

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 Natural Gas Service in New York

Case No. 09-G-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 15 II. PURPOSE AND OVERVIEW OF TESTIMONY

16 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

17 A. The purpose of my direct testimony in this proceeding ("Direct Testimony") is to present  
18 evidence and provide a recommendation regarding the Company's cost of equity  
19 (sometimes referred to as the Return on Equity or "ROE" for rate-setting purposes) for  
20 its gas utility operations, and to provide an assessment of the capital structure to be used  
21 for ratemaking purposes, as proposed in the direct testimony of the Company  
22 Accounting Panel. My analysis and recommendations are supported by the data  
23 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 three-year rate period is accepted by the Commission, I  
17 conclude that a Return on Equity of 11.30 percent is reasonable. With respect to the  
18 Company's capital structure, I conclude that the proposed capital structure, consisting of  
19 48.15 percent common equity, 49.53 percent long-term debt, 1.04 percent preferred  
20 equity, and 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.<sup>1</sup>  
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)

---

<sup>1</sup> *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.”<sup>2</sup> 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.<sup>3</sup>  
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.<sup>4</sup> 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”<sup>5</sup> 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

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

<sup>3</sup> *Ibid.*

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

<sup>5</sup> 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.<sup>6</sup>  
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:

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<sup>6</sup> 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.<sup>7</sup>  
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

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<sup>7</sup> 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."<sup>8</sup>  
22 Similarly, in a letter to Assemblyman Kevin Cahill in Cases 08-E-0887 and 08-G-0888

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<sup>8</sup> *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.”<sup>9</sup>

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.”<sup>10</sup>

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

	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			

<sup>9</sup> 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.

<sup>10</sup> *Ibid.*

<sup>11</sup> 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.<sup>12</sup> 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

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<sup>12</sup> 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 "VXV"), 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.<sup>13</sup> 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.<sup>14</sup>

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

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<sup>13</sup> See Exhibit No. \_\_ (RBH-5).

<sup>14</sup> 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...<sup>15</sup>  
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

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<sup>15</sup> 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.<sup>16</sup> 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

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<sup>16</sup> 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 Q. PLEASE PROVIDE A SUMMARY PROFILE OF CECONY.

2 A. The Company provides gas distribution service to approximately 1.06 million New York  
3 customers and electric service to approximately 3.26 million New York customers.<sup>17</sup>  
4 CECONY's long-term issuer rating issued by Standard and Poor's is A-; by Moody's  
5 Investor Services is A3; and by 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
- 10 • I began with the group of 54 companies that currently are classified as Electric  
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
  - 22 • I eliminated companies known to be party to a merger, acquisition, or other  
23 transformational transaction.

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<sup>17</sup> Consolidated Edison, Inc., SEC Form 10-K for the Period Ending 12/31/08, at 14.

1

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

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

4

**Table 2: 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

5

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

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

11

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

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

16

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

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

5

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

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

22 [T]he DCF is an economic theory for which a more comparable sample,  
23 rather than a larger sample, produces results that are more likely to be  
24 representative of the subject utility. The size of the sample is irrelevant  
25 when, as here, the sample is not random.<sup>18</sup>

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

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

## VI. COST OF EQUITY ESTIMATION

9 Q. PLEASE BRIEFLY DISCUSS THE ROE IN THE CONTEXT OF THE REGULATED RATE OF  
10 RETURN.

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

17

18 Q. HOW IS THE REQUIRED ROE DETERMINED?

19 A. The required ROE is estimated by using one or more analytical techniques that rely on  
20 market-based data to quantify investor expectations regarding required equity returns,  
21 adjusted for certain incremental costs and risks. I then apply my informed judgment,  
22 based on the results of those analyses, to determine where within the range of results the  
23 cost of equity for the Company should fall. The resulting adjusted cost of equity serves

1 as the recommended ROE for ratemaking purposes. As a general proposition, the key  
2 consideration in determining the cost of equity is that the methodologies employed  
3 reasonably reflect investors' view of the financial markets in general, and the subject  
4 company's common stock in particular. Finally, as noted earlier, while I do not  
5 necessarily agree with the formulaic approach of affording two-thirds and one-third  
6 weights to the respective DCF and CAPM results, I have produced and presented  
7 analytical results based on that method.

8  
9 Q. WHAT METHODS DID YOU USE TO DETERMINE THE COMPANY'S COST OF EQUITY?

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

16  
17 Q. WHY DO YOU BELIEVE IT IS IMPORTANT TO USE MORE THAN ONE ANALYTICAL  
18 APPROACH?

19 A. As noted above, the market cost of equity is not directly observable and, therefore, must  
20 be estimated based on both quantitative and qualitative information. As a result, a  
21 number of models have been developed to estimate the market cost of equity. As a  
22 general proposition, when faced with the task of estimating the market cost of equity,  
23 analysts are inclined to gather and evaluate as much relevant data as reasonably can be  
24 analyzed. For that reason, I use multiple approaches to estimate the market cost of equity

1 used in performing valuations in the context of our financial advisory and transaction  
2 practices. Similarly, it has been my consistent practice to use multiple methodologies  
3 when estimating the cost of equity for regulatory purposes.

4  
5 In addition, and as a practical matter, all of the models available to estimate the market  
6 cost of equity are subject to limiting assumptions or other methodological constraints.  
7 Consequently, many finance texts recommend using multiple approaches when estimating  
8 the market cost of equity. Copeland, Koller and Murrin,<sup>19</sup> for example, suggest using the  
9 CAPM and Arbitrage Pricing Theory model, while Brigham and Gapenski<sup>20</sup> recommend  
10 the CAPM and DCF approaches.

11  
12 Although we cannot directly observe the market cost of equity, we can observe the  
13 methods frequently used by analysts to arrive at their return requirements and  
14 expectations. While investors and analysts tend to use multiple approaches in developing  
15 their estimate of return requirements, each methodology requires certain judgment with  
16 respect to the reasonableness of assumptions and the validity of proxies in its application.  
17 In my view, therefore, it is both prudent and appropriate to use multiple methodologies  
18 in order to mitigate the effects of assumptions and inputs associated with relying  
19 exclusively on any single approach. In essence, analysts and academics understand that  
20 ROE models simply are tools to be used in the ROE estimation process and that strict  
21 adherence to any single approach or the specific results of any single approach can lead to

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<sup>19</sup> 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.

<sup>20</sup> 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 flawed and irrelevant conclusions. That position is consistent with the *Hope* and *Bluefield*  
2 finding that it is the analytical result, as opposed to the methodology that is controlling in  
3 arriving at ROE determinations.

4  
5 Thus a reasonable cost of equity estimate appropriately considers alternate methodologies  
6 and the reasonableness of their individual and collective results. At the same time, it is  
7 important to recognize that the recent capital market dislocation may have significant  
8 effects on the models' inputs, producing anomalous or counter-intuitive results. In the  
9 case of the CAPM, for example, long-term Treasury yields are well below historical  
10 averages, reflecting both the continuing risk aversion on the part of investors and the  
11 need for the Federal government to finance the expansionary fiscal programs enacted to  
12 address recessionary economic conditions. While low Treasury yields may be viewed in  
13 isolation as a sign of low capital costs, other data such as continued wide credit spreads  
14 and historically high levels of expected equity market volatility indicate otherwise. In my  
15 view, analytical approaches that render cost of equity estimates that are below the average  
16 authorized returns under far more benign market conditions should be given limited  
17 weight.

18  
19 **Constant Growth DCF Model**

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

21 A. Yes. DCF models are widely used in regulatory proceedings and have sound theoretical  
22 bases, although neither the DCF model nor any other model can be applied without  
23 considerable judgment in the selection of data and the interpretation of results. In its

1 simplest form, the DCF model expresses the market cost of equity as the sum of the  
2 expected dividend yield and long-term growth rate.

3

4 Q. PLEASE DESCRIBE THE DCF APPROACH.

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

$$8 \quad P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \dots + \frac{D_\infty}{(1+k)^\infty} \quad [1]$$

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

$$12 \quad k = \frac{D(1+g)}{P_0} + g \quad [2]$$

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

16

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

18 A. The Constant Growth DCF model requires the following assumptions: (1) earnings,  
19 dividends and book value grow at the same, constant rate; (2) a stable dividend payout  
20 ratio; (3) a constant price-to-earnings multiple; and (4) a discount rate greater than the  
21 expected growth rate. To the extent that any quantification of these assumptions is

1 uncertain, considered judgment and/or specific adjustments should be applied to the  
2 results.

3

4 **Dividend Yield for the Constant Growth DCF Model**

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

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

10

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

12 A. I believe it is important to use an average of recent trading days to calculate the term  $P_0$  in  
13 the DCF model so that the calculated market cost of equity is not skewed by anomalous  
14 events that may affect stock prices on any given trading day. In that regard, the averaging  
15 period should be reasonably representative of expected capital market conditions over the  
16 long-term. At the same time, it is important to reflect the extraordinary conditions that  
17 have defined the capital markets over the recent past. In my view, the use of the three-  
18 month averaging period reasonably balances those concerns. Furthermore, this averaging  
19 period is consistent with the period considered by the Commission in prior proceedings.<sup>21</sup>

20

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<sup>21</sup> 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 Q. PUTTING ASIDE THE ISSUE OF THE AVERAGING PERIOD, DID YOU MAKE ANY  
2 ADJUSTMENTS TO THE DIVIDEND YIELD TO ACCOUNT FOR PERIODIC GROWTH IN  
3 DIVIDENDS?

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

13

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

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

17 A. Yes. In its Constant Growth form, the DCF model (*i.e.*, Equation [2]) assumes a single  
18 growth rate in perpetuity. Accordingly, in order to reduce the long-term growth rate to a  
19 single measure, (as noted earlier) one must assume a constant payout ratio, and that  
20 earnings per share, dividends per share and book value per share all grow at the same  
21 constant rate. Over the long run, however, dividend growth can only be sustained by  
22 earnings growth. Consequently, it is important to incorporate a variety of measures of  
23 long-term earnings growth into the Constant Growth DCF model. This can be  
24 accomplished by averaging those measures of long-term growth that tend to be least

1 influenced by capital allocation decisions that companies may make in response to near-  
2 term changes in the business environment. Since such decisions may directly affect near-  
3 term dividend payout ratios, estimates of earnings growth are more indicative of long-  
4 term investor expectations than are dividend growth estimates. Therefore, for the  
5 purposes of the Constant Growth form of the DCF model, growth in earnings per share  
6 (“EPS”) represents the appropriate measure of long-term growth.

7  
8 **Results for Constant Growth DCF Model**

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

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

- 12 1. The average daily closing prices for the three months ended October 15, 2009 for  
13 the term  $P_0$ ; and
- 14 2. The annualized dividend per share as of October 15, 2009 for the term  $D_0$ .

15  
16 I then calculated the DCF results using the average of the following growth terms:

- 17 1. The Zacks consensus long-term earnings growth estimates; and
- 18 2. The Value Line earnings per share growth estimates.

19  
20 Q. HOW DID YOU CALCULATE THE HIGH AND LOW RESULTS OF THE CONSTANT GROWTH  
21 DCF MODEL?

22 A. I calculated the mean high DCF result using the maximum growth rate (*i.e.*, the maximum  
23 of the Value Line and Zack’s EPS growth rates) in combination with the dividend yield  
24 for each of the proxy group companies. Thus, the mean high result reflects the average

1 maximum DCF result for the proxy group. I used a similar approach to calculate the  
2 mean low results, using the minimum growth rate for each proxy group company.

3

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

5 A. As noted in Exhibit No. \_\_ (RBH-2), the unadjusted mean DCF result for my proxy  
6 group is 11.17 percent, based on a three-month averaging period. The mean high DCF  
7 result for the three-month averaging period is 12.04 percent.

8 **Multi-Period DCF Model**

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

10 A. Yes, consistent with Commission precedent, I also considered the results of a multi-  
11 period (three-stage) Discounted Cash Flow Model, sometimes referred to as a “Multi-  
12 period Dividend Discount” model. The three-stage model, which is an extension of the  
13 Constant Growth form, enables the analyst to specify specific growth rates over three  
14 discreet stages. As with the Constant Growth form of the model, the multi-period form  
15 defines the cost of equity as the discount rate that sets the current price equal to the  
16 discounted value of future cash flows. Unlike the Constant Growth form, however, the  
17 multi-period model must be solved in an iterative fashion.

18

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

20 A. As noted above, the model sets the subject company’s stock price equal to the present  
21 value of cash flows received over three “stages”. In the first two stages “cash flows” are  
22 defined as projected dividends. In the third stage, “cash flows” equal both dividends and  
23 the expected price at which the stock will be sold at the end of the period. The expected  
24 stock price is based on the “Gordon” model, which defines the price as the expected

1 dividend divided by the difference between the cost of equity (*i.e.*, the discount rate) and  
 2 the long-term expected growth rate. In essence, the terminal price is defined by the  
 3 Constant Growth DCF model. In each of the three stages, the dividend is projected as  
 4 the product of the project earnings per share, and the expected dividend payout ratio. A  
 5 summary description of the model is provided in Table 3, below.

6 **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"> <li>• Stock Price</li> <li>• Earnings Per Share (EPS)</li> <li>• Dividends Per Share (DPS)</li> </ul>	<ul style="list-style-type: none"> <li>• Expected EPS</li> <li>• Expected DPS</li> </ul>	<ul style="list-style-type: none"> <li>• Expected EPS</li> <li>• Expected DPS</li> </ul>	<ul style="list-style-type: none"> <li>• Expected EPS</li> <li>• Expected DPS</li> <li>• Terminal Value</li> </ul>
Assumptions	<ul style="list-style-type: none"> <li>• 3-month stock price averaging period</li> </ul>	<ul style="list-style-type: none"> <li>• EPS growth rate</li> <li>• Payout ratio</li> </ul>		<ul style="list-style-type: none"> <li>• Long-term growth rate</li> </ul>

7

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

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

17

1 It also is very important to note that while the model calculates the cost of equity based  
2 on expected dividends, it does not rely solely on Value Line for dividend growth rate  
3 projections. In my experience, a common and legitimate criticism of DCF models that  
4 rely on projected dividend growth rates (especially in the Constant Growth form of the  
5 model) is that Value Line is the sole source of such projections.<sup>22</sup> While the form of the  
6 model I have used relies on Value Line for projected payout ratios, the potential bias  
7 resulting from reliance on a single analyst is mitigated by the use of consensus earnings  
8 forecasts. The model also enables the analyst to check for the reasonableness of the  
9 inputs and results by reference to certain market-based metrics. The terminal price, for  
10 example, can be divided by the expected EPS in the final year to calculate an average  
11 Price/Earnings ("P/E") ratio. To the extent that the projected P/E ratio is inconsistent  
12 with either historical or expected levels, it may be an indicator of incorrect or inconsistent  
13 assumptions within the balance of the model.

14  
15 Q. DO YOU BELIEVE THAT THE MULTI-PERIOD MODEL DESCRIBED ABOVE IS CONSISTENT  
16 WITH THE INTENT OF THE TWO-STAGE MODEL RELIED UPON BY THE COMMISSION?

17 A. Yes, I do. It is my understanding that the general form of the model involves a short-  
18 term stage based on dividend growth and a second stage based on a long-term growth  
19 estimate.<sup>23</sup> Although my calculation of dividend growth does not rely on the Value Line  
20 Dividend Per Share growth estimate, it does consider both consensus earnings  
21 projections and Value Line's expected payout ratio. My long-run growth estimate, the  
22 timing of which extends beyond the horizon of the Value Line and analyst projections, is

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

<sup>23</sup> New York Public Service Commission, Case 08-E-0539.

1 based on highly visible projections of long-term macroeconomic (in this case, Gross  
 2 Domestic Product, or “GDP”) growth. In my view, both the construction of the model  
 3 and the underlying inputs and assumptions are consistent with, and enhance, the  
 4 application of the two-stage model.

5

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

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

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

9

**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

10

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

12 A. The long-term growth rate of 5.95 percent is based on a GDP growth rate of 3.36  
 13 percent from 1929 through 2008 and an inflation rate of 2.50 percent. The GDP growth

1 rate is calculated as the compound growth rate in the chain weighted GDP for the period  
2 from 1929 through 2008. This growth rate is consistent with the growth rate relied upon  
3 by Staff in the multi-period model that was relied on in Case 08-E-0539. I calculated the  
4 rate of inflation of 2.50 percent based on the average of the long-term projected growth  
5 rate in the Consumer Price Index (“CPI”) for all urban consumers, as reported by Blue  
6 Chip Economic Indicators of 2.40 percent<sup>24</sup> and the compound annual growth rate in the  
7 CPI of 2.61 percent projected by the Energy Information Administration (“EIA”) in the  
8 2009 Annual Energy Outlook.<sup>25</sup>

9  
10 Q. WHAT WERE YOUR SPECIFIC ASSUMPTIONS WITH RESPECT TO THE PAYOUT RATIO?

11 A. As noted in Table 4, for the first two periods I relied on the first year and long-term  
12 projected payout ratios reported by Value Line<sup>26</sup> for each of the proxy group companies.  
13 In the long term, I assumed that the payout ratios for the proxy group converge to the  
14 long-term industry average payout ratio of 66.00 percent, as reported by Value Line.

15  
16 Q. WHAT WERE THE RESULTS OF THIS ANALYSIS?

17 A. As shown in Exhibit No. \_\_\_ (RBH-3), the results of this multi-stage DCF analysis suggest  
18 an ROE of 11.01 percent based on a three-month averaging period.

19

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<sup>24</sup> 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.

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

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

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

3 A. Yes, they are. Based on the assumptions I discussed previously, the multi-period model  
4 results in an average price-to-earnings multiple of 13.94, which is generally consistent  
5 with price-to-earnings (“P/E”) multiple of 13.50 that Value Line projects for the electric  
6 industry for the long-term industry outlook. Furthermore, the results of the model are  
7 generally consistent with the Value Line projected annual P/E ratio for the proxy group  
8 companies of 13.21 for 2012 through 2014. As noted earlier, since the terminal price is  
9 derivative of the model’s prior calculations and assumptions, the terminal P/E ratio is an  
10 indicator of the reasonableness and consistency of the inputs and results.  
11

12 **Capital Asset Pricing Model Analysis**

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

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

19 
$$k_e = r_f + \beta(r_m - r_f) \quad [3]$$

20 where:

21  $k_e$  = the required market ROE

22  $\beta$  = Beta of an individual security

23  $r_f$  = the risk free rate of return

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

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

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

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

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

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

Second, the extraordinary loss in equity values experienced in 2008 actually reduced the market risk premium when measured on a historical basis. As sometimes applied in the CAPM, the market risk premium represents the difference in the arithmetic average total

1 return on common stocks, and the income-only return on long-term Government bonds,  
2 as reported by Morningstar, Inc. (formerly, Ibbotson Associates). Consequently, the  
3 market losses experienced in 2008 actually resulted in a *decrease* in the historic risk  
4 premium from the prior year from 7.10 percent to 6.50 percent. In my view, the notion  
5 that the premium required by equity investors would decrease at the same time that equity  
6 market volatility was at historically high levels is counter-intuitive, and supports the use of  
7 a forward-looking (*ex-ante*) market risk premium estimate.

8  
9 Q. WITH THOSE QUALIFICATIONS IN MIND, WHAT ASSUMPTIONS DID YOU USE IN YOUR  
10 CAPM MODEL?

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

15 The horizon of the chosen Treasury security should match the horizon  
16 of whatever is being valued... If an investor plans to hold stock in a  
17 company for only five years, the yield on a five-year Treasury note would  
18 not be appropriate since the company will continue to exist beyond those  
19 five years.<sup>27</sup>

20  
21 Because utility companies represent long-duration investments, it is appropriate to use  
22 yields on long-term Treasury bonds as the risk-free rate component of the CAPM. In my  
23 view, the 30-year Treasury Bond is the appropriate security for that purpose.

24  
25 As to the market risk premium, for the reasons discussed above, I did not use a historical  
26 average; rather, I developed two forward-looking (*ex-ante*) estimates. Finally, for the Beta

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

1 term, I used Beta estimates from Value Line and Bloomberg, both of which adjust their  
2 Beta estimates based on an average of the raw, historical Beta and 1.0. While their  
3 techniques are slightly different, in both cases (*i.e.*, for both Value Line and Bloomberg),  
4 the adjustment addresses the tendency of the CAPM to underestimate the cost of capital  
5 for companies with “unadjusted” or “raw” Betas significantly less than 1.0. For relatively  
6 low raw Beta companies such as regulated utilities, failure to take such adjustments into  
7 consideration will result in an understatement of required returns.

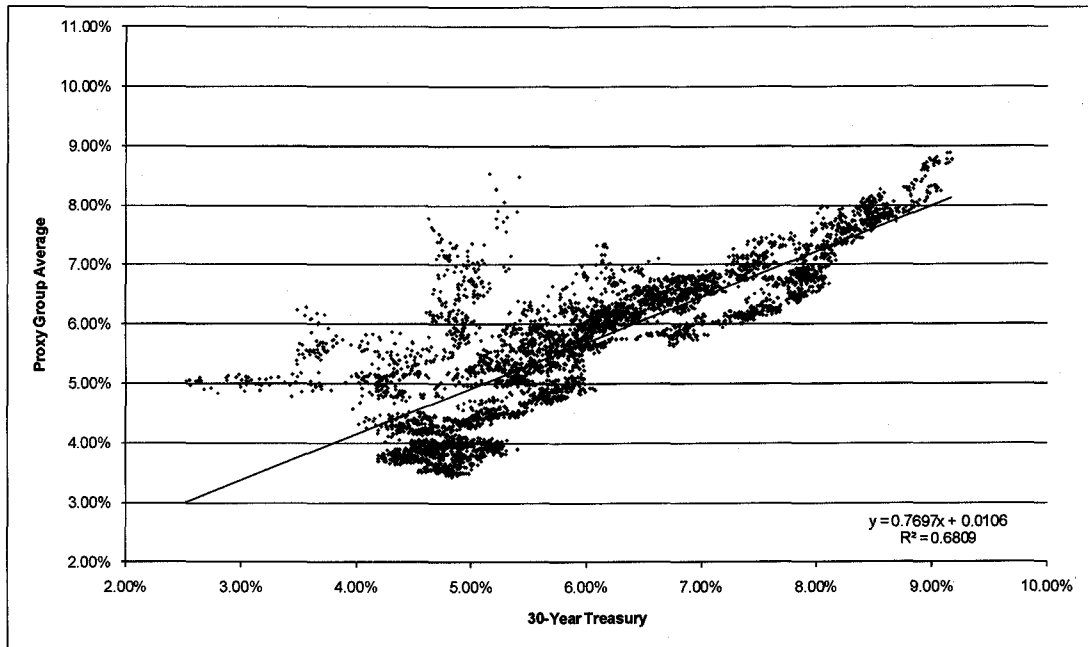
8  
9 Q. HAS THE COMMISSION TYPICALLY RELIED ON THE YIELD ON 30-YEAR TREASURY BONDS  
10 IN ESTIMATING THE RISK FREE RATE?

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

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

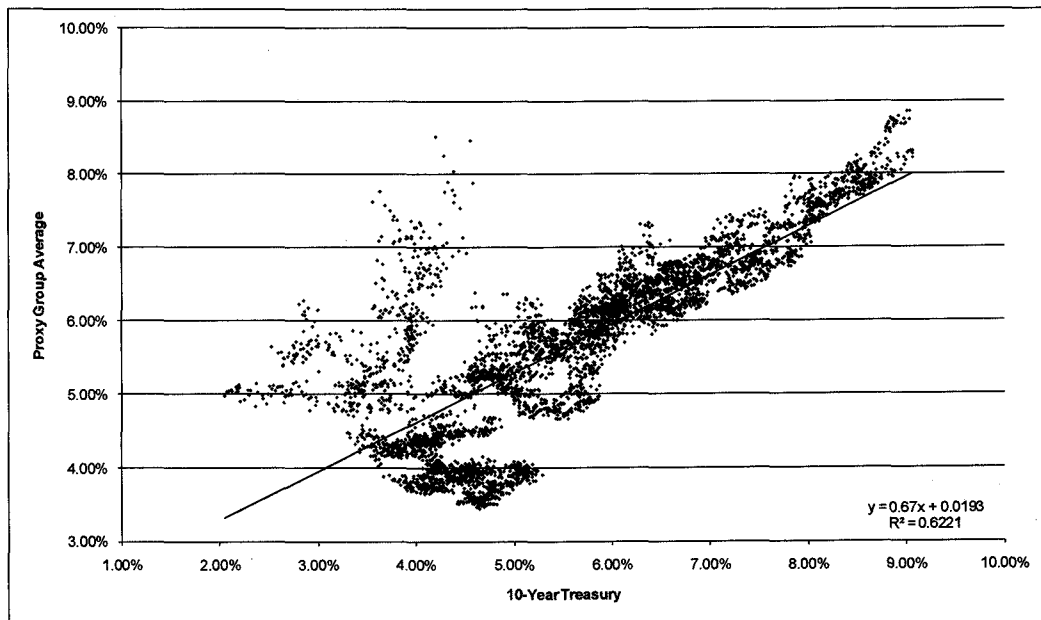
1 **Chart 1: Proxy Group Average Dividend Yield versus the 30-Year Treasury Bond Yield**



2

3

4 **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.<sup>29</sup> 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 VXX) 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

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<sup>29</sup> 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)).<sup>30</sup>

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”<sup>31</sup>) 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  $\beta$  = Adjusted Beta of an individual security

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<sup>30</sup> *Ibid.*, at 129.

<sup>31</sup> *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 underestimates the “alpha”, or the constant return term.<sup>32</sup>

As with the CAPM, my application of the Zero-Beta CAPM includes *ex-ante* estimates of the Market Risk Premium,<sup>33</sup> 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**

	<b>Results</b>
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%

17

<sup>32</sup> *Ibid.*, at 191.  
<sup>33</sup> *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.

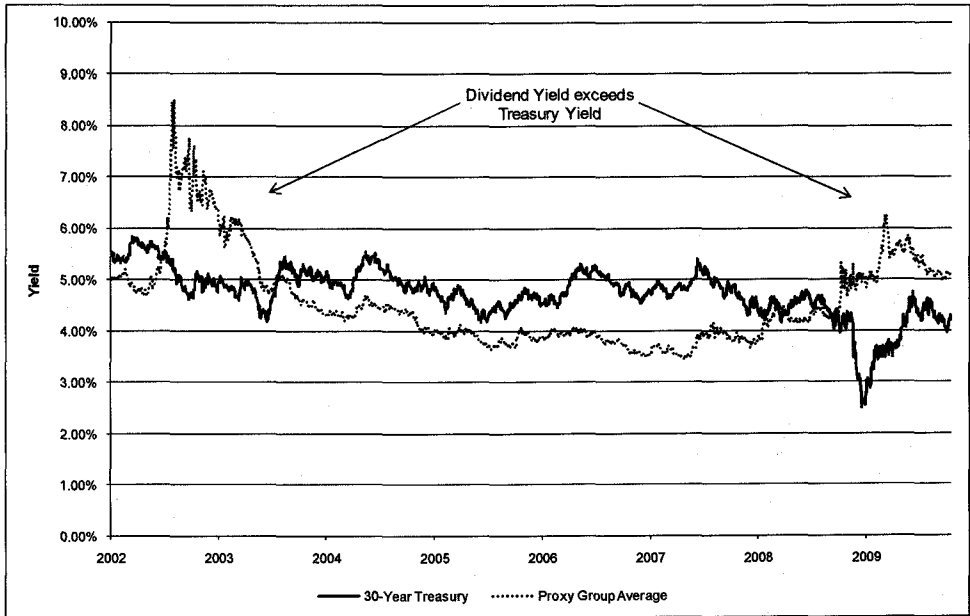
1 Q. IS IT YOUR VIEW THAT THE CAPM RESULTS SHOULD BE GIVEN SPECIFIC WEIGHTS IN  
2 DETERMINING THE COMPANY'S COST OF EQUITY?

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 Yields<sup>34</sup>



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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:

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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.<sup>35</sup>

14

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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

<sup>34</sup> Source: Bloomberg Professional Service.

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

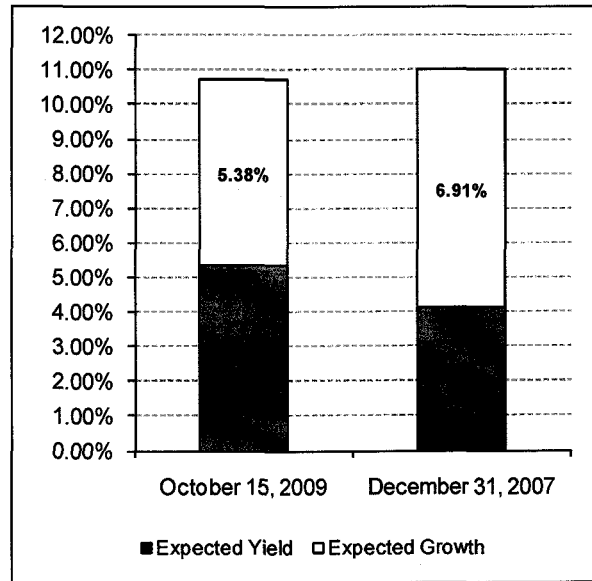
1 the CAPM and Zero-Beta CAPM results are heavily influenced by the estimated risk-free  
2 rate, I believe those models should be given little weight in determining the Company's  
3 cost of equity.

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 Analysis<sup>36</sup>**



2

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#### 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

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<sup>36</sup> 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.<sup>37</sup>  
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

---

<sup>37</sup> 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."<sup>38</sup> The Commission adopted  
2 this recommendation.<sup>39</sup>

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.<sup>40</sup>

21  

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<sup>38</sup> Case 08-E-0539, Rate Order, at 118.

<sup>39</sup> *Ibid.*, at 140-141.

<sup>40</sup> 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.<sup>41</sup> 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.<sup>42</sup>

12

<sup>41</sup> This calculation is presented in Exhibit No. \_\_ (RBH-7).

<sup>42</sup> 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,<sup>43</sup> and  
5 Commission's final order in the Company's most recent rate proceeding,<sup>44</sup> 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 of 10.80 percent, including flotation costs.

9 **Table 7: Weighted Average Analytical Results<sup>45</sup>**

	<b>Results</b>
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.

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<sup>43</sup> *Ibid.*

<sup>44</sup> 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.

<sup>45</sup> 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 billion<sup>46</sup> 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

---

<sup>46</sup> 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.<sup>47</sup>  
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.<sup>48</sup>  
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

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

<sup>48</sup> 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.<sup>49</sup>  
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

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<sup>49</sup> 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.<sup>50</sup>  
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.<sup>51</sup>

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.<sup>52</sup>  
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.

---

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

<sup>51</sup> *Ibid.*, at 5.

<sup>52</sup> *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 three-year rate plan,  
9 my recommended return would increase to 11.30 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 10.80<sup>53</sup> 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.

---

<sup>53</sup> 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**

	<b>Mean Low</b>	<b>Mean</b>	<b>Mean High</b>
Constant Growth DCF	10.30%	11.17%	12.04%
Multi-Period DCF	11.01%		
Average DCF	11.09%		
	<b>Sharpe-Ratio Derived MRP</b>	<b>Average</b>	<b>S&amp;P 500 <i>Ex- Ante</i> Derived MRP</b>
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%		
<b>Weighted Average Cost of Equity</b> (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.<sup>54</sup> 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

<sup>54</sup> 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 THREE-YEAR STAY-OUT PERIOD?

20 A. It is important to consider the potential effect that increases in the general level of  
21 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.<sup>55</sup>

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

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<sup>55</sup> 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 three-year Treasury Note was 3.40 percent, while the average yield on the one-year  
16 Treasury Note was 3.14 percent. The difference between those two average yields is 0.26  
17 percent; one-half of that amount equals 0.13 percent, or 13 basis points. Over the past  
18 five years, however, the difference between the one and three-year yields has steadily  
19 increased, such that the average difference over two years was 0.58 percent (58 basis  
20 points), which is more than two times higher than the five-year average. The one-year  
21 average difference was 86 basis points, suggesting a 43 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 2012 Blue Chip Financial  
6 Forecast for the project yield of 5.30 percent, which reasonably approximates the end  
7 date for the rate plan. The difference between the current and projected yields is 114  
8 basis points. One-half of that difference is 57 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 three-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 three-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 50 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**

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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.

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**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.

**ATTACHMENT A**  
**RÉSUMÉ OF ROBERT B. HEVERT**

- 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

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**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

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**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

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**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.

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**ATTACHMENT A**  
**EXPERT TESTIMONY OF ROBERT B. HEVERT**

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
<b>Arkansas Public Service Commission</b>				
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
<b>Colorado Public Utilities Commission</b>				
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)
<b>Connecticut Department of Public Utility Control</b>				
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
<b>Federal Energy Regulatory Commission</b>				
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
<b>Maine Public Utilities Commission</b>				
Northern Utilities, Inc.	07/95	Northern Utilities	Maine PUC	Gas Distribution System Expansion
<b>Massachusetts Department of Public Utilities</b>				
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
<b>Minnesota Public Utilities Commission</b>				
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
<b>Mississippi Public Service Commission</b>				
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
<b>New Hampshire Public Utilities Commission</b>				
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
<b>New Jersey Board of Public Utilities</b>				
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
<b>New Mexico Public Regulation Commission</b>				
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)
<b>New York State Public Service Commission</b>				
Niagara Mohawk Power Corporation	07/01	Niagara Mohawk Power Corporation	Case No. 01-E-1046	Power Purchase and Sale Agreement; Standard Offer Service Agreement
<b>North Dakota Public Service Commission</b>				
Otter Tail Power Company	11/08	Otter Tail Power Company	Docket No. 08-862	Return on Equity (electric)
<b>Oklahoma Corporation Commission</b>				
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
<b>Rhode Island Public Utilities Commission</b>				
National Grid RI – Gas	08/08	National Grid RI – Gas	Docket No. 3943	Revenue Decoupling and Return on Equity
<b>South Dakota Public Utilities Commission</b>				
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)
<b>Texas Public Utility Commission</b>				
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)
<b>Texas Railroad Commission</b>				
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
<b>Utah Public Service Commission</b>				
Questar Gas Company	12/07	Questar Gas Company	Docket No. 07-057-13	Return on Equity
<b>Vermont Public Service Board</b>				
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)
<b>Virginia State Corporation Commission</b>				
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
UIL 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%	5.93%	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	
Allele	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%	9.35%	9.44%
Alliant Energy Corp.	LNT	0.70	0.81	0.75	4.72%	6.50%	9.27%	9.61%	9.96%
DPL, Inc.	DPL	0.60	0.66	0.63	4.72%	6.50%	8.62%	8.81%	9.00%
Duke Energy Corp.	DUK	0.65	0.73	0.69	4.72%	6.50%	8.94%	9.22%	9.49%
NSTAR	NST	0.65	0.68	0.67	4.72%	6.50%	8.94%	9.05%	9.16%
PG&E Corp	PCG	0.55	0.61	0.58	4.72%	6.50%	8.29%	8.49%	8.70%
Portland General	POR	0.75	0.74	0.74	4.72%	6.50%	9.51%	9.55%	9.59%
Progress Energy	PGN	0.65	0.69	0.67	4.72%	6.50%	8.94%	9.06%	9.18%
Southern Co.	SO	0.55	0.57	0.56	4.72%	6.50%	8.29%	8.36%	8.43%
Vectren Corp.	VVC	0.75	0.72	0.74	4.72%	6.50%	9.40%	9.50%	9.59%
Wisconsin Energy	WEC	0.65	0.65	0.65	4.72%	6.50%	8.94%	8.95%	8.95%
Xcel Energy, Inc.	XEL	0.65	0.66	0.66	4.72%	6.50%	8.94%	8.98%	9.01%
	MEAN	0.65	0.69	0.67			8.95%	9.08%	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 <sub>h</sub>	Vol <sub>h</sub>		
6.50%	20.46%		
VOL <sub>e</sub>		Historical Market Sharpe Ratio	RP <sub>e</sub>
28.09%		31.77%	8.93%

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

RP<sub>h</sub> = historical arithmetic average Risk Premium

Vol<sub>h</sub> = historical market volatility

Vol<sub>e</sub> = 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%	0.01%
ABT UN Equity	Abbott Laboratories	0.80%	11.02%		0.09%	3.05%	0.02%
ANF UN Equity	Abercrombie & Fitch Co	0.03%	12.60%		0.00%	1.89%	0.00%
ADBE UN Equity	Adobe Systems Inc	0.19%	14.14%		0.03%	0.00%	0.00%
AMD UN Equity	Advanced Micro Devices Inc	0.04%	8.83%		0.00%	0.00%	0.00%
AES UN Equity	AES Corp/The	0.10%	11.00%		0.01%	0.00%	0.00%
AET UN Equity	Aetna Inc	0.11%	12.43%		0.01%	0.11%	0.00%
ACS UN Equity	Affiliated Computer Services Inc	0.05%	11.50%		0.01%	0.00%	0.00%
AFL UN Equity	Aflac Inc	0.21%	13.33%		0.03%	2.44%	0.01%
A UN Equity	Agilent Technologies Inc	0.10%	15.00%		0.01%	0.00%	0.00%
APD UN Equity	Air Products & Chemicals Inc	0.18%	7.51%		0.01%	2.20%	0.00%
ARG UN Equity	Airgas Inc	0.04%	9.80%		0.00%	1.27%	0.00%
AKS UN Equity	AK Steel Holding Corp	0.02%	No Long-Term Growth			0.93%	0.00%
AKAM UN Equity	Akamai Technologies Inc	0.04%	9.08%		0.00%	0.00%	0.00%
AA UN Equity	Alcoa Inc	0.14%	12.67%		0.02%	1.43%	0.00%
AYE UN Equity	Allegheny Energy Inc	0.04%	9.00%		0.00%	2.85%	0.00%
ATI UN Equity	Allegheny Technologies Inc	0.04%	No Long-Term Growth			1.85%	0.00%
AGN UN Equity	Allergan Inc/United States	0.18%	13.62%		0.02%	0.41%	0.00%
ALL UN Equity	Allstate Corp/The	0.17%	7.71%		0.01%	2.54%	0.00%
ALTR UN Equity	Altera Corp	0.06%	16.60%		0.01%	0.89%	0.00%
MO UN Equity	Altria Group Inc	0.38%	8.33%		0.03%	7.24%	0.03%
AMZN UN Equity	Amazon.com Inc	0.42%	22.19%		0.09%	0.00%	0.00%
AEE UN Equity	Ameren Corp	0.06%	4.00%		0.00%	6.04%	0.00%
AEP UN Equity	American Electric Power Co Inc	0.15%	5.00%		0.01%	5.32%	0.01%
AXP UN Equity	American Express Co	0.42%	12.50%		0.05%	2.03%	0.01%
AIG UN Equity	American International Group Inc	0.31%	13.50%		0.04%	0.00%	0.00%
AMT UN Equity	American Tower Corp	0.16%	17.47%		0.03%	0.00%	0.00%
AMP UN Equity	Ameriprise Financial Inc	0.09%	11.50%		0.01%	1.81%	0.00%
ABC UN Equity	AmerisourceBergen Corp	0.07%	12.22%		0.01%	1.02%	0.00%
AMGN UN Equity	Amgen Inc	0.63%	10.94%		0.07%	0.00%	0.00%
APH UN Equity	Amphenol Corp	0.07%	15.33%		0.01%	0.14%	0.00%
APC UN Equity	Anadarko Petroleum Corp	0.32%	5.83%		0.02%	0.55%	0.00%
ADI UN Equity	Analog Devices Inc	0.08%	13.00%		0.01%	2.84%	0.00%
AOC UN Equity	AON Corp	0.11%	10.40%		0.01%	1.46%	0.00%
APA UN Equity	Apache Corp	0.34%	7.50%		0.03%	0.59%	0.00%
AVL UN Equity	Apartment Investment & Management Co	0.02%	No Long-Term Growth			3.82%	0.00%
APOL UN Equity	Apollo Group Inc	0.11%	17.75%		0.02%	0.00%	0.00%
AAPL UN Equity	Apple Inc	1.71%	18.88%		0.32%	0.00%	0.00%
AMAT UN Equity	Applied Materials Inc	0.18%	10.80%		0.02%	1.74%	0.00%
ADM UN Equity	Arocher-Daniels-Midland Co	0.19%	No Long-Term Growth			1.84%	0.00%
AIZ UN Equity	Assurant Inc	0.04%	8.75%		0.00%	1.88%	0.00%
T UN Equity	AT&T Inc	1.53%	5.32%		0.08%	6.38%	0.10%
ADSK UN Equity	Autodesk Inc	0.06%	13.00%		0.01%	0.00%	0.00%
ADP UN Equity	Automatic Data Processing Inc	0.21%	11.02%		0.02%	3.33%	0.01%
AN UN Equity	AutoNation Inc	0.04%	10.25%		0.00%	0.00%	0.00%
AZO UN Equity	AutoZone Inc	0.07%	11.94%		0.01%	0.00%	0.00%
AVB UN Equity	AvalonBay Communities Inc	0.06%	3.78%		0.00%	4.79%	0.00%
AVY UN Equity	Avery Dennison Corp	0.04%	6.00%		0.00%	2.87%	0.00%
AVP UN Equity	Avon Products Inc	0.15%	9.41%		0.01%	2.47%	0.00%
BHI UN Equity	Baker Hughes Inc	0.15%	13.00%		0.02%	1.22%	0.00%
BLL UN Equity	Ball Corp	0.05%	8.50%		0.00%	0.77%	0.00%
BAC UN Equity	Bank of America Corp	1.57%	8.75%		0.14%	0.22%	0.00%
BK UN Equity	Bank of New York Mellon Corp/The	0.34%	11.03%		0.04%	1.81%	0.01%
BAX UN Equity	Baxter International Inc	0.33%	11.71%		0.04%	1.90%	0.01%
BBT UN Equity	BB&T Corp	0.20%	7.50%		0.01%	4.11%	0.01%
BDX UN Equity	Becton Dickinson and Co	0.16%	11.80%		0.02%	2.11%	0.00%
BBBY UN Equity	Bed Bath & Beyond Inc	0.10%	11.94%		0.01%	0.00%	0.00%
BMS UN Equity	Bemis Co Inc	0.03%	7.00%		0.00%	3.36%	0.00%
BBY UN Equity	Best Buy Co Inc	0.17%	12.58%		0.02%	1.37%	0.00%
BIG UN Equity	Big Lots Inc	0.02%	14.29%		0.00%	0.00%	0.00%
BIIB UN Equity	Biogen Idec Inc	0.14%	8.51%		0.01%	0.00%	0.00%
BJS UN Equity	BJ Services Co	0.06%	6.00%		0.00%	0.93%	0.00%
BDK UN Equity	Black & Decker Corp	0.03%	0.33%		0.00%	1.52%	0.00%
BMC UN Equity	BMC Software Inc	0.07%	15.88%		0.01%	0.00%	0.00%
BA UN Equity	Boeing Co/The	0.38%	9.13%		0.03%	3.23%	0.01%
BXP UN Equity	Boston Properties Inc	0.09%	4.80%		0.00%	3.29%	0.00%
BSX UN Equity	Boston Scientific Corp	0.15%	14.78%		0.02%	0.00%	0.00%
BMJ UN Equity	Bristol-Myers Squibb Co	0.46%	6.53%		0.03%	5.34%	0.02%
BRDM UN Equity	Broadcom Corp	0.13%	16.87%		0.02%	0.00%	0.00%
BFIB UN Equity	Brown-Forman Corp	0.05%	6.50%		0.00%	2.34%	0.00%
BNI UN Equity	Burlington Northern Santa Fe Corp	0.28%	12.00%		0.04%	1.85%	0.01%
CA UN Equity	CA Inc	0.12%	9.20%		0.01%	0.61%	0.00%
COG UN Equity	Cabot Oil & Gas Corp	0.04%	No Long-Term Growth			0.27%	0.00%
CAM UN Equity	Cameron International Corp	0.09%	No Long-Term Growth			0.00%	0.00%
CPB UN Equity	Campbell Soup Co	0.11%	7.56%		0.01%	3.21%	0.00%
COF UN Equity	Capital One Financial Corp	0.17%	10.73%		0.02%	1.14%	0.00%
CAH UN Equity	Cardinal Health Inc	0.10%	11.50%		0.01%	2.41%	0.00%
CFN UN Equity	CareFusion Corp	0.05%	5.18%		0.00%	0.00%	0.00%
CCL UN Equity	Carnival Corp	0.21%	12.89%		0.03%	0.00%	0.00%
CAT UN Equity	Caterpillar Inc	0.34%	7.80%		0.03%	3.05%	0.01%
CBG UN Equity	CB Richard Ellis Group Inc	0.03%	11.00%		0.00%	0.00%	0.00%
CBS UN Equity	CBS Corp	0.08%	3.53%		0.00%	1.95%	0.00%
CELG UN Equity	Celgene Corp	0.26%	24.80%		0.06%	0.00%	0.00%
CNP UN Equity	Centerpoint Energy Inc	0.05%	7.00%		0.00%	5.91%	0.00%
CTL UN Equity	CenturyTel Inc	0.10%	3.26%		0.00%	8.24%	0.01%
CEPH UN Equity	Cephalon Inc	0.04%	12.25%		0.01%	0.00%	0.00%
CF UN Equity	CF Industries Holdings Inc	0.04%	No Long-Term Growth			0.38%	0.00%
CHRW UN Equity	CH Robinson Worldwide Inc	0.10%	14.44%		0.01%	1.38%	0.00%
SCHW UN Equity	Charles Schwab Corp/The	0.21%	14.17%		0.03%	1.31%	0.00%

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%
CJ 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%	0.00%	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%	0.19%	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	0.08%	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%	5.60%	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%	0.00%	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	El Du Pont de Nemours & Co	0.31%	7.05%	0.02%	4.75%	0.01%
EP UN Equity	El 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%	0.02%
EMC UN Equity	EMC Corp/Massachusetts	0.37%	13.00%	0.05%	0.00%	0.00%
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%	3.17%	0.00%	5.51%	0.00%
EL UN Equity	Estee Lauder Cos Inc/The	0.05%	11.42%	0.01%	1.49%	0.00%
EXC UN Equity	Exelon 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%	6.75%	0.00%	0.38%	0.00%
FHN UN Equity	First Horizon National Corp	0.03%	7.40%	0.00%	0.00%	0.00%
FSLR 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%
FLUR UN Equity	FLIR Systems Inc	0.04%	17.49%	0.01%	0.00%	0.00%
FLS UN Equity	Flowserve 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%	2.68%	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%
GOOG 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		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%
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		0.68%	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%	13.67%	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	0.18%	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%	0.08%	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	Mylan 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%
NDQA 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%
NIJ UN Equity	Northeast Utilities	0.04%	6.33%	0.00%	4.00%	0.00%
NTRS UW Equity	Northem 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%	3.87%	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%	1.58%	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%
PFJ UN Equity	Principal Financial Group Inc	0.09%	10.42%	0.01%	1.36%	0.00%
PG 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%	6.49%	0.01%
PGR 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	Qwestar 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%
RSH 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%
R7N 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%
RRD UW Equity	RR Donnelley & Sons Co	0.05%	No Long-Term Growth		2.20%	0.00%
R UN Equity	Ryder System Inc	0.02%	No Long-Term Growth		1.65%	0.00%
SWY UN Equity	Safeway Inc	0.10%	7.92%	0.01%	1.85%	0.00%
CRM UN Equity	Salesforce.com Inc	0.08%	30.59%	0.02%	0.00%	0.00%
SNDK 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	0.48%	12.21%	0.06%	0.89%	0.00%
SLE 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	Sampra Energy	0.13%	6.00%	0.01%	2.87%	0.00%
SHW UN Equity	Shenwin-Williams Co/The	0.07%	6.79%	0.00%	2.25%	0.00%
SIALL UW Equity	Sigma-Aldrich Corp	0.07%	8.48%	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%	40.28%	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%
SYMC UW 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 UW 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 UW 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%
WFMI UW 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 UW 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 UW 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 UW 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 UW 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.

$\beta$  = 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%
$\beta$ = 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%
$\beta$ = 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	\$6,532,648	\$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	3.056%
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. [i]	15,000,000	\$20.25	\$0.610	\$600,000	\$19.600	\$9,750,000	\$303,750,000	\$294,000,000	3.210%
<b>Weighted Average Flotation Costs</b>							\$59,363,521	\$2,221,113,250	\$2,161,749,729	2.673%
								<b>FLOTATION COSTS</b>		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	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	\$1.76	\$32.99	5.33%	5.44%	5.59%	4.00%	NA	4.00%	9.44%	9.59%
LNT	\$1.50	\$26.78	5.60%	5.73%	5.89%	4.50%	4.50%	4.50%	10.23%	10.39%
DPL	\$1.14	\$25.05	4.55%	4.70%	4.83%	4.50%	8.50%	6.50%	11.20%	11.33%
DUK	\$0.98	\$15.48	6.20%	6.35%	6.52%	4.50%	5.00%	4.75%	11.10%	11.27%
NST	\$1.50	\$31.87	4.71%	4.87%	5.00%	5.70%	8.00%	6.85%	11.72%	11.85%
PCG	\$1.68	\$40.28	4.17%	4.32%	4.44%	7.50%	6.50%	7.00%	11.32%	11.44%
POR	\$1.02	\$19.59	5.21%	5.34%	5.49%	6.70%	3.50%	5.10%	10.44%	10.59%
PGN	\$2.48	\$38.94	6.37%	6.54%	6.72%	4.50%	6.00%	5.25%	11.79%	11.97%
SO	\$1.75	\$31.64	5.53%	5.71%	5.87%	8.50%	4.50%	6.50%	12.21%	12.37%
VVC	\$1.34	\$23.57	5.68%	5.85%	6.01%	6.80%	5.00%	5.90%	11.75%	11.91%
WEC	\$1.35	\$44.37	3.04%	3.17%	3.26%	9.00%	8.00%	8.50%	11.67%	11.76%
XEL	\$0.98	\$19.58	5.00%	5.15%	5.30%	5.50%	6.50%	6.00%	11.15%	11.30%
<b>MEDIAN</b>				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	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 [9])
- [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