# Niagara Mohawk Power Corporation d/b/a National Grid 

# PROCEEDING ON MOTION OF THE COMMISSION AS TO THE RATES, CHARGES, RULES AND REGULATIONS OF NIAGARA MOHAWK POWER CORPORATION FOR ELECTRIC AND GAS SERVICE 

Testimony and Exhibits of:
Kenneth D. Daly
Robert B. Hevert

## Book 1

April 2012

Submitted to:
New York State Public Service Commission
Case 12-E- $\qquad$
Case 12-G- $\qquad$

Submitted by:
Niagara Mohawk Power Corporation

Before the Public Service Commission
NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID
Direct Testimony
of
Kenneth D. Daly, CFA
President, New York
Q. Please state your name and business address.
A. My name is Kenneth D. Daly and my business address is One MetroTech Center, Brooklyn, New York 11201.
Q. Please explain your role and principal responsibilities at National Grid.
A. I am the President of the New York jurisdiction. I am responsible and accountable for the individual performance of The Brooklyn Union Gas Company d/b/a National Grid NY, KeySpan Gas East Corporation d/b/a National Grid and Niagara Mohawk Power Corporation d/b/a National Grid ("Niagara Mohawk" or "Company"). I spend approximately fifty percent of my time overseeing all aspects of Niagara Mohawk's business, including electric transmission and electric and gas distribution operations, financial performance, customer interactions, regulatory affairs and community involvement. I also serve on the Board of Directors for Niagara Mohawk.
Q. Please describe your educational background and business experience.
A. I received a Bachelor of Arts degree in English from St. Francis College in 1988. I received a Masters in Business Administration degree from St.

John's University in 1992 and a Masters of Science in Human Resource Management degree from Polytechnic University in 1999. I achieved the Chartered Financial Analyst designation in 2002. I joined The Brooklyn Union Gas Company in 1988 and have served in various roles in Customer Relations, Human Resources, Treasury, Investor Relations and Finance in the legacy KeySpan Corporation ("KeySpan") companies. In 2005, I was named Vice President, Financial and Employee Related Services, responsible for Collections, Human Resources and Accounting. I served as a Merger Coordination Officer in the National Grid-KeySpan merger and was named as the Chief Financial Officer for the Global Gas Distribution business in 2007. In 2009, I was named the Global Financial Controller responsible for the financial performance of National Grid plc. I was named to my current position as President of the New York jurisdiction in 2011. In addition, I have been an adjunct professor of business and finance at St. Francis College for 20 years and serve on the board of directors for numerous New York academic and non-profit organizations.

## Q. How have you organized your testimony?

A. First, I provide an overview of the filing, introduce the witnesses and summarize the background for this case. I then describe the improvements
at Niagara Mohawk since our last rate filing in 2010, and describe our significant efforts to reduce costs. Finally, I explain how the Commission's granting the relief sought in this case will further the objectives shared by the Company, our customers and the State of New York.

## Q. Please provide an overview of the Company's filing.

A. This filing seeks to take advantage of a unique opportunity to maintain bill stability and even reduce rates for many of our Upstate New York electric customers and, at the same time, to provide Niagara Mohawk with revenues sufficient to recover its costs of providing safe and reliable electric and gas service. The filing describes National Grid's exhaustive efforts to reduce costs across its US business, and presents electric and gas business revenue deficiencies that are net of Niagara Mohawk's \$55.8 million share of the savings estimated to be achieved through National Grid's US Restructuring Program.

This filing demonstrates National Grid's extensive efforts to strengthen the trust and confidence of our customers, regulators and other stakeholders and to improve cost transparency. To that end, the filing describes the major reorganization of National Grid's US business and our
move to a jurisdictional model that brings greater focus to our customers and regulators and creates jurisdictional accountability for performance. We discuss the steady progress we have made in implementing the recommendations from the Commission's management audit of Niagara Mohawk's electric business and our commitment to implementing the recommendations made by the Liberty Consulting Group ("Liberty") in its independent review of National Grid's affiliate transactions and relationships. To fully implement and realize the benefits from these recommendations, National Grid must consolidate its financial, human resources and supply chain systems on a common platform. This filing describes our scheduled launch of the US Foundation Program in October 2012 to accomplish this.

Although we have exceeded our commitment to make significant infrastructure investments in Niagara Mohawk's system, and we continue to meet or exceed our reliability performance targets, much work remains to be done on the system to maintain safe and reliable service for customers. This filing presents Niagara Mohawk's gas and electric capital investment plans, which are designed to enable us to continue to maintain safe and reliable service and meet customer expectations. Rates that are designed to generate revenues sufficient to recover the cost of service and to maintain the Company's financial integrity are critical. Of equal importance is a return on equity commensurate with the returns available from enterprises of similar risks, and a capital structure that reflects the equity and debt Niagara Mohawk will invest in its business. Absent a fully compensatory return on equity and rates that provide Niagara Mohawk a reasonable opportunity to earn it, the Company's ability to attract and maintain the debt and equity capital needed to finance its operations on reasonable terms will be impaired.

To attract and retain a quality workforce that is motivated to achieve performance metrics, including safety, reliability, customer satisfaction and other measures that serve the interests of our customers, Niagara Mohawk seeks recovery of a portion of its variable pay program, which was recently redesigned for the majority of our employees to focus more on customer priorities. The Company seeks recovery of its market competitive compensation costs, including a portion of the costs of its variable pay program.

This filing further demonstrates Niagara Mohawk's commitments to helping customers manage their energy usage and contributing to the communities we serve. Prior to this filing, we held numerous outreach meetings with customers. Consistent with their feedback, in this filing, Niagara Mohawk sets forth new and expanded economic development programs, including efforts to assist customers converting from oil to natural gas, proposes to expand programs to help our customers who are most in need of financial assistance, and details our partnerships with customers such as the effort underway at the Buffalo Niagara Medical Campus. These programs and efforts are designed to improve economic conditions for our customers and the communities we serve.

## Q. Please introduce the other witnesses who provide testimony in the Company's direct case.

A. The Company's electric and gas filings are supported by the direct testimony of 17 witnesses or witness panels, in addition to my testimony. The general subjects they address are as follows:

- The Electric Infrastructure and Operations Panel consists of Ellen S. Smith, Executive Vice President and Chief Operations Officer, Keith P. McAfee, Vice President, New York Electric and Allen C. Chieco, Director, Network Strategy, New York Electric. The panel's testimony discusses the Company's electric transmission and distribution capital additions, transmission and distribution operations and maintenance costs, as well as Niagara Mohawk's fleet and facility investments.
- The Gas Infrastructure and Operations Panel consists of Ellen S. Smith, William J. Akley, Senior Vice President, Maintenance and Construction, and Laurie T. Brown, Director, Network Strategy-Gas. The panel's testimony discusses the Company's gas capital additions and operations and maintenance costs.
- Robert B. Hevert, of Sussex Economic Advisors, LLC, provides evidence supporting the Company's cost of equity capital.
- Mustally A. Hussain, Director of Integrated Analytics, supports the Company's overall cost of capital and capital structure.
- The Human Resources Panel consists of Maureen Heaphy, Vice President of US Compensation, Benefits and Pensions and John Goudelias and Janet Fuersich of Towers Watson. The panel's testimony describes the Company's compensation and benefits program and the Company's efforts to control the costs of those programs.
- The Management Audit Panel consists of Peter T. Zschokke, Director, Regulatory Strategy and Margaret M. Janzen, Director, Wholesale Electric Supply. The panel's testimony addresses the Company's implementation of the recommendations in the most recent Niagara Mohawk management audit.
- The Information Systems Panel consists of Matthew Guarini, Vice President, US Information Services, and Michael Kyle, Director, US Foundation Program. The panel's testimony describes major information systems investments and initiatives during the twelve months ending March 31, 2014 ("Rate Year"), including the US Foundation Program.
- Dr. Ronald E. White of Foster Associates presents the Company's gas depreciation study and proposed gas depreciation rates for ratemaking purposes.
- Charles F. Willard, Director, Site Investigation and Remediation ("SIR"), discusses the Company’s SIR program, Niagara Mohawk’s efforts to control and mitigate SIR expense, including the use of a competitive bidding process, and the Company's forecast SIR costs.
- The Shared Services and Customer Panel consists of Rudolph L. Wynter Jr., Senior Vice President of Shared Services, Evelyn Kaye, Vice President, Transactions Delivery Center, and Edward H. White Jr., Vice President, Customer and Business Strategy. The panel's testimony sets forth our proposals relating to property tax,
uncollectible expense, customer service quality metrics, economic development and low income programs.
- Joseph F. Gredder, Manager, Electric Forecasting and Analysis, presents the Company's Electric Sales Forecast.
- A. Leo Silvestrini, Manager, Gas Load Forecasting and Analysis, presents the Company's Gas Sales Forecast.
- Elizabeth D. Arangio, Director, Gas Supply Planning, discusses the Company's efforts to purchase natural gas supplies on a reliable, least cost basis.
- The Service Company Panel consists of David B. Doxsee, Vice President, Finance, James M. Molloy, Director, Revenue Requirements for Upstate New York, and Sharon Partridge, Vice President, Service Company and Regulatory Accounting. The panel discusses service company charges and allocations, the consolidation of the service companies and proposed new allocation methodologies, the implementation of the Liberty review recommendations, the Overland Consulting ("Overland") review, and efforts to review the historic test year costs to ensure that they were accurately charged to Niagara Mohawk. The historic test year is the twelve months ended December 31, 2011 ("Historic Test Year").
- The Revenue Requirements Panel consists of David B. Doxsee and James M. Molloy. The panel's testimony sets forth the calculation of the revenue requirements for the Rate Year, including savings achieved from the US Restructuring Program.
- The Electric Rate Design Panel consists of Pamela B. Dise, Manager, Electric Pricing New York, Howard S. Gorman of HSG Group Inc., and Kellie I. Smith, Lead Analyst, Electric Pricing New York. The panel's testimony addresses marginal and embedded cost of service studies, the revenue forecast, revenue allocation, rate design and bill impacts for electric customers.
- The Gas Rate Design Panel consists of Melissa R. Nairn, Manager, Gas Pricing New York, Dawn M. Herrity, Principal Analyst, Gas Pricing New York, and Joseph T. Trainor of Black \& Veatch Corporation. The panel's testimony addresses the marginal and embedded cost of service studies, the revenue forecast, revenue allocation, rate design and bill impacts for gas customers.


## Q. What are the overall objectives of the Company's filing?

A. We have two overarching objectives. Our first objective is to continue to make progress in strengthening the trust and confidence of the Commission and our customers, as I discuss below. This is a top priority
for me. Our second key objective is to adjust Niagara Mohawk's electric and gas base rates to recover the Company's costs of providing safe and reliable electric and gas service to its customers with a balanced proposal that mitigates the impact on customer bills. The achievement of this critical objective would allow Niagara Mohawk to deliver on its service priorities that align with the priorities of our customers and the Commission, including executing its electric and gas capital investment plans that would enable the Company to continue providing safe and reliable service to customers, meeting all of our reliability performance standards and maintaining our strong storm restoration performance. It would also allow us to continue to respond to other interests of our customers, including helping them manage their energy usage and facilitating the economic vitality of the communities we serve.

As set forth in the testimony of the Revenue Requirements Panel, the Company proposes to adjust its base electric delivery rates, which took effect January 1, 2011 pursuant to the Commission's Order in Case 10-E0050 ("Electric Rate Order" or "2010 Electric Rate Case"), to eliminate a revenue deficiency of $\$ 130.7$ million. The Company has designed and timed this filing such that new electric delivery rates would replace a portion of an expiring annualized electric surcharge of approximately
$\$ 190$ million. The net result is a decrease in electric delivery revenues, lower electric delivery rates for all customer classes, except street lighting classes, and continued rate stability.

Niagara Mohawk also seeks to adjust its base gas delivery rates, which took effect following the Commission's adoption of the Gas Joint Proposal in Case 08-G-0609 ("2008 Gas Rate Case"), to eliminate a revenue deficiency of $\$ 39.8$ million, which will be partially offset by the elimination of a base rate allowance of approximately $\$ 15.3$ million of deferral recovery. To mitigate bill impacts for our gas customers and maintain rate stability, the Company is proposing to amortize deferred liabilities of $\$ 14.1$ million per year for three years. The result is a net increase in gas delivery revenues of $\$ 10.4$ million.

The Company's revenue deficiencies arise even though National Grid has been successful in significantly reducing US operating costs as a result of merging its operations with KeySpan and implementing the US Restructuring Program. As discussed more fully by the Revenue Requirements Panel, Niagara Mohawk's revenue requirements reflect $\$ 56.2$ million in cost reductions as a result of the KeySpan merger and $\$ 55.8$ million of estimated cost reductions associated with the US

Restructuring Program. However, even these total annual savings exceeding $\$ 100$ million are not sufficient to fully offset the Company's need for rate relief in this case.

Niagara Mohawk needs a fair opportunity to earn a reasonable return on the equity it will invest in its utility business. That opportunity, which can only be available from compensatory rates, is a necessary outcome of this case. With appropriate rates in place, we will be able to make the necessary infrastructure investments to maintain safe, reliable and cost effective service to our customers and to continue to meet our reliability metrics, as well as to gain ground on our other priorities to assist our customers and the communities we serve. We learned directly from our customers that these priorities align with their interests.

## Q. What efforts did the Company undertake to learn about customer priorities?

A. In anticipation of this filing, the Company held more than 50 outreach meetings, many of which I attended personally, with customers, various state agencies, local governments, school districts, and economic and community partners. We communicated with more than 300 stakeholders to ensure that we understood the priorities of our customers and reflected their feedback in this filing. Our outreach was welcomed and I heard firsthand from our customers what we do well and what needs improvement. We received warm appreciation for our storm restoration performance and fair criticism on the age and reliability of the system. Importantly, we confirmed that our customers want us to focus on investing in our infrastructure and providing safe and reliable service, helping them manage their energy usage and facilitating economic development in the communities we serve. These are Niagara Mohawk's priorities as well.

## Q. Please discuss the Company's recent history with respect to changes in the Company's electric and gas base rates. <br> A. Although the Electric Rate Order authorized an increase in revenue of $\$ 119$ million, it postponed recovery of certain deferral balances until 2012, thereby avoiding any impact on customer bills. In fact, our electric customers experienced a delivery rate decrease in 2012. In July 2011, the Company filed to remove $\$ 545$ million of competitive transition charges from base electric delivery rates and simultaneously filed to recover the postponed deferral balances. The Commission approved the removal of the competitive transition charges and authorized recovery of $\$ 240$ million over 15 months (approximately $\$ 190$ million annualized) through a

deferral recovery surcharge. The net impact of replacing the competitive transition charges with the deferral recovery surcharge reduced average residential customer delivery bills by 11 percent, small commercial customer delivery bills 9 percent to 21 percent and large commercial and industrial customer delivery bills 39 percent to 44 percent effective January 1, 2012. The expiration of the deferral recovery surcharge on March 31, 2013 presents an opportunity to reset base delivery rates to provide adequate revenues to recover our cost of providing service while maintaining rate stability for customers.

The Commission's Order in the 2008 Gas Rate Case marked the first increase in gas delivery rates in nearly 13 years. Overall, Niagara Mohawk customers have benefitted from longstanding rate stability.

However, despite our significant efforts to reduce and control costs, Niagara Mohawk continues to earn insufficient returns for the electric and gas businesses, as shown in the tables below:

Niagara Mohawk Electric Business

$$
\begin{array}{lllll}
2007 & 2008 & 2009 & 2010 & 2011
\end{array}
$$

| Allowed Return | 10.60 | 10.60 | 10.60 | 10.60 | 9.30 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Earned Return
6.33
5.16
$3.18 \quad 4.41 \quad 4.44$

Absent rate relief, the Company estimates that it will earn 6.79 percent on equity in FY 2014.

Niagara Mohawk Gas Business

|  | 2007 | 2008 | 2009 | 2010 | 2011 |
| :--- | ---: | :---: | :---: | :---: | :---: |
| Allowed Return | 10.60 | 10.60 | 10.60 | 10.20 | 10.20 |
| Earned Return | 3.44 | 0.50 | 3.61 | 4.17 | 5.35 |

Absent rate relief, the Company estimates it will earn 6.30 percent on equity in FY 2014.

Our continuing inability to earn a reasonable return on equity in either segment is a serious concern.

## Q. Is the Company proposing a multi-year rate plan?

A. This filing proposes new rates for the Rate Year only, but we are willing to explore a two or three year rate plan settlement that begins with compensatory rates and provides adequate revenues and protections with respect to changes in cost drivers for both Niagara Mohawk and its customers. To facilitate such discussions, we have included projections for two years beyond the Rate Year.

## Q. What are the principal factors contributing to the revenue deficiency that Niagara Mohawk seeks to recover?

A. The revenue deficiency for the Company's electric and gas business is largely driven by the fact that current rates are inadequate to recover our cost of service, including our cost of capital.

National Grid has done its part to control the costs of operating its US businesses, including Niagara Mohawk. As discussed in the testimony of the Service Company Panel, over the five year period from 2007 to 2011, operating and maintenance expenses, excluding mandated costs, costs largely beyond the Company's control and nonrecurring costs, increased at a compound annual escalation rate of 0.86 percent, slightly more than half of the compound annual inflation rate over the same period of 1.64
percent. Not all of the anticipated savings from the US Restructuring Program are reflected in this comparison.

As I discuss below, National Grid redoubled its efforts to reduce costs through its US Restructuring Program. In doing so, National Grid's investors have absorbed approximately $\$ 130$ million of the costs to achieve US Restructuring Program savings. Even so, Niagara Mohawk's share of these savings is insufficient to eliminate its revenue deficiency, as the savings will be offset by inflation and other cost increases associated with infrastructure and other capital investments.

## Q. How does Niagara Mohawk intend to deliver on its priority to build the confidence of its customers and regulators?

A. I believe the first step is to clearly demonstrate that we have listened to our regulators, customers and other stakeholders and are efficiently and effectively managing Niagara Mohawk's business consistent with their interests. It is my belief that we have already made some progress in this regard. This filing addresses how, through a major structural reorganization, exhaustive efficiency initiatives, strong operations performance and significant investment, Niagara Mohawk has made great strides in overcoming certain challenges and improving the efficiency of its operations.

We recognize that our communications and information records in the 2010 Electric Rate Case were not as transparent as they should have been. We acknowledge that we must work hard to earn the trust and confidence of our customers, regulators and other stakeholders. We take very seriously our responsibility to effectively and efficiently manage our business and to communicate with our regulators, our customers and other stakeholders in an open, honest and transparent manner. To that end, we have made significant changes that will facilitate the effective and efficient management of the business and provide more transparency in all that we do.

A key step in meeting this objective was the structural reorganization of National Grid's US business. At the time of the 2010 Electric Rate Case, National Grid was organized on a line of business model. This model, which leveraged economies of scale and unified National Grid's US business following the National Grid-KeySpan merger, received some attention in the comprehensive management audit of Niagara Mohawk's electric business conducted by NorthStar Consulting Group, which offered
a perspective on the regulatory challenges of operating under a line of business model. These organizational concerns were reinforced in the 2010 Electric Rate Case. In particular, Department of Public Service Staff ("Staff") and the Commission raised concerns over the transparency of service company costs and allocations and whether National Grid's systems, structure and processes provided sufficient protection for its New York customers.

## Q. How has National Grid's reorganization of its US business addressed these concerns?

A. In January 2011, National Grid announced a US organizational redesign that shifted from a line of business model to a jurisdictional model, under which National Grid appointed jurisdictional presidents with responsibility and accountability by operating company and jurisdiction. National Grid's vision and core values remain unchanged, but our focus on the individual jurisdictions in which we operate has been highlighted and revitalized.

My New York leadership team is completely focused on National Grid's operating companies in New York, and on listening and responding to New York regulators, customers and other stakeholders. The
reorganization is supporting our renewed focus on service company charges and transactions and has better enabled us to report and communicate on the activities at Niagara Mohawk. For example, Company Witness David Doxsee is the Chief Financial Officer for the New York Jurisdiction and is responsible for the New York companies' financial statements. My entire New York leadership team participates in a monthly financial review of the performance of the New York operating entities. The reorganization is also supporting our local focus on operations. For example, Company Witnesses Keith McAfee and Laurie Brown are members of my leadership team. They are responsible for operations, construction and maintenance, including emergency response and storm restoration, of Niagara Mohawk's electric and gas systems. During the severe storms over the past year, they updated me directly and regularly on our efforts to restore service to our customers and to protect our system.

With the implementation of the US Foundation Program, the Company will finalize service level agreements ("SLAs"), which will serve as an important tool for me and my leadership team to monitor and manage service company transactions with the New York operating companies. The SLAs and the accompanying governance structure will provide the
framework for measuring, reviewing, and challenging service company performance and allocation of costs from the perspective of the New York utilities. The benefits of the SLAs will be fully realized after the US Foundation Program is implemented.

In addition, to respond to certain management audit recommendations and feedback from Staff, and to further embed the jurisdictional model in the business, the Niagara Mohawk Board of Directors is now comprised of members of my New York leadership team and we have adopted a vision statement for Niagara Mohawk. Also consistent with the management audit recommendations, on April 3, 2012, National Grid announced the appointment of Nora Brownell to the National Grid plc Board of Directors, effective June 1, 2012. She has extensive US utility experience and has served as a former Pennsylvania Public Utility Commissioner and Federal Energy Regulatory Commissioner, and will no doubt be a valuable contributor to the Board.

## Q. How has National Grid addressed the Commission's concerns about the transparency and accuracy of service company allocations to its New York operating companies?

A. Although the service company charges giving rise to the concerns that surfaced in the 2010 Electric Rate Case were less than one percent of the requested revenue requirement, National Grid recognized that the circumstances were indicative of broader challenges. National Grid responded by proactively engaging Liberty to perform a thorough and independent review of service company and affiliate transactions and offered Liberty the full support of National Grid management. Liberty's five-month review culminated in a report detailing a number of recommendations that the Company is committed to implementing. The Service Company Panel discusses National Grid's efforts to implement the Liberty recommendations.

Since the 2010 Electric Rate Case, Niagara Mohawk has also undergone an independent review of service company charges and transactions by Overland at the direction of the Commission. In the Electric Rate Order, the Commission established $\$ 50$ million of the Company's annual revenue requirement as temporary pending the outcome of the independent review. The Company has fully cooperated with the Overland review. National Grid looks forward to reviewing any recommendations of Overland concerning means to improve its processes and controls, and would
welcome any improvements or refinements to the Liberty recommendations that result from Overland's review.

Guided largely by the Liberty recommendations, the Company has improved its controls, governance, reporting, tracking and transparency of service company transactions since the 2010 Electric Rate Case, as discussed by the Service Company Panel. The Information Services Panel describes National Grid's plan to consolidate its financial, human resources and supply chain systems on one platform with the implementation of the US Foundation Program, which Liberty identified as a critical path deliverable for addressing the concerns raised by Staff and Liberty. The US Foundation Program is expected to be implemented in October 2012. In connection with its launch, National Grid is consolidating its US service companies and, consistent with Liberty's recommendation, proposing a single set of cost allocation methodologies, which were filed with the Commission on March 30, 2012.

We recognize the significant effort required by Staff in reviewing the Company's filing in the 2010 Electric Rate Case. To facilitate Staff's review of Historic Test Year costs in this case, National Grid engaged Ernst \& Young LLP ("E\&Y") to review the accounting for costs charged
from the service companies to Niagara Mohawk and its affiliates in the Historic Test Year. This detailed review was designed to identify misallocations of costs among operating companies, positive or negative, that may have occurred in the Historic Test Year so that they could be corrected. E\&Y's review was focused on verifying that the costs charged to Niagara Mohawk and its affiliates were allocated appropriately in the Historic Test Year, in accordance with National Grid's cost allocation methodologies, and were proper to include in Niagara Mohawk's cost of service. In addition, the Historic Test Year and the forecast Rate Year underwent significant internal reviews. Together, these internal and external reviews should facilitate Staff's timely audit of service company charges and Niagara Mohawk's Rate Year revenue requirements.

## Q. Please explain the Company's objectives with respect to

 infrastructure investment.A. As discussed in the testimony of the Electric and Gas Infrastructure and Operations Panels, Niagara Mohawk recognizes its basic obligation to provide safe, reliable and efficient service to our customers. The Company proposes to invest $\$ 454$ million and $\$ 82$ million in electric and gas infrastructure, respectively, in the Rate Year to achieve that result.

Over the past five years, the Company has made significant investment in its electric infrastructure. The Company exceeded, by approximately \$230 million, its commitment in the National Grid-KeySpan merger proceeding to invest $\$ 1.47$ billion in Niagara Mohawk's electric infrastructure. These investments have enabled Niagara Mohawk to maintain reliable service to customers. But significant electric infrastructure investment is still needed to satisfy requirements established by various state and federal authorities, to address asset condition issues and to ensure sufficient system capacity to meet our customers' needs. Through our collaboration with customers, municipalities and other local organizations, we are gaining information about where new, large customers may be sited in our service territory for consideration in our system planning.

The Company's electric infrastructure plan balances the need for ongoing investment to provide safe and reliable service with the impacts on customer bills. In response to certain management audit recommendations, the Company has refined its electric infrastructure investment and operations plans and significantly reduced its forecast electric investment.

The Company's gas infrastructure investment plan recognizes the need to enhance and continue pipeline integrity and reliability programs and to balance customer bill impacts. To improve the safety and reliability of the gas distribution system, Niagara Mohawk proposes to accelerate its current pace of leak prone main replacement from an average of 30 miles per year to 35 miles per year. In addition, the gas investment plan includes programs to enhance the inspection, monitoring and remote operation capabilities on the Company's gas network to improve system performance and mitigate public safety risks associated with pipeline failures.

In addition, the Gas Infrastructure Investment Panel addresses the Company's efforts to expand the availability of gas service through targeted capital investments and other means. While commodity prices can be volatile, we expect natural gas to remain a very cost effective alternative to fuel oil for the foreseeable future.

The Company has attempted to forecast carefully the infrastructure investment needed to fulfill its public service obligations and to balance customer bill impacts. However, Niagara Mohawk proposes certain limited deferral mechanisms to address discrete issues where we expect to
incur costs in the Rate Year that we have not included in our investment plans because, at this time, the magnitude and timing of these costs are uncertain. These issues include, for the electric business, proposed federal rules relating to the bulk electric system and necessary work to maintain reliability in the event of the closure of electric generating plants on the Niagara Mohawk system. For the gas business, the Company proposes to defer the costs to comply with pending pipeline safety regulations of the U.S. Department of Transportation and Pipeline and Hazardous Materials Safety Administration in response to two recent high-profile incidents involving gas pipelines.

## Q. What rate of return on equity and capital structure does the Company propose?

A. We are proposing a return on equity of 10.55 percent for the Rate Year, as discussed in the testimony of Company Witness Robert Hevert, and a capital structure with a 51 percent equity component, which reflects Niagara Mohawk's current and forecast capital structure, as discussed in the testimony of Company Witness Mustally Hussain.

Since its acquisition by National Grid in 2002, the Company's common equity ratio exclusive of goodwill has increased from approximately 25 percent at the end of the first quarter following the transaction, to more than 51 percent as of 2007. In large part because of this increase, today Niagara Mohawk has a low "A" bond rating, compared to its "BBB" rating at the time of its acquisition by National Grid. These significant achievements were accomplished by using the Company's cash earnings and other sources of internally generated cash to increase the Company's common equity balance, pay down debt and fund construction and other operating expenditures.

The Company's ability to generate internal cash flow and retain favorable access to capital markets will be directly affected by the level of earnings authorized by the Commission in this proceeding. The return on equity and capital structure are foundational elements of the Company's ability to provide safe and reliable service to our customers at reasonable costs. Absent a reasonable return on equity and a rate structure that allows Niagara Mohawk a fair opportunity to earn it, the Company's ability to raise debt and equity capital on reasonable terms will be compromised.

Niagara Mohawk is committed to investing in its infrastructure, but to finance its operations and deliver on its capital investment plans, the Company will require continued access to capital on reasonable terms.

Investors use the return on equity reflected in rates as a key benchmark in assessing investment opportunities in public utilities. A return on equity that is below what investors believe they can earn on other investments with similar risks would impair our ability to attract capital, both debt and equity, on reasonable terms.

The capital structure that the Company proposes to use for ratemaking purposes will ensure that customers will pay rates that reflect the capital actually being used to finance Niagara Mohawk's regulated operations. The fact that Niagara Mohawk has maintained an equity ratio above 50 percent has been an important factor in the significant improvement in its credit rating, which is a benefit to customers through lower interest expense.

## Q. Has the Company reflected variable pay for employees below the senior leadership level in its revenue requirement?

A. Yes. As discussed by the Human Resources Panel, National Grid's total compensation package, consisting of base pay, variable pay and benefits, is necessary to attract and retain a qualified workforce capable of meeting the Company's goals of providing safe, reliable and efficient service. I recognize that in past rate cases the costs associated with variable pay
have not been reflected in Niagara Mohawk's rates. However, in this case, the Company is presenting evidence that its total compensation package, including variable pay, is reasonable and market competitive. Moreover, in a departure from the past, when the goals of the variable pay plan were focused on financial measures and individual employee goals, for the 2012-13 performance year, the plan has a more direct connection between variable compensation and goals that align with the interests of customers and are consistent with the Commission's policies. Unless the full costs of market competitive total compensation, including variable pay, are reflected in the rates set in this proceeding, the Company's ability to earn the return on equity allowed in this proceeding will be compromised.

## Q. What is the Company's proposal for recovery of SIR costs?

A. The Company proposes a base rate allowance that reflects its forecast Rate Year spending and full reconciliation for any over or under recovery for future refund to or recovery from customers. It is extremely important that Niagara Mohawk be permitted to fully recover its prudently incurred costs associated with these activities. While the Company does what it can to minimize these costs, the scope and timing of its site investigation and remediation activities are largely dictated by the New York

Department of Environmental Protection and the actual incurrence of SIR costs is unpredictable. Company Witness Charles Willard discusses Niagara Mohawk's site investigation and remediation program.

## Q. Please provide an overview of National Grid's efforts to reduce costs through the US Restructuring Program and the results for the Rate Year.

A. As part of the US Restructuring Program announced in January 2011, National Grid publicly announced a target to reduce its operating costs across its US business by $\$ 200$ million, measured from a baseline of fiscal year 2010 financial performance, adjusted for inflation. This goal was established to partially mitigate the revenue deficiency of National Grid's US operating companies, of which Niagara Mohawk represents approximately 33 percent. This was an enormous challenge, given that the revenue deficiency the US Restructuring Program was designed to address already reflected the realization of just over $\$ 200$ million in savings achieved as a result of the National Grid-KeySpan merger. As discussed in the testimony of the Revenue Requirements Panel, National Grid's senior management presented stretch targets to the business to assure that the $\$ 200$ million goal was achieved and to motivate employees to drive toward maximum efficiencies, all without compromising the ability to provide safe and reliable service. These efforts will pay significant dividends for Niagara Mohawk's customers.

Measured from a baseline of fiscal year 2010 financial performance, National Grid has exceeded its external target and reduced its US operating costs by $\$ 203.8$ million, on a run rate basis, as of March 31, 2012.

Measured from the more aggressive baseline of fiscal year 2011 performance, National Grid estimates that the US Restructuring Program will have reduced operating costs by $\$ 171.7$ million, on a run rate basis, as of March 31, 2013. This equates to $\$ 32.7$ million more than the target measured from fiscal year 2010 performance.

Of the $\$ 171.7$ million of cost reductions from initiatives to be implemented before the start of the Rate Year, approximately $\$ 55.8$ million are allocable to Niagara Mohawk and 100 percent of these cost reductions are reflected in the Company's Rate Year labor forecast and non-labor savings adjustment. Niagara Mohawk's share of total non-labor cost reductions is approximately $\$ 21.2$ million, of which only $\$ 7.5$ million was achieved and is reflected in the Historic Test Year. Accordingly,
nearly two thirds of the non-labor cost reductions we have reflected in the Rate Year are yet to be achieved. Achieving these cost savings before the start of the Rate Year will be a challenge and is far from certain.

## Q. Is the US Restructuring Program an ongoing initiative?

A. No. National Grid has exceeded its external target and implemented unprecedented cost reductions in a very short period. However, the US Restructuring Program, which included the major organizational redesign, the reduction of approximately 1,400 employees and significant cost cutting, has taken a toll. Coming closely after the KeySpan merger, the US Restructuring Program has placed a strain on employees who are emerging from a half decade of cost reductions and organizational changes. Our focus must now be on responsibly executing, achieving and sustaining the cost reduction initiatives that have been identified and on providing employees a settled and cohesive environment that allows us to meet the challenges ahead.

## Q. Has the Company added a productivity factor to further reduce its Rate Year cost of service?

A. Yes. National Grid believes it has identified maximum savings from the US Restructuring Program. We do not believe that a traditional productivity adjustment is warranted in light of the significant savings Niagara Mohawk has reflected in the Rate Year, particularly in light of the fact that it will be a difficult stretch for the Company to achieve and sustain them. However, the Company recognizes Commission precedent and Staff's position with respect to the traditional productivity adjustment. The Company has therefore further reduced the Rate Year revenue requirement by $\$ 6.5$ million, which represents one percent of payroll expense.

The Company has not identified initiatives to achieve these incremental productivity savings and does not know if they are reasonably achievable. Since the merger with KeySpan, National Grid has reduced its costs across its US business by approximately $\$ 373$ million through the combination of merger and US Restructuring cost reduction initiatives. The remaining potential to reduce costs is extremely limited, and achieving the additional savings to compensate for this productivity adjustment will be very challenging.

## Q. What are the rate impacts of the Company's filing?

A. Our proposal is designed to minimize the impacts on customers of the necessary electric and gas delivery rate increases. We timed this filing so
that new rates would coincide with the expiration of the electric deferral surcharge on March 31, 2013, as discussed in the testimony of our Electric Rate Design Panel. Absent new rates going into effect April 1, 2013, most electric customers would experience a short term decrease in their electric delivery bills, only to experience an increase when base rates are reset to align revenues with the Company's cost of providing service. The Company does not believe that such temporary and misleading rate fluctuations would be beneficial to customers, particularly our large commercial and industrial customers who forecast utility costs and depend on rate stability for business planning purposes.

As shown in the table below, with the expiration of the electric deferral surcharge, all electric customer classes, excluding street lighting classes, will experience a delivery rate decrease on April 1, 2013. For example, a typical residential electric customer using 600 kWh monthly will experience a 3.2 percent delivery rate decrease. For this reason, the Company is proposing to take no action with respect to net regulatory assets and liabilities at this time. This will allow the net deferral account balance to be used to mitigate future rate impacts.

As discussed in the testimony of our Electric Rate Design Panel, the street lighting classes, in aggregate, will experience a three percent delivery revenue increase.

As discussed in the testimony of our Gas Rate Design Panel, the Company's proposal (for a $\$ 39.8$ million increase less the expiration of $\$ 15.3$ million of deferral recovery) results in rate increases for our gas customers. To alleviate these rate impacts, the Company proposes to credit gas customers the net balance of its regulatory liabilities (\$14.1 million) per year for three years such that the Company's proposed base rate increase nets to $\$ 10.4$ million. The result is a modest delivery rate increase for our residential and commercial customers and a modest

| Service Classification | Usage Level | Rate Year to Rate Year Comparison Delivery Rate | Rate Year to Rate Year Comparison - Commodity | Total Bill |
| :---: | :---: | :---: | :---: | :---: |
| SC1 Small Residential | $\begin{aligned} & \hline 1,000 \\ & \text { therms } \end{aligned}$ | 2.6\% | 2.0\% | 2.3\% |
| SC2 Large Residential | $\begin{aligned} & 3,1800 \\ & \text { therms } \\ & \hline \end{aligned}$ | 0.8\% | 1.1\% | 1.0\% |
| SC2 Small Commercial | $\begin{aligned} & \hline 3,940 \\ & \text { therms } \\ & \hline \end{aligned}$ | 0.5\% | 1.1\% | 0.8\% |
| SC2 Small Industrial | $\begin{aligned} & 14,580 \\ & \text { therms } \\ & \hline \end{aligned}$ | -1.1\% | 1.1\% | 0.2\% |
| SC3 Large Commercial \& Industrial | 108,940 therms | -2.4\% | 4.5\% | 2.7\% |
| SC7 Small Transportation | $\begin{aligned} & 83,900 \\ & \text { therms } \end{aligned}$ | 0.8\% | ---- | 0.8\% |
| SC5 Medium <br> Transportation | $437,140$ <br> therms | 2.5\% | ---- | 2.5\% |
| SC8 Large Transportation | $\begin{aligned} & \hline 3,215,330 \\ & \text { therms } \end{aligned}$ | 3.6\% | ---- | 3.6\% | delivery rate decrease for our industrial and large supply customers in the Rate Year. The Company proposes to update its merchant function charge to better reflect the cost of merchant service, and to expand its applicability to SC-3 large supply customers on an equitable basis.

Typical Bills
Includes the Impact of the Elimination of $\$ 15.3$ million of Base Rate Deferral Recovery and Amortization of $\mathbf{\$ 1 4 . 1}$ million of Regulatory Liabilities

The electric and gas tables above reflect the typical bill impacts of the Company's proposals on customer delivery rates and total bills, assuming that electric and gas commodity prices are constant at the level forecast in the Rate Year. Neither table reflects potential changes in commodity prices, which can be volatile and are beyond the Company's control.

## Q. Please describe how this filing advances the Company's objectives of being part of the communities it serves and helping customers manage their energy usage.

A. The Company appreciates its critical role in the communities we serve as a provider of essential energy services that supports our customers and as a partner in the economic vitality of the Upstate New York region. An understanding of the communities we serve allows us to better integrate regional priorities into our business objectives. We are committed to assisting our customers' efforts to manage their energy requirements and to improving economic conditions in the communities we serve. This filing demonstrates this commitment through retained and expanded discounts for our low income customers, new and expanded economic development programs, investments to help customers manage their energy consumption and grants to spur the installation of compressed natural gas and electric vehicle charging stations.

## Q. Please explain the Company's low income proposals.

A. Many of our customers continue to struggle in the Upstate economy and the Company therefore proposes to continue its electric low income programs and to expand gas low income programs that provide additional assistance to our customers most in need. The Company is proposing to increase the monthly credit for qualifying gas customers from $\$ 7.50$ to $\$ 10.00$. This increase would offset the impact of the proposed increase in the customer charge for our low income customers. The Shared Services and Customer Panel describes our low income customer initiatives.

## Q. Please explain the Company's economic development proposals.

A. Economic recovery in the Company's service territory is flagging. As discussed in the testimony of the Shared Services and Customer Panel, we are proposing to increase funding for our electric economic development grant programs by approximately $\$ 2$ million to $\$ 11$ million annually. The Company's electric economic development grant programs are designed to (i) help customers improve their productivity, efficiency, and viability, (ii) promote sustainable smart growth by redeveloping vacant buildings, Brownfield sites, and certain urban centers, (iii) facilitate regional growth through the development and deployment of renewable technologies and (iv) partner with local organizations to promote the Niagara Mohawk service territory to new or expanding companies. Working collaboratively
with customers, municipalities and other local organizations presents the opportunity to gain valuable insights that allow the Company to optimize economic development plans to suit the needs of our customers and communities.

During 2011, the electric economic development grant programs provided an opportunity for Niagara Mohawk to assist customers who suffered severe damage from Hurricane Irene. Using the Company's grant structure as a basis, the Company quickly proposed emergency economic development programs. The Commission's swift action in approving the Company's filing is enabling customers to receive $\$ 1.7$ million in funding when it is most needed to recover from the devastation of Hurricane Irene. Since 2003, the Company's electric economic development grant programs have contributed to the creation or retention of more than 19,000 jobs across the Company's service area and have helped generate over $\$ 2$ billion in new capital investment. Spending under the grant programs has steadily increased over the past three years, from $\$ 3.7$ million in 2009 to $\$ 7.2$ million in 2010 and $\$ 8.6$ million in 2011. Importantly, during 2011, a total of $\$ 11.9$ million in project applications was approved for funding. The Company proposes to increase base rate funding to $\$ 11$ million to
reflect this increase in activity and to assure that grant money is available to promote economic growth in Niagara Mohawk's service territory. Although the current grant programs benefit both electric and gas customers, the Company does not currently offer economic development grants for gas only customers. The Shared Services and Customer Panel discusses our proposal to create two new programs totaling $\$ 1$ million. These programs will help offset customer costs for natural gas infrastructure upgrades that are required to accommodate a business expansion, a conversion to gas from an alternate fuel or new construction and will promote regional economic growth through the development, demonstration and deployment of new sustainable gas and clean transportation technologies.

## Q. Please describe the Company's proposals to assist customers in managing their energy consumption.

A. In response to customer feedback, Niagara Mohawk is making two proposals to help customers manage their energy consumption. First, the Company proposes an energy only light emitting diode ("LED") option in its street lighting tariff. Under the Company's proposal, customers will now have the opportunity to select and purchase LED equipment from an extensive assortment. This proposal is in direct response to requests from
some of our municipal customers who have expressed interest in LED technology. Second, the Company is proposing to spend a portion of the current Millennium Fund, a gas surcharge used to support research and development programs, to participate in the Utilization Technology Development program at the Gas Technology Institute. We believe this program is a cost-effective means to support mid to long term gas technology research and development, including new and advanced appliance technologies and gas renewable energy technologies. In our feedback sessions, customers confirmed that they are looking to Niagara Mohawk to take the initiative and explore new technologies and educate and collaborate with customers regarding energy management. This program is an important step in meeting our customers' expectations. We welcome opportunities to partner with our customers to explore innovative ways to manage their energy use, as we did recently with the Buffalo Niagara Medical Campus.

## Q. Please explain the Company's partnership with the Buffalo Niagara Medical Campus. <br> A. The Company seized an opportunity to partner with the Buffalo Niagara Medical Campus ("BNMC"). The Shared Services and Customer Panel discusses the Company's collaboration with BNMC to define and

implement a high quality, modern and efficient customer-driven energy platform that improves reliability and power quality, and promotes positive behavior change around energy usage. The effort is expected to generate insightful energy data that can be shared for benchmarking and future initiatives. The Company is also working with BNMC to support infrastructure for electric vehicle charging and compressed natural gas fueling stations and to explore renewable energy and storage integration opportunities.

## Q. Please address the Company's proposals relating to electric vehicle and compressed natural gas fueling stations. <br> A. The Company proposes grant programs totaling $\$ 1.7$ million to promote the installation of customer-owned alternative fuel vehicle fueling and charging stations. Compressed natural gas ("CNG") vehicles and electric vehicles ("EVs") require special fueling or charging stations, and those stations are limited in Upstate New York. To encourage our customers with small and medium size vehicle fleets to install them, the Company is proposing to offer grants to qualifying customers. These grants would partially offset the costs of installing the stations and promote the use of CNG vehicles and EVs. Environmental stewardship is a core value of National Grid and we believe that these proposals would advance the

 policies set forth in the New York State Energy Plan, the National Energy Policy Act, and the Clean Air Act to promote the use of alternative fuel technologies that lessen dependence on imported fuels and to reduce greenhouse gas emissions through the use of clean fuel vehicles. The Shared Services and Customer Panel provides detail on the Company's proposals.
## Q. Is the Company's filing consistent with the State's Energy Plan?

A. Yes. Niagara Mohawk stands behind New York State's energy policies and, as demonstrated throughout this filing, is committed to investing in its electric and gas infrastructure while promoting clean energy supplies and facilitating job creation and economic growth. Niagara Mohawk will actively participate in the Governor's Energy Highway initiative and we welcome the opportunity to partner with state policy makers and other utility companies to develop innovative, cost effective and environmentally sound solutions to our energy challenges.

## Q. Please summarize your testimony.

A. Niagara Mohawk's rate filing is designed to address the priorities shared among the Company, our customers and the Commission. Niagara Mohawk is taking advantage of a unique opportunity to reset rates to
recover its cost of providing safe and reliable electric and gas service, including its cost of capital, while maintaining bill stability for our customers and mitigating rate impacts. We have balanced the Company's need to recover its costs with the impacts on customers and their needs as well.

Our feedback sessions with customers and other stakeholders were an excellent learning experience for us, and we confirmed how aligned customer priorities were with our own. We learned that customers are looking to us to be their advocate and their guide for all things energy. They want us to help them manage their energy consumption, to provide assistance to those in need and to promote economic development in their communities. Customers are very interested in rate stability and the ability to predict their utility costs. Importantly, customers keenly understand the importance of the Company's infrastructure investments, as they rely on continuous service of electricity and gas to run their homes, businesses, schools and industry.

Niagara Mohawk is committed to being the partner, advocate and guide our customers want us to be and to stay connected to the communities we serve to meet these expectations. We have reflected much of the feedback we received in our proposals in this filing, including bill stability, prudent infrastructure investment, low income programs, economic development programs and LED lighting options.

Our proposals are also responsive to regulatory feedback. Under the organizational redesign announced shortly after the Commission's Order in the 2010 Electric Rate Case, I am ultimately responsible for responding to feedback from Staff and the Commission, and we have done that in this filing. Despite the extensive cost reductions reflected in the Rate Year, the Company has included a productivity adjustment consistent with Commission precedent. We have recently modified our variable compensation program consistent with the Commission's guidance. Niagara Mohawk has gained valuable insights from the management audit and Liberty review and is making steady progress implementing those recommendations. The US Foundation Program and its successful implementation will allow us to fully realize the benefits of those recommendations. We have also undertaken extensive efforts to facilitate Staff's review of Niagara Mohawk's revenue requirements in this case.

We have certainly made every effort to efficiently manage our business. Niagara Mohawk's revenues are inadequate to cover its cost of service,

16 Q. Does that conclude your testimony? successfully respond to the inevitable challenges we face.
A. Yes.
including its cost of capital, despite nearly five years of cost reductions across National Grid's US business that have lowered costs for Niagara Mohawk customers by more than $\$ 100$ million. Given the magnitude of cost reductions reflected in the Rate Year, rates must be reset to fully recover the Company's cost of service, including the cost of variable compensation paid to employees based on achievement of objectives that align with those of our customers and the Commission, and to provide a fair opportunity to earn a reasonable return on the equity that will be invested in utility operations. This is a required outcome of this case.

I am confident that, with strengthened relationships with our customers and regulators and fully compensatory rates, Niagara Mohawk will achieve the priorities it shares with its customers and the Commission and


# Before the Public Service Commission <br> NIAGARA MOHAWK POWER CORPORATION D/B/A NATIONAL GRID 

## Direct Testimony

of
Robert B. Hevert

## Direct Testimony of Robert B. Hevert

## Table of Contents

I. Introduction and Qualifications ..... 1
II. Purpose and Overview of Testimony ..... 2
III. Summary of Conclusions ..... 9
IV. Regulatory Guidelines and Financial Considerations ..... 11
V. Current Capital Market Environment ..... 12
A. Incremental Credit Spreads ..... 14
B. Yield Spreads ..... 16
VI. Proxy Group Selection ..... 23
VII. Cost of Equity Estimation ..... 29
A. Discounted Cash Flow Model ..... 32
B. Stock Prices used in the DCF Model ..... 33
C. Multi-Stage DCF Models ..... 34
D. Capital Asset Pricing Model Analysis ..... 48
E. Weighted Average Results ..... 59
VIII. Business and Financial Risks ..... 60
A. Regulatory Risk ..... 61
B. Capital Expenditure Risk ..... 66
C. Capital Structure ..... 70
IX. Stay-Out Premium ..... 72
X. Conclusion and Recommendation ..... 81

## I. Introduction and Qualifications

Q. What is your name and business affiliation?
A. My name is Robert B. Hevert. I am Managing Partner of Sussex

Economic Advisors, LLC, and an Executive Advisor to Concentric Energy Advisors, Inc., of Marlborough, Massachusetts.
Q. Please describe your educational background.
A. I hold a Bachelor's degree in Business and Economics from the University of Delaware, and an MBA with a concentration in Finance from the University of Massachusetts. Additionally, I hold the Chartered Financial Analyst designation.
Q. On whose behalf are you submitting this testimony?
A. I am submitting this testimony on behalf of Niagara Mohawk Power Corporation d/b/a National Grid ("Niagara Mohawk" or "Company"), an indirect, wholly-owned subsidiary of National Grid USA ("National Grid").
Q. Please describe your experience in the energy and utility industries.

## Direct Testimony of Robert B. Hevert

A. I have worked in regulated industries for over twenty-five years, having served as an executive and manager with consulting firms, a financial officer of a publicly-traded natural gas utility, and an analyst at a telecommunications utility. In my role as a consultant, I have advised numerous energy and utility clients on a wide range of financial and economic issues, including corporate and asset-based transactions, asset and enterprise valuation, transaction due diligence, and strategic matters. As an expert witness, I have provided testimony in over 80 proceedings regarding various financial and regulatory matters, including cost of capital issues, before numerous state utility regulatory agencies and the Federal Energy Regulatory Commission. A summary of my professional and educational background, including a list of my testimony in prior proceedings, is included as Attachment A to this testimony.

## II. Purpose and Overview of Testimony

## Q. What is the purpose of this testimony?

A. The purpose of this testimony is to present evidence and provide a recommendation regarding the Company's Cost of Equity (sometimes referred to as the Return on Equity or "ROE" for rate-making purposes) for its electric and natural gas utility operations, and to provide an assessment of the capital structure to be used to establish Niagara

## Direct Testimony of Robert B. Hevert

Mohawk's rates, as proposed in the direct testimony of Company Witness Mustally Hussain. My analysis and recommendations are supported by the data presented in Exhibit __ (RBH-1) through Exhibit __ (RBH-9), and Attachment B, which were prepared by me or under my direction.

The Cost of Equity, which is the return required by equity investors to assume the risks of ownership, is a market-based concept. As opposed to the earned return on common equity, which is an accounting construct that can be observed in historical data, the Cost of Equity is unobservable and must be estimated based on observable capital market data. As a consequence, there may be differences of opinion among analysts as to the data, assumptions and models used in the estimation process. In addition, in recent rate proceedings, the New York State Public Service Commission (the "Commission") has affirmed its preferences with respect to certain methodologies. As such, this testimony has been developed to note and explain any areas in which the approach taken may differ from the Commission's past practices.

This testimony establishes that a Return on Equity rate of 10.55 percent is necessary for Niagara Mohawk to provide an appropriate return to its equity investors for the twelve months ending March 31, 2014 ("Rate

## Direct Testimony of Robert B. Hevert

Year"). If the Company and the Department of Public Service Staff ("Staff") were to agree to a three-year rate settlement, my recommended ROE increases by 35 basis points to 10.90 percent to reflect the incremental risk that equity investors would assume by agreeing not to seek rate relief for a three-year period.

My recommended 10.55 percent Return on Equity considers a variety of factors that affect the required return to equity investors. This testimony therefore:

- Explains the multiple analytical approaches that were evaluated to develop my 10.55 percent Cost of Equity recommendation;
- Describes the application of those various multiple analytical approaches in light of Commission precedent;
- Explains how the Cost of Equity is affected by the various business and financial risks faced by Niagara Mohawk, including capital market conditions, the Company's proposed capital investment plan, and the current regulatory environment;
- Assesses the Company's proposed capital structure in the context of those in place at the utility operating companies held within the proxy group; and


## Direct Testimony of Robert B. Hevert

- Quantifies the premium required by investors in the Company's common equity to assume the additional risk of forgoing rate relief for a three-year period.

This testimony presents certain analyses structured according to the Commission's preferred methodological approach. In those cases in which additional analyses or alternative information should be incorporated into the estimation of the Company's ROE, I have described the alternative information and presented the additional analyses. For example, with respect to the application of the Discounted Cash Flow ("DCF") methodology, this testimony presents an alternative DCF model that calculates cash flows over three separate time periods, rather than the two time periods previously relied upon by the Commission. Similarly, this testimony presents analyses demonstrating that the use of the three- to five-year "Sustainable Growth" rate is an inappropriate proxy for expected long-term growth in the Multi-Stage DCF model, and presents a long-term growth rate estimate based on a projection of expected nominal economic growth as of the beginning of the terminal period.

As to the Capital Asset Pricing Model ("CAPM"), this testimony discusses the use of Beta Coefficients derived from the Value Line Investment

## Direct Testimony of Robert B. Hevert

Survey, and concludes that the use of an additional source of Beta Coefficients, namely the Bloomberg Professional Service, provides valuable additional information in the estimation of the Company's ROE. I also explain why the risk-free rate reflected in the CAPM should be derived from the current yields on 30-year Treasury securities.

Finally, in estimating the added premium required by the Company's equity investors for a three-year "Stay-Out" period, this testimony presents analyses demonstrating that the appropriate calculation of that risk is based on longer-term Treasury securities than have been traditionally relied upon by the Commission. This testimony further discusses the risks over and above those addressed in the application of the Commission's traditional Stay-Out premium calculation methodology.

Together with the exhibits attached to this testimony, this evidence demonstrates that an ROE of 10.55 percent is necessary to provide the Company with an opportunity to generate sufficient earnings to provide an appropriate return to its equity investors, while supporting the Company's financial integrity and its ability to support its substantial capital expenditure plan. Finally, this testimony demonstrates that if the Company agrees to and the Commission ultimately adopts a three-year

## Direct Testimony of Robert B. Hevert

Stay-Out period, the ROE should increase by 35 basis points, from 10.55 percent to 10.90 percent.

Finally, with respect to the Company's capital structure, I conclude that the proposed capital structure for the Rate Year, consisting of 51.40 percent common equity, 0.60 percent preferred equity, 46.30 percent longterm debt, 1.0 percent short-term debt and 0.70 percent customer deposits, as proposed by Company Witness Mustally Hussain, is reasonable relative to the average capital structures of my proxy group companies and indicates that the Company is exposed to an average level of financial risk as compared to the proxy group.

## Q. Please provide a brief overview of the analyses that led to your ROE recommendation.

A. As discussed in more detail in Section VII, it is extremely important to consider the results of several analytical approaches in determining the Company's ROE. To develop my ROE recommendation, I therefore applied two forms of the DCF model and two forms of the CAPM. Because the Commission has applied specific weighting factors to the DCF and CAPM models in prior proceedings, I have produced a set of

## Direct Testimony of Robert B. Hevert

analyses reflecting those weighting factors, i.e., two-thirds weight applied to DCF results and one-third weight applied to CAPM results.

In addition to the DCF and CAPM analyses, I considered the effect of financial and business risks, most notably the regulatory environment in which the Company operates, in arriving at my ROE recommendation.

## Q. How is the remainder of this testimony organized?

A. The remainder of this testimony is organized in eight sections as follows:

Section III - Provides a summary of my principal observations and conclusions;

Section IV - Discusses the regulatory guidelines and financial considerations pertinent to the development of the cost of capital;
$\underline{\text { Section V - Briefly discusses the current capital market }}$ conditions and the effect of those conditions on the Company's Cost of Equity;

Section VI - Explains my selection of the proxy group of electric utilities used to develop my analytical results;

Section VII - Explains my analyses and the analytical bases for my ROE recommendation;

Section VIII - Summarizes the specific business and financial risks that have a direct bearing on the Company's Cost of Equity;

Section IX - Provides my recommended Stay-Out premium and explains my supporting analyses; and

Direct Testimony of Robert B. Hevert

$\underline{\text { Section X - Summarizes my conclusions and recommendations. }}$

## III. Summary of Conclusions

Q. What are the key factors considered in your analyses and upon which you base your recommended ROE?
A. My analyses and recommendations considered the following:

- The Hope and Bluefield decisions that established the standards for determining a fair and reasonable allowed Return on Equity, including, consistency of the allowed return with other businesses having similar risk; adequacy of the return to provide access to capital and support credit quality; and that the end result must lead to just and reasonable rates.
- The effect of the current capital market conditions on investors' return requirements, and, in particular, the fact that risk aversion and investor uncertainty remain at elevated levels when compared to market conditions preceding the recent economic recession. ${ }^{1}$
- The Company's business risks relative to the proxy group of comparable companies and the implications of those risks in arriving at the appropriate ROE.

[^0]
## Direct Testimony of Robert B. Hevert

$1 \quad$ Q. What are the results of your analyses?
2 A. The results of my analyses are summarized in Table 1.

Table 1: Summary of Analytical Results

|  | Low | Mean | High |
| :---: | :---: | :---: | :---: |
| Two-Stage DCF | 9.66\% | 10.46\% | 12.05\% |
| Three-Stage DCF | 9.56\% | 10.36\% | 11.94\% |
| Mean DCF |  | 10.41\% |  |
|  | Value Line <br> Beta Coefficient | Mean | Bloomberg Beta Coefficient |
| Market Based CAPM | 10.44\% | 10.49\% | 10.54\% |
| Zero-Beta CAPM | 11.13\% | 11.16\% | 11.20\% |
| Mean CAPM |  | 10.83\% |  |
| Weighted Average Cost of Equity (2/3* DCF) + (1/3* CAPM) |  |  | 10.55\% |

3

9 Company's ROE.
10

Based on the analytical results presented in Table 1, and in light of the considerations discussed throughout the balance of this testimony, considering the Company's business and financial risks relative to the proxy group, it is my view that a reasonable range of estimates is from 10.50 percent to 11.00 percent and, within that range, an ROE of 10.55 percent is reasonable and appropriate, if not a conservative estimate of the

## Direct Testimony of Robert B. Hevert

## IV. Regulatory Guidelines and Financial Considerations

## Q. Please describe the guiding principles to be used in establishing the cost of capital for a regulated utility.

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

Based on those standards, the consequence of the Commission's order in this case should be to provide the Company with the opportunity to earn an ROE that is: (1) adequate to attract capital at reasonable terms, thereby enabling it to continue to provide safe, reliable service; (2) sufficient to support the financial soundness of the Company's operations; and (3) commensurate with returns on equity investments in enterprises having comparable risks. The authorized ROE should enable the Company to finance capital expenditures at reasonable rates and maintain its financial

## Direct Testimony of Robert B. Hevert

 flexibility over the period during which rates are expected to remain in effect.Q. Why is it important for a utility to be allowed the opportunity to earn a return that is adequate to attract equity capital at reasonable terms?
A. A return that is adequate to attract capital at reasonable terms enables the Company to provide safe and reliable service while maintaining its financial integrity. While the "capital attraction" and "financial integrity" standards are important principles in normal economic conditions, the practical implications of those standards are even more pronounced in the current financial environment. As discussed in more detail in Section V, continued equity market uncertainty, together with sustained increases in utility debt credit spreads (i.e., the difference in debt yields of utilities with varying credit ratings) have intensified the importance of maintaining a strong financial profile.

## V. Current Capital Market Environment

Q. How do economic conditions influence the required cost of capital and required ROE?

## Direct Testimony of Robert B. Hevert

A. The required cost of capital, including the ROE, is a function of prevailing
and expected economic and capital market conditions. During times of
capital market instability, risk aversion increases, which causes investors
to seek the relative safety of U.S. Treasury debt, resulting in lower
Treasury yields.

To the extent that observable measures of equity market instability and risk aversion remain elevated, relative to historical norms, it would be incorrect to conclude that the Cost of Equity has materially decreased. While there is little question that the capital market dislocation that began in late 2008 has moderated, recent market instability and investor risk aversion remain at comparatively high levels. That is especially true when viewed relative to the conditions that existed prior to the 2008-2009 financial market dislocation.

## Q. What analysis have you conducted to assess current capital market conditions?

A. As discussed below, I considered several widely-recognized measures of investor risk sentiment, including: (1) incremental credit spreads; and (2) the relationship between the dividend yields of the proxy group companies and Treasury yields. Except where noted, I compared current market

## Direct Testimony of Robert B. Hevert

conditions to the two-year period prior to the 2007-2009 recession (i.e., January 2006 through November 2007), and to the capital market contraction period of 2002-2003. As shown in Table 2, those metrics indicate that current levels of instability and risk aversion are significantly higher than the levels observed prior to the recent recession, and are much closer to the levels experienced during the 2002-2003 capital market contraction.

Table 2: Risk Sentiment Indicators ${ }^{2}$

|  | March 16, <br> $\mathbf{2 0 1 2}^{3}$ | Pre-recession <br> (Jan-2006 <br> through <br> Nov-2007) | Jan-2002 <br> through <br> Dec-2003 |
| :--- | :---: | :---: | :---: |
| Credit Spreads (Moody's Utility Bond <br> Index) <br> Baa-rated bond to A-rated bond | $0.70 \%$ | $0.25 \%$ | $0.46 \%$ |
| Dividend Yield Spreads <br> 10-year Treasury to Proxy Group | $-2.27 \%$ | $0.80 \%$ | $-1.54 \%$ |

## A. Incremental Credit Spreads

## Q. How have credit spreads been affected by current market conditions?

A. As a preliminary matter, the "credit spread" is the incremental return required by debt investors to take on the default risk associated with securities of differing credit quality. As shown in Table 2, and as Chart 1 (below) demonstrates, the 90-day moving average spread as of March 16,

[^1]
## Direct Testimony of Robert B. Hevert

2012 between the Moody's Baa-rated utility bond index and the Moody's A-rated utility bond index is 45 basis points above - or approximately 180 percent higher than - the comparable average credit spread immediately prior to the onset of the recent recession. As such, investors currently require a higher return to compensate for the perceived risk of holding lower-rated debt securities than was the case prior to the onset of the recent recession.

Chart 1: Moody's Utility Bond Index Baa-A Credit Spread


## Q. What are the implications of higher credit spreads as compared to the long-term average?

A. The increase in the credit spreads is an observable measure of the capital markets' increased risk aversion; increased risk aversion clearly is associated with a higher Cost of Equity. Although increased credit spreads have recently coincided with a reduction in the absolute level of utility bond and Treasury yields, that fact does not necessarily imply a correspondingly lower Cost of Equity; to the contrary, there is a clear and well-established inverse relationship between the level of interest rates and the equity risk premium. ${ }^{4}$ Consequently, lower utility bond yields, which are a function of lower Treasury yields, do not necessarily imply a correspondingly lower Cost of Equity, particularly considering that the current level of credit spreads is higher than the long-term average.

## B. Yield Spreads

Q. Please discuss your analysis of the relationship between dividend yields and Treasury yields.

[^2]
## Direct Testimony of Robert B. Hevert

A. As a preliminary matter, the "yield spread" is the difference between longterm Treasury yields and dividend yields. ${ }^{5}$ Investors often consider yield spreads in their assessment of security valuation and capital market conditions. As shown in Chart 2, the 2008-2009 financial market dislocation created the first significant inversion of the yield spread (i.e., the average dividend yield for the proxy group was higher than the 90-day average Treasury yield) in five years. Prior to that time, the most recent period during which dividend yields for the proxy group were significantly higher than Treasury yields was from mid-2002 through mid-2003, which itself was a period of credit and equity valuation contraction.

[^3]Chart 2: Treasury Yield/Dividend Yield Divergence
(January 1, 1996 - March 16, 2012)


An article in The Wall Street Journal noted this same relationship between utility dividend yields and the ten-year Treasury yield, observing that, "Dividend yields have tended to track the yield on 10-year Treasuries closely." ${ }^{\text {" }}$
Q. Why is the continued divergence between utility dividend yields and the ten-year Treasury yield relevant in determining the Company's Cost of Equity?

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

## Direct Testimony of Robert B. Hevert

A. As suggested by The Wall Street Journal, investors often look to the relationships among financial metrics to assess current and expected levels of market stability. To the extent that such relationships materially and persistently deviate from long-term norms, it may be an indication of continuing or expected instability. In the case of the yield spread, the fact that continued Federal intervention in the capital markets has been required to maintain relatively low Treasury yields introduces yet another significant element of capital market uncertainty, in that the duration and magnitude of Federal intervention remains unknown. ${ }^{7}$ Again, investors require increased returns to compensate for taking on such risk.

As such, it is important to recognize that Federal intervention in the capital markets, itself, has created additional uncertainty. For example, in its second round of "Quantitative Easing," the Federal Reserve Board (the "Fed") purchased $\$ 600$ billion of Treasury securities between November 2010 and June 2011, thereby injecting additional liquidity into capital markets. In an effort to reduce interest rates on longer-term government bonds, on September 21, 2011, the Fed announced plans to purchase, by

[^4]
## Direct Testimony of Robert B. Hevert

 June 2012, $\$ 400$ billion in Treasury securities with remaining maturities of six to 30 years, and to sell an equal amount of Treasury securities with remaining maturities of three years or less.The widened yield spread, which began in 2008, has continued. From January 2000 through September 15, 2008 (i.e., the time of the Lehman Brothers bankruptcy filing), the average yield spread between ten-year Treasury securities and the proxy group average dividend yield was negative 29 basis points. During the two-year period ${ }^{8}$ prior to the recession, the average yield on ten-year Treasury securities exceeded the proxy group average dividend yield by approximately 80 basis points. As Chart 3 indicates, the 90-day average yield spread as of March 16, 2012 was negative 227 basis points.

[^5]Chart 3: Proxy Company Yield Spread


## Q. What conclusions do you draw from those analyses?

A. Those analyses clearly demonstrate that current market conditions are similar to the 2002-2003 market dislocation that affected all market segments, including utilities. One outcome of the 2002-2003 market dislocation was a renewed emphasis on capital market access and the importance of maintaining a strong financial profile, both of which are equally important in the current market environment. The result of market instability and risk aversion, of course, is an increased, not a decreased Cost of Equity. The extent of that uncertainty manifested, at least in part, in the significant decrease in long-term Treasury yields since Standard and

## Direct Testimony of Robert B. Hevert

 Poor's ("Standard and Poor's" or "S\&P") downgraded U.S. sovereign debt on August 5, 2011. Even though that ratings action would call into question the meaning and application of the "Risk-Free Rate," investors still have sought safety in Treasury securities. In summary, market instability and measures of risk aversion remain above historical norms.
## Q. How should current economic conditions be taken into consideration in determining the appropriate ROE for the Company?

A. First, at all times, but especially given the continuing capital market instability, it is extremely important to assess the reasonableness of any financial model's results in the context of observable market data. To the extent that certain ROE estimates are incompatible with such metrics or inconsistent with basic financial principles, it is appropriate to consider whether alternative estimation techniques are likely to provide more meaningful and reliable results.

Second, in my view, the authorized rate of return in this proceeding will provide a signal to the financial community concerning the ability of the Company to meet its capital needs during a period in which its capital investments are increasing. If investors perceive a supportive regulatory environment, as evidenced by an allowed rate of return that compensates

## Direct Testimony of Robert B. Hevert

the Company at a level commensurate with its risk, the Company should be able to attract capital at a reasonable cost. Conversely, if investors perceive a lack of connection between the allowed rate of return and current economic conditions, the regulatory environment would be seen as less favorable, thereby limiting the Company's ability to attract capital at a reasonable cost.

## VI. Proxy Group Selection

## Q. Please explain why you have used a group of proxy companies to determine the Cost of Equity for Niagara Mohawk.

A. First, it is important to bear in mind that the Cost of Equity for a given enterprise depends on the risks attendant to the business in which the company is engaged. According to financial theory, the value of a given company is equal to the aggregate market value of its constituent business units. In this proceeding, we are focused on estimating the Cost of Equity for Niagara Mohawk, an indirect wholly-owned subsidiary of National Grid USA. Because the Cost of Equity is a market-based concept, and given that Niagara Mohawk is not publicly traded, it is necessary to establish a group of companies that are both publicly traded and comparable to Niagara Mohawk in certain fundamental business and financial respects to serve as its "proxy" in the Cost of Equity estimation

## Direct Testimony of Robert B. Hevert

 process. As discussed later, the proxy companies used in my analyses all possess a set of operating and risk characteristics that are substantially comparable to Niagara Mohawk, and thus provide a reasonable basis for the derivation and assessment of ROE estimates.It is my understanding that since the Recommended Decision in the Generic Finance Case approximately 17 years ago, the Commission has endorsed the use of proxy groups for the purpose of determining the ROE in utility rate proceedings. Because proxy companies are used as the basis for estimating Niagara Mohawk's Cost of Equity, the primary objective of the screening process is to render a group of companies that are highly comparable to the Company with respect to fundamental financial and business risks. As a practical matter, while the determination of an appropriate ROE necessarily requires a degree of informed judgment, the careful selection of a risk-appropriate comparison group serves to mitigate the extent to which subjective assessments must be applied.

## Q. Does the rigorous selection of a proxy group suggest that analytical results will be tightly clustered around average (i.e., mean) results?

A. Not necessarily. As discussed in greater detail in Section VII, the DCF approach is based on the theory that a stock's current price represents the

## Direct Testimony of Robert B. Hevert

present value of its future expected cash flows. Notwithstanding the care taken to establish risk comparability, market expectations with respect to future risks and growth opportunities will vary from company to company. Therefore, even within a group of similarly situated companies, it is common for analytical results to reflect a seemingly wide range. At issue, then, is how to select an ROE estimate in the context of that range. As discussed throughout this testimony, that determination necessarily must be based on the informed judgment and experience of the analyst.

## Q. Please provide a summary profile of Niagara Mohawk.

A. Niagara Mohawk provides electric distribution service and natural gas distribution service in Upstate New York. Niagara Mohawk's long-term issuer ratings are A- (Standard and Poor's) and A3 (Moody's Investor Services, or "Moody's"). The following table provides summary financial and operating statistics for Niagara Mohawk for the most recently reported three years:

Table 3: Niagara Mohawk Operating and Financial Results
2008 To 2010 (millions of dollars)

|  | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ |
| :--- | :---: | :---: | :---: |
| Electric Operating Revenue | $\$ 3,329$ | $\$ 2,977$ | $\$ 3,357$ |
| Gas Operating Revenue | $\$ 910$ | $\$ 784$ | $\$ 747$ |
| Net Electric Utility Operating <br> Income | $\$ 285$ | $\$ 185$ | $\$ 230$ |
| Net Gas Utility Operating Income | $\$ 79$ | $\$ 57$ | $\$ 28$ |
| Net Electric Utility Plant | $\$ 5,091$ | $\$ 5,322$ | $\$ 5,620$ |
| Net Gas Plant in Service | $\$ 1,352$ | $\$ 1,391$ | $\$ 1,423$ |

## Q. How did you select the companies included in your proxy group?

A. I began with the companies that Value Line classifies as "Electric

Utilities," a group of 52 domestic U.S. electric and combination utilities, and simultaneously applied the following screening criteria:

- I eliminated the companies that are not covered by at least two utility industry equity analysts;
- I eliminated companies that have below investment-grade corporate credit ratings and/or senior unsecured bond ratings according to $\mathrm{S} \& \mathrm{P}$ or Moody's;
- I eliminated companies that have not paid regular dividends or do not have positive earnings growth projections because such characteristics are incompatible with the DCF model;
- To ensure that the proxy group consists of companies that are primarily regulated utilities, I excluded companies with less than 70.00


## Direct Testimony of Robert B. Hevert

 percent of total net operating income derived from regulated utility operations; and- I eliminated companies known to be party to a merger, acquisition, or other transformational transaction.


## Q. How many companies met the screening criteria for your initial proxy group?

A. The criteria discussed above resulted in an initial group of 31 companies.

## Q. Does this constitute your final proxy group?

A. No, it does not. I then examined the operating profile of each of those 31 companies to be certain that none displayed characteristics that were inconsistent with my intent to produce a proxy group that is fundamentally similar to the Company. As a result of that examination, I made one modification to the final proxy group. I excluded ITC Holding Corp. ("ITC") because it is a FERC-regulated transmission-only company, and as such is not fundamentally comparable to Niagara Mohawk.

My final proxy group therefore consists of the 30 companies noted in Table 4 (below).

Table 4: Final Proxy Group

| Company | Ticker |
| :--- | :---: |
| Allete | ALE |
| Alliant Energy Corp. | LNT |
| Ameren Corp. | AEE |
| American Electric Power | AEP |
| Avista Corp. | AVA |
| Black Hills Corp. | BKH |
| Center Point Energy | CNP |
| Cleco Corp. | ED |
| Consolidated Edison | D |
| Dominion Resources, Inc. | DTE |
| DTE Energy Co. | EIX |
| Edison International | GXP |
| Great Plains Energy Inc. | HE |
| Hawaiian Electric | IDA |
| IDACORP, Inc. | TEG |
| Integrys/WPS Resources | OGE |
| OGE Energy | POM |
| Pepco Holdings, Inc. | PCG |
| PG\&E Corp | PNW |
| Pinnacle West Capital | POR |
| Portland General | SCG |
| SCANA Corp. | SRE |
| Sempra Energy | SO |
| Southern Co. | TE |
| TECO Energy, Inc. | UIL |
| UIL Holdings Corp. | VVC |
| Vectren Corp. | WR |
| Westar Energy | WEC |
| Wisconsin Energy | XEL |
| Xcel Energy, Inc. |  |
|  |  |
|  |  |

## Direct Testimony of Robert B. Hevert

## VII. Cost of Equity Estimation

## Q. Please briefly discuss the ROE in the context of the regulated rate of return.

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

## Q. How is the required ROE determined?

A. The required ROE is estimated by using one or more analytical techniques that rely on market-based data to quantify investor expectations regarding required equity returns, incorporating certain incremental costs and risks. The resulting Cost of Equity serves as the recommended ROE for ratemaking purposes. As a general proposition, the key consideration in determining the Cost of Equity is that the methodologies employed reasonably reflect investors' view of the financial markets in general, and the subject company's common stock in particular. Finally, while I do not necessarily agree with the formulaic approach of affording two-thirds and
one-third weights to the respective DCF and CAPM results, I have produced and presented analytical results based on that method.

## Q. What methods did you use to determine the Company's Cost of Equity?

A. I used the DCF model as the initial approach; I then considered the results of the CAPM in assessing the reasonableness of the DCF results and developing my Cost of Equity recommendation. With respect to the DCF model, I have considered two Multi-Stage forms of the model: a TwoStage model, based on the model relied upon by the Commission in the 2010 Electric Rate Case; and a Three-Stage model that allows for a transition period between the near- and long-term growth estimates. In addition, consistent with the Commission's stated preference, I used both the traditional form of the CAPM as well as the "Zero-Beta" form of that model. In both forms of the CAPM, I incorporated a forward-looking (i.e., ex-ante) measure of the Market Risk Premium.

## Q. Why do you believe it is important to use more than one analytical approach?

A. Because the Cost of Equity is not directly observable, it must be estimated based on both quantitative and qualitative information. When faced with

## Direct Testimony of Robert B. Hevert

 the task of estimating the Cost of Equity, analysts and investors are inclined to gather and evaluate as much relevant data as reasonably can be analyzed. As a practical matter, however, all of the models available for estimating the Cost of Equity are subject to limiting assumptions or other methodological constraints. Consequently, many finance texts recommend using multiple approaches when estimating the Cost of Equity. For example, Copeland, Koller and Murrin, ${ }^{9}$ suggest using the CAPM and Arbitrage Pricing Theory model, while Brigham and Gapenski ${ }^{10}$ recommend the CAPM, DCF and "bond yield plus risk premium" approaches.In essence, analysts and academics understand that ROE models are tools to be used in the ROE estimation process and that strict adherence to any single approach, or the specific results of any single approach, can lead to flawed and irrelevant conclusions. That position is consistent with the Hope and Bluefield finding that it is the analytical result, as opposed to the method, that is controlling in arriving at ROE determinations. A reasonable ROE estimate therefore considers alternative methods,

[^6]observable market data, and the reasonableness of their individual and collective results.

Consequently, it is both prudent and appropriate to use multiple methods to mitigate the effects of assumptions and inputs associated with relying exclusively on any single approach. Such use, however, must be tempered with due caution as to the results generated by each individual approach. While prescriptive as to the specific weights afforded to each individual approach, the Commission's preferred methodology does take multiple methodologies into account in estimating the required ROE.

## A. Discounted Cash Flow Model

## Q. Are DCF models widely used to determine the ROE for regulated utilities?

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

## Direct Testimony of Robert B. Hevert

## Q. Please describe the DCF approach.

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

$$
\begin{equation*}
P_{0}=\frac{D_{1}}{(1+k)}+\frac{D_{2}}{(1+k)^{2}}+\ldots+\frac{D_{\infty}}{(1+k)^{\infty}} \tag{1}
\end{equation*}
$$

Where $\mathrm{P}_{0}$ represents the current market stock price, $\mathrm{D}_{1} \ldots \mathrm{D}_{\infty}$ are all expected future dividends, and $k$ is the discount rate, or required return, that sets the observed price equal to the present value of expected cash flows. As discussed in more detail below, I have not included the Constant Growth form of the DCF model, but instead have focused on two Multi-Stage forms.

## B. Stock Prices used in the DCF Model

Q. What market data did you use to calculate the current stock price in your DCF models?
A. The stock prices in my DCF models are based on the average market closing prices for the proxy companies' shares over the three months ended March 16, 2012.

## Q. Why did you use a three-month averaging period?

## Direct Testimony of Robert B. Hevert

A. I believe it is important to use an average of recent trading days to calculate the term $P_{0}$ in the DCF model so that the calculated market Cost of Equity is not skewed by anomalous events that may affect stock prices on any given trading day. In that regard, the averaging period should be reasonably representative of expected capital market conditions over the long-term. At the same time, it is important to reflect the volatile conditions that have defined the financial markets over the recent past. In my view, the use of the three-month averaging period reasonably balances those concerns. That averaging period is also consistent with the period considered by the Commission in recent proceedings. ${ }^{11}$

## C. Multi-Stage DCF Models

Q. Please describe the Multi-Stage DCF models included in your analyses.
A. Consistent with the Commission's stated preference, I have prepared a Two-Stage DCF analysis based on the structure discussed in the Commission's Order in the 2010 Electric Rate Case. For the reasons

[^7] discussed in more detail below, I also have included a three-stage form of the model.

## Q. What are the specific benefits of the Multi-Stage DCF models you have relied upon?

A. Both forms of the Multi-Stage DCF model define the Cost of Equity as the discount rate that sets the current stock price equal to the discounted value of future cash flows (i.e., projected dividends). Because both models project dividends as the product of the dividend payout ratio and earnings, they include the important ability to recognize that dividend payout ratios may decrease during periods of increasing capital expenditures. That capability is particularly relevant for the Three-Stage DCF model, which, as described below, allows for a transition between near- and long-term growth stages.

It also is very important to note that while the models calculate the Cost of Equity based on projected dividends, they do not rely solely on Value Line for dividend growth rate projections. Rather, the DCF models combine expected Earnings Per Share, which are projected based on consensus earnings growth estimates, with Value Line's projected dividend payout ratio. In my experience, a common and legitimate criticism of DCF

## Direct Testimony of Robert B. Hevert

models that rely solely on projected dividend growth is that Value Line is the sole source of such projections. ${ }^{12}$ While the form of the model I have used relies on Value Line for projected dividend payout ratios, the potential bias resulting from reliance on a single analyst is mitigated by the use of consensus earnings forecasts, and establishes a clear relationship between growth in earnings and growth in dividends through the use of projected payout ratios.

The models also enable the analyst to check for the reasonableness of the inputs and results by reference to certain market-based metrics. For example, the terminal price, which is the expected stock price at the end of the period, can be divided by the expected Earnings Per Share ("EPS") in the final year to calculate a projected Price/Earnings ("P/E") ratio. To the extent that the projected $\mathrm{P} / \mathrm{E}$ ratio is inconsistent with either historical or expected levels, it may be an indicator of incorrect or inconsistent assumptions in the balance of the model. Importantly, there are no common market-based valuation metrics that rely solely on dividend projections.

12 See, for example, Harris and Marston, Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts, Financial Management, at 65 (Summer 1992).

## Direct Testimony of Robert B. Hevert

## Q. Please generally describe the structure of the Two-Stage DCF model.

A. As shown in Table 5 (below), the Two-Stage DCF model calculates the proxy companies' individual required ROEs by projecting annual dividends over two stages, including a near-term growth stage (years one through five) and a long-term growth stage (from year six to perpetuity). Dividends in the near-term are projected as the product of Earnings Per Share and the projected dividend payout rate. As noted in Table 5 (below), earnings growth projections are provided by Value Line, Zacks and Thomson First Call; the expected dividend payout ratio is provided by Value Line. As noted above, the near-term growth stage ends in year five, after which the model immediately moves to the long-term growth stage. During the long-term growth stage, earnings are projected to grow at a rate equal to projected nominal Gross Domestic Product ("GDP"), and the dividend payout ratio is assumed to have reverted to its long-term norm.

In the first stage, "cash flows" are defined as projected dividends. In the second stage, "cash flows" equal both dividends and the expected price at which the stock will be sold at the end of the period. The expected stock price is based on the "Gordon" model, which defines the price as the expected dividend divided by the difference between the Cost of Equity (i.e., the discount rate) and the long-term expected growth rate. The price

## Direct Testimony of Robert B. Hevert

calculated using the Gordon model in the terminal stage is approximately equal to the price calculated using terminal stage cash flows that extend indefinitely, or for an extended time period (e.g. 200 years).

Table 5: Two-Stage DCF Model Structure

| Stage | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{2}$ |
| :--- | :--- | :--- | :--- |
| Cash Flow <br> Component | Initial Stock <br> Price | Expected <br> Dividend | Expected <br> Dividend + <br> Terminal Value |
| Inputs | Stock Price <br> Earnings Per <br> Share (EPS) <br> Dividends Per <br> Share (DPS) | Expected EPS <br> Expected DPS | Expected EPS <br> Expected DPS <br> Terminal Value |
| Assumptions | 3-month stock <br> price averaging <br> period | Near-term <br> dividend payout <br> ratio <br> Analyst growth <br> rates | Long-term <br> dividend payout <br> ratio <br> Long-term <br> growth rate |

Q. Does your alternative Three-Stage DCF model provide a more reasonable means of estimating the Company's ROE than the Commission's preferred Two-Stage DCF model?
A. Yes, it does. Because the Three-Stage DCF model allows for a transition from the first stage growth rate to the long-term growth rate, it avoids the often unrealistic assumption, implicit in the Two-Stage DCF model, i.e., that growth will change immediately between the first and final stages. In my view, that additional flexibility is very important when, as is the case

## Direct Testimony of Robert B. Hevert

with electric utilities, there is an expected period of high capital expenditures in the near and intermediate terms.

## Q. Please generally describe the structure of your Three-Stage DCF model.

A. As noted above, the model sets the subject company's stock price equal to the present value of cash flows received over three stages. Similar to the application of the Two-Stage DCF model, cash flows in the first two stages are defined as projected dividends. In the third stage, cash flows equal both dividends and the expected price at which the stock will be sold at the end of the period. As with the Two-Stage DCF model, the terminal stock price is based on the Gordon model. In essence, the terminal price is equal to the present value of the remaining cash flows in perpetuity, and has the same practical effect on the ROE calculation as continuing the long-term growth stage indefinitely. ${ }^{13}$ In each of the three stages, the dividend is projected as the product of the projected earnings per share, and the expected dividend payout ratio. A summary description of the model is provided in Table 6 (below).

13 I understand that in prior cases, Staff has assumed a long-term period of 195 years. Given the nature of present value calculations, 195 years is essentially equal to perpetuity, which is assumed in the Gordon Model.

Table 6: Three-Stage DCF Structure

| Stage | 0 | 1 | 2 | 3 |
| :---: | :---: | :---: | :---: | :---: |
| Cash Flow Component | Initial Stock Price | Expected Dividend | Expected Dividend | Expected Dividend + Terminal Value |
| Inputs | Stock Price Earnings Per Share (EPS) Dividends Per Share (DPS) | Expected EPS <br> Expected DPS | Expected EPS <br> Expected DPS | Expected EPS <br> Expected DPS <br> Terminal Value |
| Assumptions | 3-month stock price averaging period | Near-term dividend payout ratio Analyst growth rates |  | Long-term dividend payout ratio Long-term growth rate |

Q. Do you believe that the DCF model described above is consistent with the intent of the two-stage model relied upon by the Commission?
A. Yes, I do. In my view, both the construction of the model and the underlying inputs and assumptions are consistent with, and enhance, the application of the two-stage model. As noted above, the general form of the two-stage model relied upon by the Commission involves a near-term growth stage based on projected dividends and a long-term growth stage based on estimated long-term growth. My calculation of dividend growth does not solely rely on the Value Line projected dividends, but rather includes both Value Line's estimated dividend payout ratios and earnings

## Direct Testimony of Robert B. Hevert

 growth projections in addition to consensus analyst growth projections. The use of consensus projections mitigates the potential bias (either high or low) associated with relying on a single source of projections (i.e., Value Line). Moreover, the ability to consider industry trends and company-specific circumstances enables the analyst to provide more refined projections by recognizing that payout ratios are likely to change over time. Finally, the long-run growth estimate, the timing of which extends beyond the horizon of the Value Line and analyst projections, is based on highly visible projections of long-term macroeconomic (i.e., GDP) growth.
## Q. Please summarize your inputs to the DCF models.

A. I applied both DCF models using the proxy group described earlier in my testimony. My assumptions with respect to the various model inputs are described in Tables 7 and 8 (below).

Table 7: Two-Stage DCF Model Assumptions

| Stage | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{2}$ |
| :--- | :--- | :--- | :--- |
| Stock Price | Three-month <br> average daily <br> stock price as of <br> March 16, 2012. |  |  |
| Growth Rates | Initial EPS as <br> reported by Value <br> Line | Analyst growth as <br> average of (1) <br> Value Line, (2) <br> Thomson First <br> Call, and (3) <br> Zacks projected <br> growth rates | Long-term GDP <br> growth |
| Dividend Payout <br> Ratio |  | Value Line <br> company-specific | Long-term <br> industry average <br> (Calculated based <br> on median long- <br> term payout ratios <br> for Value Line <br> universe of <br> electric utilities) |
| Terminal Value |  | Expected <br> dividend in final <br> year divided by <br> solved Cost of <br> Equity less long- <br> term growth rate |  |

Table 8: Three-Stage DCF Model Assumptions

| Stage | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ |
| :--- | :--- | :--- | :--- | :--- |
| Stock Price | Three-month <br> average daily <br> stock price as <br> of March 16, <br> 2012. |  |  |  |
| Growth Rates | Initial EPS as <br> reported by <br> Value Line | Analyst growth <br> as average of <br> (1) Value Line, <br> (2) Thomson <br> First Call, and <br> (3) Zacks <br> projected <br> growth rates | Transition to <br> long-term GDP <br> growth | Long-term GDP <br> growth |
| Dividend |  | Value Line <br> company- <br> specific | Transition to <br> long-term <br> industry <br> average payout <br> ratio | Long-term <br> industry <br> average <br> (Calculated <br> based on <br> median long- <br> term payout <br> ratios for Value <br> Line universe of <br> electric utilities) |
| Terminal Value |  |  | Expected <br> dividend in <br> final year <br> divided by <br> solved Cost of <br> Equity less <br> long-term <br> growth rate |  |

1 Q. How did you calculate the long-term GDP growth rate?
2 A. The long-term growth rate of 5.77 percent used in my Three-Stage model

## Direct Testimony of Robert B. Hevert

$2011,{ }^{14}$ and an inflation rate of 2.45 percent. The GDP growth rate is calculated as the compound growth rate in the real GDP for the period from 1929 through 2011. ${ }^{15}$ The rate of inflation of 2.45 percent is a compound annual forward rate starting in ten years (i.e., 2022, which is the beginning of the terminal period) and is based on the 30-day average as of March 16, 2012, of projected inflation from three sources. The first estimate ( 2.45 percent) is based on the spread between yields on long-term nominal Treasury Securities and long-term Treasury Inflation-Protected Securities ("TIPS"), known as the "TIPS spread." The second estimate ( 2.82 percent) is based on the embedded inflation in Zero-Coupon Inflation-Indexed Swaps. The final estimate is the average of the compound annual Consumer Price Index growth rate of 2.20 percent and the annual Gross Domestic Product Price Index growth rate of 1.94 percent projected by the Energy Information Administration ("EIA") in the 2012 Annual Energy Outlook. ${ }^{16}$ The long-term growth rate, therefore, reflects long-term historical real growth, and the market's expectation of long-term inflation. ${ }^{17}$

14 Bureau of Economic Analysis, February 29, 2012 update.
The Bureau of Economic Analysis reports real GDP in chain-weighted 2005 dollars. EIA Annual Energy Outlook 2012 Early Release, Table 20. Macroeconomic Indicators. Please note that $5.77 \%=[(1+3.24 \%) \times(1+2.45 \%)]-1$.
The estimated long-term growth rate used in the two-stage DCF model is calculated similarly, relying on an inflation estimate of 2.46 percent starting in five years and a real growth rate of 3.24 percent.

## Direct Testimony of Robert B. Hevert

Q. Why is the long-term GDP growth rate a reasonable estimate of longterm growth in your Multi-Stage DCF models?
A. In regulatory proceedings, long-term estimates of GDP growth are commonly used as a proxy for the long-term growth in proxy group company dividends in Multi-Stage DCF analyses. ${ }^{18}$ That application is based on the common theoretical assumption that, over the long run, all the companies in the economy will converge to the same constant growth rate. That assumption is designed to address the uncertainty associated with estimating individual company growth rates over very long time horizons and is not meant to act as a prediction that company growth rates in the economy will indeed converge in practice over any given period.
Q. Please describe the long-term growth estimate developed by Staff in the 2010 Electric Rate Case.
A. In the 2010 Electric Rate Case, Staff relied on an estimate of long-term growth based on the Sustainable Growth model, which was calculated using Value Line projections of earnings retention, return on equity, share

[^8]
## Direct Testimony of Robert B. Hevert

 growth and the market-to-book ratio over a three- to five-year period. ${ }^{19}$ That is, Staff's second stage growth estimate was based on three-to-five year projections that concluded concurrently with the end of the first stage of its model.
## Q. Is the Sustainable Growth model an appropriate measure of the

## Company's long-term growth?

A. No, it is not. It is my understanding that Staff has used the Sustainable Growth model since the Generic Finance Case. However, as discussed in Attachment B, since that time, there have been published studies in both academic and practitioner journals that call in to question the validity of the underlying assumptions of the Sustainable Growth model. ${ }^{20}$ As also discussed in Attachment B and shown in Exhibit __ (RBH-4), my analysis of historical financial data from 1995-2011 for electric utilities supports the conclusion that the Sustainable Growth rate is an inappropriate measure of long-term growth for the Company.

19 See the 2010 Electric Rate Case, Prepared Testimony of Staff Finance Panel, at 41-42; Exhibit_(PP/KD-20), at 1-2.
See, for example, Ping Zhou, William Ruland, Dividend Payout and Future Earnings Growth, Financial Analysts Journal, Vol. 62, No. 3, 2006. See also Owain ap Gwilym, James Seaton, Karina Suddason, Stephen Thomas, International Evidence on the Payout Ratio, Earnings, Dividends and Returns, Financial Analysts Journal, Vol. 62, No. 1, 2006.

## Direct Testimony of Robert B. Hevert

## Q. What were your specific assumptions with respect to the payout ratio?

A. As noted in Tables 7 and 8, in the first period of both DCF models (i.e., years one through five), I relied on the first year and three- to five-year projected payout ratios reported by Value Line. ${ }^{21}$ In my Three-Stage DCF analysis, I then assumed that during the second five-year period (i.e., years six through ten), the payout ratio will gradually converge to the long-term industry average median of 66.78 percent. ${ }^{22}$ My Two-Stage DCF analysis does not allow for that gradual transition period, and therefore shifts to the long-term industry average median in 2016, the first year after Value Line's projected long-term payout ratio for 2015. Given the elevated level of capital expenditures that the industry is facing over the coming three to five years, it is reasonable to assume that, in general, payout ratios will decline in the near term, but revert to the long-term average over the long term. ${ }^{23}$

## Q. What were the results of your DCF analyses?

[^9]
## Direct Testimony of Robert B. Hevert

A. As shown in Exhibit __ (RBH-2), the Three-Stage DCF analysis produces an ROE range of 9.56 percent to 11.94 percent with a mean ROE of 10.36 percent based on three-month average stock prices for the period ending March 16, 2012. Similarly, as shown in Exhibit $\qquad$ (RBH-1), the TwoStage DCF analysis produces an ROE range of 9.66 percent to 12.05 percent with a mean ROE of 10.46 percent based on average stock prices for the same three-month period.

## Q. Are the results of your analyses generally consistent with the projected market value of the proxy companies?

A. Yes, they are. As shown in Exhibit __ (RBH-1) and Exhibit __ (RBH-2), the results of my Two-Stage DCF analysis produce expected proxy group company P/E ratios between 11.28 and 18.24 with a median value of 15.51, while the results of my Three-Stage DCF analysis produce a range of expected proxy group company $\mathrm{P} / \mathrm{E}$ ratios between 11.43 and 18.62 with a median value of 15.99 . These results are highly consistent with the industry historical range of $\mathrm{P} / \mathrm{E}$ ratios, as shown in Exhibit $\qquad$ (RBH-3).

## D. Capital Asset Pricing Model Analysis

## Q. Please briefly describe the CAPM.

## Direct Testimony of Robert B. Hevert

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

$$
\begin{equation*}
k_{e}=r_{f}+\beta\left(r_{m}-r_{f}\right) \tag{3}
\end{equation*}
$$

where:

$$
\begin{aligned}
& k_{e}=\text { the required market ROE; } \\
& \beta=\text { Beta Coefficient of an individual security; } \\
& r_{f}=\text { the risk-free rate of return; and } \\
& r_{m}=\text { the required return on the market as a whole. }
\end{aligned}
$$

In this specification, the term $\left(r_{m}-r_{\mathrm{f}}\right)$ represents the Market Risk Premium. According to the theory underlying the CAPM, because unsystematic risk can be diversified away, investors should be concerned only with systematic or non-diversifiable risk. Non-diversifiable risk is measured by the Beta Coefficient, which is defined as:

$$
\begin{equation*}
\beta=\frac{\operatorname{Covariance}\left(r_{e}, r_{m}\right)}{\operatorname{Variance}\left(r_{m}\right)} \tag{4}
\end{equation*}
$$

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

## Direct Testimony of Robert B. Hevert

 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. Has the CAPM analysis been affected by recent economic conditions?

A. Yes. Recent market conditions have affected the CAPM model in a number of important ways. First, as noted earlier, 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 financial dislocation, investors reacted to extraordinary levels of market volatility by investing in low-risk securities such as Treasury bonds. Moreover, the Fed's intervention in the markets for Treasury securities has accomplished its objective of lowering longterm interest rates. Consequently, the first term in the model (i.e., the riskfree rate) is lower than it would have been absent the elevated degree of risk aversion that has, at least in part, resulted in historically low Treasury yields.

Moreover, Value Line and Bloomberg calculate the Beta Coefficient for each company over historical periods of 60 and 24 months, respectively. During the recent financial market dislocation, the relationship between the returns of the proxy group companies and the S\&P 500 Index was considerably different from what has been experienced in the current

# Direct Testimony of Robert B. Hevert 

market environment. Consequently, Value Line Beta Coefficient estimates, which are calculated over a longer historical time period that includes the effects of the financial market dislocation, result in Beta Coefficient estimates that are lower than what has been experienced historically in markets similar to the current market environment. For example, in September 2007, one year prior to the Lehman Brothers bankruptcy filing, the average Value Line Beta Coefficient for my proxy group was 0.929 . The average Value Line Beta Coefficient estimate for the proxy group is currently 0.728 , which (all else remaining equal) would suggest a lower CAPM estimate notwithstanding the continued instability in the capital markets.

## Q. What risk-free rate did you use in your CAPM model?

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

The horizon of the chosen Treasury security should match the horizon of whatever is being valued... Note that the horizon is a function of the investment, not the investor. If an investor plans to hold stock in a company for only five
years, the yield on a five-year Treasury note would not be appropriate since the company will continue to exist beyond those five years. ${ }^{24}$

Because utility companies represent long-duration investments, it is appropriate to use yields on long-term Treasury Bonds as the risk-free rate component of the CAPM. In my view, the 30 -year Treasury bond is the appropriate security for that purpose.
Q. Have you attempted to determine the appropriate term of the risk-
free rate based on Company and utility industry information?
A. Yes. First, the composite depreciation rate of approximately 2.79 percent
for total electric utility plant, as calculated from the Company's most
recent FERC Form 1, suggests an average useful life of 35.87 years for the
Company's electric assets. Moreover, the Commission traditionally has
relied upon a single report published by Bank of America Merrill Lynch
("BofAML") in the development of its preferred Market Risk Premium
measure. In the January publication of that report, BofAML reported an
average equity duration for utility companies of approximately 27.50
years. ${ }^{25}$

24 Morningstar Inc., Ibbotson SBBI 2011 Valuation Yearbook, at 44.

## Direct Testimony of Robert B. Hevert

Q. Please describe the term "equity duration" and its relevance to the selection of the risk-free term of the CAPM.
A. In finance, "duration" (whether for bonds or equity) typically refers to the present value weighted time to receive the security's cash flows. ${ }^{26}$ In terms of its practical application, duration is a measure of the percentage change in the market price of a given stock in response to a change in the implied long-term return of that stock. A common investment strategy is to match the duration of investments with the term of the underlying asset in which the funds are being invested, or the term of the liability being funded. Given that the term of the risk-free rate should match the life of the underlying investment, it is appropriate to consider the equity duration of the subject company when selecting the Treasury yield used as the riskfree rate in the CAPM.

## Q. In the 2010 Electric Rate Case, what risk-free rate did the Commission rely upon?

A. The Commission relied on the average of the yields on ten and 30-year Treasury securities to estimate the risk-free rate. Moreover, the Commission relied on a presumption that the risk-free rate should match the holding period of an investor in the proxy companies' equity

26 See Cohen, Zinbarg and Zeikel, Investment Analysis and Portfolio Management, Irwin, $5^{\text {th }}$, Ed., 1987, at $450-452$.

## Direct Testimony of Robert B. Hevert

securities. That position, however, does not address the average life of the assets being financed with long-term securities including common equity, or the equity duration of the utility industry. In essence, the use of a shorter-term Treasury yield does not reflect, as Morningstar suggests it should, "the horizon of whatever is being valued."27 The Commission's application of the CAPM could, therefore, misstate the required ROE for the Company because it relies on results that are derived using the lower yield of a shorter-term Treasury security, which does not reflect the longer time horizon of the Company's assets.

## Q. Please describe your estimate of the Market Risk Premium used in your CAPM.

A. The estimated Market Risk Premium is based on the expected return on the S\&P 500 Index, less the current 30-year Treasury bond yield. The expected return on the $\mathrm{S} \& \mathrm{P} 500$ Index is calculated as the market capitalization-weighted average DCF result for all companies in the index.

## Q. How did you apply your projected Market Risk Premium estimate?

A. I relied on the projected Market Risk Premium to calculate the CAPM result using the three-month average 30-year Treasury bond yield as the

[^10]risk-free rate. As shown in Exhibit $\qquad$ (RBH-5), the use of the forwardlooking Market Risk Premium and current risk-free rate produces a range of results that substantially overlaps the range of results produced by the other calculation methodologies.

## Q. Is your calculation of the forward-looking Market Risk Premium consistent with the methodology relied upon in previous cases before the Commission? <br> A. Yes. The Commission previously has relied upon the calculation of a projected Market Risk Premium, based on the difference between the estimated forward-looking required market return for the S\&P 500, as provided by Merrill Lynch, and the risk-free rate. As a practical matter, that approach is consistent with the Market DCF-derived forward-looking Market Risk Premium estimate discussed above (see also Exhibit <br> $\qquad$

 (RBH-5). ${ }^{28}$Q. What Beta Coefficients did you use in your CAPM analysis?
A. I used proxy group average Beta Coefficient estimates from both Bloomberg and Value Line. While both of those services adjust their Rates, Charges, Rules and Regulations of Orange and Rockland Utilities, Inc. for Electric Service, Order Establishing Rates For Electric Service, (Issued June 17, 2011), at 77.
calculated (or "raw") Beta Coefficients to reflect the tendency of the Beta Coefficient to regress to the market mean of 1.00, Value Line calculates the Beta Coefficient over a five-year period, while Bloomberg's calculation is based on two years of data.

## Q. Do you have any concerns with Staff's exclusive reliance on Value Line for Beta Coefficient estimates in the Company's 2010 Electric Rate Case?

A. Yes, I do. As discussed above, Value Line's Beta Coefficient estimates are calculated using five years of historical data, which includes data from the highly anomalous financial market turmoil during the recent financial crises. Chart 4 illustrates the relationship between the covariance of average weekly returns for the proxy group and the variance in the returns of the New York Stock Exchange Composite Index ("NYSE Index"), the two components of the Beta Coefficient calculation using the Value Line approach. As shown in Chart 4, during the recent financial market dislocation, the relationship between the returns of the proxy group companies and the NYSE Index was considerably different from what has been experienced in the current market environment or immediately preceding the financial crisis. To capture a more current period than the Value Line five-year calculation period, it is reasonable to rely on Bloomberg Beta Coefficients as well as Value Line Beta Coefficients in the CAPM analysis.

Chart 4: Proxy Group Average Covariance and NYSE Index Variance (Moving 24-Month Calculation)

Q. Did you consider another form of the CAPM in your analysis?
A. Yes. In prior proceedings, the Commission has relied upon the "ZeroBeta" CAPM in estimating the Cost of Equity. The Zero-Beta CAPM calculates the product of the adjusted Beta Coefficient and the Market Risk Premium, and applies a weight of 75 percent to that result. The model then applies a 25 percent weight to the Market Risk Premium, without applying the Beta Coefficient. The results of the two calculations

## Direct Testimony of Robert B. Hevert

are summed, along with the risk-free rate, to produce the Zero-Beta CAPM result, as noted in Equation [5] below:

$$
\begin{equation*}
k_{\mathrm{e}}=r_{\mathrm{f}}+0.75 \beta\left(r_{\mathrm{m}}-r_{\mathrm{f}}\right)+0.25\left(r_{\mathrm{m}}-r_{\mathrm{f}}\right) \tag{5}
\end{equation*}
$$ where:

$k_{e}=$ the required market ROE; $\beta=$ Adjusted Beta Coefficient of an individual security; $r_{f}=$ the risk-free rate of return; and $r_{m}=$ 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 underestimate the Cost of Equity for companies with low Beta Coefficients 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) from what is estimated by the CAPM, and that the CAPM under-estimates the "alpha," or the constant return term.

As with the CAPM, my application of the Zero-Beta CAPM uses the Market DCF-derived forward-looking Market Risk Premium estimate, the current yield on 30-year Treasury securities as the risk-free rate and two

## Direct Testimony of Robert B. Hevert

estimates of the Beta Coefficient. The results of my CAPM, and ZeroBeta CAPM analyses are provided in Table 9 (below), (see also Exhibit $\qquad$ (RBH-5)).

Table 9: CAPM Results

|  | Results |
| :---: | :---: |
| CAPM |  |
| Bloomberg Beta Coefficient | $10.54 \%$ |
| Value Line Beta Coefficient | $10.44 \%$ |
| Zero-Beta CAPM |  |
| Bloomberg Beta Coefficient | $11.20 \%$ |
| Value Line Beta Coefficient | $11.13 \%$ |

## Q. Did you also produce results based on the Commission's two-thirds/one-third weighting of the DCF and CAPM results?

A. Yes, I did. In light of the Commission's past reliance on a weighting of the DCF and the CAPM results at two-thirds and one-third, respectively, I have presented the calculated result using that methodology.

## E. Weighted Average Results

Q. Please discuss your calculation of the weighted average Cost of Equity estimate.
A. Consistent with the Commission's final order in the 2010 Electric Rate Case, I considered the weighted average of the results of the DCF and

## Direct Testimony of Robert B. Hevert

CAPM analyses. As shown in Table 10 (below), the weighted average of the DCF and CAPM analyses is 10.55 percent.

Table 10: Weighted Average Analytical Results

|  | Results |
| :--- | :--- |
| Average DCF | $10.41 \%$ |
| Average CAPM | $10.83 \%$ |
| Weighted Average | $10.55 \%$ |

## VIII. Business and Financial Risks

Q. Do the mean DCF and CAPM results for the proxy group provide an appropriate estimate of the Cost of Equity for the Company?
A. No, the mean results do not necessarily provide an appropriate estimate of the Company's Cost of Equity. There are additional factors that must be taken into consideration when determining where the Company's Cost of Equity falls within the range of results. In particular, the regulatory environment in which the Company operates is an important consideration in determining the Company's risk relative to the proxy group companies and should be considered in terms of its overall effect on Niagara Mohawk's business risk and, therefore, its Cost of Equity. Moreover, the Company's significant capital expenditure plans relative to the capital expenditure plans of the proxy group companies are a risk factor that should be incorporated in an assessment of the Company's required ROE.

## Direct Testimony of Robert B. Hevert

While I did not include explicit adjustments to my ROE estimates for regulatory risk or the risk of capital expenditures, I did take those issues into consideration when determining where Niagara Mohawk's ROE falls within the range of analytical results. Moreover, in assessing the Company's ROE, I reviewed the Company's proposed capital structure by reference to the capital structures in place at the operating utilities of the proxy group companies.

## A. Regulatory Risk

## Q. How does the regulatory environment in which a utility operates

 affect its access to and cost of capital?A. The regulatory environment in which a utility operates can significantly affect both the access to and the cost of capital in several ways. First, there is little question that rating agencies consider the regulatory environment, including the extent to which the presiding regulatory commission is supportive of issues affecting credit quality, to be an important determinant of the subject company's credit profile. Moody's, for example, considers the nature of regulation, including its effect on cost recovery and cash flow generation, to be of such consequence that it

## Direct Testimony of Robert B. Hevert

represents 50 percent of the factors analyzed in arriving at credit ratings. ${ }^{29}$
As to the overall regulatory environment, Moody's notes that "...the predictability and supportiveness of the regulatory framework in which [a regulated utility] operates is a key credit consideration and the one that differentiates the industry from most other corporate sectors."30 Moody's further explains:

For a regulated utility company, we consider the characteristics of the regulatory environment in which it operates. These include how developed the regulatory framework is; its track record for predictability and stability in terms of decision making; and the strength of the regulator's authority over utility regulatory issues. A utility operating in a stable, reliable, and highly predictable regulatory environment will be scored higher on this factor than a utility operating in a regulatory environment that exhibits a high degree of uncertainty or unpredictability. Those utilities operating in a less developed regulatory framework or one that is characterized by a high degree of political intervention in the regulatory process will receive the lowest scores on this factor. ${ }^{31}$

It therefore is important to recognize that regulatory decisions regarding the authorized ROE and capital structure have direct consequences for the subject utility's internal cash flow generation (sometimes referred to as

[^11]"Funds from Operations", or "FFO"). Because credit ratings are intended to reflect the ability to meet financial obligations as they come due, the ability to generate the cash flows required to meet those obligations (and to provide an additional amount for unexpected events) is of critical importance to debt investors. Two of the most important metrics used to assess that ability are the ratios of FFO to debt and FFO to interest expense, both of which are directly affected by regulatory decisions regarding the appropriate rate of return, and capital structure.

## Q. Have you conducted any analysis of investor's perceptions of the

 regulatory environment in which Niagara Mohawk operates compared to the proxy group companies?A. Yes, I have. To assess investors' views as to the Company's regulatory environment, I considered the jurisdictional rankings developed by both Standard and Poor's ${ }^{32}$ and Regulatory Research Associates ("RRA"). ${ }^{33}$ S\&P ranks regulatory jurisdictions on a five tier scale from least creditsupportive to most credit-supportive. To compare Niagara Mohawk's regulatory environment to the proxy group, I used a numerical approach that ranks jurisdictions from five to one, with S\&P's ranking convention.

32 Standard and Poor's, Assessing U.S. Utility Regulatory Environments, updated March 12, 2010, at 1-2.
Regulatory Research Associates, Regulatory Focus: State Regulatory Evaluations, July 11,2011, at 2.

## Direct Testimony of Robert B. Hevert

 Under that approach, higher values indicate a more credit-supportive jurisdiction. I applied that ranking system to the proxy group companies by regulatory jurisdiction. For each proxy group company that operates in multiple jurisdictions, I considered the ranking for each regulatory jurisdiction where it operates. As shown in Exhibit $\qquad$ (RBH-6), S\&P's average ranking of the proxy group companies, using the simple average of the jurisdictions in which they operate, is 2.85 (i.e., generally creditsupportive) whereas Niagara Mohawk's ranking in the New York jurisdiction is 2.00 (i.e., less credit-supportive).
## Q. Have you conducted a similar analysis using the RRA ranking system?

A. Yes, I have. RRA rates regulatory jurisdictions from the perspective of investors, and assigns ratings of "Above Average," "Average," or "Below Average." RRA further distinguishes jurisdictions within those respective categories by applying ratings of 1,2 or 3 , with a rating of " 1 " being the strongest. In describing its ranking system, RRA notes that:

The evaluations are assigned from an investor perspective and indicate the relative regulatory risk associated with the ownership of securities issued by each jurisdiction's electric and gas utilities. Each evaluation is based upon our consideration of the numerous factors affecting the regulatory process in the state, and is

## Direct Testimony of Robert B. Hevert

changed as major events occur that cause us to modify our view of the regulatory risk accruing to the ownership of utility securities in that individual jurisdiction. ${ }^{34}$

New York currently is rated "Average 3," in the bottom half of all ratings and only one notch above a "Below Average" ranking. Regarding New

York's regulatory environment, RRA notes:
The PSC has a long history of authorizing below-industry-average returns on equity (ROEs). In 2007-2008, the Commission adopted a $9.1 \%$ ROE in three rate proceedings -- we note that this ROE was, by far, the lowest return authorized nationwide in at least the last 30 years.

In October 2007, we lowered our rating of New York regulation from Average/2 to Average/3 following the PSC's authorization of a $9.1 \%$ ROE for Orange and Rockland Utilities (see the Final Report dated 10/25/07), and we continue to accord New York regulation an Average/3 rating. ${ }^{35}$

To compare Niagara Mohawk's regulatory environment to the proxy group, I used a numerical ranking process similar to that applied to the S\&P jurisdictional ratings discussed earlier, with nine (Above Average/1) being the highest ranking and one (Below Average/3) being the lowest. As shown in Exhibit __ (RBH-6), the simple average of the RRA ranking for each of the proxy group companies, in all jurisdictions, is 5.38 (i.e.,

[^12]
# Direct Testimony of Robert B. Hevert 

between Average/1 and Average/2). The Company's New York operations have a ranking of 4.00 (i.e., Average/3), approximately 1.38 notches below the average ranking of the proxy group companies.

## Q. What are your conclusions regarding the effect of overall regulatory risk on the Company's Cost of Equity? <br> A. Rankings such as those provided by S\&P and RRA are observable and meaningful indicators of the financial community's view of the regulatory risks faced by utilities. Based on the analyses discussed above, (i.e., using the S\&P and RRA ranking structures), the financial community appears to attribute somewhat higher regulatory risk to Niagara Mohawk than to the proxy group (on average). That finding would support an ROE for the Company toward the upper end of the range of results.

## B. Capital Expenditure Risk

## Q. Please summarize the Company's capital expenditure plans.

A. As shown in Table 11 (below), the Company is planning over $\$ 2.18$ billion in capital expenditures over the next four years. As discussed in the testimony of the Electric and Gas Infrastructure Panels, the Company's capital expenditure plans provide for system growth and reinforcement,

## Direct Testimony of Robert B. Hevert

facility upgrades for reliability, and compliance with regulatory obligations.

Table 11: Niagara Mohawk Capital Expenditure Forecast

| (Millions of dollars per <br> Fiscal Year) | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | 2016 | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Total Capital Expenditures | 508.35 | 535.78 | 559.24 | 580.21 | $2,183.58$ |

## Q. Do credit rating agencies recognize risks associated with increased capital expenditures? <br> A. Yes, they do. From a credit perspective, the additional pressure on cash flows associated with high levels of capital expenditures exerts corresponding pressure on credit metrics and, therefore, credit ratings. Therefore, to the extent that the Company's rates do not permit it to recover its full cost of doing business, the Company will face reduced cash flows and thus increased pressure on its credit metrics.

## Q. Are equity investors also concerned with comparatively high levels of

 capital expenditures?A. Yes, equity investors also recognize the pressure on cash flows associated with relatively high levels of capital expenditures. For example, in its quarterly review of the electric utility industry, KeyBanc Capital Markets ("KeyBanc") noted that:

Direct Testimony of Robert B. Hevert

> Although capital markets have improved since early 2009, liquidity and capital costs remain a concern, as costs for credit have generally become more expensive and available durations have shrunk. Higher interest costs will likely continue to pressure earnings until regulatory lag is better addressed. $_{* * *}^{\text {Credit and liquidity concerns have driven many }}$ companies to revisit capital spending plans and reassess operational efficiencies.
> Q. Will the Company need continued access to the capital markets to finance its capital expenditures?
> A. Yes. When the level of capital expenditures outpaces the growth in internally generated cash, there is increasing pressure to access the external capital markets. Given the size and long-term nature of its anticipated capital expenditures, the Company will require continued access to external capital, at reasonable terms, to finance its planned capital expenditures. As noted throughout my testimony, the Company's ability to generate internal cash flow and access the capital markets will be directly affected by the Commission's order in this proceeding.

## Direct Testimony of Robert B. Hevert

Q. Have you considered the Company's expected capital expenditures in comparison to its expected depreciation expense?
A. Yes, I have. As shown in Table 12, below, the Company's expected level of capital expenditures exceeds its expected level of depreciation expense by approximately 2.30 times over the 2013 to 2016 time period. In that regard, Barclay's Capital notes that capital expenditures are persistently around 2.00 times depreciation expense for the utility industry as a whole. ${ }^{37}$

Table 12: Niagara Mohawk Capital Expenditure
and Depreciation Expense Forecast

|  | 2013 |  | 2014 | 2015 | 2016 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Average |  |  |  |  |  |
| Total Capital Expenditures <br> (\$MM/yr) | 508.35 | 535.78 | 559.24 | 580.21 | $2,183.58$ |
| Depreciation Expense <br> (\$MM/yr) | 216.83 | 229.63 | 239.29 | 249.59 | 935.34 |
| Multiple (x) | 2.34 | 2.33 | 2.34 | 2.32 | 2.33 |

Q. What are your conclusions regarding the effect of the Company's capital spending plans on its risk profile?
A. It is clear that, on a relative basis, the Company's capital expenditure program is significant. This program, which is necessary to sustain system growth and meet reliability requirements, could materially dilute the Company's current earnings and cash flows. It also is clear that the

[^13]
## Direct Testimony of Robert B. Hevert

financial community recognizes the additional risks associated with substantial capital expenditures and that those risks are reflected in market valuation multiples. In my view, these factors suggest a comparatively high level of risk for Niagara Mohawk relative to the proxy group.

## C. Capital Structure

## Q. What is the Company's proposed capital structure?

A. The Company's proposed capital structure consists of 51.40 percent common equity, 0.60 percent preferred equity, 46.30 percent long-term debt, 1.0 percent short-term debt and 0.70 percent customer deposits. The Company has a standalone capital structure, separate from its parent, and the Company's projected Rate Year capital structure is discussed in detail by Company Witness Mustally Hussain.

## Q. Please discuss your analysis of the capital structures of the proxy group companies.

A. To assess the reasonableness of the Company's proposed capital structure, I reviewed the capitalization ratios of the individual utility operating companies owned and operated by the respective proxy group companies for the past eight quarters. As shown in Exhibit $\qquad$ (RBH-7), the Company's proposed equity ratio (i.e., 51.40 percent) is similar to the
mean equity ratio of the proxy group companies of 50.91 percent. The Company's long-term debt ratio, preferred equity ratio, short-term debt ratio and customer deposit ratio respectively, are within the range of those ratios for the proxy group companies. Thus, overall, the Company's proposed capital structure ratios are reasonable compared to the proxy group.

## Q. Will the capital structure and ROE authorized in this proceeding affect the Company's access to capital at reasonable rates?

A. Yes. As noted earlier, the level of earnings authorized by the Commission will directly affect the Company's ability to fund its operations with internally generated funds; both bond investors and rating agencies expect a significant portion of on-going capital investments to be financed with internally generated funds. The need to generate funds internally also is important in light of the capital market conditions noted earlier.

It also is important to realize that because a utility's investment horizon is very long, investors require the assurance of a sufficiently high return to satisfy the long-run financing requirements of the assets it puts into service. Those assurances, which often are measured by the relationship between internally generated cash flows and debt (or interest expense),

## Direct Testimony of Robert B. Hevert

depend quite heavily on both the capital structure and ROE used for ratemaking purposes. As a consequence, the ROE and capital structure are very important not only to equity investors, but also to debt investors. Given the capital market conditions noted earlier, the authorized ROE and capital structure take on even greater significance.

## IX. Stay-Out Premium

## Q. What are the implications for the Company's Cost of Equity if it were to agree to a three-year Stay-Out period?

A. It is important to consider the potential effect that increases in the general level of interest rates would have on the Company's stock price and its Cost of Equity. As discussed earlier, electric utility companies have equity durations of approximately 28 years. As also noted earlier, the assets supported by the Company's common equity have useful lives in excess of 30 years. Consequently, the interest rate risk to which equity holders are exposed relates to the long end of the yield curve, i.e., the 30year Treasury yield. In light of the historically low level of long-term Treasury rates, it is reasonable to assume that, on balance, long-term rates are more likely to increase than decrease during the term of the Stay-Out period, representing a significant element of risk for equity investors.

## Q. How has the Stay-Out premium been calculated in prior proceedings before the Commission?

A. It is my understanding that in prior proceedings involving three-year stayout provisions, the Stay-Out premium has been calculated by taking onehalf of the difference between the five-year average yields on three and one-year Treasury Notes. ${ }^{38}$

## Q. What are your concerns with that approach?

A. My primary concern is that the methodology for calculating the premium appears unrelated to the underlying risks that it is intended to mitigate. As discussed earlier, given the relatively long equity duration and asset lives associated with utility operations, the risks associated with changes in capital market conditions are focused on long-term interest rates. Putting aside that fundamental issue, it also is the case that the shape and slope of the yield curve is not constant over time, such that a relatively flat slope at the short end of the curve (the difference between one- and three-year yields) may produce an inadequate premium relative to what would be derived from the long end of the curve. Finally, it is unclear how the 50

## Direct Testimony of Robert B. Hevert

percent adjustment factor relates to the mitigation of company-specific risks over the term of the Stay-Out period.

In addition, considering the recently unstable nature of the capital markets, it is unclear why a five-year historical average difference between shortterm interest rates would be indicative of the incremental return requirements over the coming three years. For much the same reason that the Market Risk Premium component of the CAPM is a forward-looking measure, the Stay-Out premium also should at least consider forwardlooking data. Moreover, if the risk associated with the Stay-Out period is that the Company's Cost of Equity will increase as a result of changes in the level of interest rates, then (as discussed above) the relevant security is the 30-year Treasury security. In that case, a more appropriate measure of risk would be the difference between current and projected long-term Treasury yields.

## Q. Did you calculate the Stay-Out premium using the Commission's traditional approach?

A. Yes, I did. As shown in Exhibit $\qquad$ (RBH-8), over the five-year period ended February 29, 2012, the average yield on the three-year Treasury Note was 1.82 percent, while the average yield on the one-year Treasury

## Direct Testimony of Robert B. Hevert

Note was 1.30 percent. The difference between those two average yields is 0.53 percent; one-half of that amount equals 0.26 percent, or 26 basis points. Over the past five years, however, the difference between the oneand three-year yields has increased, such that the average difference over two years was 0.61 percent ( 61 basis points), which is 1.15 times the fiveyear average.

## Q. Did you also calculate the Stay-Out premium based on the difference in current and implied long-term Treasury yields?

A. Yes, I estimated the expected rate differential for a three-year Stay-Out period based on the difference in current yields on long-term U.S. Treasury bonds and the expected yield on bonds issued at the end of the three-year Stay-Out period. Because utility valuations tend to be highly related to long-term Treasury yields, the expected change in yields is a reasonable measure of the Stay-Out premium.

To calculate the premium related to a three-year Stay-Out, I calculated the three-month average of the implied 27-year Treasury yield, estimated three years from now, and the current interpolated 27-year Treasury yield. It is reasonable to calculate the interpolated 27-year Treasury yield because the 30 -year Treasury Bond is the longest maturity Treasury

## Direct Testimony of Robert B. Hevert

security currently traded. Advancing the current 30-year Treasury yield by three years results in a 27-year implied Treasury security, which can be compared on a current and forward basis. The difference between those average yields of 0.47 percent is the expected difference in the yield on the bonds over the three-year period. That difference, which is based on observable market data, would be a reasonable measure of the Stay-Out premium.

The calculation of the implied Treasury yields and the current interpolated Treasury yields are based on the following formulas. The implied 27-year Treasury yield is calculated as:

$$
{ }_{27} f_{3}=\left[\left(1+{ }_{30} \mathrm{r}_{0}\right)^{30} /\left(1+{ }_{3} \mathrm{r}_{0}\right)^{3}\right]^{1 / 27}-1[6]
$$

where:
${ }_{27} f_{3}=$ the implied 27-year forward Treasury rate in 3 years; ${ }_{30} \mathrm{r}_{0}=$ the current 30 -year Treasury rate; and ${ }_{3} \mathrm{r}_{0}=$ the yield on 3-year Treasury Notes to match duration of the Stay-Out.

The interpolated current 27-year Treasury yield is calculated based on the following formula:

$$
{ }_{27} r_{0}=\left(\left[\left(30 r_{0-10} r_{0}\right) / 20\right] *(27-10)\right)+{ }_{10} \mathbf{r}_{0} \text { [7] }
$$

where:
${ }_{10} \mathrm{r}_{0}=$ the current 10-year Treasury rate.

## Direct Testimony of Robert B. Hevert

 Using the methodology described above, I estimated the premium that would be required for a three-year Stay-Out period. As shown in Exhibit _ (RBH-9), the results of that analysis indicate that the premium, as implied by current Treasury market data, is in the range of 47 basis points. ${ }^{39}$
## Q. Do you have any additional comments on the development of an estimate of the Stay-Out premium?

A. Yes, I do. Given the uncertainty currently observed in the financial markets, the traditional approach may no longer provide the appropriate compensation for the additional risks perceived by utility equity investors. While the Commission's traditional approach and my alternative approach both rely on measures of Treasury yields, the risk differential between utility common equity and Treasuries should be considered in setting an ROE premium. Given that on the date of investment, an investor in Treasury Bonds is virtually guaranteed to collect that Bond's coupon payment, the risk of investment in utility common equity is significantly greater. That is, there is a significantly greater risk that a utility equity investor will fail to realize the required return if the company itself is not

[^14]
## Direct Testimony of Robert B. Hevert

recovering the cost of service in its rates or is precluded from addressing unexpected cost increases or external financial shocks through the regulatory structure. Given the level of instability and risk perceptions in current financial markets, utility equity investors require a larger premium to offset the increased risk assumed by agreeing to a Stay-Out period. Even investors in utility bonds, which are less risky than utility common equity, demand a premium above Treasury rates.

Moreover, the importance of that risk premium may be highlighted by the reliance on a standard calculation methodology to estimate the Company's ROE. Insofar as investors are aware of a standard formulation used to estimate the Company's ROE, that formulation becomes, to a certain extent, incorporated by the investment community. Such a focus on the analytical results of the models chosen to estimate the ROE and not the reasonableness of the overall results concentrates the risks to investors on the chance that, for example, the DCF results materially change. In the context of the DCF model, for example, changes in stock prices are inversely related to changes in long-term interest rates, resulting in a higher required Return on Equity. To that point, as discussed earlier in my Testimony, BofAML demonstrates that utilities are comparatively longduration securities that are sensitive to changes in the returns required by

## Direct Testimony of Robert B. Hevert

investors. In that regard, the relevant issue is not movements along the yield curve, but rather the extent to which long-term interest rates may change over the Stay-Out period. As discussed above, based on long-term Treasury yields, the implied change in interest rates over the three-year Stay-Out period is approximately 47 basis points.

Aside from the effect of changes in long-term interest rates, equity valuations remain at risk to increases in broad market instability, rotation out of the utility sector on the part of institutional investors, unexpected credit contractions, and other factors that affect both fundamental equity valuations and investor trading patterns. If the Company is foreclosed from adjusting the market-required ROE during a period of higher price instability, investors will necessarily incorporate a larger risk premium than in periods of greater equity stability. To the extent that, on balance, those factors represent greater downside risk, the Stay-Out premium should recognize that uncertainty.

Finally, apart from my disagreement with the use of one- and three-year Treasury securities as the relevant benchmark for measuring the additional risk assumed by investors with a three-year Stay-Out period, simply on a technical basis, the use of only half the differential in establishing the

## Direct Testimony of Robert B. Hevert

Stay-Out Premium also is not reasonable. In the case of bonds (in particular Treasuries), the investor in the longer maturity instrument is virtually assured to collect the entire differential between the two rates. Investors require, and receive, the entire difference in interest rates, not half of that difference, for investing in the longer maturity security. As such, even if the one- and three-year Treasuries were the appropriate benchmark, the use of only one-half of the differential substantially understates the indicated risk premium.

## Q. What is your recommendation as to the appropriate level of the StayOut premium?

A. For the reasons noted above, I do not believe that one-half of the five-year average difference between the one- and three-year Treasury yields is the appropriate measure of the incremental risks incurred by equity investors in the current market environment. Even if the Commission chose to maintain that approach, consideration should be given to the increase in term spreads (i.e., the difference between the one- and three-year yields) over the past five years. In that case, the appropriate averaging period would be one or two years, as opposed to five. In my view, the potential for and market expectations of a substantial increase in the level of longterm Treasury yields also should be given consideration in the

## Direct Testimony of Robert B. Hevert

 determination of the Stay-Out premium. Considering both the Commission's traditional approach and the likelihood of increased longterm rates, a Stay-Out premium of 35 basis points is reasonable and appropriate at this time.
## X. Conclusion and Recommendation

Q. What is your conclusion regarding a fair return on book equity for Niagara Mohawk?
A. $\quad 10.55$ percent is a reasonable estimate of the return required by equity investors to invest in a company of Niagara Mohawk's risk profile in the current capital market environment. In the event that the Company were to agree to a three-year rate plan, as discussed above, my recommended return would increase to 10.90 percent to reflect the additional risk associated with fixing rates during that period. My recommended return on book equity considers the results of the DCF and CAPM models, summarized in Table 13 (below), and the specific risks to which the Company remains exposed. Applying the Commission's weightings to the average of the DCF model results of 10.41 percent and the average of the CAPM results of 10.83 percent, results in an estimated Cost of Equity of 10.55 percent. Based on those analytical results, the Company's ROE falls in a range between 10.50 percent and 11.00 percent and, in my view,

## Direct Testimony of Robert B. Hevert

1

2
3 an authorized ROE of 10.55 percent is a reasonable, if not conservative estimate, especially in light of the Company's business and financial risks relative to the proxy group.

Table 13: Summary of Analytical Results

|  | Low | Mean | High |
| :---: | :---: | :---: | :---: |
| Two-Stage DCF | 9.66\% | 10.46\% | 12.05\% |
| Three-Stage DCF | 9.56\% | 10.36\% | 11.94\% |
| Mean DCF |  | 10.41\% |  |
|  | Value Line Beta Coefficient | Mean | Bloomberg Beta Coefficient |
| Market Based CAPM | 10.44\% | 10.49\% | 10.54\% |
| Zero-Beta CAPM | 11.13\% | 11.16\% | 11.20\% |
| Mean CAPM | 10.83\% |  |  |
| Weighted Average Cost of Equity (2/3 * DCF) + ( $1 / 3$ * CAPM) |  |  | 10.55\% |

4 Q. Does this conclude your direct testimony?
5 A. Yes, it does.


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

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

## REPRESENTATIVE PROJECT EXPERIENCE

## Litigation Support and Expert Testimony

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

## Financial and Economic Advisory Services

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

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

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

## Regulatory Analysis and Ratemaking

On behalf of electric, natural gas and combination utilities throughout North America, provided services relating to energy industry restructuring including merchant function exit, residual energy supply obligations, and stranded cost assessment and recovery. Specific services provided include: performing strategic review and development of merchant function exit strategies including analysis of provider of last resort obligations in both electric and gas markets; and developing value optimizing strategies for physical generation assets.

## Energy Market Assessment

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

## Resource Procurement, Contracting and Analysis

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

## Business Strategy and Operations

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

## PROFESSIONAL HISTORY

## Sussex Economic Advisors, LLC (2012 - Present)

Managing Partner
Concentric Energy Advisors, Inc. (2002-2012)
President
Navigant Consulting, Inc. (1997-2001)
Managing Director (2000 - 2001)
Director (1998-2000)
Vice President, REED Consulting Group (1997-1998)

## Bay State Gas Company (now Columbia Gas Company of Massachusetts) (1987-1997)

Vice President and Assistant Treasurer

Boston College (1986-1987)
Financial Analyst
General Telephone Company of the South (1984-1986)
Revenue Requirements Analyst

## EDUCATION

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

## DESIGNATIONS AND PROFESSIONAL AFFILIATIONS

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

## PUBLICATIONS/PRESENTATIONS

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

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


## AVAILABLE UPON REQUEST

Extensive client and project listings, and specific references.

| SpONSOR | DATE | CASE/ApPLICANT | DOCKET No. | SubJECT |
| :---: | :---: | :---: | :---: | :---: |
| Arizona Corporation Commission |  |  |  |  |
| Southwest Gas Corporation | 11/10 | Southwest Gas Corporation | $\begin{aligned} & \text { Docket No. G- } \\ & 01551 \mathrm{~A}-10-0458 \end{aligned}$ | Return on Equity |
| Arkansas Public Service Commission |  |  |  |  |
| CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Arkansas Gas | 01/07 | CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Arkansas Gas | Docket No. 06- $161-\mathrm{U}$ | Return on Equity |
| Colorado Public Utilities Commission |  |  |  |  |
| Public Service Company of Colorado | 11/11 | Public Service Company of Colorado | Docket No. 11AL947E | Return on Equity (electric) |
| Xcel Energy, Inc. | 12/10 | Public Service Company of Colorado | Docket No. 10AL963G | Return on Equity (electric) |
| Atmos Energy Corporation | 07/09 | Atmos Energy Colorado-Kansas Division | $\begin{aligned} & \text { Docket No. 09AL- } \\ & 507 \mathrm{G} \end{aligned}$ | Return on Equity (gas) |
| Xcel Energy, Inc. | 12/06 | Public Service Company of Colorado | Docket No. 06S- 656G | Return on Equity (gas) |
| Xcel Energy, Inc. | 04/06 | Public Service Company of Colorado | Docket No. 06S234EG | Return on Equity (electric) |
| Xcel Energy, Inc. | 08/05 | Public Service Company of Colorado | Docket No. 05S369ST | Return on Equity (steam) |
| Xcel Energy, Inc. | 05/05 | Public Service Company of Colorado | Docket No. 05S- $264 \mathrm{G}$ | Return on Equity (gas) |
| Columbia Public Service Commission |  |  |  |  |
| Potomac Electric Power Company | 07/11 | Potomac Electric Power Company | Formal Case No. FC1087 | Return on Equity |
| Connecticut Department of Public Utility Control |  |  |  |  |
| Southern Connecticut Gas Company | 09/08 | Southern <br> Connecticut Gas <br> Company | Docket No. 08-0817 | Return on Equity |
| Southern Connecticut Gas Company | 12/07 | Southern <br> Connecticut Gas Company | Docket No. 05-0317PH02 | Return on Equity |
| Connecticut Natural Gas Corporation | 12/07 | Connecticut Natural Gas Corporation | Docket No. 06-0304PH02 | Return on Equity |
| Delaware Public Service Commission |  |  |  |  |
| Delmarva Power \& Light Company | 12/11 | Delmarva Power \& Light Company | Case No. 11-528 | Return on Equity |

$\left.\begin{array}{|l|c|l|l|l|l|}\hline \text { Sponsor } & \text { DATE } & \text { CASE/APPLICANT } & \text { DockEt No. } & \text { SuBJECT } \\ \hline \text { Federal Energy Regulatory Commission } & 10 / 10 & \begin{array}{l}\text { Public Service } \\ \text { Company of New } \\ \text { Mexico }\end{array} & \begin{array}{l}\text { Docket No. ER11- } \\ 1915-000\end{array} & \text { Return on Equity } \\ \hline \begin{array}{l}\text { Public Service Company of New } \\ \text { Mexico }\end{array} & 05 / 10 & \begin{array}{l}\text { Portland Natural } \\ \text { Gas Transmission } \\ \text { System }\end{array} & \begin{array}{l}\text { Docket No. RP10- } \\ 729-000\end{array} & \text { Return on Equity } \\ \hline \begin{array}{l}\text { Portland Natural Gas Transmission } \\ \text { System }\end{array} & 10 / 09 & \begin{array}{l}\text { Florida Gas } \\ \text { Transmission } \\ \text { Company, LLC }\end{array} & \begin{array}{l}\text { Docket No. RP10- } \\ 21-000\end{array} & \text { Return on Equity } \\ \hline \begin{array}{l}\text { Florida Gas Transmission } \\ \text { Company, LLC }\end{array} & 07 / 09 & \begin{array}{l}\text { Maritimes and } \\ \text { Northeast Pipeline, } \\ \text { LLC }\end{array} & \begin{array}{l}\text { Docket No. RP09- } \\ 809-000\end{array} & \text { Return on Equity } \\ \hline \begin{array}{l}\text { Maritimes and Northeast Pipeline, } \\ \text { LLC }\end{array} & 02 / 08 & \begin{array}{l}\text { Saltville Gas } \\ \text { Storage }\end{array} & \begin{array}{l}\text { Docket No. RP08- } \\ 257-000\end{array} & \text { Return on Equity } \\ \hline \text { Spectra Energy } & 08 / 07 & \begin{array}{l}\text { Panhandle Energy } \\ \text { Pipelines }\end{array} & \begin{array}{l}\text { Docket No. PL07- } \\ 2-000\end{array} & \begin{array}{l}\text { Response to draft } \\ \text { policy statement } \\ \text { regarding inclusion } \\ \text { of MLPs in proxy } \\ \text { groups for }\end{array} \\ \text { determination of } \\ \text { gas pipeline ROEs }\end{array}\right]$

| SPONSOR | Date | CASE/APPLICANT | Docket No. | SUBJECT |
| :---: | :---: | :---: | :---: | :---: |
| Maine Public Utilities Commission |  |  |  |  |
| Central Maine Power Company | 06/11 | Central Maine Power Company | Docket No. 2010- $327$ | Response to Bench Analysis provided by Commission Staff relating to the Company's credit and collections processes |
| Maryland Public Service Commission |  |  |  |  |
| Delmarva Power \& Light Company | 12/11 | Delmarva Power \& Light Company | Case No. 9285 | Return on Equity |
| Potomac Electric Power Company | 12/11 | Potomac Electric Power Company | Case No. 9286 | Return on Equity |
| Delmarva Power \& Light Company | 12/10 | Delmarva Power \& Light Company | Case No. 9249 | Return on Equity |
| Massachusetts Department of Public Utilities |  |  |  |  |
| National Grid | 08/09 | Massachusetts Electric Company d/b/a National Grid | DPU 09-39 | Revenue <br> Decoupling and <br> Return on Equity |
| National Grid | 08/09 | Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid | DPU 09-38 | Return on Equity - <br> Solar Generation |
| Bay State Gas Company | 04/09 | Bay State Gas Company | DTE 09-30 | Return on Equity |
| NSTAR Electric | 09/04 | NSTAR Electric | DTE 04-85 | Divestiture of Power Purchase Agreement |
| NSTAR Electric | 08/04 | NSTAR Electric | DTE 04-78 | Divestiture of Power Purchase Agreement |
| NSTAR Electric | 07/04 | NSTAR Electric | DTE 04-68 | Divestiture of Power Purchase Agreement |
| NSTAR Electric | 07/04 | NSTAR Electric | DTE 04-61 | Divestiture of Power Purchase Agreement |
| NSTAR Electric | 06/04 | NSTAR Electric | DTE 04-60 | Divestiture of Power Purchase Agreement |
| Unitil Corporation | 01/04 | Fitchburg Gas and Electric | DTE 03-52 | Integrated Resource Plan; Gas Demand Forecast |
| Minnesota Public Utilities Commission |  |  |  |  |
| Otter Tail Power Corporation | 04/10 | Otter Tail Power Company | Docket No. E-017/GR-10-239 | Return on Equity |


| SPONSOR | DATE | CASE/APPLICANT | Docket No. | Subject |
| :---: | :---: | :---: | :---: | :---: |
| Minnesota Power a division of ALLETE, Inc. | 11/09 | Minnesota Power | Docket No. E-015/GR-09-1151 | Return on Equity |
| CenterPoint Energy Resources Corp. d/b/a <br> CenterPoint Energy Minnesota Gas | 11/08 | CenterPoint Energy Minnesota Gas | Docket No. G-008/GR-08-1075 | Return on Equity |
| Otter Tail Power Corporation | 10/07 | Otter Tail Power Company | Docket No. E-017/GR-07-1178 | Return on Equity |
| Xcel Energy, Inc. | 11/05 | NSP-Minnesota | Docket No. E-002/GR-05-1428 | Return on Equity (electric) |
| Xcel Energy, Inc. | 09/04 | NSP Minnesota | Docket No. G-002/GR-04-1511 | Cost of Capital (gas) |
| Mississippi Public Service Commission |  |  |  |  |
| CenterPoint Energy Resources, Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Mississippi Gas | 07/09 | CenterPoint Energy Mississippi Gas | Docket No. 09-UN-334 | Return on Equity |
| Missouri Public Service Commission |  |  |  |  |
| Union Electric Company d/b/a Ameren Missouri | 02/12 | Union Electric Company d/b/a Ameren Missouri | Case No. ER-2012-0166 | Return on Equity (electric) |
| Union Electric Company d/b/a AmerenUE | 09/10 | Union Electric Company d/b/a AmerenUE | $\begin{aligned} & \text { Case No. ER- } \\ & \text { 2011-0028 } \end{aligned}$ | Return on Equity (electric) |
| Union Electric Company d/b/a AmerenUE | 06/10 | Union Electric Company d/b/a AmerenUE | $\begin{aligned} & \text { Case No. GR- } \\ & \text { 2010-0363 } \end{aligned}$ | Return on Equity (gas) |
| Nevada Public Utilities Commission |  |  |  |  |
| Southwest Gas Corporation | 04/12 | Southwest Gas Corporation |  | Return on Equity (gas) |
| Nevada Power Company | 06/11 | Nevada Power Company | Docket No. 1106006 | Return on Equity (electric) |
| New Hampshire Public Utilities Commission |  |  |  |  |
| EnergyNorth Natural Gas d/b/a National Grid NH | 02/10 | EnergyNorth Natural Gas d/b/a National Grid NH | $\begin{aligned} & \text { Docket No. DG } \\ & 10-017 \end{aligned}$ | Return on Equity |
| Unitil Energy Systems, Inc. ("Unitil"), EnergyNorth Natural Gas, Inc. d/b/a National Grid NH, Granite State Electric Company d/b/a National Grid, and Northern Utilities, Inc. - New Hampshire Division | 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 | $\begin{aligned} & \text { Docket No. DG } \\ & 07-072 \end{aligned}$ | Carrying Charge Rate on Cash Working Capital |


| SpONSOR | DATE | CASE/APPLICANT | Docket No. | Subject |
| :---: | :---: | :---: | :---: | :---: |
| Atlantic City Electric Company | 08/11 | Atlantic City Electric Company | Docket No. ER11080469 | Return on Equity |
| Pepco Holdings, Inc. | 09/06 | Atlantic City Electric Company | Docket No. EMO6090638 | Divestiture and Valuation of Electric Generating Assets |
| Pepco Holdings, Inc. | 12/05 | Atlantic City Electric Company | Docket No. <br> EM05121058 | Market Value of Electric Generation Assets; Auction |
| Conectiv | 06/03 | Atlantic City Electric Company | Docket No. EO03020091 | Market Value of Electric Generation Assets; Auction Process |
| New Mexico Public Regulation Commission |  |  |  |  |
| Southwestern Public Service Company | 02/11 | Southwestern Public Service Company | Case No. 10-00395-UT | Return on Equity (electric) |
| Public Service Company of New Mexico | 06/10 | Public Service Company of New Mexico | Case No. 10-00086-UT | Return on Equity (electric) |
| Public Service Company of New Mexico | 09/08 | Public Service Company of New Mexico | $\begin{aligned} & \text { Case No. 08- } \\ & 00273-U T \end{aligned}$ | Return on Equity (electric) |
| Xcel Energy, Inc. | 07/07 | Southwestern Public Service Company | $\begin{aligned} & \text { Case No. 07- } \\ & \text { 00319-UT } \end{aligned}$ | Return on Equity (electric) |
| New York State Public Service Commission |  |  |  |  |
| Orange and Rockland Utilities, Inc. | 07/11 | Orange and Rockland Utilities, Inc. | $\begin{aligned} & \text { Case No. 11-E- } \\ & 0408 \end{aligned}$ | Return on Equity (electric) |
| Orange and Rockland Utilities, Inc. | 07/10 | Orange and Rockland Utilities, Inc. | $\begin{aligned} & \text { Case No. 10-E- } \\ & 0362 \end{aligned}$ | Return on Equity (electric) |
| Consolidated Edison Company of New York, Inc. | 11/09 | Consolidated Edison Company of New York, Inc. | $\begin{aligned} & \text { Case No. 09-G- } \\ & 0795 \end{aligned}$ | Return on Equity (gas) |
| Consolidated Edison Company of New York, Inc. | 11/09 | Consolidated Edison Company of New York, Inc. | $\begin{aligned} & \text { Case No. 09-S- } \\ & 0794 \end{aligned}$ | Return on Equity (steam) |
| Niagara Mohawk Power Corporation | 07/01 | Niagara Mohawk Power Corporation | $\begin{aligned} & \text { Case No. 01-E- } \\ & 1046 \end{aligned}$ | Power Purchase and Sale <br> Agreement; Standard Offer Service Agreement |
| North Carolina Utilities Commission |  |  |  |  |
| Dominion North Carolina Power | 03/12 | Dominion Resources | Docket No. E-22, <br> Sub 479 | Return on Equity (electric) |
| Duke Energy Carolinas, LLC | 07/11 | Duke Energy Carolinas, LLC | Docket No. E-7, Sub 989 | Return on Equity (electric) |


| SPONSOR | DATE | CASE/APPLICANT | Docket No. | SubJECT |
| :---: | :---: | :---: | :---: | :---: |
| North Dakota Public Service Commission |  |  |  |  |
| Otter Tail Power Company | 11/08 | Otter Tail Power Company | Docket No. 08-862 | Return on Equity (electric) |
| Oklahoma Corporation Commission |  |  |  |  |
| Oklahoma Gas \& Electric Company | 07/11 | Oklahoma Gas \& Electric Company | Cause No. PUD201100087 | Return on Equity |
| CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Oklahoma Gas | 03/09 | CenterPoint Energy Oklahoma Gas | Cause No. PUD200900055 | Return on Equity |
| Rhode Island Public Utilities Commission |  |  |  |  |
| National Grid RI - Gas | 08/08 | National Grid RI Gas | Docket No. 3943 | Revenue <br> Decoupling and <br> Return on Equity |
| South Carolina Public Service Commission |  |  |  |  |
| Duke Energy Carolinas, LLC | 08/11 | Duke Energy Carolinas, LLC | Docket No. 2011-271-E | Return on Equity (electric) |
| South Carolina Electric \& Gas | 03/10 | South Carolina Electric \& Gas | Docket No. 2009-489-E | Return on Equity |
| South Dakota Public Utilities Commission |  |  |  |  |
| Otter Tail Power Company | 08/10 | Otter Tail Power Company | Docket No. EL10011 | Return on Equity (electric) |
| Northern States Power Company | 06/09 | South Dakota <br> Division of Northern <br> States Power | Docket No. EL09009 | Return on Equity (electric) |
| Otter Tail Power Company | 10/08 | Otter Tail Power Company | Docket No. EL08- $030$ | Return on Equity (electric) |
| Texas Public Utility Commission |  |  |  |  |
| Oncor Electric Delivery Company, LLC | 01/11 | Oncor Electric Delivery Company, LLC | Docket No. 38929 | Return on Equity |
| Texas-New Mexico Power Company | 08/10 | Texas-New Mexico Power Company | Docket No. 38480 | Return on Equity (electric) |
| CenterPoint Energy Houston Electric LLC | 07/10 | CenterPoint Energy Houston Electric LLC | Docket No. 38339 | Return on Equity |
| Xcel Energy, Inc. | 05/10 | Southwestern Public Service Company | Docket No. 38147 | Return on Equity (electric) |
| Texas-New Mexico Power Company | 08/08 | Texas-New Mexico Power Company | Docket No. 36025 | Return on Equity (electric) |
| Xcel Energy, Inc. | 05/06 | Southwestern Public <br> Service Company | Docket No. 32766 | Return on Equity (electric) |
| Texas Railroad Commission |  |  |  |  |


| SPONSOR | Date | CASE/APPLICANT | Docket No. | Subject |
| :---: | :---: | :---: | :---: | :---: |
| Centerpoint Energy Resources Corp. <br> d/b/a Centerpoint Energy Entex and Centerpoint Energy Texas Gas | 12/10 | Centerpoint Energy Resources Corp. d/b/a Centerpoint Energy Entex and Centerpoint Energy Texas Gas | GUD 10038 | Return on Equity |
| Atmos Pipeline - Texas | 09/10 | Atmos Pipeline Texas | GUD 10000 | Return on Equity |
| CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas | 07/09 | CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas | GUD 9902 | Return on Equity |
| CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Texas Gas | 03/08 | CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Texas Gas | GUD 9791 | Return on Equity |
| Utah Public Service Commission |  |  |  |  |
| Questar Gas Company | 12/07 | Questar Gas Company | Docket No. 07-057-13 | Return on Equity |
| Vermont Public Service Board |  |  |  |  |
| Central Vermont Public Service Corporation; Green Mountain Power | 2/12 | Central Vermont <br> Public Service <br> Corporation; Green <br> Mountain Power | Docket No. 7770 | Merger Policy |
| Central Vermont Public Service Corporation | 12/10 | Central Vermont Public Service Corporation | Docket No. 7627 | Return on Equity (electric) |
| Green Mountain Power | 04/06 | Green Mountain Power | Docket Nos. 7175 and 7176 | Return on Equity (electric) |
| Vermont Gas Systems, Inc. | 12/05 | Vermont Gas Systems | Docket Nos. 7109 and 7160 | Return on Equity (gas) |
| Virginia State Corporation Commission |  |  |  |  |
| 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 <br> Structure and <br> Electric <br> Generation <br> Strategy |

## Assessment of the Sustainable Growth Model

## I. Model Description

The fundamental assumption underlying the Sustainable Growth Model is that expected growth is a function of expected earnings, and the extent to which those earnings are retained and invested in the enterprise. In its simplest form, therefore, the model represents long-term growth as the product of the retention ratio (i.e., the percentage of earnings not paid out as dividends, referred to below as "b") and the expected return on book equity (referred to below as "r"). Thus the simple "b x r" form of the model projects growth as a function of internally generated funds. That form of the model is limiting, however, in that it does not provide for growth funded by external equity.

The "br +sv " form of the Sustainable Growth estimate is meant to reflect growth from both internally generated funds (i.e., the "br" term) and from issuances of equity (i.e., the "sv" term), as shown in Equation [1] below. As noted above, the first term, which is the product of the retention ratio (i.e., "b") and the expected Return on Equity (i.e., "r") represents the portion of net income that is "plowed back" into the company as a means of funding growth. The "sv" term, which represents growth from external capital, often is represented as:

$$
\left(\frac{m}{b}-1\right) \times \text { Common Shares growth rate [1] }
$$

where:

$$
\frac{m}{b}=\text { the market to book ratio. }
$$

In this form, the "sv" term reflects an element of growth as the product of (1) the growth in shares outstanding, and (2) that portion of the market-to-book ratio that exceeds unity.

## II. Theoretical and Practical Limitations of the Model

One of the fundamental assumptions of the Sustainable Growth model is that future earnings will increase as the retention ratio increases. That is, if future growth is modeled as "b x r", growth will increase as "b" increases. There are, however, several reasons why that may not be the case. Management decisions to conserve cash for capital investments, to manage the dividend payout for the purpose of minimizing future dividend reductions, or to signal future earnings prospects can and do influence dividend payout (and therefore earnings retention) decisions in the near-term. Consequently, it is appropriate to test whether increases in earnings retention ratios necessarily are associated with higher future earnings growth rates. As discussed below, that assumption is not supported by the data source relied upon by Staff to derive its Sustainable Growth estimate.

Additionally, a significant practical concern is that the Sustainable Growth model assumes a constant earned return on common equity, a constant payout ratio, and a constant earnings growth rate, all in perpetuity (even though in reality, those values fluctuate). In that important respect, the Sustainable Growth model is fundamentally related to the Constant Growth DCF model that has been rejected by Staff and the Commission. Therefore, it would be inconsistent to reject the Constant Growth DCF model and yet assume a long-term growth rate based on the Constant Growth assumptions.

Finally, given the context of the use of the Sustainable Growth rate model, there remains the issue of the circular logic associated with assuming an expected return on equity (that is, "r"), for the purpose of determining the ROE. That is, by adopting Value Line's expected earned Return on Common Equity, the model pre-supposes the return it is meant to derive.

## III. Recent Literature

As noted above, the Sustainable Growth model assumes that lower retention ratios lead to lower growth, and vice versa. Equivalently, given that payout ratios are the inverse of retention ratios, the model assumes higher payout ratios should lead to lower growth. However, several independent studies based on historical market data have contradicted that premise and indicate such a direct relationship does not necessarily hold in practice.

In 2003, Arnott and Asness published a study that found, over the course of 130 years of data, future earnings growth is associated with high, rather than low payout ratios. The authors' conclusions were based on a regression of twelve-month trailing dividend payout ratios to both forward five and ten-year earnings growth rates. The study found a statistically meaningful positive correlation between pay-out ratios and both subsequent earnings growth rates, across all time-periods measured. In summarizing their research, the authors stated:

We investigate whether dividend policy, as observed in the payout ratio of the U.S. equity market portfolio, forecasts future aggregate earnings growth. The historical evidence strongly suggests that expected future earnings growth is fastest when current payout ratios are high and slowest when payout ratios are low. This relationship is not subsumed by other factors, such as simple mean reversion in earnings. ${ }^{1}$

In a 2006 article titled International Evidence on the Payout Ratio, Earnings, Dividends, and Returns, Gwilym et al. discussed their extension of the work of Arnott and Asness to companies in international markets. After analyzing market data in ten countries, in addition to

[^15]the U.S., the authors found "international evidence generally supports A\&A's (i.e., Arnott and Asness) findings - despite the very different institutional, tax, and legal environments., ${ }^{2}$

Finally, in a 2006 Financial Analyst Journal article, Zhou and Rutland discussed their research that supported the earlier conclusions of Arnott and Asness that higher payout ratios are not associated with lower earnings growth. The researchers concluded that they found:
... a strong, positive association between current dividend payout ratio and future earnings growth. These results are robust to (1) alternative measures of earnings, (2) additional controls for mean reversion in earnings, (3) various subperiods, (4) consideration of industry effects, and (5) influence of share repurchases. ${ }^{3}$

In essence, the findings of all three studies consistently find there is a negative, not a positive relationship between retention ratio and earnings growth. In light of those articles, it is reasonable to question the appropriateness of using the Sustainable Growth model to estimate long-term growth of electric utilities such as Niagara Mohawk.

## IV. Analysis of Electric Utilities

To test the applicability of the academic findings cited above to this proceeding, I analyzed historical data to determine whether the premise of the Sustainable Growth model necessarily holds with respect to electric utility companies in general. Based on Value Line data for 1995 through 2011, as available (as of March 16, 2012, including historical information regarding both earnings and dividends per share), I calculated (in each year of the historical period) the dividend payout ratio, the retention ratio, and the subsequent five-year earnings growth rate for the companies in the proxy group. I then performed a regression analysis in

[^16]which the dependent variable was the five-year earnings growth rate, and the explanatory variable was the earnings retention ratio. The purpose of that analysis was to determine whether the data source typically relied upon by Staff to calculate the Sustainable Growth estimate empirically supports the assumption that higher retention ratios necessarily produce higher earnings growth rates.

As shown in Table 1 (below), ${ }^{4}$ there was a statistically significant negative relationship between the five-year earnings growth rate and the earnings retention ratio. As shown in that Table, the t-statistics for both the Intercept and the Retention Ratio Regression Coefficient are highly significant, indicating that higher retention ratios have been associated with lower, not higher future growth rates. That is, based on data provided by Value Line (i.e., the source of the data typically relied upon in Staff's analysis), over the study period earnings growth actually decreased as the retention ratio increased.

Table 1: Regression Results

|  | Coefficient | Standard <br> Error | t-Statistic |
| :--- | :---: | :---: | :---: |
| Intercept | 0.208 | 0.028 | 7.537 |
| Retention Ratio | -0.356 | 0.064 | -5.525 |

## V. Conclusion

Given the strong statistical results of my analyses, and the corroborating research discussed above, I continue to believe that substantial reliance on an estimate of long-term growth derived from a Sustainable Growth rate calculated using Value Line projections over a three- to five-year period is inappropriate.

4
See also Exhibit $\qquad$ (RBH-4).

## Index of Exhibits

| Exhibit __ (RBH-1) | Two-Stage DCF Model - 3 Month Average Price |
| :--- | :--- |
| Exhibit __ (RBH-2) | Three-Stage DCF Model - 3 Month Average Price |
| Exhibit __ (RBH-3) | Proxy Group Historical Range of P/E Ratios |
| Exhibit __ (RBH-4) | Retention Ratio Regression - Supporting Data \& Analysis |
| Exhibit __ (RBH-5) | CAPM and Zero Beta CAPM using Ex-Ante MRP |
| Exhibit __ (RBH-6) | Regulatory Risk for Proxy Group Companies |
| Exhibit __ (RBH-7) | Capital Structure |
| Exhibit __ (RBH-8) | Stay-Out Premium Calculation |
| Exhibit __ (RBH-9) | Alternate Calculation of Stay-Out Premium |

## Testimony of Robert B. Hevert

Exhibit __(RBH-1)

Two-Stage DCF Model - 3 Month Average Price
TWO-STAGE DCF MODEL - 3 MONTH AVERAGE PRICE

TWO-STAGE DCF MODEL - 3 MONTH AVERAGE PRICE

| Dividend Payout Ratic |  | [31] | [32] | [33] | [34] | [35] | [36] | [37] | [38] | [39] | [40] | [41] | [42] | [43] | [44] | [45] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Company | Ticker | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| Allete | ALE | 68.00\% | 66.00\% | 64.00\% | 62.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Alliant Energy Corp. | LNT | 65.00\% | 64.67\% | 64.33\% | 64.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Ameren Corp. | AEE | 67.00\% | 68.00\% | 69.00\% | 70.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| American Electric Power | AEP | 58.00\% | 57.00\% | 56.00\% | 55.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Avista Corp. | AVA | 64.00\% | 65.33\% | 66.67\% | 68.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Black Hills Corp. | Вкн | 73.00\% | 70.67\% | 68.33\% | 66.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Center Point Energy | CNP | 65.00\% | 65.33\% | 65.67\% | 66.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Cleco Corp. | CNL | 52.00\% | 54.33\% | 56.67\% | 59.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Consolidated Edison | ED | 65.00\% | 64.00\% | 63.00\% | 62.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Dominion Resources, Inc. | D | 67.00\% | 66.33\% | 65.67\% | 65.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| DTE Energy Co. | DTE | 63.00\% | 63.00\% | 63.00\% | 63.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Edison International | EIX | 46.00\% | 46.00\% | 46.00\% | 46.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Great Plains Energy Inc. | GXP | 59.00\% | 59.33\% | 59.67\% | 60.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Hawaiian Electric | HE | 73.00\% | 69.67\% | 66.33\% | 63.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| IDACORP, Inc. | IDA | 43.00\% | 47.00\% | 51.00\% | 55.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Integry | teg | 77.00\% | 74.00\% | 71.00\% | 68.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| OGE Energy | OGE | 43.00\% | 43.00\% | 43.00\% | 43.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Pepco Holdings, Inc. | POM | 83.00\% | 78.33\% | 73.67\% | 69.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| PG\&E Corp | PCG | 61.00\% | 57.33\% | 53.67\% | 50.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Pinnacle West Capital | PNW | 63.00\% | 64.00\% | 65.00\% | 66.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Portland General | POR | 54.00\% | 53.67\% | $53.33 \%$ | 53.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| SCANA Corp. | SCG | 63.00\% | 61.67\% | 60.33\% | 59.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Sempra Energy | SRE | 45.00\% | 44.33\% | 43.67\% | 43.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Southern Co. | so | 73.00\% | 71.67\% | 70.33\% | 69.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| TECO Energy, Inc. | TE | 65.00\% | 64.67\% | 64.33\% | 64.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| UIL Holdings Corp. | UIL | 79.00\% | 76.67\% | 74.33\% | 72.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Vectren Corp. | vvc | 73.00\% | 72.00\% | 71.00\% | 70.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Westar Energy | WR | 70.00\% | 66.33\% | 62.67\% | 59.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Wisconsin Energy | WEC | 53.00\% | 55.33\% | 57.67\% | 60.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Xcel Energy, Inc. | XEL | 58.00\% | 59.67\% | 61.33\% | 63.00\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |


| Dividends per Share and | 1 Market Valu | [46] | [47] | [48] | [49] | [50] | [51] | [52] | [53] | [54] | [55] | [56] | [57] | [58] | [59] | [60] | [61] | [62] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Company | Ticker | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Terminal | Terminal P/E Ratio |
| Allete | ALE | \$1.65 | \$1.69 | \$1.73 | \$1.76 | \$2.00 | \$2.11 | \$2.24 | \$2.36 | \$2.50 | \$2.65 | \$2.80 | \$2.96 | \$3.13 | \$3.31 | \$3.50 | \$92.09 | 17.55 |
| Alliant Energy Corp. | LNT | \$2.00 | \$2.10 | \$2.21 | \$2.33 | \$2.57 | \$2.72 | \$2.87 | \$3.04 | \$3.22 | \$3.40 | \$3.60 | \$3.81 | \$4.03 | \$4.26 | \$4.51 | \$95.75 | 14.19 |
| Ameren Corp. | ate | \$2.01 | \$2.12 | \$2.24 | \$2.36 | \$2.34 | \$2.48 | \$2.62 | \$2.77 | \$2.93 | \$3.10 | \$3.28 | \$3.47 | \$3.67 | \$3.88 | \$4.11 | \$69.34 | 11.28 |
| American Electric Power | AEP | \$1.64 | \$1.68 | \$1.72 | \$1.76 | \$2.23 | \$2.36 | \$2.50 | \$2.64 | \$2.79 | \$2.96 | \$3.13 | \$3.31 | \$3.50 | \$3.70 | \$3.91 | \$89.92 | 15.34 |
| Avista Corp. | AVA | \$1.15 | \$1.23 | \$1.31 | \$1.39 | \$1.43 | \$1.51 | \$1.60 | \$1.69 | \$1.79 | \$1.89 | \$2.00 | \$2.11 | \$2.24 | \$2.37 | \$2.50 | \$55.98 | 14.94 |
| Black Hills Corp. | BKH | \$1.37 | \$1.42 | \$1.46 | \$1.50 | \$1.62 | \$1.71 | \$1.81 | \$1.91 | \$2.03 | \$2.14 | \$2.27 | \$2.40 | \$2.54 | \$2.68 | \$2.84 | \$74.79 | 17.60 |
| Center Point Energy | CNP | \$0.76 | \$0.80 | \$0.84 | \$0.88 | \$0.93 | \$0.99 | \$1.04 | \$1.10 | \$1.17 | \$1.23 | \$1.31 | \$1.38 | \$1.46 | \$1.55 | \$1.64 | \$42.43 | 17.33 |
| Cleco Corp. | CNL | \$1.30 | \$1.42 | \$1.55 | \$1.68 | \$1.99 | \$2.11 | \$2.23 | \$2.36 | \$2.49 | \$2.64 | \$2.79 | \$2.95 | \$3.12 | \$3.30 | \$3.49 | \$86.77 | 16.58 |
| Consolidated Edison | ED | \$2.40 | \$2.44 | \$2.49 | \$2.53 | \$2.82 | \$2.99 | \$3.16 | \$3.34 | \$3.53 | \$3.74 | \$3.95 | \$4.18 | \$4.42 | \$4.68 | \$4.95 | \$131.20 | 17.70 |
| Dominion Resources, Inc. | D | \$1.94 | \$2.02 | \$2.10 | \$2.19 | \$2.36 | \$2.50 | \$2.64 | \$2.79 | \$2.96 | \$3.13 | \$3.31 | \$3.50 | \$3.70 | \$3.91 | \$4.14 | \$113.10 | 18.24 |
| DTE Energy Co. | DTE | \$2.56 | \$2.67 | \$2.79 | \$2.91 | \$3.22 | \$3.40 | \$3.60 | \$3.81 | \$4.03 | \$4.26 | \$4.51 | \$4.77 | \$5.05 | \$5.34 | \$5.65 | \$119.98 | 14.19 |
| Edison International | EIX | \$1.60 | \$1.64 | \$1.67 | \$1.70 | \$2.52 | \$2.66 | \$2.82 | \$2.98 | \$3.15 | \$3.34 | \$3.53 | \$3.73 | \$3.95 | \$4.18 | \$4.42 | \$95.27 | 14.39 |
| Great Plains Energy Inc. | GXP | \$1.01 | \$1.08 | \$1.14 | \$1.22 | \$1.43 | \$1.52 | \$1.60 | \$1.70 | \$1.79 | \$1.90 | \$2.01 | \$2.12 | \$2.25 | \$2.38 | \$2.51 | \$46.81 | 12.43 |
| Hawaiian Electric | HE | \$1.06 | \$1.11 | \$1.16 | \$1.21 | \$1.40 | \$1.48 | \$1.57 | \$1.66 | \$1.76 | \$1.86 | \$1.96 | \$2.08 | \$2.20 | \$2.33 | \$2.46 | \$57.67 | 15.65 |
| IDACORP, Inc. | IDA | \$1.38 | \$1.57 | \$1.78 | \$2.01 | \$2.54 | \$2.69 | \$2.84 | \$3.01 | \$3.18 | \$3.37 | \$3.56 | \$3.77 | \$3.98 | \$4.21 | \$4.46 | \$95.71 | 14.34 |
| Integry | TEG | \$2.97 | \$3.12 | \$3.26 | \$3.41 | \$3.66 | \$3.87 | \$4.09 | \$4.33 | \$4.58 | \$4.84 | \$5.12 | \$5.42 | $\$ 5.73$ | \$6.06 | \$6.41 | \$116.58 | 12.14 |
| OGE Energy | OGE | \$1.46 | \$1.56 | \$1.67 | \$1.78 | \$2.94 | \$3.11 | \$3.29 | \$3.48 | \$3.69 | \$3.90 | \$4.12 | \$4.36 | \$4.62 | \$4.88 | \$5.16 | \$126.58 | 16.37 |
| Pepco Holdings, Inc. | POM | \$1.10 | \$1.07 | \$1.04 | \$1.01 | \$1.01 | \$1.07 | \$1.13 | \$1.20 | \$1.27 | \$1.34 | \$1.42 | \$1.50 | \$1.59 | \$1.68 | \$1.78 | \$42.60 | 16.02 |
| PG\&E Corp | PCG | \$1.84 | \$1.79 | \$1.73 | \$1.67 | \$2.31 | \$2.44 | \$2.58 | \$2.73 | \$2.89 | \$3.06 | \$3.23 | \$3.42 | \$3.62 | \$3.83 | \$4.05 | \$93.58 | 15.44 |
| Pinnacle West Capital | PNW | \$2.17 | \$2.32 | \$2.49 | \$2.67 | \$2.86 | \$3.02 | \$3.20 | \$3.38 | \$3.58 | \$3.78 | \$4.00 | \$4.23 | \$4.48 | \$4.74 | \$5.01 | \$105.65 | 14.08 |
| Portland General | POR | \$1.01 | \$1.06 | \$1.11 | \$1.17 | \$1.57 | \$1.66 | \$1.75 | \$1.85 | \$1.96 | \$2.07 | \$2.19 | \$2.32 | \$2.45 | \$2.60 | \$2.75 | \$57.06 | 13.87 |
| SCANA Corp. | SCG | \$1.94 | \$1.98 | \$2.01 | \$2.04 | \$2.40 | \$2.54 | \$2.69 | \$2.84 | \$3.01 | \$3.18 | \$3.36 | \$3.56 | \$3.76 | \$3.98 | \$4.21 | \$99.81 | 15.83 |
| Sempra Energy | SRE | \$2.04 | \$2.13 | \$2.23 | \$2.33 | \$3.85 | \$4.07 | \$4.31 | \$4.55 | \$4.82 | \$5.10 | \$5.39 | \$5.70 | \$6.03 | \$6.38 | \$6.75 | \$134.14 | 13.27 |
| Southern Co. | so | \$1.98 | \$2.04 | \$2.11 | \$2.18 | \$2.22 | \$2.35 | \$2.48 | \$2.63 | \$2.78 | \$2.94 | \$3.11 | \$3.29 | \$3.48 | \$3.68 | \$3.89 | \$98.56 | 16.90 |
| TECO Energy, Inc. | TE | \$0.87 | \$0.92 | \$0.96 | \$1.01 | \$1.12 | \$1.18 | \$1.25 | \$1.32 | \$1.40 | \$1.48 | \$1.56 | \$1.65 | \$1.75 | \$1.85 | \$1.96 | \$40.62 | 13.86 |
| ULL Holdings Corp. | ULL | \$1.70 | \$1.72 | \$1.73 | \$1.75 | \$1.68 | \$1.78 | \$1.89 | \$1.99 | \$2.11 | \$2.23 | \$2.36 | \$2.50 | \$2.64 | \$2.79 | \$2.96 | \$75.49 | 17.06 |
| Vectren Corp. | vVC | \$1.32 | \$1.36 | \$1.41 | \$1.46 | \$1.46 | \$1.55 | \$1.64 | \$1.73 | \$1.83 | \$1.94 | \$2.05 | \$2.17 | \$2.29 | \$2.42 | \$2.56 | \$64.12 | 16.69 |
| Westar Energy | WR | \$1.42 | \$1.43 | $\$ 1.43$ | \$1.43 | \$1.71 | \$1.81 | \$1.92 | \$2.03 | \$2.14 | \$2.27 | \$2.40 | \$2.54 | \$2.68 | \$2.84 | \$3.00 | \$62.71 | 13.94 |
| Wisconsin Energy | WEC | \$1.16 | \$1.30 | \$1.45 | \$1.61 | \$1.92 | \$2.03 | \$2.15 | \$2.27 | \$2.40 | \$2.54 | \$2.69 | \$2.84 | \$3.01 | \$3.18 | \$3.36 | \$78.45 | 15.58 |
| X cel Energy, Inc. | XEL | \$1.00 | \$1.08 | \$1.17 | \$1.26 | \$1.41 | \$1.49 | \$1.57 | \$1.66 | \$1.76 | \$1.86 | \$1.97 | \$2.08 | \$2.20 | \$2.33 | \$2.47 | \$60.01 | 16.25 |

Exhibit__(RBH-1)
Page 3 of 4
TWO-STAGE DCF MODEL- 3 MONTH AVERAGE PRICE

| Investor Cash Flows |  | [63] | [64] | [65] | [66] | [67] | [68] | [69] | [70] | [71] | [72] | [73] | [74] | [75] | [76] | [77] | [78] | [79] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Company | Ticker | Initial | 31612 | 916112 | 91613 | 91614 | 91615 | 91616 | 91617 | 91618 | 91619 | 91620 | 1621 | 116 | 1623 | 91624 | 916125 | 916126 |
| Allete | ALE | (\$41.41) | S0.00 | \$1.65 | \$1.69 | 51.73 | 81.76 | \$2.00 | \$2.11 | \$2.24 | ${ }^{52} 36$ | \$2.50 | \$2.65 | \$2.80 | \$2.96 | \$3.13 | 53.31 | \$95.59 |
| Alliant Energy Corp. | Lnt | (\$43.08) | \$0.00 | \$2.00 | \$2.10 | \$2.21 | \$2.33 | \$2.57 | \$2.72 | 52.87 | \$3.04 | \$3.22 | \$3.40 | 53.60 | \$3.81 | \$4.03 | 54.26 | \$100.26 |
| Ameren Corp. | ate | (\$32.01) | S0.00 | \$2.01 | \$2.12 | \$2.24 | \$2.36 | \$2.34 | \$2.48 | \$2.62 | \$2.77 | \$2.93 | 53.10 | 53.28 | \$3.47 | \$3.67 | 53.88 | \$73.45 |
| American Electric Power | AEP | (839.84) | S0.00 | \$1.64 | \$1.68 | \$1.72 | \$1.76 | \$2.23 | \$2.36 | \$2.50 | \$2.64 | \$2.79 | \$2.96 | \$3.13 | \$3.31 | \$3.50 | 53.70 | \$93.83 |
| Avista Corp. | AVA | (\$25.38) | \$0.00 | \$1.15 | \$1.23 | \$1.31 | \$1.39 | \$1.43 | \$1.51 | \$1.60 | \$1.69 | \$1.79 | 81.89 | \$2.00 | \$2.11 | \$2.24 | \$2.37 | \$58.48 |
| Black Fills Corp. | BKH | (\$33.81) | 50.00 | ${ }^{81.37}$ | \$1.42 | \$1.46 | \$1.50 | \$1.62 | \$1.71 | \$1.81 | ${ }^{81.91}$ | \$2.03 | \$2.14 | \$2.27 | \$2.40 | \$2.54 | 52.68 | \$77.63 |
| Center Point Energy | $\mathrm{cNP}^{\text {c }}$ | (\$19.15) | 50.00 | 50.76 | \$0.80 | 50.84 | S0.88 | S0.93 | 50.99 | \$1.04 | \$1.10 | 81.17 | \$1.23 | $\$ 1.31$ | \$1.38 | \$1.46 | \$1.55 | \$44.07 |
| Cleco Corp. | CNL | (838.30) | s0.00 | 81.30 | \$1.42 | \$1.55 | $\$ 1.68$ | \$1.99 | \$2.11 | \$2.23 | \$2.36 | \$2.49 | \$2.64 | \$2.79 | \$2.95 | \$3.12 | \$3,30 | \$90.26 |
| Consolidated Edison | ED | (\$59.17) | S0.00 | \$2.40 | \$2.44 | \$2.49 | \$2.53 | \$2.82 | S2.99 | \$3.16 | \$3.34 | \$3.53 | 53.74 | \$3.95 | \$4.18 | \$4.42 | 54.68 | \$136.15 |
| Dominion Resourres, Inc. | D | (\$50.96) | \$0.00 | ${ }_{51.94}$ | \$2.02 | \$2.10 | S2.19 | \$2.36 | \$2.50 | \$2.64 | S2.79 | \$2.96 | ${ }_{53} 3.13$ | ${ }^{53.31}$ | \$3.50 | ${ }_{\text {S }} 5.70$ | ${ }_{53,91}$ | \$117.24 |
| DTE Energy Co. | DTE | (554.08) | s0.00 | \$2.56 | \$2.67 | \$2.79 | \$2.91 | \$3.22 | \$3.40 | \$3.60 | \$3.81 | 54.03 | ${ }^{54.26}$ | \$4.51 | 84.77 | 85.05 | 55.34 | \$125.63 |
| Edison International | EIX | (\$41.35) | 50.00 | 81.60 | 81.64 | 81.67 | 81.70 | \$2.52 | \$2.66 | \$2.82 | \$2.98 | \$3.15 | \$3,34 | 83.53 | \$3.73 | \$3,95 | 54.18 | \$99.68 |
| Great Plains Energy Inc. | GXP | (\$20.81) | \$0.00 | \$1.01 | ${ }^{51.08}$ | \$1.14 | \$1.22 | \$1.43 | \$1.52 | \$1.60 | 81.70 | 81.79 | \$1.90 | \$2.01 | \$2.12 | \$2.25 | 52.38 | \$49.32 |
| Hawaiian Electric | HE | (\$25.76) | 50.00 | 81.06 | 81.11 | \$1.16 | \$1.21 | 81.40 | \$1.48 | 81.57 | ${ }^{81.66}$ | \$1.76 | \$1.86 | \$1.96 | \$2.08 | \$2.20 | 52.33 | \$60.13 |
| IDACORP, Inc. | IDA | (\$41.53) | S0.00 | \$1.38 | ${ }^{1.57}$ | \$1.78 | \$2.01 | \$2.54 | \$2.69 | \$2.84 | \$3.01 | \$3.18 | 53.37 | \$3.56 | 53.77 | \$3.98 | 54.21 | \$100.17 |
| Integry | teg | (\$52.99) | S0.00 | \$2.97 | \$3.12 | \$3.26 | \$3.41 | \$3.66 | 53.87 | 54.09 | 54.33 | \$4.58 | \$4.84 | \$5.12 | \$5.42 | 55.73 | \$6.06 | \$123.00 |
| OGE Enerry | ${ }^{\text {OGE }}$ | (553.98) | \$0.00 | \$1.46 | ${ }^{51.56}$ | 81.67 | ${ }^{51.78}$ | \$2.94 | 83.11 | \$3.29 | ${ }^{53.48}$ | ${ }^{53.69}$ | 53.90 | 54.12 | \$4.36 | \$4.62 | 54.88 | \$131.75 |
| Pepeo Holdings, Inc. | pom | (\$19.84) | \$0.00 | \$1.10 | \$1.07 | \$1.04 | \$1.01 | \$1.01 | \$1.07 | \$1.13 | \$1.20 | \$1.27 | \$1.34 | \$1.42 | \$1.50 | \$1.59 | \$1.68 | \$44.38 |
| PGikE Corp | PCG | (841.51) | \$0.00 | \$1.84 | 81.79 | 81.73 | 81.67 | \$2.31 | \$2.44 | \$2.58 | \$2.73 | \$2.89 | \$3.06 | \$3.23 | \$3.42 | \$3.62 | \$3.83 | 597.63 |
| Pinnacle West Capital | PNW | (s47.55) | 50.00 | \$2.17 | \$2.32 | \$2.49 | \$2.67 | \$2.86 | 53.02 | \$3.20 | \$3.38 | \$3.58 | 53.78 | 54.00 | \$4.23 | \$4.48 | 54.74 | \$110.66 |
| Portland General | POR | (524.94) | \$0.00 | ${ }^{51.01}$ | \$1.06 | \$1.11 | \$1.17 | ${ }^{51.57}$ | \$1.66 | \$1.75 | ${ }^{51.85}$ | \$1.96 | \$2.07 | \$2.19 | \$2.32 | \$2.45 | \$2.60 | \$59.81 |
| scana Corp. | sci | (\$44.77) | S0.00 | \$1.94 | ${ }^{11.98}$ | \$2.01 | \$2.04 | \$2.40 | \$2.54 | \$2.69 | \$2.84 | \$3.01 | 53.18 | \$3.36 | 53.56 | \$3.76 | 53.98 | \$104.02 |
| Sempra Energy | SRE | (557.02) | \$0.00 | \$2.04 | \$2.13 | \$2.23 | ${ }^{52.33}$ | ${ }^{53.85}$ | 54.07 | \$4.31 | ${ }^{54.55}$ | ${ }^{54.82}$ | \$5.10 | \$5.39 | \$5.70 | \$6.03 | \$6.38 | \$140.89 |
| Southern Co. | so | (\$44.93) | \$0.00 | \$1.98 | \$2.04 | \$2.11 | \$2.18 | \$2.22 | \$2.35 | \$2.48 | \$2.63 | \$2.78 | \$2.94 | 53.11 | \$3.29 | \$3.48 | 53.68 | \$102.45 |
| TECO Enerry, Inc. | TE | (\$18.29) | 50.00 | 50.87 | \$0.92 | \$0.96 | 81.01 | \$1.12 | \$1.18 | \$1.25 | ${ }^{81.32}$ | \$1.40 | S1.48 | 81.56 | \$1.65 | \$1.75 | 81.85 | \$42.57 |
| ULL Holdings Corp. | ULL | (\$34.91) | 50.00 | \$1.70 | ${ }^{81.72}$ | 81.73 | 81.75 | ${ }^{51.68}$ | \$1.78 | 81.89 | 81.99 | \$2.11 | \$2.23 | \$2.36 | \$2.50 | \$2.64 | 52.79 | \$78.45 |
| Vectren Corp. | vvc | (\$29.31) | 50.00 | ${ }^{10.32}$ | ${ }^{81.36}$ | \$1.41 | \$1.46 | \$1.46 | \$1.55 | 81.64 | \$1.73 | \$1.83 | \$1.94 | \$2.05 | \$2.17 | \$2.29 | \$2.42 | \$66.69 |
| Westar Energy | wr | (528.20) | S0.00 | \$1.42 | ${ }^{11.43}$ | \$1.43 | \$1.43 | \$1.71 | \$1.81 | \$1.92 | \$2.03 | \$2.14 | 52.27 | \$2.40 | \$2.54 | $\$ 2.68$ | 52.84 | \$65.71 |
| Wisconsin Energy | WEC | (\$34.45) | ${ }^{50.00}$ | ${ }_{\text {s } 1.16}$ | ${ }_{\text {S1 }} 1.30$ | ${ }_{\text {S1.45 }}$ | ${ }_{\text {S }} 81.61$ | \$1.92 | \$2.03 | ${ }_{\text {S2. }}$. 15 | \$2.27 | \$2.40 | \$2.54 | ${ }^{52.69}$ | \$2.84 | ${ }_{8}^{83.01}$ | ${ }_{53} 5318$ | ${ }_{581.81}$ |
| Xcel Energy, Inc. | XEL | (526.75) | 50.00 | \$1.00 | 81.08 | 81.17 | \$1.26 | ${ }^{81.41}$ | S1.49 | 81.57 | ${ }^{51.66}$ | 81.76 | 81.86 | \$1.97 | \$2.08 | \$2.20 | 52.33 | \$62.48 |


| [1] | Source: Bloomberg Professional; based on three-month historical average |
| :---: | :---: |
| [2] | Source: Zacks |
| [3] | Source: Value Line |
| [4] | Source: Yahoo! Finance |
| [5] | Equals average of Columns [2], [3] and [4] |
| [6] | Source: EIA Annual Energy Outlook 2012, Bloomberg Professional, Bureau of Economic Analysis |
| [7] | Source: Value Line |
| [8] | Source: Value Line |
| [9] | Equals industry average historical payout ratio (1990-present) |
| [10] | Equals Column [1] + Column [63] |
| [11] | Equals result of Excel Solver function; goal: Column [10] equals \$0.00 |
| [12] | Equals (Column [20] / Column [14]) ^ $(1 /(2016-2010))-1$ |
| [13] | Equals (Column [30] / Column [20]) ${ }^{\wedge}(1 /(2026-2016))-1$ |
| [14] | Source: Value Line |
| [15] | Equals Column [14] x ( $1+$ Column [5]) |
| [16] | Equals Column [15] x ( $1+$ Column [5]) |
| [17] | Equals Column [16] x ( $1+$ Column [5]) |
| [18] | Equals Column [17] x ( $1+$ Column [5]) |
| [19] | Equals Column [18] x ( $1+$ Column [5]) |
| [20] | Equals Column [19] x ( $1+$ Column [5]) |
| [21] | Equals Column [20] x ( $1+$ Column [6]) |
| [22] | Equals Column [21] x ( $1+$ Column [6]) |
| [23] | Equals Column [22] x ( $1+$ Column [6]) |
| [24] | Equals Column [23] x ( $1+$ Column [6] $)$ |
| [25] | Equals Column [24] x ( $1+$ Column [6]) |
| [26] | Equals Column [25] x ( $1+$ Column [6]) |
| [27] | Equals Column [26] x ( $1+$ Column [6]) |
| [28] | Equals Column [27] x ( $1+$ Column [6]) |
| [29] | Equals Column [28] x ( $1+$ Column [6]) |
| [30] | Equals Column [29] x ( $1+$ Column [6]) |
| [31] | Equals Column [7] |
| [32] | Equals Column [31] + ((Column [34]-Column [31]) / 3) |
| [33] | Equals Column [32] + ((Column [34] - Column [31]) / 3) |
| [34] | Equals Column [8] |
| [35] | Equals Column [34] + ((Column [36] - Column [34]) / 2) |
| [36] | Equals Column [9] |
| [37] | Equals Column [9] |
| [38] | Equals Column [9] |
| [39] | Equals Column [9] |
| [40] | Equals Column [9] |
| [41] | Equals Column [9] |
| [42] | Equals Column [9] |
| [43] | Equals Column [9] |
| [44] | Equals Column [9] |
| [45] | Equals Column [9] |
| [46] | Equals Column [16] x Column [31] |
| [47] | Equals Column [17] x Column [32] |
| [48] | Equals Column [18] x Column [33] |
| [49] | Equals Column [19] x Column [34] |
| [50] | Equals Column [20] x Column [35] |
| [51] | Equals Column [21] x Column [36] |
| [52] | Equals Column [22] x Column [37] |
| [53] | Equals Column [23] x Column [38] |
| [54] | Equals Column [24] x Column [39] |
| [55] | Equals Column [25] x Column [40] |
| [56] | Equals Column [26] x Column [41] |
| [57] | Equals Column [27] x Column [42] |
| [58] | Equals Column [28] x Column [43] |
| [59] | Equals Column [29] x Column [44] |
| [60] | Equals Column [30] x Column [45] |
| [61] | Equals (Column [60] x ( $1+$ Column [6]) $/$ / (Column [11] - Column [6]) |
| [62] | Equals Column [61] / Column [30] |
| [63] | Equals negative net present value; discount rate equals Column [11], cash flows equal Column [64] through Column [79] |
| [64] | Equals \$0.00 |
| [65] | Equals Column [46] |
| [66] | Equals Column [47] |
| [67] | Equals Column [48] |
| [68] | Equals Column [49] |
| [69] | Equals Column [50] |
| [70] | Equals Column [51] |
| [71] | Equals Column [52] |
| [72] | Equals Column [53] |
| [73] | Equals Column [54] |
| [74] | Equals Column [55] |
| [75] | Equals Column [56] |
| [76] | Equals Column [57] |
| [77] | Equals Column [58] |
| [78] | Equals Column [59] |
| [79] | Equals Column [60] + Column [61] |

## (z-Hgy) - н!q!чхヨ

## Testimony of Robert B. Hevert

Exhibit __(RBH-2)

Three-Stage DCF Model - 3 Month Average Price
three-stage dcf model - 3 MONTH AVERAGE PRICE

| Dividend Payout Ratic |  | [29] | [30] | [31] | [32] | [33] | [34] | [35] | [36] | [37] | [38] | [39] | [40] | [41] | [42] | [43] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Company | Ticker | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| Allete | ALE | 68.0\% | 66.00\% | 64.00\% | 62.00\% | 62.68\% | 6.3.7\% | 64.05\% | 64.73\% | 65.41\% | 66.10\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Alliant Energy Corp. | LNT | 65.0\% | 64.67\% | 64.33\% | 64.00\% | 64.40\% | 64.79\% | 65.19\% | 65.59\% | 65.98\% | 66.38\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Ameren Corp. | AEE | 67.00\% | 68.00\% | 69.00\% | 7.00\% | 69.54\% | 69.08\% | 68.62\% | 68.16\% | 67.70\% | 67.24\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| American Electric Power | AEP | 58.00\% | 57.00\% | 56.00\% | 55.00\% | 56.88\% | 58.37\% | 60.05\% | 61.73\% | 6.41\% | 65.10\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Avista Corp. | AVA | 64.00\% | 65.33\% | 66.6\% | 68.00\% | 67.83\% | 67.65\% | 67.48\% | 67.30\% | 67.13\% | 66.95\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Black Hills Corp. | BKH | 73.00\% | 70.67\% | 68.33\% | 66.00\% | 66.11\% | 66.22\% | 66.33\% | 66.44\% | 66.56\% | 66.67\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78 |
| Center Point Energy | ${ }_{\text {cNP }}$ | 65.00\% | 65.33\% | ${ }^{65.67 \%}$ | 66.00\% | 66.11\% | ${ }^{66.22 \%}$ | 66.33\% | 66.44\% | 66.56\% | 66.67\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Cleco Corp. | CNL | 52.0\%\% | 54.33\% | 56.6\% | 59.00\% | 60.11\% | 61.22\% | 62.33\% | 6.44\% | 64.56\% | 65.6\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Consolidated Edison | ED | 65.0\% | 64.00\% | 63.00\% | 62.00\% | 62.68\% | 6.37\% | 64.05\% | 64.73\% | 65.41\% | 66.10\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Dominion Resources, Inc. | D | 67.0\%\% | 66.33\% | 65.6\% | 65.00\% | 65.25\% | 65.51\% | 65.76\% | 66.02\% | 66.27\% | 66.52\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| DTE Energy Co. | DTE | 63.00\% | 63.00\% | 63.00\% | 63.00\% | 63.54\% | 64.08\% | 64.62\% | 65.16\% | 65.70\% | 66.24\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Edison International | EIX | 46.0\%\% | 46.00\% | 46.00\% | 46.00\% | 48.97\% | 51.94\% | 54.91\% | 57.8\% | 60.84\% | 63.81\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Great Plains Energy Inc. | GXP | 59.00\% | 59.33\% | 59.67\% | 60.00\% | 60.97\% | 61.94\% | ${ }^{62.91 \%}$ | ${ }^{6.8 .87 \%}$ | 64.84\% | ${ }^{65.85 \%}$ | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Hawaiian Electric | HE | 73.00\% | 69.67\% | 66.33\% | 63.00\% | 63.54\% | 64.08\% | 64.62\% | 65.16\% | 65.70\% | 66.24\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| IDACORP, Inc. | IDA | 43.0\% | 47.00\% | 51.00\% | 55.00\% | 56.68\% | 58.3\% | 60.05\% | 61.73\% | 63.41\% | 65.10\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Integry | teg | 77.00\% | 74.00\% | 71.00\% | 68.00\% | 67.83\% | 67.6\% | 67.48\% | 67.30\% | 67.13\% | 66.95\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| OGE Energy | OGE | 43.0\% | 43.00\% | 43.00\% | 43.0\%\% | 46.40\% | 49.79\% | 53.19\% | 56.59\% | 5998\% | 63.38\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Pepco Holdings, Inc. | ром | 83.0\% | 78.33\% | 73.6\% | 69.00\% | 68.88\% | 68.3\% | 68.05\% | 67.73\% | 67.41\% | 67.10\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| PG\&E Corp | PCG | 61.00\% | 57.33\% | 53.6\% | 50.00\% | 52.40\% | 54.79\% | 57.19\% | 59.59\% | 61.98\% | 64.38\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Pinacle West Capital | PNW | 63.00\% | 64.00\% | 65.00\% | 66.00\% | 66.11\% | 66.22\% | 66.33\% | 66.44\% | 66.56\% | 66.67\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Portland General | POR | 54.0\%\% | 53.67\% | 53.33\% | 53.00\% | 54.97\% | 56.94\% | 58.91\% | 60.87\% | 62.84\% | 64.81\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| scana corp. | scg | 63.00\% | 61.67\% | 60.33\% | 59.0\% | 60.11\% | 61.22\% | 62.33\% | 63.44\% | 64.56\% | 65.67\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Sempra Energy | SRE | 45.0\% | 44.33\% | 43.6\% | 43.0\% | 46.40\% | 49.79\% | 53.19\% | 56.59\% | 5998\% | 63.38\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Southern Co. | so | 73.00\% | 71.67\% | 70.33\% | 69.00\% | 68.68\% | 68.37\% | 68.05\% | 67.73\% | 67.41\% | 67.10\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| TECO Enerry, Inc. | TE | 65.00\% | 64.67\% | 64.33\% | 64.00\% | 64.40\% | 64.79\% | 65.19\% | 65.59\% | 65.98\% | 66.38\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| ULL Holdings Corp. | UIL | 79.00\% | 76.67\% | 74.33\% | 72.00\% | 71.25\% | 70.51\% | 69.76\% | 69.02\% | 68.27\% | 67.52\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Vectren Corp. | vvc | 73.00\% | 72.00\% | 71.00\% | 70.00\% | 69.54\% | 69.08\% | 68.62\% | 68.16\% | 67.70\% | 67.24\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Westar Energy | wr | 7.00\% | 66.33\% | 62.67\% | 59.00\% | 60.11\% | 61.22\% | 62.33\% | 63.44\% | 64.56\% | 65.6\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Wisconsin Energy | WEC | 53.0\% | 55.33\% | 57.67\% | 60.00\% | 60.97\% | 61.94\% | 62.91\% | 63.87\% | 64.84\% | 65.81\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |
| Xcel Energy, Inc. | xEL | 58.00\% | 59.67\% | 61.33\% | 63.0\% | 63.54\% | 64.08\% | 64.62\% | 65.16\% | 6.70\% | 66.24\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% | 66.78\% |



THREE-STAGE DCF MODEL - 3 MONTH AVERAGE PRICE

| Investor Cash Flows |  | [61] | [62] | [63] | [64] | [65] | [66] | [67] | [68] | [69] | [70] | [71] | [72] | [73] | [74] | [75] | [76] | [77] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Initial |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Company | Ticker | Outflow | 3/16/12 | 9/16/12 | 9/16/13 | 9/16/14 | 9/16/15 | 9/16/16 | 9/16/17 | 9/16/18 | 9/16/19 | 9/16/20 | 9/16/21 | 9/16/22 | 9/16/23 | 9/16/24 | 9/16/25 | 9/16/26 |
| Allete | ALE | (\$41.41) | \$0.00 | \$1.65 | \$1.69 | \$1.73 | \$1.76 | \$1.87 | \$2.00 | \$2.13 | \$2.27 | \$2.43 | \$2.59 | \$2.77 | \$2.93 | \$3.10 | \$3.27 | \$95.77 |
| Alliant Energy Corp. | LNT | (\$43.08) | \$0.00 | \$2.00 | \$2.10 | \$2.21 | \$2.33 | \$2.48 | \$2.64 | \$2.80 | \$2.98 | \$3.17 | \$3.38 | \$3.59 | \$3.80 | \$4.02 | \$4.25 | \$100.46 |
| Ameren Corp. | AEE | (\$32.01) | \$0.00 | \$2.01 | \$2.12 | \$2.24 | \$2.36 | \$2.44 | \$2.53 | \$2.62 | \$2.73 | \$2.86 | \$2.99 | \$3.14 | \$3.32 | \$3.51 | \$3.72 | \$71.90 |
| American Electric Power | AEP | (\$39.84) | \$0.00 | \$1.64 | \$1.68 | \$1.72 | \$1.76 | \$1.89 | \$2.04 | \$2.20 | \$2.37 | \$2.57 | \$2.78 | \$3.01 | \$3.19 | \$3.37 | \$3.57 | \$94.40 |
| Avista Corp. | AVA | (\$25.38) | \$0.00 | \$1.15 | \$1.23 | \$1.31 | \$1.39 | \$1.45 | \$1.51 | \$1.58 | \$1.66 | \$1.74 | \$1.83 | \$1.93 | \$2.04 | \$2.16 | \$2.29 | \$57.77 |
| Black Hills Corp. | BKH | (\$33.81) | \$0.00 | \$1.37 | \$1.42 | \$1.46 | \$1.50 | \$1.60 | \$1.71 | \$1.82 | \$1.93 | \$2.05 | \$2.17 | \$2.30 | \$2.44 | \$2.58 | \$2.73 | \$77.84 |
| Center Point Energy | CNP | (\$19.15) | \$0.00 | \$0.76 | \$0.80 | \$0.84 | \$0.88 | \$0.92 | \$0.97 | \$1.02 | \$1.07 | \$1.13 | \$1.20 | \$1.27 | \$1.34 | \$1.42 | \$1.50 | \$43.73 |
| Cleco Corp. | CNL | (\$38.30) | \$0.00 | \$1.30 | \$1.42 | \$1.55 | \$1.68 | \$1.79 | \$1.91 | \$2.04 | \$2.19 | \$2.34 | \$2.52 | \$2.71 | \$2.86 | \$3.03 | \$3.20 | \$90.39 |
| Consolidated Edison | ED | (\$59.17) | \$0.00 | \$2.40 | \$2.44 | \$2.49 | \$2.53 | \$2.65 | \$2.78 | \$2.93 | \$3.10 | \$3.28 | \$3.50 | \$3.74 | \$3.95 | \$4.18 | \$4.42 | \$135.05 |
| Dominion Resources, Inc. | D | (\$50.96) | \$0.00 | \$1.94 | \$2.02 | \$2.10 | \$2.19 | \$2.31 | \$2.44 | \$2.57 | \$2.72 | \$2.89 | \$3.06 | \$3.25 | \$3.44 | \$3.64 | \$3.85 | \$116.84 |
| DTE Energy Co. | DTE | (\$54.08) | \$0.00 | \$2.56 | \$2.67 | \$2.79 | \$2.91 | \$3.06 | \$3.23 | \$3.41 | \$3.61 | \$3.84 | \$4.08 | \$4.35 | \$4.60 | \$4.87 | \$5.15 | \$124.94 |
| Edison International | EIX | (\$41.35) | \$0.00 | \$1.60 | \$1.64 | \$1.67 | \$1.70 | \$1.85 | \$2.01 | \$2.20 | \$2.40 | \$2.64 | \$2.91 | \$3.22 | \$3.41 | \$3.61 | \$3.81 | \$100.30 |
| Great Plains Energy Inc. | GXP | (\$20.81) | \$0.00 | \$1.01 | \$1.08 | \$1.14 | \$1.22 | \$1.31 | \$1.41 | \$1.51 | \$1.62 | \$1.74 | \$1.87 | \$2.01 | \$2.12 | \$2.25 | \$2.38 | \$49.79 |
| Hawaiian Electric | HE | (\$25.76) | \$0.00 | \$1.06 | \$1.11 | \$1.16 | \$1.21 | \$1.33 | \$1.47 | \$1.60 | \$1.74 | \$1.88 | \$2.01 | \$2.15 | \$2.27 | \$2.40 | \$2.54 | \$61.72 |
| IDACORP, Inc. | IDA | (\$41.53) | \$0.00 | \$1.38 | \$1.57 | \$1.78 | \$2.01 | \$2.16 | \$2.32 | \$2.50 | \$2.70 | \$2.93 | \$3.17 | \$3.44 | \$3.64 | \$3.85 | \$4.07 | \$100.85 |
| Integrys | TEG | (\$52.99) | \$0.00 | \$2.97 | \$3.12 | \$3.26 | \$3.41 | \$3.71 | \$4.02 | \$4.33 | \$4.64 | \$4.95 | \$5.25 | \$5.54 | \$5.86 | \$6.19 | \$6.55 | \$125.54 |
| OGE Energy | OGE | (\$53.98) | \$0.00 | \$1.46 | \$1.56 | \$1.67 | \$1.78 | \$2.05 | \$2.34 | \$2.66 | \$3.00 | \$3.38 | \$3.78 | \$4.21 | \$4.45 | \$4.71 | \$4.98 | \$136.53 |
| Pepco Holdings, Inc. | POM | (\$19.84) | \$0.00 | \$1.10 | \$1.07 | \$1.04 | \$1.01 | \$1.04 | \$1.08 | \$1.12 | \$1.16 | \$1.21 | \$1.27 | \$1.34 | \$1.42 | \$1.50 | \$1.58 | \$43.55 |
| PG\&E Corp | PCG | (\$41.51) | \$0.00 | \$1.84 | \$1.79 | \$1.73 | \$1.67 | \$1.81 | \$1.97 | \$2.14 | \$2.33 | \$2.55 | \$2.79 | \$3.06 | \$3.23 | \$3.42 | \$3.62 | \$98.45 |
| Pinnacle West Capital | PNW | (\$47.55) | \$0.00 | \$2.17 | \$2.32 | \$2.49 | \$2.67 | \$2.83 | \$2.99 | \$3.17 | \$3.35 | \$3.55 | \$3.76 | \$3.99 | \$4.22 | \$4.46 | \$4.72 | \$110.46 |
| Portland General | POR | (\$24.94) | \$0.00 | \$1.01 | \$1.06 | \$1.11 | \$1.17 | \$1.29 | \$1.41 | \$1.55 | \$1.69 | \$1.85 | \$2.02 | \$2.20 | \$2.33 | \$2.46 | \$2.60 | \$61.02 |
| SCANA Corp. | SCG | (\$44.77) | \$0.00 | \$1.94 | \$1.98 | \$2.01 | \$2.04 | \$2.16 | \$2.29 | \$2.44 | \$2.60 | \$2.79 | \$2.99 | \$3.21 | \$3.40 | \$3.59 | \$3.80 | \$103.82 |
| Sempra Energy | SRE | (\$57.02) | \$0.00 | \$2.04 | \$2.13 | \$2.23 | \$2.33 | \$2.67 | \$3.04 | \$3.45 | \$3.89 | \$4.36 | \$4.88 | \$5.44 | \$5.75 | \$6.08 | \$6.44 | \$146.42 |
| Southern Co. | SO | (\$44.93) | \$0.00 | \$1.98 | \$2.04 | \$2.11 | \$2.18 | \$2.28 | \$2.39 | \$2.51 | \$2.64 | \$2.77 | \$2.92 | \$3.07 | \$3.25 | \$3.44 | \$3.64 | \$101.65 |
| TECO Energy, Inc. | TE | (\$18.29) | \$0.00 | \$0.87 | \$0.92 | \$0.96 | \$1.01 | \$1.08 | \$1.14 | \$1.22 | \$1.29 | \$1.38 | \$1.46 | \$1.56 | \$1.65 | \$1.74 | \$1.84 | \$42.63 |
| UIL Holdings Corp. | UIL | (\$34.91) | \$0.00 | \$1.70 | \$1.72 | \$1.73 | \$1.75 | \$1.80 | \$1.86 | \$1.92 | \$1.99 | \$2.07 | \$2.16 | \$2.26 | \$2.39 | \$2.53 | \$2.68 | \$77.01 |
| Vectren Corp. | VVC | (\$29.31) | \$0.00 | \$1.32 | \$1.36 | \$1.41 | \$1.46 | \$1.52 | \$1.59 | \$1.66 | \$1.74 | \$1.82 | \$1.91 | \$2.01 | \$2.12 | \$2.24 | \$2.37 | \$65.95 |
| Westar Energy | WR | (\$28.20) | \$0.00 | \$1.42 | \$1.43 | \$1.43 | \$1.43 | \$1.54 | \$1.66 | \$1.80 | \$1.94 | \$2.09 | \$2.25 | \$2.41 | \$2.55 | \$2.70 | \$2.86 | \$66.49 |
| Wisconsin Energy | WEC | (\$34.45) | \$0.00 | \$1.16 | \$1.30 | \$1.45 | \$1.61 | \$1.75 | \$1.90 | \$2.05 | \$2.22 | \$2.39 | \$2.57 | \$2.76 | \$2.92 | \$3.09 | \$3.26 | \$83.00 |
| Xcel Energy, Inc. | XEL | (\$26.75) | \$0.00 | \$1.00 | \$1.08 | \$1.17 | \$1.26 | \$1.34 | \$1.42 | \$1.51 | \$1.60 | \$1.71 | \$1.82 | \$1.94 | \$2.05 | \$2.17 | \$2.29 | \$62.44 |


| [1] | ce: Bloomberg Professional; based on three-month historical average |
| :---: | :---: |
| [2] | Source: Exhibit No.__(RBH-1); Yahoo! Finance, Zacks \& Value Line; equals average earnings growth estimate |
| [3] | Source: EIA Annual Energy Outlook 2012, Bloomberg Professional, Bureau of Economic Analysis |
| [4] | Source: Value Line |
| [5] | Source: Value Line |
| [6] | Equals industry average historical payout ratio (1990-present) |
| [7] | Equals Column [1] + Column [61] |
| [8] | Equals result of Excel Solver function; goal: Column [7] equals \$0.00 |
| [9] | Equals (Column [18] / Column [12]) ^(1/(2016-2010)) - 1 |
| [10] | Equals (Column [23] / Column [18])^(1/(2021-2016))-1 |
| [11] | Equals (Column [28] / Column [23])^ (1/(2026-2021))-1 |
| [12] | Source: Value Line |
| [13] | Equals Column [12] x ( $1+$ Column [2]) |
| [14] | Equals Column [13] x ( $1+$ Column [2]) |
| [15] | Equals Column [14] x ( $1+$ Column [2]) |
| [16] | Equals Column [15] x ( $1+$ Column [2]) |
| [17] | Equals Column [16] x ( $1+$ Column [2]) |
| [18] | Equals Column [17] x ( $1+$ Column [2]) |
| [19] | Equals (1 + (Column [2] + (( Column [3] - Column [2]) / (2021-2016+1)) x (2017-2016)) ) ) x Column [18] |
| [20] | Equals (1 + (Column [2] + ((Column [3] - Column [2]) / (2021-2016+1)) x (2018-2016)) ) x ( Column [19] |
| [21] | Equals (1 + (Column [2] + (( Column [3] - Column [2]) / (2021-2016+1)) x (2019-2016)) )) $\times$ Column [20] |
| [22] | Equals (1 + (Column [2] + (( Column [3] - Column [2]) / (2021-2016+1)) x (2020-2016)) ) ) x Column [21] |
| [23] | Equals (1 + (Column [2] + ((Column [3] - Column [2]) / (2021-2016+1)) x (2021-2016)) ) $\times$ x Column [22] |
| [24] | Equals Column [23] x (1 + Column [3]) |
| [25] | Equals Column [24] x ( $1+$ Column [3]) |
| [26] | Equals Column [25] x ( $1+$ Column [3]) |
| [27] | Equals Column [26] x ( $1+$ Column [3]) |
| [28] | Equals Column [27] x ( $1+$ Column [3]) |
| [29] | Equals Column [4] |
| [30] | Equals Column [29] + ((Column [32] - Column [29]) / 3) |
| [31] | Equals Column [30] + ((Column [32] - Column [29]) / 3) |
| [32] | Equals Column [5] |
| [33] | Equals Column [32] + ((Column [39] - Column [32]) / 7) |
| [34] | Equals Column [33] + ((Column [39] - Column [32]) / 7) |
| [35] | Equals Column [34] + ((Column [39] - Column [32]) / 7) |
| [36] | Equals Column [35] + ((Column [39] - Column [32]) / 7) |
| [37] | Equals Column [36] + ((Column [39] - Column [32]) / 7) |
| [38] | Equals Column [37] + ((Column [39] - Column [32]) / 7) |
| [39] | Equals Column [6] |
| [40] | Equals Column [6] |
| [41] | Equals Column [6] |
| [42] | Equals Column [6] |
| [43] | Equals Column [6] |
| [44] | Equals Column [12] x Column [29] |
| [45] | Equals Column [13] x Column [30] |
| [46] | Equals Column [14] x Column [31] |
| [47] | Equals Column [15] x Column [32] |
| [48] | Equals Column [16] x Column [33] |
| [49] | Equals Column [17] x Column [34] |
| [50] | Equals Column [18] x Column [35] |
| [51] | Equals Column [19] x Column [36] |
| [52] | Equals Column [20] x Column [37] |
| [53] | Equals Column [21] x Column [38] |
| [54] | Equals Column [22] x Column [39] |
| [55] | Equals Column [23] x Column [40] |
| [56] | Equals Column [24] x Column [41] |
| [57] | Equals Column [25] x Column [42] |
| [58] | Equals Column [26] x Column [43] |
| [59] | Equals (Column [58] x ( $1+$ Column [3]) $/$ / (Column [8] - Column [3]) |
| [60] | Equals Column [59] / Column [28] |
| [61] | Equals negative net present value; discount rate equals Column [8], cash flows equal Column [62] through Column [77] |
| [62] | Equals \$0.00 |
| [63] | Equals Column [44] |
| [64] | Equals Column [45] |
| [65] | Equals Column [46] |
| [66] | Equals Column [47] |
| [67] | Equals Column [48] |
| [68] | Equals Column [49] |
| [69] | Equals Column [50] |
| [70] | Equals Column [51] |
| [71] | Equals Column [52] |
| [72] | Equals Column [53] |
| [73] | Equals Column [54] |
| [74] | Equals Column [55] |
| [75] | Equals Column [56] |
| [76] | Equals Column [57] |
| [77] | Equals Column [58] + Column [59] |

## 1! $9!4 \times$ 日

# Testimony of Robert B. Hevert 

Exhibit __ (RBH-3)
Proxy Group Historical Range of P/E Ratios
(RBH-3)
Page 1 of 1

PROXY GROUP HISTORICAL RANGE OF P/E RATIOS

| Company | Ticker | Gordon Growth Terminal P/E Ratio |  | Range Since 1990 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Two-Stage DCF | Three-Stage DCF | Low | High |
| Allete | ALE | 17.55 | 17.80 | 4.40 | 27.84 |
| Alliant Energy Corp. | LNT | 14.19 | 14.25 | 9.67 | 18.70 |
| Ameren Corp. | AEE | 11.28 | 11.55 | 10.02 | 20.20 |
| American Electric Power | AEP | 15.34 | 16.04 | 9.56 | 19.34 |
| Avista Corp. | AVA | 14.94 | 15.28 | 8.90 | 35.09 |
| Black Hills Corp. | BKH | 17.60 | 17.36 | 9.20 | 23.54 |
| Center Point Energy | CNP | 17.33 | 17.75 | 6.02 | 31.99 |
| Cleco Corp. | CNL | 16.58 | 17.16 | 7.82 | 21.06 |
| Consolidated Edison | ED | 17.70 | 18.62 | 8.64 | 17.38 |
| Dominion Resources, Inc. | D | 18.24 | 18.51 | 10.70 | 38.07 |
| DTE Energy Co. | DTE | 14.19 | 14.65 | 8.64 | 16.75 |
| Edison International | EIX | 14.39 | 15.94 | 5.95 | 16.86 |
| Great Plains Energy Inc. | GXP | 12.43 | 12.57 | 10.12 | 23.65 |
| Hawaiian Electric | HE | 15.65 | 14.67 | 10.03 | 21.43 |
| IDACORP, Inc. | IDA | 14.34 | 14.99 | 11.03 | 24.52 |
| Integrys | TEG | 12.14 | 11.43 | 10.75 | 25.89 |
| OGE Energy | OGE | 16.37 | 16.64 | 9.79 | 19.23 |
| Pepco Holdings, Inc. | POM | 16.02 | 16.69 | 9.20 | 20.06 |
| PG\&E Corp | PCG | 15.44 | 16.52 | 5.97 | 18.76 |
| Pinnacle West Capital | PNW | 14.08 | 14.12 | 8.53 | 18.58 |
| Portland General | POR | 13.87 | 14.14 | 11.25 | 23.90 |
| SCANA Corp. | SCG | 15.83 | 16.57 | 7.80 | 17.26 |
| Sempra Energy | SRE | 13.27 | 13.70 | 8.39 | 15.86 |
| Southern Co. | SO | 16.90 | 16.99 | 6.53 | 18.15 |
| TECO Energy, Inc. | TE | 13.86 | 13.94 | 7.30 | 19.43 |
| UIL Holdings Corp. | UIL | 17.06 | 17.49 | 8.77 | 23.42 |
| Vectren Corp. | VVC | 16.69 | 16.87 | 13.69 | 18.61 |
| Westar Energy | WR | 13.94 | 14.03 | 8.11 | 58.83 |
| Wisconsin Energy | WEC | 15.58 | 15.39 | 10.24 | 33.05 |
| Xcel Energy, Inc. | XEL | 16.25 | 16.53 | 7.97 | 18.61 |

Notes:

[^17]
## 

## Testimony of Robert B. Hevert

Exhibit __(RBH-4)

Retention Ratio Regression - Supporting Data \& Analysis

Exhibit __(RBH-4)

| Company | Ticker |  | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\overline{\text { Allete }}$ | ALE | Earning Per Share | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.35 | 2.48 | 2.77 | 3.08 | 2.82 | 1.89 | 2.19 | 2.65 |
|  |  | Dividends Per Share | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.30 | 1.25 | 1.45 | 1.64 | 1.72 | 1.76 | 1.76 | 1.78 |
|  |  | Payout Ratio | NA | NA | NA | NA | NA | NA | NA | NA | NA | 22.22\% | 50.40\% | 52.35\% | 53.25\% | 60.99\% | 93.12\% | 80.37\% | 67.17\% |
|  |  | Earnings Growth | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 83.70\% | 11.69\% | 11.19\% | -8.44\% | -32.98\% | 15.87\% | 21.00\% |
|  |  | 5 yr Avg Fwd EPS | NA | NA | nA | NA | NA | NA | NA | NA | NA | 13.03\% | -0.53\% | 1.33\% | NA | NA | NA | NA | NA |
| Alliant Energy | LNT | Eanning Per Share | NA | NA | NA | NA | NA | 2.47 | 2.42 | 1.18 | 1.57 | 1.85 | 2.21 | 2.06 | 2.69 | 2.54 | 1.89 | 2.75 | 2.75 |
|  |  | Dividends Per Share | NA | NA | NA | NA | NA | 2.00 | 2.00 | 2.00 | 1.00 | 1.02 | 1.05 | 1.15 | 1.27 | 1.40 | 1.50 | 1.58 | 1.70 |
|  |  | Payout Ratio | NA | NA | NA | NA | NA | 80.97\% | 82.64\% | 169.49\% | 63.69\% | 55.14\% | 47.51\% | 55.83\% | 47.21\% | 55.12\% | 79.37\% | 57.45\% | 61.82\% |
|  |  | Earnings Growth | NA | NA | NA | NA | NA | NA | -2.02\% | -51.24\% | 33.05\% | 17.83\% | 19.46\% | -6.79\% | 30.58\% | -5.58\% | -25.59\% | 45.50\% | 0.00\% |
|  |  | 5 yr Avg Fwd EPS | NA | NA | NA | NA | NA | 3.42\% | 2.46\% | 18.83\% | .11.10\% | 2.42\% | 7.63\% | 8.98\% | NA | NA | NA | NA | NA |
| Ameren Corp. | AEE | Eanning Per Share | 2.95 | 2.86 | 2.44 | 2.82 | 2.81 | 3.33 | 3.41 | 2.66 | 3.14 | 2.82 | 3.13 | 2.66 | 2.98 | 2.88 | 2.78 | 2.77 | 2.47 |
|  |  | Dividends Per Share | 2.46 | 2.51 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 1.54 | 1.54 | 1.56 |
|  |  | Payout Ratio | 83.39\% | 87.76\% | 104.10\% | 90.07\% | 90.39\% | 76.28\% | 74.49\% | 95.49\% | 80.89\% | 90.07\% | 81.15\% | 95.49\% | 85.23\% | 88.19\% | 55.40\% | 55.60\% | 63.16\% |
|  |  | Earnings Growth | NA | -3.05\% | -14.69\% | 15.57\% | -0.35\% | 18.51\% | 2.40\% | -21.99\% | 18.05\% | -10.19\% | 10.99\% | -15.02\% | 12.03\% | -3.36\% | -3.47\% | -0.36\% | -10.83\% |
|  |  | 5yr Avg Fwd EPS | 3.20\% | 4.29\% | 2.83\% | 3.32\% | 1.35\% | -0.15\% | -3.63\% | 3.17\% | -1.11\% | 0.24\% | -2.03\% | -1.20\% | NA | NA | NA | NA | NA |
| American Elec. Power | AEP | Earning Per Share | NA | NA | NA | NA | NA | 1.04 | 3.27 | 2.86 | 2.53 | 2.61 | 2.64 | 2.86 | 2.86 | 2.99 | 2.97 | 2.60 | 3.13 |
|  |  | Dividends Per Share | NA | NA | NA | NA | NA | 2.40 | 2.40 | 2.40 | 1.65 | 1.40 | 1.42 | 1.50 | 1.58 | 1.64 | 1.64 | 1.71 | 1.85 |
|  |  | Payout Ratio | NA | NA | NA | NA | NA | 230.77\% | 73.39\% | 83.92\% | 65.22\% | 53.64\% | 53.79\% | 52.45\% | 55.24\% | 54.85\% | 55.22\% | 65.77\% | 59.11\% |
|  |  | Earnings Growth | NA | NA | NA | NA | NA | NA | 214.42\% | -12.54\% | -11.54\% | 3.16\% | 1.15\% | 8.33\% | 0.00\% | 4.55\% | -0.67\% | -12.46\% | 20.38\% |
|  |  | 5 yr Avg Fwd EPS | NA | NA | NA | NA | NA | 38.93\% | -2.29\% | 0.22\% | 3.44\% | 2.67\% | -0.05\% | 2.36\% | NA | NA | NA | NA | NA |
| Avista Corp. | AVA | Earning Per Share | 1.41 | 1.35 | 1.96 | 1.28 | 0.12 | 1.76 | 1.20 | 0.67 | 1.02 | 0.73 | 0.92 | 1.47 | 0.72 | 1.36 | 1.58 | 1.65 | NA |
|  |  | Dividends Per Share | 1.24 | 1.24 | 1.24 | 1.05 | 0.48 | 0.48 | 0.48 | 0.48 | 0.49 | 0.52 | 0.55 | 0.57 | 0.60 | 0.69 | 0.81 | 1.00 | 1.10 |
|  |  | Payout Ratio | 87.94\% | 91.85\% | 63.27\% | 82.03\% | 400.00\% | 27.27\% | 40.00\% | 71.64\% | 48.04\% | 71.23\% | 59.78\% | 38.78\% | 83.33\% | 50.74\% | 51.27\% | 60.61\% | NA |
|  |  | Earrings Growth | NA | -4.26\% | 45.19\% | -34.69\% | -90.63\% | 1366.67\% | -31.82\% | -44.17\% | 52.24\% | -28.43\% | 26.03\% | 59.78\% | -51.02\% | 88.89\% | 16.18\% | 4.43\% | NA |
|  |  | 5 yr Avg Fwd EPS | 256.46\% | 250.94\% | 233.07\% | 250.46\% | 262.90\% | -5.23\% | 13.09\% | 11.72\% | 19.05\% | 27.97\% | 23.65\% | NA | NA | NA | NA | NA | NA |
| Black Hilis Corp. | BKH | Earning Per Share | 1.19 | 1.40 | 1.49 | 1.60 | 1.70 | 2.37 | 3.42 | 2.33 | 1.84 | 1.74 | 2.11 | 2.21 | 2.68 | 0.18 | 2.32 | 1.66 | NA |
|  |  | Dividends Per Share | 0.89 | 0.92 | 0.95 | 1.00 | 1.04 | 1.08 | 1.12 | 1.16 | 1.20 | 1.24 | 1.28 | 1.32 | 1.37 | 1.40 | 1.42 | 1.44 | 1.46 |
|  |  | Payout Ratio | 74.79\% | 65.71\% | 63.76\% | 62.50\% | 61.18\% | 45.57\% | 32.75\% | 49.79\% | 65.22\% | 71.26\% | 60.66\% | 59.73\% | 51.12\% | 777.78\% | 61.21\% | 86.75\% | NA |
|  |  | Earnings Growth | NA | 17.65\% | 6.43\% | 7.38\% | 6.25\% | 39.41\% | 44.30\% | -31.87\% | -21.03\% | -5.43\% | 21.26\% | 4.74\% | 21.27\% | -93.28\% | 1188.89\% | -28.45\% | NA |
|  |  | 5 yr Avg Fwd EPS | 15.42\% | 20.76\% | 13.10\% | 7.41\% | 5.08\% | 1.45\% | -6.47\% | 4.16\% | -10.29\% | 228.58\% | 218.63\% | NA | NA | NA | NA | NA | NA |
| Center Point Energy | CNP | Earning Per Share | NA | NA | NA | NA | NA | NA | 1.54 | 1.29 | 1.37 | 0.61 | 0.67 | 1.33 | 1.17 | 1.30 | 1.01 | 1.07 | 1.27 |
|  |  | Dividends Per Share | NA | NA | NA | NA | NA | NA | 1.50 | 1.07 | 0.40 | 0.40 | 0.40 | 0.60 | 0.68 | 0.73 | 0.76 | 0.78 | 0.79 |
|  |  | Payout Ratio | NA | NA | NA | NA | NA | NA | 97.40\% | 82.95\% | 29.20\% | 65.57\% | 59.70\% | 45.11\% | 58.12\% | 56.15\% | 75.25\% | 72.90\% | 62.20\% |
|  |  | Earnings Growth | NA | NA | NA | NA | NA | NA | NA | -16.23\% | 6.20\% | -55.47\% | 9.84\% | 98.51\% | -12.03\% | 11.11\% | -22.31\% | 5.94\% | 18.69\% |
|  |  | 5 yr Avg Fwd EPS | NA | nA | NA | Na | NA | NA | 8.57\% | 9.41\% | 10.39\% | 17.02\% | 16.24\% | 0.28\% | NA | NA | NA | NA | NA |
| Cleco Corporation | CNL | Earning Per Share | 1.04 | 1.12 | 1.09 | 1.12 | 1.19 | 1.46 | 1.51 | 1.52 | 1.26 | 1.32 | 1.42 | 1.36 | 1.32 | 1.70 | 1.76 | 2.29 | 2.59 |
|  |  | Dividends Per Share | 0.75 | 0.77 | 0.79 | 0.81 | 0.83 | 0.85 | 0.87 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.98 | 1.12 |
|  |  | Payout Ratio | 72.12\% | 68.75\% | 72.48\% | 72.32\% | 69.75\% | 58.22\% | 57.62\% | 59.21\% | 71.43\% | 68.18\% | 63.38\% | 66.18\% | 68.18\% | 52.94\% | 51.14\% | 42.79\% | 43.24\% |
|  |  | Earnings Growth | NA | 7.69\% | -2.68\% | 2.75\% | 6.25\% | 22.69\% | 3.42\% | 0.66\% | -17.11\% | 4.76\% | 7.58\% | -4.23\% | -2.94\% | 28.79\% | 3.53\% | 30.11\% | 13.10\% |
|  |  | 5 5r Avg Fwd EPS | 7.34\% | 6.49\% | 7.16\% | 3.18\% | 2.89\% | -0.14\% | -1.67\% | -2.39\% | 6.79\% | 6.55\% | 11.05\% | 14.52\% | NA | NA | NA | NA | NA |
| Consolidated Edison | ED | Earning Per Share | 2.93 | 2.93 | 2.95 | 3.04 | 3.13 | 2.74 | 3.21 | 3.13 | 2.83 | 2.32 | 2.99 | 2.95 | 3.48 | 3.36 | 3.14 | 3.47 | 3.57 |
|  |  | Dividends Per Share | 2.04 | 2.08 | 2.10 | 2.12 | 2.14 | 2.18 | 2.20 | 2.22 | 2.24 | 2.26 | 2.28 | 2.30 | 2.32 | 2.34 | 2.36 | 2.38 | 2.40 |
|  |  | Payout Ratio | 69.62\% | 70.99\% | 71.19\% | 69.74\% | 68.37\% | 79.56\% | 68.54\% | 70.93\% | 79.15\% | 97.41\% | 76.25\% | 77.97\% | 66.67\% | 69.64\% | 75.16\% | 68.59\% | 67.23\% |
|  |  | Earnings Growth | NA | 0.00\% | 0.68\% | 3.05\% | 2.96\% | -12.46\% | 17.15\% | -2.49\% | -9.58\% | -18.02\% | 28.88\% | -1.34\% | 17.97\% | -3.45\% | -6.55\% | 10.51\% | 2.88\% |
|  |  | 5 yr Avg Fwd EPS | -1.15\% | 2.28\% | 1.64\% | -0.88\% | -5.08\% | 3.19\% | -0.51\% | 3.58\% | 4.81\% | 7.10\% | 3.43\% | 4.27\% | NA | NA | NA | NA | NA |
| Dominion | D | Earning Per Share | 1.23 | 1.33 | 1.50 | 0.86 | 1.50 | 1.25 | 1.49 | 2.41 | 1.96 | 2.13 | 1.50 | 2.40 | 2.13 | 3.04 | 2.64 | 2.89 | 2.76 |
|  |  | Dividends Per Share | 1.29 | 1.29 | 1.29 | 1.29 | 1.29 | 1.29 | 1.29 | 1.29 | 1.29 | 1.30 | 1.34 | 1.38 | 1.46 | 1.58 | 1.75 | 1.83 | 1.97 |
|  |  | Payout Ratio | 104.88\% | 96.99\% | 86.00\% | 150.00\% | 86.00\% | 103.20\% | 86.58\% | 53.53\% | 65.82\% | 61.03\% | 89.33\% | 57.50\% | 68.54\% | 51.97\% | 66.29\% | 63.32\% | 71.38\% |
|  |  | Earnings Growth |  | 8.13\% | 12.78\% | -42.67\% | 74.42\% | $-16.67 \%$ | 19.20\% | 61.74\% | -18.67\% | 8.67\% | -29.58\% | 60.00\% | -11.25\% | 42.72\% | -13.16\% | 9.47\% | -4.50\% |
|  |  | 5 yr Avg Fwd EPS | 7.20\% | 9.41\% | 19.21\% | 24.00\% | 10.86\% | 8.27\% | 16.43\% | 1.83\% | 14.11\% | 9.75\% | 17.56\% | 4.66\% | NA | NA | NA | NA | NA |


| Company | Ticker |  | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DTE Energy Co. | DTE | Earning Per Share | 3.02 | 2.80 | 2.88 | 3.05 | 3.33 | 3.27 | 2.15 | 3.83 | 2.85 | 2.55 | 3.27 | 2.45 | 2.66 | 2.73 | 3.24 | 3.74 | 3.67 |
|  |  | Dividends Per Share | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.08 | 2.12 | 2.12 | 2.12 | 2.18 | 2.32 |
|  |  | Payout Ratio | 68.21\% | 73.57\% | 71.53\% | 67.54\% | 61.86\% | 63.00\% | 95.81\% | 53.79\% | 72.28\% | 80.78\% | 63.00\% | 84.90\% | 79.70\% | 77.66\% | 65.43\% | 58.29\% | 63.22\% |
|  |  | Earnings Growth | NA | -7.28\% | 2.86\% | 5.90\% | 9.18\% | -1.80\% | -34.25\% | 78.14\% | -25.59\% | -10.53\% | 28.24\% | -25.08\% | 8.57\% | 2.63\% | 18.68\% | 15.43\% | -1.87\% |
|  |  | 5 yr Avg Fwd EPS | 1.77\% | -3.62\% | 11.43\% | 5.14\% | 1.19\% | 7.20\% | 9.04\% | -4.88\% | 0.77\% | 6.61\% | 4.05\% | 8.69\% | NA | NA | NA | NA | NA |
| Edison International | EIX | Earning Per Share | 1.66 | 1.64 | 1.75 | 1.86 | 2.03 | NA | 1.30 | 1.82 | 2.38 | 0.69 | 3.34 | 3.28 | 3.32 | 3.68 | 3.24 | 3.35 | NA |
|  |  | Dividends Per Share | 1.00 | 1.00 | 1.00 | 1.04 | 1.08 | 0.83 | NA | NA | NA | 0.80 | 1.02 | 1.10 | 1.18 | 1.23 | 1.25 | 1.27 | 1.29 |
|  |  | Payout Ratio | 60.24\% | 60.98\% | 57.14\% | 55.91\% | 53.20\% | NA | NA | NA | NA | 115.94\% | 30.54\% | 33.54\% | 35.54\% | 33.42\% | 38.58\% | 37.91\% | NA |
|  |  | Earnings Growth | NA | -1.20\% | 6.71\% | 6.29\% | 9.14\% | NA | NA | 40.00\% | 30.77\% | -71.01\% | 384.06\% | -1.80\% | 1.22\% | 10.84\% | -11.96\% | 3.40\% | NA |
|  |  | 5 yr Avg Fwd EPS | NA | NA | NA | NA | NA | NA | 76.40\% | 68.65\% | 64.66\% | 76.47\% | 0.34\% | NA | NA | NA | NA | NA | NA |
| Great Plains Energy Inc. | GXP | Earning Per Share | 1.92 | 1.69 | 1.69 | 1.89 | 1.26 | 2.05 | 1.59 | 2.04 | 2.27 | 2.46 | 2.18 | 1.62 | 1.86 | 1.16 | 1.03 | 1.53 | 1.25 |
|  |  | Dividends Per Share | 1.54 | 1.59 | 1.62 | 1.64 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 0.83 | 0.83 | 0.84 |
|  |  | Payout Ratio | 80.21\% | 94.08\% | 95.86\% | 86.77\% | 131.75\% | 80.98\% | 104.40\% | 81.37\% | 73.13\% | 67.48\% | 76.15\% | 102.47\% | 89.25\% | 143.10\% | 80.58\% | 54.25\% | 67.20\% |
|  |  | Earnings Growth | NA | -11.98\% | 0.00\% | 11.83\% | -33.33\% | 62.70\% | -22.44\% | 28.30\% | 11.27\% | 8.37\% | -11.38\% | -25.69\% | 14.81\% | -37.63\% | -11.21\% | 48.54\% | -18.30\% |
|  |  | 5 yr Avg Fwd EPS | 5.84\% | 3.75\% | 9.41\% | 9.30\% | 17.64\% | 2.83\% | 2.18\% | -0.52\% | -10.30\% | -14.22\% | -2.23\% | -0.76\% | NA | NA | NA | NA | NA |
| Hawaiian Electric | HE | Earning Per Share | 1.33 | 1.30 | 1.38 | 1.48 | 1.45 | 1.27 | 1.60 | 1.62 | 1.58 | 1.36 | 1.46 | 1.33 | 1.11 | 1.07 | 0.91 | 1.21 | NA |
|  |  | Dividends Per Share | 1.19 | 1.21 | 1.22 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
|  |  | Payout Ratio | 89.47\% | 93.08\% | 88.41\% | 83.78\% | 85.52\% | 97.64\% | 77.50\% | 76.54\% | 78.48\% | 91.18\% | 84.93\% | 93.23\% | 111.71\% | 115.89\% | 136.26\% | 102.48\% | NA |
|  |  | Earnings Growth | NA | -2.26\% | 6.15\% | 7.25\% | -2.03\% | -12.41\% | 25.98\% | 1.25\% | -2.47\% | -13.92\% | 7.35\% | -8.90\% | -16.54\% | -3.60\% | -14.95\% | 32.97\% | NA |
|  |  | 5 yr Avg Fwd EPS | -0.66\% | 4.99\% | 4.01\% | 2.06\% | -0.31\% | 3.64\% | -3.34\% | -6.90\% | -7.12\% | -7.33\% | -2.21\% | NA | NA | NA | NA | NA | NA |
| IDACORP, Inc. | IDA | Earning Per Share | 2.10 | 2.21 | 2.32 | 2.37 | 2.43 | 3.50 | 3.35 | 1.63 | 0.96 | 1.90 | 1.75 | 2.35 | 1.86 | 2.18 | 2.64 | 2.95 | NA |
|  |  | Dividends Per Share | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.70 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 |
|  |  | Payout Ratio | 88.57\% | 84.16\% | 80.17\% | 78.48\% | 76.54\% | 53.14\% | 55.52\% | 114.11\% | 177.08\% | 63.16\% | 68.57\% | 51.06\% | 64.52\% | 55.05\% | 45.45\% | 40.68\% | NA |
|  |  | Earnings Growth | NA | 5.24\% | 4.98\% | 2.16\% | 2.53\% | 44.03\% | -4.29\% | -51.34\% | -41.10\% | 97.92\% | -7.89\% | 34.29\% | -20.85\% | 17.20\% | 21.10\% | 11.74\% | NA |
|  |  | 5 yr Avg Fwd EPS | 11.79\% | 9.88\% | -1.38\% | -10.03\% | 9.04\% | -1.34\% | 6.37\% | 12.47\% | 24.13\% | 8.77\% | 12.70\% | NA | NA | NA | NA | NA | NA |
| Integrys | TEG | Earning Per Share | NA | NA | NA | NA | NA | NA | 2.74 | 2.74 | 2.76 | 4.07 | 4.09 | 3.51 | 2.48 | 1.58 | 2.28 | 3.24 | 2.88 |
|  |  | Dividends Per Share | NA | NA | NA | NA | NA | NA | 2.08 | 2.12 | 2.16 | 2.20 | 2.24 | 2.28 | 2.56 | 2.68 | 2.72 | 2.72 | 2.72 |
|  |  | Payout Ratio | NA | NA | NA | NA | NA | NA | 75.91\% | 77.37\% | 78.26\% | 54.05\% | 54.77\% | 64.96\% | 103.23\% | 169.62\% | 119.30\% | 83.95\% | 94.44\% |
|  |  | Earnings Growth | NA | NA | NA | NA | NA | NA | NA | 0.00\% | 0.73\% | 47.46\% | 0.49\% | -14.18\% | -29.34\% | -36.29\% | 44.30\% | 42.11\% | -11.11\% |
|  |  | 5 yr Avg Fwd EPS | NA | NA | NA | NA | NA | NA | 6.90\% | 1.03\% | -6.37\% | -7.00\% | 1.32\% | 1.93\% | NA | NA | NA | NA | NA |
| OGE Energy | OGE | Earning Per Share | 1.52 | 1.62 | 1.61 | 2.04 | 1.94 | 1.89 | 1.29 | 1.43 | 1.73 | 1.78 | 1.83 | 2.45 | 2.64 | 2.49 | 2.66 | 2.99 | 3.45 |
|  |  | Dividends Per Share | 1.33 | 1.33 | 1.33 | 1.33 | 1.33 | 1.33 | 1.33 | 1.33 | 1.33 | 1.33 | 1.33 | 1.34 | 1.37 | 1.40 | 1.43 | 1.46 | 1.52 |
|  |  | Payout Ratio | 87.50\% | 82.10\% | 82.61\% | 65.20\% | 68.56\% | 70.37\% | 103.10\% | 93.01\% | 76.88\% | 74.72\% | 72.68\% | 54.69\% | 51.89\% | 56.22\% | 53.76\% | 48.83\% | 44.06\% |
|  |  | Earnings Growth | NA | 6.58\% | -0.62\% | 26.71\% | -4.90\% | -2.58\% | -31.75\% | 10.85\% | 20.98\% | 2.89\% | 2.81\% | 33.88\% | 7.76\% | -5.68\% | 6.83\% | 12.41\% | 15.38\% |
|  |  | 5 yr Avg Fwd EPS | 5.04\% | -2.63\% | -0.33\% | -1.48\% | 0.08\% | 1.16\% | 14.28\% | 13.66\% | 8.33\% | 9.12\% | 11.04\% | 7.34\% | NA | NA | NA | NA | NA |
| Pepco Holdings, Inc. | POM | Earning Per Share | NA | NA | NA | NA | NA | NA | 2.16 | 1.79 | 1.35 | 1.46 | 1.49 | 1.33 | 1.53 | 1.93 | 1.06 | 1.24 | NA |
|  |  | Dividends Per Share | NA | NA | NA | NA | NA | NA | NA | 0.42 | 1.00 | 1.00 | 1.00 | 1.04 | 1.04 | 1.08 | 1.08 | 1.08 | 1.08 |
|  |  | Payout Ratio | NA | NA | NA | NA | NA | NA | NA | 23.46\% | 74.07\% | 68.49\% | 67.11\% | 78.20\% | 67.97\% | 55.96\% | 101.89\% | 87.10\% | NA |
|  |  | Earnings Growth | NA | NA | NA | NA | NA | NA | NA | -17.13\% | -24.58\% | 8.15\% | 2.05\% | -10.74\% | 15.04\% | 26.14\% | -45.08\% | 16.98\% | NA |
|  |  | 5 yr Avg Fwd EPS | NA | NA | NA | NA | NA | NA | -8.45\% | -2.02\% | 8.13\% | -2.52\% | 0.47\% | NA | NA | NA | NA | NA | NA |
| PG\&E Corp. | PCG | Earning Per Share | 2.95 | 2.16 | 1.57 | 1.88 | 2.24 | NA | 3.02 | NA | 2.05 | 2.12 | 2.35 | 2.76 | 2.78 | 3.22 | 3.03 | 2.82 | NA |
|  |  | Dividends Per Share | 1.96 | 1.77 | 1.20 | 1.20 | 1.20 | 1.20 | NA | NA | NA | NA | 1.23 | 1.32 | 1.44 | 1.56 | 1.68 | 1.82 | 1.82 |
|  |  | Payout Ratio | 66.44\% | 81.94\% | 76.43\% | 63.83\% | 53.57\% | NA | NA | NA | NA | NA | 52.34\% | 47.83\% | 51.80\% | 48.45\% | 55.45\% | 64.54\% | NA |
|  |  | Earnings Growth | NA | -26.78\% | -27.31\% | 19.75\% | 19.15\% | NA | NA | NA | NA | 3.41\% | 10.85\% | 17.45\% | 0.72\% | 15.83\% | -5.90\% | -6.93\% | NA |
|  |  | 5 yr Avg Fwd EPS | NA | NA | NA | NA | NA | NA | NA | NA | 9.65\% | 7.79\% | 4.23\% | NA | NA | NA | NA | NA | NA |
| Pinnacle West Capital | PNW | Earning Per Share | 2.22 | 2.47 | 2.76 | 2.85 | 3.18 | 3.35 | 3.68 | 2.53 | 2.52 | 2.58 | 2.24 | 3.17 | 2.96 | 2.12 | 2.26 | 3.08 | NA |
|  |  | Dividends Per Share | 0.93 | 1.03 | 1.13 | 1.23 | 1.33 | 1.43 | 1.53 | 1.63 | 1.73 | 1.83 | 1.93 | 2.03 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
|  |  | Payout Ratio | 41.89\% | 41.70\% | 40.94\% | 43.16\% | 41.82\% | 42.69\% | 41.58\% | 64.43\% | 68.65\% | 70.93\% | 86.16\% | 64.04\% | 70.95\% | 99.06\% | 92.92\% | 68.18\% | NA |
|  |  | Earnings Growth | NA | 11.26\% | 11.74\% | 3.26\% | 11.58\% | 5.35\% | 9.85\% | -31.25\% | -0.40\% | 2.38\% | -13.18\% | 41.52\% | -6.62\% | -28.38\% | 6.60\% | 36.28\% | NA |
|  |  | 5 yr Avg Fwd EPS | 8.64\% | 8.36\% | -0.24\% | -0.97\% | -2.81\% | -6.52\% | -0.18\% | 4.74\% | -0.86\% | -0.01\% | 9.88\% | NA | NA | NA | NA | NA | NA |
| Portland General | POR | Earning Per Share | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.02 | 1.14 | 2.33 | 1.39 | 1.31 | 1.66 | NA |
|  |  | Dividends Per Share | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.68 | 0.93 | 0.97 | 1.01 | 1.04 | 1.06 |
|  |  | Payout Ratio | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 59.65\% | 39.91\% | 69.78\% | 77.10\% | 62.65\% | NA |
|  |  | Earnings Growth | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 11.76\% | 104.39\% | -40.34\% | -5.76\% | 26.72\% | NA |
|  |  | 5 yr Avg Fwd EPS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 19.35\% | NA | NA | NA | NA | NA | NA |


RETENTION RATIO REGRESSION
SUPPORTING DATA

| Company | Ticker |  | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SCANA Corp. | SCG | Earning Per Share | 1.86 | 2.05 | 1.90 | 2.12 | 1.44 | 2.12 | 2.15 | 2.38 | 2.50 | 2.67 | 2.78 | 2.59 | 2.74 | 2.95 | 2.85 | 2.98 | 2.97 |
|  |  | Dividends Per Share | 1.44 | 1.47 | 1.51 | 1.54 | 1.32 | 1.15 | 1.20 | 1.30 | 1.38 | 1.46 | 1.56 | 1.68 | 1.76 | 1.84 | 1.88 | 1.90 | 1.94 |
|  |  | Payout Ratio | 77.42\% | 71.71\% | 79.47\% | 72.64\% | 91.67\% | 54.25\% | 55.81\% | 54.62\% | 55.20\% | 54.68\% | 56.12\% | 64.86\% | 64.23\% | 62.37\% | 65.96\% | 63.76\% | 65.32\% |
|  |  | Earrings Growth | NA | 10.22\% | -7.32\% | 11.58\% | -32.08\% | 47.22\% | 1.42\% | 10.70\% | 5.04\% | 6.80\% | 4.12\% | -6.83\% | 5.79\% | 7.66\% | -3.39\% | 4.56\% | -0.34\% |
|  |  | 5 5r Avg Fwd EPS | 5.92\% | 4.16\% | 7.77\% | 6.46\% | 14.24\% | 5.61\% | 3.97\% | 2.98\% | 3.51\% | 1.47\% | 1.56\% | 2.86\% | NA | NA | NA | NA | NA |
| Sempra Energy | SRE | Earning Per Share | 1.94 | 1.98 | 2.20 | 1.24 | 1.66 | 2.06 | 2.55 | 2.79 | 3.01 | 3.93 | 3.52 | 4.23 | 4.26 | 4.43 | 4.78 | 4.02 | NA |
|  |  | Dividends Per Share | 1.56 | 1.56 | 1.56 | 1.56 | 1.56 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.16 | 1.20 | 1.24 | 1.37 | 1.56 | 1.56 | 1.92 |
|  |  | Payout Ratio | 80.41\% | 78.79\% | 70.91\% | 125.81\% | 93.98\% | 48.54\% | 39.22\% | 35.84\% | 33.22\% | 25.45\% | 32.95\% | 28.37\% | 29.11\% | 30.93\% | 32.64\% | 38.81\% | NA |
|  |  | Earrings Growth | NA | 2.06\% | 11.11\% | -43.64\% | 33.87\% | 24.10\% | 23.79\% | 9.41\% | 7.89\% | 30.56\% | -10.43\% | 20.17\% | 0.71\% | 3.99\% | 7.90\% | -15.90\% | NA |
|  |  | 5 yr Avg Fwd EPS | 5.50\% | 9.85\% | 9.51\% | 19.81\% | 19.15\% | 12.24\% | 11.52\% | 9.78\% | 9.00\% | 4.47\% | 3.37\% | NA | NA | NA | NA | NA |  |
| Southern $\mathrm{Co}^{\text {o }}$ | so | Earning Per Share | 1.66 | 1.68 | 1.58 | 1.73 | 1.83 | 2.01 | 1.61 | 1.85 | 1.97 | 2.06 | 2.13 | 2.10 | 2.28 | 2.25 | 2.32 | 2.37 | 2.57 |
|  |  | Dividends Per Share | 1.22 | 1.26 | 1.30 | 1.34 | 1.34 | 1.34 | 1.34 | 1.36 | 1.39 | 1.42 | 1.48 | 1.54 | 1.60 | 1.66 | 1.73 | 1.80 | 1.87 |
|  |  | Payout Ratio | 73.49\% | 75.00\% | 82.28\% | 77.46\% | 73.22\% | 66.67\% | 83.23\% | 73.51\% | 70.56\% | 68.93\% | 69.48\% | 73.33\% | 70.18\% | 73.78\% | 74.57\% | 75.95\% | 72.76\% |
|  |  | Earnings Growth | NA | 1.20\% | -5.95\% | 9.49\% | 5.78\% | 9.84\% | -19.90\% | 14.91\% | 6.49\% | 4.57\% | 3.40\% | -1.41\% | 8.57\% | -1.32\% | 3.11\% | 2.16\% | 8.44\% |
|  |  | 5 yr Avg Fwd EPS | 4.07\% | -0.15\% | 4.02\% | 3.42\% | 3.18\% | 1.89\% | 5.59\% | 4.32\% | 2.76\% | 2.47\% | 2.22\% | 4.19\% | NA | NA | NA | NA | NA |
| Teco Energy, Inc. | TE | Earning Per Share | 1.60 | 1.71 | 1.61 | 1.52 | 1.53 | 1.97 | 2.24 | 1.95 | NA | 0.71 | 1.00 | 1.17 | 1.27 | 0.77 | 1.00 | 1.13 | 1.27 |
|  |  | Dividends Per Share | 1.05 | 1.11 | 1.17 | 1.23 | 1.29 | 1.33 | 1.37 | 1.41 | 0.93 | 0.76 | 0.76 | 0.76 | 0.78 | 0.80 | 0.80 | 0.82 | 0.85 |
|  |  | Payout Ratio | 65.63\% | 64.91\% | 72.67\% | 80.92\% | 84.31\% | 67.51\% | 61.16\% | 72.31\% | NA | 107.04\% | 76.00\% | 64.96\% | 61.42\% | 103.90\% | 80.00\% | 72.57\% | 66.93\% |
|  |  | Earrings Growth | NA | 6.87\% | -5.85\% | -5.59\% | 0.66\% | 28.76\% | 13.71\% | -12.95\% | NA | NA | 40.85\% | 17.00\% | 8.55\% | -39.37\% | 29.87\% | 13.00\% | 12.39\% |
|  |  | 5 yr Avg Fwd EPS | 4.97\% | 6.34\% | 4.92\% | NA | NA | NA | NA | NA | NA | 1138\% | 5.81\% | 4.89\% | NA | NA | NA | NA | NA |
| Üil Holdings Corp. | Uil | Earning Per Share | 2.18 | 1.90 | 1.96 | 1.80 | 2.23 | 2.56 | 2.53 | 1.85 | 1.24 | 1.54 | 1.30 | 1.86 | 1.87 | 1.89 | 1.94 | 1.99 | NA |
|  |  | Dividends Per Share | 1.69 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 |
|  |  | Payout Ratio | 77.52\% | 91.05\% | 88.27\% | 96.11\% | 77.58\% | 67.58\% | 68.38\% | 93.51\% | 139.52\% | 112.34\% | 133.08\% | 93.01\% | 92.51\% | 91.53\% | 89.18\% | 86.93\% | NA |
|  |  | Earrings Growth | NA | -12.84\% | 3.16\% | -8.16\% | 23.89\% | 14.80\% | -1.17\% | -26.88\% | -32.97\% | 24.19\% | -15.58\% | 43.08\% | 0.54\% | 1.07\% | 2.65\% | 2.58\% | NA |
|  |  | 5 yr Avg Fwd EPS | 4.17\% | 6.50\% | 0.49\% | -4.47\% | -4.41\% | -10.48\% | -1.63\% | 3.85\% | 10.66\% | 6.35\% | 9.98\% | NA | NA | NA | NA | NA | NA |
| Vectren Corp. | vVC | Earning Per Share | NA | NA | NA | NA | NA | 1.17 | 1.08 | 1.68 | 1.56 | 1.42 | 1.81 | 1.44 | 1.83 | 1.63 | 1.79 | 1.64 | 1.73 |
|  |  | Dividends Per Share | NA | NA | NA | nA | NA | 0.98 | 1.03 | 1.07 | 1.11 | 1.15 | 1.19 | 1.23 | 1.27 | 1.31 | 1.35 | 1.37 | 1.39 |
|  |  | Payout Ratio | NA | NA | NA | NA | NA | 83.76\% | 95.37\% | 63.69\% | 71.15\% | 80.99\% | 65.75\% | 85.42\% | 69.40\% | 80.37\% | 75.42\% | 83.54\% | 80.35\% |
|  |  | Earnings Growth | NA | NA | NA | NA | NA | NA | -7.69\% | 55.56\% | -7.14\% | -8.97\% | 27.46\% | -20.44\% | 27.08\% | -10.93\% | 9.82\% | -8.38\% | 5.49\% |
|  |  | 5 yr Avg Fwd EPS | NA | NA | NA | NA | NA | 11.84\% | 9.29\% | 3.60\% | 2.84\% | 6.60\% | -0.57\% | 4.62\% | NA | NA | NA | NA | NA |
| Westar Energy | WR | Earning Per Share | 2.71 | 2.60 | NA | 2.13 | 1.48 | 0.89 | NA | 1.00 | 1.48 | 1.17 | 1.55 | 1.88 | 1.84 | 1.31 | 1.28 | 1.80 | 1.79 |
|  |  | Dividends Per Share | 2.03 | 2.07 | 2.10 | 2.14 | 2.14 | 1.44 | 1.20 | 1.20 | 0.87 | 0.80 | 0.92 | 0.98 | 1.08 | 1.16 | 1.20 | 1.24 | 1.28 |
|  |  | Payout Ratio | 74.91\% | 79.62\% | NA | 100.47\% | 144.59\% | 161.80\% | NA | 120.00\% | 58.78\% | 68.38\% | 59.35\% | 52.13\% | 58.70\% | 88.55\% | 93.75\% | 68.89\% | 71.51\% |
|  |  | Earnings Growth | NA | -4.06\% | NA | NA | -30.52\% | -39.86\% | NA | NA | 48.00\% | -20.95\% | 32.48\% | 21.29\% | -2.13\% | -28.80\% | -2.29\% | 40.63\% | -0.56\% |
|  |  | 5 yr Avg Fwd EPS | NA | NA | NA | Na | NA | NA | NA | 15.74\% | 0.38\% | 4.11\% | 5.74\% | 1.37\% | NA | NA | NA | NA | NA |
| Wisconsin Energy | WEC | Earning Per Share | 1.07 | 0.99 | 0.27 | 0.83 | 0.94 | 0.54 | 0.92 | 1.16 | 1.13 | 0.93 | 1.28 | 1.32 | 1.42 | 1.52 | 1.60 | 1.92 | 2.18 |
|  |  | Dividends Per Share | 0.73 | 0.75 | 0.77 | 0.78 | 0.78 | 0.69 | 0.40 | 0.40 | 0.40 | 0.42 | 0.44 | 0.46 | 0.50 | 0.54 | 0.68 | 0.80 | 1.04 |
|  |  | Payout Ratio | 68.22\% | 75.76\% | 285.19\% | 93.98\% | 82.98\% | 127.78\% | 43.48\% | 34.48\% | 35.40\% | 45.16\% | 34.38\% | 34.85\% | 35.21\% | 35.53\% | 42.50\% | 41.67\% | 47.71\% |
|  |  | Earrings Growth | NA | -7.48\% | -72.73\% | 207.41\% | 13.25\% | -42.55\% | 70.37\% | 26.09\% | -2.59\% | -17.70\% | 37.63\% | 3.13\% | 7.58\% | 7.04\% | 5.26\% | 20.00\% | 13.54\% |
|  |  | 5yr Avg Fwd EPS | -19.58\% | 35.15\% | 54.91\% | 12.91\% | 6.72\% | .-22.76\% | 9.31\% | 5.61\% | 7.54\% | -12.13\% | 8.60\% | -10.68\% | NA | NA | NA | NA | NA |
| Xel Energy, Inc. | XEL | Earning Per Share | 1.96 | 1.91 | 1.61 | 1.84 | 1.43 | 1.60 | 2.27 | 0.42 | 1.23 | 1.27 | 1.20 | 1.35 | 1.35 | 1.46 | 1.49 | 1.56 | NA |
|  |  | Dividends Per Share |  |  |  | 1.43 | 1.45 | 1.48 | 1.50 | 1.13 | 0.75 | 0.81 | 0.85 | 0.88 | 0.91 | 0.94 | 0.97 | 1.00 | 1.03 |
|  |  | Payout Ratio | 68.37\% | 71.73\% | 86.96\% | 77.72\% | 101.40\% | 92.50\% | 66.08\% | 269.05\% | 60.98\% | 63.78\% | 70.83\% | 65.19\% | 67.41\% | 64.38\% | 65.10\% | 64.10\% | NA |
|  |  | Earrings Growth |  | -2.55\% | -15.71\% | 14.29\% | -22.28\% | 11.89\% | 41.88\% | -81.50\% | 192.86\% | 3.25\% | -5.51\% | 12.50\% |  | 8.15\% | 2.05\% | 4.70\% | NA |
|  |  | 5 yr Avg Fwd EPS | -2.87\% | 6.01\% | -7.15\% | 28.57\% | 33.67\% | 30.19\% | 24.32\% | 40.62\% | 3.68\% | 3.44\% | 5.48\% | NA | NA | NA | NA | NA | NA |

[^18]
## SUMMARY OUTPUT

| Regression Statistics |  |
| :--- | :---: |
| Multiple R | 0.324172 |
| R Square | 0.105087 |
| Adjusted R Square | 0.101645 |
| Standard Error | 0.374780 |
| Observations | 262 |

$\mathrm{Y}=5$-year Average Forward EPS Growth
$\mathrm{X}=$ Retention Ratio

Standard Error
0.374780

Observations
ANOVA

|  | $d f$ | SS | MS | $F$ | Significance $F$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Regression | 1 | 4.288411 | 4.288411 | 30.531140 | 0.000000 |
| Residual | 260 | 36.519664 | 0.140460 |  |  |
| Total | 261 | 40.808075 |  |  |  |


|  | Coefficients | Standard Error | $t$ Stat | P-value | Lower 95\% | Upper 95\% | Lower 95.0\% |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Upper 95.0\% |  |  |  |  |  |  |  |
| Intercept | 0.208235 | 0.027629 | 7.536750 | 0.000000 | 0.153830 | 0.262641 | 0.153830 |
| Retention Ratio | -0.355545 | 0.064346 | -5.525499 | 0.000000 | -0.482251 | -0.228839 | -0.482251 |

RETENTION RATIO REGRESSION


## RETENTION RATIO REGRESSION

| Year | Ticker | 5-year Average |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Payout <br> Ratio | Fwd EPS Growth | Retention Ratio |
| 2006 | CNL | 66.18\% | 14.52\% | 33.82\% |
| 1995 | ED | 69.62\% | -1.15\% | 30.38\% |
| 1996 | ED | 70.99\% | 2.28\% | 29.01\% |
| 1997 | ED | 71.19\% | 1.64\% | 28.81\% |
| 1998 | ED | 69.74\% | -0.88\% | 30.26\% |
| 1999 | ED | 68.37\% | -5.08\% | 31.63\% |
| 2000 | ED | 79.56\% | 3.19\% | 20.44\% |
| 2001 | ED | 68.54\% | -0.51\% | 31.46\% |
| 2002 | ED | 70.93\% | 3.58\% | 29.07\% |
| 2003 | ED | 79.15\% | 4.81\% | 20.85\% |
| 2004 | ED | 97.41\% | 7.10\% | 2.59\% |
| 2005 | ED | 76.25\% | 3.43\% | 23.75\% |
| 2006 | ED | 77.97\% | 4.27\% | 22.03\% |
| 1995 | D | 104.88\% | 7.20\% | -4.88\% |
| 1996 | D | 96.99\% | 9.41\% | 3.01\% |
| 1997 | D | 86.00\% | 19.21\% | 14.00\% |
| 1998 | D | 150.00\% | 24.00\% | -50.00\% |
| 1999 | D | 86.00\% | 10.86\% | 14.00\% |
| 2000 | D | 103.20\% | 8.27\% | -3.20\% |
| 2001 | D | 86.58\% | 16.43\% | 13.42\% |
| 2002 | D | 53.53\% | 1.83\% | 46.47\% |
| 2003 | D | 65.82\% | 14.11\% | 34.18\% |
| 2004 | D | 61.03\% | 9.75\% | 38.97\% |
| 2005 | D | 89.33\% | 17.56\% | 10.67\% |
| 2006 | D | 57.50\% | 4.66\% | 42.50\% |
| 1995 | DTE | 68.21\% | 1.77\% | 31.79\% |
| 1996 | DTE | 73.57\% | -3.62\% | 26.43\% |
| 1997 | DTE | 71.53\% | 11.43\% | 28.47\% |
| 1998 | DTE | 67.54\% | 5.14\% | 32.46\% |
| 1999 | DTE | 61.86\% | 1.19\% | 38.14\% |
| 2000 | DTE | 63.00\% | 7.20\% | 37.00\% |
| 2001 | DTE | 95.81\% | 9.04\% | 4.19\% |
| 2002 | DTE | 53.79\% | -4.88\% | 46.21\% |
| 2003 | DTE | 72.28\% | 0.77\% | 27.72\% |
| 2004 | DTE | 80.78\% | 6.61\% | 19.22\% |
| 2005 | DTE | 63.00\% | 4.05\% | 37.00\% |
| 2006 | DTE | 84.90\% | 8.69\% | 15.10\% |
| 2004 | EIX | 115.94\% | 76.47\% | -15.94\% |
| 2005 | EIX | 30.54\% | 0.34\% | 69.46\% |
| 1995 | GXP | 80.21\% | 5.84\% | 19.79\% |
| 1996 | GXP | 94.08\% | 3.75\% | 5.92\% |
| 1997 | GXP | 95.86\% | 9.41\% | 4.14\% |
| 1998 | GXP | 86.77\% | 9.30\% | 13.23\% |
| 1999 | GXP | 131.75\% | 17.64\% | -31.75\% |
| 2000 | GXP | 80.98\% | 2.83\% | 19.02\% |
| 2001 | GXP | 104.40\% | 2.18\% | -4.40\% |
| 2002 | GXP | 81.37\% | -0.52\% | 18.63\% |
| 2003 | GXP | 73.13\% | -10.30\% | 26.87\% |
| 2004 | GXP | 67.48\% | -14.22\% | 32.52\% |
| 2005 | GXP | 76.15\% | -2.23\% | 23.85\% |
| 2006 | GXP | 102.47\% | -0.76\% | -2.47\% |
| 1995 | HE | 89.47\% | -0.66\% | 10.53\% |
| 1996 | HE | 93.08\% | 4.99\% | 6.92\% |
| 1997 | HE | 88.41\% | 4.01\% | 11.59\% |
| 1998 | HE | 83.78\% | 2.06\% | 16.22\% |
| 1999 | HE | 85.52\% | -0.31\% | 14.48\% |
| 2000 | HE | 97.64\% | 3.64\% | 2.36\% |
| 2001 | HE | 77.50\% | -3.34\% | 22.50\% |
| 2002 | HE | 76.54\% | -6.90\% | 23.46\% |
| 2003 | HE | 78.48\% | -7.12\% | 21.52\% |
| 2004 | HE | 91.18\% | -7.33\% | 8.82\% |
| 2005 | HE | 84.93\% | -2.21\% | 15.07\% |
| 1995 | IDA | 88.57\% | 11.79\% | 11.43\% |
| 1996 | IDA | 84.16\% | 9.88\% | 15.84\% |
| 1997 | IDA | 80.17\% | -1.38\% | 19.83\% |
| 1998 | IDA | 78.48\% | -10.03\% | 21.52\% |
| 1999 | IDA | 76.54\% | 9.04\% | 23.46\% |
| 2000 | IDA | 53.14\% | -1.34\% | 46.86\% |

RETENTION RATIO REGRESSION
Page 7 of 8


RETENTION RATIO REGRESSION

| Year | Ticker | 5-year Average |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Payout | Fwd EPS |  |
|  |  | Ratio | Growth | Retention Ratio |
| 2001 | SO | 83.23\% | 5.59\% | 16.77\% |
| 2002 | SO | 73.51\% | 4.32\% | 26.49\% |
| 2003 | SO | 70.56\% | 2.76\% | 29.44\% |
| 2004 | SO | 68.93\% | 2.47\% | 31.07\% |
| 2005 | SO | 69.48\% | 2.22\% | 30.52\% |
| 2006 | SO | 73.33\% | 4.19\% | 26.67\% |
| 1995 | TE | 65.63\% | 4.97\% | 34.38\% |
| 1996 | TE | 64.91\% | 6.34\% | 35.09\% |
| 1997 | TE | 72.67\% | 4.92\% | 27.33\% |
| 2004 | TE | 107.04\% | 11.38\% | -7.04\% |
| 2005 | TE | 76.00\% | 5.81\% | 24.00\% |
| 2006 | TE | 64.96\% | 4.89\% | 35.04\% |
| 1995 | UIL | 77.52\% | 4.17\% | 22.48\% |
| 1996 | UIL | 91.05\% | 6.50\% | 8.95\% |
| 1997 | UIL | 88.27\% | 0.49\% | 11.73\% |
| 1998 | UIL | 96.11\% | -4.47\% | 3.89\% |
| 1999 | UIL | 77.58\% | -4.41\% | 22.42\% |
| 2000 | UIL | 67.58\% | -10.48\% | 32.42\% |
| 2001 | UIL | 68.38\% | -1.63\% | 31.62\% |
| 2002 | UIL | 93.51\% | 3.85\% | 6.49\% |
| 2003 | UIL | 139.52\% | 10.66\% | -39.52\% |
| 2004 | UIL | 112.34\% | 6.35\% | -12.34\% |
| 2005 | UIL | 133.08\% | 9.98\% | -33.08\% |
| 2000 | VVC | 83.76\% | 11.84\% | 16.24\% |
| 2001 | VVC | 95.37\% | 9.29\% | 4.63\% |
| 2002 | VVC | 63.69\% | 3.60\% | 36.31\% |
| 2003 | VVC | 71.15\% | 2.84\% | 28.85\% |
| 2004 | VVC | 80.99\% | 6.60\% | 19.01\% |
| 2005 | VVC | 65.75\% | -0.57\% | 34.25\% |
| 2006 | VVC | 85.42\% | 4.62\% | 14.58\% |
| 2002 | WR | 120.00\% | 15.74\% | -20.00\% |
| 2003 | WR | 58.78\% | 0.38\% | 41.22\% |
| 2004 | WR | 68.38\% | 4.11\% | 31.62\% |
| 2005 | WR | 59.35\% | 5.74\% | 40.65\% |
| 2006 | WR | 52.13\% | 1.37\% | 47.87\% |
| 1995 | WEC | 68.22\% | 19.58\% | 31.78\% |
| 1996 | WEC | 75.76\% | 35.15\% | 24.24\% |
| 1997 | WEC | 285.19\% | 54.91\% | -185.19\% |
| 1998 | WEC | 93.98\% | 12.91\% | 6.02\% |
| 1999 | WEC | 82.98\% | 6.72\% | 17.02\% |
| 2000 | WEC | 127.78\% | 22.76\% | -27.78\% |
| 2001 | WEC | 43.48\% | 9.31\% | 56.52\% |
| 2002 | WEC | 34.48\% | 5.61\% | 65.52\% |
| 2003 | WEC | 35.40\% | 7.54\% | 64.60\% |
| 2004 | WEC | 45.16\% | 12.13\% | 54.84\% |
| 2005 | WEC | 34.38\% | 8.60\% | 65.63\% |
| 2006 | WEC | 34.85\% | 10.68\% | 65.15\% |
| 1995 | XEL | 68.37\% | -2.87\% | 31.63\% |
| 1996 | XEL | 71.73\% | 6.01\% | 28.27\% |
| 1997 | XEL | 86.96\% | -7.15\% | 13.04\% |
| 1998 | XEL | 77.72\% | 28.57\% | 22.28\% |
| 1999 | XEL | 101.40\% | 33.67\% | -1.40\% |
| 2000 | XEL | 92.50\% | 30.19\% | 7.50\% |
| 2001 | XEL | 66.08\% | 24.32\% | 33.92\% |
| 2002 | XEL | 269.05\% | 40.62\% | -169.05\% |
| 2003 | XEL | 60.98\% | 3.68\% | 39.02\% |
| 2004 | XEL | 63.78\% | 3.44\% | 36.22\% |
| 2005 | XEL | 70.83\% | 5.48\% | 29.17\% |

## (ऽ-НЯy) -

## Testimony of Robert B. Hevert

Exhibit __(RBH-5)

CAPM and Zero Beta CAPM using Ex-Ante MRP

## CAPM AND ZERO BETA CAPM USING EX-ANTE MARKET RISK PREMIUM CALCULATION



Notes:
[1] Source: Bloomberg Professional
[2] Source: Value Line
[3] Source: Bloomberg Professional, 3-month average of 30-year Treasury
[4] see Notes [1] and [2]
[5] Source: Exhibit No.__(RBH-5) page 2
[6] Equals Col. [3] $+($ Col. [4] x Col. [5] $)$
[7] Equals Col. [3] $+(0.25 \times$ Col. [5] $)+(0.75 \times$ Col. [4] x Col. [5] $)$
[8] Average of Col. [6] \& Col. [7]

## MARKET RISK PREMIUM DERIVED FROM ANALYSTS' LONG-TERM GROWTH ESTIMATES



|  |  | [6] | [7] | [8] | [9] | [10] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Ticker | Weight in Index | Long-Term Growth Est. | Cap-Weighted Long-Term Growth Est. | Estimated Dividend Yield | Cap-Weighted Dividend Yield |
| 3 M CO | MMM | 0.48\% | 12.50\% | 0.06\% | 2.65\% | 0.01\% |
| ABBOTT LABORATORIES | ABT | 0.72\% | 9.08\% | 0.07\% | 3.45\% | 0.02\% |
| ABERCROMBIE \& FITCH CO-CL A | ANF | 0.03\% | 21.40\% | 0.01\% | 1.23\% | 0.00\% |
| ACCENTURE PLC-CL A | ACN | 0.32\% | 14.00\% | 0.04\% | 2.15\% | 0.01\% |
| ACE LTD | ACE | 0.19\% | 9.65\% | 0.02\% | 2.40\% | 0.00\% |
| ADOBE SYSTEMS INC | ADBE | 0.13\% | 10.25\% | 0.01\% | 0.00\% | 0.00\% |
| ADVANCED MICRO DEVICES | AMD | 0.04\% | 9.77\% | 0.00\% | 0.00\% | 0.00\% |
| AES CORP | AES | 0.08\% | 8.00\% | 0.01\% | 0.61\% | 0.00\% |
| AETNA INC | AET | 0.13\% | 10.80\% | 0.01\% | 1.43\% | 0.00\% |
| AFLAC INC | AFL | 0.17\% | 10.33\% | 0.02\% | 2.86\% | 0.00\% |
| AGILENT TECHNOLOGIES INC | A | 0.12\% | 14.55\% | 0.02\% | 0.52\% | 0.00\% |
| AGL RESOURCES INC | GAS | 0.04\% | 4.00\% | 0.00\% | 4.68\% | 0.00\% |
| AIR PRODUCTS \& CHEMICALS INC | APD | 0.15\% | 9.48\% | 0.01\% | 2.64\% | 0.00\% |
| AIRGAS INC | ARG | 0.05\% | 14.30\% | 0.01\% | 1.44\% | 0.00\% |
| AKAMAI TECHNOLOGIES INC | AKAM | 0.05\% | 14.43\% | 0.01\% | 0.00\% | 0.00\% |
| ALCOA INC | AA | 0.09\% | 10.00\% | 0.01\% | 1.22\% | 0.00\% |
| ALLEGHENY TECHNOLOGIES INC | ATI | 0.04\% | 15.00\% | 0.01\% | 1.66\% | 0.00\% |
| ALLERGAN INC | AGN | 0.22\% | 14.05\% | 0.03\% | 0.22\% | 0.00\% |
| ALLSTATE CORP | ALL | 0.13\% | 9.00\% | 0.01\% | 2.58\% | 0.00\% |
| ALPHA NATURAL RESOURCES INC | ANR | 0.03\% | n/a | n/a | 0.00\% | 0.00\% |
| ALTERA CORP | ALTR | 0.10\% | 14.75\% | 0.01\% | 0.82\% | 0.00\% |
| ALTRIA GROUP INC | MO | 0.47\% | 8.00\% | 0.04\% | 5.75\% | 0.03\% |
| AMAZON.COM INC | AMZN | 0.65\% | 28.89\% | 0.19\% | 0.00\% | 0.00\% |
| AMEREN CORPORATION | AEE | 0.06\% | -4.00\% | 0.00\% | 5.07\% | 0.00\% |
| AMERICAN ELECTRIC POWER | AEP | 0.14\% | 3.75\% | 0.01\% | 4.89\% | 0.01\% |
| AMERICAN EXPRESS CO | AXP | 0.51\% | 11.67\% | 0.06\% | 1.38\% | 0.01\% |
| AMERICAN INTERNATIONAL GROUP | AIG | 0.39\% | 12.33\% | 0.05\% | 0.00\% | 0.00\% |
| AMERICAN TOWER CORP | AMT | 0.19\% | 20.40\% | 0.04\% | 1.36\% | 0.00\% |
| AMERIPRISE FINANCIAL INC | AMP | 0.10\% | 13.00\% | 0.01\% | 1.80\% | 0.00\% |
| AMERISOURCEBERGEN CORP | ABC | 0.08\% | 13.33\% | 0.01\% | 1.13\% | 0.00\% |
| AMGEN INC | AMGN | 0.41\% | 9.27\% | 0.04\% | 2.14\% | 0.01\% |
| AMPHENOL CORP-CL A | APH | 0.07\% | 14.00\% | 0.01\% | 0.57\% | 0.00\% |
| ANADARKO PETROLEUM CORP | APC | 0.32\% | 9.88\% | 0.03\% | 0.43\% | 0.00\% |
| ANALOG DEVICES INC | ADI | 0.09\% | 11.00\% | 0.01\% | 2.88\% | 0.00\% |
| AON CORP | AON | 0.12\% | 8.33\% | 0.01\% | 1.25\% | 0.00\% |
| APACHE CORP | APA | 0.32\% | 9.76\% | 0.03\% | 0.61\% | 0.00\% |
| APARTMENT INVT \& MGMT CO -A | AIV | 0.02\% | 8.90\% | 0.00\% | 2.72\% | 0.00\% |
| APOLLO GROUP INC-CL A | APOL | 0.04\% | 10.50\% | 0.00\% | 0.00\% | 0.00\% |
| APPLE INC | AAPL | 4.20\% | 19.80\% | 0.83\% | 0.00\% | 0.00\% |
| APPLIED MATERIALS INC | AMAT | 0.13\% | 14.00\% | 0.02\% | 2.41\% | 0.00\% |
| ARCHER-DANIELS-MIDLAND CO | ADM | 0.16\% | 10.00\% | 0.02\% | 2.12\% | 0.00\% |
| ASSURANT INC | AIZ | 0.03\% | 9.67\% | 0.00\% | 1.96\% | 0.00\% |
| AT\&T INC | T | 1.44\% | 6.34\% | 0.09\% | 5.60\% | 0.08\% |
| AUTODESK INC | ADSK | 0.07\% | 17.40\% | 0.01\% | 0.00\% | 0.00\% |
| AUTOMATIC DATA PROCESSING | ADP | 0.21\% | 10.17\% | 0.02\% | 2.81\% | 0.01\% |
| AUTONATION INC | AN | 0.04\% | 18.21\% | 0.01\% | n/a | $\mathrm{n} / \mathrm{a}$ |
| AUTOZONE INC | AZO | 0.11\% | 15.63\% | 0.02\% | 0.00\% | 0.00\% |
| AVALONBAY COMMUNITIES INC | AVB | 0.10\% | 9.63\% | 0.01\% | 2.77\% | 0.00\% |
| AVERY DENNISON CORP | AVY | 0.02\% | 7.00\% | 0.00\% | 3.61\% | 0.00\% |
| AVON PRODUCTS INC | AVP | 0.06\% | 11.00\% | 0.01\% | 4.89\% | 0.00\% |
| BAKER HUGHES INC | BHI | 0.16\% | 23.00\% | 0.04\% | 1.23\% | 0.00\% |
| BALL CORP | BLL | 0.05\% | 10.00\% | 0.00\% | 0.88\% | 0.00\% |
| BANK OF NEW YORK MELLON CORP | BK | 0.22\% | 16.50\% | 0.04\% | 2.34\% | 0.01\% |
| BANK OF AMERICA CORP | BAC | 0.81\% | 8.67\% | 0.07\% | 0.45\% | 0.00\% |
| BAXTER INTERNATIONAL INC | BAX | 0.26\% | 9.21\% | 0.02\% | 2.30\% | 0.01\% |
| BB\&T CORP | BBT | 0.17\% | 7.00\% | 0.01\% | 2.40\% | 0.00\% |
| BEAM INC | BEAM | 0.07\% | 11.52\% | 0.01\% | 1.45\% | 0.00\% |
| BECTON DICKINSON AND CO | BDX | 0.13\% | 9.75\% | 0.01\% | 2.28\% | 0.00\% |
| BED BATH \& BEYOND INC | BBBY | 0.12\% | 15.67\% | 0.02\% | 0.00\% | 0.00\% |
| BEMIS COMPANY | BMS | 0.03\% | 6.00\% | 0.00\% | 3.18\% | 0.00\% |
| BERKSHIRE HATHAWAY INC-CL B | BRK/B | 0.67\% | n/a | $\mathrm{n} / \mathrm{a}$ | n/a | n/a |
| BEST BUY CO INC | BBY | 0.07\% | 8.25\% | 0.01\% | 2.49\% | 0.00\% |
| BIG LOTS INC | BIG | 0.02\% | 12.13\% | 0.00\% | n/a | n/a |
| BIOGEN IDEC INC | BIIB | 0.22\% | 12.90\% | 0.03\% | 0.00\% | 0.00\% |

## STANDARD AND POOR'S 500 INDEX

|  |  | [6] | [7] | [8] | [9] | [10] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Ticker | Weight in Index | Long-Term Growth Est. | Cap-Weighted Long-Term Growth Est. | Estimated Dividend Yield | Cap-Weighted <br> Dividend Yield |
| BLACKROCK INC | BLK | 0.22\% | 12.50\% | 0.03\% | 2.91\% | 0.01\% |
| BMC SOFTWARE INC | BMC | 0.05\% | 9.65\% | 0.00\% | 0.00\% | 0.00\% |
| BOEING CO/THE | BA | 0.43\% | 14.00\% | 0.06\% | 2.34\% | 0.01\% |
| BORGWARNER INC | BWA | 0.07\% | 22.72\% | 0.02\% | 0.07\% | 0.00\% |
| BOSTON PROPERTIES INC | BXP | 0.12\% | 5.54\% | 0.01\% | 2.03\% | 0.00\% |
| BOSTON SCIENTIFIC CORP | BSX | 0.07\% | 5.66\% | 0.00\% | 0.00\% | 0.00\% |
| BRISTOL-MYERS SQUIBB CO | BMY | 0.43\% | 3.87\% | 0.02\% | 4.08\% | 0.02\% |
| BROADCOM CORP-CL A | BRCM | 0.14\% | 15.33\% | 0.02\% | 1.03\% | 0.00\% |
| BROWN-FORMAN CORP-CLASS B | BF/B | 0.05\% | 13.00\% | 0.01\% | 1.68\% | 0.00\% |
| CA INC | CA | 0.10\% | 10.67\% | 0.01\% | 1.47\% | 0.00\% |
| CABLEVISION SYSTEMS-NY GRP-A | CVC | 0.02\% | 11.68\% | 0.00\% | 4.18\% | 0.00\% |
| CABOT OIL \& GAS CORP | COG | 0.05\% | 10.00\% | 0.01\% | 0.28\% | 0.00\% |
| CAMERON INTERNATIONAL CORP | CAM | 0.10\% | 17.00\% | 0.02\% | 0.00\% | 0.00\% |
| CAMPBELL SOUP CO | CPB | 0.08\% | 6.00\% | 0.00\% | 3.62\% | 0.00\% |
| CAPITAL ONE FINANCIAL CORP | COF | 0.24\% | 10.67\% | 0.03\% | 0.46\% | 0.00\% |
| CARDINAL HEALTH INC | CAH | 0.11\% | 12.25\% | 0.01\% | 1.79\% | 0.00\% |
| CAREFUSION CORP | CFN | 0.04\% | 9.59\% | 0.00\% | 0.00\% | 0.00\% |
| CARMAX INC | KMX | 0.06\% | 13.99\% | 0.01\% | n/a | n/a |
| CARNIVAL CORP | CCL | 0.15\% | 19.67\% | 0.03\% | 3.09\% | 0.00\% |
| CATERPILLAR INC | CAT | 0.57\% | 11.38\% | 0.06\% | 1.62\% | 0.01\% |
| CBRE GROUP INC - A | CBG | 0.05\% | 13.33\% | 0.01\% | 3.17\% | 0.00\% |
| CBS CORP-CLASS B NON VOTING | CBS | 0.15\% | 12.72\% | 0.02\% | 1.30\% | 0.00\% |
| CELGENE CORP | CELG | 0.26\% | 24.47\% | 0.06\% | 0.00\% | 0.00\% |
| CENTERPOINT ENERGY INC | CNP | 0.06\% | 6.25\% | 0.00\% | 4.25\% | 0.00\% |
| CENTURYLINK INC | CTL | 0.19\% | 2.32\% | 0.00\% | 7.42\% | 0.01\% |
| CERNER CORP | CERN | 0.10\% | 19.40\% | 0.02\% | 0.00\% | 0.00\% |
| CF INDUSTRIES HOLDINGS INC | CF | 0.09\% | 12.00\% | 0.01\% | 0.88\% | 0.00\% |
| C.H. ROBINSON WORLDWIDE INC | CHRW | 0.08\% | 14.38\% | 0.01\% | 2.01\% | 0.00\% |
| CHESAPEAKE ENERGY CORP | CHK | 0.13\% | 3.73\% | 0.00\% | 0.97\% | 0.00\% |
| CHEVRON CORP | CVX | 1.68\% | -0.55\% | -0.01\% | 3.00\% | 0.05\% |
| CHIPOTLE MEXICAN GRILL INC | CMG | 0.10\% | 20.10\% | 0.02\% | 0.00\% | 0.00\% |
| CHUBB CORP | CB | 0.14\% | 9.75\% | 0.01\% | 2.37\% | 0.00\% |
| CIGNA CORP | CI | 0.10\% | 10.88\% | 0.01\% | 0.07\% | 0.00\% |
| CINCINNATI FINANCIAL CORP | CINF | 0.04\% | 5.00\% | 0.00\% | 4.56\% | 0.00\% |
| CINTAS CORP | CTAS | 0.04\% | 11.50\% | 0.00\% | 1.32\% | 0.00\% |
| CISCO SYSTEMS INC | CSCO | 0.83\% | 9.09\% | 0.08\% | 1.41\% | 0.01\% |
| CITIGROUP INC | C | 0.83\% | 8.33\% | 0.07\% | 0.78\% | 0.01\% |
| CITRIX SYSTEMS INC | CTXS | 0.11\% | 16.00\% | 0.02\% | 0.00\% | 0.00\% |
| CLIFFS NATURAL RESOURCES INC | CLF | 0.08\% | 12.00\% | 0.01\% | 2.20\% | 0.00\% |
| CLOROX COMPANY | CLX | 0.07\% | 10.00\% | 0.01\% | 3.50\% | 0.00\% |
| CME GROUP INC | CME | 0.15\% | 15.00\% | 0.02\% | 4.12\% | 0.01\% |
| CMS ENERGY CORP | CMS | 0.04\% | 5.80\% | 0.00\% | 4.40\% | 0.00\% |
| COACH INC | COH | 0.17\% | 15.30\% | 0.03\% | 1.18\% | 0.00\% |
| COCA-COLA CO/THE | KO | 1.22\% | 8.00\% | 0.10\% | 2.92\% | 0.04\% |
| COCA-COLA ENTERPRISES | CCE | 0.06\% | 8.50\% | 0.01\% | 2.40\% | 0.00\% |
| COGNIZANT TECH SOLUTIONS-A | CTSH | 0.18\% | 19.00\% | 0.03\% | 0.00\% | 0.00\% |
| COLGATE-PALMOLIVE CO | CL | 0.35\% | 9.00\% | 0.03\% | 2.56\% | 0.01\% |
| COMCAST CORP-CLASS A | CMCSA | 0.47\% | 17.95\% | 0.09\% | 2.16\% | 0.01\% |
| COMERICA INC | CMA | 0.05\% | 6.37\% | 0.00\% | 1.52\% | 0.00\% |
| COMPUTER SCIENCES CORP | CSC | 0.04\% | 8.00\% | 0.00\% | 2.53\% | 0.00\% |
| CONAGRA FOODS INC | CAG | 0.08\% | 9.00\% | 0.01\% | 3.59\% | 0.00\% |
| CONOCOPHILLIPS | COP | 0.76\% | -1.94\% | -0.01\% | 3.54\% | 0.03\% |
| CONSOLIDATED EDISON INC | ED | 0.13\% | 3.66\% | 0.00\% | 4.21\% | 0.01\% |
| CONSOL ENERGY INC | CNX | 0.06\% | n/a | n/a | 1.45\% | 0.00\% |
| CONSTELLATION BRANDS INC-A | STZ | 0.03\% | 10.00\% | 0.00\% | 0.00\% | 0.00\% |
| COOPER INDUSTRIES PLC | CBE | 0.08\% | 14.67\% | 0.01\% | 1.93\% | 0.00\% |
| CORNING INC | GLW | 0.17\% | 9.67\% | 0.02\% | 2.05\% | 0.00\% |
| COSTCO WHOLESALE CORP | COST | 0.30\% | 13.90\% | 0.04\% | 1.02\% | 0.00\% |
| COVENTRY HEALTH CARE INC | CVH | 0.04\% | 12.33\% | 0.00\% | 0.22\% | 0.00\% |
| COVIDIEN PLC | COV | 0.20\% | 11.25\% | 0.02\% | 1.59\% | 0.00\% |
| CR BARD INC | BCR | 0.06\% | 10.00\% | 0.01\% | 0.83\% | 0.00\% |
| CROWN CASTLE INTL CORP | CCI | 0.11\% | 22.67\% | 0.03\% | 0.00\% | 0.00\% |
| CSX CORP | CSX | 0.18\% | 14.78\% | 0.03\% | 2.31\% | 0.00\% |
| CUMMINS INC | CMI | 0.19\% | 13.27\% | 0.02\% | 1.25\% | 0.00\% |
| CVS CAREMARK CORP | CVS | 0.45\% | 13.50\% | 0.06\% | 1.42\% | 0.01\% |
| DANAHER CORP | DHR | 0.29\% | 14.50\% | 0.04\% | 0.18\% | 0.00\% |
| DARDEN RESTAURANTS INC | DRI | 0.05\% | 12.27\% | 0.01\% | 3.19\% | 0.00\% |
| DAVITA INC | DVA | 0.06\% | 12.57\% | 0.01\% | 0.00\% | 0.00\% |
| DEAN FOODS CO | DF | 0.02\% | 10.00\% | 0.00\% | 0.00\% | 0.00\% |
| DEERE \& CO | DE | 0.26\% | 14.95\% | 0.04\% | 2.01\% | 0.01\% |
| DELL INC | DELL | 0.23\% | 4.67\% | 0.01\% | 0.00\% | 0.00\% |
| DENBURY RESOURCES INC | DNR | 0.06\% | 26.75\% | 0.02\% | 0.00\% | 0.00\% |
| DENTSPLY INTERNATIONAL INC | XRAY | 0.04\% | 10.80\% | 0.00\% | 0.41\% | 0.00\% |
| DEVON ENERGY CORPORATION | DVN | 0.23\% | 7.75\% | 0.02\% | 1.04\% | 0.00\% |
| DEVRY INC | DV | 0.02\% | 10.35\% | 0.00\% | 0.77\% | 0.00\% |
| DIAMOND OFFSHORE DRILLING | DO | 0.08\% | 18.00\% | 0.01\% | 4.87\% | 0.00\% |
| DIRECTV-CLASS A | DTV | 0.25\% | 13.62\% | 0.03\% | 0.00\% | 0.00\% |

## STANDARD AND POOR'S 500 INDEX

|  |  | [6] | [7] | [8] | [9] | [10] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Ticker | Weight in Index | Long-Term Growth Est. | Cap-Weighted Long-Term Growth Est. | Estimated <br> Dividend Yield | Cap-Weighted <br> Dividend Yield |
| DISCOVER FINANCIAL SERVICES | DFS | 0.13\% | 10.50\% | 0.01\% | 1.24\% | 0.00\% |
| DISCOVERY COMMUNICATIONS-A | DISCA | 0.05\% | 20.70\% | 0.01\% | 0.00\% | 0.00\% |
| DOLLAR TREE INC | DLTR | 0.09\% | 20.93\% | 0.02\% | n/a | n/a |
| DOMINION RESOURCES INC/VA | D | 0.22\% | 3.50\% | 0.01\% | 4.17\% | 0.01\% |
| DOVER CORP | DOV | 0.09\% | 14.50\% | 0.01\% | 2.02\% | 0.00\% |
| DOW CHEMICAL CO/THE | DOW | 0.32\% | 5.33\% | 0.02\% | 2.99\% | 0.01\% |
| DR HORTON INC | DHI | 0.04\% | 7.67\% | 0.00\% | 0.94\% | 0.00\% |
| DR PEPPER SNAPPLE GROUP INC | DPS | 0.06\% | 8.00\% | 0.01\% | 3.56\% | 0.00\% |
| DTE ENERGY COMPANY | DTE | 0.07\% | 4.10\% | 0.00\% | 4.40\% | 0.00\% |
| DU PONT (E.I.) DE NEMOURS | DD | 0.38\% | 8.81\% | 0.03\% | 3.08\% | 0.01\% |
| DUKE ENERGY CORP | DUK | 0.22\% | 2.67\% | 0.01\% | 4.83\% | 0.01\% |
| DUN \& BRADSTREET CORP | DNB | 0.03\% | 10.00\% | 0.00\% | 1.77\% | 0.00\% |
| E*TRADE FINANCIAL CORP | ETFC | 0.02\% | 11.00\% | 0.00\% | 0.00\% | 0.00\% |
| EASTMAN CHEMICAL CO | EMN | 0.05\% | 7.50\% | 0.00\% | 1.95\% | 0.00\% |
| EATON CORP | ETN | 0.13\% | 10.25\% | 0.01\% | 2.99\% | 0.00\% |
| EBAY INC | EBAY | 0.37\% | 12.99\% | 0.05\% | 0.00\% | 0.00\% |
| ECOLAB INC | ECL | 0.13\% | 13.30\% | 0.02\% | 1.32\% | 0.00\% |
| EDISON INTERNATIONAL | EIX | 0.11\% | -1.45\% | 0.00\% | 3.10\% | 0.00\% |
| EDWARDS LIFESCIENCES CORP | EW | 0.06\% | 20.90\% | 0.01\% | 0.00\% | 0.00\% |
| EL PASO CORP | EP | 0.17\% | $\mathrm{n} / \mathrm{a}$ | n/a | 1.15\% | 0.00\% |
| ELECTRONIC ARTS INC | EA | 0.04\% | 17.42\% | 0.01\% | 0.00\% | 0.00\% |
| ELI LILLY \& CO | LLY | 0.36\% | -2.27\% | -0.01\% | 4.87\% | 0.02\% |
| EMC CORP/MA | EMC | 0.46\% | 15.50\% | 0.07\% | 0.00\% | 0.00\% |
| EMERSON ELECTRIC CO | EMR | 0.30\% | 13.00\% | 0.04\% | 3.00\% | 0.01\% |
| ENTERGY CORP | ETR | 0.09\% | -3.03\% | 0.00\% | 4.98\% | 0.00\% |
| EOG RESOURCES INC | EOG | 0.24\% | 35.60\% | 0.09\% | 0.55\% | 0.00\% |
| EQT CORP | EQT | 0.06\% | 32.25\% | 0.02\% | 1.75\% | 0.00\% |
| EQUIFAX INC | EFX | 0.04\% | 10.00\% | 0.00\% | 1.52\% | 0.00\% |
| EQUITY RESIDENTIAL | EQR | 0.14\% | 8.08\% | 0.01\% | 2.88\% | 0.00\% |
| ESTEE LAUDER COMPANIES-CL A | EL | 0.12\% | 13.25\% | 0.02\% | 0.90\% | 0.00\% |
| EXELON CORP | EXC | 0.25\% | -4.70\% | -0.01\% | 5.42\% | 0.01\% |
| EXPEDIA INC | EXPE | 0.03\% | 9.24\% | 0.00\% | 1.03\% | 0.00\% |
| EXPEDITORS INTL WASH INC | EXPD | 0.07\% | 12.96\% | 0.01\% | 1.23\% | 0.00\% |
| EXPRESS SCRIPTS INC | ESRX | 0.20\% | 16.00\% | 0.03\% | 0.00\% | 0.00\% |
| EXXON MOBIL CORP | XOM | 3.13\% | 5.08\% | 0.16\% | 2.28\% | 0.07\% |
| F5 NETWORKS INC | FFIV | 0.08\% | 22.30\% | 0.02\% | 0.00\% | 0.00\% |
| FAMILY DOLLAR STORES | FDO | 0.05\% | 15.82\% | 0.01\% | 1.38\% | 0.00\% |
| FASTENAL CO | FAST | 0.12\% | 19.40\% | 0.02\% | 1.27\% | 0.00\% |
| FEDERATED INVESTORS INC-CL B | FII | 0.02\% | 8.00\% | 0.00\% | 4.37\% | 0.00\% |
| FEDEX CORP | FDX | 0.23\% | 14.23\% | 0.03\% | 0.55\% | 0.00\% |
| FIDELITY NATIONAL INFORMATIO | FIS | 0.07\% | 13.14\% | 0.01\% | 2.12\% | 0.00\% |
| FIFTH THIRD BANCORP | FITB | 0.10\% | 3.38\% | 0.00\% | 2.56\% | 0.00\% |
| FIRST HORIZON NATIONAL CORP | FHN | 0.02\% | 7.50\% | 0.00\% | 0.89\% | 0.00\% |
| FIRST SOLAR INC | FSLR | 0.02\% | 16.25\% | 0.00\% | 0.00\% | 0.00\% |
| FIRSTENERGY CORP | FE | 0.14\% | 2.00\% | 0.00\% | 4.94\% | 0.01\% |
| FISERV INC | FISV | 0.07\% | 12.43\% | 0.01\% | 0.00\% | 0.00\% |
| FLIR SYSTEMS INC | FLIR | 0.03\% | 14.24\% | 0.00\% | 1.07\% | 0.00\% |
| FLOWSERVE CORP | FLS | 0.05\% | 6.00\% | 0.00\% | 1.21\% | 0.00\% |
| FLUOR CORP | FLR | 0.08\% | 12.67\% | 0.01\% | 0.96\% | 0.00\% |
| FMC CORP | FMC | 0.05\% | 8.82\% | 0.00\% | 0.60\% | 0.00\% |
| FMC TECHNOLOGIES INC | FTI | 0.10\% | 13.00\% | 0.01\% | 0.00\% | 0.00\% |
| FORD MOTOR CO | F | 0.36\% | 11.44\% | 0.04\% | 1.60\% | 0.01\% |
| FOREST LABORATORIES INC | FRX | 0.07\% | -1.00\% | 0.00\% | 0.00\% | 0.00\% |
| FRANKLIN RESOURCES INC | BEN | 0.21\% | 9.00\% | 0.02\% | 2.45\% | 0.01\% |
| FREEPORT-MCMORAN COPPER | FCX | 0.28\% | n/a | n/a | 3.54\% | 0.01\% |
| FRONTIER COMMUNICATIONS CORP | FTR | 0.03\% | 3.00\% | 0.00\% | 9.26\% | 0.00\% |
| GAMESTOP CORP-CLASS A | GME | 0.02\% | 9.50\% | 0.00\% | n/a | n/a |
| GANNETT CO | GCI | 0.03\% | 9.00\% | 0.00\% | 4.67\% | 0.00\% |
| GAP INC/THE | GPS | 0.10\% | 9.00\% | 0.01\% | 1.92\% | 0.00\% |
| GENERAL DYNAMICS CORP | GD | 0.20\% | 9.00\% | 0.02\% | 2.62\% | 0.01\% |
| GENERAL ELECTRIC CO | GE | 1.64\% | 13.50\% | 0.22\% | 3.36\% | 0.06\% |
| GENERAL MILLS INC | GIS | 0.19\% | 8.00\% | 0.02\% | 3.14\% | 0.01\% |
| GENUINE PARTS CO | GPC | 0.08\% | 9.46\% | 0.01\% | 3.15\% | 0.00\% |
| GENWORTH FINANCIAL INC-CL A | GNW | 0.03\% | 5.00\% | 0.00\% | 0.04\% | 0.00\% |
| GILEAD SCIENCES INC | GILD | 0.27\% | 16.07\% | 0.04\% | 0.00\% | 0.00\% |
| GOLDMAN SACHS GROUP INC | GS | 0.47\% | 9.05\% | 0.04\% | 1.15\% | 0.01\% |
| GOODRICH CORP | GR | 0.12\% | 11.05\% | 0.01\% | 0.95\% | 0.00\% |
| GOODYEAR TIRE \& RUBBER CO | GT | 0.02\% | 40.85\% | 0.01\% | 0.00\% | 0.00\% |
| GOOGLE INC-CL A | GOOG | 1.24\% | 17.38\% | 0.22\% | 0.00\% | 0.00\% |
| H\&R BLOCK INC | HRB | 0.04\% | 11.00\% | 0.00\% | 3.96\% | 0.00\% |
| HALLIBURTON CO | HAL | 0.25\% | 22.00\% | 0.05\% | 1.05\% | 0.00\% |
| HARLEY-DAVIDSON INC | HOG | 0.09\% | 13.00\% | 0.01\% | 1.07\% | 0.00\% |
| HARMAN INTERNATIONAL | HAR | 0.03\% | 20.00\% | 0.01\% | 0.60\% | 0.00\% |
| HARRIS CORP | HRS | 0.04\% | 6.50\% | 0.00\% | 2.66\% | 0.00\% |
| HARTFORD FINANCIAL SVCS GRP | HIG | 0.07\% | 9.50\% | 0.01\% | 2.14\% | 0.00\% |
| HASBRO INC | HAS | 0.04\% | 10.00\% | 0.00\% | 4.00\% | 0.00\% |
| HCP INC | HCP | 0.13\% | 4.96\% | 0.01\% | 4.97\% | 0.01\% |

## STANDARD AND POOR'S 500 INDEX

|  |  | [6] | [7] | [8] | [9] | [10] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Ticker | Weight in Index | Long-Term Growth Est. | Cap-Weighted Long-Term Growth Est. | Estimated Dividend Yield | Cap-Weighted Dividend Yield |
| HEALTH CARE REIT INC | HCN | 0.09\% | 6.42\% | 0.01\% | 5.40\% | 0.00\% |
| HELMERICH \& PAYNE | HP | 0.05\% | 15.00\% | 0.01\% | 0.47\% | 0.00\% |
| HERSHEY CO/THE | HSY | 0.08\% | 7.00\% | 0.01\% | 2.48\% | 0.00\% |
| HESS CORP | HES | 0.16\% | 5.19\% | 0.01\% | 0.64\% | 0.00\% |
| HEWLETT-PACKARD CO | HPQ | 0.37\% | 9.00\% | 0.03\% | 1.73\% | 0.01\% |
| HJ HEINZ CO | HNZ | 0.13\% | 8.00\% | 0.01\% | 3.59\% | 0.00\% |
| HOME DEPOT INC | HD | 0.58\% | 14.50\% | 0.08\% | 2.40\% | 0.01\% |
| HONEYWELL INTERNATIONAL INC | HON | 0.36\% | 16.48\% | 0.06\% | 2.42\% | 0.01\% |
| HORMEL FOODS CORP | HRL | 0.06\% | 11.00\% | 0.01\% | 2.10\% | 0.00\% |
| HOSPIRA INC | HSP | 0.05\% | -0.54\% | 0.00\% | 0.00\% | 0.00\% |
| HOST HOTELS \& RESORTS INC | HST | 0.09\% | 12.18\% | 0.01\% | 1.51\% | 0.00\% |
| HUDSON CITY BANCORP INC | HCBK | 0.03\% | 0.50\% | 0.00\% | 4.25\% | 0.00\% |
| HUMANA INC | HUM | 0.11\% | 9.00\% | 0.01\% | 1.16\% | 0.00\% |
| HUNTINGTON BANCSHARES INC | HBAN | 0.04\% | 5.50\% | 0.00\% | 2.68\% | 0.00\% |
| INTL BUSINESS MACHINES CORP | IBM | 1.84\% | 10.00\% | 0.18\% | 1.54\% | 0.03\% |
| ILLINOIS TOOL WORKS | ITW | 0.22\% | 9.05\% | 0.02\% | 2.48\% | 0.01\% |
| INGERSOLL-RAND PLC | IR | 0.09\% | 10.60\% | 0.01\% | 1.57\% | 0.00\% |
| INTEGRYS ENERGY GROUP INC | TEG | 0.03\% | 4.50\% | 0.00\% | 5.13\% | 0.00\% |
| INTEL CORP | INTC | 1.07\% | 10.40\% | 0.11\% | 3.07\% | 0.03\% |
| INTERCONTINENTALEXCHANGE INC | ICE | 0.08\% | 14.00\% | 0.01\% | 0.00\% | 0.00\% |
| INTERPUBLIC GROUP OF COS INC | IPG | 0.04\% | 9.33\% | 0.00\% | 1.95\% | 0.00\% |
| INTL FLAVORS \& FRAGRANCES | IFF | 0.04\% | 3.00\% | 0.00\% | 2.22\% | 0.00\% |
| INTL GAME TECHNOLOGY | IGT | 0.04\% | 14.75\% | 0.01\% | 1.58\% | 0.00\% |
| INTERNATIONAL PAPER CO | IP | 0.12\% | 5.00\% | 0.01\% | 2.95\% | 0.00\% |
| INTUIT INC | INTU | 0.14\% | 15.14\% | 0.02\% | 0.71\% | 0.00\% |
| INTUITIVE SURGICAL INC | ISRG | 0.16\% | 21.33\% | 0.03\% | n/a | n/a |
| INVESCO LTD | IVZ | 0.09\% | 11.33\% | 0.01\% | 1.99\% | 0.00\% |
| IRON MOUNTAIN INC | IRM | 0.04\% | 13.67\% | 0.01\% | 3.46\% | 0.00\% |
| J.C. PENNEY CO INC | JCP | 0.06\% | 16.50\% | 0.01\% | 2.28\% | 0.00\% |
| JABIL CIRCUIT INC | JBL | 0.04\% | 12.00\% | 0.01\% | 1.16\% | 0.00\% |
| JACOBS ENGINEERING GROUP INC | JEC | 0.05\% | 14.33\% | 0.01\% | 0.00\% | 0.00\% |
| JDS UNIPHASE CORP | JDSU | 0.03\% | 15.00\% | 0.00\% | 0.00\% | 0.00\% |
| JM SMUCKER CO/THE | SJM | 0.07\% | 8.00\% | 0.01\% | 2.45\% | 0.00\% |
| JOHNSON CONTROLS INC | JCI | 0.17\% | 21.19\% | 0.04\% | 2.05\% | 0.00\% |
| JOHNSON \& JOHNSON | JNJ | 1.38\% | 6.38\% | 0.09\% | 3.66\% | 0.05\% |
| JOY GLOBAL INC | JOY | 0.07\% | 19.40\% | 0.01\% | 0.89\% | 0.00\% |
| JPMORGAN CHASE \& CO | JPM | 1.31\% | 7.50\% | 0.10\% | 2.66\% | 0.03\% |
| JUNIPER NETWORKS INC | JNPR | 0.09\% | 15.11\% | 0.01\% | 0.00\% | 0.00\% |
| KELLOGG CO | K | 0.15\% | 8.33\% | 0.01\% | 3.33\% | 0.00\% |
| KEYCORP | KEY | 0.06\% | 5.86\% | 0.00\% | 2.10\% | 0.00\% |
| KIMBERLY-CLARK CORP | KMB | 0.22\% | 5.14\% | 0.01\% | 4.04\% | 0.01\% |
| KIMCO REALTY CORP | KIM | 0.06\% | 10.87\% | 0.01\% | 3.93\% | 0.00\% |
| KLA-TENCOR CORPORATION | KLAC | 0.07\% | 9.67\% | 0.01\% | 2.69\% | 0.00\% |
| KOHLS CORP | KSS | 0.10\% | 12.25\% | 0.01\% | 2.36\% | 0.00\% |
| KRAFT FOODS INC-CLASS A | KFT | 0.52\% | 8.00\% | 0.04\% | 3.09\% | 0.02\% |
| KROGER CO | KR | 0.11\% | 10.05\% | 0.01\% | 1.93\% | 0.00\% |
| L-3 COMMUNICATIONS HOLDINGS | LLL | 0.05\% | 1.59\% | 0.00\% | 2.81\% | 0.00\% |
| LABORATORY CRP OF AMER HLDGS | LH | 0.07\% | 12.57\% | 0.01\% | 0.00\% | 0.00\% |
| LEGG MASON INC | LM | 0.03\% | 11.00\% | 0.00\% | 1.09\% | 0.00\% |
| LEGGETT \& PLATT INC | LEG | 0.03\% | 15.00\% | 0.00\% | 4.82\% | 0.00\% |
| LENNAR CORP-A | LEN | 0.03\% | 8.00\% | 0.00\% | 0.65\% | 0.00\% |
| LEUCADIA NATIONAL CORP | LUK | 0.05\% | n/a | n/a | n/a | n/a |
| LEXMARK INTERNATIONAL INC-A | LXK | 0.02\% | -9.00\% | 0.00\% | 2.84\% | 0.00\% |
| LIFE TECHNOLOGIES CORP | LIFE | 0.06\% | 9.64\% | 0.01\% | 0.00\% | 0.00\% |
| LIMITED BRANDS INC | LTD | 0.11\% | 14.90\% | 0.02\% | 2.56\% | 0.00\% |
| LINCOLN NATIONAL CORP | LNC | 0.06\% | 9.50\% | 0.01\% | 1.21\% | 0.00\% |
| LINEAR TECHNOLOGY CORP | LLTC | 0.06\% | 9.67\% | 0.01\% | 2.89\% | 0.00\% |
| LOCKHEED MARTIN CORP | LMT | 0.22\% | 8.38\% | 0.02\% | 4.57\% | 0.01\% |
| LOEWS CORP | L | 0.12\% | n/a | n/a | 0.63\% | 0.00\% |
| LORILLARD INC | LO | 0.13\% | 11.50\% | 0.02\% | 4.76\% | 0.01\% |
| LOWE'S COS INC | LOW | 0.29\% | 14.64\% | 0.04\% | 2.04\% | 0.01\% |
| LSI CORP | LSI | 0.04\% | 14.38\% | 0.01\% | n/a | n/a |
| M \& T BANK CORP | MTB | 0.08\% | 8.05\% | 0.01\% | 3.27\% | 0.00\% |
| MACY'S INC | M | 0.13\% | 10.90\% | 0.01\% | 1.89\% | 0.00\% |
| MARATHON OIL CORP | MRO | 0.19\% | 4.10\% | 0.01\% | 1.86\% | 0.00\% |
| MARATHON PETROLEUM CORP | MPC | 0.12\% | 12.00\% | 0.01\% | 2.56\% | 0.00\% |
| MARRIOTT INTERNATIONAL-CL A | MAR | 0.10\% | 16.62\% | 0.02\% | 1.13\% | 0.00\% |
| MARSH \& MCLENNAN COS | MMC | 0.14\% | 10.67\% | 0.01\% | 2.68\% | 0.00\% |
| MASCO CORP | MAS | 0.04\% | 15.00\% | 0.01\% | 2.26\% | 0.00\% |
| MASTERCARD INC-CLASS A | MA | 0.39\% | 18.09\% | 0.07\% | 0.14\% | 0.00\% |
| MATTEL INC | MAT | 0.09\% | 10.00\% | 0.01\% | 3.76\% | 0.00\% |
| MCCORMICK \& CO-NON VTG SHRS | MKC | 0.05\% | n/a | n/a | 2.34\% | 0.00\% |
| MCDONALD'S CORP | MCD | 0.77\% | 9.69\% | 0.07\% | 2.93\% | 0.02\% |
| MCGRAW-HILL COMPANIES INC | MHP | 0.10\% | 10.50\% | 0.01\% | 2.10\% | 0.00\% |
| MCKESSON CORP | MCK | 0.17\% | 14.53\% | 0.02\% | 0.73\% | 0.00\% |
| MEAD JOHNSON NUTRITION CO | MJN | 0.12\% | 10.33\% | 0.01\% | 1.45\% | 0.00\% |
| MEADWESTVACO CORP | MWV | 0.04\% | 10.00\% | 0.00\% | $3.20 \%$ | 0.00\% |

## STANDARD AND POOR'S 500 INDEX

|  |  | [6] | [7] | [8] | [9] | [10] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Ticker | Weight in Index | Long-Term <br> Growth Est. | Cap-Weighted Long-Term Growth Est. | Estimated Dividend Yield | Cap-Weighted Dividend Yield |
| MEDCO HEALTH SOLUTIONS INC | MHS | 0.21\% | 13.40\% | 0.03\% | 0.00\% | 0.00\% |
| MEDTRONIC INC | MDT | 0.32\% | 7.37\% | 0.02\% | 2.48\% | 0.01\% |
| MERCK \& CO. INC. | MRK | 0.89\% | 3.87\% | 0.03\% | 4.43\% | 0.04\% |
| METLIFE INC | MET | 0.31\% | 9.50\% | 0.03\% | 2.44\% | 0.01\% |
| METROPCS COMMUNICATIONS INC | PCS | 0.03\% | 20.70\% | 0.01\% | 0.00\% | 0.00\% |
| MICROCHIP TECHNOLOGY INC | MCHP | 0.05\% | 12.50\% | 0.01\% | 3.82\% | 0.00\% |
| MICRON TECHNOLOGY INC | MU | 0.07\% | 10.51\% | 0.01\% | 0.00\% | 0.00\% |
| MICROSOFT CORP | MSFT | 2.10\% | 10.80\% | 0.23\% | 2.35\% | 0.05\% |
| MOLEX INC | MOLX | 0.02\% | 12.50\% | 0.00\% | 2.81\% | 0.00\% |
| MOLSON COORS BREWING CO -B | TAP | 0.05\% | 8.00\% | 0.00\% | 3.19\% | 0.00\% |
| MONSANTO CO | MON | 0.32\% | 8.40\% | 0.03\% | 1.50\% | 0.00\% |
| MOODY'S CORP | MCO | 0.07\% | 12.50\% | 0.01\% | 1.50\% | 0.00\% |
| MORGAN STANLEY | MS | 0.30\% | 12.00\% | 0.04\% | 1.19\% | 0.00\% |
| MOSAIC CO/THE | MOS | 0.13\% | 8.00\% | 0.01\% | 0.43\% | 0.00\% |
| MOTOROLA MOBILITY HOLDINGS I | MMI | 0.09\% | 20.00\% | 0.02\% | 0.00\% | 0.00\% |
| MOTOROLA SOLUTIONS INC | MSI | 0.12\% | n/a | n/a | 1.74\% | 0.00\% |
| MURPHY OIL CORP | MUR | 0.09\% | 10.00\% | 0.01\% | 2.01\% | 0.00\% |
| MYLAN INC | MYL | 0.08\% | 10.92\% | 0.01\% | 0.00\% | 0.00\% |
| NABORS INDUSTRIES LTD | NBR | 0.05\% | 31.00\% | 0.01\% | 0.00\% | 0.00\% |
| NASDAQ OMX GROUP/THE | NDAQ | 0.04\% | 9.33\% | 0.00\% | 0.00\% | 0.00\% |
| NATIONAL OILWELL VARCO INC | NOV | 0.27\% | 19.00\% | 0.05\% | 0.55\% | 0.00\% |
| NETAPP INC | NTAP | 0.12\% | 16.13\% | 0.02\% | 0.00\% | 0.00\% |
| NETFLIX INC | NFLX | 0.05\% | 16.38\% | 0.01\% | 0.00\% | 0.00\% |
| NEWELL RUBBERMAID INC | NWL | 0.04\% | 9.67\% | 0.00\% | 1.94\% | 0.00\% |
| NEWFIELD EXPLORATION CO | NFX | 0.04\% | 8.00\% | 0.00\% | 0.00\% | 0.00\% |
| NEWMONT MINING CORP | NEM | 0.20\% | -3.00\% | -0.01\% | 3.18\% | 0.01\% |
| NEWS CORP-CL A | NWSA | 0.26\% | 16.90\% | 0.04\% | 0.99\% | 0.00\% |
| NEXTERA ENERGY INC | NEE | 0.19\% | 5.00\% | 0.01\% | 3.88\% | 0.01\% |
| NIKE INC - CL B | NKE | 0.32\% | 13.37\% | 0.04\% | 1.21\% | 0.00\% |
| NISOURCE INC | NI | 0.05\% | n/a | n/a | 3.93\% | 0.00\% |
| NOBLE CORP | NE | 0.08\% | 13.00\% | 0.01\% | 1.36\% | 0.00\% |
| NOBLE ENERGY INC | NBL | 0.14\% | 21.90\% | 0.03\% | 0.87\% | 0.00\% |
| NORDSTROM INC | JWN | 0.09\% | 13.20\% | 0.01\% | 1.70\% | 0.00\% |
| NORFOLK SOUTHERN CORP | NSC | 0.18\% | 12.47\% | 0.02\% | 2.69\% | 0.00\% |
| NORTHEAST UTILITIES | NU | 0.05\% | 8.19\% | 0.00\% | 3.25\% | 0.00\% |
| NORTHERN TRUST CORP | NTRS | 0.09\% | 14.34\% | 0.01\% | 2.32\% | 0.00\% |
| NORTHROP GRUMMAN CORP | NOC | 0.12\% | 4.00\% | 0.00\% | 3.45\% | 0.00\% |
| NOVELLUS SYSTEMS INC | NVLS | 0.03\% | 10.00\% | 0.00\% | 0.00\% | 0.00\% |
| NRG ENERGY INC | NRG | 0.03\% | 0.02\% | 0.00\% | 0.43\% | 0.00\% |
| NUCOR CORP | NUE | 0.11\% | 8.50\% | 0.01\% | 3.30\% | 0.00\% |
| NVIDIA CORP | NVDA | 0.07\% | 12.67\% | 0.01\% | 0.00\% | 0.00\% |
| NYSE EURONEXT | NYX | 0.06\% | 10.00\% | 0.01\% | 4.14\% | 0.00\% |
| O'REILLY AUTOMOTIVE INC | ORLY | 0.09\% | 17.26\% | 0.02\% | 0.00\% | 0.00\% |
| OCCIDENTAL PETROLEUM CORP | OXY | 0.63\% | 0.31\% | 0.00\% | 1.94\% | 0.01\% |
| OMNICOM GROUP | OMC | 0.10\% | 8.00\% | 0.01\% | 2.33\% | 0.00\% |
| ONEOK INC | OKE | 0.07\% | 16.00\% | 0.01\% | 3.16\% | 0.00\% |
| ORACLE CORP | ORCL | 1.15\% | 14.67\% | 0.17\% | 0.79\% | 0.01\% |
| OWENS-ILLINOIS INC | OI | 0.03\% | 8.67\% | 0.00\% | 0.00\% | 0.00\% |
| PACCAR INC | PCAR | 0.13\% | 6.23\% | 0.01\% | 2.65\% | 0.00\% |
| PALL CORP | PLL | 0.05\% | 11.00\% | 0.01\% | 1.23\% | 0.00\% |
| PARKER HANNIFIN CORP | PH | 0.10\% | 9.30\% | 0.01\% | 1.70\% | 0.00\% |
| PATTERSON COS INC | PDCO | 0.03\% | 12.33\% | 0.00\% | 0.91\% | 0.00\% |
| PAYCHEX INC | PAYX | 0.09\% | 10.00\% | 0.01\% | 3.97\% | 0.00\% |
| PEABODY ENERGY CORP | BTU | 0.07\% | n/a | n/a | 1.02\% | 0.00\% |
| PEOPLE'S UNITED FINANCIAL | PBCT | 0.04\% | 7.67\% | 0.00\% | 4.76\% | 0.00\% |
| PEPCO HOLDINGS INC | POM | 0.03\% | 6.50\% | 0.00\% | 5.72\% | 0.00\% |
| PEPSICO INC | PEP | 0.78\% | 5.50\% | 0.04\% | 3.30\% | 0.03\% |
| PERKINELMER INC | PKI | 0.02\% | 9.00\% | 0.00\% | 1.03\% | 0.00\% |
| PERRIGO CO | PRGO | 0.07\% | 13.53\% | 0.01\% | 0.26\% | 0.00\% |
| PFIZER INC | PFE | 1.27\% | 3.74\% | 0.05\% | 4.00\% | 0.05\% |
| P G \& E CORP | PCG | 0.14\% | 0.48\% | 0.00\% | 4.21\% | 0.01\% |
| PHILIP MORRIS INTERNATIONAL | PM | 1.14\% | 11.50\% | 0.13\% | 3.80\% | 0.04\% |
| PINNACLE WEST CAPITAL | PNW | 0.04\% | 5.80\% | 0.00\% | 4.57\% | 0.00\% |
| PIONEER NATURAL RESOURCES CO | PXD | 0.10\% | 44.80\% | 0.05\% | 0.12\% | 0.00\% |
| PITNEY BOWES INC | PBI | 0.03\% | n/a | n/a | 8.20\% | 0.00\% |
| PLUM CREEK TIMBER CO | PCL | 0.05\% | 5.00\% | 0.00\% | 4.05\% | 0.00\% |
| PNC FINANCIAL SERVICES GROUP | PNC | 0.26\% | 10.63\% | 0.03\% | 2.46\% | 0.01\% |
| PPG INDUSTRIES INC | PPG | 0.11\% | 8.00\% | 0.01\% | 2.53\% | 0.00\% |
| PPL CORPORATION | PPL | 0.13\% | -9.00\% | -0.01\% | 5.08\% | 0.01\% |
| PRAXAIR INC | PX | 0.25\% | 10.70\% | 0.03\% | 1.95\% | 0.00\% |
| PRECISION CASTPARTS CORP | PCP | 0.20\% | 13.75\% | 0.03\% | 0.07\% | 0.00\% |
| PRICELINE.COM INC | PCLN | 0.26\% | 21.78\% | 0.06\% | 0.00\% | 0.00\% |
| PRINCIPAL FINANCIAL GROUP | PFG | 0.07\% | 11.00\% | 0.01\% | 2.51\% | 0.00\% |
| PROCTER \& GAMBLE CO/THE | PG | 1.42\% | 9.20\% | 0.13\% | 3.13\% | 0.04\% |
| PROGRESS ENERGY INC | PGN | 0.12\% | 2.55\% | 0.00\% | 4.65\% | 0.01\% |
| PROGRESSIVE CORP | PGR | 0.11\% | 7.75\% | 0.01\% | 1.91\% | 0.00\% |
| PROLOGIS INC | PLD | 0.12\% | 5.21\% | 0.01\% | 3.18\% | 0.00\% |

## STANDARD AND POOR'S 500 INDEX

|  |  | [6] | [7] | [8] | [9] | [10] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Ticker | Weight in Index | Long-Term <br> Growth Est. | Cap-Weighted Long-Term Growth Est. | Estimated Dividend Yield | Cap-Weighted Dividend Yield |
| PRUDENTIAL FINANCIAL INC | PRU | 0.23\% | 11.00\% | 0.03\% | 2.54\% | 0.01\% |
| PUBLIC SERVICE ENTERPRISE GP | PEG | 0.12\% | -1.28\% | 0.00\% | 4.70\% | 0.01\% |
| PUBLIC STORAGE | PSA | 0.18\% | 5.21\% | 0.01\% | 3.20\% | 0.01\% |
| PULTEGROUP INC | PHM | 0.03\% | 10.00\% | 0.00\% | 0.00\% | 0.00\% |
| QEP RESOURCES INC | QEP | 0.04\% | 19.50\% | 0.01\% | 0.17\% | 0.00\% |
| QUALCOMM INC | QCOM | 0.85\% | 15.72\% | 0.13\% | 1.30\% | 0.01\% |
| QUANTA SERVICES INC | PWR | 0.04\% | 15.83\% | 0.01\% | n/a | n/a |
| QUEST DIAGNOSTICS INC | DGX | 0.07\% | 12.40\% | 0.01\% | 1.13\% | 0.00\% |
| RALPH LAUREN CORP | RL | 0.08\% | 12.75\% | 0.01\% | 0.45\% | 0.00\% |
| RANGE RESOURCES CORP | RRC | 0.08\% | 15.00\% | 0.01\% | 0.26\% | 0.00\% |
| RAYTHEON COMPANY | RTN | 0.14\% | 8.00\% | 0.01\% | 3.45\% | 0.00\% |
| RED HAT INC | RHT | 0.08\% | 18.67\% | 0.01\% | 0.00\% | 0.00\% |
| REGIONS FINANCIAL CORP | RF | 0.07\% | 8.55\% | 0.01\% | 0.78\% | 0.00\% |
| REPUBLIC SERVICES INC | RSG | 0.09\% | 10.00\% | 0.01\% | 2.90\% | 0.00\% |
| REYNOLDS AMERICAN INC | RAI | 0.18\% | 7.44\% | 0.01\% | 5.64\% | 0.01\% |
| ROBERT HALF INTL INC | RHI | 0.03\% | 12.67\% | 0.00\% | 1.95\% | 0.00\% |
| ROCKWELL AUTOMATION INC | ROK | 0.09\% | 14.67\% | 0.01\% | 2.06\% | 0.00\% |
| ROCKWELL COLLINS INC | COL | 0.07\% | 8.36\% | 0.01\% | 1.70\% | 0.00\% |
| ROPER INDUSTRIES INC | ROP | 0.07\% | 14.00\% | 0.01\% | 0.52\% | 0.00\% |
| ROSS STORES INC | ROST | 0.10\% | 9.98\% | 0.01\% | 1.06\% | 0.00\% |
| ROWAN COMPANIES INC | RDC | 0.04\% | 13.00\% | 0.00\% | 0.00\% | 0.00\% |
| RR DONNELLEY \& SONS CO | RRD | 0.02\% | 5.00\% | 0.00\% | 7.92\% | 0.00\% |
| RYDER SYSTEM INC | R | 0.02\% | 14.62\% | 0.00\% | 2.23\% | 0.00\% |
| SAFEWAY INC | SWY | 0.05\% | 9.62\% | 0.00\% | 2.55\% | 0.00\% |
| SAIC INC | SAI | 0.03\% | 6.40\% | 0.00\% | n/a | n/a |
| SALESFORCE.COM INC | CRM | 0.16\% | 27.30\% | 0.04\% | 0.00\% | 0.00\% |
| SANDISK CORP | SNDK | 0.09\% | 15.71\% | 0.01\% | 0.00\% | 0.00\% |
| SARA LEE CORP | SLE | 0.10\% | 6.00\% | 0.01\% | 2.10\% | 0.00\% |
| SCANA CORP | SCG | 0.04\% | 4.48\% | 0.00\% | 4.41\% | 0.00\% |
| SCHLUMBERGER LTD | SLB | 0.79\% | 21.33\% | 0.17\% | 1.42\% | 0.01\% |
| SCHWAB (CHARLES) CORP | SCHW | 0.15\% | 16.00\% | 0.02\% | 1.56\% | 0.00\% |
| SCRIPPS NETWORKS INTER-CL A | SNI | 0.04\% | 13.81\% | 0.01\% | 0.89\% | 0.00\% |
| SEALED AIR CORP | SEE | 0.03\% | 5.50\% | 0.00\% | 2.56\% | 0.00\% |
| SEARS HOLDINGS CORP | SHLD | 0.07\% | n/a | n/a | n/a | n/a |
| SEMPRA ENERGY | SRE | 0.11\% | 8.00\% | 0.01\% | 3.52\% | 0.00\% |
| SHERWIN-WILLIAMS CO/THE | SHW | 0.09\% | 13.12\% | 0.01\% | 1.46\% | 0.00\% |
| SIGMA-ALDRICH | SIAL | 0.07\% | 9.17\% | 0.01\% | 1.07\% | 0.00\% |
| SIMON PROPERTY GROUP INC | SPG | 0.33\% | 6.60\% | 0.02\% | 2.73\% | 0.01\% |
| SLM CORP | SLM | 0.06\% | n/a | n/a | 3.01\% | 0.00\% |
| SNAP-ON INC | SNA | 0.03\% | n/a | n/a | n/a | n/a |
| SOUTHERN CO/THE | SO | 0.30\% | 5.96\% | 0.02\% | 4.38\% | 0.01\% |
| SOUTHWEST AIRLINES CO | LUV | 0.05\% | 3.00\% | 0.00\% | 0.23\% | 0.00\% |
| SOUTHWESTERN ENERGY CO | SWN | 0.09\% | 12.85\% | 0.01\% | 0.00\% | 0.00\% |
| SPECTRA ENERGY CORP | SE | 0.16\% | 5.00\% | 0.01\% | 3.59\% | 0.01\% |
| SPRINT NEXTEL CORP | S | 0.07\% | 4.00\% | 0.00\% | 0.00\% | 0.00\% |
| ST JUDE MEDICAL INC | STJ | 0.11\% | 10.29\% | 0.01\% | 2.05\% | 0.00\% |
| STANLEY BLACK \& DECKER INC | SWK | 0.10\% | n/a | n/a | 2.15\% | 0.00\% |
| Staples inc | SPLS | 0.09\% | 8.50\% | 0.01\% | 2.51\% | 0.00\% |
| STARBUCKS CORP | SBUX | 0.31\% | 17.81\% | 0.05\% | 1.30\% | 0.00\% |
| STARWOOD HOTELS \& RESORTS | HOT | 0.08\% | 22.15\% | 0.02\% | 0.89\% | 0.00\% |
| STATE STREET CORP | STT | 0.17\% | 7.68\% | 0.01\% | 1.90\% | 0.00\% |
| STERICYCLE INC | SRCL | 0.06\% | 16.67\% | 0.01\% | n/a | n/a |
| STRYKER CORP | SYK | 0.16\% | 11.26\% | 0.02\% | 1.15\% | 0.00\% |
| SUNOCO INC | SUN | 0.03\% | -1.07\% | 0.00\% | 1.84\% | 0.00\% |
| SUNTRUST BANKS INC | STI | 0.10\% | 20.37\% | 0.02\% | 1.32\% | 0.00\% |
| SUPERVALU INC | SVU | 0.01\% | 1.45\% | 0.00\% | 5.53\% | 0.00\% |
| SYMANTEC CORP | SYMC | 0.10\% | 9.00\% | 0.01\% | 0.00\% | 0.00\% |
| SYSCO CORP | SYY | 0.13\% | 10.00\% | 0.01\% | 3.72\% | 0.00\% |
| T ROWE PRICE GROUP INC | TROW | 0.13\% | 13.75\% | 0.02\% | 2.07\% | 0.00\% |
| TARGET CORP | TGT | 0.30\% | 12.14\% | 0.04\% | 2.07\% | 0.01\% |
| TE CONNECTIVITY LTD | TEL | 0.12\% | 15.00\% | 0.02\% | 2.01\% | 0.00\% |
| TECO ENERGY INC | TE | 0.03\% | 4.70\% | 0.00\% | 4.96\% | 0.00\% |
| TENET HEALTHCARE CORP | THC | 0.02\% | 11.20\% | 0.00\% | 0.00\% | 0.00\% |
| TERADATA CORP | TDC | 0.09\% | 14.80\% | 0.01\% | n/a | n/a |
| TERADYNE INC | TER | 0.02\% | 11.25\% | 0.00\% | 0.00\% | 0.00\% |
| TESORO CORP | TSO | 0.03\% | 2.26\% | 0.00\% | 0.00\% | 0.00\% |
| TEXAS INSTRUMENTS INC | TXN | 0.29\% | 9.00\% | 0.03\% | 2.09\% | 0.01\% |
| TEXTRON INC | TXT | 0.06\% | 29.25\% | 0.02\% | 0.30\% | 0.00\% |
| THERMO FISHER SCIENTIFIC INC | TMO | 0.16\% | 12.82\% | 0.02\% | 0.00\% | 0.00\% |
| TIFFANY \& CO | TIF | 0.07\% | 14.53\% | 0.01\% | 1.78\% | 0.00\% |
| TIME WARNER CABLE | TWC | 0.19\% | 14.89\% | 0.03\% | 2.81\% | 0.01\% |
| TIME WARNER INC | TWX | 0.27\% | 12.80\% | 0.03\% | 2.83\% | 0.01\% |
| TITANIUM METALS CORP | TIE | 0.02\% | 15.00\% | 0.00\% | 1.61\% | 0.00\% |
| TJX COMPANIES INC | TJX | 0.22\% | 12.50\% | 0.03\% | 1.20\% | 0.00\% |
| TORCHMARK CORP | TMK | 0.04\% | 8.25\% | 0.00\% | 1.25\% | 0.00\% |
| TOTAL SYSTEM SERVICES INC | TSS | 0.03\% | 10.43\% | 0.00\% | 1.71\% | 0.00\% |
| TRAVELERS COS INC/THE | TRV | 0.18\% | 8.67\% | 0.02\% | 2.88\% | 0.01\% |

## STANDARD AND POOR'S 500 INDEX

|  |  | [6] | [7] | [8] | [9] | [10] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Ticker | Weight in Index | Long-Term Growth Est. | Cap-Weighted Long-Term Growth Est. | Estimated Dividend Yield | Cap-Weighted Dividend Yield |
| TRIPADVISOR INC | TRIP | 0.03\% | 12.67\% | 0.00\% | n/a | n/a |
| TYCO INTERNATIONAL LTD | TYC | 0.19\% | 13.00\% | 0.02\% | 1.98\% | 0.00\% |
| TYSON FOODS INC-CL A | TSN | 0.05\% | 6.00\% | 0.00\% | 0.82\% | 0.00\% |
| UNION PACIFIC CORP | UNP | 0.42\% | 15.43\% | 0.06\% | 2.09\% | 0.01\% |
| UNITED PARCEL SERVICE-CL B | UPS | 0.44\% | 14.74\% | 0.06\% | 2.83\% | 0.01\% |
| UNITED TECHNOLOGIES CORP | UTX | 0.60\% | 11.53\% | 0.07\% | 2.38\% | 0.01\% |
| UNITEDHEALTH GROUP INC | UNH | 0.45\% | 11.00\% | 0.05\% | 1.14\% | 0.01\% |
| UNUM GROUP | UNM | 0.05\% | 9.50\% | 0.01\% | 1.73\% | 0.00\% |
| URBAN OUTFITTERS INC | URBN | 0.03\% | 18.09\% | 0.01\% | 0.00\% | 0.00\% |
| US BANCORP | USB | 0.47\% | 11.41\% | 0.05\% | 2.19\% | 0.01\% |
| UNITED STATES STEEL CORP | X | 0.03\% | 6.50\% | 0.00\% | 0.67\% | 0.00\% |
| VALERO ENERGY CORP | VLO | 0.12\% | -7.37\% | -0.01\% | 2.14\% | 0.00\% |
| VARIAN MEDICAL SYSTEMS INC | VAR | 0.06\% | 12.67\% | 0.01\% | 0.00\% | 0.00\% |
| VENTAS INC | VTR | 0.13\% | 5.52\% | 0.01\% | 4.33\% | 0.01\% |
| VERISIGN INC | VRSN | 0.05\% | 13.00\% | 0.01\% | 0.00\% | 0.00\% |
| VERIZON COMMUNICATIONS INC | VZ | 0.86\% | 7.95\% | 0.07\% | 5.10\% | 0.04\% |
| VF CORP | VFC | 0.13\% | 11.88\% | 0.01\% | 1.94\% | 0.00\% |
| VIACOM INC-CLASS B | VIAB | 0.18\% | 16.29\% | 0.03\% | 1.94\% | 0.00\% |
| VISA INC-CLASS A SHARES | V | 0.47\% | 18.88\% | 0.09\% | 0.76\% | 0.00\% |
| VORNADO REALTY TRUST | VNO | 0.12\% | 2.08\% | 0.00\% | 3.38\% | 0.00\% |
| VULCAN MATERIALS CO | VMC | 0.05\% | 9.33\% | 0.00\% | 0.09\% | 0.00\% |
| WAL-MART STORES INC | WMT | 1.60\% | 11.00\% | 0.18\% | 2.65\% | 0.04\% |
| WALGREEN CO | WAG | 0.23\% | 12.83\% | 0.03\% | 2.57\% | 0.01\% |
| WALT DISNEY CO/THE | DIS | 0.60\% | 12.68\% | 0.08\% | 1.39\% | 0.01\% |
| WASHINGTON POST-CLASS B | WPO | 0.02\% | n/a | n/a | n/a | n/a |
| WASTE MANAGEMENT INC | WM | 0.12\% | 10.00\% | 0.01\% | 4.05\% | 0.01\% |
| WATERS CORP | WAT | 0.06\% | 12.85\% | 0.01\% | 0.00\% | 0.00\% |
| WATSON PHARMACEUTICALS INC | WPI | 0.06\% | 9.05\% | 0.01\% | 0.00\% | 0.00\% |
| WELLPOINT INC | WLP | 0.17\% | 11.20\% | 0.02\% | 1.65\% | 0.00\% |
| WELLS FARGO \& CO | WFC | 1.37\% | 30.21\% | 0.42\% | 2.19\% | 0.03\% |
| WESTERN DIGITAL CORP | WDC | 0.07\% | 6.33\% | 0.00\% | 0.00\% | 0.00\% |
| WESTERN UNION CO | WU | 0.09\% | 11.70\% | 0.01\% | 2.20\% | 0.00\% |
| WEYERHAEUSER CO | WY | 0.09\% | 5.00\% | 0.00\% | 2.73\% | 0.00\% |
| WHIRLPOOL CORP | WHR | 0.05\% | 10.00\% | 0.00\% | 2.60\% | 0.00\% |
| WHOLE FOODS MARKET INC | WFM | 0.12\% | 17.83\% | 0.02\% | 0.64\% | 0.00\% |
| WILLIAMS COS INC | WMB | 0.14\% | 17.00\% | 0.02\% | 3.60\% | 0.00\% |
| WINDSTREAM CORP | WIN | 0.05\% | 0.00\% | 0.00\% | 8.27\% | 0.00\% |
| WISCONSIN ENERGY CORP | WEC | 0.06\% | 6.50\% | 0.00\% | 3.49\% | 0.00\% |
| WPX ENERGY INC | WPX | 0.03\% | n/a | n/a | n/a | n/a |
| WW GRAINGER INC | GWW | 0.12\% | 13.12\% | 0.02\% | 1.38\% | 0.00\% |
| WYNDHAM WORLDWIDE CORP | WYN | 0.05\% | 14.40\% | 0.01\% | 2.03\% | 0.00\% |
| WYNN RESORTS LTD | WYNN | 0.10\% | 30.76\% | 0.03\% | 1.55\% | 0.00\% |
| XCEL ENERGY INC | XEL | 0.10\% | 5.27\% | 0.01\% | 4.02\% | 0.00\% |
| XEROX CORP | XRX | 0.09\% | n/a | n/a | 2.04\% | 0.00\% |
| XILINX INC | XLNX | 0.08\% | 13.17\% | 0.01\% | 2.03\% | 0.00\% |
| XL GROUP PLC | XL | 0.05\% | 8.33\% | 0.00\% | 2.08\% | 0.00\% |
| XYLEM INC | XYL | 0.04\% | n/a | n/a | 1.44\% | 0.00\% |
| YAHOO! INC | YHOO | 0.14\% | 12.81\% | 0.02\% | 0.00\% | 0.00\% |
| YUM! BRANDS INC | YUM | 0.24\% | 12.88\% | 0.03\% | 1.78\% | 0.00\% |
| ZIMMER HOLDINGS INC | ZMH | 0.09\% | 10.15\% | 0.01\% | 0.57\% | 0.00\% |
| ZIONS BANCORPORATION | ZION | 0.03\% | 8.20\% | 0.00\% | 0.26\% | 0.00\% |
| Notes: |  |  |  |  |  |  |
| [1] Equals sum of Col. [10] |  |  |  |  |  |  |
| [2] Equals sum of Col. [8] |  |  |  |  |  |  |
| [3] Equals ([1] $\times(1+(0.5 \times[2]))$ ) ${ }^{\text {[2] }}$ |  |  |  |  |  |  |
| [4] Source: Bloomberg Professional |  |  |  |  |  |  |
| [5] Equals [3] - [4] |  |  |  |  |  |  |
| [6] Equals weight in S\&P 500 based on market capitalization |  |  |  |  |  |  |
| [7] Source: Bloomberg Professional |  |  |  |  |  |  |
| [8] Equals Col. [6] x Col. [7] if Col. [7] $\neq \mathrm{n} / \mathrm{a}$, otherwise equals zero |  |  |  |  |  |  |
| $[9]$ Source: Bloomberg Professional |  |  |  |  |  |  |
| [10] Equals Col. [6] x Col. [9] if Col. [9] $\neq \mathrm{n} / \mathrm{a}$, otherwise equals zero |  |  |  |  |  |  |

## $(9-\mathrm{Hg})^{-1!9!ч х 马}$

## Testimony of Robert B. Hevert

Exhibit __(RBH-6)

Regulatory Risk for Proxy Group Companies

|  |  | [1] | [2] | [3] | [4] |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | S\&P |  | RRA |  |
|  |  | Rank | Numeric Rank | Rank | Numeric Rank |
| Allete | Minnesota | Credit supportive | 3 | Average / 2 | 5 |
|  | Wisconsin | More credit supportive | 4 | Above Average / 2 | 8 |
| Alliant Energy Corp. | Wisconsin | More credit supportive | 4 | Above Average / 2 | 8 |
|  | Iowa | More credit supportive | 4 | Above Average / 3 | 7 |
|  | Minnesota | Credit supportive | 3 | Average / 2 | 5 |
| Ameren Corp. | Illinois | Less credit supportive | 2 | Below Average / 2 | 2 |
|  | Missouri | Less credit supportive | 2 | Average / 2 | 5 |
| American Electric Power | Arkansas | Credit supportive | 3 | Average / 3 | 4 |
|  | Indiana | More credit supportive | 4 | Above Average / 3 | 7 |
|  | Kentucky | Credit supportive | 3 | Average / 1 | 6 |
|  | Louisiana | Less credit supportive | 2 | Average / 1 | 6 |
|  | Michigan | Credit supportive | 3 | Average / 1 | 6 |
|  | Ohio | Credit supportive | 3 | Average / 1 | 6 |
|  | Oklahoma | Credit supportive | 3 | Average / 2 | 5 |
|  | Tennessee | NA | NA | Average / 1 | 6 |
|  | Texas | Less credit supportive | 2 | Below Average / 1 | 3 |
|  | Virginia | Credit supportive | 3 | Above Average / 3 | 7 |
|  | West Virginia | Less credit supportive | 2 | Average / 3 | 4 |
| Avista Corp. | Washington | Less credit supportive | 2 | Average / 3 | 4 |
|  | Idaho | Credit supportive | 3 | Average / 2 | 5 |
| Black Hills Corp. | Colorado | Credit supportive | 3 | Average / 1 | 6 |
|  | South Dakota | Credit supportive | 3 | Average / 2 | 5 |
|  | Wyoming | Less credit supportive | 2 | Average / 2 | 5 |
|  | Montana | Less credit supportive | 2 | Below Average / 1 | 3 |
| Center Point Energy | Texas | Less credit supportive | 2 | Below Average / 1 | 3 |
|  | Arkansas | Credit supportive | 3 | Average / 3 | 4 |
|  | Louisiana | Less credit supportive | 2 | Average / 1 | 6 |
|  | Mississippi | Credit supportive | 3 | Above Average / 2 | 8 |
|  | Minnesota | Credit supportive | 3 | Average / 2 | 5 |
| Cleco Corp. | Louisiana | Less credit supportive | 2 | Average / 1 | 6 |
| Consolidated Edison | New York | Less credit supportive | 2 | Average / 3 | 4 |
|  | Pennsylvania | Credit supportive | 3 | Average / 3 | 4 |
|  | New Jersey | Credit supportive | 3 | Average / 2 | 5 |
| Dominion Resources, Inc. | Virginia | Credit supportive | 3 | Above Average / 3 | 7 |
|  | North Carolina | Credit supportive | 3 | Above Average / 2 | 8 |
| DTE Energy Co. | Michigan | Credit supportive | 3 | Average / 1 | 6 |
| Edison International | California | More credit supportive | 4 | Average / 1 | 6 |
| Great Plains Energy Inc. | Kansas | Credit supportive | 3 | Average / 2 | 5 |
|  | Missouri | Less credit supportive | 2 | Average / 2 | 5 |
| Hawaiian Electric | Hawaii | Less credit supportive | 2 | Average / 2 | 5 |
| IDACORP, Inc. | Idaho | Credit supportive | 3 | Average / 2 | 5 |
|  | Oregon | Credit supportive | 3 | Average / 3 | 4 |
| Integrys/WPS Resources | Michigan | Credit supportive | 3 | Average / 1 | 6 |
|  | Wisconsin | More credit supportive | 4 | Above Average / 2 | 8 |
| OGE Energy | Arkansas | Credit supportive | 3 | Average / 3 | 4 |
|  | Oklahoma | Credit supportive | 3 | Average / 2 | 5 |

PROXY GROUP COMPANIES AND JURISDICTIONAL RANKINGS

|  |  | S\&P |  | RRA |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Rank | Numeric Rank | Rank | Numeric Rank |
| Pepco Holdings, Inc. | Maryland | Less credit supportive | 2 | Below Average / 2 | 2 |
|  | District of Columbia | Least credit supportive | 1 | Average / 2 | 5 |
|  | New Jersey | Credit supportive | 3 | Average / 2 | 5 |
|  | Delaware | Least credit supportive | 1 | Average / 2 | 5 |
| PG\&E Corp | California | More credit supportive | 4 | Average / 1 | 6 |
| Pinnacle West Capital | Arizona | Least credit supportive | 1 | Average / 3 | 4 |
| Portland General | Oregon | Credit supportive | 3 | Average / 3 | 4 |
| SCANA Corp. | South Carolina | More credit supportive | 4 | Average / 1 | 6 |
| Sempra Energy | California | More credit supportive | 4 | Average / 1 | 6 |
| Southern Co. | Alabama | More credit supportive | 4 | Above Average / 2 | 8 |
|  | Florida | Credit supportive | 3 | Average / 1 | 6 |
|  | Georgia | More credit supportive | 4 | Average / 1 | 6 |
|  | Mississippi | Credit supportive | 3 | Above Average / 2 | 8 |
| TECO Energy, Inc. | Florida | Credit supportive | 3 | Average / 1 | 6 |
| UIL Holdings Corp. | Connecticut | Less credit supportive | 2 | Below Average / 3 | 1 |
| Vectren Corp. | Indiana | More credit supportive | 4 | Above Average / 3 | 7 |
| Westar Energy | Kansas | Credit supportive | 3 | Average / 2 | 5 |
| Wisconsin Energy | Wisconsin | More credit supportive | 4 | Above Average / 2 | 8 |
|  | Michigan | Credit supportive | 3 | Average / 1 | 6 |
| Xcel Energy, Inc. | Minnesota | Credit supportive | 3 | Average / 2 | 5 |
|  | Wisconsin | More credit supportive | 4 | Above Average / 2 | 8 |
|  | North Dakota | Credit supportive | 3 | Average / 1 | 6 |
|  | South Dakota | Credit supportive | 3 | Average / 2 | 5 |
|  | Michigan | Credit supportive | 3 | Average / 1 | 6 |
|  | Colorado | Credit supportive | 3 | Average / 1 | 6 |
|  | Texas | Less credit supportive | 2 | Below Average / 1 | 3 |
|  | New Mexico | Least credit supportive | 1 | Below Average / 1 | 3 |
| Proxy Group Average |  |  | 2.85 |  | 5.38 |
|  |  |  |  |  |  |
| Niagara Mowhawk | New York | Less credit supportive | 2 | Average / 3 | 4 |

Notes
[1] Source: Standard \& Poor's Rating Service, Assessing U.S. Utility Regulatory Environments, March 12, 2010, at 1-2
[2] Most Credit Supportive $=5$, More Credit Supportive $=4$, Credit Supportive $=3$, Less Credit Supportive $=2$, Least Credit Supportive $=1$
[3] Source: State Regulatory Evaluations, Regulatory Research Associates, January 19, 2012, at 2
[4] $\mathrm{AA} / 1=9, \mathrm{AA} / 2=8, \mathrm{AA} / 3=7, \mathrm{~A} / 1=6, \mathrm{~A} / 2=5, \mathrm{~A} / 3=4, \mathrm{BA} / 1=3, \mathrm{BA} / 2=2, \mathrm{BA} / 3=1$

## (L-НЯУ) - !! 9 !Чхヨ

# Testimony of Robert B. Hevert 

Exhibit __ (RBH-7)

## Capital Structure

Summary Data

## Common Equity Ratio

| Company Name | Ticker | 2011 Q3 | 2011 Q2 | 2011 Q1 | 2010 Q4 | 2010 Q3 | 2010 Q2 | 2010 Q1 | 2009 Q4 | Overall <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Allete | ALE | 57.72\% | 58.90\% | 58.71\% | 56.67\% | 57.45\% | 58.58\% | 58.26\% | 57.59\% | 57.99\% |
| Alliant Energy Corp. | LNT | 50.29\% | 49.40\% | 49.34\% | 49.07\% | 49.61\% | 48.41\% | 47.63\% | 47.91\% | 48.96\% |
| Ameren Corp. | AEE | 55.49\% | 55.12\% | 54.28\% | 54.59\% | 52.50\% | 50.85\% | 50.50\% | 50.70\% | 53.00\% |
| American Electric Power | AEP | 48.83\% | 47.45\% | 46.81\% | 46.92\% | 45.73\% | 44.75\% | 44.68\% | 44.62\% | 46.22\% |
| Avista Corp. | AVA | 48.48\% | 48.64\% | 48.70\% | 46.93\% | 47.95\% | 47.06\% | 46.86\% | 46.25\% | 47.61\% |
| Black Hills Corp. | BKH | 50.71\% | 50.62\% | 50.71\% | 51.93\% | 52.15\% | 52.35\% | 52.83\% | 52.29\% | 51.70\% |
| Cleco Corp. | CNL | 46.76\% | 47.01\% | 46.26\% | 46.63\% | 49.85\% | 49.76\% | 49.97\% | 44.76\% | 47.63\% |
| Consolidated Edison | ED | 64.20\% | 63.91\% | 63.67\% | 63.61\% | 62.65\% | 61.73\% | 62.46\% | 62.20\% | 63.05\% |
| Dominion Resources, Inc. | D | 53.05\% | 51.77\% | 52.49\% | 52.26\% | 52.38\% | 50.55\% | 52.60\% | 49.64\% | 51.84\% |
| DTE Energy Co. | DTE | 48.06\% | 47.26\% | 48.35\% | 48.81\% | 48.77\% | 48.39\% | 48.70\% | 48.53\% | 48.36\% |
| Edison International | EIX | 47.20\% | 47.14\% | 48.02\% | 48.60\% | 48.36\% | 48.24\% | 47.78\% | 48.53\% | 47.98\% |
| Great Plains Energy Inc. | GXP | 50.64\% | 49.09\% | 49.35\% | 50.25\% | 50.60\% | 49.17\% | 44.39\% | 44.79\% | 48.54\% |
| IDACORP, Inc. | IDA | 50.33\% | 48.79\% | 48.69\% | 46.59\% | 46.19\% | 48.13\% | 47.52\% | 47.44\% | 47.96\% |
| Integrys | TEG | 57.63\% | 56.30\% | 56.36\% | 57.15\% | 56.81\% | 58.22\% | 58.92\% | 57.31\% | 57.34\% |
| OGE Energy | OGE | 54.04\% | 52.40\% | 53.90\% | 54.02\% | 53.88\% | 52.58\% | 55.68\% | 55.83\% | 54.04\% |
| Pepco Holdings, Inc. | POM | 45.64\% | 44.76\% | 44.49\% | 44.03\% | 44.51\% | 43.28\% | 44.11\% | 44.35\% | 44.40\% |
| PG\&E Corp | PCG | 47.53\% | 47.04\% | 46.37\% | 45.88\% | 46.08\% | 46.30\% | 45.68\% | 46.29\% | 46.40\% |
| Pinnacle West Capital | PNW | 51.58\% | 51.92\% | 52.07\% | 52.47\% | 52.49\% | 50.99\% | 47.90\% | 49.85\% | 51.16\% |
| Portland General | POR | 47.79\% | 47.66\% | 47.65\% | 46.49\% | 46.52\% | 46.17\% | 46.39\% | 46.86\% | 46.94\% |
| SCANA Corp. | SCG | 51.06\% | 50.56\% | 50.96\% | 52.22\% | 52.15\% | 51.17\% | 50.58\% | 50.34\% | 51.13\% |
| Sempra Energy | SRE | 51.17\% | 53.06\% | 52.58\% | 50.36\% | 49.51\% | 52.37\% | 54.61\% | 54.13\% | 52.22\% |
| Southern Co. | SO | 48.86\% | 47.46\% | 47.67\% | 45.89\% | 46.62\% | 47.05\% | 47.81\% | 47.03\% | 47.30\% |
| TECO Energy, Inc. | TE | 50.38\% | 49.89\% | 49.70\% | 48.99\% | 49.98\% | 49.00\% | 49.64\% | 48.60\% | 49.52\% |
| UIL Holdings Corp. | UIL | 45.82\% | 46.38\% | 46.81\% | 45.32\% | 45.43\% | 46.08\% | 46.74\% | 47.15\% | 46.22\% |
| Vectren Corp. | VVC | 50.06\% | 49.34\% | 49.41\% | 48.94\% | 50.04\% | 49.22\% | 49.14\% | 48.03\% | 49.27\% |
| Westar Energy | WR | 57.51\% | 55.95\% | 56.62\% | 57.29\% | 57.86\% | 56.49\% | 56.45\% | 56.52\% | 56.84\% |
| Wisconsin Energy | WEC | 56.40\% | 58.21\% | 58.93\% | 57.84\% | 59.37\% | 56.69\% | 57.84\% | 57.07\% | 57.79\% |
| Xcel Energy, Inc. | XEL | 54.34\% | 53.55\% | 54.08\% | 52.95\% | 54.70\% | 54.82\% | 53.82\% | 53.77\% | 54.00\% |
| Proxy Group Average |  |  |  |  |  |  |  |  |  | 50.91\% |

## Common Equity Ratio

| Company Name | Ticker | 2011 Q3 | 2011 Q2 | 2011 Q1 | 2010 Q4 | 2010 Q3 | 2010 Q2 | 2010 Q1 | 2009 Q4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ALLETE (Minnesota Power) | ALE | 56.27\% | 58.10\% | 57.48\% | 56.81\% | 56.78\% | 59.06\% | 58.69\% | 58.64\% |
| Superior Water, Light and Power Company | ALE | 59.18\% | 59.70\% | 59.93\% | 56.54\% | 58.12\% | 58.10\% | 57.83\% | 56.55\% |
| Interstate Power and Light Company | LNT | 47.56\% | 46.24\% | 47.15\% | 47.24\% | 47.60\% | 46.23\% | 45.51\% | 45.39\% |
| Wisconsin Power and Light Company | LNT | 53.02\% | 52.57\% | 51.53\% | 50.91\% | 51.62\% | 50.59\% | 49.74\% | 50.44\% |
| Ameren Illinois Company | AEE | 58.34\% | 58.25\% | 56.72\% | 57.04\% | na | na | na | na |
| Union Electric Company | AEE | 52.63\% | 51.99\% | 51.85\% | 52.14\% | 52.50\% | 50.85\% | 50.50\% | 50.70\% |
| AEP Texas Central Company | AEP | 60.66\% | 47.07\% | 44.82\% | 44.66\% | 44.58\% | 43.60\% | 43.70\% | 43.57\% |
| AEP Texas North Company | AEP | 45.11\% | 43.60\% | 43.15\% | 45.37\% | 42.44\% | 42.52\% | 43.75\% | 40.18\% |
| Appalachian Power Company | AEP | 43.68\% | 42.63\% | 41.07\% | 42.69\% | 42.84\% | 41.26\% | 42.03\% | 42.15\% |
| Columbus Southern Power Company | AEP | 50.76\% | 50.43\% | 50.35\% | 50.30\% | 48.02\% | 46.60\% | 46.03\% | 46.05\% |
| Indiana Michigan Power Company | AEP | 48.59\% | 48.13\% | 48.35\% | 47.31\% | 46.34\% | 45.82\% | 45.97\% | 45.40\% |
| Kentucky Power Company | AEP | 44.68\% | 44.49\% | 44.61\% | 43.97\% | 43.37\% | 42.57\% | 43.44\% | 43.21\% |
| Kingsport Power Company | AEP | 44.81\% | 48.09\% | 45.00\% | 44.34\% | 40.59\% | 40.52\% | 40.16\% | 38.06\% |
| Ohio Power Company | AEP | 53.53\% | 53.95\% | 54.14\% | 53.03\% | 51.99\% | 51.96\% | 49.11\% | 49.64\% |
| Public Service Company of Oklahoma | AEP | 47.24\% | 46.25\% | 44.08\% | 43.18\% | 44.96\% | 42.72\% | 42.55\% | 44.43\% |
| Southwestern Electric Power Company | AEP | 50.59\% | 49.48\% | 48.80\% | 48.40\% | 48.38\% | 47.13\% | 46.74\% | 50.92\% |
| Wheeling Power Co | AEP | 47.51\% | 47.88\% | 50.57\% | 52.82\% | 49.48\% | 47.55\% | 47.95\% | 47.21\% |
| Avista Corporation | AVA | 48.48\% | 48.64\% | 48.70\% | 46.93\% | 47.95\% | 47.06\% | 46.86\% | 46.25\% |
| Black Hills Colorado Electric Utility Company, LP | BKH | 40.55\% | 41.62\% | 42.70\% | 45.28\% | 47.09\% | 50.60\% | 53.52\% | 55.69\% |
| Black Hills Power, Inc. | BKH | 54.30\% | 53.49\% | 53.19\% | 52.72\% | 52.17\% | 49.84\% | 48.89\% | 45.76\% |
| Cheyenne Light, Fuel and Power Company | BKH | 57.28\% | 56.77\% | 56.25\% | 57.80\% | 57.19\% | 56.62\% | 56.09\% | 55.42\% |
| Cleco Power LLC | CNL | 46.76\% | 47.01\% | 46.26\% | 46.63\% | 49.85\% | 49.76\% | 49.97\% | 44.76\% |
| Consolidated Edison Company of New York, Inc. | ED | 49.87\% | 49.42\% | 48.36\% | 49.24\% | 46.46\% | 47.09\% | 47.06\% | 47.98\% |
| Orange and Rockland Utilities, Inc. | ED | 47.53\% | 46.89\% | 47.00\% | 46.34\% | 45.91\% | 46.73\% | 48.27\% | 45.97\% |
| Pike County Light \& Power Company | ED | 60.66\% | 60.54\% | 60.55\% | 60.00\% | 59.42\% | 54.36\% | 55.83\% | 56.16\% |
| Rockland Electric Company | ED | 98.76\% | 98.77\% | 98.76\% | 98.88\% | 98.81\% | 98.75\% | 98.70\% | 98.69\% |
| Virginia Electric and Power Company | D | 53.05\% | 51.77\% | 52.49\% | 52.26\% | 52.38\% | 50.55\% | 52.60\% | 49.64\% |
| Detroit Edison Company | DTE | 48.06\% | 47.26\% | 48.35\% | 48.81\% | 48.77\% | 48.39\% | 48.70\% | 48.53\% |
| Southern California Edison Co. | EIX | 47.20\% | 47.14\% | 48.02\% | 48.60\% | 48.36\% | 48.24\% | 47.78\% | 48.53\% |
| Kansas City Power \& Light Company | GXP | 49.64\% | 48.01\% | 48.56\% | 49.36\% | 49.86\% | 48.20\% | 49.02\% | 49.33\% |
| KCP\&L Greater Missouri Operations Company | GXP | 51.65\% | 50.16\% | 50.15\% | 51.14\% | 51.35\% | 50.15\% | 39.75\% | 40.25\% |
| Idaho Power Co. | IDA | 50.33\% | 48.79\% | 48.69\% | 46.59\% | 46.19\% | 48.13\% | 47.52\% | 47.44\% |
| Upper Peninsula Power Company | TEG | 60.34\% | 58.82\% | 59.51\% | 59.22\% | 58.46\% | 61.57\% | 62.95\% | 60.11\% |
| Wisconsin Public Service Corp | TEG | 54.92\% | 53.78\% | 53.21\% | 55.08\% | 55.15\% | 54.87\% | 54.89\% | 54.52\% |
| Oklahoma Gas and Electric Company | OGE | 54.04\% | 52.40\% | 53.90\% | 54.02\% | 53.88\% | 52.58\% | 55.68\% | 55.83\% |
| Atlantic City Electric Company | POM | 40.17\% | 37.01\% | 37.42\% | 37.04\% | 38.70\% | 35.91\% | 35.64\% | 36.67\% |
| Delmarva Power \& Light Company | POM | 47.93\% | 49.07\% | 48.40\% | 47.70\% | 47.66\% | 46.61\% | 49.47\% | 49.09\% |
| Potomac Electric Power Company | POM | 48.82\% | 48.20\% | 47.65\% | 47.35\% | 47.18\% | 47.32\% | 47.23\% | 47.30\% |
| Pacific Gas and Electric Company | PCG | 47.53\% | 47.04\% | 46.37\% | 45.88\% | 46.08\% | 46.30\% | 45.68\% | 46.29\% |
| Arizona Public Service Company | PNW | 51.58\% | 51.92\% | 52.07\% | 52.47\% | 52.49\% | 50.99\% | 47.90\% | 49.85\% |
| Portland General Electric Company | POR | 47.79\% | 47.66\% | 47.65\% | 46.49\% | 46.52\% | 46.17\% | 46.39\% | 46.86\% |
| South Carolina Electric \& Gas Co. | SCG | 51.06\% | 50.56\% | 50.96\% | 52.22\% | 52.15\% | 51.17\% | 50.58\% | 50.34\% |
| San Diego Gas \& Electric Co. | SRE | 51.17\% | 53.06\% | 52.58\% | 50.36\% | 49.51\% | 52.37\% | 54.61\% | 54.13\% |
| Alabama Power Company | SO | 44.35\% | 43.78\% | 43.53\% | 43.58\% | 44.10\% | 43.28\% | 43.21\% | 42.85\% |
| Georgia Power Company | SO | 50.59\% | 48.56\% | 48.43\% | 48.36\% | 48.91\% | 48.42\% | 48.86\% | 47.39\% |
| Gulf Power Company | SO | 44.54\% | 43.21\% | 43.39\% | 42.48\% | 42.95\% | 43.20\% | 44.08\% | 42.76\% |
| Mississippi Power Company | SO | 55.96\% | 54.30\% | 55.33\% | 49.14\% | 50.52\% | 53.29\% | 55.07\% | 55.11\% |
| Tampa Electric Company | TE | 50.38\% | 49.89\% | 49.70\% | 48.99\% | 49.98\% | 49.00\% | 49.64\% | 48.60\% |
| United Illuminating Company | UIL | 45.82\% | 46.38\% | 46.81\% | 45.32\% | 45.43\% | 46.08\% | 46.74\% | 47.15\% |
| Southern Indiana Gas and Electric Company, Inc. | VVC | 50.06\% | 49.34\% | 49.41\% | 48.94\% | 50.04\% | 49.22\% | 49.14\% | 48.03\% |
| Kansas Gas and Electric Company | WR | 57.42\% | 56.50\% | 56.26\% | 56.74\% | 56.97\% | 56.24\% | 55.98\% | 56.89\% |
| Westar Energy (KPL) | WR | 57.61\% | 55.39\% | 56.99\% | 57.84\% | 58.74\% | 56.74\% | 56.91\% | 56.15\% |
| Wisconsin Electric Power Company | WEC | 56.40\% | 58.21\% | 58.93\% | 57.84\% | 59.37\% | 56.69\% | 57.84\% | 57.07\% |
| Northern States Power Company - MN | XEL | 52.24\% | 52.23\% | 52.16\% | 51.11\% | 51.12\% | 52.44\% | 52.22\% | 51.78\% |
| Northern States Power Company - WI | XEL | 56.75\% | 55.75\% | 55.98\% | 55.30\% | 57.53\% | 57.34\% | 54.18\% | 56.17\% |
| Public Service Company of Colorado | XEL | 56.36\% | 56.77\% | 57.57\% | 55.24\% | 59.85\% | 59.30\% | 57.97\% | 56.67\% |
| Southwestern Public Service Company | XEL | 52.03\% | 49.44\% | 50.61\% | 50.14\% | 50.28\% | 50.18\% | 50.91\% | 50.47\% |

Summary Data

## Preferred Equity Ratio

| Company Name | Ticker | 2011 Q3 | 2011 Q2 | 2011 Q1 | 2010 Q4 | 2010 Q3 | 2010 Q2 | 2010 Q1 | 2009 Q4 | Overall <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Allete | ALE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Alliant Energy Corp. | LNT | 3.73\% | 3.80\% | 4.36\% | 4.35\% | 4.34\% | 4.43\% | 4.37\% | 4.45\% | 4.23\% |
| Ameren Corp. | AEE | 1.25\% | 1.26\% | 1.22\% | 1.22\% | 1.03\% | 1.46\% | 1.47\% | 1.46\% | 1.29\% |
| American Electric Power | AEP | 0.16\% | 0.17\% | 0.17\% | 0.17\% | 0.17\% | 0.17\% | 0.17\% | 0.18\% | 0.17\% |
| Avista Corp. | AVA | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Black Hills Corp. | BKH | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Cleco Corp. | CNL | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Consolidated Edison | ED | 0.26\% | 0.26\% | 0.26\% | 0.26\% | 0.26\% | 0.27\% | 0.27\% | 0.27\% | 0.26\% |
| Dominion Resources, Inc. | D | 1.55\% | 1.53\% | 1.57\% | 1.59\% | 1.66\% | 1.69\% | 1.80\% | 1.79\% | 1.65\% |
| DTE Energy Co. | DTE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Edison International | EIX | 5.61\% | 5.80\% | 5.98\% | 5.40\% | 5.42\% | 5.61\% | 5.78\% | 6.00\% | 5.70\% |
| Great Plains Energy Inc. | GXP | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| IDACORP, Inc. | IDA | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Integrys | TEG | 1.29\% | 1.27\% | 1.25\% | 1.23\% | 1.23\% | 1.23\% | 1.24\% | 1.24\% | 1.25\% |
| OGE Energy | OGE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Pepco Holdings, Inc. | POM | 0.00\% | 0.00\% | 0.00\% | 0.11\% | 0.11\% | 0.11\% | 0.12\% | 0.12\% | 0.07\% |
| PG\&E Corp | PCG | 1.02\% | 1.02\% | 1.04\% | 1.03\% | 1.05\% | 1.06\% | 1.08\% | 1.09\% | 1.05\% |
| Pinnacle West Capital | PNW | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Portland General | POR | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| SCANA Corp. | SCG | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Sempra Energy | SRE | 1.12\% | 1.20\% | 1.21\% | 1.27\% | 1.29\% | 1.42\% | 1.52\% | 1.55\% | 1.32\% |
| Southern Co. | SO | 3.23\% | 3.27\% | 3.34\% | 3.33\% | 3.39\% | 3.49\% | 3.56\% | 3.60\% | 3.40\% |
| TECO Energy, Inc. | TE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| UIL Holdings Corp. | UIL | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Vectren Corp. | VVC | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Westar Energy | WR | 0.24\% | 0.24\% | 0.25\% | 0.26\% | 0.26\% | 0.26\% | 0.27\% | 0.27\% | 0.26\% |
| Wisconsin Energy | WEC | 0.54\% | 0.56\% | 0.57\% | 0.57\% | 0.60\% | 0.60\% | 0.62\% | 0.62\% | 0.59\% |
| 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 |  |  |  |  |  |  |  |  |  | 0.76\% |


#### Abstract

Underlying Data


| Company Name | Ticker | 2011 Q3 | 2011 Q2 | 2011 Q1 | 2010 Q4 | 2010 Q3 | 2010 Q2 | 2010 Q1 | 2009 Q4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ALLETE (Minnesota Power) | ALE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Superior Water, Light and Power Company | ALE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Interstate Power and Light Company | LNT | 5.25\% | 5.38\% | 6.51\% | 6.49\% | 6.44\% | 6.56\% | 6.40\% | 6.51\% |
| Wisconsin Power and Light Company | LNT | 2.20\% | 2.22\% | 2.21\% | 2.21\% | 2.25\% | 2.29\% | 2.34\% | 2.39\% |
| Ameren Illinois Company | AEE | 1.47\% | 1.48\% | 1.41\% | 1.40\% | na | na | na | na |
| Union Electric Company | AEE | 1.02\% | 1.04\% | 1.04\% | 1.03\% | 1.03\% | 1.46\% | 1.47\% | 1.46\% |
| AEP Texas Central Company | AEP | 0.30\% | 0.40\% | 0.38\% | 0.41\% | 0.41\% | 0.43\% | 0.43\% | 0.43\% |
| AEP Texas North Company | AEP | 0.33\% | 0.32\% | 0.32\% | 0.34\% | 0.33\% | 0.33\% | 0.33\% | 0.30\% |
| Appalachian Power Company | AEP | 0.26\% | 0.27\% | 0.26\% | 0.27\% | 0.27\% | 0.27\% | 0.27\% | 0.27\% |
| Columbus Southern Power Company | AEP | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Indiana Michigan Power Company | AEP | 0.22\% | 0.22\% | 0.23\% | 0.23\% | 0.22\% | 0.22\% | 0.22\% | 0.22\% |
| Kentucky Power Company | AEP | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Kingsport Power Company | AEP | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Ohio Power Company | AEP | 0.29\% | 0.29\% | 0.29\% | 0.28\% | 0.27\% | 0.27\% | 0.25\% | 0.26\% |
| Public Service Company of Oklahoma | AEP | 0.26\% | 0.26\% | 0.26\% | 0.25\% | 0.26\% | 0.26\% | 0.28\% | 0.29\% |
| Southwestern Electric Power Company | AEP | 0.13\% | 0.13\% | 0.14\% | 0.14\% | 0.14\% | 0.14\% | 0.14\% | 0.16\% |
| Wheeling Power Co | AEP | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Avista Corporation | AVA | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Black Hills Colorado Electric Utility Company, LP | BKH | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Black Hills Power, Inc. | BKH | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Cheyenne Light, Fuel and Power Company | BKH | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Cleco Power LLC | CNL | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Consolidated Edison Company of New York, Inc. | ED | 1.04\% | 1.05\% | 1.03\% | 1.05\% | 1.03\% | 1.06\% | 1.06\% | 1.09\% |
| Orange and Rockland Utilities, Inc. | ED | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Pike County Light \& Power Company | ED | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Rockland Electric Company | ED | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Virginia Electric and Power Company | D | 1.55\% | 1.53\% | 1.57\% | 1.59\% | 1.66\% | 1.69\% | 1.80\% | 1.79\% |
| Detroit Edison Company | DTE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Southern California Edison Co. | EIX | 5.61\% | 5.80\% | 5.98\% | 5.40\% | 5.42\% | 5.61\% | 5.78\% | 6.00\% |
| Kansas City Power \& Light Company | GXP | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| KCP\&L Greater Missouri Operations Company | GXP | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Idaho Power Co. | IDA | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Upper Peninsula Power Company | TEG | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Wisconsin Public Service Corp | TEG | 2.57\% | 2.54\% | 2.49\% | 2.46\% | 2.45\% | 2.47\% | 2.47\% | 2.47\% |
| Oklahoma Gas and Electric Company | OGE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Atlantic City Electric Company | POM | 0.00\% | 0.00\% | 0.00\% | 0.33\% | 0.32\% | 0.32\% | 0.35\% | 0.35\% |
| Delmarva Power \& Light Company | POM | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Potomac Electric Power Company | POM | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Pacific Gas and Electric Company | PCG | 1.02\% | 1.02\% | 1.04\% | 1.03\% | 1.05\% | 1.06\% | 1.08\% | 1.09\% |
| Arizona Public Service Company | PNW | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Portland General Electric Company | POR | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| South Carolina Electric \& Gas Co. | SCG | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| San Diego Gas \& Electric Co. | SRE | 1.12\% | 1.20\% | 1.21\% | 1.27\% | 1.29\% | 1.42\% | 1.52\% | 1.55\% |
| Alabama Power Company | SO | 5.54\% | 5.59\% | 5.62\% | 5.65\% | 5.60\% | 5.63\% | 5.69\% | 5.72\% |
| Georgia Power Company | SO | 1.47\% | 1.46\% | 1.47\% | 1.49\% | 1.49\% | 1.53\% | 1.57\% | 1.62\% |
| Gulf Power Company | SO | 3.94\% | 3.87\% | 3.91\% | 3.96\% | 3.98\% | 4.07\% | 4.19\% | 4.27\% |
| Mississippi Power Company | SO | 1.97\% | 2.16\% | 2.36\% | 2.23\% | 2.50\% | 2.71\% | 2.80\% | 2.80\% |
| Tampa Electric Company | TE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| United Illuminating Company | UIL | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Southern Indiana Gas and Electric Company, Inc. | VVC | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Kansas Gas and Electric Company | WR | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Westar Energy (KPL) | WR | 0.48\% | 0.48\% | 0.51\% | 0.52\% | 0.53\% | 0.53\% | 0.54\% | 0.54\% |
| Wisconsin Electric Power Company | WEC | 0.54\% | 0.56\% | 0.57\% | 0.57\% | 0.60\% | 0.60\% | 0.62\% | 0.62\% |
| Northern States Power Company - MN | XEL | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Northern States Power Company - WI | XEL | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Public Service Company of Colorado | XEL | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Southwestern Public Service Company | XEL | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |

Long Term Debt Ratio (incl current portion)
Summary Data

| Company Name | Ticker | 2011 Q3 | 2011 Q2 | 2011 Q1 | 2010 Q4 | 2010 Q3 | 2010 Q2 | 2010 Q1 | 2009 Q4 | Overall <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Allete | ALE | 42.24\% | 41.06\% | 41.26\% | 41.09\% | 42.50\% | 41.37\% | 41.69\% | 42.36\% | 41.70\% |
| Alliant Energy Corp. | LNT | 45.75\% | 46.56\% | 45.48\% | 45.48\% | 45.82\% | 46.93\% | 41.45\% | 44.10\% | 45.20\% |
| Ameren Corp. | AEE | 42.66\% | 43.02\% | 43.89\% | 43.61\% | 46.25\% | 47.48\% | 47.81\% | 47.62\% | 45.29\% |
| American Electric Power | AEP | 44.99\% | 46.79\% | 47.46\% | 47.54\% | 45.28\% | 45.44\% | 45.52\% | 48.20\% | 46.40\% |
| Avista Corp. | AVA | 47.12\% | 47.82\% | 48.19\% | 47.85\% | 48.13\% | 48.55\% | 49.35\% | 49.26\% | 48.28\% |
| Black Hills Corp. | BKH | 29.25\% | 29.71\% | 29.98\% | 29.62\% | 30.02\% | 30.23\% | 31.48\% | 32.76\% | 30.38\% |
| Cleco Corp. | CNL | 51.64\% | 51.44\% | 52.21\% | 51.90\% | 47.64\% | 48.74\% | 48.61\% | 53.72\% | 50.74\% |
| Consolidated Edison | ED | 33.71\% | 33.94\% | 33.68\% | 34.30\% | 33.98\% | 33.92\% | 34.88\% | 35.76\% | 34.27\% |
| Dominion Resources, Inc. | D | 41.16\% | 40.54\% | 41.71\% | 41.27\% | 43.25\% | 42.02\% | 44.77\% | 44.70\% | 42.43\% |
| DTE Energy Co. | DTE | 50.87\% | 51.06\% | 49.92\% | 50.67\% | 50.66\% | 50.18\% | 50.63\% | 50.81\% | 50.60\% |
| Edison International | EIX | 43.14\% | 44.80\% | 43.64\% | 44.73\% | 44.90\% | 43.45\% | 43.84\% | 43.92\% | 44.05\% |
| Great Plains Energy Inc. | GXP | 48.42\% | 43.65\% | 42.74\% | 46.00\% | 46.12\% | 41.62\% | 38.48\% | 38.98\% | 43.25\% |
| IDACORP, Inc. | IDA | 49.44\% | 50.89\% | 51.00\% | 53.36\% | 53.74\% | 51.73\% | 52.40\% | 52.54\% | 51.89\% |
| Integrys | TEG | 36.52\% | 39.19\% | 38.21\% | 38.38\% | 39.23\% | 40.18\% | 37.08\% | 36.70\% | 38.19\% |
| OGE Energy | OGE | 44.54\% | 46.15\% | 44.16\% | 44.41\% | 44.55\% | 45.83\% | 42.41\% | 42.52\% | 44.32\% |
| Pepco Holdings, Inc. | POM | 52.03\% | 52.48\% | 51.08\% | 51.57\% | 51.64\% | 52.17\% | 52.60\% | 52.96\% | 52.07\% |
| PG\&E Corp | PCG | 46.37\% | 46.59\% | 46.58\% | 48.84\% | 47.96\% | 47.33\% | 47.01\% | 48.11\% | 47.35\% |
| Pinnacle West Capital | PNW | 47.50\% | 47.10\% | 46.98\% | 46.59\% | 46.58\% | 48.03\% | 48.32\% | 49.13\% | 47.53\% |
| Portland General | POR | 51.98\% | 52.09\% | 52.16\% | 52.77\% | 53.04\% | 53.64\% | 53.44\% | 52.97\% | 52.76\% |
| SCANA Corp. | SCG | 41.33\% | 42.02\% | 41.31\% | 41.37\% | 42.05\% | 44.62\% | 45.41\% | 45.02\% | 42.89\% |
| Sempra Energy | SRE | 46.85\% | 44.84\% | 45.36\% | 47.49\% | 48.31\% | 44.04\% | 42.31\% | 43.21\% | 45.30\% |
| Southern Co. | SO | 46.55\% | 46.91\% | 46.42\% | 48.05\% | 48.95\% | 46.17\% | 46.35\% | 46.86\% | 47.03\% |
| TECO Energy, Inc. | TE | 46.49\% | 46.78\% | 47.15\% | 47.95\% | 46.46\% | 45.98\% | 46.83\% | 46.91\% | 46.82\% |
| UIL Holdings Corp. | UIL | 45.84\% | 46.38\% | 47.01\% | 49.94\% | 49.87\% | 47.71\% | 48.39\% | 48.51\% | 47.96\% |
| Vectren Corp. | VVC | 45.15\% | 45.62\% | 45.77\% | 45.33\% | 45.99\% | 46.03\% | 47.13\% | 47.31\% | 46.04\% |
| Westar Energy | WR | 37.51\% | 38.15\% | 39.13\% | 39.33\% | 39.50\% | 39.91\% | 40.29\% | 39.81\% | 39.20\% |
| Wisconsin Energy | WEC | 40.45\% | 36.45\% | 37.09\% | 37.18\% | 38.72\% | 38.96\% | 40.06\% | 40.06\% | 38.62\% |
| Xcel Energy, Inc. | XEL | 44.34\% | 43.07\% | 43.63\% | 44.16\% | 44.06\% | 43.87\% | 45.14\% | 44.76\% | 44.13\% |
| Proxy Group Average |  |  |  |  |  |  |  |  |  | 44.81\% |

Long Term Debt Ratio (incl current portion)
Underlying Data

| Company Name | Ticker | 2011 Q3 | 2011 Q2 | 2011 Q1 | 2010 Q4 | 2010 Q3 | 2010 Q2 | 2010 Q1 | 2009 Q4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ALLETE (Minnesota Power) | ALE | 43.71\% | 41.89\% | 42.51\% | 43.18\% | 43.20\% | 40.93\% | 41.29\% | 41.34\% |
| Superior Water, Light and Power Company | ALE | 40.76\% | 40.24\% | 40.01\% | 39.01\% | 41.80\% | 41.82\% | 42.09\% | 43.37\% |
| Interstate Power and Light Company | LNT | 46.98\% | 48.18\% | 46.16\% | 46.09\% | 45.78\% | 47.01\% | 40.80\% | 41.34\% |
| Wisconsin Power and Light Company | LNT | 44.51\% | 44.94\% | 44.80\% | 44.87\% | 45.86\% | 46.84\% | 42.10\% | 46.87\% |
| Ameren Illinois Company | AEE | 39.21\% | 39.29\% | 40.89\% | 40.62\% | na | na | na | na |
| Union Electric Company | AEE | 46.11\% | 46.74\% | 46.88\% | 46.60\% | 46.25\% | 47.48\% | 47.81\% | 47.62\% |
| AEP Texas Central Company | AEP | 39.04\% | 52.53\% | 54.80\% | 54.92\% | 55.01\% | 55.97\% | 55.87\% | 55.94\% |
| AEP Texas North Company | AEP | 52.23\% | 51.00\% | 50.90\% | 54.29\% | 51.49\% | 51.78\% | 51.92\% | 47.98\% |
| Appalachian Power Company | AEP | 55.17\% | 56.19\% | 57.81\% | 53.88\% | 54.82\% | 53.56\% | 51.26\% | 52.89\% |
| Columbus Southern Power Company | AEP | 48.23\% | 48.54\% | 48.62\% | 48.70\% | 51.06\% | 52.44\% | 53.00\% | 52.03\% |
| Indiana Michigan Power Company | AEP | 50.38\% | 49.99\% | 50.60\% | 50.30\% | 52.67\% | 53.17\% | 53.02\% | 53.62\% |
| Kentucky Power Company | AEP | 53.27\% | 53.47\% | 53.44\% | 54.09\% | 54.73\% | 55.09\% | 54.68\% | 54.91\% |
| Kingsport Power Company | AEP | 31.57\% | 33.41\% | 31.11\% | 32.17\% | 0.00\% | 0.00\% | 0.00\% | 35.68\% |
| Ohio Power Company | AEP | 45.76\% | 45.33\% | 45.16\% | 46.21\% | 47.29\% | 47.34\% | 50.29\% | 49.76\% |
| Public Service Company of Oklahoma | AEP | 50.04\% | 51.10\% | 53.42\% | 49.78\% | 51.41\% | 51.34\% | 51.32\% | 52.99\% |
| Southwestern Electric Power Company | AEP | 46.72\% | 48.84\% | 49.61\% | 50.07\% | 50.22\% | 51.44\% | 51.86\% | 47.55\% |
| Wheeling Power Co | AEP | 22.49\% | 24.30\% | 26.60\% | 28.57\% | 29.40\% | 27.74\% | 27.52\% | 26.88\% |
| Avista Corporation | AVA | 47.12\% | 47.82\% | 48.19\% | 47.85\% | 48.13\% | 48.55\% | 49.35\% | 49.26\% |
| Black Hills Colorado Electric Utility Company, LP | BKH | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Black Hills Power, Inc. | BKH | 45.54\% | 46.35\% | 46.64\% | 47.11\% | 47.68\% | 47.78\% | 50.99\% | 54.13\% |
| Cheyenne Light, Fuel and Power Company | BKH | 42.22\% | 42.77\% | 43.29\% | 41.76\% | 42.37\% | 42.93\% | 43.46\% | 44.15\% |
| Cleco Power LLC | CNL | 51.64\% | 51.44\% | 52.21\% | 51.90\% | 47.64\% | 48.74\% | 48.61\% | 53.72\% |
| Consolidated Edison Company of New York, Inc. | ED | 47.68\% | 48.12\% | 47.01\% | 48.34\% | 47.17\% | 50.20\% | 48.20\% | 49.60\% |
| Orange and Rockland Utilities, Inc. | ED | 49.82\% | 50.40\% | 50.29\% | 50.88\% | 50.17\% | 42.36\% | 48.68\% | 51.09\% |
| Pike County Light \& Power Company | ED | 37.35\% | 37.23\% | 37.42\% | 37.99\% | 38.58\% | 43.11\% | 42.66\% | 42.36\% |
| Rockland Electric Company | ED | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Virginia Electric and Power Company | D | 41.16\% | 40.54\% | 41.71\% | 41.27\% | 43.25\% | 42.02\% | 44.77\% | 44.70\% |
| Detroit Edison Company | DTE | 50.87\% | 51.06\% | 49.92\% | 50.67\% | 50.66\% | 50.18\% | 50.63\% | 50.81\% |
| Southern California Edison Co. | EIX | 43.14\% | 44.80\% | 43.64\% | 44.73\% | 44.90\% | 43.45\% | 43.84\% | 43.92\% |
| Kansas City Power \& Light Company | GXP | 49.96\% | 40.23\% | 43.65\% | 43.94\% | 43.93\% | 43.98\% | 45.30\% | 45.59\% |
| KCP\&L Greater Missouri Operations Company | GXP | 46.88\% | 47.07\% | 41.83\% | 48.07\% | 48.32\% | 39.26\% | 31.66\% | 32.36\% |
| Idaho Power Co. | IDA | 49.44\% | 50.89\% | 51.00\% | 53.36\% | 53.74\% | 51.73\% | 52.40\% | 52.54\% |
| Upper Peninsula Power Company | TEG | 36.81\% | 35.16\% | 33.97\% | 34.94\% | 36.71\% | 38.33\% | 32.12\% | 31.31\% |
| Wisconsin Public Service Corp | TEG | 36.23\% | 43.22\% | 42.46\% | 41.82\% | 41.75\% | 42.03\% | 42.04\% | 42.09\% |
| Oklahoma Gas and Electric Company | OGE | 44.54\% | 46.15\% | 44.16\% | 44.41\% | 44.55\% | 45.83\% | 42.41\% | 42.52\% |
| Atlantic City Electric Company | POM | 56.14\% | 57.98\% | 52.64\% | 53.12\% | 53.36\% | 53.78\% | 57.79\% | 58.38\% |
| Delmarva Power \& Light Company | POM | 50.36\% | 49.28\% | 49.86\% | 50.54\% | 50.33\% | 51.63\% | 48.79\% | 49.29\% |
| Potomac Electric Power Company | POM | 49.59\% | 50.20\% | 50.74\% | 51.04\% | 51.23\% | 51.11\% | 51.24\% | 51.22\% |
| Pacific Gas and Electric Company | PCG | 46.37\% | 46.59\% | 46.58\% | 48.84\% | 47.96\% | 47.33\% | 47.01\% | 48.11\% |
| Arizona Public Service Company | PNW | 47.50\% | 47.10\% | 46.98\% | 46.59\% | 46.58\% | 48.03\% | 48.32\% | 49.13\% |
| Portland General Electric Company | POR | 51.98\% | 52.09\% | 52.16\% | 52.77\% | 53.04\% | 53.64\% | 53.44\% | 52.97\% |
| South Carolina Electric \& Gas Co. | SCG | 41.33\% | 42.02\% | 41.31\% | 41.37\% | 42.05\% | 44.62\% | 45.41\% | 45.02\% |
| San Diego Gas \& Electric Co. | SRE | 46.85\% | 44.84\% | 45.36\% | 47.49\% | 48.31\% | 44.04\% | 42.31\% | 43.21\% |
| Alabama Power Company | SO | 49.43\% | 49.94\% | 50.16\% | 50.07\% | 49.61\% | 49.90\% | 50.39\% | 50.71\% |
| Georgia Power Company | SO | 46.82\% | 47.15\% | 46.22\% | 45.87\% | 48.48\% | 47.11\% | 46.96\% | 47.84\% |
| Gulf Power Company | SO | 48.67\% | 47.85\% | 47.91\% | 48.47\% | 51.65\% | 47.81\% | 46.88\% | 47.74\% |
| Mississippi Power Company | SO | 41.29\% | 42.69\% | 41.38\% | 47.79\% | 46.07\% | 39.87\% | 41.16\% | 41.16\% |
| Tampa Electric Company | TE | 46.49\% | 46.78\% | 47.15\% | 47.95\% | 46.46\% | 45.98\% | 46.83\% | 46.91\% |
| United Illuminating Company | UIL | 45.84\% | 46.38\% | 47.01\% | 49.94\% | 49.87\% | 47.71\% | 48.39\% | 48.51\% |
| Southern Indiana Gas and Electric Company, Inc. | VVC | 45.15\% | 45.62\% | 45.77\% | 45.33\% | 45.99\% | 46.03\% | 47.13\% | 47.31\% |
| Kansas Gas and Electric Company | WR | 42.10\% | 43.02\% | 43.27\% | 42.80\% | 42.57\% | 43.31\% | 43.56\% | 42.65\% |
| Westar Energy (KPL) | WR | 32.93\% | 33.27\% | 34.99\% | 35.85\% | 36.44\% | 36.52\% | 37.03\% | 36.96\% |
| Wisconsin Electric Power Company | WEC | 40.45\% | 36.45\% | 37.09\% | 37.18\% | 38.72\% | 38.96\% | 40.06\% | 40.06\% |
| Northern States Power Company - MN | XEL | 46.71\% | 47.61\% | 47.63\% | 48.80\% | 48.79\% | 45.88\% | 47.72\% | 48.14\% |
| Northern States Power Company - WI | XEL | 40.00\% | 40.22\% | 40.40\% | 40.42\% | 41.80\% | 42.43\% | 43.47\% | 41.84\% |
| Public Service Company of Colorado | XEL | 43.14\% | 40.72\% | 41.34\% | 40.65\% | 39.57\% | 40.12\% | 40.76\% | 40.03\% |
| Southwestern Public Service Company | XEL | 47.51\% | 43.72\% | 45.14\% | 46.79\% | 46.06\% | 47.07\% | 48.59\% | 49.03\% |

Summary Data

## Customer Deposit Ratio

| Company Name | Ticker | 2011 Q3 | 2011 Q2 | 2011 Q1 | 2010 Q4 | 2010 Q3 | 2010 Q2 | 2010 Q1 | 2009 Q4 | Overall <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Allete | ALE | 0.04\% | 0.04\% | 0.04\% | 0.05\% | 0.05\% | 0.05\% | 0.05\% | 0.05\% | 0.05\% |
| Alliant Energy Corp. | LNT | 0.17\% | 0.17\% | 0.16\% | 0.16\% | 0.16\% | 0.18\% | 0.21\% | 0.21\% | 0.18\% |
| Ameren Corp. | AEE | 0.61\% | 0.60\% | 0.60\% | 0.59\% | 0.23\% | 0.22\% | 0.22\% | 0.23\% | 0.41\% |
| American Electric Power | AEP | 1.44\% | 1.49\% | 1.41\% | 1.40\% | 1.34\% | 1.35\% | 1.33\% | 1.37\% | 1.39\% |
| Avista Corp. | AVA | 0.37\% | 0.35\% | 0.34\% | 0.33\% | 0.34\% | 0.35\% | 0.36\% | 0.36\% | 0.35\% |
| Black Hills Corp. | BKH | 0.38\% | 0.39\% | 0.39\% | 0.38\% | 0.38\% | 0.39\% | 0.40\% | 0.39\% | 0.39\% |
| Cleco Corp. | CNL | 1.60\% | 1.55\% | 1.53\% | 1.47\% | 1.54\% | 1.50\% | 1.43\% | 1.52\% | 1.52\% |
| Consolidated Edison | ED | 1.39\% | 1.45\% | 1.40\% | 1.37\% | 1.36\% | 1.55\% | 1.32\% | 1.30\% | 1.39\% |
| Dominion Resources, Inc. | D | 0.64\% | 0.65\% | 0.70\% | 0.71\% | 0.75\% | 0.78\% | 0.83\% | 0.81\% | 0.73\% |
| DTE Energy Co. | DTE | 0.31\% | 0.30\% | 0.31\% | 0.31\% | 0.32\% | 0.32\% | 0.31\% | 0.30\% | 0.31\% |
| Edison International | EIX | 1.09\% | 1.16\% | 1.21\% | 1.27\% | 1.32\% | 1.40\% | 1.47\% | 1.55\% | 1.31\% |
| Great Plains Energy Inc. | GXP | 0.19\% | 0.19\% | 0.20\% | 0.20\% | 0.21\% | 0.22\% | 0.20\% | 0.20\% | 0.20\% |
| IDACORP, Inc. | IDA | 0.23\% | 0.33\% | 0.31\% | 0.05\% | 0.07\% | 0.14\% | 0.09\% | 0.02\% | 0.15\% |
| Integrys | TEG | 0.15\% | 0.14\% | 0.13\% | 0.13\% | 0.13\% | 0.13\% | 0.39\% | 0.35\% | 0.19\% |
| OGE Energy | OGE | 1.42\% | 1.45\% | 1.58\% | 1.57\% | 1.56\% | 1.59\% | 1.68\% | 1.66\% | 1.56\% |
| Pepco Holdings, Inc. | POM | 1.50\% | 1.49\% | 1.54\% | 1.52\% | 1.53\% | 1.48\% | 1.48\% | 1.42\% | 1.50\% |
| PG\&E Corp | PCG | 0.89\% | 0.87\% | 0.84\% | 0.83\% | 0.91\% | 1.07\% | 1.01\% | 0.98\% | 0.93\% |
| Pinnacle West Capital | PNW | 0.92\% | 0.97\% | 0.95\% | 0.94\% | 0.94\% | 0.98\% | 1.00\% | 1.02\% | 0.97\% |
| Portland General | POR | 0.23\% | 0.25\% | 0.19\% | 0.19\% | 0.19\% | 0.19\% | 0.17\% | 0.17\% | 0.20\% |
| SCANA Corp. | SCG | 0.57\% | 0.58\% | 0.60\% | 0.62\% | 0.63\% | 0.63\% | 0.60\% | 0.58\% | 0.60\% |
| Sempra Energy | SRE | 0.87\% | 0.90\% | 0.85\% | 0.88\% | 0.88\% | 1.02\% | 1.10\% | 1.11\% | 0.95\% |
| Southern Co. | SO | 1.00\% | 1.01\% | 1.03\% | 1.01\% | 1.03\% | 1.06\% | 1.07\% | 1.06\% | 1.03\% |
| TECO Energy, Inc. | TE | 3.13\% | 3.15\% | 3.16\% | 3.06\% | 3.07\% | 3.02\% | 3.06\% | 3.03\% | 3.08\% |
| UIL Holdings Corp. | UIL | 0.13\% | 0.13\% | 0.13\% | 0.14\% | 0.14\% | 0.14\% | 0.15\% | 0.15\% | 0.14\% |
| Vectren Corp. | VVC | 0.91\% | 0.87\% | 0.87\% | 0.79\% | 0.87\% | 0.74\% | 0.76\% | 0.62\% | 0.80\% |
| Westar Energy | WR | 0.37\% | 0.37\% | 0.38\% | 0.38\% | 0.37\% | 0.37\% | 0.38\% | 0.37\% | 0.37\% |
| Wisconsin Energy | WEC | 0.45\% | 0.47\% | 0.44\% | 0.44\% | 0.43\% | 0.43\% | 0.41\% | 0.38\% | 0.43\% |
| Xcel Energy, Inc. | XEL | 0.31\% | 0.31\% | 0.32\% | 0.33\% | 0.35\% | 0.34\% | 0.35\% | 0.34\% | 0.33\% |
| Proxy Group Average |  |  |  |  |  |  |  |  |  | 0.77\% |


| Company Name | Ticker | 2011 Q3 | 2011 Q2 | 2011 Q1 | 2010 Q4 | 2010 Q3 | 2010 Q2 | 2010 Q1 | 2009 Q4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ALLETE (Minnesota Power) | ALE | 0.02\% | 0.02\% | 0.02\% | 0.02\% | 0.02\% | 0.02\% | 0.02\% | 0.02\% |
| Superior Water, Light and Power Company | ALE | 0.06\% | 0.06\% | 0.06\% | 0.08\% | 0.08\% | 0.08\% | 0.08\% | 0.08\% |
| Interstate Power and Light Company | LNT | 0.20\% | 0.21\% | 0.19\% | 0.19\% | 0.18\% | 0.19\% | 0.25\% | 0.25\% |
| Wisconsin Power and Light Company | LNT | 0.14\% | 0.14\% | 0.14\% | 0.14\% | 0.15\% | 0.16\% | 0.17\% | 0.18\% |
| Ameren Illinois Company | AEE | 0.98\% | 0.98\% | 0.98\% | 0.94\% | na | na | na | na |
| Union Electric Company | AEE | 0.23\% | 0.23\% | 0.23\% | 0.23\% | 0.23\% | 0.22\% | 0.22\% | 0.23\% |
| AEP Texas Central Company | AEP | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.06\% |
| AEP Texas North Company | AEP | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.13\% |
| Appalachian Power Company | AEP | 0.89\% | 0.91\% | 0.86\% | 0.88\% | 0.88\% | 0.87\% | 0.89\% | 0.88\% |
| Columbus Southern Power Company | AEP | 1.00\% | 1.03\% | 1.02\% | 1.00\% | 0.92\% | 0.96\% | 0.97\% | 0.95\% |
| Indiana Michigan Power Company | AEP | 0.81\% | 0.83\% | 0.82\% | 0.82\% | 0.77\% | 0.78\% | 0.79\% | 0.75\% |
| Kentucky Power Company | AEP | 2.05\% | 2.04\% | 1.95\% | 1.94\% | 1.91\% | 1.92\% | 1.88\% | 1.83\% |
| Kingsport Power Company | AEP | 5.19\% | 5.46\% | 5.00\% | 5.07\% | 4.69\% | 4.88\% | 4.69\% | 4.90\% |
| Ohio Power Company | AEP | 0.42\% | 0.43\% | 0.41\% | 0.48\% | 0.45\% | 0.43\% | 0.35\% | 0.34\% |
| Public Service Company of Oklahoma | AEP | 2.46\% | 2.39\% | 2.24\% | 2.11\% | 2.16\% | 2.17\% | 2.20\% | 2.30\% |
| Southwestern Electric Power Company | AEP | 1.41\% | 1.54\% | 1.46\% | 1.40\% | 1.27\% | 1.29\% | 1.26\% | 1.38\% |
| Wheeling Power Co | AEP | 1.62\% | 1.73\% | 1.78\% | 1.70\% | 1.68\% | 1.58\% | 1.56\% | 1.52\% |
| Avista Corporation | AVA | 0.37\% | 0.35\% | 0.34\% | 0.33\% | 0.34\% | 0.35\% | 0.36\% | 0.36\% |
| Black Hills Colorado Electric Utility Company, LP | BKH | 0.48\% | 0.54\% | 0.54\% | 0.53\% | 0.55\% | 0.59\% | 0.62\% | 0.64\% |
| Black Hills Power, Inc. | BKH | 0.16\% | 0.17\% | 0.17\% | 0.17\% | 0.15\% | 0.13\% | 0.12\% | 0.11\% |
| Cheyenne Light, Fuel and Power Company | BKH | 0.50\% | 0.46\% | 0.45\% | 0.44\% | 0.44\% | 0.44\% | 0.45\% | 0.44\% |
| Cleco Power LLC | CNL | 1.60\% | 1.55\% | 1.53\% | 1.47\% | 1.54\% | 1.50\% | 1.43\% | 1.52\% |
| Consolidated Edison Company of New York, Inc. | ED | 1.42\% | 1.41\% | 1.36\% | 1.37\% | 1.31\% | 1.33\% | 1.31\% | 1.33\% |
| Orange and Rockland Utilities, Inc. | ED | 0.90\% | 0.93\% | 0.95\% | 0.99\% | 0.93\% | 1.09\% | 1.14\% | 1.09\% |
| Pike County Light \& Power Company | ED | 2.00\% | 2.23\% | 2.03\% | 2.02\% | 2.00\% | 2.53\% | 1.52\% | 1.48\% |
| Rockland Electric Company | ED | 1.24\% | 1.23\% | 1.24\% | 1.12\% | 1.19\% | 1.25\% | 1.30\% | 1.31\% |
| Virginia Electric and Power Company | D | 0.64\% | 0.65\% | 0.70\% | 0.71\% | 0.75\% | 0.78\% | 0.83\% | 0.81\% |
| Detroit Edison Company | DTE | 0.31\% | 0.30\% | 0.31\% | 0.31\% | 0.32\% | 0.32\% | 0.31\% | 0.30\% |
| Southern California Edison Co. | EIX | 1.09\% | 1.16\% | 1.21\% | 1.27\% | 1.32\% | 1.40\% | 1.47\% | 1.55\% |
| Kansas City Power \& Light Company | GXP | 0.14\% | 0.15\% | 0.15\% | 0.16\% | 0.16\% | 0.17\% | 0.18\% | 0.19\% |
| KCP\&L Greater Missouri Operations Company | GXP | 0.24\% | 0.24\% | 0.24\% | 0.25\% | 0.26\% | 0.26\% | 0.21\% | 0.22\% |
| Idaho Power Co. | IDA | 0.23\% | 0.33\% | 0.31\% | 0.05\% | 0.07\% | 0.14\% | 0.09\% | 0.02\% |
| Upper Peninsula Power Company | TEG | 0.08\% | 0.08\% | 0.08\% | 0.10\% | 0.10\% | 0.10\% | 0.65\% | 0.61\% |
| Wisconsin Public Service Corp | TEG | 0.23\% | 0.21\% | 0.17\% | 0.17\% | 0.16\% | 0.15\% | 0.12\% | 0.10\% |
| Oklahoma Gas and Electric Company | OGE | 1.42\% | 1.45\% | 1.58\% | 1.57\% | 1.56\% | 1.59\% | 1.68\% | 1.66\% |
| Atlantic City Electric Company | POM | 1.21\% | 1.22\% | 1.26\% | 1.20\% | 1.17\% | 1.13\% | 1.17\% | 1.17\% |
| Delmarva Power \& Light Company | POM | 1.70\% | 1.66\% | 1.74\% | 1.76\% | 1.83\% | 1.76\% | 1.74\% | 1.62\% |
| Potomac Electric Power Company | POM | 1.59\% | 1.60\% | 1.61\% | 1.61\% | 1.59\% | 1.57\% | 1.53\% | 1.47\% |
| Pacific Gas and Electric Company | PCG | 0.89\% | 0.87\% | 0.84\% | 0.83\% | 0.91\% | 1.07\% | 1.01\% | 0.98\% |
| Arizona Public Service Company | PNW | 0.92\% | 0.97\% | 0.95\% | 0.94\% | 0.94\% | 0.98\% | 1.00\% | 1.02\% |
| Portland General Electric Company | POR | 0.23\% | 0.25\% | 0.19\% | 0.19\% | 0.19\% | 0.19\% | 0.17\% | 0.17\% |
| South Carolina Electric \& Gas Co. | SCG | 0.57\% | 0.58\% | 0.60\% | 0.62\% | 0.63\% | 0.63\% | 0.60\% | 0.58\% |
| San Diego Gas \& Electric Co. | SRE | 0.87\% | 0.90\% | 0.85\% | 0.88\% | 0.88\% | 1.02\% | 1.10\% | 1.11\% |
| Alabama Power Company | SO | 0.67\% | 0.69\% | 0.69\% | 0.69\% | 0.69\% | 0.70\% | 0.71\% | 0.71\% |
| Georgia Power Company | SO | 1.12\% | 1.09\% | 1.08\% | 1.09\% | 1.10\% | 1.15\% | 1.19\% | 1.20\% |
| Gulf Power Company | SO | 1.41\% | 1.40\% | 1.41\% | 1.41\% | 1.42\% | 1.41\% | 1.41\% | 1.38\% |
| Mississippi Power Company | SO | 0.79\% | 0.86\% | 0.93\% | 0.84\% | 0.91\% | 0.96\% | 0.97\% | 0.93\% |
| Tampa Electric Company | TE | 3.13\% | 3.15\% | 3.16\% | 3.06\% | 3.07\% | 3.02\% | 3.06\% | 3.03\% |
| United Illuminating Company | UIL | 0.13\% | 0.13\% | 0.13\% | 0.14\% | 0.14\% | 0.14\% | 0.15\% | 0.15\% |
| Southern Indiana Gas and Electric Company, Inc. | VVC | 0.91\% | 0.87\% | 0.87\% | 0.79\% | 0.87\% | 0.74\% | 0.76\% | 0.62\% |
| Kansas Gas and Electric Company | WR | 0.47\% | 0.47\% | 0.48\% | 0.46\% | 0.46\% | 0.46\% | 0.46\% | 0.45\% |
| Westar Energy (KPL) | WR | 0.27\% | 0.26\% | 0.29\% | 0.29\% | 0.28\% | 0.27\% | 0.29\% | 0.29\% |
| Wisconsin Electric Power Company | WEC | 0.45\% | 0.47\% | 0.44\% | 0.44\% | 0.43\% | 0.43\% | 0.41\% | 0.38\% |
| Northern States Power Company - MN | XEL | 0.06\% | 0.06\% | 0.07\% | 0.07\% | 0.06\% | 0.06\% | 0.04\% | 0.04\% |
| Northern States Power Company - WI | XEL | 0.20\% | 0.20\% | 0.21\% | 0.21\% | 0.22\% | 0.24\% | 0.26\% | 0.23\% |
| Public Service Company of Colorado | XEL | 0.50\% | 0.51\% | 0.52\% | 0.52\% | 0.58\% | 0.59\% | 0.60\% | 0.60\% |
| Southwestern Public Service Company | XEL | 0.47\% | 0.46\% | 0.48\% | 0.52\% | 0.53\% | 0.49\% | 0.51\% | 0.50\% |

Summary Data
Notes Payable

| Company Name | Ticker | 2011 Q3 | 2011 Q2 | 2011 Q1 | 2010 Q4 | 2010 Q3 | 2010 Q2 | 2010 Q1 | 2009 Q4 | Overall <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Allete | ALE | 0.00\% | 0.00\% | 0.00\% | 2.19\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.27\% |
| Alliant Energy Corp. | LNT | 0.07\% | 0.07\% | 0.66\% | 0.93\% | 0.06\% | 0.06\% | 6.34\% | 3.32\% | 1.44\% |
| Ameren Corp. | AEE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| American Electric Power | AEP | 4.57\% | 4.09\% | 4.14\% | 3.97\% | 7.48\% | 8.28\% | 8.30\% | 5.64\% | 5.81\% |
| Avista Corp. | AVA | 4.04\% | 3.18\% | 2.77\% | 4.89\% | 3.58\% | 4.03\% | 3.43\% | 4.13\% | 3.76\% |
| Black Hills Corp. | BKH | 19.66\% | 19.28\% | 18.92\% | 18.06\% | 17.46\% | 17.03\% | 15.29\% | 14.56\% | 17.53\% |
| Cleco Corp. | CNL | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.98\% | 0.00\% | 0.00\% | 0.00\% | 0.12\% |
| Consolidated Edison | ED | 0.44\% | 0.44\% | 1.00\% | 0.45\% | 1.76\% | 2.54\% | 1.07\% | 0.46\% | 1.02\% |
| Dominion Resources, Inc. | D | 3.59\% | 5.51\% | 3.53\% | 4.17\% | 1.95\% | 4.97\% | 0.00\% | 3.06\% | 3.35\% |
| DTE Energy Co. | DTE | 0.76\% | 1.38\% | 1.42\% | 0.21\% | 0.25\% | 1.10\% | 0.36\% | 0.36\% | 0.73\% |
| Edison International | EIX | 2.95\% | 1.11\% | 1.14\% | 0.00\% | 0.00\% | 1.31\% | 1.13\% | 0.00\% | 0.96\% |
| Great Plains Energy Inc. | GXP | 0.75\% | 7.07\% | 7.71\% | 3.54\% | 3.06\% | 8.99\% | 16.94\% | 16.03\% | 8.01\% |
| IDACORP, Inc. | IDA | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Integrys | TEG | 4.41\% | 3.10\% | 4.05\% | 3.11\% | 2.60\% | 0.24\% | 2.38\% | 4.40\% | 3.04\% |
| OGE Energy | OGE | 0.00\% | 0.00\% | 0.36\% | 0.00\% | 0.00\% | 0.00\% | 0.23\% | 0.00\% | 0.07\% |
| Pepco Holdings, Inc. | POM | 0.83\% | 1.26\% | 2.89\% | 2.77\% | 2.21\% | 2.96\% | 1.69\% | 1.14\% | 1.97\% |
| PG\&E Corp | PCG | 4.19\% | 4.48\% | 5.17\% | 3.41\% | 4.00\% | 4.24\% | 5.22\% | 3.53\% | 4.28\% |
| Pinnacle West Capital | PNW | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 2.77\% | 0.00\% | 0.35\% |
| Portland General | POR | 0.00\% | 0.00\% | 0.00\% | 0.55\% | 0.25\% | 0.00\% | 0.00\% | 0.00\% | 0.10\% |
| SCANA Corp. | SCG | 7.03\% | 6.83\% | 7.12\% | 5.79\% | 5.17\% | 3.59\% | 3.41\% | 4.05\% | 5.37\% |
| Sempra Energy | SRE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.15\% | 0.46\% | 0.00\% | 0.20\% |
| Southern Co. | SO | 0.36\% | 1.35\% | 1.55\% | 1.72\% | 0.00\% | 2.24\% | 1.22\% | 1.45\% | 1.24\% |
| TECO Energy, Inc. | TE | 0.00\% | 0.19\% | 0.00\% | 0.00\% | 0.50\% | 2.00\% | 0.48\% | 1.46\% | 0.58\% |
| UIL Holdings Corp. | UIL | 8.20\% | 7.11\% | 6.05\% | 4.60\% | 4.55\% | 6.06\% | 4.71\% | 4.19\% | 5.69\% |
| Vectren Corp. | VVC | 3.89\% | 4.17\% | 3.95\% | 4.95\% | 3.10\% | 4.00\% | 2.96\% | 4.03\% | 3.88\% |
| Westar Energy | WR | 4.36\% | 5.30\% | 3.61\% | 2.75\% | 2.01\% | 2.97\% | 2.62\% | 3.03\% | 3.33\% |
| Wisconsin Energy | WEC | 2.16\% | 4.31\% | 2.96\% | 3.97\% | 0.87\% | 3.31\% | 1.07\% | 1.87\% | 2.57\% |
| Xcel Energy, Inc. | XEL | 1.01\% | 3.07\% | 1.97\% | 2.56\% | 0.90\% | 0.97\% | 0.69\% | 1.13\% | 1.54\% |
| Proxy Group Average |  |  |  |  |  |  |  |  |  | 2.76\% |


| Notes Payable |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Company Name | Ticker | 2011 Q3 | 2011 Q2 | 2011 Q1 | 2010 Q4 | 2010 Q3 | 2010 Q2 | 2010 Q1 | 2009 Q4 |
| ALLETE (Minnesota Power) | ALE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Superior Water, Light and Power Company | ALE | 0.00\% | 0.00\% | 0.00\% | 4.37\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Interstate Power and Light Company | LNT | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 7.04\% | 6.51\% |
| Wisconsin Power and Light Company | LNT | 0.13\% | 0.13\% | 1.32\% | 1.87\% | 0.12\% | 0.12\% | 5.64\% | 0.12\% |
| Ameren Illinois Company | AEE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | na | na | na | na |
| Union Electric Company | AEE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| AEP Texas Central Company | AEP | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| AEP Texas North Company | AEP | 2.33\% | 5.08\% | 5.63\% | 0.00\% | 5.75\% | 5.37\% | 4.00\% | 11.41\% |
| Appalachian Power Company | AEP | 0.00\% | 0.00\% | 0.00\% | 2.27\% | 1.18\% | 4.04\% | 5.55\% | 3.81\% |
| Columbus Southern Power Company | AEP | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.98\% |
| Indiana Michigan Power Company | AEP | 0.00\% | 0.83\% | 0.00\% | 1.34\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Kentucky Power Company | AEP | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.43\% | 0.00\% | 0.05\% |
| Kingsport Power Company | AEP | 18.43\% | 13.04\% | 18.89\% | 18.42\% | 54.73\% | 54.59\% | 55.15\% | 21.35\% |
| Ohio Power Company | AEP | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Public Service Company of Oklahoma | AEP | 0.00\% | 0.00\% | 0.00\% | 4.68\% | 1.22\% | 3.51\% | 3.64\% | 0.00\% |
| Southwestern Electric Power Company | AEP | 1.15\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Wheeling Power Co | AEP | 28.38\% | 26.10\% | 21.05\% | 16.91\% | 19.43\% | 23.13\% | 22.97\% | 24.39\% |
| Avista Corporation | AVA | 4.04\% | 3.18\% | 2.77\% | 4.89\% | 3.58\% | 4.03\% | 3.43\% | 4.13\% |
| Black Hills Colorado Electric Utility Company, LP | BKH | 58.97\% | 57.84\% | 56.76\% | 54.18\% | 52.36\% | 48.81\% | 45.86\% | 43.67\% |
| Black Hills Power, Inc. | BKH | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 2.26\% | 0.00\% | 0.00\% |
| Cheyenne Light, Fuel and Power Company | BKH | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Cleco Power LLC | CNL | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.98\% | 0.00\% | 0.00\% | 0.00\% |
| Consolidated Edison Company of New York, Inc. | ED | 0.00\% | 0.00\% | 2.24\% | 0.00\% | 4.03\% | 0.33\% | 2.37\% | 0.00\% |
| Orange and Rockland Utilities, Inc. | ED | 1.75\% | 1.77\% | 1.77\% | 1.79\% | 2.99\% | 9.82\% | 1.91\% | 1.85\% |
| Pike County Light \& Power Company | ED | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Rockland Electric Company | ED | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Virginia Electric and Power Company | D | 3.59\% | 5.51\% | 3.53\% | 4.17\% | 1.95\% | 4.97\% | 0.00\% | 3.06\% |
| Detroit Edison Company | DTE | 0.76\% | 1.38\% | 1.42\% | 0.21\% | 0.25\% | 1.10\% | 0.36\% | 0.36\% |
| Southern California Edison Co. | EIX | 2.95\% | 1.11\% | 1.14\% | 0.00\% | 0.00\% | 1.31\% | 1.13\% | 0.00\% |
| Kansas City Power \& Light Company | GXP | 0.26\% | 11.61\% | 7.64\% | 6.55\% | 6.05\% | 7.65\% | 5.50\% | 4.89\% |
| KCP\&L Greater Missouri Operations Company | GXP | 1.24\% | 2.53\% | 7.78\% | 0.54\% | 0.08\% | 10.33\% | 28.38\% | 27.17\% |
| Idaho Power Co. | IDA | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Upper Peninsula Power Company | TEG | 2.77\% | 5.95\% | 6.45\% | 5.75\% | 4.73\% | 0.00\% | 4.29\% | 7.98\% |
| Wisconsin Public Service Corp | TEG | 6.04\% | 0.25\% | 1.66\% | 0.48\% | 0.48\% | 0.48\% | 0.48\% | 0.82\% |
| Oklahoma Gas and Electric Company | OGE | 0.00\% | 0.00\% | 0.36\% | 0.00\% | 0.00\% | 0.00\% | 0.23\% | 0.00\% |
| Atlantic City Electric Company | POM | 2.48\% | 3.79\% | 8.68\% | 8.31\% | 6.44\% | 8.87\% | 5.06\% | 3.42\% |
| Delmarva Power \& Light Company | POM | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.18\% | 0.00\% | 0.00\% | 0.00\% |
| Potomac Electric Power Company | POM | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Pacific Gas and Electric Company | PCG | 4.19\% | 4.48\% | 5.17\% | 3.41\% | 4.00\% | 4.24\% | 5.22\% | 3.53\% |
| Arizona Public Service Company | PNW | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 2.77\% | 0.00\% |
| Portland General Electric Company | POR | 0.00\% | 0.00\% | 0.00\% | 0.55\% | 0.25\% | 0.00\% | 0.00\% | 0.00\% |
| South Carolina Electric \& Gas Co. | SCG | 7.03\% | 6.83\% | 7.12\% | 5.79\% | 5.17\% | 3.59\% | 3.41\% | 4.05\% |
| San Diego Gas \& Electric Co. | SRE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.15\% | 0.46\% | 0.00\% |
| Alabama Power Company | SO | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.48\% | 0.00\% | 0.00\% |
| Georgia Power Company | SO | 0.01\% | 1.74\% | 2.80\% | 3.19\% | 0.02\% | 1.79\% | 1.41\% | 1.94\% |
| Gulf Power Company | SO | 1.44\% | 3.66\% | 3.39\% | 3.69\% | 0.00\% | 3.51\% | 3.45\% | 3.85\% |
| Mississippi Power Company | SO | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 3.16\% | 0.00\% | 0.00\% |
| Tampa Electric Company | TE | 0.00\% | 0.19\% | 0.00\% | 0.00\% | 0.50\% | 2.00\% | 0.48\% | 1.46\% |
| United Illuminating Company | UIL | 8.20\% | 7.11\% | 6.05\% | 4.60\% | 4.55\% | 6.06\% | 4.71\% | 4.19\% |
| Southern Indiana Gas and Electric Company, Inc. | VVC | 3.89\% | 4.17\% | 3.95\% | 4.95\% | 3.10\% | 4.00\% | 2.96\% | 4.03\% |
| Kansas Gas and Electric Company | WR | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Westar Energy (KPL) | WR | 8.72\% | 10.59\% | 7.22\% | 5.50\% | 4.02\% | 5.94\% | 5.23\% | 6.06\% |
| Wisconsin Electric Power Company | WEC | 2.16\% | 4.31\% | 2.96\% | 3.97\% | 0.87\% | 3.31\% | 1.07\% | 1.87\% |
| Northern States Power Company - MN | XEL | 0.99\% | 0.10\% | 0.14\% | 0.03\% | 0.03\% | 1.62\% | 0.03\% | 0.04\% |
| Northern States Power Company - WI | XEL | 3.05\% | 3.83\% | 3.41\% | 4.07\% | 0.44\% | 0.00\% | 2.08\% | 1.77\% |
| Public Service Company of Colorado | XEL | 0.00\% | 1.99\% | 0.57\% | 3.60\% | 0.00\% | 0.00\% | 0.66\% | 2.71\% |
| Southwestern Public Service Company | XEL | 0.00\% | 6.38\% | 3.77\% | 2.55\% | 3.13\% | 2.26\% | 0.00\% | 0.00\% |

## Notes

## Source: SNL Financial

Hawaiian Electric \& CenterPoint Energy were excluded from this analysis due to unavailable data on customer deposits
Ameren Illinois Company is composed of recently merged operating utilities and historical data is not available
"NA" indicates the operating company capital structure is not reported.

## $(8-\mathrm{Hg})^{-7!9!ч х 马}$

## Testimony of Robert B. Hevert

Exhibit __(RBH-8)
Stay-Out Premium Calculation

| Date | Treasury Yields [1] |  |  |
| :---: | :---: | :---: | :---: |
|  |  | 1-Year | 3-Year |
| $\begin{array}{lll}\text { Mar-07 } & 4.92 & 4.51\end{array}$ |  |  |  |
|  | Apr-07 | 4.93 | 4.60 |
| $\begin{array}{lll}\text { May-07 } & 4.91 & 4.69\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Jun-07 } & 4.96 & 5.00\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Jul-07 } & 4.96 & 4.82\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Aug-07 } & 4.47 & 4.34\end{array}$ |  |  |  |
| Sep-07 4.14 |  |  |  |
| Oct-07 4.10 4.01 |  |  |  |
| $\begin{array}{lll}\text { Nov-07 } & 3.50 & 3.35\end{array}$ |  |  |  |
| Dec-07 3.26 3.13 |  |  |  |
| Jan-08 2.71 |  |  |  |
| Feb-08 2.05 2.19 |  |  |  |
| $\begin{array}{lll}\text { Mar-08 } & 1.54 & 1.80\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Apr-08 } & 1.74 & 2.23\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { May-08 } & 2.06 & 2.69\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Jun-08 } & 2.42 & 3.08\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Jul-08 } & 2.28 & 2.87\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Aug-08 } & 2.18 & 2.70\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Sep-08 } & 1.91 & 2.32\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Oct-08 } & 1.42 & 1.86\end{array}$ |  |  |  |
| Nov-08 1.07 1.51 |  |  |  |
| Dec-08 0.49 1.07 |  |  |  |
| Jan-09 0.44 |  |  |  |
| Feb-09 0.62 1.37 |  |  |  |
| $\begin{array}{lll}\text { Mar-09 } & 0.64 & 1.31\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Apr-09 } & 0.55 & 1.32\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { May-09 } & 0.50 & 1.39\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Jun-09 } & 0.51 & 1.76\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Jul-09 } & 0.48 & 1.55\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Aug-09 } & 0.46 & 1.65\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Sep-09 } & 0.40 & 1.48\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Oct-09 } & 0.37 & 1.46\end{array}$ |  |  |  |
| Nov-09 0.31 1.32 |  |  |  |
| Dec-09 0.37 1.38 |  |  |  |
| $\begin{array}{lll}\text { Jan-10 } & 0.34 & 1.49\end{array}$ |  |  |  |
| Feb-10 0.35 1.40 |  |  |  |
| $\begin{array}{lll}\text { Mar-10 } & 0.40 & 1.51\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Apr-10 } & 0.44 & 1.64\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { May-10 } & 0.37 & 1.32\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Jun-10 } & 0.32 & 1.17\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Jul-10 } & 0.29 & 0.98\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Aug-10 } & 0.26 & 0.78\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Sep-10 } & 0.26 & 0.75\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Oct-10 } & 0.23 & 0.57\end{array}$ |  |  |  |
| Nov-10 0.25 0.67 |  |  |  |
| $\begin{array}{lll}\text { Dec-10 } & 0.29 & 0.99\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Jan-11 } & 0.27 & 1.03\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Feb-11 } & 0.29 & 1.28\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Mar-11 } & 0.26 & 1.17\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Apr-11 } & 0.25 & 1.21\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { May-11 } & 0.19 & 0.94\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Jun-11 } & 0.18 & 0.71\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Jul-11 } & 0.19 & 0.68\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Aug-11 } & 0.11 & 0.38\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Sep-11 } & 0.10 & 0.35\end{array}$ |  |  |  |
| $\begin{array}{lll}\text { Oct-11 } & 0.11 & 0.47\end{array}$ |  |  |  |
| Nov-11 0.11 0.39 |  |  |  |
| Dec-11 0.12 0.39 |  |  |  |
| Jan-12 0.11 |  |  |  |
| Feb-12 0.16 0.38 |  |  |  |
| $5-\mathrm{Yr}$. Avg. 1.30 1.82 |  |  |  |
|  |  |  | 0.53 |
| Stay-Out Premium (.5 x Differential) $\quad 0.26$ |  |  |  |
| $4-\mathrm{Yr}$. Avg. 0.60 1.30 |  |  |  |
|  |  |  | 0.69 |
| Stay-Out Premium (.5x Differential) $\quad 0.35$ |  |  |  |
| 3-Yr. Avg. 0.30 1.05 |  |  |  |
|  |  |  | 0.74 |
| Stay-Out Premium (.5 x Differential) $\quad 0.37$ |  |  |  |
| $2-Y r . ~ A v g . ~$ 0.23 0.84 |  |  |  |
|  |  |  | 0.61 |
| Stay-Out Premium (.5x Differential) $\quad 0.30$ |  |  |  |
| 1 -Yr. Avg.  0.16 <br>  Differential 0.62 <br>   0.46 <br>  Stay-Out Premium (.5 x Differential) 0.23 |  |  |  |
|  |  |  |  |
|  |  |  |  |

Notes
[1] Source: Bloomberg Professional Service; derived from Federal Reserve Statistical Release H. 15

## Testimony of Robert B. Hevert

Exhibit __(RBH-9)

Alternate Calculation of Stay-Out Premium

Current vs 3-Yr Forward Long-Term Treasury Yields (three-month average): $0.47 \%$

|  | [1] | [2] | [3] | [4] | [5] | [6] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $3-\mathrm{yr}$ <br> Treas. | $\begin{aligned} & 10-\mathrm{yr} \\ & \text { Treas. } \end{aligned}$ | $\begin{aligned} & 30-\mathrm{yr} \\ & \text { Treas. } \end{aligned}$ | Implied <br> Forward 27-yr Treas. | Interpolated Current 27-yr Treas. | Difference |
| 03/16/2012 | 0.57\% | 2.31\% | 3.41\% | 3.73\% | 3.25\% | 0.49\% |
| 03/15/2012 | 0.56\% | 2.29\% | 3.41\% | 3.73\% | 3.24\% | 0.49\% |
| 03/14/2012 | 0.60\% | 2.29\% | 3.43\% | 3.75\% | 3.26\% | 0.49\% |
| 03/13/2012 | 0.51\% | 2.14\% | 3.26\% | 3.57\% | 3.09\% | 0.48\% |
| 03/12/2012 | 0.47\% | 2.04\% | 3.17\% | 3.47\% | 3.00\% | 0.47\% |
| 03/09/2012 | 0.46\% | 2.04\% | 3.19\% | 3.50\% | 3.02\% | 0.48\% |
| 03/08/2012 | 0.44\% | 2.03\% | 3.18\% | 3.49\% | 3.01\% | 0.48\% |
| 03/07/2012 | 0.42\% | 1.98\% | 3.12\% | 3.42\% | 2.95\% | 0.48\% |
| 03/06/2012 | 0.40\% | 1.96\% | 3.08\% | 3.38\% | 2.91\% | 0.47\% |
| 03/05/2012 | 0.43\% | 2.00\% | 3.13\% | 3.43\% | 2.96\% | 0.47\% |
| 03/02/2012 | 0.41\% | 1.99\% | 3.11\% | 3.41\% | 2.94\% | 0.47\% |
| 03/01/2012 | 0.43\% | 2.03\% | 3.15\% | 3.46\% | 2.98\% | 0.47\% |
| 02/29/2012 | 0.43\% | 1.98\% | 3.08\% | 3.38\% | 2.92\% | 0.46\% |
| 02/28/2012 | 0.41\% | 1.94\% | 3.07\% | 3.37\% | 2.90\% | 0.47\% |
| 02/27/2012 | 0.40\% | 1.92\% | 3.04\% | 3.34\% | 2.87\% | 0.47\% |
| 02/24/2012 | 0.43\% | 1.98\% | 3.10\% | 3.40\% | 2.93\% | 0.47\% |
| 02/23/2012 | 0.43\% | 1.99\% | 3.13\% | 3.43\% | 2.96\% | 0.48\% |
| 02/22/2012 | 0.42\% | 2.01\% | 3.15\% | 3.46\% | 2.98\% | 0.48\% |
| 02/21/2012 | 0.44\% | 2.05\% | 3.20\% | 3.51\% | 3.03\% | 0.48\% |
| 02/17/2012 | 0.42\% | 2.01\% | 3.16\% | 3.47\% | 2.99\% | 0.48\% |
| 02/16/2012 | 0.42\% | 1.99\% | 3.14\% | 3.45\% | 2.97\% | 0.48\% |
| 02/15/2012 | 0.38\% | 1.93\% | 3.09\% | 3.40\% | 2.92\% | 0.48\% |
| 02/14/2012 | 0.40\% | 1.92\% | 3.06\% | 3.36\% | 2.89\% | 0.47\% |
| 02/13/2012 | 0.40\% | 1.99\% | 3.14\% | 3.45\% | 2.97\% | 0.48\% |
| 02/10/2012 | 0.36\% | 1.96\% | 3.11\% | 3.42\% | 2.94\% | 0.48\% |
| 02/09/2012 | 0.38\% | 2.04\% | 3.20\% | 3.52\% | 3.03\% | 0.49\% |
| 02/08/2012 | 0.35\% | 2.01\% | 3.14\% | 3.45\% | 2.97\% | 0.48\% |
| 02/07/2012 | 0.35\% | 2.00\% | 3.14\% | 3.45\% | 2.97\% | 0.49\% |
| 02/06/2012 | 0.32\% | 1.93\% | 3.08\% | 3.39\% | 2.91\% | 0.48\% |
| 02/03/2012 | 0.33\% | 1.97\% | 3.13\% | 3.45\% | 2.96\% | 0.49\% |
| 02/02/2012 | 0.31\% | 1.86\% | 3.01\% | 3.31\% | 2.84\% | 0.48\% |
| 02/01/2012 | 0.31\% | 1.87\% | 3.01\% | 3.31\% | 2.84\% | 0.48\% |
| 01/31/2012 | 0.30\% | 1.83\% | 2.94\% | 3.24\% | 2.77\% | 0.46\% |
| 01/30/2012 | 0.31\% | 1.87\% | 2.99\% | 3.29\% | 2.82\% | 0.47\% |
| 01/27/2012 | 0.32\% | 1.93\% | 3.07\% | 3.38\% | 2.90\% | 0.48\% |
| 01/26/2012 | 0.31\% | 1.96\% | 3.10\% | 3.41\% | 2.93\% | 0.49\% |
| 01/25/2012 | 0.34\% | 2.01\% | 3.13\% | 3.44\% | 2.96\% | 0.48\% |
| 01/24/2012 | 0.39\% | 2.08\% | 3.15\% | 3.46\% | 2.99\% | 0.47\% |
| 01/23/2012 | 0.39\% | 2.09\% | 3.15\% | 3.46\% | 2.99\% | 0.47\% |
| 01/20/2012 | 0.38\% | 2.05\% | 3.10\% | 3.41\% | 2.94\% | 0.46\% |
| 01/19/2012 | 0.36\% | 2.01\% | 3.05\% | 3.35\% | 2.89\% | 0.46\% |
| 01/18/2012 | 0.35\% | 1.92\% | 2.96\% | 3.25\% | 2.80\% | 0.45\% |
| 01/17/2012 | 0.33\% | 1.87\% | 2.89\% | 3.18\% | 2.74\% | 0.44\% |
| 01/13/2012 | 0.34\% | 1.89\% | 2.91\% | 3.20\% | 2.76\% | 0.44\% |
| 01/12/2012 | 0.35\% | 1.94\% | 2.97\% | 3.27\% | 2.82\% | 0.45\% |
| 01/11/2012 | 0.34\% | 1.93\% | 2.96\% | 3.26\% | 2.81\% | 0.45\% |
| 01/10/2012 | 0.37\% | 2.00\% | 3.04\% | 3.34\% | 2.88\% | 0.46\% |
| 01/09/2012 | 0.38\% | 1.98\% | 3.02\% | 3.32\% | 2.86\% | 0.45\% |
| 01/06/2012 | 0.40\% | 1.98\% | 3.02\% | 3.32\% | 2.86\% | 0.45\% |
| 01/05/2012 | 0.40\% | 2.02\% | 3.06\% | 3.36\% | 2.90\% | 0.46\% |
| 01/04/2012 | 0.40\% | 2.00\% | 3.03\% | 3.33\% | 2.88\% | 0.45\% |
| 01/03/2012 | 0.40\% | 1.97\% | 2.98\% | 3.27\% | 2.83\% | 0.44\% |
| 12/30/2011 | 0.36\% | 1.89\% | 2.89\% | 3.18\% | 2.74\% | 0.44\% |
| 12/29/2011 | 0.41\% | 1.91\% | 2.90\% | 3.18\% | 2.75\% | 0.43\% |
| 12/28/2011 | 0.42\% | 1.93\% | 2.91\% | 3.19\% | 2.76\% | 0.43\% |
| 12/27/2011 | 0.45\% | 2.02\% | 3.04\% | 3.33\% | 2.89\% | 0.44\% |
| 12/23/2011 | 0.45\% | 2.03\% | 3.05\% | 3.34\% | 2.90\% | 0.45\% |
| 12/22/2011 | 0.41\% | 1.97\% | 2.99\% | 3.28\% | 2.84\% | 0.44\% |
| 12/21/2011 | 0.40\% | 1.98\% | 3.00\% | 3.29\% | 2.85\% | 0.45\% |
| 12/20/2011 | 0.39\% | 1.94\% | 2.93\% | 3.22\% | 2.78\% | 0.43\% |
| 12/19/2011 | 0.36\% | 1.82\% | 2.79\% | 3.06\% | 2.64\% | 0.42\% |

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional
[3] Source: Bloomberg Professional
[4] $\left(\left((1+\text { Column [3] })^{\wedge} 30 /(1+\text { Column [1])^3 })^{\wedge}(1 / 27)\right)-1\right.$
[5] Equals (((Column [3] - Column [2]) / 20) x 17) + Column [2]
[6] Equals Column [4] - Column [5]


[^0]:    1 The National Bureau of Economic Research determined that the recent recession began in December 2007 and ended in June 2009.

[^1]:    2 Source: Bloomberg Professional Service.
    $3 \quad 90$-trading day average as of March 16,2012 , except as noted otherwise.

[^2]:    $4 \quad$ Robert S. Harris and Felicia C. Marston, Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts, Financial Management, Summer 1992, at 69; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, The Risk Premium Approach to Measuring a Utility's Cost of Equity, Financial Management, Spring 1985, at 33-45; and Farris M. Maddox, Donna T. Pippert, and Rodney N. Sullivan, An Empirical Study of Ex Ante Risk Premiums for the Electric Utility Industry, Financial Management, Autumn 1995, at 89-95.

[^3]:    5 The analysis presented here is based on yield spreads calculated using 10-year Treasury Bond Yields.

[^4]:    7 I note that in the Company's last rate case, the Commission declined to include updated Treasury yields due to the effect of the Federal Reserve's ongoing intervention in the Treasury market. See Case 10-E-0050, Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Niagara Mohawk Power Corporation for Electric Service (the "2010 Electric Rate Case"), Order Establishing Rates For Electric Service, (Issued January 24, 2011), at 82.

[^5]:    8 This analysis includes the 23 months beginning January 2006 and ending November 30, 2007, just prior to the start of the recent recession, as defined by the National Bureau of Economic Research.

[^6]:    9 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. Eugene Brigham, Louis Gapenski, Financial Management: Theory and Practice, 7th Ed. (Orlando: Dryden Press, 1994), at 341.

[^7]:    11 For example, in Case 10-E-0362 the Commission relied upon the Staff DCF analysis that used three months of stock price data. Therefore, I have relied on a three-month averaging period for the purpose of my DCF analyses. See, Case 10-E-0362, Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Orange and Rockland Utilities, Inc. for Electric Service, Order Establishing Rates For Electric Service (Issued June 17, 2011), at 64.

[^8]:    18 See, for example, Composition of Proxy Groups for Determining Gas and Oil Pipeline Return on Equity, 123 FERC ๆ 61,048 , at P. 6 (2008), citing Northwest Pipeline Company, 79 FERC $\mathbb{1}$ 61,309, at 62,383 (1997) (Opinion No. 396-B). Williston Basin Interstate Pipeline Company, 79 FERC $\uparrow$ 61,311, at 62,389 (1997) (Williston I), aff’d, Williston Basin Interstate Pipeline Co. v. FERC, 165 F.3d 54,57 (D.C. Cir. 1999) (Williston v. FERC).

[^9]:    ${ }^{21}$ As reported in the Value Line Investment Survey for each of my proxy group companies as "All Div'ds to Net Prof."
    The 66.78 percent average median payout ratio was calculated based on data from 1990 to the present for all 52 companies included in the Value Line electric utility universe. Source: Bloomberg.
    23 KeyBanc Capital Markets Inc. Equity Research, Electric Utilities Quarterly 1Q10, June 2010, at 7.

[^10]:    27 Morningstar Inc., Ibbotson SBBI 2011 Valuation Yearbook, at 44.

[^11]:    Special Comment: Regulatory Frameworks - Ratings and Credit Quality for InvestorOwned Utilities, Moody's Investors Service, June 18, 2010, at 3.
    Moody's, Global Infrastructure Finance, Regulated Electric and Gas Utilities, August 2009 , at 6 .
    Ibid.

[^12]:    $34 \quad$ Ibid., at 1.
    35
    Regulatory Research Associates, New York Regulatory Review, Updated January 1, 2011, at 1.

[^13]:    37 The Seventh Inning Stretch, Power \& Utilities, Barclays Capital, July 14, 2011, at 11.

[^14]:    39 I note the market implied increase in long-term Treasury yields appears reasonable, if not conservative, compared to Blue Chip Financial Forecast's projected increase of 242 basis points from the current 3.08 percent 30-year Treasury yield by 2016.

[^15]:    1 Robert Arnott, Clifford Asness, Surprise: Higher Dividends = Higher Earnings Growth, Financial Analysts Journal, Vol. 59, No. 1, January/February 2003.

[^16]:    2 Owain ap Gwilym, James Seaton, Karina Suddason, Stephen Thomas, International Evidence on the Payout Ratio, Earnings, Dividends and Returns, Financial Analysts Journal, Vol. 62, No. 1, 2006. (clarification added)

    3 Ping Zhou, William Ruland, Dividend Payout and Future Earnings Growth, Financial Analysts Journal, Vol. 62, No. 3, 2006. See also Owain ap Gwilym, James Seaton, Karina Suddason, Stephen Thomas, International Evidence on the Payout Ratio, Earnings, Dividends and Returns, Financial Analysts Journal, Vol. 62, No. 1, 2006.

[^17]:    Source: Bloomberg; ranges based on annual end-of-year $\mathrm{P} / \mathrm{E}$ ratios

[^18]:    $\frac{\text { Notes: }}{\text { Source: Value Line }}$
    NA denotes that no dividend payment was made, earnings were negative or financials were not available
    Average 5yr EPS Growth is only reported when data are available for all 5 years

