based
22 and, therefore, must be inferred from market-based information.
23

¹⁸ Re: Verizon New Hampshire, 232 P.U.R. 4th 24 (N.H. P.U.C., 2004).

1 Q. HOW IS THE REQUIRED ROE DETERMINED?

2 A. The required ROE is estimated by using one or more analytical techniques that rely on
3 market-based data to quantify investor expectations regarding required equity returns,
4 adjusted for certain incremental costs and risks. I then apply my informed judgment,
5 based on the results of those analyses, to determine where within the range of results the
6 cost of equity for the Company should fall. The resulting adjusted cost of equity serves
7 as the recommended ROE for ratemaking purposes. As a general proposition, the key
8 consideration in determining the cost of equity is that the methodologies employed
9 reasonably reflect investors' view of the financial markets in general, and the subject
10 company's common stock in particular. Finally, as noted earlier, while I do not
11 necessarily agree with the formulaic approach of affording two-thirds and one-third
12 weights to the respective DCF and CAPM results, I have produced and presented
13 analytical results based on that method.

14

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

16 A. I used the DCF model as the initial approach; I then considered the results of the CAPM
17 in assessing the reasonableness of the DCF results and developing my cost of equity
18 recommendation. With respect to the DCF model, I considered both the Constant
19 Growth and Multi-Period forms of the model. Similarly, I used both the traditional form
20 of the CAPM as well as the "Zero-Beta" form of that model. In both forms of the
21 CAPM, I incorporated two alternative (*ex-ante*) measures of the Market Risk Premium.

22

1 Q. WHY DO YOU BELIEVE IT IS IMPORTANT TO USE MORE THAN ONE ANALYTICAL
2 APPROACH?

3 A. As noted above, the market cost of equity is not directly observable and, therefore, must
4 be estimated based on both quantitative and qualitative information. As a result, a
5 number of models have been developed to estimate the market cost of equity. As a
6 general proposition, when faced with the task of estimating the market cost of equity,
7 analysts are inclined to gather and evaluate as much relevant data as reasonably can be
8 analyzed. For that reason, I use multiple approaches to estimate the market cost of equity
9 used in performing valuations in the context of our financial advisory and transaction
10 practices. Similarly, it has been my consistent practice to use multiple methodologies
11 when estimating the cost of equity for regulatory purposes.

12
13 In addition, and as a practical matter, all of the models available to estimate the market
14 cost of equity are subject to limiting assumptions or other methodological constraints.
15 Consequently, many finance texts recommend using multiple approaches when estimating
16 the market cost of equity. Copeland, Koller and Murrin,¹⁹ for example, suggest using the
17 CAPM and Arbitrage Pricing Theory model, while Brigham and Gapenski²⁰ recommend
18 the CAPM and DCF approaches.

19
20 Although we cannot directly observe the market cost of equity, we can observe the
21 methods frequently used by analysts to arrive at their return requirements and

¹⁹ Tom Copeland, Tim Koller and Jack Murrin, Valuation: Measuring and Managing the Value of Companies, 3rd ed. (New York: McKinsey & Company, Inc., 2000), at 214.

²⁰ Eugene Brigham, Louis Gapenski, Financial Management: Theory and Practice, 7th Ed. (Orlando: Dryden Press, 1994), at 341. See also *How do CFOs make capital budgeting and capital structure decisions?*, John Graham and Campbell Harvey, Duke University, Journal of Applied Corporate Finance, Volume 15, Number 1, Spring 2002.

1 expectations. While investors and analysts tend to use multiple approaches in developing
2 their estimate of return requirements, each methodology requires certain judgment with
3 respect to the reasonableness of assumptions and the validity of proxies in its application.
4 In my view, therefore, it is both prudent and appropriate to use multiple methodologies
5 in order to mitigate the effects of assumptions and inputs associated with relying
6 exclusively on any single approach. In essence, analysts and academics understand that
7 ROE models simply are tools to be used in the ROE estimation process and that strict
8 adherence to any single approach or the specific results of any single approach can lead to
9 flawed and irrelevant conclusions. That position is consistent with the *Hope and Bluefield*
10 finding that it is the analytical result, as opposed to the methodology that is controlling in
11 arriving at ROE determinations.

12
13 Thus a reasonable cost of equity estimate appropriately considers alternate methodologies
14 and the reasonableness of their individual and collective results. At the same time, it is
15 important to recognize that the recent capital market dislocation may have significant
16 effects on the models' inputs, producing anomalous or counter-intuitive results. In the
17 case of the CAPM, for example, long-term Treasury yields are well below historical
18 averages, reflecting both the continuing risk aversion on the part of investors and the
19 need for the Federal government to finance the expansionary fiscal programs enacted to
20 address recessionary economic conditions. While low Treasury yields may be viewed in
21 isolation as a sign of low capital costs, other data such as continued wide credit spreads
22 and historically high levels of expected equity market volatility indicate otherwise. In my
23 view, analytical approaches that render cost of equity estimates that are below the average

1 authorized returns under far more benign market conditions should be given limited
2 weight.

3

4 **Constant Growth DCF Model**

5 Q. ARE DCF MODELS WIDELY USED TO DETERMINE THE ROE FOR REGULATED UTILITIES?

6 A. Yes. DCF models are widely used in regulatory proceedings and have sound theoretical
7 bases, although neither the DCF model nor any other model can be applied without
8 considerable judgment in the selection of data and the interpretation of results. In its
9 simplest form, the DCF model expresses the market cost of equity as the sum of the
10 expected dividend yield and long-term growth rate.

11

12 Q. PLEASE DESCRIBE THE DCF APPROACH.

13 A. The DCF approach is based on the theory that a stock's current market price represents
14 the present value of all expected future cash flows. In its most general form, the DCF
15 model is expressed as follows:

$$16 \quad P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \dots + \frac{D_\infty}{(1+k)^\infty} \quad [1]$$

17 Where P_0 represents the current market stock price, $D_1 \dots D_\infty$ are all expected future
18 dividends, and k is the discount rate, or required return. Equation [1] is a standard
19 present value calculation that can be simplified and rearranged into the familiar form:

$$20 \quad k = \frac{D(1+g)}{P_0} + g \quad [2]$$

1 Equation [2] is often referred to as the “Constant Growth DCF” model, in which the first
2 term is the expected dividend yield at the market price of the stock and the second term
3 is the expected long-term growth rate.

4
5 Q. WHAT ASSUMPTIONS ARE REQUIRED FOR THE CONSTANT GROWTH DCF MODEL?

6 A. The Constant Growth DCF model requires the following assumptions: (1) earnings,
7 dividends and book value grow at the same, constant rate; (2) a stable dividend payout
8 ratio; (3) a constant price-to-earnings multiple; and (4) a discount rate greater than the
9 expected growth rate. To the extent that any quantification of these assumptions is
10 uncertain, considered judgment and/or specific adjustments should be applied to the
11 results.

12
13 **Dividend Yield for the Constant Growth DCF Model**

14 Q. WHAT MARKET DATA DID YOU USE TO CALCULATE THE DIVIDEND YIELD IN YOUR DCF
15 MODEL?

16 A. The dividend yield in my DCF model is based on the proxy companies’ current annual
17 dividend and average closing market prices for the companies’ shares over three months
18 ended October 15, 2009.

19
20 Q. WHY DID YOU USE A THREE-MONTH AVERAGING PERIOD?

21 A. I believe it is important to use an average of recent trading days to calculate the term P_0 in
22 the DCF model so that the calculated market cost of equity is not skewed by anomalous
23 events that may affect stock prices on any given trading day. In that regard, the averaging
24 period should be reasonably representative of expected capital market conditions over the

1 long-term. At the same time, it is important to reflect the extraordinary conditions that
2 have defined the capital markets over the recent past. In my view, the use of the three-
3 month averaging period reasonably balances those concerns. Furthermore, this averaging
4 period is consistent with the period considered by the Commission in prior proceedings.²¹
5

6 Q. PUTTING ASIDE THE ISSUE OF THE AVERAGING PERIOD, DID YOU MAKE ANY
7 ADJUSTMENTS TO THE DIVIDEND YIELD TO ACCOUNT FOR PERIODIC GROWTH IN
8 DIVIDENDS?

9 A. Yes. Since utility companies tend to increase their quarterly dividends at different times
10 throughout the year, it is reasonable to assume that dividend increases will be evenly
11 distributed over calendar quarters. Given that assumption, it is reasonable to apply one-
12 half of the expected annual dividend growth for purposes of calculating the expected
13 dividend yield component of the DCF model. This adjustment provides that the
14 expected dividend yield is, on average, representative of the coming twelve-month period,
15 and that it does not overstate the aggregated dividends to be paid during that time.
16 Accordingly, the DCF estimates provided in Exhibit No. __ (RBH-2) reflect one-half of
17 the expected growth in the dividend yield component of the model.
18

²¹ As noted in the Commission's Order Setting Electric Rates, Case 08-E-0539 at 125, issued April 24, 2009 the Commission determined that based on current market conditions, it was reasonable to rely on a three-month averaging period.

1 **Growth Rates for the Constant Growth DCF Model**

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

4 A. Yes. In its Constant Growth form, the DCF model (*i.e.*, Equation [2]) assumes a single
5 growth rate in perpetuity. Accordingly, in order to reduce the long-term growth rate to a
6 single measure, (as noted earlier) one must assume a constant payout ratio, and that
7 earnings per share, dividends per share and book value per share all grow at the same
8 constant rate. Over the long run, however, dividend growth can only be sustained by
9 earnings growth. Consequently, it is important to incorporate a variety of measures of
10 long-term earnings growth into the Constant Growth DCF model. This can be
11 accomplished by averaging those measures of long-term growth that tend to be least
12 influenced by capital allocation decisions that companies may make in response to near-
13 term changes in the business environment. Since such decisions may directly affect near-
14 term dividend payout ratios, estimates of earnings growth are more indicative of long-
15 term investor expectations than are dividend growth estimates. Therefore, for the
16 purposes of the Constant Growth form of the DCF model, growth in earnings per share
17 (“EPS”) represents the appropriate measure of long-term growth.

18
19 **Results for Constant Growth DCF Model**

20 Q. PLEASE SUMMARIZE YOUR INPUTS TO THE CONSTANT GROWTH DCF MODEL.

21 A. I applied the DCF model to the proxy group of twelve companies using the following
22 inputs for the price and dividend terms:

- 23 1. The average daily closing prices for the three-months ended October 15, 2009 for
24 the term P_0 ; and

1 2. The annualized dividend per share as of October 15, 2009 for the term D_0 .

2

3 I then calculated the DCF results using the average of the following growth terms:

4 1. The Zacks consensus long-term earnings growth estimates; and

5 2. The Value Line earnings per share growth estimates.

6

7 Q. HOW DID YOU CALCULATE THE HIGH AND LOW RESULTS OF THE CONSTANT GROWTH
8 DCF MODEL?

9 A. I calculated the mean high DCF result using the maximum growth rate (*i.e.*, the maximum
10 of the Value Line and Zack's EPS growth rates) in combination with the dividend yield
11 for each of the proxy group companies. Thus, the mean high result reflects the average
12 maximum DCF result for the proxy group. I used a similar approach to calculate the
13 mean low results, using the minimum growth rate for each proxy group company.

14

15 Q. WHAT ARE THE RESULTS OF YOUR DCF ANALYSIS?

16 A. As noted in Exhibit No. __ (RBH-2), the unadjusted mean DCF result for my proxy
17 group is 11.17 percent, based on a three-month averaging period. The mean high DCF
18 result for the three-month averaging period is 12.04 percent.

19

20 **Multi-Period DCF Model**

21 Q. HAVE YOU CONSIDERED ALTERNATIVE FORMS OF THE DCF MODEL?

22 A. Yes, consistent with Commission precedent, I also considered the results of a multi-
23 period (three-stage) Discounted Cash Flow Model, sometimes referred to as a "Multi-
24 period Dividend Discount" model. The three-stage model, which is an extension of the

1 Constant Growth form, enables the analyst to specify specific growth rates over three
2 discreet stages. As with the Constant Growth form of the model, the multi-period form
3 defines the cost of equity as the discount rate that sets the current price equal to the
4 discounted value of future cash flows. Unlike the Constant Growth form, however, the
5 multi-period model must be solved in an iterative fashion.

6
7 Q. PLEASE GENERALLY DESCRIBE THE STRUCTURE OF YOUR MULTI-PERIOD MODEL.

8 A. As noted above, the model sets the subject company's stock price equal to the present
9 value of cash flows received over three "stages". In the first two stages "cash flows" are
10 defined as projected dividends. In the third stage, "cash flows" equal both dividends and
11 the expected price at which the stock will be sold at the end of the period. The expected
12 stock price is based on the "Gordon" model, which defines the price as the expected
13 dividend divided by the difference between the cost of equity (*i.e.*, the discount rate) and
14 the long-term expected growth rate. In essence, the terminal price is defined by the
15 Constant Growth DCF model. In each of the three stages, the dividend is projected as
16 the product of the project earnings per share, and the expected dividend payout ratio. A
17 summary description of the model is provided in Table 3, below.

1

Table 3: Multi-Stage DCF Structure

Stage	0	1	2	3
Cash Flow Component	Initial Stock Price	Expected Dividend	Expected Dividend	Expected Dividend + Terminal Value
Inputs	<ul style="list-style-type: none"> • Stock Price • Earnings Per Share (EPS) • Dividends Per Share (DPS) 	<ul style="list-style-type: none"> • Expected EPS • Expected DPS 	<ul style="list-style-type: none"> • Expected EPS • Expected DPS 	<ul style="list-style-type: none"> • Expected EPS • Expected DPS • Terminal Value
Assumptions	<ul style="list-style-type: none"> • 3-month stock price averaging period 	<ul style="list-style-type: none"> • EPS growth rate • Payout ratio 		<ul style="list-style-type: none"> • Long-term growth rate

2

3 Q. WHAT ARE THE SPECIFIC BENEFITS OF A THREE-STAGE MODEL?

4 A. Because the second stage allows for a transition from the first stage growth rate to the
5 long-term growth rate, it avoids the often unrealistic assumption that growth will change
6 immediately between the first and final stages. In my view, that additional flexibility is
7 very important when, as is the case with electric utilities, there is an expected period of
8 high capital expenditures in the near and intermediate terms. Because the model projects
9 dividends as the product of earnings and the payout ratio, it adds the important ability to
10 recognize that during periods of high capital expenditures, payout ratios may be
11 somewhat lower than they otherwise would be.

12

13 It also is very important to note that while the model calculates the cost of equity based
14 on expected dividends, it does not rely solely on Value Line for dividend growth rate
15 projections. In my experience, a common and legitimate criticism of DCF models that
16 rely on projected dividend growth rates (especially in the Constant Growth form of the

1 model) is that Value Line is the sole source of such projections.²² While the form of the
2 model I have used relies on Value Line for projected payout ratios, the potential bias
3 resulting from reliance on a single analyst is mitigated by the use of consensus earnings
4 forecasts. The model also enables the analyst to check for the reasonableness of the
5 inputs and results by reference to certain market-based metrics. The terminal price, for
6 example, can be divided by the expected EPS in the final year to calculate an average
7 Price/Earnings ("P/E") ratio. To the extent that the projected P/E ratio is inconsistent
8 with either historical or expected levels, it may be an indicator of incorrect or inconsistent
9 assumptions within the balance of the model.

10

11 Q. DO YOU BELIEVE THAT THE MULTI-PERIOD MODEL DESCRIBED ABOVE IS CONSISTENT
12 WITH THE INTENT OF THE TWO-STAGE MODEL RELIED UPON BY THE COMMISSION?

13 A. Yes, I do. It is my understanding that the general form of the model involves a short-
14 term stage based on dividend growth and a second stage based on a long-term growth
15 estimate.²³ Although my calculation of dividend growth does not rely on the Value Line
16 Dividend Per Share growth estimate, it does consider both consensus earnings
17 projections and Value Line's expected payout ratio. My long-run growth estimate, the
18 timing of which extends beyond the horizon of the Value Line and analyst projections, is
19 based on highly visible projections of long-term macroeconomic (in this case, Gross
20 Domestic Product, or "GDP") growth. In my view, both the construction of the model
21 and the underlying inputs and assumptions are consistent with, and enhance, the
22 application of the two-stage model.

²² See, for example, Harris and Marston, Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts, *Financial Management*, 21 (Summer 1992).

²³ New York Public Service Commission, Case 08-E-0539.

1

2 Q. PLEASE SUMMARIZE YOUR INPUTS TO THE MULTI-PERIOD DCF MODEL.

3 A. I applied the multi-period model to the proxy group described earlier in my testimony.

4 My assumptions with respect to the various model inputs are described in Table 4, below.

5

Table 4: Multi-Stage DCF Model Assumption

Stage	0	1	2	3
Stock Price	3 month average daily stock price as of October 15, 2009			
Earnings Growth	EPS as reported by Value Line	EPS growth as average of (1) Value Line, and (2) Zacks projected growth rates	Transition to Long-term GDP growth on geometric average basis	Long-term GDP growth
Payout Ratio		Value Line company-specific	Transition to industry average payout ratio (Value Line) on a geometric average basis	Industry average (Value Line)
Terminal Value				Expected dividend in final year divided by solved cost of equity less long-term growth rate

6

7 Q. HOW DID YOU CALCULATE THE LONG-TERM GDP GROWTH RATE?

8 A. The long-term growth rate of 5.95 percent is based on a GDP growth rate of 3.36

9 percent from 1929 through 2008 and an inflation rate of 2.50 percent. The GDP growth

10 rate is calculated as the compound growth rate in the chain weighted GDP for the period

11 from 1929 through 2008. This growth rate is consistent with the growth rate relied upon

12 by Staff in the multi-period model that was relied on in Case 08-E-0539. I calculated the

13 rate of inflation of 2.50 percent based on the average of the long-term projected growth

1 rate in the Consumer Price Index (“CPI”) for all urban consumers, as reported by Blue
2 Chip Economic Indicators of 2.40 percent²⁴ and the compound annual growth rate in the
3 CPI of 2.61 percent projected by the Energy Information Administration (“EIA”) in the
4 2009 Annual Energy Outlook.²⁵

5
6 Q. WHAT WERE YOUR SPECIFIC ASSUMPTIONS WITH RESPECT TO THE PAYOUT RATIO?

7 A. As noted in Table 4, for the first two periods I relied on the first year and long-term
8 projected payout ratios reported by Value Line²⁶ for each of the proxy group companies.
9 In the long term, I assumed that the payout ratios for the proxy group converge to the
10 long-term industry average payout ratio of 66.00 percent, as reported by Value Line.

11

12 Q. WHAT WERE THE RESULTS OF THIS ANALYSIS?

13 A. As shown in Exhibit No. ___ (RBH-3), the results of this multi-stage DCF analysis suggest
14 an ROE of 11.01 percent for the three-month averaging period.

15

16 Q. ARE THE RESULTS OF YOUR ANALYSIS GENERALLY CONSISTENT WITH THE PROJECTED
17 MARKET VALUE OF THE PROXY COMPANIES AND THE ELECTRIC INDUSTRY?

18 A. Yes, they are. Based on the assumptions I discussed previously, the multi-period model
19 results in an average price-to-earnings multiple of 13.94, which is generally consistent
20 with price-to-earnings (“P/E”) multiple of 13.50 that Value Line projects for the electric
21 industry for the long-term industry outlook. Furthermore, the results of the model are

²⁴ Blue Chip Economic Indicators Vol. 34, No. 10, October 10, 2009, at 14. The long-term average growth rate in CPI for the period from 2016 through 2020.

²⁵ EIA 2009 Annual Energy Outlook, Table A20. Macroeconomic Indicators, Update AEO2009 Reference April 2009.

²⁶ As reported in the Value Line Investment Survey as “All Div’ds to Net Prof”.

1 generally consistent with the Value Line projected annual P/E ratio for the proxy group
2 companies of 13.21 for 2012 through 2014. As noted earlier, since the terminal price is
3 derivative of the model's prior calculations and assumptions, the terminal P/E ratio is an
4 indicator of the reasonableness and consistency of the inputs and results.

6 **Capital Asset Pricing Model Analysis**

7 Q. PLEASE BRIEFLY DESCRIBE THE CAPITAL ASSET PRICING MODEL.

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

$$13 \quad k_e = r_f + \beta(r_m - r_f) \quad [3]$$

14 where:

15 k_e = the required market ROE

16 β = Beta of an individual security

17 r_f = the risk free rate of return

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

19
20 In this specification, the term $(r_m - r_f)$ represents the market risk premium. According to
21 the theory underlying the CAPM, since unsystematic risk can be diversified away,
22 investors should be concerned only with systematic or non-diversifiable risk. Non-
23 diversifiable risk is measured by Beta, which is defined as:

1
$$\beta = \frac{\text{Covariance}(r_e, r_m)}{\text{Variance}(r_m)} \quad [4]$$

2 The variance of the market return, noted in Equation [4], is a measure of the uncertainty
3 of the general market, and the covariance between the return on a specific security and
4 the market reflects the extent to which the return on that security will respond to a given
5 change in the market return.

6
7 Q. HOW HAS THE CAPM BEEN AFFECTED BY THE CURRENT ECONOMIC CONDITIONS?

8 A. The recent market has affected the CAPM model in two important ways. First, as noted
9 above, the risk free rate, " r_f ", in the CAPM formula is represented by the interest rate on
10 long-term U.S. Treasury securities. During the recent capital market contraction,
11 investors reacted to the extraordinary levels of market volatility discussed earlier by
12 investing in lowest-risk securities such as Treasury bonds. Consequently, the first term in
13 the model (*i.e.*, the risk-free rate) is lower than it would have been absent the elevated
14 degree of risk aversion that, at least in part, has resulted in historically low Treasury yields.

15
16 Second, the extraordinary loss in equity values experienced in 2008 actually reduced the
17 market risk premium when measured on a historical basis. As sometimes applied in the
18 CAPM, the market risk premium represents the difference in the arithmetic average total
19 return on common stocks, and the income-only return on long-term Government bonds,
20 as reported by Morningstar, Inc. (formerly, Ibbotson Associates). Consequently, the
21 market losses experienced in 2008 actually resulted in a *decrease* in the historic risk
22 premium from the prior year from 7.10 percent to 6.50 percent. In my view, the notion
23 that the premium required by equity investors would decrease at the same time that equity

1 market volatility was at historically high levels is counter-intuitive, and supports the use of
2 a forward-looking (*ex-ante*) market risk premium estimate.

3
4 Q. WITH THOSE QUALIFICATIONS IN MIND, WHAT ASSUMPTIONS DID YOU USE IN YOUR
5 CAPM MODEL?

6 A. First, I used the three-month average yield on 30-year Treasury Bonds as my estimate of
7 the risk-free rate. In determining the security most relevant to the application of the
8 CAPM, it is important to select the term (or maturity) that best matches the life of the
9 underlying investment. As noted by Morningstar:

10 The horizon of the chosen Treasury security should match the horizon
11 of whatever is being valued... If an investor plans to hold stock in a
12 company for only five years, the yield on a five-year Treasury note would
13 not be appropriate since the company will continue to exist beyond those
14 five years.²⁷

15
16 Because utility companies represent long-duration investments, it is appropriate to use
17 yields on long-term Treasury bonds as the risk-free rate component of the CAPM. In my
18 view, the 30-year Treasury Bond is the appropriate security for that purpose.

19
20 As to the market risk premium, for the reasons discussed above, I did not use a historical
21 average; rather, I developed two forward-looking (*ex-ante*) estimates. Finally, for the Beta
22 term, I used Beta estimates from Value Line and Bloomberg, both of which adjust their
23 Beta estimates based on an average of the raw, historical Beta and 1.0. While their
24 techniques are slightly different, in both cases (*i.e.*, for both Value Line and Bloomberg),
25 the adjustment addresses the tendency of the CAPM to underestimate the cost of capital
26 for companies with “unadjusted” or “raw” Betas significantly less than 1.0. For relatively

²⁷ Morningstar Inc., 2009 Ibbotson Stocks, Bonds, Bills and Inflation, Valuation Yearbook, at 46.

1 low raw Beta companies such as regulated utilities, failure to take such adjustments into
2 consideration will result in an understatement of required returns.

3

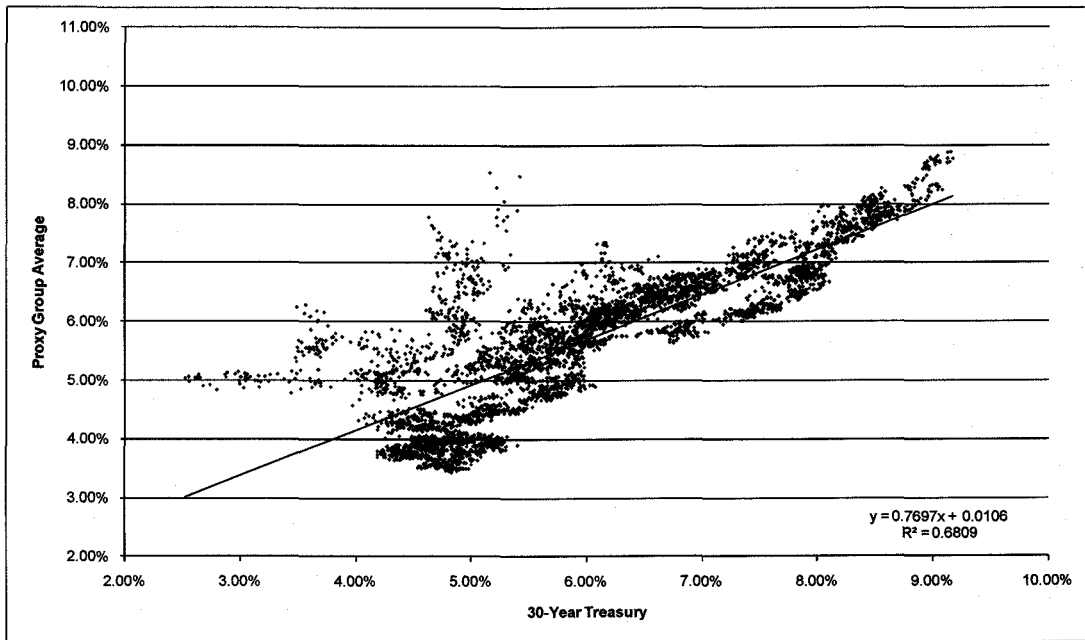
4 Q. HAS THE COMMISSION TYPICALLY RELIED ON THE YIELD ON 30-YEAR TREASURY BONDS
5 IN ESTIMATING THE RISK FREE RATE?

6 A. It is my understanding that the Commission has relied on the average of the yields on the
7 10-year and the 30-year Treasury in estimating the risk-free rate. However, as shown in
8 Charts 1 and 2 below, the relationship between the proxy group average dividend yield
9 and the 30-year Treasury bond yield is very similar to the relationship between the proxy
10 group dividend yield and the yield on the 10-year Treasury bond. Comparing the two
11 equations presented in Charts 1 and 2, the R^2 , which is a measure of the fit of the
12 regression line through the data set, is slightly higher on the relationship between the
13 proxy group average dividend yield and the 30-year Treasury yield, suggesting a slightly
14 better fit than the 10-year Treasury yield. Furthermore, the average depreciation rate for
15 CECONY for 2006 through 2008 was approximately 2.97 percent,²⁸ suggesting an
16 average useful life of 33.71 years. On balance, therefore, the 30-year Treasury yield is the
17 better measure of the risk-free rate for the purpose of the CAPM.

²⁸ Consolidated Edison, Inc., Consolidated Edison of New York, Inc., SEC Form 10-K For the Fiscal Year Ended December 31, 2008, at 83.

1

Chart 1: Proxy Group Average Dividend Yield versus the 30-Year Treasury Bond Yield

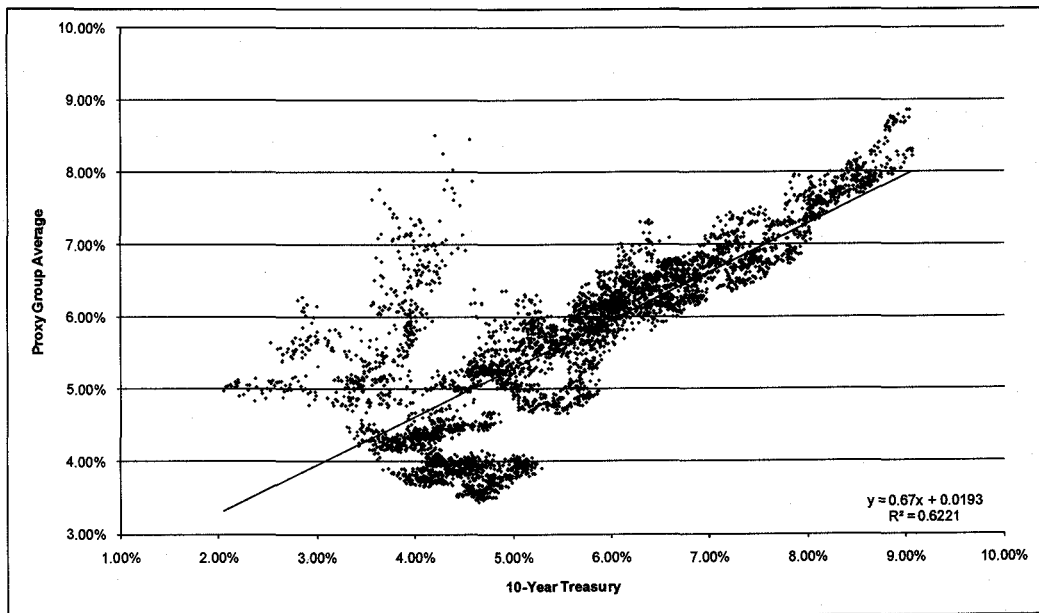


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Chart 2: Proxy Group Average Dividend Yield versus the 10-Year Treasury Bond Yield



5

6

1 Q. PLEASE DESCRIBE THE APPROACHES USED TO ESTIMATE THE *EX-ANTE* MARKET RISK
2 PREMIUM.

3 A. The first approach assumes a constant Sharpe Ratio, which is the ratio of the risk
4 premium relative to the risk, or standard deviation of a given security or index of
5 securities. As shown in Exhibit No.____ (RBH-5), the constant Sharpe Ratio is the ratio of
6 historical risk premium of 6.50 percent and the historical market volatility of 20.46
7 percent.²⁹ The expected risk premium is then calculated as the product of the Sharpe
8 Ratio and the expected market volatility. For the purpose of that calculation, I used the
9 three-month volatility index (*i.e.*, the VXV) discussed earlier in my testimony, and the
10 settlement prices on the February, March, and April 2010 VIX futures contracts.

11
12 Q. PLEASE DESCRIBE YOUR SECOND APPROACH TO ESTIMATING THE MARKET RISK PREMIUM.

13 A. The second approach is a relatively simple calculation of the expected return on the S&P
14 500 Index, less the current 30-year Treasury bond yield. The expected return on the S&P
15 500 is calculated using the Constant Growth DCF model for the companies in the S&P
16 500 index for which long-term earnings projections are available (the companies with
17 such projections represent 92.57 percent of the index market capitalization).

18
19 Q. HOW DID YOU APPLY YOUR PROJECTED MARKET RISK PREMIUM ESTIMATES?

20 A. I relied on each of these projected risk premiums to recalculate the CAPM model using
21 both near and long-term projections of the 30-year Treasury bond yield as the risk free
22 rate. As noted in Exhibit No.____ (RBH-5), the use of projected market risk premia and

²⁹ The standard deviation is easily calculated from the Morningstar data. See also Morningstar Inc., 2009 Ibbotson Stocks, Bonds, Bills and Inflation, Valuation Yearbook, Large Company Stocks: Total Returns Table B-1, at 166-167.

1 risk free rates produces a range of results that substantially overlaps the range of results
2 produced by the other calculation methodologies.

3

4 Q. IS YOUR CALCULATION OF THE *EX-ANTE* MARKET RISK PREMIUM CONSISTENT WITH THE
5 METHODOLOGY RELIED UPON IN PREVIOUS CASES BEFORE THE COMMISSION?

6 A. I believe so. The Commission previously has relied upon the calculation of a projected
7 market risk premium, based on the difference between the estimated *ex-ante* required
8 market return for the S&P 500, as provided by Merrill Lynch and the risk-free rate. As a
9 practical matter, that approach is similar to the DCF-based *ex-ante* market risk premium
10 estimate discussed above (*see* also Exhibit No. __ (RBH-5)).³⁰

11

12 Q. DID YOU CONSIDER ANOTHER FORM OF THE CAPM IN YOUR ANALYSIS?

13 A. Yes. In prior proceedings, the Commission relied upon the “Zero-Beta” CAPM (the
14 form of which is sometimes referred to as the “Empirical CAPM”³¹) in estimating the
15 cost of equity. The Zero-Beta CAPM calculates the product of the adjusted Beta and the
16 market risk premium, and applying a weight of 75.00 percent to that result. The model
17 then applies a 25.00 percent weight to the market risk premium, without any effect of
18 Beta. The results of the two calculations are summed, along with the risk free rate, to
19 produce the Zero-Beta CAPM result:

20
$$k_e = r_f + 0.75\beta(r_m - r_f) + 0.25(r_m - r_f) \quad [5]$$

21 where:

22 k_e = the required market ROE

23 β = Adjusted Beta of an individual security

³⁰ *Ibid.*, at 129.

³¹ *See*, for example, Roger A. Morin, New Regulatory Finance, Public Utilities Reports, Inc., 2006, at 189.

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r_f = the risk free rate of return
 r_m = the required return on the market as a whole.

In essence, the Zero-Beta form of the CAPM addresses the tendency of the CAPM to under-estimate the cost of equity for low-Beta companies such as regulated utilities. In that regard, the Zero-Beta CAPM is not redundant to the use of adjusted Betas, rather it recognizes the results of academic research indicating that the risk-return relationship is different (in essence, flatter) than estimated by the CAPM, and that the CAPM under-estimates the “alpha”, or the constant return term.³²

As with the CAPM, my application of the Zero-Beta CAPM includes *ex-ante* estimates of the Market Risk Premium,³³ and the yield on 30-year Treasury securities as the risk-free rate. The results of my market based CAPM, and Zero-Beta CAPM analyses are provided in Table 5 (below), (*see* also Exhibit No.____ (RBH-5) and Exhibit No.____ (RBH-6)).

Table 5: CAPM Results

	Results
Market Based CAPM	
Sharpe Ratio Derived MRP	10.28%
DCF (<i>Ex-Ante</i>) Derived MRP	9.14%
Zero-Beta CAPM	
Sharpe Ratio Derived MRP	11.02%
DCF (<i>Ex-Ante</i>) Derived MRP	9.73%

³² *Ibid.*, at 191.
³³ *See*, for example, Order Setting Electric Rates, Case 08-E-0539, Issued and Effective April 24, 2009, New York Public Service Commission, at 127-129.

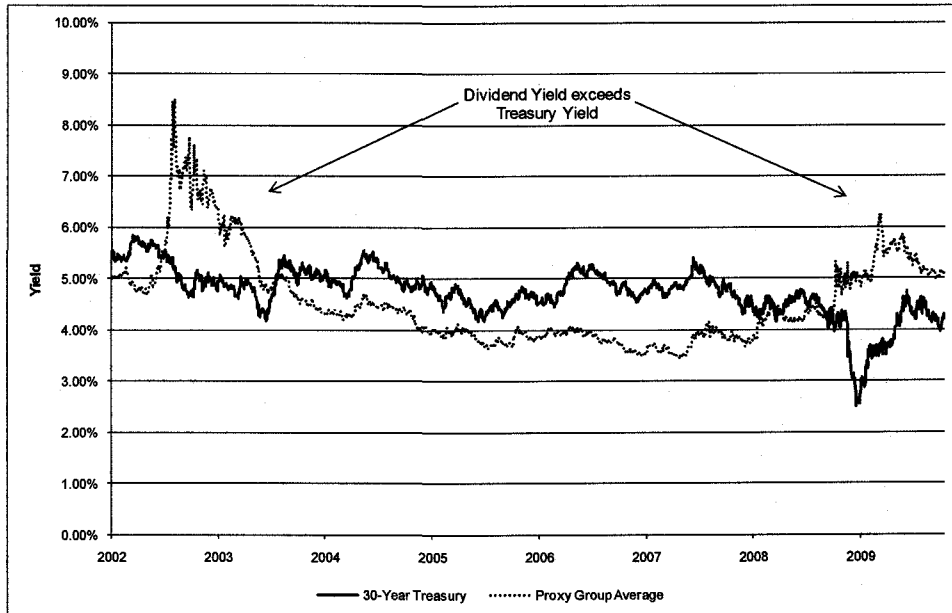
1 Q. IS IT YOUR VIEW THAT THE CAPM RESULTS SHOULD BE GIVEN SPECIFIC WEIGHTS IN
2 DETERMINING THE COMPANY'S COST OF EQUITY?

3 A. Not necessarily. While I have calculated the CAPM using the approaches and
4 assumptions discussed above, for several reasons I do not believe that a specific weight
5 should be given to those results. First, the CAPM results, in particular those based on the
6 *ex-ante* DCF estimate of the Market Risk Premium, are not sufficiently above the yields on
7 long-term utility debt and are well below the prevailing level of ROE authorizations.
8 That is, they suggest an unreasonably low equity risk premium. Consequently, the CAPM
9 results, using both the Sharpe Ratio and *ex-ante* DCF Market Risk Premium estimates
10 produce unreasonably low ROE estimates.

11
12 The Federal government's response to the economic recession, and the continuing level
13 of risk aversion on the part of investors has resulted in long-term Treasury yields that
14 remain well below their historical averages. At the same time, credit spreads remain high
15 relative to historical levels, and utility dividend yields have departed from their consistent
16 historical level relative to long-term Treasury yields. As to the second point, since 2002,
17 the proxy group dividend yields have maintained a fairly consistent discount relative to
18 long-term Treasury yields. As shown on Chart 3, that relationship prevailed but for two
19 periods; the credit contraction that occurred during mid-2002 into the summer of 2003,
20 and the current market. While the long-term difference between the 30-year Treasury
21 yield and the proxy group dividend yield averaged approximately 71 basis points
22 (excluding the inversion periods noted above), the 30-day average (as of October 15,
23 2009) difference is *negative* 91 basis points.

1

Chart 3: Historical Dividend Yields vs. Long-Term Treasury Yields³⁴



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A recent article in The Wall Street Journal noted the same inversion between utility dividend yields and the ten-year Treasury yield. Specifically, the article stated:

5

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And dividend yields have tended to track the yield on 10-year Treasuries closely. Since 1970, the spread of regulated utilities' dividend yields over Treasury yields has averaged 0.24 percentage point. Today, with utilities yielding about 5.65%, the spread is 10 times that, having peaked in March at 3.75 percentage points. You have to go all the way back to the early 1980s for the last time it reached such heights.

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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 Treasuries, particularly after Lehman Brothers collapsed in September 2008, the Federal Reserve's policy of buying up government debt has helped keep them low.³⁵

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Given those substantial departures from long-term relationships, it is clear that the low level of Treasury yields do not reflect the higher level of risk aversion reflected in both proxy group dividend yields, and market volatility indices (*i.e.*, the VIX and VXV). Since

20

21

³⁴ Source: Bloomberg Professional Service.

³⁵ The Wall Street Journal, *A Short Circuit in the Stock Market*, October 23, 2009, Liam Denning, at C10.

1 the CAPM and Zero-Beta CAPM results are heavily influenced by the estimated risk-free
2 rate, I believe those models should be given little weight in determining the Company's
3 cost of equity.

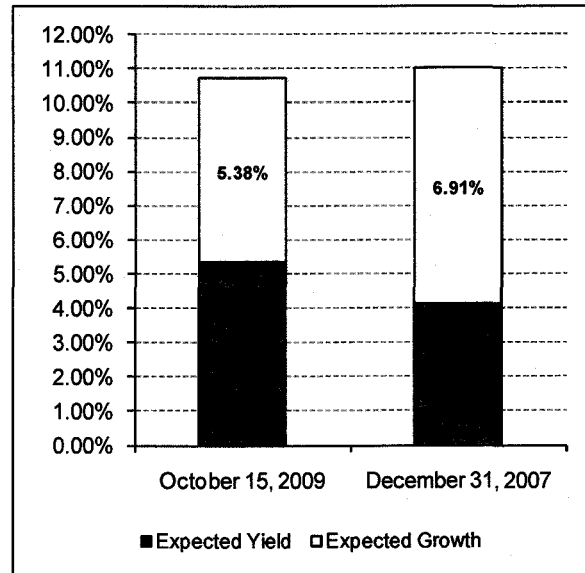
4

5 Q. DOES THE MARKET DISLOCATION DISCUSSED PREVIOUSLY SUGGEST THAT THE CURRENT
6 DCF RESULTS ARE NOT REFLECTIVE OF THE COST OF EQUITY?

7 A. I do not believe so. Chart 4 (below) demonstrates that there is an inverse relationship
8 between the growth rates and dividend yields that are relied on in the Constant Growth
9 DCF model for my proxy group companies. As shown in Chart 4, in December 2007,
10 Value Line projected an overall proxy group required return on equity of approximately
11 11.01 percent, comprised of an expected dividend yield of 4.10 percent and an expected
12 growth rate of 6.91 percent. Since that time, the expected dividend yield and expected
13 growth rates have changed substantially to 5.33 percent and 5.38 percent, respectively.
14 However, the overall required ROE of the proxy group has changed only somewhat to
15 10.71 percent. It is important to note that proxy group required ROE of 10.71 percent as
16 of October 15, 2009 includes an estimated growth rate for ALLETE, Inc of -1.00
17 percent. Excluding ALLETE, Inc. from that calculation increases the required ROE to
18 11.27 percent, with 5.95 percent accorded to the expected growth rate and 5.31 percent
19 accorded to the expected dividend yield. Therefore, while the overall required return on
20 equity has remained relatively constant for the proxy group, the individual components of
21 that return have changed over time to reflect current market conditions.

1

Chart 4: Growth Rate and Yield Analysis³⁶



2

3

4 Flotation Cost Adjustment

5 Q. WHAT ARE FLOTATION COSTS?

6 A. Flotation costs are the costs associated with the sale of new issues of common stock.

7 These costs include out-of-pocket expenditures for the preparation, filing, underwriting,
8 and other costs of issuance of common stock.

9

10 Q. WHY IS IT IMPORTANT TO RECOGNIZE FLOTATION COSTS IN THE ALLOWED ROE?

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

16

³⁶ Source: Value Line

1 Q. OVER WHAT PERIODS OF TIME ARE ISSUANCE AND FLOTATION COSTS RECOGNIZED?

2 A. The issuance costs associated with long-term debt reflect the incurrence of issuance costs
3 that can be assigned a definite life or period of applicability. These costs are amortized
4 over the life of the debt issuance, either to maturity or upon retirement of the debt.
5 Equity issuance or flotation costs, however, do not have a definite period of applicability,
6 but rather have an infinite life.

7
8 Q. IS THE NEED FOR A FLOTATION COST ADJUSTMENT RECOGNIZED BY THE ACADEMIC AND
9 FINANCIAL COMMUNITIES?

10 A. Yes. The need to reimburse investors for equity issuance costs in a rate-limiting cost-of-
11 service context is justified by the academic and financial communities in the same spirit
12 that investors are reimbursed for other costs of service. This treatment is consistent with
13 the philosophy of a fair rate of return. According to Dr. Shannon Pratt:

14 Flotation costs occur when new issues of stock or debt are sold to the
15 public. The firm usually incurs several kinds of flotation or transaction
16 costs, which reduce the actual proceeds received by the firm. Some of
17 these are direct out-of-pocket outlays, such as fees paid to underwriters,
18 legal expenses, and prospectus preparation costs. Because of this
19 reduction in proceeds, the firm's required returns on these proceeds
20 equate to a higher return to compensate for the additional costs.
21 Flotation costs can be accounted for either by amortizing the cost, thus
22 reducing the cash flow to discount, or by incorporating the cost into the
23 cost of capital. Because flotation costs are not typically applied to
24 operating cash flow, one must incorporate them into the cost of capital.³⁷
25

26 Q. HAS THE COMMISSION RECOGNIZED THE NEED TO ADJUST FOR FLOTATION COSTS IN
27 ESTABLISHING THE ROE?

28 A. Yes. In Case 08-E-0539, in developing their recommendation to the Commission, the
29 Administrative Law Judges recognized the need to adjust the Company's ROE to "permit

³⁷ Shannon P. Pratt, Cost of Capital Estimation and Applications, Second Edition, at 220-221.

1 rate recovery of the Company's likely equity issuance costs."³⁸ The Commission adopted
2 this recommendation.³⁹

3

4 Q. DO THE DCF AND CAPM METHODOLOGIES ALREADY INCORPORATE INVESTOR
5 EXPECTATIONS OF A RETURN THAT COMPENSATES FOR FLOTATION COSTS?

6 A. No. All the models used to estimate the appropriate market cost of equity assume no
7 "friction" or transaction costs, as these costs are not reflected in the market price (in the
8 case of the DCF model) or risk premium (in the case of the CAPM). Therefore, it is
9 appropriate to consider flotation costs in determining where within the range of
10 reasonable returns on equity CECONY's return should fall.

11

12 Q. IS THERE SUPPORT FOR THIS APPROACH?

13 A. Yes. Several economists have recognized that the flotation cost adjustment is made not
14 to reflect current or future financing costs, but rather to compensate investors for costs
15 incurred for all past issuances comprising the total equity portion of the Company's
16 capitalization. An article in The Journal of Finance, for example, noted that:

17 Under the conventional approach in other words, the flotation cost
18 adjustment is not made to reflect current or future financing costs, ... it
19 is made to compensate investors for costs incurred in preceding stock
20 issues.⁴⁰
21

³⁸ Case 08-E-0539, Rate Order, at 118.

³⁹ *Ibid.*, at 140-141.

⁴⁰ Cleveland S. Patterson, Flotation Cost Allowance in Rate of Return Regulation: Comment, The Journal of Finance, Vol. XXXVIII, No. 4, September 1983, at 1337 (clarification and emphasis added).

1 Q. ARE FLOTATION COSTS PART OF THE UTILITY'S INVESTED COSTS OR PART OF THE
2 UTILITY'S EXPENSES?

3 A. Flotation costs are part of the invested costs of the utility, which are properly reflected on
4 the balance sheet of the utility as "paid in capital." Flotation costs are not expenses and
5 are not reflected in the income statement. Rather, like investments in rate base or the
6 issuance costs of long-term debt, flotation costs are incurred over time. As a result, the
7 great majority of a utility's flotation costs are incurred prior to the test year, but remain
8 part of the cost structure that exists during the test year and beyond, and as such, should
9 be recognized for ratemaking purposes.

10

11 Q. HAVE YOU CALCULATED THE EFFECT OF FLOTATION COSTS ON THE ROE?

12 A. Yes. I modified the DCF calculation to provide a dividend yield that would reimburse
13 investors for issuance costs. Based on the weighted average of flotation costs set out on
14 Exhibit No. __ (RBH-7), a flotation cost of 1.38 percent is derived from the costs
15 incurred by CECONY's parent company, CEI, in the most recent four equity issuances.
16 Using the 1.38 percent flotation cost discussed above, I modified the DCF calculation to
17 provide a dividend yield that would reimburse investors for issuance costs. As shown in
18 Table 6, and Exhibit No. __ (RBH-7), based on that calculation, an adjustment of 0.06
19 percent (*i.e.*, six basis points) is reflective of flotation costs for CECONY.

20

21 Since the ROE estimates have been determined on the basis of the proxy companies, I
22 also calculated the average flotation cost, based on the most recent underwritten equity
23 issuance for each of the proxy companies, where available. That analysis indicates an
24 average flotation cost of approximately 2.67 percent, which results in an average flotation

1 cost adjustment of 12 basis points.⁴¹ Table 6 (below), provides the DCF results, adjusted
 2 for flotation costs, using first the CEI-specific costs, then the proxy group average
 3 flotation cost.

4 **Table 6: DCF Results Adjusted for Flotation Costs**

Averaging Period	Mean Low	Mean	Mean High
Constant Growth DCF - CEI Flotation Costs			
	10.36%	11.23%	12.10%
Constant Growth DCF - Proxy Group Average Flotation Costs			
	10.42%	11.29%	12.16%
Multi-Period DCF - CEI Flotation Costs			
		11.08%	
Multi-Period DCF - Proxy Group Average Flotation Costs			
		11.14%	

5

6 Q. DID YOU ALSO PRODUCE RESULTS BASED ON THE COMMISSION'S TWO-THIRDS/ONE-
 7 THIRD WEIGHTING OF THE DCF AND CAPM RESULTS?

8 A. Yes, I did. In light of the Commission's past reliance on a weighting of the multi-period
 9 DCF and the CAPM results at two-thirds, and one-third, respectively, I have presented
 10 the calculated result using that methodology. As discussed below, those results are
 11 generally consistent with my recommendation.⁴²

12

⁴¹ This calculation is presented in Exhibit No. ___ (RBH-7).

⁴² Case 91-M-0509, Proceeding on Motion of the Commission to Consider Financial Regulatory Policies for New York State Utilities, at 27.

1 **Weighted Average Results**

2 Q. PLEASE DISCUSS YOUR CALCULATION OF THE WEIGHTED AVERAGE COST OF EQUITY
3 ESTIMATE.

4 A. Consistent with the recommended decision in the Generic Finance Proceeding,⁴³ and
5 Commission's final order in the Company's most recent rate proceeding,⁴⁴ I considered
6 the weighted average of the results of the DCF and CAPM analyses. As shown in Table
7 7 (below), the weighted average of the DCF and CAPM analyses suggest a market cost of
8 equity in the range of 10.80 percent, including flotation costs.

9 **Table 9: Weighted Average Analytical Results⁴⁵**

	Results
Average DCF	11.09%
Average CAPM	10.04%
Weighted Average	10.80%

10

VII. BUSINESS RISKS AND OPERATING PERFORMANCE

11 Q. DO THE MEAN DCF, AND CAPM RESULTS FOR THE PROXY GROUP PROVIDE AN
12 APPROPRIATE ESTIMATE OF THE COST OF EQUITY FOR THE COMPANY?

13 A. No, the mean results do not necessarily provide an appropriate estimate of the
14 Company's cost of equity. In my view, the Company's business and financial risks must
15 be taken into consideration when determining where the Company's cost of equity falls
16 within the range of results.

⁴³ *Ibid.*

⁴⁴ Case 08-E-0539, Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Electric Service, Rate Order (issued April 24, 2009), at 133.

⁴⁵ Including a flotation cost adjustment of 6 basis points, as applied by the Commission in Case 08-E-0539 at 140-141.

1

2 Q. WHAT IS THE PRIMARY BUSINESS RISK THAT CECONY CURRENTLY FACES?

3 A. The principal business risk facing CEI is the need for a very substantial level of capital
4 expenditures, which are far higher than historical levels of investment, and higher than
5 the average of the comparable group.

6

7 **Capital Expenditures**

8 Q. PLEASE SUMMARIZE THE COMPANY'S CAPITAL EXPENDITURE PLAN.

9 A. The Company's current projections for the gas, steam, and electric operations include
10 approximately \$6.6 billion⁴⁶ in capital investment for the Company for the three-year
11 period from 2009 through 2011.

12

13 Q. HOW IS THE COMPANY'S RISK PROFILE AFFECTED BY THE SUBSTANTIAL INCREASE IN ITS
14 PLANNED CAPITAL EXPENDITURES?

15 A. As with any utility faced with a substantial capital expenditure plan, the Company's risk
16 profile is adversely affected in two significant and related ways: (1) the heightened level of
17 investment increases the risk of under-recovery, or the delayed recovery of the invested
18 capital; and (2) an inadequate authorized return will put downward pressure on key credit
19 metrics.

20

⁴⁶ Source: Company forecast. Please note that this figure does not account for any reductions in the Company's projected capital investment plans due to the ongoing electric rate case (i.e., Case 09-E-0428).

1 Q. HAVE THE RISKS ASSOCIATED WITH ELEVATED CAPITAL EXPENDITURES BEEN
2 RECOGNIZED BY THE FINANCIAL COMMUNITY?

3 A. Yes, they have. Rating agencies, for example, have consistently focused on the
4 detrimental effect on cash flows and corresponding pressure on credit metrics resulting
5 from elevated capital expenditures. In effect, the additional pressure on cash flows exerts
6 corresponding pressure on credit metrics and, therefore, credit ratings. In fact, Standard
7 & Poor's commented on this concern in its August 2007 analysis of the electric utility
8 industry:

9 Utilities are aggressively investing in generation facilities to address rising
10 demand and replace retiring assets, in transmission plants to replace and
11 build out an aging grid, and in distribution systems that need to be
12 expanded and made more efficient.⁴⁷
13

14 More recently, Fitch Ratings noted that:

15 Jurisdictional regulatory practices will be a key of creditworthiness in the
16 sector. Utilities operating in states with regulatory mechanisms in place
17 that facilitate timely recovery of costs and a reasonable return on
18 investment in rates are more likely to come through this period of stress
19 with limited deterioration of credit quality. Conversely, the ratings of
20 utilities operating in states with relatively low authorized ROEs and
21 significant regulatory lag are more likely to suffer credit deterioration.⁴⁸
22

23 Equity investors also recognize the pressure on cash flows associated with relatively high
24 levels of capital expenditures, and the resulting effect on the cost of capital. As noted by
25 Wachovia Capital Markets:

26 The harsh reality is that the recession (or depression?) and concurrent
27 bank turmoil is all happening in the midst of a major long-term building
28 cycle for the industry, which in and of itself poses substantial financing
29 and regulatory risks.

30 ***

⁴⁷ Standard & Poor's, *Electric Utilities Industry Survey*, August 9, 2007, at 6.

⁴⁸ FitchRatings, U.S. Utilities, Power and Gas 2009 Outlook, December 2008, at 12.

1 The debt markets remain open, but there is a great deal of concern about
2 maintaining credit quality as a move down the credit curve can result in
3 substantial costs given large spread differentials.⁴⁹
4

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

7 A. First, it is clear that the Company has a substantial capital expenditure program. It also is
8 clear that the financial community recognizes the additional risks associated with
9 substantial capital expenditures and that those risks are reflected in market valuation
10 multiples. In my view, these factors suggest a high level of risk.
11

VIII. CAPITAL STRUCTURE

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

13 A. The Company's test year capital structure consists of 48.15 percent common equity, 49.53
14 percent long-term debt, 1.04 percent Preferred Stock, and 1.28 percent customer
15 deposits. The Company has an actual, separate capital structure and the Company's
16 projected test year capital structure is discussed in detail in the direct testimony of The
17 Accounting Panel.
18

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

21 A. In order to assess the reasonableness of the Company's proposed capital structure, I
22 reviewed the capitalization ratios of the individual utility operating companies owned and
23 operated by the respective proxy group companies for the past eight quarters. As shown

⁴⁹ Wachovia Capital Markets, LLC, Equity Research, *Takeaways from Platts Conference*, April 9, 2009, at 3.

1 in Exhibit No. __ (RBH-8), the Company's proposed equity ratio (48.15 percent) is well
2 below the mean equity ratio of the proxy group companies of 55.46 percent. The
3 Company's long-term debt ratio, preferred stock ratio, and customer deposit ratio of
4 49.53 percent, 1.04 percent, and 1.28 percent respectively are within the range of those
5 ratios for the proxy group companies. Thus, overall, the Company's proposed capital
6 structure ratios are reasonable compared to the proxy group.

7

8 Q. WILL THE CAPITAL STRUCTURE AND ROE AUTHORIZED IN THIS PROCEEDING AFFECT
9 THE COMPANY'S ACCESS TO CAPITAL AT REASONABLE RATES?

10 A. Yes, I believe so. As noted earlier, the level of earnings authorized by the Commission
11 directly affects the Company's ability to fund its operations with internally generated
12 funds; both bond-investors and rating agencies expect a significant portion of on-going
13 capital investments to be financed with internally generated funds. The need to generate
14 funds internally also is important in light of the constrained, volatile, and expensive
15 capital market conditions noted earlier.

16

17 It also is important to realize that because a utility's investment horizon is very long,
18 investors require the assurance of a sufficiently high return to satisfy the long-run
19 financing requirements of the assets it puts into service. Those assurances, which often
20 are measured by the relationship between internally generated cash flows and debt (or
21 interest expense), depend quite heavily on the capital structure. As a consequence, both
22 the ROE and capital structure are very important to both debt and equity investors.
23 Given the capital market conditions noted earlier in my Direct Testimony, the authorized
24 ROE and capital structure take on even greater significance.

1

2 Q. HOW HAS THE COMPANY'S CREDIT RATING BEEN AFFECTED BY ITS AUTHORIZED ROE
3 AND CAPITAL STRUCTURE?

4 A. As noted earlier, in June 2009 Moody's downgraded the Company by two notches from
5 A1 to A3. In the most recent ratings analysis, Moody's noted that:

6 The downgrade reflects the companies' weak financial profiles and our
7 expectation that the companies are unlikely to achieve significantly
8 stronger credit metrics in the foreseeable future, in light of the current
9 challenging regulatory and economic environments and continued high
10 capital spending.⁵⁰
11

12 Moody's specifically noted that:

13 We believe CEI's regulatory environment has become more challenging
14 in recent years. Our view reflects the steady decline in allowed ROEs,
15 particularly the decline in CECONY's allowed electric ROE from the
16 11.1% that existed through most of the 1990s and the early part of this
17 decade to the 9.1% authorized for the 2009 rate year ending March 31,
18 2009. While CECONY's allowed electric ROE was increased to 10% for
19 the 2010 rate year, allowed ROEs since the 2007 rate year have been
20 consistently lower than of earlier... We believe that this has had and will
21 continue to have a negative impact on CEI and CECONY's cash flow
22 generating abilities all else being equal.⁵¹

23
24 While Moody's does not consider it likely in the near-term, an upgrade in
25 CEI's rating would likely require evidence of a less challenging regulatory
26 environment combined with a strengthening of CEI's credit metrics.⁵²
27

28 Given the analyses presented above, it is clear that the decision reached by the
29 Commission in this case has the potential to both improve the credit rating agencies' view
30 of the regulatory environment in New York, as well as improve the credit metrics, which
31 are so important to the maintenance of the Company's already reduced credit rating.

⁵⁰ See, Moody's Global Infrastructure Analysis: Consolidated Edison, Inc., Moody's Investors Services, July 2009, at 1.

⁵¹ *Ibid.*, at 5.

⁵² *Ibid.*, at 10.

1 Without such measures, Moody's sees greater potential for further negative credit actions
2 than it does for positive actions.

3

IX. CONCLUSION AND RECOMMENDATION

4 Q. WHAT IS YOUR CONCLUSION REGARDING A FAIR RETURN ON BOOK EQUITY FOR
5 CECONY?

6 A. I believe that 10.80 percent is a reasonable estimate of the return required by equity
7 investors to invest in a company of CECONY's risk profile in the current capital market
8 environment. In the event that the Commission were to approve a four-year rate plan,
9 my recommended return would increase to 11.40 percent to reflect the additional risk
10 associated with fixing rates during that period. My recommended return on book equity
11 considers the results of the DCF and CAPM models, summarized in Table 8 (below), as
12 well as the costs associated with the issuance of common stock, and the specific risks to
13 which the Company remains exposed. Applying the Commission's weightings to the
14 average of the DCF model results of 11.09 percent and the average of the CAPM results
15 of 10.04 percent, results in an estimated cost of equity of 10.74 percent. Including a 6
16 basis point adjustment for flotation costs results in a cost of equity of 10.80⁵³ percent.
17 Therefore, I conclude that a return on the book common equity of 10.80 percent
18 reasonably represents the market cost of equity for CECONY.

⁵³ This approach is consistent with the weighted average methodology applied by the Commission in Case 08-E-0539 at 140-141.

1

Table 8: Summary of Analytical Results

	Mean Low	Mean	Mean High
Constant Growth DCF	10.30%	11.17%	12.04%
Multi-Period DCF	11.01%		
Average DCF	11.09%		
	Sharpe-Ratio Derived MRP	Average	S&P 500 <i>Ex- Ante</i> Derived MRP
Market Based CAPM	10.28%	9.71%	9.14%
Zero-Beta CAPM	11.02%	10.37%	9.73%
Average CAPM	10.04%		
CEI Flotation Cost	0.06%		
Proxy Group Flotation Cost	0.12%		
Weighted Average Cost of Equity (2/3 * DCF) +(1/3 * CAPM)			
Three-Month Average (including CEI Flotation Cost)	10.80%		

2

3 **Credit Rating Adjustment**

4 Q. ARE YOU FAMILIAR WITH THE COMMISSION'S PRACTICE OF ADJUSTING THE AWARDED
5 ROE BASED ON THE CREDIT QUALITY OF THE PROXY GROUP?

6 A. Yes, I am. Historically, the Commission has made an adjustment to the Company's
7 authorized ROE to account for differences between the Company's credit rating and the
8 proxy group median credit rating.⁵⁴ This adjustment has been made to account for the
9 supposition that the market will necessarily require a lower cost of equity for a higher
10 rated entity, as compared to an entity of lower credit quality.

11

⁵⁴ See, for example, Case 08-E-0539, Rate Order, at 136.

1 Q. DOES YOUR RECOMMENDED RETURN ON BOOK EQUITY REFLECT THE DIFFERENCE IN
2 CREDIT RATING BETWEEN THE COMPANY AND YOUR PROXY GROUP?

3 A. Yes. As noted in Section V of my Direct Testimony, my credit screen specifically
4 chooses companies with at least a BBB+ credit rating. As also noted in that section, the
5 average credit rating of my proxy group is slightly below A-, while the median rating is
6 BBB+. That average credit rating is precisely the Company's average credit rating when
7 Standard and Poor's, Moody's and Fitch's long-term issuer credit ratings are considered.
8 In fact, the size of my proxy group would more than double if my credit rating screen
9 were relaxed to include companies rated BBB- and above. Moreover, because of the
10 recent downgrade by Moody's of two credit rating notches, the Company's credit rating is
11 now much closer to the proxy group credit rating than it otherwise would have been.
12 Because the credit rating of my proxy group matches that of the Company, it is not
13 necessary to make any *ex-post* adjustments to my recommended Return on Book Equity to
14 account for a difference. Furthermore, I am not aware of any theoretical basis for the
15 proposition that market required returns and credit ratings are directly related.

16

17 **Stay-Out Premium**

18 Q. WHAT ARE THE IMPLICATIONS FOR THE COMPANY'S COST OF EQUITY IF IT WERE TO
19 AGREE TO A FOUR-YEAR STAY-OUT PERIOD?

20 A. It is important to consider the potential effect that increases in the general level
21 of interest rates would have on the Company's stock price and its cost of equity. As
22 discussed in Section VI, there is a strong relationship between the proxy group average
23 dividend yield and the 30-year Treasury yield. Given the historically low level of long-
24 term Treasury rates, it is reasonable to assume that on balance, long-term rates are more

1 likely to increase than decrease during the term of the stay-out period. That represents a
2 significant element of risk for the Company.

3

4 Q. HOW HAS THE STAY-OUT PREMIUM BEEN CALCULATED IN PRIOR PROCEEDINGS BEFORE
5 THE COMMISSION?

6 A. It is my understanding that in prior proceedings, the premium has been calculated by
7 taking one-half of the difference between the five-year average yields on three and one-
8 year Treasury Notes. Staff has noted that such a calculation is meant to give guidance to
9 the Commission in arriving at an appropriate premium.⁵⁵

10

11 Q. WHAT ARE YOUR CONCERNS WITH THAT APPROACH?

12 A. My primary concern is that the methodology for calculating the premium appears
13 unrelated to the underlying risks that it is intended to mitigate. If a substantial element of
14 risk is the dilution of the earned return on equity resulting from unforeseen events, there
15 is no apparent relationship between that risk and the level of intermediate-term Treasury
16 yields. In that regard, it is unclear why the term difference between the one and three-
17 year yields would be more appropriate than the term difference between, for example, the
18 ten and 30-year Treasury yields. Moreover, the shape and slope of the yield curve is not
19 constant over time, such that a relatively flat slope at the short-end of the curve may
20 produce an inadequate premium relative to that which would be derived from the long-
21 end of the curve. Finally, it is unclear how the 50.00 percent adjustment factor relates to
22 the mitigation of company-specific risks.

23

⁵⁵ See Case 09-E-0428, Prepared Testimony of Staff Finance Panel, at 107, 108.

1 In addition, considering the recently unstable nature of the capital markets, it is unclear
2 why a five-year historical average difference between short-term interest rates would be
3 indicative of the incremental return requirements over the coming three years. For much
4 the same reason that the Market Risk Premium component of the Zero Beta CAPM is an
5 *ex-ante* measure, it stands to reason that the stay-out premium also should at least consider
6 forward-looking data. Moreover, if the risk associated with the stay-out period is that the
7 Company's cost of equity will increase as a result of changes in the level of interest rates,
8 then (as discussed above) the relevant security is the 30-year Treasury securities. In that
9 case, a more appropriate measure of risk may be the difference the current and projected
10 30-year Treasury yield.

11

12 Q. DID YOU CALCULATE THE STAY-OUT PREMIUM USING THE COMMISSION'S TRADITIONAL
13 APPROACH?

14 A. Yes, I did. Over the five year period ended October 15, 2009 the average yield on the
15 five-year Treasury Note was 3.70 percent, while the average yield on the one-year
16 Treasury Note was 3.17 percent. The difference between those two average yields is 0.53
17 percent; one-half of that amount equals 0.26 percent, or 26 basis points. Over the past
18 five years, however, the difference between the one and five-year yields has steadily
19 increased, such that the average difference over two years was 1.16 percent (116 basis
20 points), which is more than two times higher than the five-year average. The one-year
21 average difference was 155 basis points, suggesting a 78 basis point stay-out premium.

22

1 Q. DID YOU ALSO CALCULATE THE STAY-OUT PREMIUM BASED ON THE DIFFERENCE IN
2 CURRENT AND PROJECTED LONG-TERM TREASURY YIELDS?

3 A. Yes, I analyzed the difference between current and projected yields on 30-year Treasury
4 bonds. As of October 15, 2009 the current yield on the 30-year Treasury bond was 4.16
5 percent. For the projected Treasury bond yields, I relied on the 2013 Blue Chip Financial
6 Forecast for the project yield of 5.50 percent, which reasonably approximates the end
7 date for the rate plan. The difference between the current and projected yields is 134
8 basis points. One-half of that difference is 67 basis points.

9
10 Q. WHAT IS YOUR RECOMMENDATION AS TO THE APPROPRIATE LEVEL OF THE STAY-OUT
11 PREMIUM?

12 A. For the reasons noted above, I do not believe that one-half of the five-year average
13 difference between the one and five-year Treasury yields is the appropriate measure of
14 the incremental risks incurred by equity investors in the current market environment.
15 Even if the Commission chose to maintain that approach, consideration should be given
16 to the steady increase in term spreads (*i.e.*, the difference between the one and five-year
17 yields) over the past five years. In that case, the appropriate averaging period would be
18 one or two years, as opposed to five. In my view the potential for a substantial increase
19 in the level of long-term Treasury yields also should be given consideration in the
20 determination of the stay-out premium. Considering both the Commission's traditional
21 approach and the likelihood of increased long-term rates, I believe that a stay-out
22 premium of 60 basis points is reasonable and appropriate at this time.

23

1 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

2 A. Yes, it does.

Robert B. Hevert, CFA
President

Mr. Hevert is an economic and financial consultant with broad experience in the energy industry. He has an extensive background in the areas of corporate strategic planning, energy market assessment, corporate finance, mergers, and acquisitions, asset-based transactions, asset and business unit valuation, market entry strategies, strategic alliances, project development, feasibility and due diligence analyses. Mr. Hevert has significant management experience with both operating and professional services companies.

REPRESENTATIVE PROJECT EXPERIENCE

Financial and Economic Advisory Services

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

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

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

Representative non-confidential clients have included:

- Conectiv generation asset divestiture
- Eastern Utilities Associates (prior to acquisition by National Grid, PLC) generation asset divestiture
- Niagara Mohawk – sale of Niagara Mohawk Energy
- Potomac Electric Company generation asset divestiture

Representative confidential engagements have included:

- Buy-side valuation and assessment of merchant generation assets in Midwestern U.S.
- Buy-side due diligence and valuation of wholesale energy marketing companies in Eastern and Midwestern U.S.
- Buy-side due diligence of natural gas distribution assets in Northeastern U.S.
- Financial feasibility study of natural gas pipeline in upper Midwestern U.S.

- Financial valuation of natural gas pipeline in Southwestern U.S.

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. Also performed rate of return and cost of service analyses for municipally owned gas and electric utilities. 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.

Representative engagements have included:

- Performing rate of return analyses for use in cost of service analyses on behalf of municipally owned gas and electric utilities in the Southeastern and Midwestern U.S.
- Developing *merchant function exit strategies* for Northeastern U.S. natural gas distribution companies
- Developing regulatory and ratemaking strategy for mergers including several Northeastern natural gas distribution companies

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 the proposed transfer of power purchase agreements, procurement of residual service electric supply, the legal separation of generation assets, and specific financing transactions. Services provided also included 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.

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.

Representative engagements have included:

- Managing assessments of the NYPOOL, NEPOOL and PJM markets for major North American energy companies considering entering or expanding their presence in those markets
- Assessment of ECAR, MAPP, MAIN and SPP markets for a large U.S. integrated utility considering acquisition of additional electric generation assets
- Assessment of natural gas pipeline and storage capacity in the SERC and FRCC markets for a major international energy company

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, Energy Ventures, 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.

Representative engagements have included:

- Developing and facilitating executive level strategic planning retreats for Northeastern natural gas distribution companies
- Developing organization and business process redesign plans for municipally owned gas/electric/water utility in the Southeastern U.S.
- Reviewing and revising corporate merchant generation business plans for Canadian and U.S. integrated utilities
- Advising client personnel in development of business unit level strategic plans for various natural gas distribution companies

PROFESSIONAL HISTORY

Concentric Energy Advisors, Inc. (2002 – Present)

President

Navigant Consulting, Inc. (1997 – 2001)

Managing Director (2000 – 2001)

Director (1998 – 2000)

Vice President, REED Consulting Group (1997 – 1998)

REED Consulting Group (1997)

Vice President

Bay State Gas Company (1987 – 1997)

Vice President, Energy Ventures 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.

ATTACHMENT A
EXPERT TESTIMONY OF ROBERT B. HEVERT

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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 Commission				
Atmos Energy Corporation	07/09	Atmos Energy Colorado-Kansas Division	Docket No. 09AL-507G	Return on Equity (gas)
Xcel Energy	12/06	Public Service Company of Colorado	Docket No. 06S-656G	Return on Equity (gas)
Xcel Energy	04/06	Public Service Company of Colorado	Docket No. 06S-234EG	Return on Equity (electric)
Xcel Energy	08/05	Public Service Company of Colorado	Advice Letter No. 94-Steam	Return on Equity (steam)
Xcel Energy	05/05	Public Service Company of Colorado	Docket No. 05-264G	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
Connecticut Natural Gas Corporation	12/07	Connecticut Natural Gas Corporation	Docket No. 06-03-04PH02	Return on Equity
Federal Energy Regulatory Commission				
Florida Gas Transmission Company, LLC	10/09	Florida Gas Transmission Company, LLC	Docket No. RP10-21-000	Return on Equity
Maritimes and Northeast Pipeline, LLC	07/09	Maritimes and Northeast Pipeline, LLC	Docket No. RP09-809-000	Return on Equity
Spectra Energy	02/08	Saltville Gas Storage	Docket No. RP08-257-000	Return on Equity
Panhandle Energy Pipelines	08/07	Panhandle Energy Pipelines	Docket No. PL07-2-000	Response to draft policy statement regarding inclusion of MLPs in proxy groups for determination of gas pipeline ROEs
Southwest Gas Storage Company	08/07	Southwest Gas Storage Company	Docket No. RP07-541-000	Return on Equity
Southwest Gas Storage Company	06/07	Southwest Gas Storage Company	Docket No. RP07-34-000	Return on Equity
Sea Robin Pipeline LLC	06/07	Sea Robin Pipeline L.L.C.	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

ATTACHMENT A
EXPERT TESTIMONY OF ROBERT B. HEVERT

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Maine Public Utilities Commission				
Northern Utilities, Inc.	07/95	Northern Utilities	Maine PUC	Gas Distribution System Expansion
Massachusetts Department of Public Utilities				
National Grid	08/09	Massachusetts Electric Company	D.P.U. 09-39	Revenue Decoupling and Return on Equity
National Grid	08/09	Massachusetts Electric Company	D.P.U. 09-38	Return on Equity – Solar Generation
Bay State Gas Company	04/09	Bay State Gas Company	D.T.E. 09-30	Return on Equity
NSTAR Electric	09/04	NSTAR Electric	D.T.E. 04-85	Divestiture of Power Purchase Agreement
NSTAR Electric	08/04	NSTAR Electric	D.T.E. 04-78	Divestiture of Power Purchase Agreement
NSTAR Electric	07/04	NSTAR Electric	D.T.E. 04-68	Divestiture of Power Purchase Agreement
NSTAR Electric	07/04	NSTAR Electric	D.T.E. 04-61	Divestiture of Power Purchase Agreement
NSTAR Electric	06/04	NSTAR Electric	D.T.E. 04-60	Divestiture of Power Purchase Agreement
Unitil Corporation	01/04	Fitchburg Gas and Electric	D.T.E. 03-52	Integrated Resource Plan; Gas Demand Forecast
Bay State Gas Company	01/93	Bay State Gas Company	DPU 93-14	Long Term Debt Financing
Bay State Gas Company	01/91	Bay State Gas Company	DPU 91-25	Long Term Debt Financing
Minnesota Public Utilities Commission				
Minnesota Power a division of ALLETE, Inc.	11/09	Minnesota Power	Docket No. E015/GR-09-1151	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas	11/08	CenterPoint Energy Minnesota Gas	Docket No. G-008/GR-08-1075	Return on Equity
Otter Tail Power Corporation	10/07	Otter Tail Power Company	Docket No. E017/GR-07-1178	Return on Equity
Xcel Energy	11/05	NSP-Minnesota	Docket No. E002/GR-05-1428	Return on Equity (electric)
Xcel Energy	09/04	NSP Minnesota	Docket No. G002/GR-04-1511	Cost of Capital (gas)

ATTACHMENT A
EXPERT TESTIMONY OF ROBERT B. HEVERT

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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
New Hampshire Public Utilities Commission				
Unitil Energy Systems, Inc. ("Unitil"), EnergyNorth Natural Gas, Inc. d/b/a National Grid NH, Granite State Electric Company d/b/a National Grid, and Northern Utilities, Inc. – New Hampshire Division	08/08	Unitil Energy Systems, Inc. ("Unitil"), EnergyNorth Natural Gas, Inc. d/b/a National Grid NH, Granite State Electric Company d/b/a National Grid, and Northern Utilities, Inc. – New Hampshire Division	Docket No. DG 07-072	Carrying Charge Rate on Cash Working Capital
New Jersey Board of Public Utilities				
Pepco Holdings, Inc.	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	BPU Docket No. EM05121058	Market Value of Electric Generation Assets; Auction
Conectiv	06/03	Atlantic City Electric Company	BPU Docket No. EO03020091	Market Value of Electric Generation Assets; Auction Process
New Mexico Public Regulation Commission				
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	07/07	Southwestern Public Service Company	Case No. 07-00319-UT	Return on Equity (electric)
New York State Public Service Commission				
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 Dakota Public Service Commission				
Otter Tail Power Company	11/08	Otter Tail Power Company	Docket No. 08-862	Return on Equity (electric)
Oklahoma Corporation Commission				
CenterPoint Energy Resources Corp., D/B/A CenterPoint Energy Oklahoma Gas	03/09	CenterPoint Energy Oklahoma Gas	Docket No. PUD200900055	Return on Equity

ATTACHMENT A
EXPERT TESTIMONY OF ROBERT B. HEVERT

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Rhode Island Public Utilities Commission				
National Grid RI – Gas	08/08	National Grid RI – Gas	Docket No. 3943	Revenue Decoupling and Return on Equity
South Dakota Public Utilities Commission				
Northern States Power Company	06/09	South Dakota Division of Northern States Power	Docket No. EL09-009	Return on Equity (electric)
Otter Tail Power Company	10/08	Otter Tail Power Company	Docket No. EL08-030	Return on Equity (electric)
Texas Public Utility Commission				
Texas-New Mexico Power Company	08/08	Texas-New Mexico Power Company	Docket No. 36025	Return on Equity (electric)
Xcel Energy	05/06	Southwestern Public Service	SOAH Docket No. 473-06-2536 Docket No. 32766	Return on Equity (electric)
Texas Railroad Commission				
CenterPoint Energy Resources Corp. D/B/A CenterPoint Energy Texas Gas	03/08	CenterPoint Energy Resources Corp. D/B/A CenterPoint Energy Texas Gas	Docket No. 9791	Return on Equity
Utah Public Service Commission				
Questar Gas Company	12/07	Questar Gas Company	Docket No. 07-057-13	Return on Equity
Vermont Public Service Board				
Green Mountain Power	04/06	Green Mountain Power	Docket Nos. 7175 and 7176	Return on Equity (electric)
Vermont Gas Systems, Inc.	12/05	Vermont Gas Systems	Docket Nos. 7109 and 7160	Return on Equity (gas)
Virginia State Corporation Commission				
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

Relative Market to Book by Regulatory Jurisdiction Ranking

Company	Ticker	Price to Book Value	Relative Price to Book Value	Barclays' Tier
CH Energy Group	CHG	1.20	0.74	5.00
Consol. Edison	ED	1.17	0.72	5.00
Northeast Utilities	NU	1.31	0.80	5.00
Pepeco Holdings	POM	1.23	0.76	5.00
Pinnacle West Capital	PNW	1.00	0.61	5.00
PNM Resources	PNM	0.66	0.41	5.00
Allegheny Energy	AYE	2.69	1.65	5.00
UII Holdings	UIL	1.68	1.03	5.00
UniSource Energy	UNS	1.50	0.92	5.00
Tier Average		1.38	0.85	
Ameren Corp.	AEE	1.25	0.77	4.00
Gen. Vermont Pub. Serv.	CV	1.21	0.74	4.00
Cleco Corp.	CNL	1.36	0.83	4.00
Empire Dist. Elec.	EDE	1.30	0.80	4.00
Entergy Corp.	ETR	2.44	1.50	4.00
NV Energy Inc.	NVE	0.88	0.54	4.00
PPL Corp.	PPL	3.19	1.96	4.00
Public Serv. Enterprise	PEG	2.58	1.58	4.00
Avista Corp.	AVA	1.11	0.68	3.00
Dominion Resources	D	2.42	1.49	3.00
Exelon Corp.	EXC	4.39	2.70	3.00
G't Plains Energy	GXP	1.11	0.68	3.00
Hawaiian Elec.	HE	1.61	0.99	3.00
Integrus Energy	TEG	1.19	0.73	3.00
MGE Energy	MGEE	1.62	0.99	3.00
NSTAR	NST	1.97	1.21	3.00
Portland General	POR	1.05	0.64	3.00
SCANA Corp.	SCG	1.45	0.89	3.00
Vectren Corp.	VVC	1.64	1.01	3.00
Westar Energy	WR	1.10	0.68	3.00
Wisconsin Energy	WEC	1.57	0.96	3.00
ALLETE	ALE	1.55	0.95	2.00
Amer. Elec. Power	AEP	1.48	0.91	2.00
Black Hills	BKH	1.22	0.75	3.00
CenterPoint Energy	CNP	2.49	1.53	2.00
CMS Energy Corp.	CMS	1.23	0.76	2.00
DPL Inc.	DPL	3.01	1.85	2.00
DTE Energy	DTE	1.10	0.68	2.00
Edison Int'l	EIX	1.56	0.96	2.00
El Paso Electric	EE	1.33	0.82	2.00
FirstEnergy Corp.	FE	2.52	1.55	2.00
OGE Energy	OGE	1.52	0.93	2.00
Otter Tail Corp.	OTTR	1.71	1.05	2.00
PG&E Corp.	PCG	1.50	0.92	2.00
Sempra Energy	SRE	1.60	0.98	2.00
Southern Co.	SO	2.12	1.30	2.00
Xcel Energy Inc.	XEL	1.30	0.80	2.00
Alliant Energy	LNT	1.34	0.82	1.00
Duke Energy	DUK	1.06	0.65	1.00
FPL Group	FPL	2.06	1.26	1.00
IDACORP, Inc.	IDA	1.09	0.67	1.00
Progress Energy	PGN	1.30	0.80	1.00
TECO Energy	TE	1.73	1.06	1.00
Tier Average		1.68	1.03	
Overall Average		1.63	1.00	
Tier 5 Discount to Tiers 1 - 4			-17.75%	

Source: Value Line

Note: ITC Holdings Corp. and Constellation Energy Group were excluded from this analysis. ITC Holdings Corp. does not own electric distribution assets, and Constellation Energy Group is currently selling a portion of Constellation Energy Nuclear Group.

3-MONTH CONSTANT GROWTH DCF

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	
Company	Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	Zacks EPS Growth	Value Line EPS Growth	Average Growth Rate	Low DCF ROE	Mean DCF ROE	High DCF ROE	
Allete	ALE	\$1.76	\$32.99	5.33%	5.44%	4.00%	NA	4.00%	9.44%	9.44%	9.44%
Alliant Energy Corp.	LNT	\$1.50	\$26.78	5.60%	5.73%	4.50%	4.50%	4.50%	10.23%	10.23%	10.23%
DPL, Inc.	DPL	\$1.14	\$25.05	4.55%	4.70%	4.50%	8.50%	6.50%	9.15%	11.20%	13.24%
Duke Energy Corp.	DUK	\$0.96	\$15.48	6.20%	6.35%	4.50%	5.00%	4.75%	10.84%	11.10%	11.35%
NSTAR	NST	\$1.50	\$31.87	4.71%	4.87%	5.70%	8.00%	6.85%	10.54%	11.72%	12.89%
PG&E Corp	PCG	\$1.68	\$40.28	4.17%	4.32%	7.50%	6.50%	7.00%	10.81%	11.32%	11.83%
Portland General	POR	\$1.02	\$19.59	5.21%	5.34%	6.70%	3.50%	5.10%	8.80%	10.44%	12.08%
Progress Energy	PGN	\$2.48	\$38.94	6.37%	6.54%	4.50%	6.00%	5.25%	11.01%	11.79%	12.56%
Southern Co.	SO	\$1.75	\$31.64	5.53%	5.71%	8.50%	4.50%	6.50%	10.16%	12.21%	14.27%
Vectren Corp.	VVC	\$1.34	\$23.57	5.68%	5.85%	6.80%	5.00%	5.90%	10.83%	11.75%	12.68%
Wisconsin Energy	WEC	\$1.35	\$44.37	3.04%	3.17%	9.00%	8.00%	8.50%	11.16%	11.67%	12.18%
Xcel Energy, Inc.	XEL	\$0.98	\$19.58	5.00%	5.15%	5.50%	6.50%	6.00%	10.64%	11.15%	11.67%
		PROXY GROUP MEAN		5.12%	5.26%	5.98%	6.00%	5.90%	10.30%	11.17%	12.04%
									Flotation Adjustment Based on Proxy Group		
									0.12%	0.12%	0.12%
									Adjusted Mean ROE		
									10.42%	11.29%	12.16%
									Flotation Adjustment Based on ConEd's Issuances		
									0.06%	0.06%	0.06%
									Adjusted Mean ROE		
									10.36%	11.23%	12.10%

Notes

- [1] Source: Bloomberg
- [2] Source: Bloomberg. Based on indicated number of months historical average.
- [3] Equals Col. [1]/Col. [2]
- [4] Equals (Col. [1] x (1+(0.5 x Col. [7])))/Col. [2]
- [5] Source: Zacks
- [6] Source: Value Line
- [7] Equals Avg (Col. [5], [6])
- [8] Equals (Col. [3] x (1 + (0.5 x Minimum (Col. [5], [6])))) + Minimum (Col. [5], [6])
- [9] Equals Col. [4] + Col. [7]
- [10] Equals (Col. [3] x (1 + (0.5 x Maximum (Col. [5], [6])))) + Maximum (Col. [5], [6])

MULTI-PERIOD DCF MODEL - 3 MONTH AVERAGE PRICE

Company	Ticker	Stock Price	Dividend Yield	2009 EPS	EPS Growth	GDP Growth	Payout Ratio			Solver Cells			Near Term Growth	Intermediate Growth	Long Term Growth
							2009	2013	2023	Delta	k(e)	Solution			
ALLETE	ALE	\$ 32.99	5.33%	\$ 1.95	4.00%	5.95%	96.00%	74.00%	66.00%	\$ 0.00	9.82%	9.82%	4.00%	4.97%	5.95%
Alliant Energy Corp.	LNT	\$ 26.78	5.60%	\$ 1.90	4.50%	5.95%	88.00%	64.00%	66.00%	\$ 0.00	10.61%	10.61%	4.50%	5.22%	5.95%
DPL, Inc.	DPL	\$ 25.05	4.55%	\$ 2.10	6.50%	5.95%	54.00%	48.00%	66.00%	\$ 0.00	11.59%	11.59%	6.50%	6.22%	5.95%
Duke Energy Corp.	DUK	\$ 15.48	6.20%	\$ 1.10	4.75%	5.95%	85.00%	78.00%	66.00%	\$ 0.00	10.84%	10.84%	4.75%	5.35%	5.95%
NSTAR	NST	\$ 31.87	4.71%	\$ 2.35	6.85%	5.95%	65.00%	61.00%	66.00%	\$ 0.00	11.28%	11.28%	6.85%	6.40%	5.95%
PG&E Corp	PCG	\$ 40.28	4.17%	\$ 3.20	7.00%	5.95%	53.00%	51.00%	66.00%	\$ 0.00	11.49%	11.49%	7.00%	6.47%	5.95%
Portland General	POR	\$ 19.59	5.21%	\$ 1.35	5.10%	5.95%	70.00%	59.00%	66.00%	\$ 0.00	10.49%	10.49%	5.10%	5.52%	5.95%
Progress Energy	PGN	\$ 38.94	6.37%	\$ 3.10	5.25%	5.95%	80.00%	72.00%	66.00%	\$ 0.00	11.49%	11.49%	5.25%	5.60%	5.95%
Southern Co.	SO	\$ 31.64	5.53%	\$ 2.30	6.50%	5.95%	76.00%	70.00%	66.00%	\$ 0.00	11.29%	11.29%	6.50%	6.22%	5.95%
Vectren Corp.	VVC	\$ 23.57	5.68%	\$ 1.70	5.90%	5.95%	78.00%	68.00%	66.00%	\$ (0.00)	11.07%	11.07%	5.90%	5.92%	5.95%
Wisconsin Energy	WEC	\$ 44.37	3.04%	\$ 3.05	8.50%	5.95%	44.00%	48.00%	66.00%	\$ 0.00	11.09%	11.09%	8.50%	7.22%	5.95%
Xcel Energy, Inc.	XEL	\$ 19.58	5.00%	\$ 1.50	6.00%	5.95%	64.00%	54.00%	66.00%	\$ 0.00	11.13%	11.13%	6.00%	5.97%	5.95%
MEAN:		\$ 29.18	5.12%	\$ 2.13	5.90%	5.95%	71.08%	62.25%	66.00%				11.01%	5.90%	5.95%
													CEI Flotation Adjustment	0.06%	
													Adjusted ROE	11.08%	
													Proxy Group Flotation Adjustment	0.12%	
													Adjusted ROE	11.14%	

Projected Annual Data/Earnings Per Share

Company	Ticker	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Terminal Growth
ALLETE	ALE	\$ 2.82	\$ 1.95	\$ 2.03	\$ 2.11	\$ 2.19	\$ 2.28	\$ 2.38	\$ 2.49	\$ 2.61	\$ 2.75	\$ 2.91	\$ 3.08	\$ 3.26	\$ 3.46	\$ 3.66	\$ 3.88	5.95%
Alliant Energy Corp.	LNT	\$ 2.54	\$ 1.90	\$ 1.99	\$ 2.07	\$ 2.17	\$ 2.27	\$ 2.37	\$ 2.49	\$ 2.62	\$ 2.76	\$ 2.92	\$ 3.10	\$ 3.28	\$ 3.48	\$ 3.68	\$ 3.90	5.95%
DPL, Inc.	DPL	\$ 2.12	\$ 2.10	\$ 2.24	\$ 2.38	\$ 2.54	\$ 2.70	\$ 2.87	\$ 3.06	\$ 3.25	\$ 3.45	\$ 3.65	\$ 3.87	\$ 4.10	\$ 4.34	\$ 4.60	\$ 4.88	5.95%
Duke Energy Corp.	DUK	\$ 1.01	\$ 1.10	\$ 1.15	\$ 1.21	\$ 1.26	\$ 1.32	\$ 1.39	\$ 1.46	\$ 1.54	\$ 1.63	\$ 1.72	\$ 1.82	\$ 1.93	\$ 2.04	\$ 2.17	\$ 2.29	5.95%
NSTAR	NST	\$ 2.22	\$ 2.35	\$ 2.51	\$ 2.68	\$ 2.87	\$ 3.06	\$ 3.27	\$ 3.48	\$ 3.71	\$ 3.94	\$ 4.18	\$ 4.43	\$ 4.69	\$ 4.97	\$ 5.26	\$ 5.58	5.95%
PG&E Corp	PCG	\$ 3.22	\$ 3.20	\$ 3.42	\$ 3.66	\$ 3.92	\$ 4.19	\$ 4.48	\$ 4.78	\$ 5.09	\$ 5.41	\$ 5.74	\$ 6.08	\$ 6.44	\$ 6.83	\$ 7.23	\$ 7.66	5.95%
Portland General	POR	\$ 1.39	\$ 1.35	\$ 1.42	\$ 1.49	\$ 1.57	\$ 1.65	\$ 1.73	\$ 1.83	\$ 1.93	\$ 2.04	\$ 2.16	\$ 2.28	\$ 2.42	\$ 2.56	\$ 2.72	\$ 2.88	5.95%
Progress Energy	PGN	\$ 2.96	\$ 3.10	\$ 3.26	\$ 3.43	\$ 3.61	\$ 3.80	\$ 4.01	\$ 4.23	\$ 4.46	\$ 4.72	\$ 5.00	\$ 5.29	\$ 5.61	\$ 5.94	\$ 6.29	\$ 6.67	5.95%
Southern Co.	SO	\$ 2.25	\$ 2.30	\$ 2.45	\$ 2.61	\$ 2.78	\$ 2.96	\$ 3.15	\$ 3.35	\$ 3.56	\$ 3.77	\$ 4.00	\$ 4.24	\$ 4.49	\$ 4.76	\$ 5.04	\$ 5.34	5.95%
Vectren Corp.	VVC	\$ 1.63	\$ 1.70	\$ 1.80	\$ 1.91	\$ 2.02	\$ 2.14	\$ 2.26	\$ 2.40	\$ 2.54	\$ 2.69	\$ 2.85	\$ 3.02	\$ 3.20	\$ 3.39	\$ 3.59	\$ 3.81	5.95%
Wisconsin Energy	WEC	\$ 3.03	\$ 3.05	\$ 3.31	\$ 3.59	\$ 3.90	\$ 4.23	\$ 4.57	\$ 4.92	\$ 5.27	\$ 5.63	\$ 5.99	\$ 6.35	\$ 6.72	\$ 7.12	\$ 7.55	\$ 8.00	5.95%
Xcel Energy, Inc.	XEL	\$ 1.46	\$ 1.50	\$ 1.59	\$ 1.69	\$ 1.79	\$ 1.89	\$ 2.01	\$ 2.13	\$ 2.25	\$ 2.39	\$ 2.53	\$ 2.68	\$ 2.84	\$ 3.01	\$ 3.19	\$ 3.38	5.95%

Projected Annual Data/Dividend Payout Ratio

Company	Ticker	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ALLETE	ALE	96.00%	90.50%	85.00%	79.50%	74.00%	72.40%	70.80%	69.20%	67.60%	66.00%	66.00%	66.00%	66.00%	66.00%	66.00%
Alliant Energy Corp.	LNT	88.00%	82.00%	76.00%	70.00%	64.00%	64.40%	64.80%	65.20%	65.60%	66.00%	66.00%	66.00%	66.00%	66.00%	66.00%
DPL, Inc.	DPL	54.00%	52.50%	51.00%	49.50%	48.00%	51.60%	55.20%	58.80%	62.40%	66.00%	66.00%	66.00%	66.00%	66.00%	66.00%
Duke Energy Corp.	DUK	85.00%	83.25%	81.50%	79.75%	78.00%	75.60%	73.20%	70.80%	68.40%	66.00%	66.00%	66.00%	66.00%	66.00%	66.00%
NSTAR	NST	65.00%	64.00%	63.00%	62.00%	61.00%	62.00%	63.00%	64.00%	65.00%	66.00%	66.00%	66.00%	66.00%	66.00%	66.00%
PG&E Corp	PCG	53.00%	52.50%	52.00%	51.50%	51.00%	54.00%	57.00%	60.00%	63.00%	66.00%	66.00%	66.00%	66.00%	66.00%	66.00%
Portland General	POR	70.00%	67.25%	64.50%	61.75%	59.00%	60.40%	61.80%	63.20%	64.60%	66.00%	66.00%	66.00%	66.00%	66.00%	66.00%
Progress Energy	PGN	80.00%	78.00%	76.00%	74.00%	72.00%	70.80%	69.60%	68.40%	67.20%	66.00%	66.00%	66.00%	66.00%	66.00%	66.00%
Southern Co.	SO	76.00%	74.50%	73.00%	71.50%	70.00%	69.20%	68.40%	67.60%	66.80%	66.00%	66.00%	66.00%	66.00%	66.00%	66.00%
Vectren Corp.	VVC	78.00%	75.50%	73.00%	70.50%	68.00%	67.60%	67.20%	66.80%	66.40%	66.00%	66.00%	66.00%	66.00%	66.00%	66.00%
Wisconsin Energy	WEC	44.00%	45.00%	46.00%	47.00%	48.00%	51.60%	55.20%	58.80%	62.40%	66.00%	66.00%	66.00%	66.00%	66.00%	66.00%
Xcel Energy, Inc.	XEL	64.00%	61.50%	59.00%	56.50%	54.00%	56.40%	58.80%	61.20%	63.60%	66.00%	66.00%	66.00%	66.00%	66.00%	66.00%

Projected Annual Data/Dividends Per Share & Terminal Market Value

Company	Ticker	Initial Outflow	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2023 Terminal Price
ALLETE	ALE	(32.99)	\$ 1.84	\$ 1.79	\$ 1.74	\$ 1.69	\$ 1.72	\$ 1.76	\$ 1.81	\$ 1.86	\$ 1.92	\$ 2.03	\$ 2.15	\$ 2.28	\$ 2.42	\$ 2.56	\$ 70.15
Alliant Energy Corp.	LNT	(26.78)	\$ 1.63	\$ 1.58	\$ 1.52	\$ 1.45	\$ 1.53	\$ 1.61	\$ 1.71	\$ 1.81	\$ 1.93	\$ 2.04	\$ 2.17	\$ 2.29	\$ 2.43	\$ 2.57	\$ 58.52
DPL, Inc.	DPL	(25.05)	\$ 1.17	\$ 1.21	\$ 1.26	\$ 1.30	\$ 1.48	\$ 1.69	\$ 1.91	\$ 2.15	\$ 2.41	\$ 2.55	\$ 2.71	\$ 2.87	\$ 3.04	\$ 3.22	\$ 60.44
Duke Energy Corp.	DUK	(15.48)	\$ 0.96	\$ 0.98	\$ 1.01	\$ 1.03	\$ 1.05	\$ 1.07	\$ 1.09	\$ 1.11	\$ 1.13	\$ 1.20	\$ 1.27	\$ 1.35	\$ 1.43	\$ 1.51	\$ 32.77
NSTAR	NST	(31.87)	\$ 1.61	\$ 1.69	\$ 1.78	\$ 1.87	\$ 2.03	\$ 2.19	\$ 2.37	\$ 2.56	\$ 2.76	\$ 2.92	\$ 3.09	\$ 3.28	\$ 3.47	\$ 3.68	\$ 73.15
PG&E Corp	PCG	(40.28)	\$ 1.80	\$ 1.91	\$ 2.02	\$ 2.14	\$ 2.42	\$ 2.72	\$ 3.05	\$ 3.41	\$ 3.79	\$ 4.01	\$ 4.25	\$ 4.51	\$ 4.77	\$ 5.06	\$ 96.63
Portland General	POR	(19.59)	\$ 0.95	\$ 0.96	\$ 0.97	\$ 0.97	\$ 1.05	\$ 1.13	\$ 1.22	\$ 1.32	\$ 1.42	\$ 1.51	\$ 1.60	\$ 1.69	\$ 1.79	\$ 1.90	\$ 44.32
Progress Energy	PGN	(38.94)	\$ 2.54	\$ 2.61	\$ 2.67	\$ 2.74	\$ 2.84	\$ 2.94	\$ 3.05	\$ 3.17	\$ 3.30	\$ 3.49	\$ 3.70	\$ 3.92	\$ 4.15	\$ 4.40	\$ 84.13
Southern Co.	SO	(31.64)	\$ 1.82	\$ 1.90	\$ 1.99	\$ 2.07	\$ 2.18	\$ 2.29	\$ 2.40	\$ 2.52	\$ 2.64	\$ 2.80	\$ 2.96	\$ 3.14	\$ 3.33	\$ 3.53	\$ 69.85
Vectren Corp.	VVC	(23.57)	\$ 1.36	\$ 1.39	\$ 1.42	\$ 1.45	\$ 1.53	\$ 1.61	\$ 1.70	\$ 1.79	\$ 1.88	\$ 1.99	\$ 2.11	\$ 2.24	\$ 2.37	\$ 2.51	\$ 51.99
Wisconsin Energy	WEC	(44.37)	\$ 1.49	\$ 1.65	\$ 1.83	\$ 2.03	\$ 2.36	\$ 2.71	\$ 3.10	\$ 3.51	\$ 3.95	\$ 4.19	\$ 4.44	\$ 4.70	\$ 4.98	\$ 5.28	\$ 108.83
Xcel Energy, Inc.	XEL	(19.58)	\$ 0.98	\$ 0.99	\$ 1.01	\$ 1.02	\$ 1.13	\$ 1.25	\$ 1.38	\$ 1.52	\$ 1.67	\$ 1.77	\$ 1.88	\$ 1.99	\$ 2.10	\$ 2.23	\$ 45.57

CAPITAL ASSET PRICING MODEL - 3-MONTH AVERAGE 30 YEAR TREASURY BOND YIELD

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
		Adjusted Betas			30-Yr. Treasury	Market Risk			
Company		Value Line	Bloomberg	Mean Beta	Yield	Premium	Low CAPM	CAPM k(e)	High CAPM
Allete	ALE	0.70	0.73	0.71	4.29%	6.50%	8.84%	8.93%	9.02%
Alliant Energy Corp.	LNT	0.70	0.81	0.75	4.29%	6.50%	8.84%	9.19%	9.54%
DPL, Inc.	DPL	0.60	0.66	0.63	4.29%	6.50%	8.19%	8.38%	8.58%
Duke Energy Corp.	DUK	0.65	0.73	0.69	4.29%	6.50%	8.52%	8.79%	9.07%
NSTAR	NST	0.65	0.68	0.67	4.29%	6.50%	8.52%	8.62%	8.73%
PG&E Corp	PCG	0.55	0.61	0.58	4.29%	6.50%	7.87%	8.07%	8.27%
Portland General	POR	0.75	0.74	0.74	4.29%	6.50%	9.09%	9.13%	9.17%
Progress Energy	PGN	0.65	0.69	0.67	4.29%	6.50%	8.52%	8.64%	8.76%
Southern Co.	SO	0.55	0.57	0.56	4.29%	6.50%	7.87%	7.94%	8.00%
Vectren Corp.	VVC	0.75	0.72	0.74	4.29%	6.50%	8.98%	9.07%	9.17%
Wisconsin Energy	WEC	0.65	0.65	0.65	4.29%	6.50%	8.52%	8.52%	8.53%
Xcel Energy, Inc.	XEL	0.65	0.66	0.66	4.29%	6.50%	8.52%	8.55%	8.59%
	MEAN	0.65	0.69	0.67			8.52%	8.65%	8.78%

Notes

[1] Source: Value Line

[2] Source: Bloomberg

[3] Equals mean of Cols. [1], [2]

[4] Source: Bloomberg. Based on indicated number of months historical average.

[5] Source: Ibboston Associates

[6] Equals Col [4] + (Min (Cols [1], [2]) x Col [5])

[7] Equals Col. [4] +(Col. [3] x Col [5])

[8] Equals Col [4] + (Max (Cols [1], [2]) x Col [5])

CAPITAL ASSET PRICING MODEL - BLUE CHIP FORECASTED 30 YEAR TREASURY BOND YIELD

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
	Adjusted Betas			30-Yr Treasury	Market Risk			
Company	Value Line	Bloomberg	Mean Beta	Forecast	Premium	Low CAPM	CAPM k(e)	High CAPM
Allete	ALE	0.70	0.73	0.71	4.72%	6.50%	9.27%	9.44%
Alliant Energy Corp.	LNT	0.70	0.81	0.75	4.72%	6.50%	9.27%	9.96%
DPL, Inc.	DPL	0.60	0.66	0.63	4.72%	6.50%	8.62%	9.00%
Duke Energy Corp.	DUK	0.65	0.73	0.69	4.72%	6.50%	8.94%	9.49%
NSTAR	NST	0.65	0.68	0.67	4.72%	6.50%	8.94%	9.16%
PG&E Corp	PCG	0.55	0.61	0.58	4.72%	6.50%	8.29%	8.70%
Portland General	POR	0.75	0.74	0.74	4.72%	6.50%	9.51%	9.59%
Progress Energy	PGN	0.65	0.69	0.67	4.72%	6.50%	8.94%	9.18%
Southern Co.	SO	0.55	0.57	0.56	4.72%	6.50%	8.29%	8.43%
Vectren Corp.	VVC	0.75	0.72	0.74	4.72%	6.50%	9.40%	9.59%
Wisconsin Energy	WEC	0.65	0.65	0.65	4.72%	6.50%	8.94%	8.95%
Xcel Energy, Inc.	XEL	0.65	0.66	0.66	4.72%	6.50%	8.94%	9.01%
MEAN		0.65	0.69	0.67			8.95%	9.21%

Notes

- [1] Source: Value Line
- [2] Source: Bloomberg
- [3] Equals mean of Cols. [1], [2]
- [4] Source: Blue Chip Financial Forecast, October 1, 2009
- [5] Source: Ibboston Associates
- [6] Equals Col [4] + (Min (Cols [1], [2]) x Col [5])
- [7] Equals Col. [4] +(Col. [3] x Col [5])
- [8] Equals Col [4] + (Max (Cols [1], [2]) x Col [5])

CAPM UTILIZING ALTERNATIVE MARKET RISK PREMIUM CALCULATIONS

	Market Risk Premium	
	Sharpe Ratio Derived	Ex-Ante Derived- Three Month Avg. Treasury
Market Risk Premium	8.93%	7.22%
Proxy Group Beta	0.67	0.67
Three Month Average 30 Year Treasury Bond Yield	4.29%	4.29%
CAPM Result	10.28%	9.14%

MARKET RISK PREMIUM UTILIZING EXPECTED MARKET SHARPE RATIO

RP _h	Vol _h		
6.50%	20.46%		
VOL _e		Historical Market Sharpe Ratio	RP _e
28.09%		31.77%	8.93%

$$\frac{RP_h \times Vol_e}{Vol_h} = RP_e$$

RP_h = historical arithmetic average Risk Premium

Vol_h = historical market volatility

Vol_e = expected market volatility

Date	VXV	Feb 2010 VIX Futures	March 2010 VIX Futures	April 2010 VIX Futures
10/15/2009	24.22	27.1	27.05	27.55
10/14/2009	24.58	27.45	27.55	27.9
10/13/2009	25.09	27.5	27.55	27.85
10/12/2009	25.17	27.65	27.55	27.85
10/9/2009	25.08	27.9	27.85	28.15
10/8/2009	25.74	28.2	28.1	28.35
10/7/2009	26.12	28.45	28.35	28.8
10/6/2009	26.73	28.55	28.45	28.75
10/5/2009	27.61	29.15	28.95	29.25
10/2/2009	28.80	29.7	29.35	29.55
10/1/2009	28.33	29.7	29.5	29.7
9/30/2009	26.66	29	28.8	29.05
9/29/2009	26.48	28.85	28.7	28.95
9/28/2009	26.27	28.7	28.65	28.95
9/25/2009	27.21	29.25	29.2	29.5
9/24/2009	27.13	29.15	29.1	29.35
9/23/2009	26.09	28.6	28.45	28.65
9/22/2009	25.69	28.75	28.6	28.9
9/21/2009	26.23	28.7	28.6	28.7
9/18/2009	26.54	28.65	28.45	28.45
9/17/2009	25.94	28.45	28.2	28.25
9/16/2009	25.87	28.45	28.15	28.4
9/15/2009	26.33	28.7	28.5	28.35
9/14/2009	26.41	28.75	28.75	28.75
9/11/2009	26.56	28.95	28.85	
9/10/2009	26.51	28.65	28.65	
9/9/2009	27.29	29.1	28.9	
9/8/2009	28.21	29.35	29.05	
9/4/2009	28.48	29.6	29.3	
9/3/2009	29.60	30	29.65	
Overall Average	28.09			

ESTIMATED MARKET RISK PREMIUM DERIVED FROM

Estimated Weighted Index Dividend Yield	Weighted Index Long-Term Growth Rate	S&P 500 Estimated Required Market Return
1.83%	9.60%	11.51%

Percent of Index Capitalization Represented by Estimate:	92.57%
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3 Month Average 30 Year Treasury Bond Yield 4.29%

3 Month Average Implied Market Risk Premium 7.22%

Standard and Poor's 500 Index

Ticker	Name	Weight in the Index (%)	Long-Term Growth Estimate (%)	Cap-Weighted Long-Term Growth	Estimated 2009 Dividend Yield (%)	Cap-Weighted Dividend Yield
MMM UN Equity	3M Co	0.54%	11.12%		0.06%	2.66%
ABT UN Equity	Abbott Laboratories	0.80%	11.02%		0.09%	3.05%
ANF UN Equity	Abercrombie & Fitch Co	0.03%	12.60%		0.00%	1.89%
ADBE UW Equity	Adobe Systems Inc	0.19%	14.14%		0.03%	0.00%
AMD UN Equity	Advanced Micro Devices Inc	0.04%	8.83%		0.00%	0.00%
AES UN Equity	AES Corp/The	0.10%	11.00%		0.01%	0.00%
AET UN Equity	Aetna Inc	0.11%	12.43%		0.01%	0.11%
ACS UN Equity	Affiliated Computer Services Inc	0.05%	11.50%		0.01%	0.00%
AFL UN Equity	Afac Inc	0.21%	13.33%		0.03%	2.44%
A UN Equity	Agilent Technologies Inc	0.10%	15.00%		0.01%	0.00%
APD UN Equity	Air Products & Chemicals Inc	0.18%	7.51%		0.01%	2.20%
ARG UN Equity	Airgas Inc	0.04%	9.80%		0.00%	1.27%
AKS UN Equity	AK Steel Holding Corp	0.02%	No Long-Term Growth			0.93%
AKAM UW Equity	Akamai Technologies Inc	0.04%	9.08%		0.00%	0.00%
AA UN Equity	Alcoa Inc	0.14%	12.67%		0.02%	1.43%
AYE UN Equity	Allegheny Energy Inc	0.04%	9.00%		0.00%	2.85%
ATI UN Equity	Allegheny Technologies Inc	0.04%	No Long-Term Growth			1.85%
AGN UN Equity	Allergan Inc/United States	0.18%	13.62%		0.02%	0.41%
ALL UN Equity	Allstate Corp/The	0.17%	7.71%		0.01%	2.54%
ALTR UW Equity	Altera Corp	0.06%	16.60%		0.01%	0.89%
MO UN Equity	Altria Group Inc	0.38%	8.33%		0.03%	7.24%
AMZN UW Equity	Amazon.com Inc	0.42%	22.19%		0.09%	0.00%
AEE UN Equity	Ameren Corp	0.06%	4.00%		0.00%	6.04%
AEP UN Equity	American Electric Power Co Inc	0.15%	5.00%		0.01%	5.32%
AXP UN Equity	American Express Co	0.42%	12.50%		0.05%	2.03%
AIG UN Equity	American International Group Inc	0.31%	13.50%		0.04%	0.00%
AMT UN Equity	American Tower Corp	0.16%	17.47%		0.03%	0.00%
AMP UN Equity	Ameriprise Financial Inc	0.09%	11.50%		0.01%	1.81%
ABC UN Equity	AmerisourceBergen Corp	0.07%	12.22%		0.01%	1.02%
AMGN UW Equity	Amgen Inc	0.63%	10.94%		0.07%	0.00%
APH UN Equity	Amphenol Corp	0.07%	15.33%		0.01%	0.14%
APC UN Equity	Anadarko Petroleum Corp	0.32%	5.83%		0.02%	0.55%
ADI UN Equity	Analog Devices Inc	0.08%	13.00%		0.01%	2.84%
AOC UN Equity	AON Corp	0.11%	10.40%		0.01%	1.46%
APA UN Equity	Apache Corp	0.34%	7.50%		0.03%	0.59%
AIV UN Equity	Apartment Investment & Management Co	0.02%	No Long-Term Growth			3.82%
APOL UW Equity	Apollo Group Inc	0.11%	17.75%		0.02%	0.00%
AAPL UW Equity	Apple Inc	1.71%	18.88%		0.32%	0.00%
AMAT UW Equity	Applied Materials Inc	0.18%	10.80%		0.02%	1.74%
ADM UN Equity	Archer-Daniels-Midland Co	0.19%	No Long-Term Growth			1.84%
AIZ UN Equity	Assurant Inc	0.04%	8.75%		0.00%	1.88%
T UN Equity	AT&T Inc	1.53%	5.32%		0.08%	6.38%
ADSK UW Equity	Autodesk Inc	0.06%	13.00%		0.01%	0.00%
ADP UW Equity	Automatic Data Processing Inc	0.21%	11.02%		0.02%	3.33%
AN UN Equity	AutoNation Inc	0.04%	10.25%		0.00%	0.00%
AZO UN Equity	AutoZone Inc	0.07%	11.94%		0.01%	0.00%
AVB UN Equity	AvalonBay Communities Inc	0.06%	3.78%		0.00%	4.79%
AVY UN Equity	Avery Dennison Corp	0.04%	6.00%		0.00%	2.87%
AVP UN Equity	Avon Products Inc	0.15%	9.41%		0.01%	2.47%
BHI UN Equity	Baker Hughes Inc	0.15%	13.00%		0.02%	1.22%
BLL UN Equity	Ball Corp	0.05%	8.50%		0.00%	0.77%
BAC UN Equity	Bank of America Corp	1.57%	8.75%		0.14%	0.22%
BK UN Equity	Bank of New York Mellon Corp/The	0.34%	11.03%		0.04%	1.61%
BAX UN Equity	Baxter International Inc	0.33%	11.71%		0.04%	1.90%
BBT UN Equity	BB&T Corp	0.20%	7.50%		0.01%	4.11%
BDX UN Equity	Becton Dickinson and Co	0.16%	11.80%		0.02%	2.11%
BBBY UW Equity	Bed Bath & Beyond Inc	0.10%	11.94%		0.01%	0.00%
BMS UN Equity	Bemis Co Inc	0.03%	7.00%		0.00%	3.36%
BBY UN Equity	Best Buy Co Inc	0.17%	12.58%		0.00%	1.37%
BIG UN Equity	Big Lots Inc	0.02%	14.29%		0.00%	0.00%
BIIB UN Equity	Biogen Idec Inc	0.14%	8.51%		0.01%	0.00%
BJS UN Equity	BJ Services Co	0.06%	6.00%		0.00%	0.93%
BDK UN Equity	Black & Decker Corp	0.03%	0.33%		0.00%	1.52%
BMC UN Equity	BMC Software Inc	0.07%	15.88%		0.01%	0.00%
BA UN Equity	Boeing Co/The	0.38%	9.13%		0.03%	3.23%
BXP UN Equity	Boston Properties Inc	0.09%	4.80%		0.00%	3.29%
BSX UN Equity	Boston Scientific Corp	0.15%	14.78%		0.02%	0.00%
BNY UN Equity	Bristol-Myers Squibb Co	0.46%	6.53%		0.03%	5.34%
BROGM UW Equity	Broadcom Corp	0.13%	16.87%		0.02%	0.00%
BF/B UN Equity	Brown-Forman Corp	0.05%	6.50%		0.00%	2.34%
BNI UN Equity	Burlington Northern Santa Fe Corp	0.29%	12.00%		0.04%	1.85%
CA UN Equity	CA Inc	0.12%	9.20%		0.01%	0.61%
COG UN Equity	Cabot Oil & Gas Corp	0.04%	No Long-Term Growth			0.27%
CAM UN Equity	Cameron International Corp	0.09%	No Long-Term Growth			0.00%
CPB UN Equity	Campbell Soup Co	0.11%	7.56%		0.01%	3.21%
COF UN Equity	Capital One Financial Corp	0.17%	10.73%		0.02%	1.14%
CAH UN Equity	Cardinal Health Inc	0.10%	11.50%		0.01%	2.41%
CFN UN Equity	CareFusion Corp	0.05%	5.18%		0.00%	0.00%
CCL UN Equity	Carnival Corp	0.21%	12.89%		0.03%	0.00%
CAT UN Equity	Caterpillar Inc	0.34%	7.80%		0.03%	3.05%
CBG UN Equity	CB Richard Ellis Group Inc	0.03%	11.00%		0.00%	0.00%
CBS UN Equity	CBS Corp	0.08%	3.53%		0.00%	1.95%
CELG UW Equity	Celgene Corp	0.26%	24.80%		0.06%	0.00%
CNP UN Equity	Centerpoint Energy Inc	0.05%	7.00%		0.00%	5.91%
CTL UN Equity	CenturyTel Inc	0.10%	3.26%		0.00%	8.24%
CEPH UW Equity	Cephalon Inc	0.04%	12.25%		0.01%	0.00%
CF UN Equity	CF Industries Holdings Inc	0.04%	No Long-Term Growth			0.38%
CHRW UW Equity	CH Robinson Worldwide Inc	0.10%	14.44%		0.01%	1.38%
SCHW UW Equity	Charles Schwab Corp/The	0.21%	14.17%		0.03%	1.31%

CHK UN Equity	Chesapeake Energy Corp	0.19%	8.00%	0.01%	1.03%	0.00%
CVX UN Equity	Chevron Corp	1.54%	No Long-Term Growth		3.48%	0.00%
CB UN Equity	Chubb Corp	0.18%	7.34%	0.01%	2.70%	0.00%
CIEN UN Equity	Ciena Corp	0.01%	11.67%	0.00%	0.00%	0.00%
CI UN Equity	CIGNA Corp	0.08%	10.71%	0.01%	0.14%	0.00%
CINF UN Equity	Cincinnati Financial Corp	0.04%	No Long-Term Growth		5.96%	0.00%
CTAS UN Equity	Cintas Corp	0.05%	11.00%	0.00%	1.64%	0.00%
CSCO UN Equity	Cisco Systems Inc	1.41%	12.70%	0.18%	0.60%	0.00%
C UN Equity	Citigroup Inc	1.09%	2.67%	0.03%	0.17%	0.00%
CTXS UN Equity	Citrix Systems Inc	0.08%	11.62%	0.01%	0.00%	0.00%
CLX UN Equity	Clorox Co	0.08%	9.50%	0.01%	3.45%	0.00%
CME UN Equity	CME Group Inc	0.21%	12.50%	0.03%	1.49%	0.00%
CMS UN Equity	CMS Energy Corp	0.03%	6.50%	0.00%	3.64%	0.00%
COH UN Equity	Coach Inc	0.11%	15.44%	0.02%	0.89%	0.00%
KO UN Equity	Coca-Cola Co/The	1.27%	7.83%	0.10%	2.99%	0.04%
CCE UN Equity	Coca-Cola Enterprises Inc	0.10%	8.66%	0.01%	1.44%	0.00%
CTSH UN Equity	Cognizant Technology Solutions Corp	0.12%	16.67%	0.02%	0.00%	0.00%
CL UN Equity	Colgate-Palmolive Co	0.39%	10.20%	0.04%	2.19%	0.01%
CMCSA UN Equity	Comcast Corp	0.32%	10.11%	0.03%	1.75%	0.01%
CMA UN Equity	Comerica Inc	0.05%	5.42%	0.00%	0.65%	0.00%
CSC UN Equity	Computer Sciences Corp	0.08%	8.00%	0.01%	0.00%	0.00%
CPWR UN Equity	Compuware Corp	0.02%	No Long-Term Growth		0.00%	0.00%
CAG UN Equity	ConAgra Foods Inc	0.10%	7.67%	0.01%	3.60%	0.00%
COP UN Equity	ConocoPhillips	0.77%	No Long-Term Growth		3.70%	0.00%
CNX UN Equity	Consol Energy Inc	0.09%	11.67%	0.01%	0.78%	0.00%
ED UN Equity	Consolidated Edison Inc	0.11%	4.75%	0.01%	5.74%	0.01%
STZ UN Equity	Constellation Brands Inc	0.03%	9.00%	0.00%	0.00%	0.00%
CEG UN Equity	Constellation Energy Group Inc	0.07%	12.50%	0.01%	3.65%	0.00%
CVG UN Equity	Convergys Corp	0.01%	10.00%	0.00%	0.00%	0.00%
GLW UN Equity	Corning Inc	0.24%	12.86%	0.03%	1.29%	0.00%
COST UN Equity	Costco Wholesale Corp	0.26%	12.44%	0.03%	1.26%	0.00%
CVH UN Equity	Coventry Health Care Inc	0.03%	8.28%	0.00%	0.00%	0.00%
BCR UN Equity	CR Bard Inc	0.08%	14.23%	0.01%	0.83%	0.00%
CSX UN Equity	CSX Corp	0.18%	12.92%	0.02%	1.71%	0.00%
CMI UN Equity	Cummins Inc	0.10%	4.00%	0.00%	1.43%	0.00%
CVS UN Equity	CVS Caremark Corp	0.55%	13.98%	0.08%	0.80%	0.00%
DHR UN Equity	Danaher Corp	0.22%	11.07%	0.02%	0.17%	0.00%
DRI UN Equity	Darden Restaurants Inc	0.05%	12.44%	0.01%	3.00%	0.00%
DVA UN Equity	DaVita Inc	0.06%	12.39%	0.01%	0.00%	0.00%
DF UN Equity	Dean Foods Co	0.04%	11.97%	0.00%	0.00%	0.00%
DE UN Equity	Deere & Co	0.19%	7.00%	0.01%	2.55%	0.00%
DELL UN Equity	Dell Inc	0.30%	10.11%	0.03%	0.00%	0.00%
DNR UN Equity	Denbury Resources Inc	0.04%	16.00%	0.01%	0.00%	0.00%
XRAY UN Equity	DENTSPLY International Inc	0.05%	13.00%	0.01%	0.55%	0.00%
DVN UN Equity	Devon Energy Corp	0.32%	5.80%	0.02%	0.89%	0.00%
DV UN Equity	DeVry Inc	0.04%	22.41%	0.01%	0.30%	0.00%
DO UN Equity	Diamond Offshore Drilling Inc	0.15%	25.00%	0.04%	7.55%	0.01%
DTV UN Equity	DIRECTV Group Inc/The	0.26%	16.26%	0.04%	0.00%	0.00%
DFS UN Equity	Discover Financial Services	0.09%	7.67%	0.01%	0.60%	0.00%
D UN Equity	Dominion Resources Inc/VA	0.20%	5.33%	0.01%	5.10%	0.01%
DOV UN Equity	Dover Corp	0.08%	14.00%	0.01%	2.55%	0.00%
DOW UN Equity	Dow Chemical Co/The	0.31%	10.80%	0.03%	3.33%	0.01%
DHI UN Equity	DR Horton Inc	0.04%	No Long-Term Growth		1.34%	0.00%
DPS UN Equity	Dr Pepper Snapple Group Inc	0.07%	7.50%	0.01%	0.00%	0.00%
DTE UN Equity	DTE Energy Co	0.06%	4.00%	0.00%	5.90%	0.00%
DUK UN Equity	Duke Energy Corp	0.21%	3.67%	0.01%	5.93%	0.01%
DNB UN Equity	Dun & Bradstreet Corp	0.04%	12.35%	0.00%	1.79%	0.00%
DYN UN Equity	Dynegy Inc	0.01%	6.50%	0.00%	0.00%	0.00%
ETFC UN Equity	E*Trade Financial Corp	0.03%	No Long-Term Growth		0.00%	0.00%
EMN UN Equity	Eastman Chemical Co	0.04%	11.50%	0.00%	3.12%	0.00%
EK UN Equity	Eastman Kodak Co	0.01%	10.00%	0.00%	0.00%	0.00%
ETN UN Equity	Eaton Corp	0.10%	7.25%	0.01%	3.33%	0.00%
EBAY UN Equity	eBay Inc	0.32%	12.19%	0.04%	0.00%	0.00%
ECL UN Equity	Ecolab Inc	0.11%	13.40%	0.01%	1.18%	0.00%
EIX UN Equity	Edison International	0.11%	6.00%	0.01%	3.75%	0.00%
DD UN Equity	EI Du Pont de Nemours & Co	0.31%	7.05%	0.02%	4.75%	0.01%
EP UN Equity	EI Paso Corp	0.08%	8.00%	0.01%	1.79%	0.00%
ERTS UN Equity	Electronic Arts Inc	0.07%	17.56%	0.01%	0.00%	0.00%
LLY UN Equity	Eli Lilly & Co	0.40%	4.34%	0.02%	5.72%	0.00%
EMC UN Equity	EMC Corp/Massachusetts	0.37%	13.00%	0.05%	0.00%	0.02%
EMR UN Equity	Emerson Electric Co	0.30%	11.30%	0.03%	3.51%	0.01%
ESV UN Equity	ENSCO International Inc	0.07%	No Long-Term Growth		0.21%	0.00%
ETR UN Equity	Entergy Corp	0.16%	6.33%	0.01%	3.82%	0.01%
EOG UN Equity	EOG Resources Inc	0.23%	7.20%	0.02%	0.58%	0.00%
EQT UN Equity	EQT Corp	0.06%	9.00%	0.01%	2.01%	0.00%
EFX UN Equity	Equifax Inc	0.04%	9.00%	0.00%	0.00%	0.00%
EQR UN Equity	Equity Residential	0.08%	3.77%	0.00%	5.61%	0.00%
EL UN Equity	Estee Lauder Cos Inc/The	0.05%	11.42%	0.01%	1.49%	0.00%
EXC UN Equity	Exelion Corp	0.33%	1.74%	0.01%	4.21%	0.01%
EXPE UN Equity	Expedia Inc	0.07%	14.75%	0.01%	0.00%	0.00%
EXPD UN Equity	Expeditors International of Washington I	0.07%	16.13%	0.01%	1.05%	0.00%
ESRX UN Equity	Express Scripts Inc	0.22%	17.51%	0.04%	0.00%	0.00%
XOM UN Equity	Exxon Mobil Corp	3.50%	No Long-Term Growth		2.28%	0.00%
FDO UN Equity	Family Dollar Stores Inc	0.04%	12.18%	0.00%	1.94%	0.00%
FAST UN Equity	Fastenal Co	0.06%	14.75%	0.01%	1.82%	0.00%
FII UN Equity	Federated Investors Inc	0.03%	9.33%	0.00%	3.64%	0.00%
FDX UN Equity	FedEx Corp	0.25%	11.80%	0.03%	0.49%	0.00%
FIS UN Equity	Fidelity National Information Services I	0.09%	13.37%	0.01%	0.82%	0.00%
FITB UN Equity	Fifth Third Bancorp	0.08%	5.75%	0.00%	0.38%	0.00%
FHN UN Equity	First Horizon National Corp	0.03%	7.40%	0.00%	0.00%	0.00%
FLR UN Equity	First Solar Inc	0.13%	33.14%	0.04%	0.00%	0.00%
FE UN Equity	FirstEnergy Corp	0.14%	5.00%	0.01%	4.70%	0.01%
FISV UN Equity	Fiserv Inc	0.08%	13.25%	0.01%	0.00%	0.00%
FLIR UN Equity	FLIR Systems Inc	0.04%	17.49%	0.01%	0.00%	0.00%
FLS UN Equity	Flowerserve Corp	0.06%	12.00%	0.01%	0.98%	0.00%
FLR UN Equity	Fluor Corp	0.09%	13.17%	0.01%	1.14%	0.00%
FMC UN Equity	FMC Corp	0.04%	7.20%	0.00%	0.82%	0.00%
FTI UN Equity	FMC Technologies Inc	0.07%	13.00%	0.01%	0.00%	0.00%
F UN Equity	Ford Motor Co	0.24%	3.00%	0.01%	0.00%	0.00%
FRX UN Equity	Forest Laboratories Inc	0.09%	0.94%	0.00%	0.00%	0.00%
FO UN Equity	Fortune Brands Inc	0.07%	6.57%	0.00%	2.09%	0.00%
FPL UN Equity	FPL Group Inc	0.22%	9.05%	0.02%	3.53%	0.01%
BEN UN Equity	Franklin Resources Inc	0.26%	9.71%	0.02%	0.81%	0.00%
FCX UN Equity	Freeport-McMoRan Copper & Gold Inc	0.33%	9.75%	0.03%	0.00%	0.00%
FTR UN Equity	Frontier Communications Corp	0.02%	1.00%	0.00%	13.42%	0.00%
GME UN Equity	GameStop Corp	0.05%	14.20%	0.01%	0.00%	0.00%
GCI UN Equity	Gannett Co Inc	0.03%	3.67%	0.00%	1.21%	0.00%
GPS UN Equity	Gap Inc/The	0.16%	10.35%	0.02%	1.45%	0.00%
GD UN Equity	General Dynamics Corp	0.26%	8.10%	0.02%	2.24%	0.01%
GE UN Equity	General Electric Co	1.78%	8.00%	0.14%	4.66%	0.08%
GIS UN Equity	General Mills Inc	0.21%	9.37%	0.02%	2.88%	0.01%
GPC UN Equity	Genuine Parts Co	0.06%	8.75%	0.01%	4.10%	0.00%
GNW UN Equity	Genworth Financial Inc	0.06%	10.00%	0.01%	0.00%	0.00%

GENZ UN Equity	Genzyme Corp	0.15%	19.67%	0.03%	0.00%	0.00%
GILD UN Equity	Gilead Sciences Inc	0.42%	15.50%	0.07%	0.00%	0.00%
GS UN Equity	Goldman Sachs Group Inc/The	0.96%	9.95%	0.10%	0.74%	0.01%
GR UN Equity	Goodrich Corp	0.07%	12.50%	0.01%	1.78%	0.00%
GT UN Equity	Goodyear Tire & Rubber Co/The	0.04%	12.00%	0.01%	0.00%	0.00%
GOGG UN Equity	Google Inc	1.28%	21.83%	0.28%	0.00%	0.00%
HRB UN Equity	H&R Block Inc	0.07%	10.67%	0.01%	3.02%	0.00%
HAL UN Equity	Halliburton Co	0.27%	0.50%	0.00%	1.21%	0.00%
HOG UN Equity	Harley-Davidson Inc	0.06%	9.40%	0.01%	1.44%	0.00%
HAR UN Equity	Harman International Industries Inc	0.03%	12.00%	0.00%	0.13%	0.00%
HRS UN Equity	Harris Corp	0.05%	8.25%	0.00%	1.99%	0.00%
HIG UN Equity	Hartford Financial Services Group Inc	0.11%	2.83%	0.00%	0.85%	0.00%
HAS UN Equity	Hasbro Inc	0.04%	9.00%	0.00%	2.78%	0.00%
HCP UN Equity	HCP Inc	0.09%	2.29%	0.00%	5.99%	0.01%
HCN UN Equity	Health Care REIT Inc	0.05%	6.56%	0.00%	6.07%	0.00%
HSY UN Equity	Hershey Co/The	0.07%	7.06%	0.00%	3.08%	0.00%
HES UN Equity	Hess Corp	0.20%	7.25%	0.01%	0.66%	0.00%
HPQ UN Equity	Hewlett-Packard Co	1.14%	13.00%	0.15%	0.66%	0.01%
HNZ UN Equity	HJ Heinz Co	0.13%	7.62%	0.01%	4.13%	0.01%
HD UN Equity	Home Depot Inc	0.47%	10.91%	0.05%	3.30%	0.02%
HON UN Equity	Honeywell International Inc	0.28%	9.14%	0.03%	3.21%	0.01%
HRL UN Equity	Hormel Foods Corp	0.05%	11.00%	0.01%	2.13%	0.00%
HSP UN Equity	Hospira Inc	0.07%	13.51%	0.01%	0.00%	0.00%
HST UN Equity	Host Hotels & Resorts Inc	0.07%	No Long-Term Growth	0.00%	1.79%	0.00%
HCBK UN Equity	Hudson City Bancorp Inc	0.07%	23.00%	0.02%	4.45%	0.00%
HUM UN Equity	Humana Inc	0.06%	11.29%	0.01%	0.00%	0.00%
HBAN UN Equity	Huntington Bancshares Inc/OH	0.03%	2.50%	0.00%	0.84%	0.00%
ITW UN Equity	Illinois Tool Works Inc	0.23%	10.83%	0.02%	2.73%	0.01%
RX UN Equity	IMS Health Inc	0.03%	8.08%	0.00%	0.80%	0.00%
TEG UN Equity	Integrus Energy Group Inc	0.03%	13.05%	0.00%	7.71%	0.00%
INTC UN Equity	Intel Corp	1.16%	10.92%	0.13%	2.70%	0.03%
ICE UN Equity	IntercontinentalExchange Inc	0.07%	14.17%	0.01%	0.00%	0.00%
IBM UN Equity	International Business Machines Corp	1.68%	10.38%	0.17%	1.62%	0.03%
IFF UN Equity	International Flavors & Fragrances Inc	0.03%	5.50%	0.00%	2.53%	0.00%
IGT UN Equity	International Game Technology	0.07%	13.84%	0.01%	0.96%	0.00%
IP UN Equity	International Paper Co	0.11%	6.00%	0.01%	1.09%	0.00%
IPG UN Equity	Interpublic Group of Cos Inc	0.03%	9.00%	0.00%	0.00%	0.00%
INTU UN Equity	Intuit Inc	0.10%	14.80%	0.01%	0.00%	0.00%
ISRG UN Equity	Intuitive Surgical Inc	0.10%	20.17%	0.02%	0.00%	0.00%
IVZ UN Equity	Invesco Ltd	0.10%	10.75%	0.01%	1.82%	0.00%
IRM UN Equity	Iron Mountain Inc	0.05%	18.00%	0.01%	0.00%	0.00%
ITT UN Equity	ITT Corp	0.10%	13.60%	0.01%	1.45%	0.00%
JBL UN Equity	Jabil Circuit Inc	0.03%	18.33%	0.01%	1.84%	0.00%
JEC UN Equity	Jacobs Engineering Group Inc	0.06%	14.00%	0.01%	0.00%	0.00%
JNS UN Equity	Janus Capital Group Inc	0.03%	9.20%	0.00%	0.26%	0.00%
JCP UN Equity	JC Penney Co Inc	0.09%	10.60%	0.01%	2.19%	0.00%
JDSU UN Equity	JDS Uniphase Corp	0.02%	12.17%	0.00%	0.00%	0.00%
SJM UN Equity	JM Smucker Co/The	0.06%	7.88%	0.01%	2.65%	0.00%
JNJ UN Equity	Johnson & Johnson	1.68%	7.43%	0.12%	3.21%	0.05%
JCI UN Equity	Johnson Controls Inc	0.16%	11.62%	0.02%	1.95%	0.00%
JPM UN Equity	JPMorgan Chase & Co	1.85%	10.80%	0.20%	0.42%	0.01%
JNPR UN Equity	Juniper Networks Inc	0.14%	16.46%	0.02%	0.00%	0.00%
KBH UN Equity	KB Home	0.01%	12.00%	0.00%	1.55%	0.00%
K UN Equity	Kellogg Co	0.19%	8.73%	0.02%	2.86%	0.01%
KEY UN Equity	Keycorp	0.06%	5.33%	0.00%	1.36%	0.00%
KMB UN Equity	Kimberly-Clark Corp	0.25%	8.81%	0.02%	4.03%	0.01%
KIM UN Equity	Kimco Realty Corp	0.05%	4.04%	0.00%	7.29%	0.00%
KG UN Equity	King Pharmaceuticals Inc	0.03%	5.36%	0.00%	0.00%	0.00%
KLAC UN Equity	Kla-Tencor Corp	0.06%	15.00%	0.01%	1.57%	0.00%
KSS UN Equity	Kohl's Corp	0.18%	14.91%	0.03%	0.00%	0.00%
KFT UN Equity	Kraft Foods Inc	0.39%	8.12%	0.03%	4.46%	0.02%
KR UN Equity	Kroger Co/The	0.16%	9.82%	0.02%	1.54%	0.00%
LLL UN Equity	L-3 Communications Holdings Inc	0.09%	11.59%	0.01%	1.83%	0.00%
LH UN Equity	Laboratory Corp of America Holdings	0.07%	12.19%	0.01%	0.00%	0.00%
LM UN Equity	Legg Mason Inc	0.05%	7.33%	0.00%	0.35%	0.00%
LEG UN Equity	Leggett & Platt Inc	0.03%	12.50%	0.00%	5.01%	0.00%
LEN UN Equity	Lennar Corp	0.02%	12.00%	0.00%	1.06%	0.00%
LUK UN Equity	Leucadia National Corp	0.06%	No Long-Term Growth	0.00%	0.00%	0.00%
LXK UN Equity	Lexmark International Inc	0.02%	6.67%	0.00%	0.00%	0.00%
LIFE UN Equity	Life Technologies Corp	0.09%	15.13%	0.01%	0.00%	0.00%
LNC UN Equity	Lincoln National Corp	0.08%	11.43%	0.01%	0.15%	0.00%
LLTC UN Equity	Linear Technology Corp	0.06%	14.75%	0.01%	3.29%	0.00%
LMT UN Equity	Lockheed Martin Corp	0.29%	10.19%	0.03%	3.13%	0.01%
L UN Equity	Loews Corp	0.16%	No Long-Term Growth	0.00%	0.68%	0.00%
LO UN Equity	Lorillard Inc	0.13%	8.00%	0.01%	4.77%	0.01%
LOW UN Equity	Lowe's Cos Inc	0.32%	11.85%	0.04%	1.64%	0.01%
LSI UN Equity	LSI Corp	0.04%	1.00%	0.00%	0.00%	0.00%
LTD UN Equity	Ltd Brands Inc	0.06%	11.93%	0.01%	3.18%	0.00%
MTB UN Equity	M&T Bank Corp	0.08%	4.73%	0.00%	4.17%	0.00%
M UN Equity	Macy's Inc	0.08%	9.60%	0.01%	0.99%	0.00%
MRO UN Equity	Marathon Oil Corp	0.25%	7.50%	0.02%	2.74%	0.01%
MAR UN Equity	Marriott International Inc/DE	0.10%	7.26%	0.01%	0.97%	0.00%
MMC UN Equity	Marsh & McLennan Cos Inc	0.13%	8.60%	0.01%	3.17%	0.00%
MI UN Equity	Marshall & Ilsley Corp	0.03%	8.33%	0.00%	0.51%	0.00%
MAS UN Equity	Masco Corp	0.05%	6.00%	0.00%	3.00%	0.00%
MEE UN Equity	Massey Energy Co	0.03%	13.87%	0.00%	0.73%	0.00%
MA UN Equity	Mastercard Inc	0.25%	18.94%	0.05%	0.27%	0.00%
MAT UN Equity	Mattel Inc	0.07%	9.00%	0.01%	3.83%	0.00%
MBI UN Equity	MBIA Inc	0.01%	10.00%	0.00%	0.00%	0.00%
MFE UN Equity	McAfee Inc	0.07%	14.23%	0.01%	0.00%	0.00%
MKC UN Equity	McCormick & Co Inc/MD	0.04%	9.00%	0.00%	2.81%	0.00%
MCD UN Equity	McDonald's Corp	0.63%	12.15%	0.08%	3.58%	0.02%
MHP UN Equity	McGraw-Hill Cos Inc/The	0.09%	5.10%	0.00%	3.04%	0.00%
MCK UN Equity	McKesson Corp	0.16%	12.11%	0.02%	0.78%	0.00%
MWV UN Equity	MeadWestvaco Corp	0.04%	10.50%	0.00%	3.68%	0.00%
MHS UN Equity	Medco Health Solutions Inc	0.27%	16.52%	0.04%	0.06%	0.00%
MDT UN Equity	Medtronic Inc	0.41%	10.76%	0.04%	2.07%	0.01%
WFR UN Equity	MEMC Electronic Materials Inc	0.04%	15.29%	0.01%	0.00%	0.00%
MRK UN Equity	Merck & Co Inc/NJ	0.70%	4.97%	0.03%	4.57%	0.03%
MDP UN Equity	Meredith Corp	0.01%	11.00%	0.00%	2.79%	0.00%
MET UN Equity	MetLife Inc	0.31%	12.72%	0.04%	1.94%	0.01%
PCS UN Equity	MetroPCS Communications Inc	0.03%	24.74%	0.01%	0.00%	0.00%
MCHP UN Equity	Microchip Technology Inc	0.05%	10.50%	0.01%	5.15%	0.00%
MU UN Equity	Micron Technology Inc	0.07%	9.25%	0.01%	0.00%	0.00%
MSFT UN Equity	Microsoft Corp	2.38%	10.61%	0.25%	1.97%	0.05%
MIL UN Equity	Millipore Corp	0.04%	12.90%	0.01%	0.00%	0.00%
MOLX UN Equity	Molex Inc	0.02%	11.42%	0.00%	2.77%	0.00%
TAP UN Equity	Molson Coors Brewing Co	0.08%	11.33%	0.01%	1.70%	0.00%
MON UN Equity	Monsanto Co	0.43%	13.50%	0.06%	1.34%	0.01%
MWW UN Equity	Monster Worldwide Inc	0.02%	19.29%	0.00%	0.00%	0.00%
MCO UN Equity	Moody's Corp	0.06%	10.35%	0.01%	1.67%	0.00%
MS UN Equity	Morgan Stanley	0.44%	9.29%	0.04%	0.87%	0.00%
MOT UN Equity	Motorola Inc	0.19%	7.50%	0.01%	0.26%	0.00%

MUR UN Equity	Murphy Oil Corp	0.12%	11.00%	0.01%	1.55%	0.00%
MYL UW Equity	Myran Inc/PA	0.05%	17.54%	0.01%	0.15%	0.00%
NBR UN Equity	Nabors Industries Ltd	0.07%	6.33%	0.00%	0.00%	0.00%
NDAQ UW Equity	NASDAQ OMX Group Inc/The	0.04%	15.33%	0.01%	0.00%	0.00%
NOV UN Equity	National Oilwell Varco Inc	0.20%	7.00%	0.01%	0.00%	0.00%
NSM UN Equity	National Semiconductor Corp	0.03%	13.00%	0.00%	2.23%	0.00%
NTAP UW Equity	NetApp Inc	0.10%	16.10%	0.02%	0.00%	0.00%
NYT UN Equity	New York Times Co/The	0.01%	7.50%	0.00%	0.00%	0.00%
NWL UN Equity	Newell Rubbermaid Inc	0.04%	9.20%	0.00%	1.49%	0.00%
NEM UN Equity	Newmont Mining Corp	0.22%	13.43%	0.03%	0.86%	0.00%
NWSA UW Equity	News Corp	0.23%	6.06%	0.01%	1.00%	0.00%
GAS UN Equity	Nicor Inc	0.02%	4.15%	0.00%	4.88%	0.00%
NKE UN Equity	NIKE Inc	0.25%	11.56%	0.03%	1.53%	0.00%
NI UN Equity	NiSource Inc	0.04%	3.67%	0.00%	6.63%	0.00%
NBL UN Equity	Noble Energy Inc	0.13%	6.00%	0.01%	0.93%	0.00%
JWN UN Equity	Nordstrom Inc	0.07%	12.04%	0.01%	1.86%	0.00%
NSC UN Equity	Norfolk Southern Corp	0.18%	12.33%	0.02%	2.79%	0.00%
NU UN Equity	Northeast Utilities	0.04%	6.33%	0.00%	4.00%	0.00%
NTRS UW Equity	Northern Trust Corp	0.14%	11.03%	0.02%	1.88%	0.00%
NOC UN Equity	Northrop Grumman Corp	0.16%	8.76%	0.01%	3.35%	0.01%
NOVL UW Equity	Novell Inc	0.02%	11.67%	0.00%	0.00%	0.00%
NVLS UW Equity	Novellus Systems Inc	0.02%	12.00%	0.00%	0.00%	0.00%
NUE UN Equity	Nucor Corp	0.15%	5.00%	0.01%	3.03%	0.00%
NVDA UW Equity	Nvidia Corp	0.07%	12.83%	0.01%	0.00%	0.00%
NYX UN Equity	NYSE Euronext	0.08%	12.25%	0.01%	3.97%	0.00%
ORLY UW Equity	O'Reilly Automotive Inc	0.05%	19.31%	0.01%	0.00%	0.00%
OXY UN Equity	Occidental Petroleum Corp	0.67%	6.67%	0.04%	1.56%	0.01%
ODP UN Equity	Office Depot Inc	0.02%	11.00%	0.00%	0.00%	0.00%
OMC UN Equity	Omnicom Group Inc	0.12%	8.26%	0.01%	1.56%	0.00%
ORCL UW Equity	Oracle Corp	1.07%	12.63%	0.13%	0.96%	0.01%
OI UN Equity	Owens-Illinois Inc	0.07%	10.00%	0.01%	0.00%	0.00%
PCAR UW Equity	PACCAR Inc	0.14%	10.60%	0.01%	1.48%	0.00%
PTV UN Equity	Pactiv Corp	0.04%	10.90%	0.00%	0.00%	0.00%
PLL UN Equity	Pall Corp	0.04%	12.75%	0.01%	1.75%	0.00%
PH UN Equity	Parker Hannifin Corp	0.09%	No Long-Term Growth		1.93%	0.00%
PDCO UW Equity	Patterson Cos Inc	0.03%	14.33%	0.00%	0.00%	0.00%
PAYX UW Equity	Paychex Inc	0.10%	11.15%	0.01%	4.29%	0.00%
BTU UN Equity	Peabody Energy Corp	0.11%	10.33%	0.01%	0.61%	0.00%
PBCT UW Equity	People's United Financial Inc	0.06%	9.75%	0.01%	3.86%	0.00%
POM UN Equity	Pepco Holdings Inc	0.03%	7.00%	0.00%	7.17%	0.00%
PBG UN Equity	Pepsi Bottling Group Inc	0.08%	6.75%	0.01%	1.87%	0.00%
PEP UN Equity	PepsiCo Inc/NC	0.98%	9.94%	0.10%	2.86%	0.03%
PKI UN Equity	PerkinElmer Inc	0.02%	9.50%	0.00%	1.34%	0.00%
PFE UN Equity	Pfizer Inc	1.19%	1.30%	0.02%	4.53%	0.05%
PCG UN Equity	PG&E Corp	0.16%	6.67%	0.01%	3.91%	0.01%
PM UN Equity	Philip Morris International Inc	0.97%	10.25%	0.10%	4.42%	0.04%
PNW UN Equity	Pinnacle West Capital Corp	0.03%	5.33%	0.00%	6.23%	0.00%
PXD UN Equity	Pioneer Natural Resources Co	0.05%	5.50%	0.00%	0.38%	0.00%
PBI UN Equity	Pitney Bowes Inc	0.05%	No Long-Term Growth		5.67%	0.00%
PCL UN Equity	Plum Creek Timber Co Inc	0.05%	5.00%	0.00%	5.11%	0.00%
PNC UN Equity	PNC Financial Services Group Inc	0.21%	8.35%	0.02%	2.10%	0.00%
RL UN Equity	Polo Ralph Lauren Corp	0.04%	13.60%	0.01%	0.26%	0.00%
PPG UN Equity	PPG Industries Inc	0.10%	3.44%	0.00%	3.42%	0.00%
PPL UN Equity	PPL Corp	0.12%	9.67%	0.01%	4.51%	0.01%
PX UN Equity	Praxair Inc	0.26%	9.31%	0.02%	1.91%	0.00%
PCP UN Equity	Precision Castparts Corp	0.14%	15.43%	0.02%	0.12%	0.00%
PG UN Equity	Principal Financial Group Inc	0.09%	10.42%	0.01%	1.36%	0.00%
PGI UN Equity	Procter & Gamble Co/The	1.67%	9.20%	0.15%	3.12%	0.05%
PGN UN Equity	Progress Energy Inc	0.11%	4.40%	0.00%	6.48%	0.01%
PGF UN Equity	Progressive Corp/The	0.12%	8.19%	0.01%	0.69%	0.00%
PLD UN Equity	ProLogis	0.05%	7.00%	0.00%	5.87%	0.00%
PRU UN Equity	Prudential Financial Inc	0.24%	11.00%	0.03%	1.12%	0.00%
PEG UN Equity	Public Service Enterprise Group Inc	0.16%	4.25%	0.01%	4.39%	0.01%
PSA UN Equity	Public Storage	0.13%	4.13%	0.01%	2.96%	0.00%
PHM UN Equity	Pulte Homes Inc	0.04%	11.50%	0.00%	0.00%	0.00%
QLGC UW Equity	QLogic Corp	0.02%	11.00%	0.00%	0.00%	0.00%
QCOM UW Equity	QUALCOMM Inc	0.71%	15.63%	0.11%	1.60%	0.01%
PWR UN Equity	Quanta Services Inc	0.04%	9.36%	0.00%	0.00%	0.00%
DGX UN Equity	Quest Diagnostics Inc/DE	0.10%	12.39%	0.01%	0.74%	0.00%
STR UN Equity	Questar Corp	0.07%	1.00%	0.00%	1.22%	0.00%
Q UN Equity	Qwest Communications International Inc	0.06%	No Long-Term Growth		8.67%	0.00%
RSN UN Equity	RadioShack Corp	0.02%	8.93%	0.00%	1.59%	0.00%
RRC UN Equity	Range Resources Corp	0.09%	11.25%	0.01%	0.28%	0.00%
RTN UN Equity	Raytheon Co	0.18%	10.57%	0.02%	2.65%	0.00%
RHT UN Equity	Red Hat Inc	0.05%	20.00%	0.01%	0.00%	0.00%
RF UN Equity	Regions Financial Corp	0.07%	3.75%	0.00%	1.92%	0.00%
RSG UN Equity	Republic Services Inc	0.10%	13.00%	0.01%	2.74%	0.00%
RAI UN Equity	Reynolds American Inc	0.14%	5.00%	0.01%	7.14%	0.01%
RHI UN Equity	Robert Half International Inc	0.04%	14.50%	0.01%	1.80%	0.00%
ROK UN Equity	Rockwell Automation Inc/DE	0.06%	8.50%	0.01%	2.71%	0.00%
COL UN Equity	Rockwell Collins Inc	0.08%	14.17%	0.01%	1.91%	0.00%
RDC UN Equity	Rowan Cos Inc	0.03%	19.50%	0.01%	0.00%	0.00%
RDR UW Equity	RR Donnelley & Sons Co	0.05%	No Long-Term Growth		0.00%	0.00%
R UN Equity	Ryder System Inc	0.02%	No Long-Term Growth		2.20%	0.00%
SWY UN Equity	Safeway Inc	0.10%	7.92%	0.01%	1.65%	0.00%
CRM UN Equity	Salesforce.com Inc	0.08%	30.59%	0.02%	0.00%	0.00%
SNBK UW Equity	SanDisk Corp	0.05%	11.25%	0.01%	0.00%	0.00%
SLE UN Equity	Sara Lee Corp	0.08%	6.92%	0.01%	4.06%	0.00%
SCG UN Equity	SCANA Corp	0.04%	4.91%	0.00%	5.34%	0.00%
SGP UN Equity	Schering-Plough Corp	0.46%	12.21%	0.06%	0.89%	0.00%
SLB UN Equity	Schlumberger Ltd	0.82%	6.03%	0.05%	1.22%	0.01%
SNI UN Equity	Scripps Networks Interactive Inc	0.05%	12.46%	0.01%	0.79%	0.00%
SEE UN Equity	Sealed Air Corp	0.03%	5.00%	0.00%	2.31%	0.00%
SHLD UW Equity	Sears Holdings Corp	0.08%	No Long-Term Growth		0.00%	0.00%
SRE UN Equity	Sempra Energy	0.13%	6.00%	0.01%	2.87%	0.00%
SHW UN Equity	Sherwin-Williams Co/The	0.07%	6.79%	0.00%	2.25%	0.00%
SIAL UW Equity	Sigma-Aldrich Corp	0.07%	8.49%	0.01%	1.03%	0.00%
SPG UN Equity	Simon Property Group Inc	0.20%	4.42%	0.01%	3.67%	0.01%
SLM UN Equity	SLM Corp	0.04%	13.50%	0.01%	0.00%	0.00%
SII UN Equity	Smith International Inc	0.07%	8.00%	0.01%	1.49%	0.00%
SNA UN Equity	Snap-On Inc	0.02%	15.00%	0.00%	0.00%	0.00%
SO UN Equity	Southern Co	0.26%	5.25%	0.01%	5.38%	0.01%
LUV UN Equity	Southwest Airlines Co	0.07%	11.75%	0.01%	0.20%	0.00%
SWN UN Equity	Southwestern Energy Co	0.17%	40.25%	0.07%	0.00%	0.00%
SE UN Equity	Spectra Energy Corp	0.13%	4.67%	0.01%	4.87%	0.01%
S UN Equity	Sprint Nextel Corp	0.10%	1.60%	0.00%	0.00%	0.00%
STJ UN Equity	St Jude Medical Inc	0.12%	13.93%	0.02%	0.00%	0.00%
SWK UN Equity	Stanley Works/The	0.04%	9.50%	0.00%	2.82%	0.00%
SPLS UW Equity	Staples Inc	0.17%	14.26%	0.02%	1.46%	0.00%
SBUX UW Equity	Starbucks Corp	0.15%	15.51%	0.02%	0.00%	0.00%
HOT UN Equity	Starwood Hotels & Resorts Worldwide Inc	0.06%	0.86%	0.00%	1.97%	0.00%
STT UN Equity	State Street Corp	0.27%	10.01%	0.03%	0.07%	0.00%
SRCL UW Equity	Stericycle Inc	0.04%	16.75%	0.01%	0.00%	0.00%

SYK UN Equity	Stryker Corp	0.18%	11.89%	0.02%	0.85%	0.00%
JAVA UW Equity	Sun Microsystems Inc	0.07%	9.67%	0.01%	0.00%	0.00%
SUN UN Equity	Sunoco Inc	0.04%	No Long-Term Growth		3.57%	0.00%
STI UN Equity	SunTrust Banks Inc	0.11%	6.57%	0.01%	0.96%	0.00%
SVU UN Equity	SUPERVALU Inc	0.03%	7.65%	0.00%	4.25%	0.00%
SYM UN Equity	Symantec Corp	0.14%	9.94%	0.01%	0.00%	0.00%
SYU UN Equity	Sysco Corp	0.16%	9.00%	0.01%	3.73%	0.01%
TROW UW Equity	T Rowe Price Group Inc	0.12%	10.57%	0.01%	2.07%	0.00%
TGT UN Equity	Target Corp	0.38%	13.53%	0.05%	1.32%	0.01%
TE UN Equity	TECO Energy Inc	0.03%	5.50%	0.00%	5.63%	0.00%
TLAB UN Equity	Tellabs Inc	0.03%	8.50%	0.00%	0.00%	0.00%
THC UN Equity	Tenet Healthcare Corp	0.03%	8.67%	0.00%	0.00%	0.00%
TDC UN Equity	Teradata Corp	0.05%	8.50%	0.00%	0.00%	0.00%
TER UN Equity	Teradyne Inc	0.02%	14.20%	0.00%	0.00%	0.00%
TSO UN Equity	Tesoro Corp/Texas	0.02%	No Long-Term Growth		2.53%	0.00%
TXN UN Equity	Texas Instruments Inc	0.29%	11.50%	0.03%	1.92%	0.01%
TXT UN Equity	Textron Inc	0.05%	11.19%	0.01%	0.40%	0.00%
TMO UN Equity	Thermo Fisher Scientific Inc	0.19%	11.36%	0.02%	0.00%	0.00%
TIF UN Equity	Tiffany & Co	0.05%	11.31%	0.01%	1.62%	0.00%
TWC UN Equity	Time Warner Cable Inc	0.15%	11.50%	0.02%	0.00%	0.00%
TWX UN Equity	Time Warner Inc	0.36%	9.26%	0.03%	2.46%	0.01%
TIE UN Equity	Titanium Metals Corp	0.02%	5.00%	0.00%	0.95%	0.00%
TJX UN Equity	TJX Cos Inc	0.16%	12.50%	0.02%	1.23%	0.00%
TMK UN Equity	Torchmark Corp	0.04%	8.00%	0.00%	1.20%	0.00%
TSS UN Equity	Total System Services Inc	0.03%	10.20%	0.00%	1.71%	0.00%
TRV UN Equity	Travelers Cos Inc/The	0.28%	4.44%	0.01%	2.49%	0.01%
TSN UN Equity	Tyson Foods Inc	0.04%	10.00%	0.00%	1.32%	0.00%
UNP UN Equity	Union Pacific Corp	0.32%	13.05%	0.04%	1.22%	0.00%
UPS UN Equity	United Parcel Service Inc	0.41%	12.00%	0.05%	3.12%	0.01%
X UN Equity	United States Steel Corp	0.07%	4.00%	0.00%	0.96%	0.00%
UTX UN Equity	United Technologies Corp	0.61%	9.57%	0.06%	2.33%	0.01%
UNH UN Equity	UnitedHealth Group Inc	0.29%	11.69%	0.03%	0.07%	0.00%
UNM UN Equity	Unum Group	0.07%	7.80%	0.01%	1.41%	0.00%
USB UN Equity	US Bancorp	0.46%	7.33%	0.03%	0.83%	0.00%
VLO UN Equity	Valero Energy Corp	0.11%	4.50%	0.01%	2.92%	0.00%
VAR UN Equity	Varian Medical Systems Inc	0.05%	14.67%	0.01%	0.00%	0.00%
VTR UN Equity	Ventas Inc	0.06%	4.35%	0.00%	5.03%	0.00%
VRSN UN Equity	VeriSign Inc	0.05%	14.29%	0.01%	0.00%	0.00%
VZ UN Equity	Verizon Communications Inc	0.83%	4.85%	0.04%	6.40%	0.05%
VFC UN Equity	VF Corp	0.09%	10.92%	0.01%	3.06%	0.00%
VIA/B UN Equity	Viacom Inc	0.16%	6.95%	0.01%	0.00%	0.00%
VNO UN Equity	Vornado Realty Trust	0.11%	6.15%	0.01%	3.50%	0.00%
VMC UN Equity	Vulcan Materials Co	0.07%	6.83%	0.00%	2.65%	0.00%
WMT UN Equity	Wal-Mart Stores Inc	1.96%	10.30%	0.20%	2.10%	0.04%
WAG UN Equity	Walgreen Co	0.40%	14.11%	0.06%	1.35%	0.01%
DIS UN Equity	Walt Disney Co/The	0.54%	6.43%	0.03%	1.30%	0.01%
WPO UN Equity	Washington Post Co/The	0.04%	No Long-Term Growth		0.00%	0.00%
WM UN Equity	Waste Management Inc	0.16%	10.33%	0.02%	3.59%	0.01%
WAT UN Equity	Waters Corp	0.06%	14.30%	0.01%	0.00%	0.00%
WPI UN Equity	Watson Pharmaceuticals Inc	0.04%	12.07%	0.00%	0.00%	0.00%
WLP UN Equity	WellPoint Inc	0.22%	11.69%	0.03%	0.00%	0.00%
WFC UN Equity	Wells Fargo & Co	1.47%	13.60%	0.20%	1.56%	0.02%
WDC UN Equity	Western Digital Corp	0.08%	7.83%	0.01%	0.00%	0.00%
WU UN Equity	Western Union Co/The	0.14%	12.20%	0.02%	0.20%	0.00%
WY UN Equity	Weyerhaeuser Co	0.08%	5.75%	0.00%	1.41%	0.00%
WHR UN Equity	Whirlpool Corp	0.05%	No Long-Term Growth		2.33%	0.00%
WFMJ UN Equity	Whole Foods Market Inc	0.05%	14.75%	0.01%	0.00%	0.00%
WMB UN Equity	Williams Cos Inc/The	0.12%	6.00%	0.01%	2.17%	0.00%
WIN UN Equity	Windstream Corp	0.04%	No Long-Term Growth		9.78%	0.00%
WEC UN Equity	Wisconsin Energy Corp	0.05%	7.92%	0.00%	2.96%	0.00%
GWV UN Equity	WW Grainger Inc	0.07%	11.59%	0.01%	1.88%	0.00%
WYN UN Equity	Wyndham Worldwide Corp	0.03%	15.00%	0.00%	0.88%	0.00%
WYNN UN Equity	Wynn Resorts Ltd	0.08%	20.00%	0.02%	0.00%	0.00%
XEL UN Equity	Xcel Energy Inc	0.09%	5.30%	0.00%	4.98%	0.00%
XRX UN Equity	Xerox Corp	0.07%	No Long-Term Growth		2.21%	0.00%
XLNX UN Equity	Xilinx Inc	0.07%	16.00%	0.01%	2.52%	0.00%
XL UN Equity	XL Capital Ltd	0.06%	No Long-Term Growth		2.17%	0.00%
XTO UN Equity	XTO Energy Inc	0.26%	10.80%	0.03%	1.11%	0.00%
YHOO UN Equity	Yahoo! Inc	0.23%	14.99%	0.03%	0.00%	0.00%
YUM UN Equity	Yum! Brands Inc	0.17%	11.68%	0.02%	2.24%	0.00%
ZMH UN Equity	Zimmer Holdings Inc	0.11%	10.30%	0.01%	0.00%	0.00%
ZION UN Equity	Zions Bancorporation	0.02%	9.29%	0.00%	0.53%	0.00%

ZERO-BETA CAPITAL ASSET PRICING MODEL

$$K_e = R_f + 0.75\beta(R_m - R_f) + 0.25(R_m - r_f)$$

K_e = the required market ROE

R_f = the risk free rate of return

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

β = Beta of Proxy Group

ZERO-BETA CAPITAL ASSET PRICING MODEL- SHARPE RATIO DERIVED RISK PREMIUM

Factor	Three Month Avg 30-Yr US Treasury
R_f = the risk free rate of return	4.29%
R_m = Sharpe Ratio Derived Risk Premium	8.93%
β = Beta of Proxy Group	0.67
K_e = the required market ROE	11.02%

ZERO-BETA CAPITAL ASSET PRICING MODEL- EX-ANTE RISK PREMIUM

Factor	Three Month Avg 30-Yr US Treasury
R_f = the risk free rate of return	4.29%
R_m = Ex-Ante Market Risk Premium [1]	7.22%
β = Beta of Proxy Group	0.67
K_e = the required market ROE	9.73%

Factor	Three Month Avg 30-Yr US Treasury
R_f - Risk-free Calculation	Three Month Avg 30-Yr US Treasury
Avg 30-Yr US Treasury	4.29%

NOTES:

[1] Calculated by taking the S&P 500 Estimated Required Market Return and subtracting the risk-free rate calculated by the 3-month average 30-yr US Treasury yield.

FLOTATION COST ADJUSTMENT

Flotation Costs (includes all of ConEd's equity stock issuances)

Date	Issuing Entity	Shares Issued	Offering Price	Underwriting Discount	Offering Expense	Net Proceeds Per Share	Total Flotation Costs	Gross Equity Issue before Costs	Net Proceeds	Flotation Cost Percentage
Open Market Issuances										
2/27/2009	Allete, Inc.	5,000,000	\$27.98	\$0.003		\$27.977	\$15,000	\$139,900,000	\$139,885,000	0.011%
6/20/2003	Alliant Energy Corp.	15,000,000	\$19.25	\$0.770	\$370,000	\$18.455	\$11,920,000	\$288,750,000	\$276,830,000	4.128%
1/16/1994	DPL, Inc.	3,200,000	\$20.38	\$0.600	\$200,000	\$19.713	\$2,120,000	\$65,200,000	\$63,080,000	3.252%
6/1/2007	Portland General	12,477,500	\$14.10	\$0.494	\$375,000	\$13.576	\$6,532,646	\$175,932,750	\$169,400,104	3.713%
11/18/2008	Progress Energy	14,375,000	\$37.50	\$1.125	\$300,000	\$36.354	\$16,471,875	\$539,062,500	\$522,590,625	3.058%
5/8/2009	Southern Co. [i] [ii]	20,000,000	\$28.91	\$0.360	\$375,000	\$28.531	\$7,575,000	\$578,200,000	\$570,625,000	1.310%
2/20/2007	Vectren Corp.	4,600,000	\$28.33	\$0.990	\$425,000	\$27.248	\$4,979,000	\$130,318,000	\$125,339,000	3.821%
9/9/2008	Xcel Energy, Inc. [j]	15,000,000	\$20.25	\$0.610	\$800,000	\$19.600	\$9,750,000	\$303,750,000	\$294,000,000	3.210%
Weighted Average Flotation Costs							\$59,363,521	\$2,221,113,250	\$2,161,749,729	2.673%
							FLOTATION COSTS			2.673%

Flotation Cost Adjustment - Three Month Constant Growth - Hevert Proxy Group

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
	Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	Expected Dividend Yield Adjusted for Flotation Costs	Proj EPS Growth (Zacks)	Proj EPS Growth (Value Line)	Average Growth Estimate	DCF k(e)	Flotation Adjusted DCF k(e)
ALE	Allete	\$1.76	\$32.99	5.33%	5.44%	5.59%	4.00%	NA	4.00%	9.59%
LNT	Alliant Energy Corp.	\$1.50	\$26.78	5.60%	5.73%	5.89%	4.50%	4.50%	10.23%	10.39%
DPL	DPL, Inc.	\$1.14	\$25.05	4.55%	4.70%	4.83%	4.50%	6.50%	11.20%	11.33%
DUK	Duke Energy Corp.	\$0.96	\$15.48	6.20%	6.35%	6.52%	4.50%	5.00%	4.75%	11.10%
NST	NSTAR	\$1.50	\$31.87	4.71%	4.87%	5.00%	5.70%	8.00%	6.85%	11.72%
PCG	PG&E Corp	\$1.68	\$40.28	4.17%	4.32%	4.44%	7.50%	6.50%	7.00%	11.32%
POR	Portland General	\$1.02	\$19.59	5.21%	5.34%	5.49%	6.70%	3.50%	5.10%	10.44%
PGN	Progress Energy	\$2.48	\$38.94	6.37%	6.54%	6.72%	4.50%	6.00%	5.25%	11.79%
SO	Southern Co.	\$1.75	\$31.64	5.53%	5.71%	5.87%	8.50%	4.50%	6.50%	12.21%
VVC	Vectren Corp.	\$1.34	\$23.57	5.68%	5.85%	6.01%	6.80%	5.00%	5.90%	11.75%
WEC	Wisconsin Energy	\$1.35	\$44.37	3.04%	3.17%	3.26%	9.00%	8.00%	8.50%	11.67%
XEL	Xcel Energy, Inc.	\$0.98	\$19.58	5.00%	5.15%	5.30%	5.50%	6.50%	6.00%	11.15%
MEDIAN				5.39%				5.95%	11.26%	11.38%

FLOTATION ADJUSTED MEDIAN CONSTANT GROWTH DCF RESULT	11.38%
UNADJUSTED MEDIAN CONSTANT GROWTH DCF RESULT	11.26%
DIFFERENCE (FLOTATION COST ADJUSTMENT)	0.12%

[11]

Notes:

- [i] Underwriting discount was calculated as the market price minus the offering price. The discount was not explicitly given in the prospectus.
- [ii] Offering price was calculated as the maximum aggregate offering price divided by shares issued. The price was not explicitly given in the prospectus.

Notes on Flotation Cost Adjustment Calculation:

- [1] Source: Bloomberg
- [2] Source: Bloomberg
- [3] = [1] / [2] or [Annualized Dividend] / [Price]
- [4] = [3] x [1 + .5g] or [Dividend Yield] x [1 + (.5 x average growth rate)]
- [5] = [4] / [1 - 0.0267] or [Expected Dividend Yield] / [1 - Flotation Cost Percentage]
- [6] Source: Zacks Research
- [7] Source: Value Line
- [8] Average of columns [6], [7], [8]
- [9] = (Column [4] + Column [9])
- [10] = (Column [5] + Column [9])
- [11] Equals median Adjusted DCF, Column [11] - Median Unadjusted DCF, Column [10]

Flotation Costs (includes all of ConEd's equity stock issuances)

Date	Issuing Entity	Shares Issued	Offering Price	Underwriting Discount	Offering Expense	Net Proceeds Per Share	Total Flotation Costs	Gross Equity Issue before Costs	Net Proceeds	Flotation Cost Percentage
Open Market Issuances										
5/10/2007	Consolidated Edison, Inc. [i]	11,000,000	\$50.73	\$0.190	\$400,000	\$50.504	\$2,490,000	\$558,030,000	\$555,540,000	0.446%
9/20/2006	Consolidated Edison, Inc. [i]	9,715,000	\$45.96	\$0.360	\$400,000	\$45.559	\$3,897,400	\$446,501,400	\$442,604,000	0.873%
5/11/2004	Consolidated Edison, Inc.	14,000,000	\$37.74	\$1.132	\$400,000	\$36.579	\$16,250,800	\$528,360,000	\$512,109,200	3.076%
5/19/2003	Consolidated Edison, Inc.	8,700,000	\$39.80	\$0.345	\$350,000	\$39.415	\$3,351,500	\$346,260,000	\$342,908,500	0.968%
Weighted Average Flotation Costs							\$25,989,700	\$1,879,151,400	\$1,853,161,700	1.383%
							FLOTATION COSTS			1.383%

Flotation Cost Adjustment - Three Month Average Constant Growth - Hevert Proxy Group

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
	Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	Adjusted for Flotation Costs	Proj EPS Growth (Zacks)	Proj EPS Growth (Value Line)	Average Growth Estimate	DCF k(e)	Flotation Adjusted DCF k(e)
ALE Allete	\$1.76	\$32.99	5.33%	5.44%	5.52%	4.00%		4.00%	9.44%	9.52%
LNT Alliant Energy Corp.	\$1.50	\$26.78	5.60%	5.73%	5.81%	4.50%	4.50%	4.50%	10.23%	10.31%
DPL DPL, Inc.	\$1.14	\$25.05	4.55%	4.70%	4.76%	4.50%	8.50%	6.50%	11.20%	11.26%
DUK Duke Energy Corp.	\$0.96	\$15.48	6.20%	6.35%	6.44%	4.50%	5.00%	4.75%	11.10%	11.19%
NST NSTAR	\$1.50	\$31.87	4.71%	4.87%	4.94%	5.70%	8.00%	6.85%	11.72%	11.79%
PCG PG&E Corp	\$1.68	\$40.28	4.17%	4.32%	4.38%	7.50%	6.50%	7.00%	11.32%	11.38%
POR Portland General	\$1.02	\$19.59	5.21%	5.34%	5.42%	6.70%	3.50%	5.10%	10.44%	10.52%
PGN Progress Energy	\$2.48	\$38.94	6.37%	6.54%	6.63%	4.50%	6.00%	5.25%	11.79%	11.88%
SO Southern Co.	\$1.75	\$31.64	5.53%	5.71%	5.79%	8.50%	4.50%	6.50%	12.21%	12.29%
VVC Vectren Corp.	\$1.34	\$23.57	5.68%	5.85%	5.93%	6.80%	5.00%	5.90%	11.75%	11.83%
WEC Wisconsin Energy	\$1.35	\$44.37	3.04%	3.17%	3.22%	9.00%	8.00%	8.50%	11.67%	11.72%
XEL Xcel Energy, Inc.	\$0.98	\$19.58	5.00%	5.15%	5.23%	5.50%	6.50%	6.00%	11.15%	11.23%
MEDIAN				5.39%				5.95%	11.26%	11.32%

FLOTATION ADJUSTED MEDIAN CONSTANT GROWTH DCF RESULT	11.32%
UNADJUSTED MEDIAN CONSTANT GROWTH DCF RESULT	11.26%
DIFFERENCE (FLOTATION COST ADJUSTMENT)	0.06%

[11]

Notes:

- [i] Underwriting discount was calculated as the market price minus the offering price. The discount was not explicitly given in the prospectus.
- [ii] Offering price was calculated as the maximum aggregate offering price divided by shares issued. The price was not explicitly given in the prospectus.

Notes on Flotation Cost Adjustment Calculation:

- [1] Source: Bloomberg
- [2] Source: Bloomberg
- [3] = [1] / [2] or [Annualized Dividend] / [Price]
- [4] = [3] x [1 + .5g] or [Dividend Yield] x [1 + (.5 x average growth rate)]
- [5] = [4] / [1 - 0.0138] or [Expected Dividend Yield] / [1 - Flotation Cost Percentage]
- [6] Source: Zacks Research
- [7] Source: Value Line
- [8] Average of columns [6], [7], [8]
- [9] = (Column [4] + Column [8])
- [10] = (Column [5] + Column [9])
- [11] Equals median Adjusted DCF, Column [11] - Median Unadjusted DCF, Column [10]

Long Term Debt Ratio

Company Name	Ticker	2009 Q2	2009 Q1	2008 Q4	2008 Q3	2008 Q2	2008 Q1	2007 Q4	2007 Q3	Overall Average
ALLETE, Inc.	ALE	40.65%	41.39%	40.33%	39.34%	40.55%	37.24%	34.38%	35.83%	38.72%
Alliant Energy Corporation	LNT	40.20%	41.30%	41.54%	34.73%	37.18%	37.50%	38.86%	36.33%	38.45%
DPL Inc.	DPL	38.34%	38.40%	36.77%	33.56%	34.37%	37.84%	37.85%	36.48%	36.70%
Duke Energy Corporation	DUK	41.53%	41.82%	41.08%	40.46%	38.96%	37.31%	36.89%	37.85%	39.49%
NSTAR	NST	40.48%	40.83%	39.01%	39.42%	40.52%	40.82%	40.98%	33.75%	39.48%
PG&E Corporation	PCG	49.50%	50.53%	51.37%	48.24%	47.68%	48.74%	48.56%	48.27%	49.11%
Portland General Electric Company	POR	50.74%	48.22%	48.99%	49.01%	46.78%	48.38%	49.78%	48.62%	48.82%
Progress Energy, Inc.	PGN	47.31%	48.44%	48.35%	48.71%	51.27%	48.13%	47.93%	48.30%	48.55%
Southern Company	SO	48.60%	48.93%	47.78%	46.26%	47.11%	46.59%	45.21%	46.77%	47.16%
Vectren Corporation	VVC	49.71%	47.44%	45.79%	41.68%	46.29%	46.13%	43.97%	43.29%	45.54%
Wisconsin Energy Corporation	WEC	40.56%	40.66%	41.17%	33.43%	29.95%	29.96%	32.71%	36.49%	35.62%
Xcel Energy Inc.	XEL	46.11%	44.77%	45.90%	46.85%	44.62%	44.66%	43.15%	44.92%	45.12%
Proxy Group Average										42.73%

Source: SNL Financial

Equity Ratio

Company Name	Ticker	2009 Q2	2009 Q1	2008 Q4	2008 Q3	2008 Q2	2008 Q1	2007 Q4	2007 Q3	Overall Average
ALLETE, Inc.	ALE	59.33%	58.59%	59.64%	60.63%	59.42%	62.73%	65.58%	64.14%	61.26%
Alliant Energy Corporation	LNT	54.54%	53.32%	53.10%	59.49%	56.60%	56.22%	54.73%	57.85%	55.73%
DPL Inc.	DPL	59.81%	59.75%	61.45%	64.62%	63.76%	60.32%	60.33%	61.58%	61.45%
Duke Energy Corporation	DUK	58.03%	57.74%	58.49%	59.14%	60.63%	62.27%	62.69%	61.74%	60.09%
NSTAR	NST	58.14%	57.78%	59.55%	59.13%	57.99%	57.68%	57.52%	64.67%	59.06%
PG&E Corporation	PCG	48.39%	47.37%	46.45%	49.43%	50.06%	48.98%	49.10%	49.34%	48.64%
Portland General Electric C	POR	49.09%	51.58%	50.79%	50.79%	48.52%	51.21%	49.90%	51.18%	50.38%
Progress Energy, Inc.	PGN	50.39%	49.23%	49.29%	48.97%	46.46%	49.40%	49.58%	49.23%	49.07%
Southern Company	SO	46.99%	46.60%	47.57%	49.00%	48.09%	48.54%	49.30%	48.85%	48.12%
Vectren Corporation	VVC	49.72%	51.96%	53.60%	57.69%	53.13%	53.30%	55.45%	56.15%	53.87%
Wisconsin Energy Corporat	WEC	58.49%	58.42%	57.90%	65.52%	69.01%	69.03%	66.32%	62.59%	63.41%
Xcel Energy Inc.	XEL	53.52%	54.84%	53.70%	52.75%	54.96%	54.94%	56.44%	54.70%	54.48%
Proxy Group Average										55.46%

Source: SNL Financial

Preferred Equity Ratio

Company Name	Ticker	2009 Q2	2009 Q1	2008 Q4	2008 Q3	2008 Q2	2008 Q1	2007 Q4	2007 Q3	Overall Average
ALLETE, Inc.	ALE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Alliant Energy Corporation	LNT	5.03%	5.17%	5.18%	5.60%	6.01%	6.07%	6.18%	5.62%	5.61%
DPL Inc.	DPL	0.99%	0.99%	0.95%	0.98%	1.00%	0.99%	0.99%	1.06%	1.00%
Duke Energy Corporation	DUK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NSTAR	NST	1.21%	1.22%	1.26%	1.27%	1.31%	1.32%	1.32%	1.40%	1.29%
PG&E Corporation	PCG	1.16%	1.17%	1.22%	1.32%	1.30%	1.30%	1.32%	1.37%	1.27%
Portland General Electric Company	POR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Progress Energy, Inc.	PGN	0.56%	0.57%	0.59%	0.59%	0.59%	0.65%	0.67%	0.67%	0.61%
Southern Company	SO	3.42%	3.48%	3.65%	3.74%	3.80%	3.87%	4.49%	3.38%	3.73%
Vectren Corporation	VVC	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Wisconsin Energy Corporation	WEC	0.65%	0.65%	0.66%	0.76%	0.76%	0.76%	0.74%	0.70%	0.71%
Xcel Energy Inc.	XEL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Proxy Group Average										1.18%

Source: SNL Financial

Customer Deposits Ratio

Company Name	Ticker	2009 Q2	2009 Q1	2008 Q4	2008 Q3	2008 Q2	2008 Q1	2007 Q4	2007 Q3	Overall Average
ALLETE, Inc.	ALE	0.02%	0.02%	0.02%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%
Alliant Energy Corporation	LNT	0.22%	0.22%	0.18%	0.19%	0.21%	0.22%	0.22%	0.21%	0.21%
DPL Inc.	DPL	0.86%	0.85%	0.83%	0.85%	0.86%	0.84%	0.83%	0.88%	0.85%
Duke Energy Corporation	DUK	0.43%	0.44%	0.43%	0.41%	0.41%	0.42%	0.42%	0.41%	0.42%
NSTAR	NST	0.17%	0.17%	0.18%	0.18%	0.18%	0.19%	0.18%	0.17%	0.18%
PG&E Corporation	PCG	0.95%	0.93%	0.95%	1.01%	0.95%	0.98%	1.02%	1.02%	0.98%
Portland General Electric Company	POR	0.17%	0.20%	0.22%	0.20%	4.70%	0.40%	0.32%	0.20%	0.80%
Progress Energy, Inc.	PGN	1.75%	1.76%	1.77%	1.73%	1.69%	1.82%	1.83%	1.80%	1.77%
Southern Company	SO	0.99%	0.99%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Vectren Corporation	VVC	0.57%	0.60%	0.61%	0.63%	0.58%	0.57%	0.58%	0.56%	0.59%
Wisconsin Energy Corporation	WEC	0.30%	0.27%	0.27%	0.30%	0.28%	0.24%	0.24%	0.22%	0.27%
Xcel Energy Inc.	XEL	0.37%	0.39%	0.40%	0.40%	0.42%	0.40%	0.41%	0.38%	0.40%
Proxy Group Average										0.62%

Source: SNL Financial