

The Narragansett Electric Company

d/b/a National Grid

INVESTIGATION AS TO THE  
PROPRIETY OF PROPOSED TARIFF  
CHANGES

Testimony and Schedules of:

Timothy F. Horan  
Robert B. Hevert  
Maureen P. Heaphy

Book 1 of 11

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**PRE-FILED DIRECT TESTIMONY**

**OF**

**TIMOTHY F. HORAN**

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1 **I. Introduction**

2 **Q. Please state your name and business address.**

3 A. My name is Timothy F. Horan. My business address is 280 Melrose Street, Providence,  
4 RI 02907.

5  
6 **Q. By whom are you employed and in what capacity?**

7 A. I am President, Rhode Island/New Hampshire, for National Grid USA Service Company,  
8 Inc. (“NGUSC”). In this position, I have responsibility for overseeing the regulated  
9 electric and gas distribution operations of National Grid USA (“National Grid”) in Rhode  
10 Island and New Hampshire. In Rhode Island, electric and natural gas distribution  
11 services are provided by The Narragansett Electric Company d/b/a National Grid (the  
12 “Company”).

13  
14 **Q. What are your principal responsibilities in that position?**

15 A. As President of the Rhode Island Jurisdiction of National Grid, I have lead responsibility  
16 for the Rhode Island organization and for achieving its operational and financial  
17 performance objectives, while providing safe and reliable service to Rhode Island  
18 customers. The Rhode Island organization is supported by the wider National Grid  
19 organization with dedicated functional leads in all key areas, such as network strategy,  
20 engineering, finance and gas and electric operations.

1 **Q. Please describe your educational background and professional experience.**

2 A. In 1983, I earned a Bachelor of Science degree in Management Engineering from  
3 Worcester Polytechnic Institute. In 2000, I earned a Master of Business Administration  
4 from Regis University. From 1983 until June 1988, I was employed by the U.S. Army at  
5 various locations in the United States and Europe. My career with New England Electric  
6 System (“NEES”) began in 1988, when I accepted a position as a commercial and  
7 industrial services representative in Rhode Island for the Company. Over the next several  
8 years, I was employed by various subsidiary companies of NEES, including New  
9 England Power Service Company. Beginning in 1998, I worked for NEES  
10 Communications, Inc., a subsidiary of NEES, where I was the Director of New Business  
11 until 2000, when NEES was acquired by National Grid. Following National Grid’s  
12 acquisition of NEES, I held a series of senior positions, including Vice President of  
13 Business Services, with responsibility for commercial and industrial (“C&I”) business  
14 services, economic and community development, the design and implementation of  
15 demand-side management programs and policy administration for National Grid’s Rhode  
16 Island electric distribution operations.

17  
18 In 2003, I became the Director of Contractor Management with enterprise-wide  
19 responsibility for the oversight and management of the external contractors utilized for  
20 construction and maintenance of the electric distribution and transmission systems in  
21 New England and Upstate New York. In 2005, I accepted the position of Senior Vice  
22 President Business & Retail Services with responsibility for C&I business services,

1 economic and community development, the design and implementation of demand-side  
2 management programs and policy administration in National Grid's New England  
3 electric distribution companies in Massachusetts, New Hampshire, and Rhode Island. I  
4 later served as Senior Vice President of New England Gas Integration, with responsibility  
5 for overseeing the acquisition and integration of the Rhode Island natural gas distribution  
6 operations purchased from Southern Union Company in 2006. Following the closing of  
7 this acquisition, I moved into the National Grid/KeySpan Corporation integration team  
8 and was named Senior Vice President of Safety, Health, Environmental Services, and  
9 Security with responsibility for providing support to the National Grid organization to  
10 ensure that all significant safety, health, environmental, and security risks were managed  
11 and continuous improvements in safety, health, environmental, and security performance  
12 were achieved each year. In 2010, the security group was transferred to the U.K.-based  
13 Information Services ("IS") department in order to allow for coordination of asset and IS  
14 security, and therefore, at that time my responsibilities were focused solely on safety,  
15 health and the environment. In 2011, I was named to my current position of President  
16 with principal responsibility for the Rhode Island/New Hampshire gas and electric  
17 distribution operations.

18  
19 **Q. Do you have any other experience that assists in your current role in overseeing the**  
20 **safety and reliability of the National Grid system in Rhode Island?**

21 A. Yes. I recently concluded a 24-year career with the U.S. Army, serving in both active  
22 duty and the U.S. Army Reserves. The experience obtained through my service has

1           been directly beneficial to my role as Jurisdiction President, particularly in the area of  
2           emergency preparedness and response. For example, during my tenure in the U.S. Army  
3           Reserves, I served for over five years as a military liaison with the Federal Emergency  
4           Management Agency, gaining extensive knowledge of national emergency preparedness  
5           and response procedures, as well as the Incident Command System, which is used by  
6           National Grid to manage storm-response efforts. My experience includes acting as an  
7           Emergency Preparedness Liaison Officer following the September 11, 2001 terrorist  
8           attacks and deployment to Georgia to assist in the federal government's response to  
9           Hurricane Katrina. During different times in the U.S. Army Reserves, I was assigned to  
10          units in Providence, Bristol and Cranston, where I held various leadership and command  
11          positions. I retired as a Colonel from the U.S. Army Reserves in 2006.

12  
13       **Q.    Why is the Company filing to increase electric and gas distribution rates at this**  
14       **time?**

15       A.    There are several significant factors driving the need for rate relief at this point in time.  
16       Fundamentally, it is very important for the Company to recover its annual operating costs  
17       if it is to be in the position to continue meeting its public service obligation to provide  
18       safe, reliable and cost-effective service to customers on a sustainable basis at the levels of  
19       service expected by our customers. The cost to operate and maintain electric and gas  
20       distribution systems like National Grid's Rhode Island system is significant. The  
21       Company's electric and gas distribution facilities require constant attention and  
22       adherence to extensive regulation by state and federal authorities.

1 As technology advances and the dependence upon electricity increases, customer  
2 expectations about the quality of electric service increase as well. National Grid is  
3 particularly proud of its record of performance in Rhode Island. With respect to  
4 reliability of service, Narragansett Electric is a first-quartile performer. However, in  
5 order for the Company to continue this level of service, the Company needs to recover  
6 the cost of providing that service.

7  
8 On the gas side, it is essential that natural gas service not only be continuously provided  
9 to heat homes and businesses, along with providing the source of energy for other uses,  
10 but also that the delivery of the natural gas is done safely. The key to the safe delivery of  
11 natural gas is consistent and effective maintenance, which generates expenses that must  
12 be covered to assure the Company remains on sound financial footing. Although the  
13 Company continues to invest substantial resources in the gas distribution system through  
14 the annually approved capital programs, the older pipeline system cannot be replaced all  
15 at once. It will take many years, and there remains a significant amount of older  
16 infrastructure that needs constant attention while the annual replacement programs are  
17 implemented. We also need to recover the costs of equipping our employees, performing  
18 repairs, and leaving ourselves in the best position to respond to emergency calls as those  
19 calls arise. We are proud of our record in that regard, but there are costs associated with  
20 maintaining the level of service our customers expect.

21

1 In making this request for rate relief for both electric and gas distribution service, the  
2 Company is sensitive to the fact that it is difficult to raise rates for customers at any time,  
3 but especially so in the challenging economic environment that exists in Rhode Island  
4 today. The difficulty for the Company is that customers rely on the Company for reliable  
5 electric and natural gas service. The public's response to the widespread outages that  
6 followed Tropical Storm Irene and the October 2011 snow storm underscored the  
7 dependence that customers of all types and sizes have on reliable electric service. In fact,  
8 the availability of safe and reliable electric and gas service forms the backbone of the  
9 Rhode Island economy. A strong, safe, and reliable energy delivery infrastructure is  
10 essential for the economy to grow. However, the Company requires sufficient cost  
11 recovery and associated cash flow to support the implementation and adherence to proper  
12 maintenance and operating practices.

13  
14 In this filing, the Company has set forth a series of proposals that, on a collective basis,  
15 are designed to deal directly with the factors that currently make it difficult to maintain  
16 an adequate level of cost recovery and rate stability over time. If approved by the Rhode  
17 Island Public Utilities Commission (the "Commission"), these proposals would restore  
18 the Company's ability to fund utility operations on a sustainable going forward basis. In  
19 doing so, these proposals would directly serve the interest of Rhode Island customers in  
20 having access to safe and reliable energy delivery services, at the lowest reasonable cost  
21 over the long term, in an environment with ever changing demands with respect to energy  
22 consumption and use.

1 **Q. What is the purpose of your testimony?**

2 A. My testimony is designed to provide the Commission with a discussion of: (1) the  
3 organizational changes and accomplishments made by the Company since the last base-  
4 rate proceedings in 2008 and 2009 for the Company's gas and electric operations,  
5 respectively; and (2) an overview of the Company's proposals to the Commission in this  
6 proceeding, along with background on the business environment and operating factors  
7 motivating those proposals.

8  
9 From an overall perspective, my testimony is designed to provide the Commission with a  
10 vantage point on the strong commitment that the Company has made to maintain the  
11 safety and reliability of the Rhode Island distribution system; to uphold the safety of the  
12 general public in Rhode Island and of employees and contractors working on the  
13 distribution system; to mitigate environmental impacts arising from operations; and, most  
14 importantly, to build and maintain the satisfaction of customers with the service provided  
15 by the Company. These objectives are the basis for the organizational restructuring  
16 undertaken in 2011 to reinforce National Grid's engagement with customers,  
17 communities, legislators and regulators in each state jurisdiction where National Grid  
18 operates. My testimony is intended to show how this restructuring has taken form in  
19 Rhode Island for the benefit of the Company's gas and electric customers.

20

21 **Q. How is your testimony organized?**

22 A. My testimony is organized as follows: Section I is an introductory section. Section II

1 discusses the organizational changes and achievements that have taken place in relation  
2 to the Rhode Island operations since the Commission last reviewed the gas and electric  
3 distribution base rates of the Company. Section III discusses the primary components of  
4 the Company's filing, including a summary of the overall revenue-requirement  
5 calculations presented to support a change in base rates and other key elements of the  
6 Company's proposal. Lastly, in Section IV, my testimony presents concluding  
7 statements regarding the Company's filing.  
8

9 **Q. Would you please explain the naming conventions that you will be using in your**  
10 **testimony to identify the various National Grid entities involved in this proceeding?**

11 A. This proceeding is a ratemaking proceeding for the gas and electric distribution  
12 operations of The Narragansett Electric Company, which together represent the entirety  
13 of National Grid's regulated operations in Rhode Island. In this case, we will refer to the  
14 regulated entity as the "Company," where the reference is to both gas and electric  
15 distribution operations on a collective basis. Where there is a need to refer to the "stand-  
16 alone" or individual operations of The Narragansett Electric Company, the Company will  
17 use the terms "Narragansett Electric" or "Narragansett Gas." Where the Company is  
18 referring to "National Grid USA", it will use the term "National Grid"; where the  
19 Company is referring to "National Grid plc," it will use that precise term.  
20

1 **II. The Rhode Island Organization**

2 *Organizational Restructuring*

3 **Q. Have there been any organizational changes that have benefited Rhode Island?**

4 A. Yes. On January 31, 2011, National Grid announced a detailed restructuring plan to  
5 improve its U.S. performance through the creation of an organizational structure based on  
6 local state jurisdictions led by regional presidents responsible for understanding and  
7 meeting the needs of customers, communities, legislative leaders and regulators in each  
8 of those local jurisdictions. This has allowed me to take responsibility for Rhode Island  
9 as regional President, with accountability for the Company's performance in the state.

10 Organizing on the basis of state jurisdictions rather than global lines of business (which  
11 was the organizational model instituted in 2007) is designed to promote and facilitate full  
12 engagement with customers and other external constituencies so that the public-service  
13 obligation is met in a more effective manner. The new structure is also designed to result  
14 in the streamlining of many customer-facing processes and procedures, thereby  
15 improving customer interactions with National Grid operating companies, while  
16 maintaining safe and reliable service. Other regional presidents also were separately  
17 appointed for Massachusetts, New York, and our federally regulated businesses. As I  
18 stated earlier in my testimony, I was named the regional President for Rhode Island and  
19 New Hampshire within this organizational structure.

20

21 With the new structure, National Grid's Rhode Island business is now operated with a  
22 focus on Rhode Island. Rather than being two parts of two lines of business, Rhode

1 Island is now evaluated by National Grid as a stand alone operation financially, that also  
2 has the benefit of centralized services from the larger National Grid enterprise. But  
3 because I have personal responsibility for Rhode Island with the authority to address  
4 Rhode Island-specific concerns, the Company is now well-positioned to serve Rhode  
5 Island and our customers in a more direct and responsive manner.  
6

7 **Q. What is your overall duty as regional President?**

8 A. From an overall perspective, I have responsibility for implementing a focused business  
9 plan for National Grid's operations in Rhode Island that responds to the expectations and  
10 needs of our Rhode Island constituencies, while also maintaining positive financial  
11 results. I am expected to work closely with other U.S. senior managers across National  
12 Grid and its service companies in the areas of electric and gas distribution operations,  
13 network strategy, customer service, regulatory affairs and areas such as fleet, property  
14 and materials, with the goal of creating a more efficient, locally focused organization  
15 operating within the financial parameters allowed by regulators. I also have  
16 responsibility for our New Hampshire distribution businesses until such time as the  
17 divestiture of those businesses is complete.  
18

19 The transition in organizational structure from a global line of business to jurisdictional  
20 focus is specifically designed to create a single point of responsibility in relation to three  
21 key business objectives, which are:

- 1           ▪ *Accountability for providing safe and reliable service in the most cost-effective*  
2           *manner.* I now have the authority and means to meet that obligation through  
3           dedicated resources and influence over the service functions in Rhode Island.  
4           ▪ *Renewed focus on customers and the community.* As regional President, along  
5           with my Rhode Island team, we are dedicated to improving local communication,  
6           understanding stakeholder issues and priorities specific to Rhode Island, and  
7           working with the technical functions to ensure that our obligations are met to all  
8           our state and local Rhode Island stakeholders.  
9           ▪ *Establishing effective relationships with the Commission and the Rhode Island*  
10          *Division of Public Utilities and Carriers (the “Division”), and aligning internal*  
11          *operations with our regulatory obligations and commitments.* My Rhode Island  
12          team is charged with assuring that we are paying close attention to the needs of  
13          the Commission, the Division, and other governmental officials. Our singular  
14          Rhode Island focus is designed to address those matters that are important to the  
15          governmental policy-makers of the state.  
16

17 **Q. Were there any cost reduction initiatives undertaken as a part of the U.S.**  
18 **Restructuring?**

19 A. Yes. In addition to announcing the reorganization, National Grid also engaged in a  
20 significant cost-reduction program across the U.S. The U.S. businesses were able to  
21 reduce their overall aggregate operating costs by over \$200 million, compared to a  
22 baseline cost from fiscal year (“FY”) 2010, escalated for inflation. Using the baseline of

1 FY 2011, escalated for inflation, the U.S. enterprise estimates savings of approximately  
2 \$172 million on a run rate basis as of March 2013. In this case, Rhode Island customers  
3 will receive the benefit of these cost reductions through a combination of what was  
4 achieved in calendar year 2011 and what we expect to achieve during the year for which  
5 rates are being set in this case.  
6

7 **Q. In your judgment, what is the core objective driving the design and implementation**  
8 **of the restructuring?**

9 A. From the outset of my tenure as President in Rhode Island, it has been made clear to me  
10 that the core objective intended to result from this organizational change is local  
11 engagement. The reorganization comes as a result of the recognition that National Grid  
12 has public service obligations that must be met in a safe and cost-effective manner, but  
13 also that National Grid requires a policy and regulatory platform to support its efforts to  
14 fulfill its public-service obligations, and it cannot achieve this platform unless there is  
15 better alignment between the business and its local constituencies across the state. This  
16 recognition has led to a renewed emphasis on building bridges to the local communities  
17 across the state, state-elected officials, and our regulators at the Commission and the  
18 Division.  
19

20 **Q. Why is a renewed focus on local engagement important to the Company?**

21 A. In Rhode Island, the Company provides critical energy delivery services to approximately  
22 476,000 electric customers across 38 cities and towns and 250,000 natural gas

1 customers in 33 cities and towns. These customers are homeowners and businesses that  
2 depend on the delivery of safe and reliable power to sustain family life and economic  
3 activity. To provide these critical services, the Company employs approximately 630  
4 employees who live in Rhode Island, as well as hundreds of other employees who  
5 support the operations from other parts of the National Grid organization. The  
6 Company's employees are trained, well-qualified individuals who care about providing  
7 safe and reliable service to customers every single day. In addition, the Company paid  
8 approximately \$42 million in gross receipts taxes to the State of Rhode Island for 2011  
9 and invested in excess of \$124 million in delivery infrastructure for electric and gas  
10 distribution operations, producing local jobs and incurred property taxes totaling  
11 approximately \$36 million for 2011. Consequently, there is no question that the  
12 Company is an integral component of the Rhode Island economy and no question that it  
13 is important for the Company's management to be engaged with customers, communities,  
14 state policymakers and regulators in fulfilling the vital role that the Company plays in  
15 helping to maintain economic stability.

16  
17 At the same time, it requires resources to fulfill this vital role. The Company's  
18 operations must be funded sufficiently to support numerous operational functions that are  
19 involved in fulfilling the public service obligation. For example, the Company must be in  
20 a position to offer competitive compensation packages to qualified employees, with  
21 performance-based components comparable to other employment opportunities.  
22 Employees need to be trained and retrained over time to maintain the safety and

1 reliability of the system. Employees must be supervised and have adequate safety  
2 equipment, efficient access to materials and well-planned work tasks. The Company  
3 must be in a position to have adequate vehicles and facilities to support these employees.  
4 Lastly, the Company must be in a position to support a range of inspection, maintenance  
5 and investment activities. The creation of the Infrastructure, Safety and Reliability  
6 (“ISR”) mechanisms for the electric and gas distribution operations has greatly assisted in  
7 aligning cost incurrence with cost recovery; however, the Company continues to  
8 experience a shortfall in the recovery of costs, which is the reason that a rate case is  
9 needed at this time for both the electric and gas distribution operations. Financial  
10 integrity and stability are achievable, but only where there is engagement in all levels of  
11 the state in which the Company serves.

12  
13 **Q. Can you provide any detail on the actual business changes that have been**  
14 **implemented to better engage with local constituencies?**

15 A. Yes. First, my role as President is specifically designed to create a focal point for local  
16 engagement in the state. I have been tasked with leading the Rhode Island operations  
17 and for developing and improving relationships with core constituencies. In practical  
18 terms, that means meeting daily with internal and external stakeholders, including  
19 Rhode Island political leadership and public-safety officials, including the National  
20 Guard Adjutant General, state police leadership, the Rhode Island EMA Director and  
21 major Rhode Island customers, to ensure that external expectations and obligations are  
22 aligned with internal work streams. For example, we have been coordinating closely

1 with Rhode Island leadership, leadership within the City of Providence and the Rhode  
2 Island Department of Transportation regarding the Interstate I-195 highway relocation  
3 project, which impacts a key economic development area for both the State of Rhode  
4 Island and the City of Providence. We have aligned the ISR programs for the gas and  
5 electric operations to meet the design and construction needs of this project.

6  
7 In addition, our Rhode Island team has been established to take direct responsibility  
8 for local operations. With the renewed focus on customers and the community under  
9 the new organizational model, part of this team is composed of my direct staff  
10 responsible for customer and community activities in Rhode Island. To accomplish  
11 the level of engagement sought by the Company in local communities, the Rhode  
12 Island service territory is divided among four program managers, with a dedicated  
13 manager for each of the central, north, east and south areas of the state. In addition,  
14 the Rhode Island team is supported through a matrix organization with dedicated  
15 functional leads in all key areas, including representatives from Operations, Network  
16 Strategy, Regulation and Pricing, Finance, Legal, Corporate Affairs, and Community  
17 and Customer Management. These managers have direct responsibility and  
18 accountability for overseeing activities in Rhode Island. In the former global lines of  
19 business model, it was sometimes difficult for managers to focus exclusively on local  
20 requirements because their responsibilities were distributed across National Grid. This  
21 difficulty is alleviated in the new organization.

1 Second, the Company's internal governance policies and processes have been revised  
2 to support the jurisdictional model and to improve the capabilities of various business  
3 units including business planning, delegation of authority (of expenditures), risk  
4 management, capital investment plans, operation and maintenance plans and project  
5 approval. These changes are designed to improve data integrity and support quality  
6 reporting for financial and regulatory purposes. For example, my review and approval  
7 is needed for certain activities such as developing operating budgets or authorizing  
8 substantial changes to a large-scale capital project. There is ongoing dialog with the  
9 functional leads through regularly scheduled meetings, where I can review and  
10 challenge variances between approved operating budgets and actual expenditures.  
11 When the variances are presented, I am able to request that action steps be  
12 implemented to manage cost changes to the maximum extent possible. With regard to  
13 specific project changes, there is a governance process in place that requires my  
14 review and approval for changes that meet a specific set of criteria including the effect  
15 of the changes on our commitments to external stakeholders.

16  
17 Third is improved communication and collaboration. In conjunction with the Rhode  
18 Island team, I have worked to develop a stakeholder plan that identifies on-going  
19 outreach activities aimed at improving relationships with external stakeholders. The  
20 focus of the plan is to engage with state and local government agencies, communities  
21 and customers to find ways to improve service performance and meet stakeholder  
22 expectations. An example of activities conducted pursuant to the Rhode Island plan are

1 periodic meetings with municipal officials, EMA Directors and Department of Public  
2 Works officials to build familiarity with our jurisdiction-focused organization and  
3 achieve closer operational relationships.

4  
5 Lastly, is engagement with internal stakeholders, which is maintained through town  
6 hall meetings, ad hoc site visits and a formal meeting structure with the Company staff  
7 by function. Internal engagement activities are designed to promote open  
8 communication, build effective working relationships and provide a means to discuss  
9 and develop actions for performance improvements at different levels within the  
10 organization. An example of activities conducted pursuant to the Rhode Island plan is  
11 a series of meetings that the Company conducted at various Company locations with  
12 the Rhode Island United Way and Company employees to promote our continuous  
13 support of this local organization. My organization also holds weekly calls and  
14 monthly meetings with the Rhode Island cross-functional team to build a cohesive  
15 organization focused on the Rhode Island customers, communities, legislative leaders  
16 and regulators.

17  
18 *Achievements of the Rhode Island Jurisdictional Organization*

19 **Q. What is the measure of success for the Rhode Island jurisdictional organization?**

20 A. Success will be defined by a number of factors. For example, if the Company is able  
21 to improve its communication with customers, there is an opportunity for the Company  
22 to identify and implement changes in business processes that will improve customer

1 satisfaction. This is a goal of the Company. Similarly, if the Company is successful in  
2 engaging local communities, it will be better situated to implement maintenance and  
3 construction activities in those communities, which has the potential to facilitate storm  
4 response efforts and aid in daily operational activities. If the Company is able to  
5 engage with employees, it will be able to create a unified work force with a strong  
6 brand identity focused on service to customers. The Company's hope is that all of  
7 these efforts will culminate to encourage decisions by the Commission, the Division  
8 and other policymakers that create the cost recovery platform that will provide the  
9 financial wherewithal for the Company to sustain its economic role on a cost-effective  
10 basis. The Company's filing in this case is intended to further that objective.

11  
12 **Q. How is the jurisdictional model working to date in Rhode Island?**

13 A. Although the process of improvement is always continual, implementation of the  
14 jurisdictional management model has already yielded results for the Rhode Island  
15 operations in three notable areas:

16  
17 First, a difference is evident in the Company's ability to make and manage system  
18 investment. Following the rate cases in 2008 (gas operations) and 2009 (electric  
19 operations), the Company implemented ISR mechanisms for both the gas and electric  
20 operations in accordance with the Decoupling Act enacted in 2011. Although the  
21 mechanisms came about prior to the decision to transition to a local jurisdictional  
22 management model, the management of the capital programs funded through the ISR is

1 part of my oversight function and requires considerable focus on people, internal  
2 systems and field work to ensure that the identified goals are met. Thus, the  
3 Company's jurisdictional organization dovetails well with the process for developing  
4 the annual ISR plans because we are able to work through a collaborative process that  
5 allows technical experts from the Company and the Division to work together to  
6 deliver plans that are the optimal balance for Rhode Island customers.

7  
8 On March 2, 2012, the Commission approved the FY 2013 Gas ISR Plan for effect  
9 April 1, 2012, providing for a total of approximately \$62 million of capital spending  
10 for programs involving main and service replacements, public works projects,  
11 mandated work, and gas system reliability. This year's plan also included as a separate  
12 category spending for gas-system work related to the I-195 development project in  
13 Providence, which the Company anticipates will have a material impact on economic  
14 development in Rhode Island. Similarly, on March 29, 2012, the Commission voted to  
15 approve the FY 2013 Electric ISR Plan, providing for approximately \$56 million of  
16 spending on work designed to protect and improve the electricity delivery system  
17 through repair of failed or damaged equipment, installation of load growth  
18 infrastructure, replacements to address equipment condition, and operating a cost-  
19 effective vegetation management program. The work in both plans involves over \$100  
20 million of capital spending in the State of Rhode Island, which is a significant  
21 undertaking, yet one that will sustain and enhance the safety and reliability of the  
22 Rhode Island energy delivery systems to the direct benefit of customers. The

1 Company's ability to leverage the jurisdictional organization to achieve efficient and  
2 cost-effective management of this substantial undertaking is an important benefit.  
3 Second, a difference is evident in the ability to respond to large-scale weather events  
4 affecting service to customers. On August 29, 2011, Tropical Storm Irene caused  
5 significant and extensive damage to the Company's electric infrastructure and resulted in  
6 power interruptions to approximately 273,000 customers at peak, representing 57 percent  
7 of the Company's customers. The Company made steady progress in addressing the  
8 severe damage and restoring customers' power during the course of the week that  
9 followed, with 70 percent of customers restored by Tuesday, August 30, and 90 percent  
10 of customers restored by Thursday, September 1. Throughout the storm and restoration  
11 effort, the safety of our workforce and members of the public was a continued priority  
12 and no serious injuries resulted from our system or activities.

13  
14 Still, in an event of this magnitude and duration, there will always be differing  
15 perspectives on the priorities addressed by the Company in the days following the storm  
16 and whether those priorities met the often competing expectations of the many  
17 constituencies involved, and, although the Company received positive feedback from  
18 many corners, important lessons were learned. With the Rhode Island jurisdictional  
19 management organization in place, the Company was able to quickly launch a  
20 meaningful and robust after-action review with both public agencies and customers. For  
21 example, the Company conducted a series of meetings with local community agencies  
22 and organizations having a statewide perspective, as well as meetings on a community-

1 by-community basis. The Company conducted these meetings to discuss issues relating  
2 to storm and emergency response procedures, public safety, vegetation management and  
3 infrastructure construction and maintenance plans and other matters of interest.

4  
5 Similarly, the Company has been holding monthly educational luncheon meetings with a  
6 group of city and town officials to discuss various issues related to wind, solar and  
7 hydropower development. This outreach is a joint effort with the Renewable Energy  
8 Siting Partnership (“RESP”), which is a project undertaken by the University of Rhode  
9 Island and funded by the Rhode Island Office of Energy Resources. RESP functions to  
10 disseminate information on the Company’s interconnection process, net metering, and  
11 our system reliability plan. All of the efforts have been greatly facilitated through the  
12 implementation of the jurisdictional management model in Rhode Island.

13  
14 Third, the difference is evident in the Company’s civic participation. A key focus of the  
15 Rhode Island jurisdictional organization is the integration of the Company with the  
16 communities in which the Company serves customers on a wide range of educational,  
17 environmental and community projects. The Company is an active participant in a  
18 number of community organizations such as the United Way of Rhode Island, the Good  
19 Neighbor Energy Fund, the Providence Foundation and several Chambers of Commerce.  
20 Contributions to education projects include working with the Community College of  
21 Rhode Island and the U.S. Department of Energy to develop an energy utility technology  
22 certificate program. The one-year program is designed to help the students secure jobs

1 in the energy sector and will prepare them to continue their education in areas such as  
2 renewable energy. Similarly, the Company has an interest in promoting learning,  
3 particularly in the STEM (science, technology, engineering and math) curriculum, at the  
4 middle and high school level as evidenced through its partnerships with City Year and  
5 Education in Action. Both of these organizations benefit through financial contributions  
6 as well as employee volunteer involvement. The Rhode Island jurisdictional organization  
7 has provided a platform for my active participation on behalf of the Company and  
8 National Grid, which is proving to be an effective avenue for learning and understanding  
9 between the Company and its local constituencies.

10  
11 **Q. Are there any other examples of the efforts taken since the last rate case to provide**  
12 **excellent service to customers?**

13 A. Yes. A good example of efforts undertaken by the Company to improve the customer  
14 experience is the implementation of the Advantage system conversion project. Prior to  
15 January 23, 2012, Narragansett Gas customers were billed using two different systems.  
16 Approximately 260,000 sales and monthly balanced transportation accounts were  
17 managed in the Advantage/Banner system (“Advantage”), which was a legacy system  
18 carried over from the gas operations, which the Company acquired from Southern Union  
19 Company in 2006. Approximately 800 daily balanced transportation accounts were  
20 managed in the Local Distribution Company Manager (“LDCM”) system. Both systems  
21 were more than 12 years old and lacked any capacity for upgrade or vendor support.  
22 Over time, the Company experienced several instances where mitigation measures were

1 required to address system issues relating to billing, bill calculation, bill print, budget  
2 billing, cash processing, collections and service orders. On January 23, 2012, the  
3 Company completed the final implementation steps to convert the Advantage/LDCM  
4 systems to the Customer Service System, which was in use by the Company to serve its  
5 electric customers.

6  
7 This conversion is expected to greatly improve the functionality of the customer system  
8 to the benefit of Rhode Island customers by reducing the risk of system failure, which  
9 would be unsupported by vendor resources, and by reducing on-going support costs  
10 through the adoption of a common platform for gas and electric customers. The new  
11 system is a well-supported application in the marketplace and represents a cost-effective  
12 solution for Rhode Island customers.

13  
14 **Q. What is your conclusion on the going-forward potential for the Rhode Island**  
15 **jurisdictional organization to achieve its goals for engagement?**

16 A. Our job is to connect people to the energy they use, safely and reliably, while preserving  
17 the interests of shareholders in realizing a fair return on the capital invested in utility  
18 operations. Having the confidence of our shareholders is essential to our commercial  
19 success and allows us to invest in the future. Having the confidence and support of  
20 customers is likewise essential to our commercial success and allows us to invest in the  
21 future. Consequently, we see the Rhode Island jurisdictional organization as being the

1 key ingredient in aligning shareholder and customer interests to the benefit of each, and  
2 our commitment to the model reflects this perspective.  
3

4 **III. Overview of The Company's Filing**

5 **Q. What are the elements of the Company's filing in this proceeding?**

6 A. In this case, the Company is requesting a base-rate increase for its Rhode Island electric  
7 and gas distribution operations. This is the first time in Rhode Island's history that a  
8 combined gas and electric rate case has come before the Commission. Combining two  
9 separate cases into a single rate case provides a very efficient and transparent process for  
10 evaluating the costs and needs of the Company as one enterprise with two lines of  
11 business. Consistent with Commission precedent here and in other states where National  
12 Grid has both gas and electric distribution service, a separate revenue requirement has  
13 been developed for each of the electric and gas operations. In support of the revenue  
14 requirements, the Company's filing includes supporting documentation and the results of  
15 a lead lag study, allocated cost of service study ("ACOSS") and electric and natural gas  
16 sales forecasts, as well as other testimony. Where the testimony covers both gas and  
17 electric operations, there is a single witness. Where it is necessary to present a separate  
18 analysis for gas and electric operations, there are separate testimonies accomplishing that  
19 goal.  
20

21 **Q. What is the rate relief being requested for each business in this case?**

1 A. The Company is seeking base rate increases of approximately \$31.4 million for the  
2 electric business and \$20.0 million for the gas business. The testimony of Company  
3 Witness Michael D. Laflamme presents the Company's revenue-requirement analysis for  
4 each of Narragansett Electric and Narragansett Gas. As he describes in his testimony, the  
5 proposed revenue requirement for Narragansett Electric is based on a test year-end of  
6 December 31, 2011, adjusted for known and measurable changes, a proposed return on  
7 common equity of 10.75 percent and a rate base totaling \$575 million. For Narragansett  
8 Gas, the proposed revenue requirement is based on a test year-end of December 31, 2011,  
9 adjusted for known and measurable changes, a proposed return on equity of 10.75 percent  
10 and a rate base totaling \$370 million.

11  
12 If approved by the Commission as filed, the Company is projecting that the proposed rate  
13 increase as of February 1, 2013 would result in an increase of 5.2 percent on the total bill  
14 for the typical Narragansett Electric residential customer consuming 500 kWh annually.  
15 For Narragansett Gas, the increase on the total bill for the typical residential heating  
16 customer consuming 922 therms would be 7.6 percent.

17  
18 **Q. Are there any specific proposals contained in the Company's filing that you would**  
19 **like to highlight because they are important to the Company?**

20 A. Yes. Within the filing, there are five proposals that are important to allow the  
21 Company's businesses to operate on a financially sound basis each year and improve the  
22 Company's Rhode Island operations. Below, I will briefly discuss each one; however,

1 each proposal is supported in detail by another Company Witness, who I will identify as  
2 part of my discussion:

3 1. *Storm Cost Recovery and Re-establishment of the Storm Fund:* As the  
4 Commission is aware, over the last decade, the Commission wisely authorized the  
5 building up of a storm fund that rose to a surplus in excess of \$20 million, before Rhode  
6 Island was hit with its first major hurricane or substantial storm in 20 years. In  
7 responding to Tropical Storm Irene, the Company incurred approximately \$33 million in  
8 incremental storm costs. The relatively robust storm-fund balance existing at the time of  
9 Tropical Storm Irene would normally have been sufficient for a major storm; however,  
10 Tropical Storm Irene was a storm unsurpassed by condition associated with any other  
11 storm in the past 20 years. In nominal terms, Tropical Storm Irene was the most costly  
12 storm in the Company's history. Although the storm fund did not contain a sufficient  
13 balance to cover the entire cost of the storm response, the foresight of this Commission  
14 and its predecessors to create and support the storm fund over the years will have the  
15 effect of substantially mitigating the financial impact to our customers. However, we are  
16 left with a deficit balance in our storm fund of in excess of \$11 million.

17  
18 The testimony of Company Witness Laflamme discusses the details of the Company's  
19 proposal to recover these storm costs, which equate to 11 percent, or approximately \$3  
20 million, of the Narragansett Electric's request in this proceeding. The recovery of storm-  
21 related response and repair costs in this case is important for several reasons. First and  
22 foremost, the Company must be positioned to respond to large-scale events in the most

1 expeditious and efficient manner to restore power to customers. Because storm events  
2 have the potential to recur, and because response costs can be significant, timely and  
3 systematic recovery of amounts expended in relation to specific storms is essential to that  
4 objective. Thus, the Company is proposing recovery of its storm costs over a reasonable  
5 time period, as will be explained in the testimony of Mr. Laflamme.

6 2. *Addition of 19 Electrical Workers:* The Company also is requesting recovery of  
7 the costs associated with adding 19 new electrical workers who will be Rhode Island  
8 employees serving Rhode Island customers. We are proud to be adding these jobs to the  
9 state's job rolls and these additional resources are sure to enhance the ability of the  
10 Company to serve Rhode Island customers. The testimony of Company Witness Michael  
11 R. Hrycin discusses the details of the Company's proposal. These new positions are  
12 included to satisfy the minimum staffing requirements of the 2007 union contract with  
13 Local 310 BUW Council/UWUA AFL-CIO. For the next four years, these 19 new  
14 employees will be training to meet the qualifications for electrical crews used in  
15 maintaining the electric system and conducting storm response efforts and will not be  
16 used to mitigate the need for outside contractors to ensure that the reliability of the  
17 Company's electric distribution system for that time period. The positions are critical to  
18 the Company's efforts to maintain a trained, qualified and sufficiently staffed workforce.  
19 At the end of four years, these trainees will be permanent additions to the highly trained  
20 electrical work force, providing crew resources that are fully trained and familiar with the  
21 electric distribution system in Rhode Island. The total cost of the trained workforce  
22 addition, including salary and benefits, is addressed in Mr. Laflamme's testimony.

1           3.     *Recovery of Employee Retirement Costs:* In Docket No. 3943, the Commission  
2 approved implementation of a pension adjustment mechanism for pension and “other  
3 post-retirement employee benefit” expenses (“OPEB”) for Narragansett Gas (OPEB costs  
4 are primarily post-retirement health benefits). This mechanism reconciles annual pension  
5 and OPEB expense with a base amount established in distribution rates through a base-  
6 rate proceeding and allows for recovery of the difference between the base amount and  
7 the annual expense amount outside of base rates. In this case, the Company is proposing  
8 to implement a similar annual pension and OPEB adjustment mechanism for  
9 Narragansett Electric, because the electric business does not currently have such a  
10 mechanism in place. Recovery of the Company’s pension and OPEB expense through  
11 the mechanism ensures that the amount subject to recovery is no more and no less than  
12 the Company’s actual annual cost rather than being an amount that is locked into rates  
13 and is substantially higher or lower than the actual annual expense. For reasons that will  
14 be explained in the Company’s filing, these costs are effectively outside of the  
15 Company’s control, driven by actuarial assumptions under accounting rules. The  
16 testimony of Company Witness Stephen F. Doucette provides a comprehensive  
17 discussion of the reasons that a policy allowing recovery of pension and OPEB expense  
18 through the proposed Pension Adjustment Mechanism (“PAM”) is warranted and  
19 appropriate for Rhode Island.

20           4.     *Property Tax Adjustment:* The Company pays a substantial amount of property  
21 taxes across the state as a result of the substantial infrastructure the Company has in place  
22 in every city and town. Of Narragansett Electric’s requested increase in this filing,

1 property tax increases account for nearly 20 percent, or approximately \$5 million, and  
2 nearly six percent, or approximately \$1 million, of the Narragansett Gas request. The  
3 Company's tax expenses increase annually not only from the rate rising in the  
4 communities, but also each time that we invest in new infrastructure. It is a cost of doing  
5 business and a cost of investing. Yet, the Company has no control over this cost and the  
6 inability of the Company to cover the annual increases would leave a significant gap in  
7 its cost recovery. In this proceeding, the Company is proposing a change in the manner  
8 in which property tax expenses are recovered by removing the property tax expense from  
9 base rates for its gas and electric operations and recovering those expenses through a  
10 separate rate adjustment mechanism. This change is appropriate because the existing  
11 ratemaking formula for estimating the appropriate level of property tax expense for  
12 inclusion in base rates no longer produces the representative level of property tax  
13 expenses associated with the distribution plant providing service to customers. Company  
14 Witness Laflamme discusses the reasons for this proposal and the mechanism for its  
15 operation in his testimony.

16 5. *Recovery of Uncollectible Expense:* Since the 2008 and 2009 rate cases for the  
17 gas and electric operations, respectively, the Company has diligently pursued revenue-  
18 collection process enhancements and improvements. These efforts are detailed in the  
19 testimony of Company Witness Evelyn M. Kaye. However, despite these intensive  
20 efforts to increase collectible amounts, the Company continues to incur uncollectible  
21 expense in excess of what it is recovering through rates. At the same time, changes in  
22 commodity costs cause the uncollectible ratio to fluctuate somewhat significantly.

1 Therefore, the Company is proposing that the Commission reconsider implementation of  
2 a fully reconciling mechanism for commodity-related bad debt. Customer interests are  
3 protected through a reconciling mechanism for supply-related bad-debt expense because  
4 customers are not required to pay a level of uncollectible accounts expense and  
5 commodity-related administrative costs in excess of what the Company actually incurred.  
6 At the same time, the Company is able to recover its costs, which is fully appropriate  
7 given that the Company is not allowed the opportunity to earn any profit through the  
8 supply function. A fully reconciling mechanism for supply-related uncollectible expense  
9 also strikes the right balance between the customer protections in place to protect various  
10 groups of at-risk utility customers and the cost of those policies. For these reasons, we  
11 are proposing that the Commission approve a reconciling bad-debt recovery mechanism  
12 for supply-related uncollectibles only.

13  
14 **Q. Who are the witnesses appearing on behalf of the Company in support of the five**  
15 **elements of the Company's filing?**

16 A. The Company's request to the Commission in this case is presented in the testimony of  
17 the following witnesses:

18 **Michael D. Laflamme** – Mr. Laflamme is Vice President, Regulation and Pricing for  
19 New England for NGUSC. Mr. Laflamme is responsible for overseeing the ratemaking  
20 activities of the U.S. electric and gas distribution subsidiaries of National Grid located in  
21 New England. Mr. Laflamme's testimony presents the revenue-requirement analysis for  
22 Narragansett Electric and Narragansett Gas.

1       **Michael R. Hrycin** – Mr. Hrycin is Director, Overhead Lines, Rhode Island for the  
2       Company’s electric operations. Mr. Hrycin is responsible for the oversight of the  
3       maintenance and construction work for all overhead infrastructure, including distribution  
4       and sub-transmission facilities, in the State of Rhode Island. Mr. Hrycin’s testimony  
5       provides support for the inclusion of costs associated with 19 new electrical workers in  
6       the cost of service for Narragansett Electric.

7  
8       **Robert B. Hevert** – Mr. Hevert is Managing Partner at the firm of Sussex Economic  
9       Advisors, LLC, independent financial and regulatory consulting practice, and an  
10      Executive Advisor to Concentric Energy Advisors, Inc., of Marlborough, Massachusetts.  
11      Mr. Hevert’s testimony presents his recommendation regarding the appropriate rate of  
12      return that should be used in establishing base rates in this proceeding for both  
13      Narragansett Electric and Narragansett Gas. Mr. Hevert also provides support on the  
14      capital structure to be used for ratemaking in this case.

15  
16      **Maureen P. Heaphy** – Ms. Heaphy is Vice President of U.S. Compensation, Benefits  
17      and Pensions for National Grid Corporate Services, LLC (“NGCS”), which coordinates  
18      employee compensation and benefits strategy for the U.S. electric and gas distribution  
19      subsidiaries of National Grid. Ms. Heaphy’s testimony provides the supporting analysis  
20      and documentation required by the Commission for the recovery of employee  
21      compensation and benefit costs.

1       **Evelyn M. Kaye** – Ms. Kaye is Vice President, Transactions Delivery Center for  
2       NGUSC. Ms. Kaye presents testimony regarding the Company’s management of its  
3       uncollectible accounts, the proposed recovery of delivery and commodity-related  
4       uncollectible accounts expense in this case, and the request for recovery of costs  
5       associated with low-income program initiatives.

6  
7       **Steven F. Doucette** – Mr. Doucette is employed by Aon Hewitt and serves as the actuary  
8       for the National Grid pension and post-retirement benefit plans. Mr. Doucette presents  
9       an analysis of the reasons that the ratemaking treatment for pension and OPEB expense  
10      should be implemented for Narragansett Electric in this proceeding through the  
11      establishment of the PAM, similar to the mechanism in place for Narragansett Gas.

12  
13      **Jeanne A. Lloyd** – Ms. Lloyd is the Manager of Electric Pricing, New England in the  
14      Regulation and Pricing group of NGUSC. Ms. Lloyd’s testimony supports Narragansett  
15      Electric’s proposed revenue allocation and rate design for electric service rates and  
16      presents Narragansett Electric’s proposed electric service tariffs. In addition, Ms. Lloyd  
17      explains the development of rate year revenue used in the electric cost of service study  
18      supported by Company Witness Laflamme and in the ACOSS supported by Company  
19      Witness Gorman.

20  
21      **Howard Gorman** – Mr. Gorman is Principal Consultant with Black & Veatch  
22      Corporation. Mr. Gorman’s testimony presents the allocated cost of service study for

1 Narragansett Electric, along with the proposed class revenue allocation and rate design,  
2 changes to its retail transmission rates and proposed changes to retail delivery service  
3 tariffs for Narragansett Electric.

4  
5 **Ann E. Leary** – Ms. Leary is the Manager of Gas Pricing for NGCS. In her testimony,  
6 Ms. Leary explains and describes the adjustments to the test year revenues and describes  
7 several proposed tariff changes for Narragansett Gas.

8  
9 **Paul M. Normand** – Mr. Normand is a principal of Management Applications  
10 Consulting, Inc., which is a management consulting firm that provides rate and regulatory  
11 assistance for electric, gas, and water utilities. Mr. Normand’s testimony presents the  
12 ACOSS for Narragansett Gas, along with the proposed class revenue allocation and rate  
13 design and proposed changes to retail delivery service tariffs for Narragansett Gas.

14  
15 **Alfred P. Morrissey** – Mr. Morrissey is Lead Analyst of Electric Load Forecasting in the  
16 Energy Portfolio Management Department of NGUSC. Mr. Morrissey presents the  
17 Company’s forecast of electric sales and customer counts.

18  
19 **A. Leo Silvestrini** – Mr. Silvestrini is Manager of Gas Load Forecasting and Analysis in  
20 the Energy Portfolio Management Department of NGCS. Mr. Silvestrini presents the  
21 forecast of natural gas sales and customer counts.

22

1 **IV. Conclusion**

2 **Q. Do you have any summary comments on the Company's proposals in this**  
3 **proceeding?**

4 A. In this case, the Company is proposing a ratemaking structure that would (1) provide  
5 adequate revenue to the Company to support its operations and make capital available for  
6 replacement activities, and (2) equip the Company with the tools necessary to achieve  
7 public-interest benefits identified by the Commission and other stakeholders. To serve  
8 these goals, the Company is requesting that the Commission allow the following:

- 9       ▪ Base distribution rates that are designed to recover the Company's cost of service  
10       including a fair return on capital investments.
- 11       ▪ Adequate and timely recovery of storm costs associated with Tropical Storm Irene  
12       and the October 2011 snow storm, with a plan for replenishment of the storm  
13       fund.
- 14       ▪ Recovery of costs associated with the post-test year addition of 19 new electrical  
15       workers to assist in storm response and in maintaining the safety and reliability of  
16       the distribution system over the long term.
- 17       ▪ Implementation of the PAM for Narragansett Electric, which assures the timely  
18       recovery of pension and OPEB expenses when costs increase, but likewise assure  
19       the return of funds to customers when expenses are lower.
- 20       ▪ Approval of a property tax adjustment to allow for alignment of rates with the  
21       property taxes charged by local municipalities in Rhode Island.
- 22       ▪ Approval of a reconciling mechanism for the recovery of supply-related  
23       uncollectible expense to assure the timely recovery of expense when uncollectible  
24       accounts increase, and a lower rate to customers when expenses are lower.
- 25       ▪ Approval of a reconciling mechanism for the recovery of supply-related  
26       uncollectible expense to assure the timely recovery of expense when uncollectible  
27       accounts increase, and a lower rate to customers when expenses are lower.
- 28       ▪ Approval of a reconciling mechanism for the recovery of supply-related  
29       uncollectible expense to assure the timely recovery of expense when uncollectible  
30       accounts increase, and a lower rate to customers when expenses are lower.

31 The Company's experience over the past five years has demonstrated that these elements  
32 are very important to maintain the financial health of the Company and facilitate  
33 engagement with Rhode Island constituencies.

1 **Q. Does this conclude your testimony?**

2 A. Yes, it does.



**PRE-FILED DIRECT TESTIMONY**

**OF**

**ROBERT B. HEVERT**

**EXECUTIVE SUMMARY  
OF  
ROBERT B. HEVERT**

1 My direct testimony establishes that a return on equity (“ROE”) rate of 10.75 percent is  
2 necessary for The Narragansett Electric Company d/b/a National Grid (the “Company”),  
3 encompassing the combined gas and electric distribution operations, to provide an appropriate  
4 return to its equity investors. My recommended ROE of 10.75 percent considers a variety of  
5 factors that affect the required return to equity investors. My testimony therefore:

- 6 • Explains the multiple analytical approaches that were evaluated to develop the  
7 recommended ROE of 10.75 percent;
- 8 • Describes how the cost of equity is affected by the various business and financial risks  
9 faced by the Company, including capital market conditions, the current regulatory  
10 environment, the Company’s small size relative to the proxy group, and the Company’s  
11 proposed capital investment plan; and
- 12 • Proposes the capital structure that will support the Company’s operations and financing  
13 structure and examines that capital structure in the context of those in place at the utility  
14 operating companies held within the proxy group.

15 My direct testimony presents multiple analytical techniques for the purposes of estimating the  
16 Company’s ROE, although I rely primarily on two applications of the Discounted Cash Flow  
17 (“DCF”) model to develop my ROE recommendation. To assess the reasonableness of the DCF  
18 results, my testimony also includes two specifications of the Capital Asset Pricing Model  
19 (“CAPM”), as well as a Bond Yield Plus Risk Premium analysis.

20 In addition to the ROE estimation techniques, noted above, my direct testimony considers the  
21 effect of certain business and financial risks on the Company’s cost of equity. First, the

1 regulatory environment in which a utility operates can significantly affect both the access to, and  
2 the cost of, capital in several ways. My direct testimony therefore considers the Company's  
3 regulatory environment relative to those in which the proxy companies operate. In addition, the  
4 financial and academic communities have long accepted the proposition that the cost of equity  
5 for small firms is subject to a "size effect." In light of the Company's small size relative to the  
6 proxy group, my direct testimony presents an analysis to estimate the incremental return required  
7 by investors as a result of its comparatively small size. In addition, my direct testimony includes  
8 an analysis of the Company's proposed capital expenditure plan and considers the additional  
9 pressure on cash flows associated with high levels of capital expenditures.

10

11 Together with the exhibits attached to my direct testimony, this evidence demonstrates that a  
12 10.75 percent cost of equity rate should be adopted for the Company in order to provide the  
13 Company with an opportunity to generate earnings that maintain an appropriate return to its  
14 equity investors. In addition, the Company's proposal to establish a capital structure comprised  
15 of 49.60 percent common equity, 49.00 percent long-term debt, 1.20 percent short-term debt, and  
16 0.20 percent preferred stock is appropriate and reasonable. As discussed throughout my direct  
17 testimony, the recommended cost of equity and capital structure will support the Company's  
18 financial integrity and its ability to support its substantial capital expenditure plan.

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1 **I. Introduction and Qualifications**

2 **Q. Please state your name, affiliation, and business address.**

3 A. My name is Robert B. Hevert. I am Managing Partner of Sussex Economic Advisors, LLC,  
4 and an Executive Advisor to Concentric Energy Advisors, Inc., of Marlborough,  
5 Massachusetts.

6  
7 **Q. Please describe your educational background.**

8 A. I hold a Bachelor's degree in Business and Economics from the University of Delaware,  
9 and an MBA with a concentration in Finance from the University of Massachusetts.  
10 Additionally, I hold the Chartered Financial Analyst designation.

11

12 **Q. On whose behalf are you submitting this testimony?**

13 A. I am submitting this testimony on behalf of The Narragansett Electric Company d/b/a  
14 National Grid (defined previously as the "Company"), a wholly-owned subsidiary of  
15 National Grid USA ("National Grid").

16

17 **Q. Please describe your experience in the energy and utility industries.**

18 A. I have worked in regulated industries for over 25 years, having served as an executive and  
19 manager with consulting firms, a financial officer of a publicly-traded natural gas utility,  
20 and an analyst at a telecommunications utility. In my role as a consultant, I have advised  
21 numerous energy and utility clients on a wide range of financial and economic issues  
22 including corporate and asset-based transactions, asset and enterprise valuation,

1 transaction due diligence, and strategic matters. As an expert witness, I have provided  
2 testimony in over 80 proceedings regarding various financial and regulatory matters,  
3 including cost of capital issues, before numerous state utility regulatory agencies and the  
4 Federal Energy Regulatory Commission. A summary of my professional and educational  
5 background, including a list of my testimony in prior proceedings, is included as  
6 Attachment A to my direct testimony.  
7

8 **II. Purpose and Overview of Testimony**

9 **Q. What is the purpose of your testimony?**

10 A. The purpose of my direct testimony in this proceeding is to present evidence and provide a  
11 recommendation regarding the Company's cost of equity (also referred to as the ROE for  
12 rate-setting purposes) for its combined electric and natural gas utility operations, and to  
13 provide an assessment of the capital structure to be used for ratemaking purposes. My  
14 analysis and recommendations are supported by the data presented in Schedules RBH-1  
15 through RBH-10, which were prepared by me or under my direction.

16 I note that the cost of equity, which is the return required by equity investors to assume the  
17 risks of ownership, is a market-based concept. As discussed further in my testimony, as  
18 opposed to the earned return on common equity, which is an accounting construct that can  
19 be observed in historical data, the cost of equity is unobservable and must be estimated  
20 based on observable capital market data. As a consequence, there may be differences of  
21 opinion among analysts as to the data, assumptions and models used in the estimation  
22 process.

1 **Q. What are your conclusions regarding the appropriate cost of equity and capital**  
2 **structure for the Company?**

3 A. Based on the quantitative and qualitative analyses discussed throughout my direct  
4 testimony, I conclude that the Company's ROE falls in a range of 10.50 percent to 11.25  
5 percent and that an ROE of 10.75 percent is reasonable and appropriate. With respect to  
6 the Company's capital structure, I conclude that the proposed capital structure, consisting  
7 of 49.60 percent common equity, 49.00 percent long-term debt, 1.20 percent short-term  
8 debt, and 0.20 percent preferred stock is reasonable.

9  
10 **Q. Please provide a brief overview of the analyses that led to your ROE**  
11 **recommendation.**

12 A. As discussed in more detail in Section VII, it is extremely important to consider the results  
13 of several analytical approaches in determining the Company's ROE. In order to develop  
14 my ROE recommendation, I therefore applied two forms of the Discounted Cash Flow  
15 ("DCF") model, and two forms of the Capital Asset Pricing Model ("CAPM"), as well as  
16 the Bond Yield Plus Risk Premium approach.

17  
18 In addition to the analyses discussed above, I considered the effect of certain business  
19 risks, including the regulatory environment in which the Company operates, the small size  
20 of the Company relative to the proxy group, and the Company's projected capital  
21 expenditure plans, in arriving at my ROE recommendation.

22

1 **Q. How is the remainder of your direct testimony organized?**

2 A. The balance of my direct testimony is organized in eight sections as follows:

3 Section III – Provides a summary of my principle observations and conclusions;

4 Section IV – Discusses the regulatory guidelines and financial considerations  
5 pertinent to the development of the cost of capital;

6 Section V – Briefly discusses the current capital market conditions and the effect  
7 of those conditions on the Company’s cost of equity;

8 Section VI – Explains my selection of the proxy groups of electric utilities, gas  
9 utilities, and combination utilities used to develop my analytical  
10 results;

11 Section VII – Explains my analyses and the analytical bases for my ROE  
12 recommendation;

13 Section VIII – Summarizes the specific regulatory and business risks that have a  
14 direct bearing on the Company’s cost of equity;

15 Section IX – Provides my recommendation of the appropriate capital structure to  
16 support the Company’s operations and provides demonstrates the  
17 Company’s proposed Weighted Average Cost of Capital, based on  
18 that capital structure and the various cost components of the  
19 individual capital structure pieces; and

20 Section X – Summarizes my conclusions and recommendations.  
21

1 **III. Summary of Conclusions**

2 **Q. What are the key factors considered in your analyses and upon which you base your**  
3 **recommended ROE?**

4 A. My analyses and recommendations considered the following:

- 5 • The *Hope* and *Bluefield* decisions that established the standards for determining a  
6 fair and reasonable allowed return on equity including: consistency of the allowed  
7 return with other businesses having similar risk; adequacy of the return to provide  
8 access to capital and support credit quality; and that the end result must lead to just  
9 and reasonable rates.
- 10 • The effect of the current capital market conditions on investors' return  
11 requirements, and in particular, the fact that risk aversion and investor uncertainty  
12 remain at elevated levels when compared to market conditions preceding the recent  
13 economic recession.<sup>1</sup>
- 14 • The Company's business risks relative to the proxy group of comparable  
15 companies and the implications of those risks in arriving at the appropriate ROE.

16  
17 **Q. What are the results of your analyses?**

18 A. The results of my analyses are summarized in Tables 1a and 1b (below).

---

<sup>1</sup> The National Bureau of Economic Research determined that the recent recession began in December 2007 and ended in June 2009.

1 **Table 1a: Summary of Analytical Results for the Electric and Gas Proxy Groups**

<b>DCF Results<sup>2</sup></b>			
		<b>Range of Results</b>	
Constant Growth DCF		7.97%	11.28%
Multi-Stage DCF		9.72%	11.57%
<b>Supporting Methodologies</b>			
<i>CAPM Results</i>			
		Sharpe Ratio Derived Market Risk Premium	DCF Derived Market Risk Premium
<i>CAPM – Bloomberg Beta</i>			
Current 30-year Treasury (3.16%)		9.60%	10.78%
Near-Term Projected 30-year Treasury (3.42%)		9.86%	11.03%
<i>CAPM – Value Line Beta</i>			
Current 30-year Treasury (3.16%)		9.32%	10.44%
Near-Term Projected 30-year Treasury (3.42%)		9.58%	10.70%
<i>Treasury Yield Plus Risk Premium</i>			
	<b>Low</b>	<b>Mean</b>	<b>High</b>
Risk Premium	10.06%	10.37%	10.90%

2

---

<sup>2</sup> The table presents DCF results for a 90-day average dividend yield. I also considered analyses including a 30-day average dividend yield, and a 180-day average dividend yield. All DCF analyses considered are presented in Schedule RBH-1 and Schedule RBH-2.

1           **Table 1b: Summary of Analytical Results for the Combination Proxy Group**

<b>DCF Results<sup>3</sup></b>		
	<b>Range of Results</b>	
Constant Growth DCF	8.58%	10.78%
Multi-Stage DCF	9.57%	12.02%
<b>Supporting Methodologies</b>		
<i>CAPM Results</i>		
	Sharpe Ratio Derived Market Risk Premium	DCF Derived Market Risk Premium
<i>CAPM – Bloomberg Beta</i>		
Current 30-year Treasury (3.16%)	9.40%	10.53%
Near-Term Projected 30-year Treasury (3.42%)	9.65%	10.79%
<i>CAPM – Value Line Beta</i>		
Current 30-year Treasury (3.16%)	9.39%	10.52%
Near-Term Projected 30-year Treasury (3.42%)	9.64%	10.78%

2

3           Based on the analytical results presented in Tables 1a and 1b, and in light of the

4           considerations discussed throughout the balance of my direct testimony regarding the

5           Company’s regulatory and business risks relative to the proxy group, it is my view that a

6           reasonable range of estimates is from 10.50 percent to 11.25 percent and within that range,

7           an ROE of 10.75 percent is reasonable and appropriate.

8

---

<sup>3</sup>           The table presents DCF results for a 90-day average dividend yield. I also considered analyses including a 30-day average dividend yield, and a 180-day average dividend yield. All DCF analyses considered are presented in Schedule RBH-1 and Schedule RBH-2.

1 **IV. Regulatory Guidelines and Financial Considerations**

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

4 A. The United States Supreme Court's precedent-setting *Hope* and *Bluefield* cases established  
5 the standards for determining the fairness or reasonableness of a utility's allowed ROE.  
6 Among the standards established by the Court in those cases are: (1) consistency with the  
7 returns on equity investments in other businesses having similar or comparable risks; (2)  
8 adequacy of the return to support credit quality and access to capital; and (3) that the  
9 means of arriving at a fair return are not controlling, only that the end result leads to just  
10 and reasonable rates.<sup>4</sup>

11  
12 Based on those standards, the consequence of the Commission's order in this case should  
13 be to provide the Company with the opportunity to earn an ROE that is: (1) adequate to  
14 attract capital at reasonable terms, thereby enabling it to continue to provide safe, reliable  
15 service; (2) sufficient to support the financial soundness of the Company's operations; and  
16 (3) commensurate with returns on equity investments in enterprises having comparable  
17 risks. The authorized ROE should enable the Company to finance capital expenditures at  
18 reasonable rates and maintain its financial flexibility over the period during which rates are  
19 expected to remain in effect.

20

---

<sup>4</sup> *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944); *Bluefield Waterworks & Improvement Co., v. Public Service Commission of West Virginia*, 262 U.S. 679 (1923).

1 **Q. Why is it important for a utility to be allowed the opportunity to earn a return**  
2 **adequate to attract equity capital at reasonable terms?**

3 A. A return that is adequate to attract capital at reasonable terms enables the Company to  
4 provide safe, reliable service while maintaining its financial integrity. Although the  
5 “capital attraction” and “financial integrity” standards are important principles in normal  
6 economic conditions, the practical implications of those standards are even more  
7 pronounced in the current financial environment. As discussed in more detail in Section  
8 V, continued equity market uncertainty, together with sustained increases in utility debt  
9 credit spreads (i.e., the difference in debt yields of utilities with varying credit ratings)  
10 have intensified the importance of maintaining a strong financial profile.

11

12 **Q. Please describe any other statutory or regulatory guidelines you considered in this**  
13 **case.**

14 A. In 2010, the State of Rhode Island enacted R.I.G.L. §39-1-27.7.1, An Act Relating to  
15 Public Utilities and Carriers – Revenue Decoupling (the “Decoupling Act”), which  
16 requires the State’s electric and gas utilities to adopt revenue decoupling mechanisms.

17 Regarding the cost of capital, the statute specifically noted:

18 The existence of any of the ratemaking mechanisms set forth in this  
19 section shall not be relied upon or cited for the purpose of making any  
20 adjustments in the determination of the distribution company’s cost of  
21 capital.<sup>5</sup>

22

23

---

<sup>5</sup> The Decoupling Act.

1 I therefore have not made an adjustment to my estimate of the Company's ROE based on  
2 the rate mechanisms proposed by the Company in this proceeding.

3  
4 **V. Current Capital Market Environment**

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

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

11  
12 To the extent that observable measures of market instability and risk aversion remain  
13 elevated relative to historical norms, it would be incorrect to conclude that the cost of  
14 equity has materially decreased. Although there is little question that the capital market  
15 dislocation that began in late 2008 has moderated, recent market instability and investor  
16 risk aversion remain at comparatively high levels. That is especially true when viewed  
17 relative to the conditions that existed prior to the 2008-09 financial market dislocation.

18  
19 **Q. What analysis have you conducted to assess current capital market conditions?**

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

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

7 **Table 2: Risk Sentiment Indicators<sup>6</sup>**

	<b>March 16, 2012<sup>7</sup></b>	<b>Pre-recession (Jan-2006 through Nov-2007)</b>	<b>Jan-2002 through Dec-2003</b>
<i>Credit Spreads</i> (Moody’s Utility Bond Index)			
Baa-rated bond to A-rated bond	0.70%	0.25%	0.46%
<i>Dividend Yield Spreads</i>			
10-year Treasury to Combination Utility Proxy Group	-2.44%	0.87%	-1.42%

8  
9 **A. Incremental Credit Spreads**

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

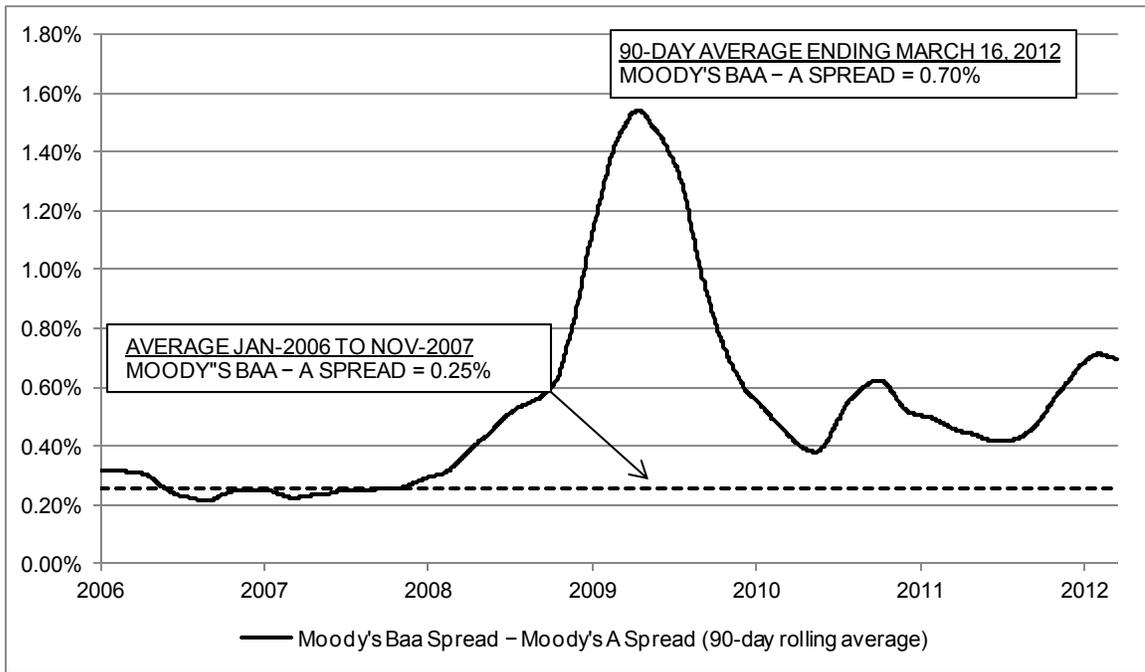
11 A. As a preliminary matter, the “credit spread” is the incremental return required by debt  
12 investors to take on the default risk associated with securities of differing credit quality.  
13 As shown in Table 2 and as Chart 1 (below) demonstrates, the 90-day moving average  
14 spread as of March 16, 2012 between the Moody’s Baa-rated utility bond index and the  
15 Moody’s A-rated utility bond index is 45 basis points above – or approximately 180  
16 percent higher than – the comparable average credit spread immediately prior to the onset  
17 of the recent recession. As such, investors currently require a higher return to compensate

---

<sup>6</sup> Source: Bloomberg Professional Service.  
<sup>7</sup> 90-trading day average as of March 16, 2012, except as noted otherwise.

1 for the perceived risk of holding lower-rated debt securities than was the case prior to the  
2 onset of the recent recession.

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



4  
5

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

8 A. To the extent that credit spreads have increased, it is an observable measure of the capital  
9 markets' increased risk aversion; increased risk aversion clearly is associated with a higher  
10 cost of equity. Although increased credit spreads have recently coincided with a reduction  
11 in the absolute level of utility bond and Treasury yields, that fact does not necessarily  
12 imply a correspondingly lower cost of equity; to the contrary, there is a clear and well-  
13 established inverse relationship between the level of interest rates and the equity risk

1 premium.<sup>8</sup> Consequently, lower utility bond yields, which are a function of lower  
2 Treasury yields, do not necessarily imply a correspondingly lower cost of equity,  
3 particularly considering that the current level of credit spreads is higher than the long-term  
4 average.

5  
6 **B. Yield Spreads**

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

9 A. As a preliminary matter, the “yield spread” is the difference between long-term Treasury  
10 yields and dividend yields.<sup>9</sup> Investors often consider yield spreads in their assessment of  
11 security valuation and capital market conditions. As shown in Chart 2 (below), the 2008 –  
12 2009 financial market dislocation created the first significant inversion of the yield spread  
13 (i.e., the average dividend yield for the proxy group was higher than the 90-day average  
14 Treasury yield) in five years. Prior to that time, the most recent period during which  
15 dividend yields for the proxy group were significantly higher than Treasury yields was  
16 from mid-2002 through mid-2003, which itself was a period of credit and equity valuation  
17 contraction.

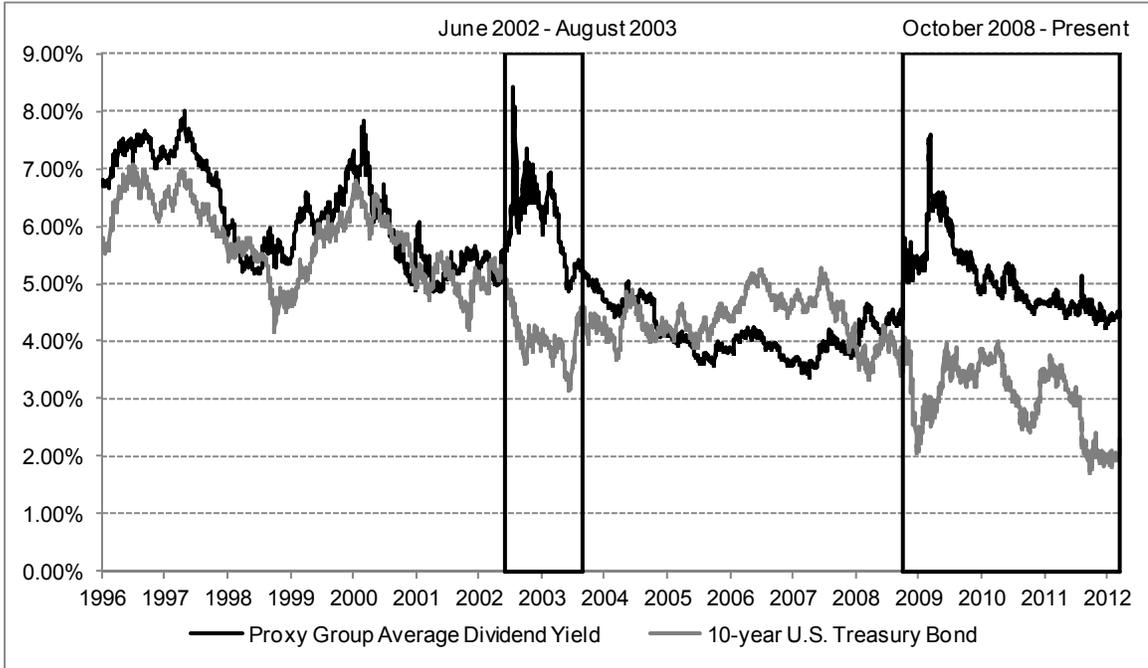
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<sup>8</sup> Robert S. Harris and Felicia C. Marston, *Estimating Shareholder Risk Premia Using Analysts’ Growth Forecasts*, *Financial Management*, Summer 1992, at 69; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *The Risk Premium Approach 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.

<sup>9</sup> The analysis presented here is based on yield spreads calculated using 10-year Treasury Bond Yields.

1  
2

**Chart 2: Treasury Yield/Dividend Yield Divergence  
(January 1, 1996 – March 16, 2012)**



3  
4

5 An article in The Wall Street Journal noted this same relationship between utility dividend  
6 yields and the ten-year Treasury yield, observing that, “Dividend yields have tended to  
7 track the yield on 10-year Treasuries closely.”<sup>10</sup>

8

9 **Q. Why is the continued divergence between utility dividend yields and the ten-year**  
10 **Treasury yield relevant in determining the Company’s cost of equity?**

11 A. First, as suggested by The Wall Street Journal, investors often look to the relationships  
12 among financial metrics to assess current and expected levels of market stability. To the  
13 extent that such relationships materially and persistently deviate from long-term norms, it

<sup>10</sup> Denning, Liam, *A Short Circuit in the Stock Market*, The Wall Street Journal, October 23, 2009, at C10.

1 may be an indication of continuing or expected instability. In the case of the yield spread,  
2 the fact that continued federal intervention in the capital markets has been required to  
3 maintain relatively low Treasury yields introduces yet another significant element of  
4 capital market uncertainty. Again, investors require increased returns to compensate for  
5 taking on such risk.

6  
7 It also is important to recognize that federal intervention in the capital markets has created  
8 additional uncertainty. For example, in its second round of “Quantitative Easing”, the  
9 Federal Reserve Board (“Fed”) purchased \$600 billion of Treasury securities between  
10 November 2010 and June 2011, thereby injecting additional liquidity into capital markets.  
11 In an effort to reduce interest rates on longer-term government bonds, on September 21,  
12 2011, the Fed announced plans to purchase by June 2012 \$400 billion in Treasury  
13 securities with remaining maturities of six to 30 years and to sell an equal amount of  
14 Treasury securities with remaining maturities of three years or less.

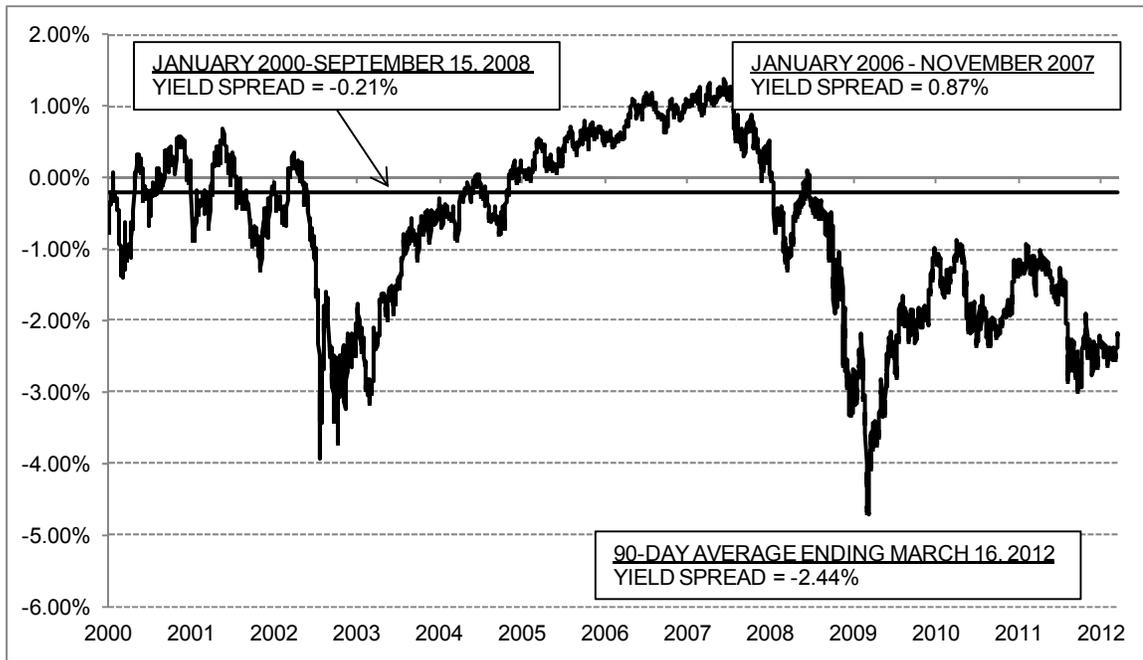
15  
16 The widened yield spread, which began in 2008, has continued. From January 2000  
17 through September 15, 2008 (i.e., the time of the Lehman Brothers bankruptcy filing), the  
18 average yield spread between ten-year Treasury securities and the proxy group average  
19 dividend yield was negative 21 basis points. During the two-year period<sup>11</sup> prior to the  
20 recession, the average yield on ten-year Treasury securities exceeded the proxy group

---

<sup>11</sup> 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.

1 average dividend yield by approximately 87 basis points. As Chart 3 (below) indicates,  
2 the 90-day average yield spread as of March 16, 2012 was negative 244 basis points.

3 **Chart 3: Proxy Company Yield Spread**



4  
5  
6 **Q. What conclusions do you draw from those analyses?**

7 A. Those analyses clearly demonstrate that current market conditions are similar to the 2002-  
8 2003 market dislocation that affected all market segments, including utilities. One  
9 outcome of the 2002-2003 market dislocation was a renewed emphasis on capital market  
10 access and the importance of maintaining a strong financial profile, both of which are  
11 equally important in the current market environment. The result of market instability and  
12 risk aversion, of course, is an increased, not a decreased cost of equity. The extent of that  
13 uncertainty manifested, at least in part, in the significant decrease in long-term Treasury  
14 yields since Standard and Poor's ("S&P") downgraded U.S. sovereign debt on August 5,

1 2011. Even though that ratings action would call into question the meaning and  
2 application of the “Risk Free Rate”, investors still have sought safety in Treasury  
3 securities. In summary, market instability and measures of risk aversion remain above  
4 historical norms.

5  
6 **Q. How should current economic conditions be taken into consideration in determining**  
7 **the appropriate ROE for the Company?**

8 A. First, given the continuing capital market instability, it is extremely important to assess the  
9 reasonableness of any financial model’s results in the context of observable market data.

10 To the extent that certain ROE estimates are incompatible with such metrics or  
11 inconsistent with basic financial principles, it is appropriate to consider whether alternative  
12 estimation techniques are likely to provide more meaningful and reliable results.

13  
14 Second, the authorized rate of return in this proceeding will provide a signal to the  
15 financial community concerning the ability of the Company to meet its capital needs  
16 during a period in which its capital investments are increasing. If investors perceive a  
17 supportive regulatory environment, as evidenced by an allowed rate of return that  
18 compensates the Company at a level commensurate with its risk, the Company should be  
19 able to attract equity capital at a reasonable cost. Conversely, if investors perceive a lack  
20 of connection between the allowed rate of return and current economic conditions, the  
21 regulatory environment would be seen as less favorable.

22

1 **VI. Proxy Group Selection**

2 **Q. Please explain why you have used a group of proxy companies to determine the cost**  
3 **of equity for the Company.**

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

16  
17 As a practical matter, while the determination of an appropriate ROE necessarily requires a  
18 degree of informed judgment, the careful selection of a risk-appropriate comparison group  
19 serves to mitigate the extent to which subjective assessments must be applied.

20

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

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

12  
13 **Q. Please provide a summary profile of the Company.**

14 A. The Company provides electric distribution service to approximately 476,000 customers in  
15 38 Rhode Island communities and natural gas distribution service to approximately  
16 250,000 customers in 33 Rhode Island communities.<sup>12</sup> The Company's long-term issuer  
17 ratings are A- (Standard and Poor's, or "S&P") and A3 (Moody's Investor Services or  
18 "Moody's"). The following table provides summary financial and operating statistics for  
19 the Company for the most recently reported three years:

---

<sup>12</sup> Source: Company Witness Timothy F. Horan.

**Table 3: Operating and Financial Results 2008 to 2010**  
**(millions of dollars)**

	<b>2008</b>	<b>2009</b>	<b>2010</b>
Electric Operating Revenue <sup>13</sup>	\$1,157	\$912	\$887
Gas Operating Revenue <sup>14</sup>	\$457	\$475	\$486
Electric Operating Income <sup>15</sup>	\$40.3	\$19.6	\$55.1
Gas Operating Income <sup>16</sup>	\$13.1	\$7.6	\$1.0
Net Electric Plant in Service <sup>17</sup>	\$832	\$851	\$919
Net Gas Plant in Service <sup>18</sup>	\$299	\$336	\$365

**Q. What conclusions do you draw regarding the Company's electric and natural gas operations from that data?**

A. Based on the relative levels of operating income and plant in service presented in Table 3, the Company's electric operations comprise approximately 73.00 percent of the Company's total regulated operations whereas its natural gas operations comprise approximately 27.00 percent of the Company's total regulated operations.

**Q. How did you take into consideration the fact that the Company has both electric and natural gas operations in this case?**

A. My analysis recognizes that the purpose of this case is to establish the rates for both the Company's electric and natural gas utility operations. To do so, I used two approaches to determine appropriate proxy companies in estimating the cost of equity for the Company.

<sup>13</sup> FERC Form 1 for each respective year, at 300 line 27b.

<sup>14</sup> FERC Form 1 for each respective year at 114 line 2c minus electric operating revenue.

<sup>15</sup> FERC Form 1 for each respective year, at 115 line 26g.

<sup>16</sup> FERC Form 1 for each respective year, at 115 line 26i.

<sup>17</sup> FERC Form 1 for each respective year, at 200 lines 3c, 6c and 18c.

<sup>18</sup> FERC Form 1 for each respective year, at 201 lines 3d, 6d and 18d

1 In my first approach, I selected an Electric Utility Proxy Group and a Gas Utility Proxy  
2 Group that represent the Company's respective electric and gas business segments. When  
3 considering the analytical results of those proxy groups, I applied weightings consistent  
4 with the Company's 73.00 percent electric and 27.00 percent gas regulated operations. In  
5 my second approach, I selected a Combination Utility Proxy Group comprised of  
6 companies with a similar composition of electric and gas utility operations.  
7

8 **Q. How did you select the companies included in your Electric Utility Proxy Group?**

9 A. I began with the companies that Value Line classifies as "Electric Utilities," which  
10 comprise a group of 52 domestic U.S. utilities, and simultaneously applied the following  
11 screening criteria:

- 12 • I eliminated the companies that are not covered by at least two utility industry  
13 equity analysts;
- 14 • I eliminated companies that have below investment grade corporate credit ratings  
15 and/or senior unsecured bond ratings according to S&P or Moody's;
- 16 • I eliminated companies that have not paid regular dividends or do not have positive  
17 earnings growth projections because such characteristics are incompatible with the  
18 DCF model;
- 19 • To ensure that the proxy group consists of companies that are primarily regulated  
20 utilities, I excluded companies with less than 60.00 percent of total net operating  
21 income derived from regulated utility operations;

- 1           • I excluded companies whose average regulated electric operating income  
2           represented less than 90.00 percent of total regulated operating income;<sup>19</sup> and  
3           • I eliminated companies known to be party to a merger, acquisition, or other  
4           transformational transaction.

5

6   **Q.    What companies met the screening criteria for your Electric Proxy Group?**

7   A.    As shown in Table 4 (below), based on the above screening criteria the proxy group  
8   consists of the following fourteen companies.

9

**Table 4: Electric Proxy Group**

<b>Company</b>	<b>Ticker</b>
American Electric Power	AEP
Cleco Corp.	CNL
Edison International	EIX
First Energy Corp.	FE
Great Plains Energy, Inc.	GXP
Hawaiian Electric	HE
IDACORP, Inc.	IDA
Integrus/WPS Resources	TEG
Otter Tail Corp.	OTTR
Pepco Holdings, Inc.	POM
Pinnacle West Capital	PNW
Portland General	POR
Southern Co.	SO
Westar Energy	WR

10

<sup>19</sup> I relied on information produced in each respective company's 2010 and prior SEC Form 10-K filings.

1 **Q. How did you select the companies included in your Gas Utility Proxy Group?**

2 A. To determine a Gas Utility Proxy Group, I began with the companies that Value Line  
3 classifies as “Gas Distribution,” which comprise a group of 11 domestic U.S. utilities, and  
4 simultaneously applied the following screening criteria:

- 5 • I eliminated the companies that are not covered by at least two utility industry  
6 equity analysts;
- 7 • I eliminated companies that have below investment grade corporate credit ratings  
8 and/or senior unsecured bond ratings according to S&P or Moody’s;
- 9 • I eliminated companies that have not paid regular dividends or do not have positive  
10 earnings growth projections because such characteristics are incompatible with the  
11 DCF model;
- 12 • To ensure that the proxy group consists of companies that are primarily regulated  
13 gas utilities, I excluded companies whose average regulated gas operating income  
14 represented less than 90.00 percent of total operating income; and
- 15 • I eliminated companies known to be party to a merger, acquisition, or other  
16 transformational transaction.

17  
18 **Q. What companies met the screening criteria for your Gas Proxy Group?**

19 A. As shown in Table 5 (below), based on the above screening criteria the proxy group  
20 consists of the following eight companies.

1

**Table 5: Gas Proxy Group**

<b>Company</b>	<b>Ticker</b>
Atmos Energy	ATO
Laclede Group	LG
New Jersey Resources	NJR
Northwest Natural Gas	NWN
Piedmont Natural Gas	PNY
South Jersey Industries	SJI
Southwest Gas	SWX
WGL Holdings Inc.	WGL

2

3 **Q. How did you select the companies included in your Combination Utility Proxy**  
4 **Group?**

5 A. I began with the companies that Value Line classifies as “Electric Utilities”, which  
6 comprise a group of 52 domestic U.S. electric and combination utilities, and  
7 simultaneously applied the following screening criteria:

- 8
- I eliminated the companies that are not covered by at least two utility industry  
9 equity analysts;
  - I eliminated companies that have below investment grade corporate credit ratings  
10 and/or senior unsecured bond ratings according to S&P or Moody’s;
  - I eliminated companies that have not paid regular dividends or do not have positive  
11 earnings growth projections because such characteristics are incompatible with the  
12 DCF model;
  - To ensure that the proxy group consists of companies that are primarily regulated  
13 utilities, I excluded companies with less than 70.00 percent of total net operating  
14 income derived from regulated utility operations; and  
15  
16  
17

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

3

4 **Q.   Based on your criteria how many companies met the screening criteria for your**  
5 **initial Combination Proxy Group?**

6 A.   As shown in Table 6 (below), the criteria discussed above resulted in an initial group of 31  
7       companies.

1

**Table 6: Initial Combination Proxy Group**

<b>Company</b>	<b>Ticker</b>
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.	CNL
Consolidated Edison	ED
Dominion Resources, Inc.	D
DTE Energy Co.	DTE
Edison International	EIX
Great Plains Energy, Inc.	GXP
Hawaiian Electric	HE
IDACORP, Inc.	IDA
IntegrYS/WPS Resources	TEG
ITC Holding Corp.	ITC
OGE Energy	OGE
Pepco Holdings, Inc.	POM
PG&E Corp.	PCG
Pinnacle West Capital	PNW
Portland General	POR
SCANA Corp.	SCG
Sempra Energy	SRE
Southern Co.	SO
TECO Energy, Inc.	TE
UIL Holdings Corp.	UIL
Vectren Corp.	VVC
Westar Energy	WR
Wisconsin Energy	WEC
Xcel Energy, Inc.	XEL

2

3 **Q. Does this constitute your final Combination Proxy Group?**

4 A. No, it does not. I then examined the operating profile of each of those 31 companies to be  
5 certain that each company owns both electric and gas utility operations and is

1           fundamentally comparable to the Company. I eliminated any company that did not meet  
2           this criterion.

3

4   **Q.    What companies met the screening criteria for your Combination Proxy Group?**

5   A.    As shown in Table 7 (below), the final proxy group consists of the following 19  
6        companies.

7

**Table 7: Final Combination Proxy Group**

<b>Company</b>	<b>Ticker</b>
ALLETE	ALE
Alliant Energy Corp.	LNT
Ameren Corp.	AEE
Avista Corp.	AVA
Black Hills Corp.	BKH
Center Point Energy	CNP
Consolidated Edison	ED
Dominion Resources, Inc.	D
DTE Energy Co.	DTE
Integrus/WPS Resources	TEG
Pepco Holdings, Inc.	POM
PG&E Corp.	PCG
SCANA Corp.	SCG
Sempra Energy	SRE
TECO Energy, Inc.	TE
UIL Holdings Corp.	UIL
Vectren Corp.	VVC
Wisconsin Energy	WEC
Xcel Energy, Inc.	XEL

8

1 **Q. Why did you not eliminate companies that own generating assets from your Electric**  
2 **Utility and Combination Utility Proxy Groups?**

3 A. Strict adherence to that criterion would eliminate every company but one from the  
4 Combination Utility Proxy Group (e.g., CenterPoint Energy). As noted earlier, the use of  
5 a proxy group serves to minimize the effect a single company can have on the analytical  
6 results. As such, a proxy group consisting of a single company would not be a reasonable  
7 group to estimate the Company's ROE.

8

9 **VII. Cost of Equity Estimation**

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

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

17

18 **Q. How is the required ROE determined?**

19 A. The required ROE is estimated by using one or more analytical techniques that rely on  
20 market-based data to quantify investor expectations regarding required equity returns,  
21 incorporating certain incremental costs and risks. The resulting cost of equity serves as the  
22 recommended ROE for ratemaking purposes. As a general proposition, the key

1 consideration in determining the cost of equity is that the methodologies employed  
2 reasonably reflect investors' view of the financial markets in general, and the subject  
3 company's common stock in particular.  
4

5 **Q. What methods did you use to determine the Company's cost of equity?**

6 A. I used two forms of the DCF model: a Constant Growth DCF model, and a Multi-Stage  
7 DCF model as the primary approaches. I then considered the results of the CAPM and an  
8 alternative Risk Premium approach in assessing the reasonableness of the DCF results in  
9 developing my ROE recommendation. As discussed in more detail below, the use of a  
10 historical Market Risk Premium ("MRP") in the CAPM produces results that are entirely  
11 inconsistent with current market conditions. Thus, a reasonable ROE estimate  
12 appropriately considers alternate methodologies and the reasonableness of their individual  
13 and collective results.  
14

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

16 A. Because the cost of equity is not directly observable, it must be estimated based on both  
17 quantitative and qualitative information. When faced with the task of estimating the cost  
18 of equity, analysts and investors are inclined to gather and evaluate as much relevant data  
19 as reasonably can be analyzed. As a result, a number of models have been developed to  
20 estimate the cost of equity. As a practical matter, however, all of the models available for  
21 estimating the cost of equity are subject to limiting assumptions or other methodological  
22 constraints. Consequently, many finance texts recommend using multiple approaches

1 when estimating the cost of equity. For example, Copeland, Koller and Murrin,<sup>20</sup> suggest  
2 using the CAPM and Arbitrage Pricing Theory model, while Brigham and Gapenski<sup>21</sup>  
3 recommend the CAPM, DCF and “bond yield plus risk premium” approaches.  
4

5 In essence, analysts and academics understand that ROE models are tools to be used in the  
6 ROE estimation process and that strict adherence to any single approach, or the specific  
7 results of any single approach, can lead to flawed and irrelevant conclusions. That  
8 position is consistent with the *Hope* and *Bluefield* finding that it is the analytical result, as  
9 opposed to the method, that is controlling in arriving at ROE determinations. A reasonable  
10 ROE estimate therefore considers alternative methods, observable market data, and the  
11 reasonableness of their individual and collective results.  
12

13 Consequently, it is both prudent and appropriate to use multiple methods in order to  
14 mitigate the effects of assumptions and inputs associated with relying exclusively on any  
15 single approach. Such use, however, must be tempered with due caution as to the results  
16 generated by each individual approach.  
17

---

<sup>20</sup> Tom Copeland, Tim Koller and Jack Murrin, Valuation: Measuring and Managing the Value of Companies, 3rd ed. (New York: McKinsey & Company, Inc., 2000), at 214.

<sup>21</sup> Eugene Brigham, Louis Gapenski, Financial Management: Theory and Practice, 7th Ed. (Orlando: Dryden Press, 1994), at 341.



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

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

**Q. What assumptions are required for the Constant Growth DCF model?**

A. The Constant Growth DCF model requires the following assumptions: (1) a constant growth rate for earnings and dividends; (2) a stable dividend payout ratio; (3) a constant price-to-earnings multiple; and (4) a discount rate greater than the expected growth rate.

To the extent that any of these assumptions is violated, considered judgment and/or specific adjustments should be applied to the results.

#### Dividend Yield for the Constant Growth DCF Model

**Q. What market data did you use to calculate the dividend yield in your Constant Growth DCF model?**

A. The dividend yield is based on the proxy companies’ current annualized dividend, and average closing stock prices over the 30, 90, and 180-trading days ended March 16, 2012.

**Q. Why did you use three averaging periods?**

A. I believe it is important to use an average of recent trading days to calculate the term  $P_0$  in the DCF model to ensure that the calculated ROE is not skewed by anomalous events that

1 may affect stock prices on any given trading day. In that regard, the averaging period  
2 should be reasonably representative of expected capital market conditions over the long  
3 term. At the same time, it is important to reflect the extraordinary conditions that have  
4 defined the financial markets over the recent past. In my view, the use of the 30, 90 and  
5 180-day averaging periods reasonably balances those concerns.

6  
7 **Q. Did you make any adjustments to the dividend yield to account for periodic growth**  
8 **in dividends?**

9 A. Yes. Since utility companies tend to increase their quarterly dividends at different times  
10 throughout the year, it is reasonable to assume that dividend increases will be evenly  
11 distributed over calendar quarters. Given that assumption, it is reasonable to apply one-  
12 half of the expected annual dividend growth for purposes of calculating the expected  
13 dividend yield component of the DCF model. This adjustment ensures that the expected  
14 dividend yield is, on average, representative of the coming twelve-month period, and does  
15 not overstate the aggregated dividends to be paid during that time. Accordingly, the DCF  
16 estimates provided in Schedule RBH-1 reflect one-half of the expected growth in the  
17 dividend yield component of the model.

18

1           Growth Rates for the DCF Model

2   **Q.    Is it important to select appropriate measures of long-term growth in applying the**  
3           **DCF model?**

4    A.    Yes. In its Constant Growth form, the DCF model (i.e., Equation [2]) assumes a single  
5           growth estimate in perpetuity. In order to reduce the long-term growth rate to a single  
6           measure, one must assume a constant payout ratio, and that earnings per share, dividends  
7           per share and book value per share all grow at the same constant rate. Over the long term,  
8           however, dividend growth can only be sustained by earnings growth.

9  
10           Consequently, it is important to incorporate a variety of measures of long-term earnings  
11           growth into the Constant Growth DCF model. This can be accomplished by averaging  
12           those measures of long-term growth that tend to be least influenced by capital allocation  
13           decisions that companies may make in response to near-term changes in the business  
14           environment. Since such decisions may directly affect near-term dividend payout ratios,  
15           estimates of earnings growth are more indicative of long-term investor expectations than  
16           are dividend growth estimates. Therefore, for the purposes of the Constant Growth form  
17           of the DCF model, growth in earnings per share represents the appropriate measure of  
18           long-term growth.

19

1 **Q. Please summarize your inputs to the Constant Growth DCF model.**

2 A. I applied the Constant Growth DCF model to the Electric Utility Proxy Group, the Gas  
3 Proxy Group, and the Combination Proxy Group using the following inputs for the price  
4 and dividend terms:

- 5 1. The average daily closing prices for the 30-, 90-, and 180-trading days ended  
6 March 16, 2012 for the term  $P_0$ ; and
- 7 2. The annualized dividend per share as of March 16, 2012 for the term  $D_0$ .

8 I then calculated the DCF results using each of the following growth terms:

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

12

13 Multi-Stage DCF Model

14 **Q. What other forms of the DCF model have you considered?**

15 A. In order to address some of the limiting assumptions underlying the Constant Growth form  
16 of the DCF model, I also considered the results of a multi-period (three-stage) DCF Model.  
17 The Multi-Stage model, which is an extension of the Constant Growth form, enables the  
18 analyst to specify growth rates over three distinct stages. As with the Constant Growth  
19 form of the DCF model, the multi-period form defines the cost of equity as the discount  
20 rate that sets the current price equal to the discounted value of future cash flows. Unlike  
21 the Constant Growth form, however, the multi-period model must be solved in an iterative  
22 fashion.

1 **Q. Please generally describe the structure of your Multi-Stage model.**

2 A. As noted above, the model sets the subject company’s stock price equal to the present  
3 value of future cash flows received over three “stages”. In the first two stages, “cash  
4 flows” are defined as projected dividends. In the third stage, “cash flows” equal both  
5 dividends and the expected price at which the stock will be sold at the end of the period.  
6 The expected terminal stock price is based on the Gordon model, which defines the price  
7 as the expected dividend divided by the difference between the cost of equity (i.e., the  
8 discount rate) and the long-term expected growth rate. In essence, the terminal price is  
9 defined by the present value of the remaining “cash flows” in perpetuity. In each of the  
10 three stages, the dividend is the product of the projected earnings per share and the  
11 expected dividend payout ratio. A summary description of the model is provided in Table  
12 8 (below).

13 **Table 8: Multi-Stage DCF Structure**

<b>Stage</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
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 Expected DPS	Expected EPS Expected DPS	Expected EPS Expected DPS Terminal Value
Assumptions	30, 90, and 180-day average stock price	EPS growth rate Payout ratio		Long-term growth rate

14

15

1 **Q. What are the specific benefits of a three-stage model?**

2 A. The benefits of a three-stage model include: (1) the second stage allows for a transition  
3 from the first stage growth rate to the long-term growth rate, thereby avoiding the often  
4 unrealistic assumption that growth will change immediately between the first and final  
5 stages; and (2) the model projects dividends as the product of earnings and the payout  
6 ratio, which adds the important ability to recognize that during periods of high capital  
7 expenditures, payout ratios may be somewhat lower than they otherwise would be.

8  
9 It also is very important to note that while the model calculates the cost of equity based on  
10 expected dividends, it does not rely solely on Value Line for dividend growth rate  
11 projections. In my experience, a common and legitimate criticism of DCF models that rely  
12 on projected dividend growth rates (especially in the Constant Growth form of the model)  
13 is that Value Line is the sole source of such projections.<sup>22</sup> Although the form of the three-  
14 stage model I have used relies on Value Line for projected payout ratios, the potential bias  
15 resulting from reliance on a single analyst is mitigated by the use of consensus earnings  
16 forecasts. The model also enables the analyst to assess the reasonableness of the inputs  
17 and results by reference to certain market-based metrics. For example, when using the  
18 Gordon model to estimate the terminal price, the stock price estimate can be divided by the  
19 expected earnings per share in the final year to calculate an average P/E ratio. To the  
20 extent that the projected P/E ratio is inconsistent with either historical or expected levels, it  
21 may indicate incorrect or inconsistent assumptions within the balance of the model.

---

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

1 **Q. Please summarize your inputs to the Multi-Stage DCF model.**

2 A. I applied the Multi-Stage DCF model to the proxy groups described earlier in my direct  
3 testimony. My assumptions with respect to the various model inputs are described in  
4 Table 9 (below).

5 **Table 9: Multi-Stage DCF Model Assumptions**

Stage	0	1	2	3
Stock Price	30, 90, and 180-day average stock price as of March 16, 2012			
Earnings Growth	EPS as reported by Value Line	EPS growth as average of (1) Value Line; (2) Zacks; and (3) First Call projected growth rates	Transition to Long-term GDP growth on geometric average basis	Long-term GDP Growth
Payout Ratio		Value Line company-specific	Transition to industry average payout ratio on a geometric average basis	Long-term industry average payout ratio
Terminal Value				Expected dividend in final year divided by solved cost of equity less long-term growth rate

6  
7 **Q. How did you calculate the long-term GDP growth rate?**

8 A. The long-term growth rate of 5.77 percent used in my Three-Stage model is based on the  
9 real GDP growth rate of 3.24 percent from 1929 through 2011,<sup>23</sup> and an inflation rate of

<sup>23</sup> Bureau of Economic Analysis, February 29, 2012 update.

1 2.45 percent. The GDP growth rate is calculated as the compound growth rate in the real  
2 GDP for the period from 1929 through 2011.<sup>24</sup> The rate of inflation of 2.45 percent is a  
3 compound annual forward rate starting in ten years (i.e., 2022, which is the beginning of  
4 the terminal period) and is based on the 30-day average as of March 16, 2012 of projected  
5 inflation from three sources. The first estimate (2.45 percent) is based on the spread  
6 between yields on long-term nominal Treasury Securities and long-term Treasury  
7 Inflation-Protected Securities (“TIPS”), known as the “TIPS spread”. The second estimate  
8 (2.82 percent) is based on the embedded inflation in Zero-Coupon Inflation Index Swaps.  
9 The final estimate is the average of the compound annual Consumer Price Index growth  
10 rate of 2.20 percent and the annual Gross Domestic Product Price Index growth rate of  
11 1.94 percent projected by the Energy Information Administration (“EIA”) in the 2012  
12 Annual Energy Outlook.<sup>25</sup> The long-term growth rate, therefore, reflects long-term  
13 historical real growth, and the market’s expectation of long-term inflation.

14  
15 **Q. What were your specific assumptions with respect to the payout ratio?**

16 A. As noted in Table 9, for the first two periods I relied on the first year and long-term  
17 projected payout ratios reported by Value Line for each of the proxy group companies. I  
18 then assumed that by the end of the second period (i.e., the end of year ten), the payout  
19 ratio for electric utilities will converge to the long-term industry median payout ratio of  
20 66.78 percent and natural gas utilities will converge to the long-term median payout ratio

---

<sup>24</sup> The Bureau of Economic Analysis reports real GDP in chain-weighted 2005 dollars.  
<sup>25</sup> EIA 2012 Annual Energy Outlook Early Release, Table A20. Macroeconomic Indicators, Update  
AEO2010 Reference March 2010. Please note that  $5.76\% = [(1+3.24\%) \times (1+2.45\%)]-1$ .

1 of 69.50 percent. I estimated the long-term payout ratio of each proxy group company to  
2 be the median of the historical payout ratio for that company for the period from 1990  
3 through the present, as available.<sup>26</sup>  
4

5 Discounted Cash Flow Model Results

6 **Q. Please summarize the results of your DCF analyses.**

7 A. Table 10 (below) (*see* also Schedule RBH-1 and Schedule RBH-2), presents the results of  
8 the Constant Growth and Multi-Stage DCF analyses. The Constant Growth DCF model  
9 produces a range of mean results from 9.50 percent to 9.80 percent; the mean high DCF  
10 results range from 10.74 percent to 11.40 percent. The Multi-Stage DCF analysis  
11 produces a range of mean results from 10.32 percent to 10.49 percent. In developing the  
12 Constant Growth and Multi-Stage DCF results for the Electric and Gas Proxy Groups, I  
13 have assigned weights of 73.00 percent and 27.00 percent, respectively, to the results for  
14 the Electric Proxy Group and Gas Proxy Group. As discussed earlier, those percentages  
15 are based on the ratio of operating income and net plant in service attributable to electric  
16 and natural gas operations at the Company.

---

<sup>26</sup> I used the electric utility industry payout ratio assumptions for my Combination Utility analyses.

1

**Table 10: Discounted Cash Flow Analyses Results**

	<b>Mean Low</b>	<b>Mean</b>	<b>Mean High</b>
<b>Constant Growth DCF – Electric and Gas Proxy Groups</b>			
30-Day Average	7.96%	9.50%	11.27%
90-Day Average	7.97%	9.51%	11.28%
180-Day Average	8.08%	9.63%	11.40%
<b>Constant Growth DCF – Combination Proxy Group</b>			
30-Day Average	8.53%	9.64%	10.74%
90-Day Average	8.58%	9.68%	10.78%
180-Day Average	8.69%	9.80%	10.90%
	<b>Low</b>	<b>Mean</b>	<b>High</b>
<b>Multi-Stage DCF – Electric and Gas Proxy Groups</b>			
30-Day Average	9.60%	10.32%	11.52%
90-Day Average	9.72%	10.34%	11.57%
180-Day Average	9.85%	10.46%	11.70%
<b>Multi-Stage DCF – Combination Proxy Group</b>			
30-Day Average	9.61%	10.32%	11.93%
90-Day Average	9.57%	10.36%	12.02%
180-Day Average	9.64%	10.49%	12.18 %

2

3 **Q. Referring to your Constant Growth DCF model, how did you calculate the mean high**  
4 **and mean low results?**

5 A. I calculated the mean high result for my Constant Growth DCF model using the maximum  
6 growth rate (i.e., the maximum of the Zacks, First Call, and Value Line EPS growth rates)  
7 in combination with the dividend yield for each of the proxy group companies. Thus, the  
8 mean high result reflects the maximum DCF result for the proxy group. I used a similar  
9 method to calculate the mean low results, using the minimum growth rate for each proxy  
10 group company.

11

1 **Q. Referring now to your Multi-Stage DCF model, are those results consistent with**  
2 **other market indicators?**

3 A. Yes, they are. Based on the assumptions described earlier, when using the Gordon model  
4 method to estimate the terminal price, for example, the Combination Proxy Group Multi-  
5 Stage model produces median P/E multiples of 15.72 to 16.53 (depending upon the stock  
6 price averaging period). This range is generally consistent with the historical median P/E  
7 ratio of the proxy group companies.

8  
9 **Q. Did you undertake any additional analyses to support your DCF model results?**

10 A. Yes. As noted earlier, I also used the CAPM and the Risk Premium approaches as a  
11 means of assessing the reasonableness of my DCF results.

12

13 **B. CAPM Analysis**

14 **Q. Please briefly describe the general form of the Capital Asset Pricing Model.**

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

20 
$$K_e = r_f + \beta(r_m - r_f) \quad [3]$$

21 where:

22  $K_e$  = the required market ROE;

1  $\beta$  = Beta of an individual security;

2  $r_f$  = the Risk-Free Rate of return; and

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

4 In this specification, the term  $(r_m - r_f)$  represents the MRP.

5 According to the theory underlying the CAPM, since unsystematic risk can be  
6 diversified away, investors should be concerned only with systematic or non-diversifiable  
7 risk. Non-diversifiable risk is measured by Beta, which is defined as:

8 
$$\beta = \frac{\text{Covariance}(r_e, r_m)}{\text{Variance}(r_m)} \quad [4]$$

9 The variance of the market return, noted in Equation [4], is a measure of the uncertainty of  
10 the general market, and the covariance between the return on a specific security and the  
11 market reflects the extent to which the return on that security will respond to a given  
12 change in the market return. Thus, Beta represents the risk of the security relative to the  
13 market.

14  
15 **Q. Has the CAPM been affected by recent economic conditions?**

16 A. Yes. The recent market has affected the CAPM in a number of important ways. First, as  
17 noted above, the risk free rate, " $r_f$ ", in the CAPM formula is represented by the interest  
18 rate on long-term U.S. Treasury securities. During the financial market dislocation,  
19 investors reacted to the extraordinary levels of market volatility discussed earlier by  
20 investing in low-risk securities such as Treasury bonds. Consequently, the first term in the

1 model (i.e., the Risk-Free Rate) is lower than it would have been absent the elevated  
2 degree of risk aversion that has, at least in part, resulted in historically low Treasury yields.

3  
4 In addition, as a result of the extraordinary loss in equity values during 2008, the MRP,  
5 when measured on a historical basis, actually decreased from the prior year, even though  
6 other measures of investor sentiment, including market volatility and credit spreads,  
7 indicated extremely high levels of risk aversion. That result is, of course, counter-  
8 intuitive. Although the 2009 market rally resulted in a somewhat higher historical MRP, it  
9 still remains below its pre-financial crisis level.

10  
11 Lastly, Beta coefficient estimates reported by Bloomberg and Value Line calculate the  
12 Beta for each company over historical periods of 24 and 60 months, respectively. Because  
13 the Value Line Beta coefficients include market data from the financial market dislocation,  
14 those Beta coefficients tend to underestimate the “systematic” risk that investors are  
15 compensated for in the CAPM analyses. For that reason, I place a greater amount of  
16 weight on the Beta coefficients calculated over a two-year period as provided by  
17 Bloomberg.

18  
19 As a consequence of the recent market conditions discussed above, it is possible to derive  
20 unreliable results from the CAPM, if the model is not properly applied. For example, it  
21 would not be appropriate to use the current yield on Treasury securities as the Risk-Free  
22 Rate in conjunction with a historical MRP, because the current Treasury yield is affected

1 by increased risk aversion and volatility that is not reflected in the historical MRP. That  
2 application would understate the required ROE.

3

4 **Q. With those qualifications in mind, what assumptions did you use in your CAPM**  
5 **model?**

6 A. Since both the DCF and CAPM models assume long-term investment horizons, I used the  
7 current 30-day average yield on 30-year Treasury bonds (i.e., 3.16 percent) and the near-  
8 term projected 30-year Treasury yield (i.e., 3.42 percent) as my estimate of the Risk-Free  
9 Rate.

10

11 **Q. What Market Risk Premia did you use in your CAPM model?**

12 A. For the reasons discussed above, I did not use a historical average; rather, I developed two  
13 forward-looking (*ex-ante*) estimates of the MRP.

14

15 **Q. Please describe your first approach to estimating the MRP.**

16 A. The first approach is based on the expected return on the S&P 500 Index, less the current  
17 30-year Treasury Bond Yield. The expected return on the S&P 500 is calculated using the  
18 Constant Growth DCF model discussed earlier in my testimony for the companies in the  
19 S&P 500 Index for which long-term earnings projections are available.

20

1 **Q. Please describe the second approach used to estimate the *Ex-ante* MRP.**

2 A. The second approach assumes a constant Sharpe Ratio, which is the ratio of the risk  
3 premium relative to the risk, or standard deviation of a given security or index of  
4 securities. The Sharpe Ratio is relied upon by financial professionals to assess how much  
5 additional return an investor receives for holding a risky (i.e., more volatile) asset rather  
6 than a risk-free (i.e., less volatile) asset. The formula for calculating the Sharpe Ratio is  
7 expressed as follows:

8 
$$S(X) = (R_x - R_f) / Std Dev (X) \quad [5]$$

9 where:

10  $X$  = the investment;

11  $R_x$  = the average return of  $X$ ;

12  $R_f$  = the best available rate of return of a risk free security; and

13  $Std Dev$  = the standard deviation of  $r_x$ .

14 As shown in Schedule RBH-3, the constant Sharpe Ratio is the ratio of the historical MRP  
15 of 6.60 percent (the numerator of Equation 5) and the historical market volatility of 20.36  
16 percent (the denominator of Equation 5).<sup>27</sup> The expected MRP is then calculated as the  
17 product of the Sharpe Ratio and the expected market volatility. For the purpose of that  
18 calculation, I used the thirty-day average of the Chicago Board Options Exchange's  
19 ("CBOE") three-month volatility index (i.e., the V XV) and the same thirty-day average of

---

<sup>27</sup> The standard deviation is easily calculated from the Morningstar data. See also Morningstar Inc., Ibbotson, Stocks, Bonds, Bills and Inflation, 2012 Valuation Yearbook, Large Company Stocks: Total Returns Table B-1, at 168-169.

1 settlement prices of futures on the CBOE's one-month volatility index (i.e., the VIX) for  
2 July 2012 through September 2012.

3  
4 **Q. What measures of the Beta coefficient did you use in your CAPM model?**

5 A. I considered two separate Beta coefficients for the proxy group companies: (1) the  
6 reported Beta coefficients from Bloomberg (which are calculated using 24 months of  
7 data); and (2) the reported Beta coefficients from Value Line (which are calculated using  
8 60 months of data). As discussed above, I place a greater amount of weight on the Beta  
9 coefficients provided by Bloomberg because their default calculation does not include the  
10 financial market dislocation of 2008 and 2009.

11  
12 **Q. How did you apply your CAPM?**

13 A. I relied on the *ex-ante* MRPs and the Bloomberg and Value Line Beta Coefficients for the  
14 proxy group to calculate the CAPM model using both the current 30-day average yield on  
15 the 30-year U.S. Treasury Bond and near-term projections of the 30-year Treasury Bond  
16 Yield as the Risk-Free Rate. As shown in Schedule RBH-3, the use of *ex-ante* market risk  
17 premia and Risk Free Rates produces a range of results that is generally consistent with the  
18 range of results produced by the other calculation methods.

19  
20 **Q. What are the results of your CAPM analyses?**

21 A. As shown in Table 11 (below) (*see* also Schedule RBH-3), the CAPM analysis based on  
22 Bloomberg estimates of Beta coefficients results in a range of returns for the Electric and

1 Gas Proxy Groups from 9.60 percent to 11.03 percent and for the Combination Proxy  
2 Group from 9.40 percent to 10.79 percent. Similarly, relying on Value Line estimates of  
3 Beta coefficients produces a range of returns for the Electric and Gas Proxy Groups from  
4 9.32 percent to 10.70 percent and for the Combination Proxy Group from 9.39 percent to  
5 10.78 percent.

6 **Table 11: Ex-Ante CAPM Results**

	<b>Sharpe Ratio Derived Market Risk Premium</b>	<b>DCF Derived Market Risk Premium</b>
<b>Electric and Gas Proxy Groups</b>		
<i>Bloomberg Beta Coefficient</i>		
Current 30-Year Treasury (3.16%)	9.60%	10.78%
Projected 30-Year Treasury (3.42%)	9.86%	11.03%
<i>Value Line Beta Coefficient</i>		
Current 30-Year Treasury (3.16%)	9.32%	10.44%
Projected 30-Year Treasury (3.42%)	9.58%	10.70%
<b>Combination Proxy Group</b>		
<i>Bloomberg Beta Coefficient</i>		
Current 30-Year Treasury (3.16%)	9.40%	10.53%
Projected 30-Year Treasury (3.42%)	9.65%	10.79%
<i>Value Line Beta Coefficient</i>		
Current 30-Year Treasury (3.16%)	9.39%	10.52%
Projected 30-Year Treasury (3.42%)	9.64%	10.78%

7  
8  
9 **Q. Does your ROE recommendation substantially rely on any of the CAPM results you**  
10 **presented in Schedule RBH-3?**

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

4

5 **C. Bond Yield Plus Risk Premium Analysis**

6 **Q. Please describe the bond yield plus risk premium approach you employed.**

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

20

1 **Q. What did your bond yield plus risk premium analysis reveal?**

2 A. As shown on Charts 5 and 6 (below), from 1992 through 2011, there was, in fact, a strong  
3 negative relationship between risk premia and interest rates. To estimate that relationship,  
4 I conducted a regression analysis using the following equation:

5 
$$RP = a + b \times T \quad [6]$$

6 where:

7  $RP$  = Risk Premium (difference between allowed ROEs and the 30-Year Treasury  
8 Yield);

9  $a$  = Intercept term;

10  $b$  = Slope term; and

11  $T$  = 30-Year Treasury Yield.

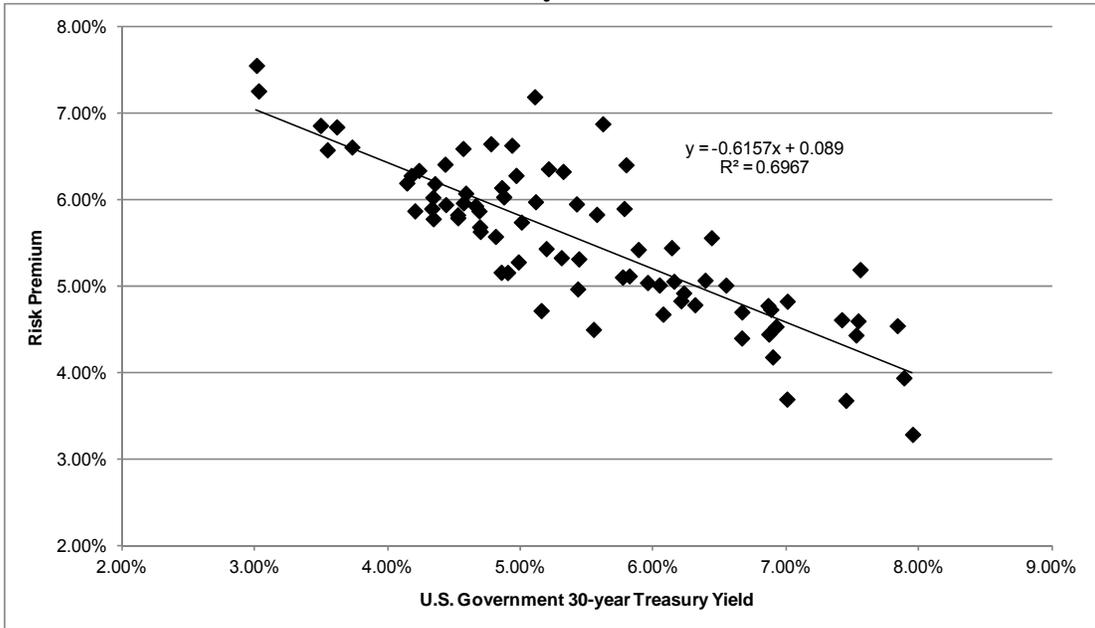
12 Data regarding allowed ROEs were derived from 528 electric and 432 natural gas  
13 utility rate cases<sup>28</sup> from 1992 through March 16, 2012 as reported by Regulatory Research  
14 Associates.

---

<sup>28</sup> This includes both vertically-integrated and T&D only companies.

1

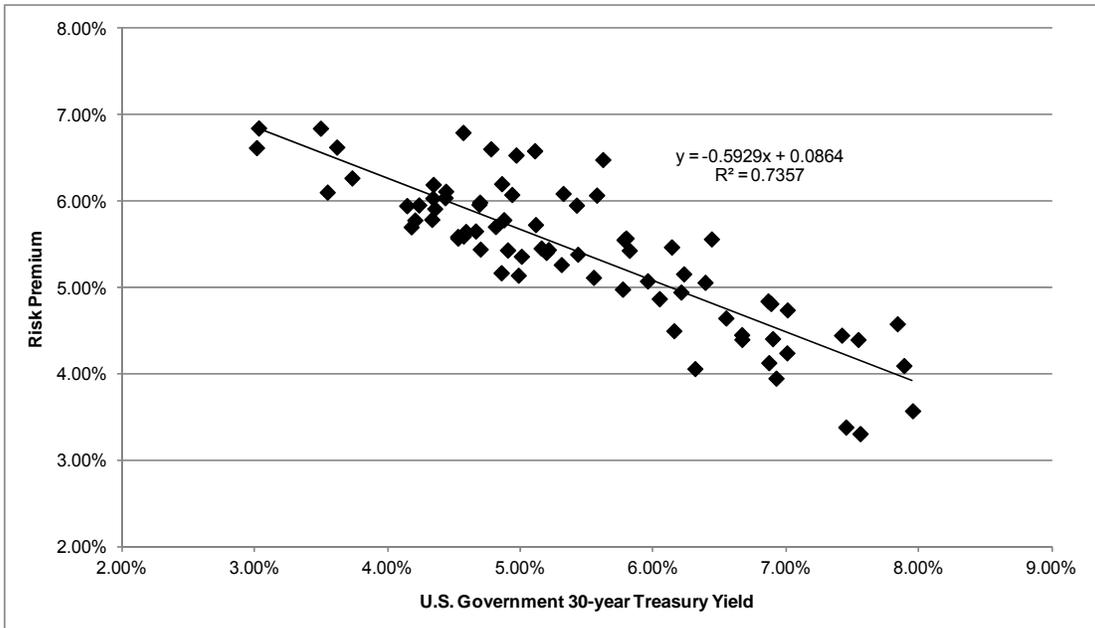
**Chart 5: Electric Utility Risk Premium Results**



2

3

**Chart 6: Natural Gas Utility Risk Premium Results**



4

5

6

7

As shown on Schedule RBH-4, from 1992 through March 16, 2012, the average risk premium for electric utilities was approximately 5.53 percent. Based on the regression

1 coefficients provided in Schedule RBH-4, however, the risk premium would be 6.95  
2 percent when using the current 30-day average of the 30-year Treasury Bond Yield,  
3 resulting in an ROE of 10.11 percent. When using the near- and long-term projections of  
4 the 30-year Treasury Bond Yield, the risk premium would be 6.80 percent and 5.64  
5 percent, respectively, resulting in a 10.21 percent and 10.94 percent ROE, respectively. A  
6 similar risk premium analysis of natural gas utility authorized returns results in a range of  
7 ROEs between 9.92 percent and 10.80 percent. Combining the electric utility and natural  
8 gas utility Bond Yield Plus Risk Premium results according to the Company's 73.00  
9 percent to 27.00 percent electric and gas operations mix, produces a range of ROEs  
10 between 10.06 percent and 10.90 percent, depending on the level of interest rates assumed.  
11 It is important to note, however, that this estimate does not include the effect of the  
12 Company's specific risk factors, as discussed in Section VIII of my direct testimony.

13  
14 **VIII. Regulatory and Business Risks**

15 **Q. Do the mean DCF, CAPM, and Bond Yield Plus Risk Premium results for the proxy**  
16 **group provide an appropriate estimate of the cost of equity for the Company?**

17 A. No, the mean results do not necessarily provide an appropriate estimate of the Company's  
18 cost of equity. In my view, there are additional factors that must be taken into  
19 consideration when determining where the Company's cost of equity falls within the range  
20 of results. In particular, the regulatory environment in which the Company operates is an  
21 important consideration in determining the Company's risk relative to the proxy group  
22 companies and should be considered in terms of its overall effect on the Company's

1 business risk, and, therefore, its cost of equity. Although I did not include any explicit  
2 adjustments to my ROE estimates for regulatory risk, I did take it into consideration when  
3 determining where the Company's ROE falls within my range of analytical results.

4  
5 **A. Regulatory Risk**

6 **Q. How does the regulatory environment in which a utility operates affect its access to**  
7 **and cost of capital?**

8 A. The regulatory environment in which a utility operates can significantly affect both the  
9 access to, and the cost of capital in several ways. First, there is little question that rating  
10 agencies consider the regulatory environment, including the extent to which the presiding  
11 regulatory commission is supportive of issues affecting credit quality, to be an important  
12 determinant of the subject company's credit profile. Moody's, for example, considers the  
13 nature of regulation, including its effect on cost recovery and cash flow generation, to be  
14 of such consequence that it represents 50.00 percent of the factors analyzed in arriving at  
15 credit ratings.<sup>29</sup> As to the overall regulatory environment, Moody's notes that "...the  
16 predictability and supportiveness of the regulatory framework in which [a regulated utility]  
17 operates is a key credit consideration and the one that differentiates the industry from most  
18 other corporate sectors."<sup>30</sup> Moody's further explains:

19 For a regulated utility company, we consider the characteristics of the  
20 regulatory environment in which it operates. These include how  
21 developed the regulatory framework is; its track record for  
22 predictability and stability in terms of decision making; and the

---

<sup>29</sup> *Special Comment: Regulatory Frameworks – Ratings and Credit Quality for Investor-Owned Utilities*,  
Moody's Investors Service, June 18, 2010, at 3.

<sup>30</sup> Moody's, *Global Infrastructure Finance, Regulated Electric and Gas Utilities*, August 2009, at 6.

1 strength of the regulator’s authority over utility regulatory issues. A  
2 utility operating in a stable, reliable, and highly predictable regulatory  
3 environment will be scored higher on this factor than a utility operating  
4 in a regulatory environment that exhibits a high degree of uncertainty  
5 or unpredictability. Those utilities operating in a less developed  
6 regulatory framework or one that is characterized by a high degree of  
7 political intervention in the regulatory process will receive the lowest  
8 scores on this factor.<sup>31</sup>

9 S&P notes that regulatory commissions should eliminate, or at least greatly reduce, the  
10 issue of rate-case lag, especially when a utility engages in a sizable capital expenditure  
11 program.<sup>32</sup> Moody’s agrees that timely cost recovery is an important determinant of credit  
12 quality, stating that “[t]he ability to recover prudently incurred costs in a timely manner is  
13 perhaps the single most important credit consideration for regulated utilities as the lack of  
14 timely recovery of such costs has caused financial stress for utilities on several  
15 occasions.”<sup>33</sup>

16  
17 It therefore is important to recognize that regulatory decisions regarding the authorized  
18 ROE and capital structure have direct consequences for the subject utility’s internal cash  
19 flow generation (sometimes referred to as “Funds from Operations”, or “FFO”). Since  
20 credit ratings are intended to reflect the ability to meet financial obligations as they come  
21 due, the ability to generate the cash flows required to meet those obligations (and to  
22 provide an additional amount for unexpected events) is of critical importance to debt  
23 investors. Two of the most important metrics used to assess that ability are the ratios of

---

<sup>31</sup> *Ibid.*

<sup>32</sup> Standard and Poor’s, *Assessing Vertically Integrated Utilities’ Business Risk Drivers*, U.S. Utilities and Power Commentary, November 2006, at 10.

<sup>33</sup> Moody’s, Global Infrastructure Finance, *Regulated Electric and Gas Utilities*, August 2009, at 7.

1 FFO to debt, and FFO to interest expense, both of which are directly affected by regulatory  
2 decisions regarding the appropriate rate of return, and capital structure.

3  
4 **Q. Have you conducted any analysis of investor’s perceptions of the regulatory**  
5 **environment in which the Company operates compared to the Combination Utility**  
6 **Proxy Group companies?**

7 A. Yes, I have. In order to assess investors’ view as to the Company’s regulatory  
8 environment, I considered the jurisdictional rankings developed by both S&P<sup>34</sup> and  
9 Regulatory Research Associates (“RRA”).<sup>35</sup> S&P ranks regulatory jurisdictions on a five  
10 tier scale from least credit supportive to most credit supportive. To compare the  
11 Company’s regulatory environment to the Combination Proxy Group, I used a numerical  
12 approach that ranks jurisdictions from five to one, with S&P’s ranking convention. Under  
13 that approach, higher values indicate a more credit supportive jurisdiction. I applied that  
14 ranking system to the proxy group companies by regulatory jurisdiction. For each proxy  
15 group company that operates in multiple jurisdictions, I considered the ranking for each  
16 regulatory jurisdiction in which they operate. As shown in Schedule RBH-5, S&P’s  
17 average ranking of the proxy group companies, using the simple average of the  
18 jurisdictions in which they operate, is 2.82 (i.e., generally credit supportive) whereas the  
19 Company’s ranking in the Rhode Island jurisdiction is 2.00 (i.e., less credit supportive).

20  

---

<sup>34</sup> Standard and Poor’s, *Assessing U.S. Utility Regulatory Environments*, updated March 12, 2010, at 1-2.  
<sup>35</sup> Regulatory Research Associates, *Regulatory Focus: State Regulatory Evaluations*, July 11, 2011, at 2.

1 **Q. Have you conducted a similar analysis using the RRA ranking system?**

2 A. Yes, I have. RRA rates regulatory jurisdictions from the perspective of investors, and  
3 assigns ratings of “Above Average,” “Average,” or “Below Average.” RRA further  
4 distinguishes jurisdictions within those respective categories by applying ratings of 1, 2 or  
5 3, with a rating of “1” being the strongest. In describing its ranking system, RRA notes  
6 that:

7 The evaluations are assigned from an investor perspective and indicate  
8 the relative regulatory risk associated with the ownership of securities  
9 issued by each jurisdiction's electric and gas utilities. Each evaluation  
10 is based upon our consideration of the numerous factors affecting the  
11 regulatory process in the state, and is changed as major events occur  
12 that cause us to modify our view of the regulatory risk accruing to the  
13 ownership of utility securities in that individual jurisdiction.<sup>36</sup>

14  
15 Rhode Island currently is rated “Average 3”; in the bottom half of all ratings and only one  
16 notch above a “Below Average” ranking. Regarding Rhode Island’s regulatory  
17 environment, RRA notes:

18 While the overall regulatory climate in Rhode Island has historically  
19 been relatively balanced from an investor vantage point, recent rate-  
20 related rulings from the PUC have been somewhat negative. In an  
21 electric rate proceeding concluded in 2010, the PUC adopted a 9.8%  
22 equity return, by far, the lowest return authorized by the Commission  
23 for energy utilities, and significantly below the average of returns  
24 authorized for electric utilities nationwide during the preceding 12  
25 months.<sup>37</sup>

26 To compare the Company’s regulatory environment to the proxy group, I used a  
27 similar numerical ranking process to that applied to the S&P jurisdictional ratings

---

<sup>36</sup> *Ibid.*, at 1.

<sup>37</sup> Regulatory Research Associates, *Rhode Island Regulatory Review*.

1 discussed earlier. As shown in Schedule RBH-5, the simple average of the RRA ranking  
2 for each of the proxy group companies, in all jurisdictions, is 5.31 (i.e., between Average/1  
3 and Average/2). The Company's Rhode Island operations have a ranking of 4.00 (i.e.,  
4 Average/3), approximately 1.31 notches below the average ranking of the proxy group  
5 companies.

6  
7 **Q. What are your conclusions regarding the effect of regulatory risk on the Company's**  
8 **cost of equity?**

9 A. Rankings such as those provided by S&P and RRA are observable and meaningful  
10 indicators of the financial community's view of the regulatory risks faced by utilities.  
11 Based on the analyses discussed above, (i.e., using the S&P and RRA ranking structures),  
12 the financial community appears to attribute somewhat higher regulatory risk to the  
13 Company than to the proxy group (on average). This would support an ROE for the  
14 Company toward the upper end of the range of results.

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

22

1        **B.      Small Size**

2        **Q.      Please explain the risk associated with small size.**

3        A.      Both the financial and academic communities have long accepted the proposition that the  
4            cost of equity for small firms is subject to a “size effect.”<sup>38</sup> While empirical evidence of  
5            the size effect often is based on studies of industries beyond regulated utilities, utility  
6            analysts also have noted the risks associated with small market capitalizations.  
7            Specifically, an analyst for Ibbotson Associates noted:

8                    For small utilities, investors face additional obstacles, such as smaller  
9                    customer base, limited financial resources, and a lack of diversification  
10                   across customers, energy sources, and geography. These obstacles  
11                   imply a higher investor return.<sup>39</sup>

12  
13           Small size, therefore, leads to two categories of increased risk for investors: (1) liquidity  
14           risk (i.e., the risk of not being able to sell one’s shares in a timely manner due to the  
15           relatively thin market for the securities); and (2) fundamental business risks.

16

17        **Q.      How does the Company compare in size to the proxy companies?**

18        A.      The Company is somewhat smaller than the median for the Combination Utility Proxy  
19            Group companies both in terms of numbers of customers and annual revenues. Schedule  
20            RBH-6 estimates the implied market capitalization for the Company (i.e., the implied  
21            market capitalization if the Company were a stand-alone, publicly traded entity). That is,  
22            because the Company is not a separately traded entity, an estimated stand-alone market

---

<sup>38</sup> See Mario Levis, The record on small companies: A review of the evidence, Journal of Asset Management, March 2002, at 368-397, for a review of literature relating to the size effect.

<sup>39</sup> Michael Annin, *Equity and the Small-Stock Effect*, Public Utilities Fortnightly, October 15, 1995.

1 capitalization for the Company must be calculated. The implied market capitalization of  
2 the Company is calculated by applying the median market-to-book ratio for the proxy  
3 group of 1.50 to the Company's implied total common equity of \$1,338.79 million.<sup>40</sup> The  
4 implied market capitalization based on that calculation is \$2,001.68 million, which is  
5 approximately 34.21 percent of the proxy group median of the combination companies of  
6 \$5.85 billion.

7  
8 **Q. Did the Decoupling Act provide any guidance regarding the Company's size relative**  
9 **to the proxy companies?**

10 A. Yes, it did. In particular, the Decoupling Act states that:

11 Actions taken by the commission in the exercise of its ratemaking  
12 authority for electric and gas rate cases shall be within the norm of  
13 industry standards and recognize the need to maintain the financial  
14 health of the distribution company as a stand-alone entity in Rhode  
15 Island.<sup>41</sup>

16  
17 Since the Company is considerably smaller in size than the proxy group companies, it is  
18 important to consider and reflect the risks associated with small size in determining the  
19 Company's ROE.

20  
21 **Q. How does the comparatively small size of the Company affect its business risks**  
22 **relative to the proxy group?**

---

<sup>40</sup> Equity value of the Company calculated from 2010 FERC Form 1 data. See Schedule RBH-6.

<sup>41</sup> R.I.G.L. §39-1-27.7.1.

1 A. In general, smaller companies are less able to withstand adverse events that affect their  
2 revenues and expenses. The effect of weather variability, the loss of large customers to  
3 bypass opportunities, or the destruction of demand as a result of general macroeconomic  
4 conditions or fuel price volatility will have a proportionately greater impact on the  
5 earnings and cash flow volatility of smaller utilities. Similarly, capital expenditures for  
6 non-revenue producing investments such as system maintenance and replacements will put  
7 proportionately greater pressure on customer costs, potentially leading to customer  
8 attrition or demand reduction. Taken together, these risks affect the return required by  
9 investors for smaller companies.

10

11 **Q. Have you considered the comparatively small size of the Company in your**  
12 **recommended return on equity?**

13 A. Yes. While I have quantified the small size effect, rather than proposing a specific  
14 premium, I have considered the small size of the Company in my assessment of business  
15 risks in order to determine where, within a reasonable range of returns, the Company's  
16 required ROE appropriately falls. In that regard, the Company's comparatively small size  
17 further supports my conclusion that an ROE above the proxy group mean is reasonable.

18

19 **Q. How did you estimate the size premium for the Company?**

20 A. In its Risk Premia Over Time Report: 2012, Morningstar Inc. presents its calculation of the  
21 size premium for deciles of market capitalizations relative to the S&P 500 Index. An  
22 additional estimate of the size premium associated with the Company, therefore, is the

1 difference in the Morningstar size risk premia for the proxy group median market  
2 capitalization relative to the implied market capitalization for the Company.

3  
4 As shown on Schedule RBH-6, according to recent market data, the median market  
5 capitalization of the combination proxy group was approximately \$5.85 billion, which  
6 corresponds to the third decile of Morningstar's market capitalization data. Based on the  
7 Morningstar analysis, that decile has a size premium of 0.94 percent (or 94 basis points).  
8 The implied market capitalization for the Company is approximately \$2.00 billion, which  
9 falls within the fifth decile and corresponds to a size premium of 1.74 percent (or 174 basis  
10 points). The difference between those size premia is 80 basis points (1.74 percent – 0.94  
11 percent).

12  
13 **Q. Are there other factors that offset the effect of smaller size on the Company's cost of**  
14 **equity?**

15 A. No, I do not believe so. I considered that possibility, but concluded that, in light of the  
16 risks discussed earlier, the Company does not have advantages on balance over the proxy  
17 group that would offset the added risk of smaller size.

18  
19 **C. Capital Expenditure Risk**

20 **Q. Please summarize the Company's capital expenditure plans.**

21 A. As discussed in the revenue requirements testimony of Company Witness Michael D.  
22 Laflamme, the Company is planning a significant level of capital expenditures over the

1 next several years. The Company's capital expenditure plan provides for system growth  
2 and reinforcement, facility upgrades for reliability, and compliance with regulatory  
3 obligations.

4  
5 **Q. Do credit rating agencies recognize risks associated with increased capital**  
6 **expenditures?**

7 A. Yes, they do. From a credit perspective, the additional pressure on cash flows associated  
8 with high levels of capital expenditures exerts corresponding pressure on credit metrics  
9 and, therefore, credit ratings. Therefore, to the extent that the Company's rates do not  
10 permit it to recover its full cost of doing business, the Company will face increased  
11 recovery risk and thus increased pressure on its credit metrics.

12  
13 **Q. Are equity investors also concerned with comparatively high levels of capital**  
14 **expenditures?**

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

19 Although capital markets have improved since early 2009, liquidity  
20 and capital costs remain a concern, as costs for credit have generally  
21 become more expensive and available durations have shrunk. Higher  
22 interest costs will likely continue to pressure earnings until regulatory  
23 lag is better addressed.

24 \*\*\*

1 Credit and liquidity concerns have driven many companies to revisit  
2 capital spending plans and reassess operational efficiencies.<sup>42</sup>

3

4 **Q. Will the Company need continued access to the capital markets in order to finance its**  
5 **capital expenditure plan?**

6 A. Yes. When the level of capital expenditures outpaces the growth in internally generated  
7 cash, there is increasing pressure to access the external capital markets. Given the size of  
8 the anticipated capital expenditures, the Company will require continued access to external  
9 capital, at reasonable terms, in order to finance its capital expenditure plan. As noted  
10 throughout my testimony, the Company's ability to generate internal cash flow and access  
11 the capital markets will be directly affected by the Commission's order in this proceeding.

12

13 **Q. Have you considered the Company's expected capital expenditures in comparison to**  
14 **its expected depreciation expense?**

15 A. Yes, I have. As shown in Table 12 (below), the Company's expected level of capital  
16 expenditures exceeds its expected level of depreciation expense by approximately 3.08  
17 times over 2013 and 2014. In that regard, Barclay's Capital notes that capital expenditures  
18 are persistently around 2.00 times depreciation expense for the utility industry as a  
19 whole.<sup>43</sup>

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<sup>42</sup> KeyBanc Capital Markets Inc., *Electric Utilities Quarterly 4Q10*, March 2011, at 7.  
<sup>43</sup> The Seventh Inning Stretch, Power & Utilities, Barclays Capital, July 14, 2011, at 11.

1                   **Table 12: Capital Expenditure and Depreciation Expense Forecast**

	2013	2014	Average
Multiple (x)	2.85	3.32	3.08

2  
3   **Q.    What are your conclusions regarding the effect of the Company’s capital spending**  
4   **plans on its risk profile?**

5   **A.**    It is clear that on a relative basis, the Company’s capital expenditure program is  
6           significant. This program, which is necessary to sustain system growth and meet reliability  
7           requirements, could materially dilute the Company’s current earnings and cash flows. It  
8           also is clear that the financial community recognizes the additional risks associated with  
9           substantial capital expenditures and that those risks are reflected in market valuation  
10          multiples. In my view, these factors suggest a comparatively high level of risk relative to  
11          the proxy group.

12  
13   **IX.    Capital Structure, Cost of Debt, and Cost of Preferred Equity**

14   **Q.    What is the Company’s proposed capital structure?**

15   **A.**    The Company’s proposed capital structure consists of 49.60 percent common equity  
16          exclusive of goodwill and accumulated Other Comprehensive Income, 0.20 percent  
17          preferred equity, 49.00 percent long-term debt, and 1.20 percent short-term debt, as shown  
18          in Schedule RBH-8. Those proportions represent the Company’s actual capital structure  
19          as of the end of the test year, December 31, 2011, after adjustments to reflect the planned  
20          issuance of new long term debt in 2012.

1 **Q. How did you calculate the costs of long-term debt shown on Schedule RBH-9?**

2 A. The Company has \$54.4 million of outstanding First Mortgage Bonds (“FMBs”), which  
3 were assumed when the Company purchased the Rhode Island gas assets of the New  
4 England Gas Company from Southern Union Company, and merged those assets into the  
5 Company. The FMBs, which have maturities ranging from 2018 to 2025, are collateralized  
6 by the gas assets. The actual cost of that long-term debt, 8.05 percent (see Panel A of  
7 Schedule RBH-9) currently is being recovered in the Company’s gas rates, as established  
8 by the Commission in Docket RIPUC No. 3943, but is not used in this case to set base  
9 rates for the Company’s electric operations.

10

11 On March 15, 2010, the Company issued \$250 million of ten-year Senior Notes at an  
12 interest rate of 4.534 percent, and \$300 million of 30-year Senior Notes at an interest rate  
13 of 5.638 percent. That debt supports the consolidated operations of the Company,  
14 including both gas and electric operations. Given that the new \$550 million of debt  
15 supports both the gas and electric operations of the Company, it is reasonable to allocate a  
16 portion to gas operations with the rest apportioned to electric operations, based on total net  
17 plant assets<sup>44</sup>.

18

19 As described in more detail below, the Company plans to issue \$150 million of new long-  
20 term debt to “term-out” its currently high level of short-term debt. The Company  
21 estimates that the effective cost rate of the new debt is will be approximately 4.85 percent,

---

<sup>44</sup> Gas Operations Net Plant / Total Net Plant = 27%; Electric Operations Net Plant / Total Net Plant = 73%.

1 inclusive of issuance expenses (estimated to be 0.75 percent, or 75 basis points of the  
2 principle amount, amortized over the 30-year expected term of the issue). Given that the  
3 new \$150 million of debt will support both the gas and electric operations of the Company,  
4 it is reasonable to allocate a portion to gas operations with the rest apportioned to electric  
5 operations, as shown in Schedule RBH-9.

6  
7 Panel B of Schedule RBH-9 represents the weighted average cost of long-term debt by  
8 segment. Dividing the total interest, fee and amortization expense for the outstanding  
9 notes by the principal outstanding yields an effective rate of 5.11 percent for the  
10 Company's electric operations and 5.90 percent for its gas operations.

11  
12 **Q. How were the projected cost rates of preferred stock and short-term debt shown in**  
13 **Schedule RBH-10 derived?**

14 A. The Company currently has one issue of preferred stock, which has an annual dividend  
15 rate of 4.50 percent. The Company participates in the National Grid regulated money pool  
16 facility for short-term debt needs. The money pool facility bears interest at the 30-day  
17 A2/P2 commercial paper rate, as published by the Federal Reserve Board. The  
18 Company's Treasury Department projects the rate to be 0.80 percent (i.e., 80 basis points)  
19 for the rate year. The rate was derived from a forecast of the one-month Libor plus 20  
20 basis points as a proxy by commercial paper dealers, based on the rate at which National  
21 Grid currently issues commercial paper.

22

1 **Q. What are the Company's plans regarding its current short-term debt balance?**

2 A. The Company's short-term debt has grown from \$21 million, as of December 31, 2010, to  
3 \$168 million, as of December 31, 2011.<sup>45</sup> The Company intends to keep its short-term  
4 debt balance at levels necessary to finance its day-to-day working capital needs. Short-  
5 term debt is used as a source of bridge financing to support long term plant investments on  
6 a temporary basis only, until such time as more permanent financing, such as new long-  
7 term debt, is issued to redeem the outstanding short-term debt.

8  
9 In order to manage its short-term debt balances, the Company is planning to issue new  
10 long-term debt, which will require authorization by the Division of Public Utilities and  
11 Carriers. The Company filed the financing petition prior to the submission of this rate case  
12 filing. Upon receiving the required authorization, the Company will issue a \$150 million  
13 tranche of long-term debt, which will be used to term-out existing short-term debt. The  
14 Company also intends to issue additional long-term debt in the future to finance capital  
15 expenditures, or to term-out then-existing short term debt, as necessary.

16

17 **Q. Is it appropriate for the Company to update its projections of both new debt**  
18 **issuances and cost rates later in this proceeding?**

---

<sup>45</sup> Point in time short term debt balances are inappropriate to measure typical levels of short-term debt, but rather a twelve-month average should be employed. Any monthly short term debt balance should be normalized to reflect a 12-month average.

1 A. Yes. Given uncertainty in the financial markets I believe that it is appropriate to update  
2 this filing to reflect the most recent information available concerning the Company's new  
3 debt issue and rates near the time of a Commission decision in this proceeding.  
4

5 **Q. What are the weighted average costs of capital that you propose in this proceeding?**

6 A. The weighted average cost of capital for the electric and gas operations are shown in  
7 Schedule RBH-10. Panel A provides an overall cost of capital of 7.85 percent for the  
8 Company's electric distribution operations, and Panel B provides an overall cost of capital  
9 of 8.24 percent for the gas distribution operations.  
10

11 **Q. Is it appropriate to use the Company's actual capital structure for ratemaking**  
12 **purposes in Rhode Island.**

13 A. Yes, it is. On May 20, 2010, the State of Rhode Island enacted the Decoupling Act.  
14 Regarding the financial health of electric and gas utilities, the statute specifically states  
15 that:

16 Actions taken by the Commission in the exercise of its ratemaking  
17 authority for electric and gas rate cases shall be within the norm of  
18 industry standards and recognize the need to maintain the financial  
19 health of the distribution company as a *stand-alone* entity in Rhode  
20 Island.<sup>46</sup> (*Emphasis added*)

21 It also is my understanding that in establishing the capital structure to be used for  
22 ratemaking purposes, the Commission, in order to ensure that customers are paying only

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<sup>46</sup> See §39-1-27.7.1(b) of the Decoupling Act.

1 the costs to support regulated operations, seeks to determine the amount of debt and equity  
2 capital that the Company is dedicating to public service. As such, the proposed capital  
3 structure ensures that the Company's customers receive the benefits of the Company's  
4 financial profile, and pay rates that reflect the capital actually being used to support its  
5 utility operations.

6  
7 Since the Company finances its rate base on a stand-alone basis, the statutory mandate of a  
8 stand-alone capital structure is consistent with the Company's proposed capital structure.  
9 To that point, as shown on Table 13 (below), the Company is a separately rated company,  
10 currently carrying Long-Term Issuer, Senior Secured, Senior Unsecured, and Preferred  
11 Stock credit ratings from both S&P and Moody's.

12 **Table 13: Credit Ratings**

<b>STANDARD &amp; POOR'S<sup>47</sup></b>	<b>MOODY'S INVESTOR SERVICE<sup>48</sup></b>
Corporate Credit Rating: A-	Issuer: A3
Senior Secured Debt: A	First Mortgage Bonds: A1
Senior Unsecured Debt: A-	Senior Secured MTNs: (P)A1
Preferred Stock: BBB	Senior Unsecured: A3
	Preferred Stock: Baa2

13  
14 It also has been my practical experience that the nature of the assets underlying utility  
15 operations determines the supporting capital structure. Utilities invest in, and therefore  
16 must finance, both long-term assets such as property, plant and equipment, and short term  
17 assets in the form of net working capital requirements. A common financing practice  
18 matches the lives of the assets being financed with the duration of the securities used to

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<sup>47</sup> Standard & Poor's, *Narragansett Electric Company*, September 26, 2011.

<sup>48</sup> Moody's Investors Service, *Narragansett Electric Company*, June 28, 2011. (P) indicates "Provisional".

1 finance those assets. Because utility assets are long-lived, it is common industry practice  
2 to fund those assets with long-duration securities. Consistent with the Decoupling Act,  
3 therefore, it is important to view the ratemaking capital structure for the Company, taking  
4 into consideration the nature of the utility assets being financed.

5  
6 Lastly, under the stand-alone approach the overall cost of capital is determined based on  
7 the subject company's capital structure and cost of debt and equity; the cost of equity is  
8 estimated by reference to a proxy group of firms of comparable risk. That approach is  
9 consistent with the analyses discussed throughout my direct testimony. The stand-alone  
10 approach therefore recognizes that the cost of capital depends on the relative risk of the  
11 investment being financed, not on the source of financing. In that regard, the *Hope* and  
12 *Bluefield* doctrines are clear that appropriate considerations in determining cost of capital  
13 are the alternatives available to investors and the risks associated with those alternatives.

14  
15 **Q. Why would it be inappropriate and unreasonable to use a capital structure other**  
16 **than the Company's actual capital structure to set rates in this proceeding?**

17 A. A capital structure with a common equity ratio of less than 49.60 percent would contain a  
18 level of debt in excess of that required to support the Company's current credit rating  
19 based on the benchmarks used by S&P in the credit rating process. According to S&P, the  
20 Company has an "excellent" business risk profile and a "significant" financial risk profile.  
21 Based on the business and financial risk matrix published by S&P, as shown below, a

1 company with “excellent” business and “significant” financial risk scores would be  
2 assigned an A- rating.

3 **Table 14: S&P Ratings Matrix**

**BUSINESS AND FINANCIAL RISK PROFILE MATRIX**

Business Risk Profile	Financial Risk Profile					
	Minimal	Modest	Intermediate	Significant	Aggressive	Highly Leveraged
Excellent	AAA	AA	A	A-	BBB	-
Strong	AA	A	A-	BBB	BB	BB-
Satisfactory	A-	BBB+	BBB	BB+	BB-	B+
Fair	-	BBB-	BB+	BB	BB-	B
Weak	-	-	BB	BB-	B+	B-
Vulnerable	-	-	-	B+	B	CCC+

4  
The Company has an A- corporate credit rating (sometimes referred to as the “CCR”) from S&P, which is compatible with an “excellent” business profile and a “significant” financial risk profile. The Company’s senior unsecured debt issuances are also rated “A-” by S&P.

5  
6 **Q. What degree of debt leverage is associated with the Company’s A- Corporate Credit**  
7 **Rating?**

8 A. According to the indicative ratios provided by S&P, for a company with a “significant”  
9 financial risk score, the total debt, including short- and long-term debt, should be in the  
10 range of 45.00 percent to 50.00 percent (*see* Table 15, below).

11 **Table 15: S&P Financial Risk Ratios**

**FINANCIAL RISK INDICATIVE RATIOS (CORPORATE)**

<b>Financial Risk Profile</b>	<b>FFO/Debt (%)</b>	<b>Debt/EBITDA (x)</b>	<b>Debt/Capital (%)</b>
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Minimal	greater than 60	less than 1.5	less than 25
Modest	45-60	1.5-2	25-35
Intermediate	30-45	2-3	35-45
Significant	20-30	3-4	45-50
Aggressive	12-20	4-5	50-60
Highly Leveraged	less than 12	greater than 5	greater than 60

FFO/Debt is the ratio of the Company’s funds from operations to its total debt.  
Debt/EBITDA is the ratio of total debt to earnings before interest, taxes, depreciation and amortizations.  
Debt/Capital is the ratio of total debt to total capital.

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Based on the metrics provided in Table 15, equity ratios (including common equity and preferred stock) for companies with A- credit ratings should be within the range of 50.00 percent to 55.00 percent. The proposed common equity ratio of 49.60 percent already is at the low end of the prescribed S&P range; an equity ratio lower still would be inconsistent with the Company’s current A- credit rating. The maintenance of an equity ratio no lower than the proposed 49.60 percent is particularly important in light of the Company’s intent to maintain its financial metrics consistent with an A rating.

Moody’s has a similar view of the importance of the Company’s capital structure. Following the authorized capital structure decision in the Company’s last rate case, Moody’s noted the importance of the authorized equity ratio as a factor in assessing the Company’s credit profile:

[t]he 42.75% equity layer *appeared low* when compared with other operating utility companies. The supreme court’s decision increases the probability that an

1 improved equity percentage will be allowed for [the Company's] NEC's rate-  
2 making purposes, which is credit positive.<sup>49</sup>

3

4 **Q. What effect does the equity ratio have on the financial risk of the Company?**

5 A. The Company has maintained an equity ratio at or above 50.00 percent while maintaining  
6 its financial risk consistent with the risk of a stand-alone utility. According to S&P, as of  
7 the first calendar quarter of 2012, the typical credit rating of a stand-alone utility in the  
8 U.S. utility sector is A,<sup>50</sup> as noted above, the Company's current CCR is A-. As such, a  
9 reduction in the Company's equity ratio below 50.00 could push the Company's ratings  
10 metrics into the BBB range. If the Company's credit ratings were to fall into the BBB  
11 range, an outcome would be higher borrowing costs.

12

13 **Q. How have customers benefited from the Company's senior unsecured debt ratings?**

14 A. As noted earlier, in March 2010, the Company issued a total of \$300 million of new 30-  
15 year debt. The Company's higher credit ratings, which derive from its credit profile,  
16 resulted in lower cost to customers than would have been the case had the Company been  
17 assessed a lower credit rating. Based on the yield spreads between A-rated and BBB-rated  
18 utility debt discussed earlier,<sup>51</sup> the interest rate on the \$300 million of 30-year debt issued  
19 by the Company would have been up to 60 basis points higher had the Company been  
20 rated BBB at the time of issuance. Because of the Company's credit rating, therefore,

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<sup>49</sup> Moody's: "Second Crack at RIPUC Rate Order Is Credit Positive for Narragansett Electric", February 6, 2012 (*emphasis added*).

<sup>50</sup> S&P: "U.S. Regulated Gas And Water Utilities' Credit Quality Should Remain Stable In 2012", January 12, 2012.

<sup>51</sup> See Chart 1.

1 customers will save approximately \$54 million in interest expense over the life of the 30-  
2 year debt (relative to the yield on BBB-rated utility debt).

3  
4 **Q. Please now discuss your analysis of the capital structures of the proxy group**  
5 **companies.**

6 A. In order to assess the reasonableness of the Company's proposed capital structure in the  
7 context of industry standards, I reviewed the capitalization ratios of the individual utility  
8 operating companies owned and operated by the respective Combination Utility Proxy  
9 Group companies over the past eight quarters. As shown in Schedule RBH-7, the  
10 Company's proposed equity ratio (i.e., 49.60 percent) is below the mean equity ratio of the  
11 proxy group companies of 50.60 percent. The Company's long-term debt ratio and short-  
12 term debt ratio of 49.00 percent and 1.20 percent, respectively, are within the range of  
13 those ratios for the proxy group companies. Thus, overall, the Company's proposed  
14 capital structure ratios are reasonable compared to the proxy group.

15  
16 **Q. Will the capital structure and ROE authorized in this proceeding affect the**  
17 **Company's ability to access capital at reasonable rates?**

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

1 It also is important to realize that because a utility's investment horizon is very long,  
2 investors require the assurance of a sufficiently high return to satisfy the long-run  
3 financing requirements of the assets it puts into service. Those assurances, which often are  
4 measured by the relationship between internally generated cash flows and debt (or interest  
5 expense), depend quite heavily on the capital structure. As a consequence, both the ROE  
6 and capital structure are very important to debt and equity investors. Given the capital  
7 market conditions noted earlier in my direct testimony, the authorized ROE and capital  
8 structure take on even greater significance.

9  
10 **X. Conclusion and Recommendation**

11 **Q. What is your conclusion regarding a fair ROE for the Company?**

12 A. I believe that 10.75 percent is a reasonable estimate of the return required by equity  
13 investors to invest in a company of the Company's risk profile in the current capital  
14 market environment. My recommended return on equity considers the results of the DCF  
15 and CAPM models, as well as the Bond Yield Plus Risk Premium analysis, summarized in  
16 Table 16a and Table 16b (below), and the specific risks to which the Company remains  
17 exposed. Based on those analytical results, the Company's ROE falls in a range between  
18 10.50 percent and 11.25 percent and, in my view, an authorized ROE of 10.75 percent is  
19 reasonable, especially in light of the Company's regulatory and business risks relative to  
20 the proxy group.

1 **Table 16a: Summary of Analytical Results for the Electric and Gas Proxy Groups**

<b>DCF Results<sup>52</sup></b>			
	<b>Range of Results</b>		
Constant Growth DCF	7.97%	11.28%	
Multi-Stage DCF	9.72%	11.57%	
<b>Supporting Methodologies</b>			
<i>CAPM Results</i>			
	Sharpe Ratio Derived Market Risk Premium	DCF Derived Market Risk Premium	
<i>CAPM – Bloomberg Beta</i>			
Current 30-year Treasury (3.16%)	9.60%	10.78%	
Near-Term Projected 30-year Treasury (3.42%)	9.86%	11.03%	
<i>CAPM – Value Line Beta</i>			
Current 30-year Treasury (3.16%)	9.32%	10.44%	
Near-Term Projected 30-year Treasury (3.42%)	9.58%	10.70%	
<i>Treasury Yield Plus Risk Premium</i>			
	<b>Low</b>	<b>Mean</b>	<b>High</b>
Risk Premium	10.06%	10.37%	10.90%

2

<sup>52</sup> The table presents DCF results for a 90-day average dividend yield. I also considered analyses including a 30-day average dividend yield, and a 180-day average dividend yield. All DCF analyses considered are presented in Schedule RBH-1 and Schedule RBH-2.

1           **Table 16b: Summary of Analytical Results for the Combination Proxy Group**

<b>DCF Results<sup>53</sup></b>		
	<b>Range of Results</b>	
Constant Growth DCF	8.58%	10.78%
Multi-Stage DCF	9.57%	12.02%
<b>Supporting Methodologies</b>		
<i>CAPM Results</i>		
	Sharpe Ratio Derived Market Risk Premium	DCF Derived Market Risk Premium
<i>CAPM – Bloomberg Beta</i>		
Current 30-year Treasury (3.00%)	9.40%	10.53%
Near-Term Projected 30-year Treasury (3.45%)	9.65%	10.79%
<i>CAPM – Value Line Beta</i>		
Current 30-year Treasury (3.00%)	9.39%	10.52%
Near-Term Projected 30-year Treasury (3.45%)	9.64%	10.78%

- 2
- 3   **Q.     Does this conclude your direct testimony?**
- 4   A.     Yes, it does.

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<sup>53</sup>       The table presents DCF results for a 90-day average dividend yield. I also considered analyses including a 30-day average dividend yield, and a 180-day average dividend yield. All DCF analyses considered are presented in Schedule RBH-1 and Schedule RBH-2.



Attachment A

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

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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.

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

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

### **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

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## **EDUCATION**

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

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## **DESIGNATIONS AND PROFESSIONAL AFFILIATIONS**

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

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## **PUBLICATIONS/PRESENTATIONS**

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

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

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## **AVAILABLE UPON REQUEST**

Extensive client and project listings, and specific references.

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SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
<b>Arizona Corporation Commission</b>				
Southwest Gas Corporation	11/10	Southwest Gas Corporation	Docket No. G-01551A-10-0458	Return on Equity
<b>Arkansas Public Service Commission</b>				
CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Arkansas Gas	01/07	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Arkansas Gas	Docket No. 06-161-U	Return on Equity
<b>Colorado Public Utilities Commission</b>				
Public Service Company of Colorado	11/11	Public Service Company of Colorado	Docket No. 11AL-947E	Return on Equity (electric)
Xcel Energy, Inc.	12/10	Public Service Company of Colorado	Docket No. 10AL-963G	Return on Equity (electric)
Atmos Energy Corporation	07/09	Atmos Energy Colorado-Kansas Division	Docket No. 09AL-507G	Return on Equity (gas)
Xcel Energy, Inc.	12/06	Public Service Company of Colorado	Docket No. 06S-656G	Return on Equity (gas)
Xcel Energy, Inc.	04/06	Public Service Company of Colorado	Docket No. 06S-234EG	Return on Equity (electric)
Xcel Energy, Inc.	08/05	Public Service Company of Colorado	Docket No. 05S-369ST	Return on Equity (steam)
Xcel Energy, Inc.	05/05	Public Service Company of Colorado	Docket No. 05S-264G	Return on Equity (gas)
<b>Columbia Public Service Commission</b>				
Potomac Electric Power Company	07/11	Potomac Electric Power Company	Formal Case No. FC1087	Return on Equity
<b>Connecticut Department of Public Utility Control</b>				
Southern Connecticut Gas Company	09/08	Southern Connecticut Gas Company	Docket No. 08-08-17	Return on Equity
Southern Connecticut Gas Company	12/07	Southern Connecticut Gas Company	Docket No. 05-03-17PH02	Return on Equity
Connecticut Natural Gas Corporation	12/07	Connecticut Natural Gas Corporation	Docket No. 06-03-04PH02	Return on Equity
<b>Delaware Public Service Commission</b>				
Delmarva Power & Light Company	12/11	Delmarva Power & Light Company	Case No. 11-528	Return on Equity
<b>Federal Energy Regulatory Commission</b>				
Public Service Company of New Mexico	10/10	Public Service Company of New Mexico	Docket No. ER11-1915-000	Return on Equity
Portland Natural Gas Transmission System	05/10	Portland Natural Gas Transmission System	Docket No. RP10-729-000	Return on Equity
Florida Gas Transmission Company, LLC	10/09	Florida Gas Transmission Company, LLC	Docket No. RP10-21-000	Return on Equity
Maritimes and Northeast Pipeline, LLC	07/09	Maritimes and Northeast Pipeline, LLC	Docket No. RP09-809-000	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Spectra Energy	02/08	Saltville Gas Storage	Docket No. RP08-257-000	Return on Equity
Panhandle Energy Pipelines	08/07	Panhandle Energy Pipelines	Docket No. PL07-2-000	Response to draft policy statement regarding inclusion of MLPs in proxy groups for determination of gas pipeline ROEs
Southwest Gas Storage Company	08/07	Southwest Gas Storage Company	Docket No. RP07-541-000	Return on Equity
Southwest Gas Storage Company	06/07	Southwest Gas Storage Company	Docket No. RP07-34-000	Return on Equity
Sea Robin Pipeline LLC	06/07	Sea Robin Pipeline LLC	Docket No. RP07-513-000	Return on Equity
Transwestern Pipeline Company	09/06	Transwestern Pipeline Company	Docket No. RP06-614-000	Return on Equity
GPU International and Aquila	11/00	GPU International	Docket No. EC01-24-000	Market Power Study
<b>Georgia Public Service Commission</b>				
Atlanta Gas Light Company	05/10	Atlanta Gas Light Company	Docket No. 31647-U	Return on Equity
<b>Illinois Commerce Commission</b>				
Ameren Illinois Company d/b/a Ameren Illinois	02/11	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 11-0279	Return on Equity (electric)
Ameren Illinois Company d/b/a Ameren Illinois	02/11	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 11-0282	Return on Equity (gas)
<b>Maine Public Utilities Commission</b>				
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
<b>Maryland Public Service Commission</b>				
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
<b>Massachusetts Department of Public Utilities</b>				
National Grid	08/09	Massachusetts Electric Company d/b/a National Grid	DPU 09-39	Revenue Decoupling and Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
National Grid	08/09	Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid	DPU 09-38	Return on Equity – Solar Generation
Bay State Gas Company	04/09	Bay State Gas Company	DTE 09-30	Return on Equity
NSTAR Electric	09/04	NSTAR Electric	DTE 04-85	Divestiture of Power Purchase Agreement
NSTAR Electric	08/04	NSTAR Electric	DTE 04-78	Divestiture of Power Purchase Agreement
NSTAR Electric	07/04	NSTAR Electric	DTE 04-68	Divestiture of Power Purchase Agreement
NSTAR Electric	07/04	NSTAR Electric	DTE 04-61	Divestiture of Power Purchase Agreement
NSTAR Electric	06/04	NSTAR Electric	DTE 04-60	Divestiture of Power Purchase Agreement
Unitil Corporation	01/04	Fitchburg Gas and Electric	DTE 03-52	Integrated Resource Plan; Gas Demand Forecast
<b>Minnesota Public Utilities Commission</b>				
Otter Tail Power Corporation	04/10	Otter Tail Power Company	Docket No. E-017/GR-10-239	Return on Equity
Minnesota Power a division of ALLETE, Inc.	11/09	Minnesota Power	Docket No. E-015/GR-09-1151	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas	11/08	CenterPoint Energy Minnesota Gas	Docket No. G-008/GR-08-1075	Return on Equity
Otter Tail Power Corporation	10/07	Otter Tail Power Company	Docket No. E-017/GR-07-1178	Return on Equity
Xcel Energy, Inc.	11/05	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)
<b>Mississippi Public Service Commission</b>				
CenterPoint Energy Resources, Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Mississippi Gas	07/09	CenterPoint Energy Mississippi Gas	Docket No. 09-UN-334	Return on Equity
<b>Missouri Public Service Commission</b>				
Union Electric Company d/b/a Ameren Missouri	02/12	Union Electric Company d/b/a Ameren Missouri	Case No. ER-2012-0166	Return on Equity (electric)
Union Electric Company d/b/a AmerenUE	09/10	Union Electric Company d/b/a AmerenUE	Case No. ER-2011-0028	Return on Equity (electric)
Union Electric Company d/b/a AmerenUE	06/10	Union Electric Company d/b/a AmerenUE	Case No. GR-2010-0363	Return on Equity (gas)

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
<b>Nevada Public Utilities Commission</b>				
Southwest Gas Corporation	04/12	Southwest Gas Corporation		Return on Equity (gas)
Nevada Power Company	06/11	Nevada Power Company	Docket No. 11-06006	Return on Equity (electric)
<b>New Hampshire Public Utilities Commission</b>				
EnergyNorth Natural Gas d/b/a National Grid NH	02/10	EnergyNorth Natural Gas d/b/a National Grid NH	Docket No. DG 10-017	Return on Equity
Unitil Energy Systems, Inc. (“Unitil”), EnergyNorth Natural Gas, Inc. d/b/a National Grid NH, Granite State Electric Company d/b/a National Grid, and Northern Utilities, Inc. – New Hampshire Division	08/08	Unitil Energy Systems, Inc. (“Unitil”), EnergyNorth Natural Gas, Inc. d/b/a National Grid NH, Granite State Electric Company d/b/a National Grid, and Northern Utilities, Inc. – New Hampshire Division	Docket No. DG 07-072	Carrying Charge Rate on Cash Working Capital
<b>New Jersey Board of Public Utilities</b>				
Atlantic City Electric Company	08/11	Atlantic City Electric Company	Docket No. ER11080469	Return on Equity
Pepco Holdings, Inc.	09/06	Atlantic City Electric Company	Docket No. EMO6090638	Divestiture and Valuation of Electric Generating Assets
Pepco Holdings, Inc.	12/05	Atlantic City Electric Company	Docket No. EM05121058	Market Value of Electric Generation Assets; Auction
Conectiv	06/03	Atlantic City Electric Company	Docket No. EO03020091	Market Value of Electric Generation Assets; Auction Process
<b>New Mexico Public Regulation Commission</b>				
Southwestern Public Service Company	02/11	Southwestern Public Service Company	Case No. 10-00395-UT	Return on Equity (electric)
Public Service Company of New Mexico	06/10	Public Service Company of New Mexico	Case No. 10-00086-UT	Return on Equity (electric)
Public Service Company of New Mexico	09/08	Public Service Company of New Mexico	Case No. 08-00273-UT	Return on Equity (electric)
Xcel Energy, Inc.	07/07	Southwestern Public Service Company	Case No. 07-00319-UT	Return on Equity (electric)
<b>New York State Public Service Commission</b>				
Orange and Rockland Utilities, Inc.	07/11	Orange and Rockland Utilities, Inc.	Case No. 11-E-0408	Return on Equity (electric)
Orange and Rockland Utilities, Inc.	07/10	Orange and Rockland Utilities, Inc.	Case No. 10-E-0362	Return on Equity (electric)
Consolidated Edison Company of New York, Inc.	11/09	Consolidated Edison Company of New York, Inc.	Case No. 09-G-0795	Return on Equity (gas)

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Consolidated Edison Company of New York, Inc.	11/09	Consolidated Edison Company of New York, Inc.	Case No. 09-S-0794	Return on Equity (steam)
Niagara Mohawk Power Corporation	07/01	Niagara Mohawk Power Corporation	Case No. 01-E-1046	Power Purchase and Sale Agreement; Standard Offer Service Agreement
<b>North Carolina Utilities Commission</b>				
Dominion North Carolina Power	03/12	Dominion Resources	Docket No. E-22, Sub 479	Return on Equity (electric)
Duke Energy Carolinas, LLC	07/11	Duke Energy Carolinas, LLC	Docket No. E-7, Sub 989	Return on Equity (electric)
<b>North Dakota Public Service Commission</b>				
Otter Tail Power Company	11/08	Otter Tail Power Company	Docket No. 08-862	Return on Equity (electric)
<b>Oklahoma Corporation Commission</b>				
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
<b>Rhode Island Public Utilities Commission</b>				
National Grid RI – Gas	08/08	National Grid RI – Gas	Docket No. 3943	Revenue Decoupling and Return on Equity
<b>South Carolina Public Service Commission</b>				
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
<b>South Dakota Public Utilities Commission</b>				
Otter Tail Power Company	08/10	Otter Tail Power Company	Docket No. EL10-011	Return on Equity (electric)
Northern States Power Company	06/09	South Dakota Division of Northern States Power	Docket No. EL09-009	Return on Equity (electric)
Otter Tail Power Company	10/08	Otter Tail Power Company	Docket No. EL08-030	Return on Equity (electric)
<b>Texas Public Utility Commission</b>				
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Xcel Energy, Inc.	05/10	Southwestern Public Service Company	Docket No. 38147	Return on Equity (electric)
Texas-New Mexico Power Company	08/08	Texas-New Mexico Power Company	Docket No. 36025	Return on Equity (electric)
Xcel Energy, Inc.	05/06	Southwestern Public Service Company	Docket No. 32766	Return on Equity (electric)
<b>Texas Railroad Commission</b>				
Centerpoint Energy Resources Corp. d/b/a Centerpoint Energy Entex and Centerpoint Energy Texas Gas	12/10	Centerpoint Energy Resources Corp. d/b/a Centerpoint Energy Entex and Centerpoint Energy Texas Gas	GUD 10038	Return on Equity
Atmos Pipeline - Texas	09/10	Atmos Pipeline - Texas	GUD 10000	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	07/09	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	GUD 9902	Return on Equity
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
<b>Utah Public Service Commission</b>				
Questar Gas Company	12/07	Questar Gas Company	Docket No. 07-057-13	Return on Equity
<b>Vermont Public Service Board</b>				
Central Vermont Public Service Corporation; Green Mountain Power	2/12	Central Vermont Public Service Corporation; Green Mountain Power	Docket No. 7770	Merger Policy
Central Vermont Public Service Corporation	12/10	Central Vermont Public Service Corporation	Docket No. 7627	Return on Equity (electric)
Green Mountain Power	04/06	Green Mountain Power	Docket Nos. 7175 and 7176	Return on Equity (electric)
Vermont Gas Systems, Inc.	12/05	Vermont Gas Systems	Docket Nos. 7109 and 7160	Return on Equity (gas)
<b>Virginia State Corporation Commission</b>				
Columbia Gas Of Virginia, Inc.	06/06	Columbia Gas Of Virginia, Inc.	Case No. PUE-2005-00098	Merger Synergies
Dominion Resources	10/01	Virginia Electric and Power Company	Case No. PUE000584	Corporate Structure and Electric Generation Strategy



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Schedule RBH-1

Constant Growth DCF

ELECTRIC PROXY GROUP - 30-DAY CONSTANT GROWTH DCF

Company	Ticker	[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] First Call Earnings Growth	[6] Zacks Earnings Growth	[7] Value Line Earnings Growth	[8] Average Earnings Growth	[9] Low ROE	[10] Mean ROE	[11] High ROE
American Electric Power	AEP	\$1.88	\$38.83	4.84%	4.94%	4.01%	4.30%	4.50%	4.27%	8.95%	9.21%	9.45%
Cleco Corp.	CNL	\$1.25	\$39.11	3.20%	3.27%	3.00%	NA	6.00%	4.50%	6.24%	7.77%	9.29%
Edison International	EIX	\$1.30	\$42.03	3.09%	3.12%	0.50%	5.00%	0.50%	2.00%	3.60%	5.12%	8.17%
First Energy Corp.	FE	\$2.20	\$43.90	5.01%	5.06%	3.77%	1.00%	0.50%	1.76%	5.52%	6.81%	8.88%
Great Plains Energy Inc.	GXP	\$0.85	\$20.33	4.18%	4.30%	4.40%	7.00%	6.00%	5.80%	8.67%	10.10%	11.33%
Hawaiian Electric	HE	\$1.24	\$25.56	4.85%	5.09%	11.37%	6.50%	11.00%	9.62%	11.51%	14.71%	16.50%
IDACORP, Inc.	IDA	\$1.32	\$41.19	3.21%	3.27%	4.00%	5.00%	4.00%	4.33%	7.27%	7.61%	8.29%
Integrus/WPS Resources	TEG	\$2.72	\$53.29	5.10%	5.34%	13.90%	4.50%	9.00%	9.13%	9.72%	14.47%	19.36%
Otter Tail Corp.	OTTR	\$1.19	\$21.72	5.48%	5.69%	5.00%	5.00%	13.00%	7.67%	10.62%	13.35%	18.83%
Pepco Holdings, Inc.	POM	\$1.08	\$19.67	5.49%	5.58%	3.70%	4.00%	2.50%	3.40%	8.06%	8.98%	9.60%
Pinnacle West Capital	PNW	\$2.10	\$47.36	4.43%	4.56%	5.59%	5.30%	6.00%	5.63%	9.85%	10.19%	10.57%
Portland General	POR	\$1.06	\$24.96	4.25%	4.37%	5.27%	5.00%	7.50%	5.92%	9.35%	10.30%	11.91%
Southern Co.	SO	\$1.89	\$44.52	4.24%	4.36%	5.85%	5.00%	5.00%	5.28%	9.35%	9.64%	10.22%
Westar Energy	WR	\$1.32	\$27.99	4.72%	4.86%	4.23%	5.50%	8.50%	6.08%	9.05%	10.94%	13.42%
Mean				4.44%	4.56%	5.33%	4.85%	6.00%	5.39%	8.41%	9.94%	11.84%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 30-day average as of March 16, 2012
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [8])
- [5] Source: Yahoo! Finance
- [6] Source: Zacks
- [7] Source: Value Line
- [8] Equals Average([5], [6], [7])
- [9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

ELECTRIC PROXY GROUP - 90-DAY CONSTANT GROWTH DCF

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	First Call Earnings Growth	Zacks Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power	AEP	\$1.88	\$39.55	4.75%	4.86%	4.01%	4.30%	4.50%	4.27%	8.86%	9.13%	9.36%
Cleco Corp.	CNL	\$1.25	\$37.48	3.34%	3.41%	3.00%	NA	6.00%	4.50%	6.39%	7.91%	9.44%
Edison International	EIX	\$1.30	\$40.70	3.19%	3.23%	0.50%	5.00%	0.50%	2.00%	3.70%	5.23%	8.27%
First Energy Corp.	FE	\$2.20	\$43.63	5.04%	5.09%	3.77%	1.00%	0.50%	1.76%	5.56%	6.84%	8.91%
Great Plains Energy Inc.	GXP	\$0.85	\$20.81	4.08%	4.20%	4.40%	7.00%	6.00%	5.80%	8.57%	10.00%	11.23%
Hawaiian Electric	HE	\$1.24	\$25.73	4.82%	5.05%	11.37%	6.50%	11.00%	9.62%	11.48%	14.67%	16.46%
IDACORP, Inc.	IDA	\$1.32	\$41.15	3.21%	3.28%	4.00%	5.00%	4.00%	4.33%	7.27%	7.61%	8.29%
Integrus/WPS Resources	TEG	\$2.72	\$52.33	5.20%	5.44%	13.90%	4.50%	9.00%	9.13%	9.82%	14.57%	19.46%
Otter Tail Corp.	OTTR	\$1.19	\$21.53	5.53%	5.74%	5.00%	5.00%	13.00%	7.67%	10.66%	13.41%	18.89%
Pepco Holdings, Inc.	POM	\$1.08	\$19.69	5.48%	5.58%	3.70%	4.00%	2.50%	3.40%	8.05%	8.98%	9.59%
Pinnacle West Capital	PNW	\$2.10	\$47.09	4.46%	4.59%	5.59%	5.30%	6.00%	5.63%	9.88%	10.22%	10.59%
Portland General	POR	\$1.06	\$24.79	4.28%	4.40%	5.27%	5.00%	7.50%	5.92%	9.38%	10.33%	11.94%
Southern Co.	SO	\$1.89	\$44.52	4.24%	4.36%	5.85%	5.00%	5.00%	5.28%	9.35%	9.64%	10.22%
Westar Energy	WR	\$1.32	\$27.83	4.74%	4.89%	4.23%	5.50%	8.50%	6.08%	9.07%	10.96%	13.45%
Mean				4.45%	4.58%	5.33%	4.85%	6.00%	5.39%	8.43%	9.96%	11.86%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 90-day average as of March 16, 2012
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [8])
- [5] Source: Yahoo! Finance
- [6] Source: Zacks
- [7] Source: Value Line
- [8] Equals Average([5], [6], [7])
- [9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

ELECTRIC PROXY GROUP - 180-DAY CONSTANT GROWTH DCF

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	First Call Earnings Growth	Zacks Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power	AEP	\$1.88	\$38.66	4.86%	4.97%	4.01%	4.30%	4.50%	4.27%	8.97%	9.24%	9.47%
Cleco Corp.	CNL	\$1.25	\$36.14	3.46%	3.54%	3.00%	NA	6.00%	4.50%	6.51%	8.04%	9.56%
Edison International	EIX	\$1.30	\$39.16	3.32%	3.35%	0.50%	5.00%	0.50%	2.00%	3.83%	5.35%	8.40%
First Energy Corp.	FE	\$2.20	\$43.79	5.02%	5.07%	3.77%	1.00%	0.50%	1.76%	5.54%	6.83%	8.89%
Great Plains Energy Inc.	GXP	\$0.85	\$20.28	4.19%	4.31%	4.40%	7.00%	6.00%	5.80%	8.68%	10.11%	11.34%
Hawaiian Electric	HE	\$1.24	\$24.90	4.98%	5.22%	11.37%	6.50%	11.00%	9.62%	11.64%	14.84%	16.63%
IDACORP, Inc.	IDA	\$1.32	\$39.83	3.31%	3.39%	4.00%	5.00%	4.00%	4.33%	7.38%	7.72%	8.40%
Integrus/WPS Resources	TEG	\$2.72	\$51.06	5.33%	5.57%	13.90%	4.50%	9.00%	9.13%	9.95%	14.70%	19.60%
Otter Tail Corp.	OTTR	\$1.19	\$20.83	5.71%	5.93%	5.00%	5.00%	13.00%	7.67%	10.86%	13.60%	19.08%
Pepco Holdings, Inc.	POM	\$1.08	\$19.37	5.58%	5.67%	3.70%	4.00%	2.50%	3.40%	8.15%	9.07%	9.69%
Pinnacle West Capital	PNW	\$2.10	\$45.28	4.64%	4.77%	5.59%	5.30%	6.00%	5.63%	10.06%	10.40%	10.78%
Portland General	POR	\$1.06	\$24.48	4.33%	4.46%	5.27%	5.00%	7.50%	5.92%	9.44%	10.38%	11.99%
Southern Co.	SO	\$1.89	\$42.92	4.40%	4.52%	5.85%	5.00%	5.00%	5.28%	9.51%	9.80%	10.38%
Westar Energy	WR	\$1.32	\$27.02	4.89%	5.03%	4.23%	5.50%	8.50%	6.08%	9.22%	11.11%	13.59%
Mean				4.57%	4.70%	5.33%	4.85%	6.00%	5.39%	8.55%	10.09%	11.99%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 180-day average as of March 16, 2012
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [8])
- [5] Source: Yahoo! Finance
- [6] Source: Zacks
- [7] Source: Value Line
- [8] Equals Average([5], [6], [7])
- [9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

GAS PROXY GROUP - 30-DAY CONSTANT GROWTH DCF

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	First Call Earnings Growth	Zacks Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
Atmos Energy	ATO	\$1.38	\$31.51	4.38%	4.47%	3.53%	4.70%	4.00%	4.08%	7.99%	8.55%	9.18%
Laclede Group	LG	\$1.66	\$41.46	4.00%	4.07%	5.30%	3.00%	2.00%	3.43%	6.04%	7.51%	9.41%
New Jersey Resources	NJR	\$1.52	\$46.87	3.24%	3.31%	2.33%	4.50%	5.50%	4.11%	5.61%	7.42%	8.83%
Northwest Nat. Gas	NWN	\$1.78	\$47.13	3.78%	3.85%	3.25%	4.30%	4.00%	3.85%	7.09%	7.70%	8.16%
Piedmont Natural Gas	PNY	\$1.20	\$32.87	3.65%	3.72%	4.55%	4.70%	2.50%	3.92%	6.20%	7.64%	8.44%
South Jersey Industries	SJI	\$1.61	\$53.19	3.03%	3.15%	8.50%	6.00%	9.00%	7.83%	9.12%	10.98%	12.16%
Southwest Gas	SWX	\$1.18	\$42.65	2.77%	2.84%	2.15%	5.30%	9.50%	5.65%	4.95%	8.49%	12.40%
WGL Holdings Inc.	WGL	\$1.60	\$41.43	3.86%	3.94%	4.50%	5.20%	3.00%	4.23%	6.92%	8.18%	9.16%
Mean				3.59%	3.67%	4.26%	4.71%	4.94%	4.64%	6.74%	8.31%	9.72%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 30-day average as of March 16, 2012
- [3] Equals [1] / [2]
- [4] Equals  $[3] \times (1 + 0.5 \times [8])$
- [5] Source: Yahoo! Finance
- [6] Source: Zacks
- [7] Source: Value Line
- [8] Equals Average([5], [6], [7])
- [9] Equals  $[3] \times (1 + 0.5 \times \text{Minimum}([5], [6], [7])) + \text{Minimum}([5], [6], [7])$
- [10] Equals  $[4] + [8]$
- [11] Equals  $[3] \times (1 + 0.5 \times \text{Maximum}([5], [6], [7])) + \text{Maximum}([5], [6], [7])$

GAS PROXY GROUP - 90-DAY CONSTANT GROWTH DCF

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	First Call Earnings Growth	Zacks Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
Atmos Energy	ATO	\$1.38	\$32.60	4.23%	4.32%	3.53%	4.70%	4.00%	4.08%	7.84%	8.40%	9.03%
Laclede Group	LG	\$1.66	\$40.67	4.08%	4.15%	5.30%	3.00%	2.00%	3.43%	6.12%	7.59%	9.49%
New Jersey Resources	NJR	\$1.52	\$47.43	3.21%	3.27%	2.33%	4.50%	5.50%	4.11%	5.57%	7.38%	8.79%
Northwest Nat. Gas	NWN	\$1.78	\$47.03	3.78%	3.86%	3.25%	4.30%	4.00%	3.85%	7.10%	7.71%	8.17%
Piedmont Natural Gas	PNY	\$1.20	\$32.77	3.66%	3.73%	4.55%	4.70%	2.50%	3.92%	6.21%	7.65%	8.45%
South Jersey Industries	SJI	\$1.61	\$54.52	2.95%	3.07%	8.50%	6.00%	9.00%	7.83%	9.04%	10.90%	12.09%
Southwest Gas	SWX	\$1.18	\$41.27	2.86%	2.94%	2.15%	5.30%	9.50%	5.65%	5.04%	8.59%	12.50%
WGL Holdings Inc.	WGL	\$1.60	\$42.35	3.78%	3.86%	4.50%	5.20%	3.00%	4.23%	6.83%	8.09%	9.08%
Mean				3.57%	3.65%	4.26%	4.71%	4.94%	4.64%	6.72%	8.29%	9.70%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 90-day average as of March 16, 2012
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [8])
- [5] Source: Yahoo! Finance
- [6] Source: Zacks
- [7] Source: Value Line
- [8] Equals Average([5], [6], [7])
- [9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

GAS PROXY GROUP - 180-DAY CONSTANT GROWTH DCF

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	First Call Earnings Growth	Zacks Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
Atmos Energy	ATO	\$1.38	\$32.80	4.21%	4.29%	3.53%	4.70%	4.00%	4.08%	7.81%	8.37%	9.01%
Laclede Group	LG	\$1.66	\$39.48	4.20%	4.28%	5.30%	3.00%	2.00%	3.43%	6.25%	7.71%	9.62%
New Jersey Resources	NJR	\$1.52	\$46.16	3.29%	3.36%	2.33%	4.50%	5.50%	4.11%	5.66%	7.47%	8.88%
Northwest Nat. Gas	NWN	\$1.78	\$45.89	3.88%	3.95%	3.25%	4.30%	4.00%	3.85%	7.19%	7.80%	8.26%
Piedmont Natural Gas	PNY	\$1.20	\$31.36	3.83%	3.90%	4.55%	4.70%	2.50%	3.92%	6.37%	7.82%	8.62%
South Jersey Industries	SJI	\$1.61	\$52.96	3.04%	3.16%	8.50%	6.00%	9.00%	7.83%	9.13%	10.99%	12.18%
Southwest Gas	SWX	\$1.18	\$39.20	3.01%	3.10%	2.15%	5.30%	9.50%	5.65%	5.19%	8.75%	12.65%
WGL Holdings Inc.	WGL	\$1.60	\$41.08	3.90%	3.98%	4.50%	5.20%	3.00%	4.23%	6.95%	8.21%	9.20%
Mean				3.67%	3.75%	4.26%	4.71%	4.94%	4.64%	6.82%	8.39%	9.80%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 180-day average as of March 16, 2012
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [8])
- [5] Source: Yahoo! Finance
- [6] Source: Zacks
- [7] Source: Value Line
- [8] Equals Average([5], [6], [7])
- [9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

WEIGHTED AVERAGE ELECTRIC AND GAS PROXY GROUPS CONSTANT GROWTH DCF RESULTS

	Low ROE	Mean ROE	High ROE
30-DAY	7.96%	9.50%	11.27%
90-DAY	7.97%	9.51%	11.28%
180-DAY	8.08%	9.63%	11.40%

COMBINATION PROXY GROUP - 30-DAY CONSTANT GROWTH DCF

Company	Ticker	[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] First Call Earnings Growth	[6] Zacks Earnings Growth	[7] Value Line Earnings Growth	[8] Average Earnings Growth	[9] Low ROE	[10] Mean ROE	[11] High ROE
ALLETE	ALE	\$1.84	\$41.60	4.42%	4.54%	5.00%	5.00%	6.00%	5.33%	9.53%	9.87%	10.56%
Alliant Energy Corp.	LNT	\$1.80	\$43.02	4.18%	4.30%	4.75%	6.00%	6.50%	5.75%	9.03%	10.05%	10.82%
Ameren Corp.	AEE	\$1.60	\$31.79	5.03%	5.13%	NA	4.00%	NA	4.00%	9.13%	9.13%	9.13%
Avista Corp.	AVA	\$1.16	\$25.33	4.58%	4.68%	4.00%	4.70%	4.50%	4.40%	8.67%	9.08%	9.39%
Black Hills Corp.	BKH	\$1.48	\$33.92	4.36%	4.50%	6.00%	5.00%	8.50%	6.50%	9.47%	11.00%	13.05%
Center Point Energy	CNP	\$0.81	\$19.03	4.26%	4.35%	4.90%	3.70%	3.00%	4.53%	7.32%	8.89%	10.08%
Consolidated Edison	ED	\$2.42	\$58.41	4.14%	4.21%	3.59%	3.70%	3.00%	3.43%	7.21%	7.64%	7.92%
Dominion Resources, Inc.	D	\$2.11	\$50.55	4.17%	4.28%	4.72%	5.50%	5.00%	5.07%	8.99%	9.35%	9.79%
DTE Energy Co.	DTE	\$2.35	\$54.42	4.32%	4.41%	4.05%	4.40%	4.50%	4.32%	8.46%	8.73%	8.92%
Integrus Energy Group, Inc.	TEG	\$2.72	\$53.29	5.10%	5.34%	13.90%	4.50%	9.00%	9.13%	9.72%	14.47%	19.36%
Pepco Holdings, Inc.	POM	\$1.08	\$19.67	5.49%	5.58%	3.70%	4.00%	2.50%	3.40%	8.06%	8.98%	9.60%
PG&E Corp	PCG	\$1.82	\$42.03	4.33%	4.40%	1.03%	4.30%	5.00%	3.44%	5.38%	7.85%	9.44%
SCANA Corp.	SCG	\$1.98	\$45.04	4.40%	4.48%	4.17%	4.00%	3.50%	3.89%	7.97%	8.37%	8.66%
Sempra Energy	SRE	\$2.40	\$58.41	4.11%	4.24%	7.05%	7.00%	4.50%	6.18%	8.70%	10.42%	11.30%
TECO Energy, Inc.	TE	\$0.88	\$17.91	4.91%	5.05%	4.22%	3.70%	9.00%	5.64%	8.70%	10.69%	14.14%
UIL Holdings Corp.	UIL	\$1.73	\$35.12	4.92%	5.02%	4.10%	5.00%	3.00%	4.03%	7.99%	9.05%	10.04%
Veetren Corp.	VVC	\$1.40	\$29.30	4.78%	4.90%	5.00%	4.30%	5.50%	4.93%	9.18%	9.83%	10.41%
Wisconsin Energy	WEC	\$1.20	\$34.48	3.48%	3.60%	6.00%	6.30%	8.50%	6.93%	9.59%	10.53%	12.13%
Xcel Energy, Inc.	XEL	\$1.04	\$26.49	3.93%	4.03%	5.25%	5.10%	5.00%	5.12%	9.02%	9.14%	9.28%
Mean				4.47%	4.58%	5.08%	4.85%	5.36%	5.05%	8.53%	9.64%	10.74%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 30-day average as of March 16, 2012
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [8])
- [5] Source: Yahoo! Finance
- [6] Source: Zacks
- [7] Source: Value Line
- [8] Equals Average([5], [6], [7])
- [9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

COMBINATION PROXY GROUP - 90-DAY CONSTANT GROWTH DCF

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	First Call Earnings Growth	Zacks Earnings Growth	Value Line Earnings Growth	Average Earnings Growth	Low ROE	Mean ROE	High ROE
ALLETE	ALE	\$1.84	\$40.65	4.53%	4.65%	5.00%	5.00%	6.00%	5.33%	9.64%	9.98%	10.66%
Alliant Energy Corp.	LNT	\$1.80	\$42.62	4.22%	4.35%	4.75%	6.00%	6.50%	5.75%	9.07%	10.10%	10.86%
Ameren Corp.	AEE	\$1.60	\$32.11	4.98%	5.08%	NA	4.00%	NA	4.00%	9.08%	9.08%	9.08%
Avista Corp.	AVA	\$1.16	\$25.18	4.61%	4.71%	4.00%	4.70%	4.50%	4.40%	8.70%	9.11%	9.42%
Black Hills Corp.	BKH	\$1.48	\$33.32	4.44%	4.59%	6.00%	5.00%	8.50%	6.50%	9.55%	11.09%	13.13%
Center Point Energy	CNP	\$0.81	\$19.24	4.21%	4.31%	4.90%	3.70%	3.00%	4.53%	7.27%	8.84%	10.03%
Consolidated Edison	ED	\$2.42	\$58.96	4.10%	4.17%	3.59%	3.70%	3.00%	3.43%	7.17%	7.60%	7.88%
Dominion Resources, Inc.	D	\$2.11	\$50.92	4.14%	4.25%	4.72%	5.50%	5.00%	5.07%	8.96%	9.32%	9.76%
DTE Energy Co.	DTE	\$2.35	\$32.25	4.41%	4.51%	4.05%	4.40%	4.50%	4.32%	8.55%	8.83%	9.01%
Integrus Energy Group, Inc.	TEG	\$2.72	\$52.33	5.20%	5.44%	13.90%	4.50%	9.00%	9.13%	9.82%	14.57%	19.46%
Pepco Holdings, Inc.	POM	\$1.08	\$19.69	5.48%	5.58%	3.70%	4.00%	2.50%	3.40%	8.05%	8.98%	9.59%
PG&E Corp	PCG	\$1.82	\$40.64	4.48%	4.56%	1.03%	4.30%	5.00%	3.44%	5.53%	8.00%	9.59%
SCANA Corp.	SCG	\$1.98	\$44.05	4.49%	4.58%	4.17%	4.00%	3.50%	3.89%	8.07%	8.47%	8.76%
Sempra Energy	SRE	\$2.40	\$55.61	4.32%	4.45%	7.05%	7.00%	4.50%	6.18%	8.91%	10.63%	11.52%
TECO Energy, Inc.	TE	\$0.88	\$18.31	4.81%	4.94%	4.22%	3.70%	9.00%	5.64%	8.60%	10.58%	14.02%
UJL Holdings Corp.	UJL	\$1.73	\$34.58	5.00%	5.10%	4.10%	5.00%	3.00%	4.03%	8.07%	9.13%	10.12%
Veetren Corp.	VVC	\$1.40	\$29.08	4.81%	4.93%	5.00%	4.30%	5.50%	4.93%	9.22%	9.87%	10.45%
Wisconsin Energy	WEC	\$1.20	\$33.88	3.54%	3.67%	6.00%	6.30%	8.50%	6.93%	9.65%	10.60%	12.19%
Xcel Energy, Inc.	XEL	\$1.04	\$26.47	3.93%	4.03%	5.25%	5.10%	5.00%	5.12%	9.03%	9.15%	9.28%
Mean				4.51%	4.63%	5.08%	4.85%	5.36%	5.05%	8.58%	9.68%	10.78%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 90-day average as of March 16, 2012
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [8])
- [5] Source: Yahoo! Finance
- [6] Source: Zacks
- [7] Source: Value Line
- [8] Equals Average([5], [6], [7])
- [9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

COMBINATION PROXY GROUP - 180-DAY CONSTANT GROWTH DCF

Company	Ticker	[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] First Call Earnings Growth	[6] Zacks Earnings Growth	[7] Value Line Earnings Growth	[8] Average Earnings Growth	[9] Low ROE	[10] Mean ROE	[11] High ROE
ALLETE	ALE	\$1.84	\$39.71	4.63%	4.76%	5.00%	5.00%	6.00%	5.33%	9.75%	10.09%	10.77%
Alliant Energy Corp.	LNT	\$1.80	\$41.12	4.38%	4.50%	4.75%	6.00%	6.50%	5.75%	9.23%	10.25%	11.02%
Ameren Corp.	AEE	\$1.60	\$30.82	5.19%	5.29%	NA	4.00%	NA	4.00%	9.29%	9.29%	9.29%
Avista Corp.	AVA	\$1.16	\$24.92	4.65%	4.76%	4.00%	4.70%	4.50%	4.40%	8.75%	9.16%	9.46%
Black Hills Corp.	BKH	\$1.48	\$32.01	4.62%	4.77%	6.00%	5.00%	8.50%	6.50%	9.74%	11.27%	13.32%
Center Point Energy	CNP	\$0.81	\$19.48	4.16%	4.25%	4.90%	5.70%	3.00%	4.53%	7.22%	8.79%	9.98%
Consolidated Edison	ED	\$2.42	\$57.24	4.23%	4.30%	3.59%	3.70%	3.00%	3.43%	7.29%	7.73%	8.01%
Dominion Resources, Inc.	D	\$2.11	\$50.14	4.21%	4.31%	4.72%	5.50%	5.00%	5.07%	9.03%	9.39%	9.82%
DTE Energy Co.	DTE	\$2.35	\$51.48	4.56%	4.66%	4.05%	4.40%	4.50%	4.32%	8.71%	8.98%	9.17%
Integrus Energy Group, Inc.	TEG	\$2.72	\$51.06	5.33%	5.57%	13.90%	4.50%	9.00%	9.13%	9.95%	14.70%	19.60%
Pepco Holdings, Inc.	POM	\$1.08	\$19.37	5.58%	5.67%	3.70%	4.00%	2.50%	3.40%	8.15%	9.07%	9.69%
PG&E Corp	PCG	\$1.82	\$41.26	4.41%	4.49%	1.03%	4.30%	5.00%	3.44%	5.46%	7.93%	9.52%
SCANA Corp.	SCG	\$1.98	\$41.94	4.72%	4.81%	4.17%	4.00%	3.50%	3.89%	8.30%	8.70%	8.99%
Sempra Energy	SRE	\$2.40	\$53.51	4.49%	4.62%	7.05%	7.00%	4.50%	6.18%	9.09%	10.81%	11.69%
TECO Energy, Inc.	TE	\$0.88	\$18.15	4.85%	4.98%	4.22%	3.70%	9.00%	5.64%	8.64%	10.62%	14.07%
UJL Holdings Corp.	UJL	\$1.73	\$33.64	5.14%	5.24%	4.10%	5.00%	3.00%	4.03%	8.21%	9.27%	10.26%
Veetren Corp.	VVC	\$1.40	\$28.14	4.98%	5.10%	5.00%	4.30%	5.50%	4.93%	9.38%	10.03%	10.61%
Wisconsin Energy	WEC	\$1.20	\$32.56	3.69%	3.81%	6.00%	6.30%	8.50%	6.93%	9.80%	10.75%	12.34%
Xcel Energy, Inc.	XEL	\$1.04	\$25.44	4.09%	4.19%	5.25%	5.10%	5.00%	5.12%	9.19%	9.31%	9.45%
Mean				4.63%	4.74%	5.08%	4.85%	5.36%	5.05%	8.69%	9.80%	10.90%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 180-day average as of March 16, 2012
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [8])
- [5] Source: Yahoo! Finance
- [6] Source: Zacks
- [7] Source: Value Line
- [8] Equals Average([5], [6], [7])
- [9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])



Schedule RBH-2

Multi-Stage DCF

WEIGHTED AVERAGE ELECTRIC AND GAS PROXY GROUPS MULTI-STAGE DCF RESULTS

	Low ROE	Mean ROE	High ROE
30-DAY	9.60%	10.32%	11.52%
90-DAY	9.72%	10.34%	11.57%
180-DAY	9.85%	10.46%	11.70%





NATURAL GAS PROXY GROUP – MULTI-STAGE DCF MODEL – 180-DAY AVERAGE PRICE

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Stock Price	EPS Growth	GDP Growth	Payout Ratio	2016	2015	Delta	Solver Cells	Near Term Growth	Intermediate Growth	Long Term Growth
Almos Energy	\$32.80	4.08%	5.77%	59.00%	54.00%	69.81%	\$0.00	10.31%	4.08%	4.92%	5.77%
Laclede Group	\$39.48	3.43%	5.77%	61.00%	58.00%	69.81%	\$0.00	10.41%	3.43%	4.60%	5.77%
New Jersey Resources	\$46.16	4.11%	5.77%	53.00%	54.00%	69.81%	\$0.00	9.39%	4.11%	4.94%	5.77%
Northwest Nat. Gas	\$45.89	3.85%	5.77%	67.00%	68.00%	69.81%	\$0.00	9.19%	3.85%	4.81%	5.77%
Piedmont Natural Gas	\$31.36	3.92%	5.77%	72.00%	72.00%	69.81%	\$0.00	9.22%	3.92%	4.84%	5.77%
South Jersey Industries	\$52.96	7.83%	5.77%	51.00%	51.00%	69.81%	\$0.00	10.24%	7.83%	6.80%	5.77%
Southwest Gas	\$39.20	5.65%	5.77%	44.00%	41.00%	69.81%	\$0.00	10.94%	5.65%	5.71%	5.77%
WGL Holdings Inc.	\$41.08	4.23%	5.77%	64.00%	62.00%	69.81%	\$0.00	9.51%	4.23%	5.00%	5.77%
					55.00%	69.81%		9.79%	4.64%	5.20%	5.77%
								9.78%			
								9.19%			
								10.41%			

Earnings per Share	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]
Company	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
Almos Energy	\$2.26	\$2.35	\$2.45	\$2.55	\$2.65	\$2.76	\$2.88	\$3.01	\$3.16	\$3.33	\$3.51	\$3.71	\$3.93	\$4.15	\$4.39	\$4.64	
Laclede Group	\$2.86	\$2.96	\$3.06	\$3.16	\$3.27	\$3.39	\$3.52	\$3.66	\$3.83	\$4.02	\$4.24	\$4.48	\$4.74	\$5.02	\$5.30	\$5.61	
New Jersey Resources	\$2.58	\$2.69	\$2.80	\$2.91	\$3.03	\$3.16	\$3.29	\$3.45	\$3.62	\$3.81	\$4.02	\$4.25	\$4.49	\$4.75	\$5.02	\$5.31	
Northwest Nat. Gas	\$2.39	\$2.48	\$2.58	\$2.68	\$2.78	\$2.89	\$3.01	\$3.14	\$3.29	\$3.46	\$3.65	\$3.86	\$4.08	\$4.32	\$4.57	\$4.83	
Piedmont Natural Gas	\$1.57	\$1.63	\$1.70	\$1.76	\$1.83	\$1.90	\$1.98	\$2.07	\$2.17	\$2.29	\$2.41	\$2.55	\$2.70	\$2.85	\$3.02	\$3.19	
South Jersey Industries	\$2.89	\$3.12	\$3.36	\$3.62	\$3.91	\$4.21	\$4.53	\$4.85	\$5.18	\$5.52	\$5.85	\$6.19	\$6.55	\$6.93	\$7.33	\$7.75	
Southwest Gas	\$2.43	\$2.57	\$2.71	\$2.87	\$3.03	\$3.20	\$3.38	\$3.57	\$3.78	\$3.99	\$4.22	\$4.47	\$4.72	\$4.99	\$5.28	\$5.59	
WGL Holdings Inc.	\$2.25	\$2.35	\$2.44	\$2.55	\$2.66	\$2.77	\$2.89	\$3.03	\$3.18	\$3.35	\$3.53	\$3.74	\$3.95	\$4.18	\$4.42	\$4.68	

MEAN: 5.77%  
MEDIAN: 4.64%  
MIN: 9.78%  
MAX: 10.41%

NATURAL GAS PROXY GROUP – MULTI-STAGE DCF MODEL – 180-DAY AVERAGE PRICE

Dividend Payout Ratio	[29]	[30]	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]
Company	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Almos Energy	59.00%	57.75%	56.50%	55.25%	54.00%	52.75%	51.50%	50.25%	49.00%	47.75%	46.50%	45.25%	44.00%	42.75%	41.50%
Laclede Group	61.00%	60.25%	59.50%	58.75%	58.00%	57.25%	56.50%	55.75%	55.00%	54.25%	53.50%	52.75%	52.00%	51.25%	50.50%
New Jersey Resources	53.00%	51.75%	50.50%	49.25%	48.00%	46.75%	45.50%	44.25%	43.00%	41.75%	40.50%	39.25%	38.00%	36.75%	35.50%
Northwest Nat. Gas	67.00%	63.75%	60.50%	57.25%	54.00%	50.75%	47.50%	44.25%	41.00%	37.75%	34.50%	31.25%	28.00%	24.75%	21.50%
Piedmont Natural Gas	72.00%	72.00%	72.00%	72.00%	72.00%	72.00%	72.00%	72.00%	72.00%	72.00%	72.00%	72.00%	72.00%	72.00%	72.00%
South Jersey Industries	51.00%	51.00%	51.00%	51.00%	51.00%	51.00%	51.00%	51.00%	51.00%	51.00%	51.00%	51.00%	51.00%	51.00%	51.00%
Southwest Gas	44.00%	43.25%	42.50%	41.75%	41.00%	40.25%	39.50%	38.75%	38.00%	37.25%	36.50%	35.75%	35.00%	34.25%	33.50%
WGL Holdings Inc.	64.00%	63.50%	63.00%	62.50%	62.00%	61.50%	61.00%	60.50%	60.00%	59.50%	59.00%	58.50%	58.00%	57.50%	57.00%

Dividends per Share and Terminal Market Value

Company	[44]	[45]	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	
Almos Energy	\$1.39	\$1.41	\$1.44	\$1.47	\$1.49	\$1.51	\$1.53	\$1.56	\$1.59	\$1.62	\$1.65	\$1.68	\$1.71	\$1.74	\$1.77	\$1.80	\$1.84	
Laclede Group	\$1.80	\$1.84	\$1.88	\$1.92	\$1.96	\$1.99	\$2.03	\$2.07	\$2.11	\$2.15	\$2.19	\$2.23	\$2.27	\$2.31	\$2.35	\$2.39	\$2.43	
New Jersey Resources	\$1.42	\$1.45	\$1.47	\$1.49	\$1.51	\$1.53	\$1.55	\$1.57	\$1.59	\$1.61	\$1.63	\$1.65	\$1.67	\$1.69	\$1.71	\$1.73	\$1.75	
Northwest Nat. Gas	\$1.66	\$1.64	\$1.62	\$1.59	\$1.56	\$1.53	\$1.50	\$1.47	\$1.44	\$1.41	\$1.38	\$1.35	\$1.32	\$1.29	\$1.26	\$1.23	\$1.20	
Piedmont Natural Gas	\$1.17	\$1.22	\$1.27	\$1.32	\$1.37	\$1.42	\$1.47	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.82	\$1.87	\$1.92	\$1.97	
South Jersey Industries	\$1.59	\$1.71	\$1.85	\$1.99	\$2.15	\$2.31	\$2.47	\$2.63	\$2.79	\$2.95	\$3.11	\$3.27	\$3.43	\$3.59	\$3.75	\$3.91	\$4.07	
Southwest Gas	\$1.13	\$1.17	\$1.22	\$1.26	\$1.31	\$1.35	\$1.39	\$1.43	\$1.47	\$1.51	\$1.55	\$1.59	\$1.63	\$1.67	\$1.71	\$1.75	\$1.79	
WGL Holdings Inc.	\$1.50	\$1.55	\$1.61	\$1.66	\$1.72	\$1.77	\$1.83	\$1.88	\$1.94	\$1.99	\$2.05	\$2.11	\$2.17	\$2.23	\$2.29	\$2.35	\$2.41	
																	Terminal PE Ratio	
																		16.26
																		\$75.51
																		\$89.15
																		\$108.25
																		\$104.08
																		\$68.20
																		\$127.88
																		\$16.50
																		\$96.44
																		\$92.18
																		18.49

NATURAL GAS PROXY GROUP – MULTI-STAGE DCF MODEL – 180-DAY AVERAGE PRICE

Investor Cash Flows	[61]	[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	
Company	2,291.2	831.02	810.13	831.04	831.05	831.06	831.07	831.08	831.09	831.20	831.21	831.22	831.23	831.24	831.25	831.26	831.27	
Almos Energy	\$0.00	\$0.00	\$1.39	\$1.41	\$1.44	\$1.47	\$1.49	\$1.51	\$1.53	\$1.56	\$1.59	\$1.62	\$1.65	\$1.68	\$1.71	\$1.74	\$1.77	
Laclede Group	(\$32.80)	\$0.00	\$1.80	\$1.84	\$1.88	\$1.92	\$1.96	\$1.99	\$2.03	\$2.07	\$2.11	\$2.15	\$2.19	\$2.23	\$2.27	\$2.31	\$2.35	
New Jersey Resources	(\$19.48)	\$0.00	\$1.42	\$1.45	\$1.47	\$1.49	\$1.51	\$1.53	\$1.55	\$1.57	\$1.59	\$1.61	\$1.63	\$1.65	\$1.67	\$1.69	\$1.71	
Northwest Nat. Gas	(\$46.16)	\$0.00	\$1.66	\$1.64	\$1.62	\$1.59	\$1.56	\$1.53	\$1.50	\$1.47	\$1.44	\$1.41	\$1.38	\$1.35	\$1.32	\$1.29	\$1.26	
Piedmont Natural Gas	(\$11.36)	\$0.00	\$1.17	\$1.22	\$1.27	\$1.32	\$1.37	\$1.42	\$1.47	\$1.52	\$1.57	\$1.62	\$1.67	\$1.72	\$1.77	\$1.82	\$1.87	
South Jersey Industries	(\$52.96)	\$0.00	\$1.59	\$1.71	\$1.85	\$1.99	\$2.15	\$2.31	\$2.47	\$2.63	\$2.79	\$2.95	\$3.11	\$3.27	\$3.43	\$3.59	\$3.75	
Southwest Gas	(\$39.20)	\$0.00	\$1.13	\$1.17	\$1.22	\$1.26	\$1.31	\$1.35	\$1.39	\$1.43	\$1.47	\$1.51	\$1.55	\$1.59	\$1.63	\$1.67	\$1.71	
WGL Holdings Inc.	(\$41.08)	\$0.00	\$1.50	\$1.55	\$1.61	\$1.66	\$1.72	\$1.77	\$1.83	\$1.88	\$1.94	\$1.99	\$2.05	\$2.11	\$2.17	\$2.23	\$2.29	
																		Terminal Stage Growth
																		1.80%
																		2.14%
																		1.56%
																		-1.60%
																		3.92%
																		7.83%
																		3.80%
																		3.41%
																		2.86%

NATURAL GAS PROXY GROUP MULTI-STAGE DCF NOTES

- [1] Source: Bloomberg Professional; based on 30, 90, or 180-day averaging period
- [2] Source: Exhibit No. \_\_\_(RBH-1); Yahoo! Finance, Zacks & Value Line; equals average earnings growth estimate
- [3] Source: EIA Annual Energy Outlook 2011, 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  $(\text{Column [18]} / \text{Column [13]})^{(1/(2016-2011))} - 1$
- [10] Equals  $(\text{Column [24]} / \text{Column [19]})^{(1/(2021-2016))} - 1$
- [11] Equals  $(\text{Column [28]} / \text{Column [24]})^{(1/(2026-2021))} - 1$
- [12] Blank
- [13] Source: Value Line
- [14] Equals  $\text{Column [13]} \times (1 + \text{Column [2]})$
- [15] Equals  $\text{Column [14]} \times (1 + \text{Column [2]})$
- [16] Equals  $\text{Column [15]} \times (1 + \text{Column [2]})$
- [17] Equals  $\text{Column [16]} \times (1 + \text{Column [2]})$
- [18] Equals  $\text{Column [17]} \times (1 + \text{Column [2]})$
- [19] Equals  $(1 + (\text{Column [2]} + (((\text{Column [3]} - \text{Column [2]}) / (2021 - 2016 + 1)) \times (2017 - 2016)))) \times \text{Column [18]}$
- [20] Equals  $(1 + (\text{Column [2]} + (((\text{Column [3]} - \text{Column [2]}) / (2021 - 2016 + 1)) \times (2018 - 2016)))) \times \text{Column [19]}$
- [21] Equals  $(1 + (\text{Column [2]} + (((\text{Column [3]} - \text{Column [2]}) / (2021 - 2016 + 1)) \times (2019 - 2016)))) \times \text{Column [20]}$
- [22] Equals  $(1 + (\text{Column [2]} + (((\text{Column [3]} - \text{Column [2]}) / (2021 - 2016 + 1)) \times (2020 - 2016)))) \times \text{Column [21]}$
- [23] Equals  $(1 + (\text{Column [2]} + (((\text{Column [3]} - \text{Column [2]}) / (2021 - 2016 + 1)) \times (2021 - 2016)))) \times \text{Column [22]}$
- [24] Equals  $\text{Column [23]} \times (1 + \text{Column [3]})$
- [25] Equals  $\text{Column [24]} \times (1 + \text{Column [3]})$
- [26] Equals  $\text{Column [25]} \times (1 + \text{Column [3]})$
- [27] Equals  $\text{Column [26]} \times (1 + \text{Column [3]})$
- [28] Equals  $\text{Column [27]} \times (1 + \text{Column [3]})$
- [29] Equals  $\text{Column [4]}$
- [30] Equals  $\text{Column [29]} + ((\text{Column [33]} - \text{Column [29]}) / 4)$
- [31] Equals  $\text{Column [30]} + ((\text{Column [33]} - \text{Column [29]}) / 4)$
- [32] Equals  $\text{Column [30]} + ((\text{Column [33]} - \text{Column [29]}) / 4)$
- [33] Equals  $\text{Column [5]}$
- [34] Equals  $\text{Column [33]} + ((\text{Column [39]} - \text{Column [33]}) / 6)$
- [35] Equals  $\text{Column [34]} + ((\text{Column [39]} - \text{Column [33]}) / 6)$
- [36] Equals  $\text{Column [35]} + ((\text{Column [39]} - \text{Column [33]}) / 6)$
- [37] Equals  $\text{Column [36]} + ((\text{Column [39]} - \text{Column [33]}) / 6)$
- [38] Equals  $\text{Column [37]} + ((\text{Column [39]} - \text{Column [33]}) / 6)$
- [39] Equals  $\text{Column [6]}$
- [40] Equals  $\text{Column [6]}$
- [41] Equals  $\text{Column [6]}$
- [42] Equals  $\text{Column [6]}$
- [43] Equals  $\text{Column [6]}$
- [44] Equals  $\text{Column [14]} \times \text{Column [29]}$
- [45] Equals  $\text{Column [15]} \times \text{Column [30]}$
- [46] Equals  $\text{Column [16]} \times \text{Column [31]}$
- [47] Equals  $\text{Column [17]} \times \text{Column [32]}$
- [48] Equals  $\text{Column [18]} \times \text{Column [33]}$
- [49] Equals  $\text{Column [19]} \times \text{Column [34]}$
- [50] Equals  $\text{Column [20]} \times \text{Column [35]}$
- [51] Equals  $\text{Column [21]} \times \text{Column [36]}$
- [52] Equals  $\text{Column [22]} \times \text{Column [37]}$
- [53] Equals  $\text{Column [23]} \times \text{Column [38]}$
- [54] Equals  $\text{Column [24]} \times \text{Column [39]}$
- [55] Equals  $\text{Column [25]} \times \text{Column [40]}$
- [56] Equals  $\text{Column [26]} \times \text{Column [41]}$
- [57] Equals  $\text{Column [27]} \times \text{Column [42]}$
- [58] Equals  $\text{Column [28]} \times \text{Column [43]}$
- [59] Equals  $(\text{Column [58]} \times (1 + \text{Column [3]}) / (\text{Column [8]} - \text{Column [3]})$
- [60] Equals  $\text{Column [59]} / \text{Column [28]}$
- [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  $\text{Column [44]}$
- [64] Equals  $\text{Column [45]}$
- [65] Equals  $\text{Column [46]}$
- [66] Equals  $\text{Column [47]}$
- [67] Equals  $\text{Column [48]}$
- [68] Equals  $\text{Column [49]}$
- [69] Equals  $\text{Column [50]}$
- [70] Equals  $\text{Column [51]}$
- [71] Equals  $\text{Column [52]}$
- [72] Equals  $\text{Column [53]}$
- [73] Equals  $\text{Column [54]}$
- [74] Equals  $\text{Column [55]}$
- [75] Equals  $\text{Column [56]}$
- [76] Equals  $\text{Column [57]}$
- [77] Equals  $\text{Column [58]} + \text{Column [59]}$

ELECTRIC PROXY GROUP – MULTI-STAGE DCF MODEL – 30-DAY AVERAGE PRICE

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	
Company	Ticker	Stock Price	EPS Growth	GDP Growth	2012	2015	2026	Delta	Solver Cells (k)	Near Term Growth	Intermediate Growth	Long Term Growth
American Electric Power	AEP	\$38.83	4.27%	5.77%	58.00%	55.00%	66.78%	\$0.00	10.28%	4.27%	5.02%	5.77%
Cleco Corp.	CNL	\$39.11	4.50%	5.77%	52.00%	59.00%	66.78%	\$0.00	9.80%	4.50%	5.13%	5.77%
Edison International	EIX	\$42.03	2.00%	5.77%	46.00%	46.00%	66.78%	\$0.00	10.13%	2.00%	3.88%	5.77%
First Energy Corp.	FE	\$43.90	1.76%	5.77%	71.00%	62.00%	66.78%	\$0.00	10.08%	1.76%	3.76%	5.77%
Great Plains Energy Inc.	GXP	\$20.33	5.80%	5.77%	59.00%	60.00%	66.78%	\$0.00	11.52%	5.80%	5.78%	5.77%
Hawaiian Electric	HE	\$25.56	9.62%	5.77%	73.00%	63.00%	66.78%	\$0.00	10.62%	9.62%	7.69%	5.77%
IDACORP, Inc.	IDA	\$41.19	4.33%	5.77%	43.00%	55.00%	66.78%	\$0.00	10.52%	4.33%	5.05%	5.77%
Integrus/WPS Resources	TEG	\$53.29	9.13%	5.77%	77.00%	68.00%	66.78%	\$0.00	11.91%	9.13%	7.45%	5.77%
Otter Tail Corp.	OTTR	\$21.72	7.67%	5.77%	NMF	92.00%	66.78%	NMF	NMF	7.67%	6.72%	5.77%
Pepco Holdings, Inc.	POM	\$19.67	3.40%	5.77%	83.00%	69.00%	66.78%	\$0.00	10.04%	3.40%	4.58%	5.77%
Pinnacle West Capital	PNW	\$47.36	5.63%	5.77%	63.00%	66.00%	66.78%	\$0.00	10.79%	5.63%	5.70%	5.77%
Portland General	POR	\$24.96	5.92%	5.77%	54.00%	63.00%	66.78%	\$0.00	10.76%	5.92%	5.84%	5.77%
Southern Co.	SO	\$44.52	5.28%	5.77%	73.00%	69.00%	66.78%	\$0.00	9.96%	5.28%	5.52%	5.77%
Westar Energy	WR	\$27.99	6.08%	5.77%	70.00%	59.00%	66.78%	\$0.00	10.84%	6.08%	5.92%	5.77%
MEAN:			5.39%	5.77%	63.23%	62.57%	66.78%		10.56%	5.42%	5.57%	5.77%
MIN:									9.80%			
MAX:									11.91%			

Earnings per Share	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
American Electric Power	AEP	\$2.60	\$2.71	\$2.83	\$2.95	\$3.07	\$3.20	\$3.34	\$3.49	\$3.66	\$3.84	\$4.04	\$4.27	\$4.51	\$4.77	\$5.05	\$5.34
Cleco Corp.	CNL	\$2.29	\$2.39	\$2.50	\$2.61	\$2.73	\$2.85	\$2.98	\$3.12	\$3.28	\$3.44	\$3.63	\$3.83	\$4.05	\$4.28	\$4.53	\$4.79
Edison International	EIX	\$3.35	\$3.42	\$3.49	\$3.56	\$3.63	\$3.70	\$3.77	\$3.87	\$4.00	\$4.15	\$4.34	\$4.56	\$4.83	\$5.10	\$5.40	\$5.71
First Energy Corp.	FE	\$3.25	\$3.31	\$3.37	\$3.42	\$3.48	\$3.55	\$3.61	\$3.70	\$3.81	\$3.95	\$4.13	\$4.34	\$4.59	\$4.85	\$5.13	\$5.43
Great Plains Energy Inc.	GXP	\$1.53	\$1.62	\$1.71	\$1.81	\$1.92	\$2.03	\$2.15	\$2.27	\$2.40	\$2.54	\$2.69	\$2.84	\$3.01	\$3.18	\$3.36	\$3.56
Hawaiian Electric	HE	\$1.21	\$1.33	\$1.45	\$1.59	\$1.75	\$1.92	\$2.10	\$2.29	\$2.48	\$2.67	\$2.86	\$3.04	\$3.22	\$3.40	\$3.60	\$3.81
IDACORP, Inc.	IDA	\$2.95	\$3.08	\$3.21	\$3.35	\$3.50	\$3.65	\$3.81	\$3.98	\$4.17	\$4.38	\$4.61	\$4.87	\$5.15	\$5.45	\$5.76	\$6.09
Integrus/WPS Resources	TEG	\$3.24	\$3.54	\$3.86	\$4.21	\$4.60	\$5.02	\$5.47	\$5.94	\$6.42	\$6.90	\$7.37	\$7.84	\$8.29	\$8.77	\$9.27	\$9.81
Otter Tail Corp.	OTTR	\$0.38	\$0.41	\$0.44	\$0.47	\$0.51	\$0.55	\$0.59	\$0.64	\$0.68	\$0.73	\$0.77	\$0.82	\$0.87	\$0.92	\$0.97	\$1.03
Pepco Holdings, Inc.	POM	\$1.24	\$1.28	\$1.33	\$1.37	\$1.42	\$1.47	\$1.52	\$1.57	\$1.64	\$1.71	\$1.80	\$1.90	\$2.01	\$2.12	\$2.24	\$2.37
Pinnacle West Capital	PNW	\$3.08	\$3.25	\$3.44	\$3.63	\$3.83	\$4.05	\$4.28	\$4.52	\$4.78	\$5.05	\$5.34	\$5.64	\$5.97	\$6.31	\$6.68	\$7.06
Portland General	POR	\$1.66	\$1.76	\$1.86	\$1.97	\$2.09	\$2.21	\$2.34	\$2.48	\$2.63	\$2.78	\$2.94	\$3.11	\$3.29	\$3.48	\$3.68	\$3.90
Southern Co.	SO	\$2.37	\$2.57	\$2.71	\$2.85	\$3.00	\$3.16	\$3.32	\$3.50	\$3.69	\$3.90	\$4.12	\$4.35	\$4.60	\$4.87	\$5.15	\$5.44
Westar Energy	WR	\$1.80	\$1.91	\$2.03	\$2.15	\$2.28	\$2.42	\$2.56	\$2.72	\$2.88	\$3.05	\$3.23	\$3.42	\$3.62	\$3.82	\$4.05	\$4.28

ELECTRIC PROXY GROUP – MULTI-STAGE DCF MODEL – 30-DAY AVERAGE PRICE

Dividend Payout Ratio	[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
American Electric Power	AEP	58.00%	57.00%	56.00%	55.00%	56.68%	58.37%	60.05%	61.73%	63.41%	65.10%	66.78%	66.78%	66.78%	66.78%
Cleco Corp.	CNL	52.00%	54.33%	56.67%	59.00%	60.11%	61.22%	62.33%	63.44%	64.56%	65.67%	66.78%	66.78%	66.78%	66.78%
Edison International	EIX	46.00%	46.00%	46.00%	46.00%	45.97%	51.98%	57.73%	60.84%	63.81%	66.78%	66.78%	66.78%	66.78%	66.78%
First Energy Corp.	FE	71.00%	68.00%	65.00%	62.00%	62.68%	63.37%	64.05%	64.73%	65.41%	66.10%	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%	63.87%	64.84%	65.81%	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%
IDACORP, Inc.	IDA	43.00%	47.00%	51.00%	55.00%	56.68%	58.37%	60.05%	61.73%	63.41%	65.10%	66.78%	66.78%	66.78%	66.78%
Integrus/WPS Resources	TEG	77.00%	74.00%	71.00%	68.00%	67.83%	67.65%	67.48%	67.30%	67.13%	66.95%	66.78%	66.78%	66.78%	66.78%
Otter Tail Corp.	OTTR	NMF	NMF	NMF	92.00%	88.40%	84.79%	81.19%	77.59%	73.98%	70.38%	66.78%	66.78%	66.78%	66.78%
Pepco Holdings, Inc.	POM	83.00%	78.33%	73.67%	69.00%	68.68%	68.37%	68.05%	67.73%	67.41%	67.10%	66.78%	66.78%	66.78%	66.78%
Pinnacle 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%
Portland General	POR	54.00%	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%
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%
Westar Energy	WR	70.00%	66.33%	62.67%	59.00%	60.11%	61.22%	62.33%	63.44%	64.56%	65.67%	66.78%	66.78%	66.78%	66.78%

Dividends per Share and Terminal Market Value	[44]	[45]	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	
Company	Ticker	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Terminal Price	Terminal P/E Ratio
American Electric Power	AEP	\$1.64	\$1.68	\$1.72	\$1.76	\$1.80	\$2.04	\$2.20	\$2.37	\$2.57	\$2.78	\$3.01	\$3.19	\$3.37	\$3.57	\$3.77	\$88.32	15.64
Cleco Corp.	CNL	\$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	\$3.39	\$88.84	17.53
Edison International	EIX	\$1.60	\$1.64	\$1.67	\$1.70	\$1.85	\$2.01	\$2.19	\$2.40	\$2.64	\$2.91	\$3.22	\$3.41	\$3.61	\$3.81	\$4.03	\$97.81	16.19
First Energy Corp.	FE	\$2.39	\$2.33	\$2.26	\$2.20	\$2.26	\$2.34	\$2.44	\$2.56	\$2.70	\$2.87	\$3.06	\$3.24	\$3.43	\$3.63	\$3.83	\$94.05	16.38
Great Plains Energy Inc.	GXP	\$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	\$2.51	\$46.19	12.28
Hawaiian Electric	HE	\$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	\$2.69	\$58.57	14.55
IDACORP, Inc.	IDA	\$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	\$4.30	\$95.76	14.86
Integrus/WPS Resources	TEG	\$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	\$6.93	\$119.20	11.50
Otter Tail Corp.	OTTR	NMF	NMF	NMF	\$0.51	\$0.52	\$0.54	\$0.55	\$0.56	\$0.57	\$0.58	\$0.58	\$0.61	\$0.65	\$0.68	\$0.72	NMF	NMF
Pepco Holdings, Inc.	POM	\$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	\$1.68	\$41.49	16.53
Pinnacle West Capital	PNW	\$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	\$4.99	\$58.32	14.06
Portland General	POR	\$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	\$2.75	\$58.32	14.15
Southern Co.	SO	\$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	\$3.84	\$96.90	16.83
Westar Energy	WR	\$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	\$3.02	\$62.99	13.92
Median																	14.86	

ELECTRIC PROXY GROUP – MULTI-STAGE DCF MODEL – 30-DAY AVERAGE PRICE

Investor Cash Flows	[61]	[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]
Company	Ticker	Initial 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
American Electric Power	AEP	(\$38.83)	\$0.00	\$1.64	\$1.68	\$1.72	\$1.76	\$1.80	\$2.04	\$2.20	\$2.37	\$2.57	\$2.78	\$3.01	\$3.19	\$3.37	\$3.57
Cleco Corp.	CNL	(\$39.11)	\$0.00	\$1.30	\$1.42	\$1.55	\$1										

ELECTRIC PROXY GROUP – MULTI-STAGE DCF MODEL – 90-DAY AVERAGE PRICE

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Stock Price	EPS Growth	GDP Growth	2012	2015	2026	Delta	Solver Cells (k)	Near Term Growth	Intermediate Growth	Long Term Growth
American Electric Power	AEP \$39.55	4.27%	5.77%	58.00%	55.00%	66.78%	\$0.00	10.20%	4.27%	5.02%	5.77%
Cleco Corp.	CNL \$37.48	4.50%	5.77%	52.00%	59.00%	66.78%	\$0.00	9.97%	4.50%	5.13%	5.77%
Edison International	EIX \$40.70	2.00%	5.77%	46.00%	46.00%	66.78%	\$0.00	10.27%	2.00%	3.88%	5.77%
First Energy Corp.	FE \$43.63	1.76%	5.77%	71.00%	62.00%	66.78%	\$0.00	10.11%	1.76%	3.76%	5.77%
Great Plains Energy Inc.	GXP \$20.81	5.80%	5.77%	59.00%	60.00%	66.78%	\$0.00	11.38%	5.80%	5.78%	5.77%
Hawaiian Electric	HE \$25.73	9.62%	5.77%	73.00%	63.00%	66.78%	\$0.00	10.59%	9.62%	7.69%	5.77%
IDACORP, Inc.	IDA \$41.15	4.33%	5.77%	43.00%	55.00%	66.78%	\$0.00	10.52%	4.33%	5.05%	5.77%
Integrus/WPS Resources	TEG \$52.33	9.13%	5.77%	77.00%	68.00%	66.78%	\$0.00	12.02%	9.13%	7.45%	5.77%
Oter Tail Corp.	OTTR \$21.53	7.67%	5.77%	NMF	NMF	66.78%	\$0.00	NMF	NMF	7.67%	5.77%
Pepco Holdings, Inc.	POM \$19.69	3.40%	5.77%	83.00%	69.00%	66.78%	\$0.00	10.03%	3.40%	4.58%	5.77%
Pinnacle West Capital	PNW \$47.09	5.63%	5.77%	63.00%	66.00%	66.78%	\$0.00	10.82%	5.63%	5.70%	5.77%
Portland General	POR \$24.79	5.92%	5.77%	54.00%	53.00%	66.78%	\$0.00	10.79%	5.92%	5.84%	5.77%
Southern Co.	SO \$44.52	5.28%	5.77%	73.00%	69.00%	66.78%	\$0.00	9.96%	5.80%	5.52%	5.77%
Westar Energy	WR \$27.83	6.08%	5.77%	70.00%	59.00%	66.78%	\$0.00	10.87%	6.08%	5.92%	5.77%
MEAN:		5.39%	5.77%	63.23%	62.57%	66.78%		10.58%	5.42%	5.57%	5.77%
MEDIAN:								10.52%			
MIN:								9.96%			
MAX:								12.02%			

ELECTRIC PROXY GROUP – MULTI-STAGE DCF MODEL – 90-DAY AVERAGE PRICE

Dividend Payout Ratio	[29]	[30]	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]
Company	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
American Electric Power	AEP 58.00%	57.00%	56.00%	55.00%	56.68%	58.37%	60.05%	61.73%	63.41%	65.10%	66.78%	66.78%	66.78%	66.78%	66.78%
Cleco Corp.	CNL 52.00%	54.33%	56.67%	59.00%	60.11%	61.22%	62.33%	63.44%	64.56%	65.67%	66.78%	66.78%	66.78%	66.78%	66.78%
Edison International	EIX 46.00%	46.00%	46.00%	46.00%	48.97%	51.94%	54.91%	57.87%	60.84%	63.81%	66.78%	66.78%	66.78%	66.78%	66.78%
First Energy Corp.	FE 71.00%	68.00%	65.00%	62.00%	62.88%	63.37%	64.05%	64.73%	65.41%	66.10%	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%	63.87%	64.84%	65.81%	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 43.00%	47.00%	51.00%	55.00%	56.68%	58.37%	60.05%	61.73%	63.41%	65.10%	66.78%	66.78%	66.78%	66.78%	66.78%
Integrus/WPS Resources	TEG 77.00%	74.00%	71.00%	68.00%	67.83%	67.65%	67.48%	67.30%	67.13%	66.95%	66.78%	66.78%	66.78%	66.78%	66.78%
Oter Tail Corp.	OTTR NMF	NMF	NMF	NMF	88.40%	84.79%	81.19%	77.59%	73.98%	70.38%	66.78%	66.78%	66.78%	66.78%	66.78%
Pepco Holdings, Inc.	POM 83.00%	78.33%	73.67%	69.00%	68.68%	68.37%	68.05%	67.73%	67.41%	67.10%	66.78%	66.78%	66.78%	66.78%	66.78%
Pinnacle 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 54.00%	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%
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%
Westar Energy	WR 70.00%	66.33%	62.67%	59.00%	60.11%	61.22%	62.33%	63.44%	64.56%	65.67%	66.78%	66.78%	66.78%	66.78%	66.78%

Dividends per Share and Terminal Market Value

Company	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Terminal Price	Terminal P/E Ratio
American Electric Power	AEP \$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	\$3.77	\$89.95	15.92
Cleco Corp.	CNL \$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	\$3.39	\$85.14	16.79
Edison International	EIX \$1.60	\$1.64	\$1.67	\$1.70	\$1.85	\$2.01	\$2.19	\$2.40	\$2.64	\$2.91	\$3.22	\$3.41	\$3.61	\$3.81	\$4.03	\$94.79	15.70
First Energy Corp.	FE \$2.39	\$2.33	\$2.26	\$2.20	\$2.26	\$2.34	\$2.44	\$2.56	\$2.70	\$2.87	\$3.06	\$3.24	\$3.43	\$3.63	\$3.83	\$93.45	16.28
Great Plains Energy Inc.	GXP \$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	\$2.51	\$47.30	12.57
Hawaiian Electric	HE \$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	\$2.69	\$58.97	14.65
IDACORP, Inc.	IDA \$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	\$4.30	\$95.67	14.85
Integrus/WPS Resources	TEG \$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	\$6.93	\$117.11	11.29
Oter Tail Corp.	OTTR NMF	NMF	NMF	NMF	\$0.51	\$0.52	\$0.54	\$0.55	\$0.56	\$0.57	\$0.58	\$0.61	\$0.65	\$0.68	\$0.72	NMF	NMF
Pepco Holdings, Inc.	POM \$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	\$1.68	\$41.54	16.56
Pinnacle West Capital	PNW \$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	\$4.99	\$104.41	13.98
Portland General	POR \$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	\$2.75	\$57.93	14.05
Southern Co.	SO \$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	\$3.84	\$96.90	16.83
Westar Energy	WR \$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	\$3.02	\$62.63	13.84
Median																14.85	

ELECTRIC PROXY GROUP – MULTI-STAGE DCF MODEL – 90-DAY AVERAGE PRICE

Investor Cash Flow	[61]	[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]
Company	Initial 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
American Electric Power	AEP (\$39.55)	\$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	\$3.77
Cleco Corp.	CNL (\$37.48)	\$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	\$3.39
Edison International	EIX (\$40.70)	\$0.00	\$1.60	\$1.64	\$1.67	\$1.70	\$1.85	\$2.01	\$2.19	\$2.40	\$2.64	\$2.91	\$3.22	\$3.41	\$3.61	\$3.81	\$4.03
First Energy Corp.	FE (\$43.63)	\$0.00	\$2.39	\$2.33	\$2.26	\$2.20	\$2.26	\$2.34	\$2.44	\$2.56	\$2.70	\$2.87	\$3.06	\$3.24	\$3.43	\$3.63	\$3.83
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	\$2.51
Hawaiian Electric	HE (\$25.73)	\$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	\$2.69
IDACORP, Inc.	IDA (\$41.15)	\$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	\$4.30
Integrus/WPS Resources	TEG (\$52.33)	\$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	\$6.93
Oter Tail Corp.	OTTR NMF	\$0.00	NMF	NMF	NMF	NMF	\$0.51	\$0.52	\$0.54	\$0.55	\$0.56	\$0.57	\$0.58	\$0.61	\$0.65	\$0.68	\$0.72
Pepco Holdings, Inc.	POM (\$19.69)	\$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	\$1.68
Pinnacle West Capital	PNW (\$47.09)	\$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	\$4.99
Portland General	POR (\$24.79)	\$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	\$2.75
Southern Co.	SO (\$44.52)	\$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	\$3.84
Westar Energy	WR (\$27.83)	\$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	\$3.02

ELECTRIC PROXY GROUP – MULTI-STAGE DCF MODEL – 180-DAY AVERAGE PRICE

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Ticker	Stock Price	EPS Growth	GDP Growth	2012	2013	2014	2015	2016	2017	2018
American Electric Power	AEP	\$38.66	4.27%	5.77%	58.00%	55.00%	66.78%	66.78%	\$0.00	10.30%	4.27%
Cleco Corp.	CNL	\$36.14	4.50%	5.77%	52.00%	59.00%	66.78%	66.78%	\$0.00	10.13%	4.50%
Edison International	EIX	\$39.16	2.00%	5.77%	46.00%	46.00%	66.78%	66.78%	\$0.00	10.44%	2.00%
First Energy Corp.	FE	\$43.79	1.76%	5.77%	71.00%	62.00%	66.78%	66.78%	\$0.00	10.09%	1.76%
Great Plains Energy Inc.	GXP	\$20.28	5.80%	5.77%	59.00%	60.00%	66.78%	66.78%	\$0.00	11.53%	5.80%
Hawaiian Electric	HE	\$24.90	9.62%	5.77%	73.00%	63.00%	66.78%	66.78%	\$0.00	10.75%	9.62%
IDACORP, Inc.	IDA	\$39.83	4.33%	5.77%	43.00%	55.00%	66.78%	66.78%	\$0.00	10.67%	4.33%
Integrus/WPS Resources	TEG	\$51.06	9.13%	5.77%	77.00%	68.00%	66.78%	66.78%	\$0.00	12.18%	9.13%
Otter Tail Corp.	OTTR	\$20.83	7.67%	5.77%	NMF	92.00%	66.78%	66.78%	NMF	NMF	7.67%
Pepco Holdings, Inc.	POM	\$19.37	3.40%	5.77%	83.00%	69.00%	66.78%	66.78%	\$0.00	10.11%	3.40%
Pinnacle West Capital	PNW	\$45.28	5.63%	5.77%	63.00%	66.00%	66.78%	66.78%	\$0.00	11.02%	5.63%
Portland General	POR	\$24.48	5.92%	5.77%	54.00%	53.00%	66.78%	66.78%	\$0.00	10.85%	5.92%
Southern Co.	SO	\$42.92	5.28%	5.77%	73.00%	69.00%	66.78%	66.78%	\$0.00	10.12%	5.28%
Westar Energy	WR	\$27.02	6.08%	5.77%	70.00%	59.00%	66.78%	66.78%	\$0.00	11.02%	6.08%
MEAN:			5.39%	5.77%	63.23%	62.57%	66.78%			10.71%	5.42%
MEDIAN:										10.67%	
MIN:										10.09%	
MAX:										12.18%	

ELECTRIC PROXY GROUP – MULTI-STAGE DCF MODEL – 180-DAY AVERAGE PRICE

Earnings per Share	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
American Electric Power	AEP	\$2.60	\$2.71	\$2.83	\$2.95	\$3.07	\$3.20	\$3.34	\$3.49	\$3.66	\$3.84	\$4.04	\$4.27	\$4.51	\$4.77	\$5.05	\$5.34
Cleco Corp.	CNL	\$2.29	\$2.39	\$2.50	\$2.61	\$2.73	\$2.85	\$2.98	\$3.12	\$3.28	\$3.44	\$3.63	\$3.83	\$4.05	\$4.28	\$4.53	\$4.79
Edison International	EIX	\$3.35	\$3.42	\$3.49	\$3.56	\$3.63	\$3.70	\$3.77	\$3.87	\$4.00	\$4.15	\$4.34	\$4.56	\$4.83	\$5.10	\$5.40	\$5.71
First Energy Corp.	FE	\$3.25	\$3.31	\$3.37	\$3.42	\$3.48	\$3.55	\$3.61	\$3.70	\$3.81	\$3.95	\$4.13	\$4.34	\$4.59	\$4.85	\$5.13	\$5.43
Great Plains Energy Inc.	GXP	\$1.53	\$1.62	\$1.71	\$1.81	\$1.92	\$2.03	\$2.15	\$2.27	\$2.40	\$2.54	\$2.69	\$2.84	\$3.01	\$3.18	\$3.36	\$3.56
Hawaiian Electric	HE	\$1.21	\$1.33	\$1.45	\$1.59	\$1.75	\$1.92	\$2.10	\$2.29	\$2.48	\$2.67	\$2.86	\$3.04	\$3.22	\$3.40	\$3.60	\$3.81
IDACORP, Inc.	IDA	\$2.95	\$3.08	\$3.21	\$3.35	\$3.50	\$3.65	\$3.81	\$3.98	\$4.17	\$4.38	\$4.61	\$4.87	\$5.15	\$5.45	\$5.76	\$6.09
Integrus/WPS Resources	TEG	\$3.24	\$3.54	\$3.86	\$4.21	\$4.60	\$5.02	\$5.47	\$5.94	\$6.42	\$6.90	\$7.37	\$7.84	\$8.29	\$8.77	\$9.27	\$9.81
Otter Tail Corp.	OTTR	\$0.38	\$0.41	\$0.44	\$0.47	\$0.51	\$0.55	\$0.59	\$0.64	\$0.68	\$0.73	\$0.77	\$0.82	\$0.87	\$0.92	\$0.97	\$1.03
Pepco Holdings, Inc.	POM	\$1.24	\$1.28	\$1.33	\$1.37	\$1.42	\$1.47	\$1.52	\$1.57	\$1.64	\$1.71	\$1.80	\$1.90	\$2.01	\$2.12	\$2.24	\$2.37
Pinnacle West Capital	PNW	\$3.08	\$3.25	\$3.44	\$3.63	\$3.83	\$4.05	\$4.28	\$4.52	\$4.78	\$5.05	\$5.34	\$5.64	\$5.97	\$6.31	\$6.68	\$7.06
Portland General	POR	\$1.66	\$1.76	\$1.86	\$1.97	\$2.09	\$2.21	\$2.34	\$2.48	\$2.63	\$2.78	\$2.94	\$3.11	\$3.29	\$3.48	\$3.68	\$3.90
Southern Co.	SO	\$2.57	\$2.57	\$2.71	\$2.85	\$3.00	\$3.16	\$3.32	\$3.50	\$3.69	\$3.90	\$4.12	\$4.35	\$4.60	\$4.87	\$5.15	\$5.44
Westar Energy	WR	\$1.80	\$1.91	\$2.03	\$2.15	\$2.28	\$2.42	\$2.56	\$2.72	\$2.88	\$3.05	\$3.23	\$3.42	\$3.62	\$3.82	\$4.05	\$4.28

ELECTRIC PROXY GROUP – MULTI-STAGE DCF MODEL – 180-DAY AVERAGE PRICE

Dividend Payout Ratio	[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
American Electric Power	AEP	58.00%	57.00%	56.00%	55.00%	56.68%	58.37%	60.05%	61.73%	63.41%	65.10%	66.78%	66.78%	66.78%	66.78%
Cleco Corp.	CNL	52.00%	54.33%	56.67%	59.00%	60.11%	61.22%	62.33%	63.44%	64.56%	65.67%	66.78%	66.78%	66.78%	66.78%
Edison International	EIX	46.00%	46.00%	46.00%	46.00%	45.97%	51.94%	54.91%	57.87%	60.84%	63.81%	66.78%	66.78%	66.78%	66.78%
First Energy Corp.	FE	71.00%	68.00%	65.00%	62.00%	62.68%	63.37%	64.05%	64.73%	65.41%	66.10%	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%	63.87%	64.84%	65.81%	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%
IDACORP, Inc.	IDA	43.00%	47.00%	51.00%	55.00%	56.68%	58.37%	60.05%	61.73%	63.41%	65.10%	66.78%	66.78%	66.78%	66.78%
Integrus/WPS Resources	TEG	77.00%	74.00%	71.00%	68.00%	67.83%	67.65%	67.48%	67.30%	67.13%	66.95%	66.78%	66.78%	66.78%	66.78%
Otter Tail Corp.	OTTR	NMF	NMF	NMF	92.00%	88.40%	84.79%	81.19%	77.59%	73.98%	70.38%	66.78%	66.78%	66.78%	66.78%
Pepco Holdings, Inc.	POM	83.00%	78.33%	73.67%	69.00%	68.68%	69.37%	68.05%	67.73%	67.41%	67.10%	66.78%	66.78%	66.78%	66.78%
Pinnacle 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%
Portland General	POR	54.00%	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%
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%
Westar Energy	WR	70.00%	66.33%	62.67%	59.00%	60.11%	61.22%	62.33%	63.44%	64.56%	65.67%	66.78%	66.78%	66.78%	66.78%

ELECTRIC PROXY GROUP – MULTI-STAGE DCF MODEL – 180-DAY AVERAGE PRICE

Dividends per Share and Terminal Market Value	[44]	[45]	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	
Company	Ticker	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Terminal Price	Terminal P/E Ratio
American Electric Power	AEP	\$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	\$3.77	\$87.93	15.57
Cleco Corp.	CNL	\$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	\$3.39	\$82.10	16.20
Edison International	EIX	\$1.60	\$1.64	\$1.67	\$1.70	\$1.85	\$2.01	\$2.19	\$2.40	\$2.64	\$2.91	\$3.22	\$3.41	\$3.61	\$3.81	\$4.03	\$91.29	15.11
First Energy Corp.	FE	\$2.39	\$2.33	\$2.26	\$2.20	\$2.26	\$2.34	\$2.44	\$2.56	\$2.70	\$2.87	\$3.06	\$3.24	\$3.43	\$3.63	\$3.83	\$93.81	16.34
Great Plains Energy Inc.	GXP	\$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	\$2.51	\$46.09	12.25
Hawaiian Electric	HE	\$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	\$2.69	\$57.08	14.18
IDACORP, Inc.	IDA	\$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	\$4.30	\$92.69	14.39
Integrus/WPS Resources	TEG	\$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	\$6.93	\$114.25	11.01
Otter Tail Corp.	OTTR	NMF	NMF	NMF	\$0.51	\$0.52	\$0.54	\$0.55	\$0.56	\$0.57	\$0.58	\$0.58	\$0.61	\$0.65	\$0.68	\$0.72	NMF	NMF
Pepco Holdings, Inc.	POM	\$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	\$1.68	\$40.81	16.26
Pinnacle West Capital	PNW	\$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	\$4.99	\$100.34	13.43
Portland General	POR	\$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	\$2.75	\$57.23	13.88
Southern Co.	SO	\$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	\$3.84	\$93.28	16.20
Westar Energy	WR	\$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	\$3.02	\$60.80	13.44
Median																	14.39	

ELECTRIC PROXY GROUP – MULTI-STAGE DCF MODEL – 180-DAY AVERAGE PRICE

Investor Cash Flows	[61]	[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]
Company	Ticker	Initial	3/16/12	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
American Electric Power	AEP	(\$38.66)	\$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</		

COMBINATION PROXY GROUP - MULTI-STAGE DCF MODEL - 30-DAY AVERAGE PRICE

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Stock Price	EPS Growth	GP Growth	2012	2015	2026	Delta	Solver Cells k(e)	Near Term Growth	Intermediate Growth	Long Term Growth
Alliant Energy Corp.	ALIE \$41.60	5.33%	5.77%	68.00%	62.00%	66.78%	\$0.00	9.72%	5.33%	5.55%	5.77%
Alliant Energy Corp.	LNT \$43.02	5.75%	5.77%	65.00%	64.00%	66.78%	\$0.00	10.73%	5.75%	5.76%	5.77%
Ameren Corp.	AEE \$31.79	4.00%	5.77%	67.00%	70.00%	66.78%	\$0.00	11.93%	4.00%	4.88%	5.77%
Avista Corp.	AVA \$25.33	4.40%	5.77%	64.00%	68.00%	66.78%	\$0.00	10.40%	4.40%	5.08%	5.77%
Black Hills Corp.	BKH \$33.92	6.50%	5.77%	73.00%	66.00%	66.78%	\$0.00	9.82%	6.50%	6.13%	5.77%
Center Point Energy	CNP \$19.03	4.53%	5.77%	65.00%	66.00%	66.78%	\$0.00	9.77%	4.53%	5.15%	5.77%
Consolidated Edison	ED \$58.41	3.43%	5.77%	65.00%	62.00%	66.78%	\$0.00	9.61%	3.44%	4.60%	5.77%
Domination Resources, Inc.	D \$50.55	5.07%	5.77%	67.00%	65.00%	66.78%	\$0.00	9.61%	3.41%	5.42%	5.77%
DTE Energy Co.	DTE \$54.42	4.32%	5.77%	63.00%	63.00%	66.78%	\$0.00	10.56%	4.32%	5.04%	5.77%
Integrus/WPS Resources	TEG \$53.29	9.13%	5.77%	77.00%	68.00%	66.78%	\$0.00	11.91%	9.13%	7.45%	5.77%
Pepco Holdings, Inc.	POM \$19.67	3.40%	5.77%	83.00%	69.00%	66.78%	\$0.00	10.04%	3.40%	4.58%	5.77%
PG&E Corp.	PCG \$42.03	3.44%	5.77%	61.00%	50.00%	66.78%	\$0.00	9.99%	3.44%	4.60%	5.77%
SCANA Corp.	SCG \$45.04	3.89%	5.77%	63.00%	59.00%	66.78%	\$0.00	10.00%	3.17%	4.83%	5.77%
Sempra Energy	SRE \$58.41	6.18%	5.77%	45.00%	43.00%	66.78%	\$0.00	10.81%	6.18%	5.97%	5.77%
TECO Energy, Inc.	TE \$17.91	5.64%	5.77%	65.00%	64.00%	66.78%	\$0.00	10.94%	6.74%	5.70%	5.77%
UIL Holdings Corp.	UIL \$35.12	4.03%	5.77%	79.00%	72.00%	66.78%	\$0.00	9.78%	4.03%	4.90%	5.77%
Vectren Corp.	VVC \$29.30	4.93%	5.77%	73.00%	70.00%	66.78%	\$0.00	9.93%	4.93%	5.35%	5.77%
Wisconsin Energy	WEC \$34.48	6.93%	5.77%	53.00%	60.00%	66.78%	\$0.00	10.35%	6.93%	6.35%	5.77%
Xcel Energy, Inc.	XEL \$26.49	5.12%	5.77%	58.00%	63.00%	66.78%	\$0.00	10.08%	5.12%	5.44%	5.77%
MEAN:		5.05%	5.77%	66.00%	63.37%	66.78%		10.32%	4.98%	5.41%	5.77%
MEDIAN:								10.04%			
MIN:								9.61%			
MAX:								11.93%			

Earnings per Share	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Alliant Energy Corp.	ALIE	\$2.19	\$2.31	\$2.43	\$2.56	\$2.70	\$2.84	\$2.99	\$3.15	\$3.33	\$3.51	\$3.71	\$3.92	\$4.14	\$4.38	\$4.64	\$4.90	\$5.19
Alliant Energy Corp.	LNT	\$2.75	\$2.91	\$3.08	\$3.25	\$3.44	\$3.64	\$3.85	\$4.07	\$4.30	\$4.55	\$4.81	\$5.09	\$5.38	\$5.69	\$6.02	\$6.37	\$6.73
Ameren Corp.	AEE	\$2.77	\$2.88	\$3.00	\$3.12	\$3.24	\$3.37	\$3.50	\$3.66	\$3.82	\$4.01	\$4.22	\$4.45	\$4.70	\$4.98	\$5.26	\$5.57	\$5.89
Avista Corp.	AVA	\$1.65	\$1.72	\$1.80	\$1.88	\$1.96	\$2.05	\$2.14	\$2.24	\$2.34	\$2.46	\$2.59	\$2.74	\$2.90	\$3.06	\$3.24	\$3.43	\$3.62
Black Hills Corp.	BKH	\$1.66	\$1.77	\$1.88	\$2.01	\$2.12	\$2.27	\$2.42	\$2.58	\$2.74	\$2.91	\$3.08	\$3.26	\$3.45	\$3.65	\$3.86	\$4.08	\$4.32
Center Point Energy	CNP	\$1.07	\$1.12	\$1.17	\$1.22	\$1.28	\$1.34	\$1.40	\$1.46	\$1.53	\$1.61	\$1.70	\$1.79	\$1.90	\$2.01	\$2.12	\$2.25	\$2.37
Consolidated Edison	ED	\$3.47	\$3.57	\$3.69	\$3.82	\$3.95	\$4.09	\$4.23	\$4.39	\$4.57	\$4.78	\$5.02	\$5.29	\$5.60	\$5.92	\$6.26	\$6.62	\$7.00
Domination Resources, Inc.	D	\$2.89	\$2.76	\$2.90	\$3.05	\$3.20	\$3.36	\$3.53	\$3.72	\$3.92	\$4.13	\$4.36	\$4.60	\$4.87	\$5.15	\$5.45	\$5.76	\$6.09
DTE Energy Co.	DTE	\$3.74	\$3.90	\$4.07	\$4.25	\$4.43	\$4.62	\$4.82	\$5.04	\$5.28	\$5.55	\$5.84	\$6.16	\$6.52	\$6.89	\$7.29	\$7.71	\$8.16
Integrus/WPS Resources	TEG	\$5.24	\$5.54	\$5.86	\$6.21	\$6.60	\$7.02	\$7.47	\$7.94	\$8.44	\$8.96	\$9.52	\$10.11	\$10.74	\$11.41	\$12.12	\$12.87	\$13.66
Pepco Holdings, Inc.	POM	\$1.24	\$1.28	\$1.33	\$1.37	\$1.42	\$1.47	\$1.52	\$1.57	\$1.64	\$1.71	\$1.80	\$1.90	\$2.01	\$2.12	\$2.24	\$2.37	\$2.51
PG&E Corp.	PCG	\$2.82	\$2.92	\$3.02	\$3.12	\$3.23	\$3.34	\$3.46	\$3.59	\$3.74	\$3.91	\$4.11	\$4.33	\$4.58	\$4.84	\$5.12	\$5.41	\$5.73
SCANA Corp.	SCG	\$2.98	\$2.97	\$3.09	\$3.21	\$3.33	\$3.46	\$3.59	\$3.75	\$3.91	\$4.10	\$4.31	\$4.55	\$4.81	\$5.09	\$5.38	\$5.69	\$6.02
Sempra Energy	SRE	\$4.02	\$4.27	\$4.53	\$4.81	\$5.11	\$5.43	\$5.76	\$6.11	\$6.48	\$6.87	\$7.28	\$7.70	\$8.15	\$8.62	\$9.11	\$9.64	\$10.19
TECO Energy, Inc.	TE	\$1.13	\$1.27	\$1.34	\$1.42	\$1.50	\$1.58	\$1.67	\$1.77	\$1.87	\$1.97	\$2.08	\$2.20	\$2.33	\$2.47	\$2.61	\$2.76	\$2.92
UIL Holdings Corp.	UIL	\$1.99	\$2.07	\$2.13	\$2.19	\$2.25	\$2.32	\$2.39	\$2.46	\$2.54	\$2.62	\$2.70	\$2.79	\$2.89	\$3.00	\$3.11	\$3.23	\$3.35
Vectren Corp.	VVC	\$1.64	\$1.72	\$1.81	\$1.89	\$1.99	\$2.09	\$2.19	\$2.30	\$2.42	\$2.55	\$2.69	\$2.84	\$3.00	\$3.18	\$3.36	\$3.56	\$3.76
Wisconsin Energy	WEC	\$1.92	\$2.05	\$2.20	\$2.35	\$2.51	\$2.68	\$2.87	\$3.06	\$3.26	\$3.47	\$3.69	\$3.91	\$4.13	\$4.37	\$4.62	\$4.89	\$5.17
Xcel Energy, Inc.	XEL	\$1.56	\$1.64	\$1.72	\$1.81	\$1.90	\$2.00	\$2.10	\$2.21	\$2.33	\$2.46	\$2.60	\$2.74	\$2.90	\$3.07	\$3.25	\$3.43	\$3.63

COMBINATION PROXY GROUP - MULTI-STAGE DCF MODEL - 30-DAY AVERAGE PRICE

Dividend Payout Ratio	[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
Alliant Energy Corp.	ALIE	68.00%	66.00%	64.00%	62.00%	62.68%	63.37%	64.05%	64.73%	65.41%	66.10%	66.78%	66.78%	66.78%	66.78%	66.78%
Alliant Energy Corp.	LNT	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%
Ameren Corp.	AEE	67.00%	68.00%	69.00%	70.00%	69.54%	69.08%	68.62%	68.16%	67.70%	67.24%	66.78%	66.78%	66.78%	66.78%	66.78%
Avista Corp.	AVA	64.00%	65.33%	66.67%	68.00%	67.83%	67.62%	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	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%
Consolidated Edison	ED	65.00%	64.00%	63.00%	62.00%	62.68%	63.37%	64.05%	64.73%	65.41%	66.10%	66.78%	66.78%	66.78%	66.78%	66.78%
Domination Resources, Inc.	D	67.00%	66.33%	65.67%	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%
Integrus/WPS Resources	TEG	77.00%	74.00%	71.00%	68.00%	67.83%	67.65%	67.48%	67.30%	67.13%	66.95%	66.78%	66.78%	66.78%	66.78%	66.78%
Pepco Holdings, Inc.	POM	83.00%	78.33%	73.67%	69.00%	68.68%	68.37%	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%	53.67%	50.00%	52.40%	54.79%	57.19%	59.59%	61.98%	64.38%	66.78%	66.78%	66.78%	66.78%	66.78%
SCANA Corp.	SCG	63.00%	61.67%	60.33%	59.00%	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	45.00%	44.33%	43.67%	43.00%	46.40%	49.79%	53.19%	56.59%	59.98%	63.38%	66.78%	66.78%	66.78%	66.78%	66.78%
TECO Energy, 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%
UIL 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%
Wisconsin Energy	WEC	53.00%	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%	63.00%	63.54%	64.08%	64.62%	65.16%	65.70%	66.24%	66.78%	66.78%	66.78%	66.78%	66.78%

Dividends per Share and Terminal Market Value	[44]	[45]	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]		
Company	Ticker	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Terminal Price	Terminal P/E Ratio	
Alliant Energy Corp.	ALIE	\$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	\$3.46	\$92.74	17.88	
Alliant Energy Corp.	LNT	\$2.00	\$2.10	\$2.21	\$2.33	\$2.48	\$2.64	\$2.80	\$2.97	\$3.17	\$3.38	\$3.59	\$3.80	\$4.02	\$4.25	\$4.50	\$45.00	\$95.81	14.23
Ameren Corp.	AEE	\$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	\$3.93	\$67.47	\$67.47	11.46

COMBINATION PROXY GROUP – MULTI-STAGE DCF MODEL – 90-DAY AVERAGE PRICE

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Stock Price	EPS Growth	GP Growth	2012	2015	2026	Delta	Solver Cells k(e)	Near Term Growth	Intermediate Growth	Long Term Growth
Alliant Energy Corp.	ALIE	\$40.65	5.33%	5.77%	68.00%	62.00%	66.78%	\$0.00	9.81%	5.33%	5.77%
Alliant Energy Corp.	LNT	\$42.62	5.75%	5.77%	65.00%	64.00%	66.78%	\$0.00	10.78%	5.75%	5.77%
Ameren Corp.	AEE	\$32.11	4.00%	5.77%	67.00%	70.00%	66.78%	\$0.00	11.80%	4.00%	5.77%
Avista Corp.	AVA	\$25.18	4.40%	5.77%	64.00%	68.00%	66.78%	\$0.00	10.43%	4.40%	5.77%
Black Hills Corp.	BKH	\$33.32	6.50%	5.77%	73.00%	66.00%	66.78%	\$0.00	9.89%	6.50%	5.77%
Center Point Energy	CNP	\$19.24	4.53%	5.77%	65.00%	66.00%	66.78%	\$0.00	9.73%	4.53%	5.77%
Consolidated Edison	ED	\$58.96	3.43%	5.77%	65.00%	62.00%	66.78%	\$0.00	9.57%	3.44%	4.60%
Domination Resources, Inc.	D	\$50.92	5.07%	5.77%	67.00%	65.00%	66.78%	\$0.00	9.58%	3.41%	5.42%
DTE Energy Co.	DTE	\$63.25	4.32%	5.77%	63.00%	63.00%	66.78%	\$0.00	10.66%	4.32%	5.77%
Integrus/WPS Resources	TEG	\$52.33	9.13%	5.77%	77.00%	68.00%	66.78%	\$0.00	12.02%	9.13%	7.45%
Pepco Holdings, Inc.	POM	\$19.69	3.40%	5.77%	83.00%	69.00%	66.78%	\$0.00	10.03%	3.40%	4.58%
PG&E Corp.	PCG	\$40.64	3.44%	5.77%	61.00%	50.00%	66.78%	\$0.00	10.13%	3.44%	4.60%
SCANA Corp.	SCG	\$44.05	3.89%	5.77%	63.00%	59.00%	66.78%	\$0.00	10.10%	3.17%	4.83%
Sempra Energy	SRE	\$55.61	6.18%	5.77%	45.00%	43.00%	66.78%	\$0.00	11.04%	6.18%	5.97%
TECO Energy, Inc.	TE	\$18.31	5.64%	5.77%	65.00%	64.00%	66.78%	\$0.00	10.83%	6.4%	5.70%
UIL Holdings Corp.	UIL	\$34.58	4.03%	5.77%	79.00%	72.00%	66.78%	\$0.00	9.84%	4.03%	5.77%
Vectren Corp.	VVC	\$29.08	4.93%	5.77%	73.00%	70.00%	66.78%	\$0.00	9.99%	4.93%	5.35%
Wisconsin Energy	WEC	\$33.88	6.93%	5.77%	53.00%	60.00%	66.78%	\$0.00	10.43%	6.93%	5.77%
Xcel Energy, Inc.	XEL	\$26.47	5.12%	5.77%	58.00%	63.00%	66.78%	\$0.00	10.08%	5.12%	5.44%
MEAN:			5.05%	5.77%	66.00%	63.37%	66.78%		10.36%	4.98%	5.41%
MEDIAN:									10.10%		
MIN:									9.57%		
MAX:									12.02%		

Earnings per Share	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Alliant Energy Corp.	ALIE	\$2.19	\$2.31	\$2.43	\$2.56	\$2.70	\$2.84	\$2.99	\$3.15	\$3.33	\$3.51	\$3.71	\$3.92	\$4.14	\$4.38	\$4.64	\$4.90
Alliant Energy Corp.	LNT	\$2.75	\$2.91	\$3.08	\$3.25	\$3.44	\$3.64	\$3.85	\$4.07	\$4.30	\$4.55	\$4.81	\$5.09	\$5.38	\$5.69	\$6.02	\$6.37
Ameren Corp.	AEE	\$2.77	\$2.88	\$3.00	\$3.12	\$3.24	\$3.37	\$3.50	\$3.66	\$3.82	\$4.01	\$4.22	\$4.45	\$4.70	\$4.98	\$5.26	\$5.57
Avista Corp.	AVA	\$1.65	\$1.72	\$1.80	\$1.88	\$1.96	\$2.05	\$2.14	\$2.24	\$2.34	\$2.46	\$2.59	\$2.74	\$2.90	\$3.06	\$3.24	\$3.43
Black Hills Corp.	BKH	\$1.66	\$1.77	\$1.88	\$2.01	\$2.14	\$2.27	\$2.42	\$2.58	\$2.74	\$2.91	\$3.08	\$3.26	\$3.45	\$3.65	\$3.86	\$4.08
Center Point Energy	CNP	\$1.07	\$1.12	\$1.17	\$1.22	\$1.28	\$1.34	\$1.40	\$1.46	\$1.53	\$1.61	\$1.70	\$1.79	\$1.90	\$2.01	\$2.12	\$2.25
Consolidated Edison	ED	\$3.47	\$3.57	\$3.69	\$3.82	\$3.95	\$4.09	\$4.23	\$4.39	\$4.57	\$4.78	\$5.02	\$5.29	\$5.60	\$5.92	\$6.26	\$6.62
Domination Resources, Inc.	D	\$2.89	\$2.76	\$2.90	\$3.05	\$3.20	\$3.36	\$3.53	\$3.72	\$3.92	\$4.13	\$4.36	\$4.60	\$4.87	\$5.15	\$5.45	\$5.76
DTE Energy Co.	DTE	\$3.74	\$3.90	\$4.07	\$4.25	\$4.43	\$4.62	\$4.82	\$5.04	\$5.28	\$5.55	\$5.84	\$6.16	\$6.52	\$6.89	\$7.29	\$7.71
Integrus/WPS Resources	TEG	\$3.24	\$3.54	\$3.86	\$4.21	\$4.60	\$5.02	\$5.47	\$5.94	\$6.42	\$6.90	\$7.37	\$7.84	\$8.29	\$8.77	\$9.27	\$9.81
Pepco Holdings, Inc.	POM	\$1.24	\$1.28	\$1.33	\$1.37	\$1.42	\$1.47	\$1.52	\$1.57	\$1.64	\$1.71	\$1.80	\$1.90	\$2.01	\$2.12	\$2.24	\$2.37
PG&E Corp.	PCG	\$2.82	\$2.92	\$3.02	\$3.12	\$3.23	\$3.34	\$3.46	\$3.59	\$3.74	\$3.91	\$4.11	\$4.33	\$4.58	\$4.84	\$5.12	\$5.41
SCANA Corp.	SCG	\$2.98	\$2.97	\$3.09	\$3.21	\$3.33	\$3.46	\$3.59	\$3.75	\$3.91	\$4.10	\$4.31	\$4.55	\$4.81	\$5.09	\$5.38	\$5.69
Sempra Energy	SRE	\$4.02	\$4.27	\$4.53	\$4.81	\$5.11	\$5.43	\$5.76	\$6.11	\$6.48	\$6.87	\$7.28	\$7.70	\$8.15	\$8.62	\$9.11	\$9.64
TECO Energy, Inc.	TE	\$1.13	\$1.27	\$1.34	\$1.42	\$1.50	\$1.58	\$1.67	\$1.77	\$1.87	\$1.97	\$2.07	\$2.20	\$2.33	\$2.47	\$2.61	\$2.76
UIL Holdings Corp.	UIL	\$1.99	\$2.07	\$2.15	\$2.23	\$2.31	\$2.40	\$2.49	\$2.59	\$2.69	\$2.80	\$2.91	\$3.03	\$3.15	\$3.28	\$3.41	\$3.54
Vectren Corp.	VVC	\$1.64	\$1.72	\$1.81	\$1.89	\$1.99	\$2.09	\$2.19	\$2.30	\$2.42	\$2.55	\$2.69	\$2.84	\$3.00	\$3.18	\$3.36	\$3.56
Wisconsin Energy	WEC	\$1.92	\$2.05	\$2.20	\$2.35	\$2.51	\$2.68	\$2.87	\$3.06	\$3.26	\$3.47	\$3.69	\$3.91	\$4.13	\$4.37	\$4.62	\$4.89
Xcel Energy, Inc.	XEL	\$1.56	\$1.64	\$1.72	\$1.81	\$1.90	\$2.00	\$2.10	\$2.21	\$2.33	\$2.46	\$2.60	\$2.74	\$2.90	\$3.07	\$3.25	\$3.43

COMBINATION PROXY GROUP – MULTI-STAGE DCF MODEL – 90-DAY AVERAGE PRICE

Dividend Payout Ratio	[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
Alliant Energy Corp.	ALIE	68.00%	66.00%	64.00%	62.00%	62.68%	63.37%	64.05%	64.73%	65.41%	66.10%	66.78%	66.78%	66.78%	66.78%
Alliant Energy Corp.	LNT	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%
Ameren Corp.	AEE	67.00%	67.00%	67.00%	67.00%	67.00%	67.00%	67.00%	67.00%	67.00%	67.00%	67.00%	67.00%	67.00%	67.00%
Avista Corp.	AVA	64.00%	65.33%	66.67%	68.00%	67.83%	67.62%	67.48%	67.30%	67.13%	66.95%	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%
Center Point Energy	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%
Consolidated Edison	ED	65.00%	64.00%	63.00%	62.00%	62.68%	63.37%	64.05%	64.73%	65.41%	66.10%	66.78%	66.78%	66.78%	66.78%
Domination Resources, Inc.	D	67.00%	66.33%	65.67%	65.00%	65.25%	65.51%	65.76%	66.02%	66.27%	66.52%	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%
Integrus/WPS Resources	TEG	77.00%	74.00%	71.00%	68.00%	67.83%	67.65%	67.48%	67.30%	67.13%	66.95%	66.78%	66.78%	66.78%	66.78%
Pepco Holdings, Inc.	POM	83.00%	78.33%	73.67%	69.00%	68.68%	68.37%	68.05%	67.73%	67.41%	67.10%	66.78%	66.78%	66.78%	66.78%
PG&E Corp.	PCG	61.00%	57.33%	53.67%	50.00%	52.40%	54.79%	57.19%	59.59%	61.98%	64.38%	66.78%	66.78%	66.78%	66.78%
SCANA Corp.	SCG	63.00%	61.67%	60.33%	59.00%	60.11%	61.22%	62.33%	63.44%	64.56%	65.67%	66.78%	66.78%	66.78%	66.78%
Sempra Energy	SRE	45.00%	44.33%	43.67%	43.00%	46.40%	49.70%	53.19%	56.59%	59.98%	63.38%	66.78%	66.78%	66.78%	66.78%
TECO Energy, 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%
UIL 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%
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%
Wisconsin Energy	WEC	63.00%	65.33%	67.67%	70.00%	69.77%	69.54%	69.31%	69.08%	68.85%	68.62%	68.39%	68.16%	67.93%	67.70%
Xcel Energy, Inc.	XEL	58.00%	59.67%	61.33%	63.00%	63.54%	64.08%	64.62%	65.16%	65.70%	66.24%	66.78%	66.78%	66.78%	66.78%

Dividends per Share and Terminal Market Value	[44]	[45]	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	
Company	Ticker	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Terminal Price	Terminal P/E Ratio
Alliant Energy Corp.	ALIE	\$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	\$3.46	\$90.58	17.47
Alliant Energy Corp.	LNT	\$2.00	\$2.10	\$2.21	\$2.33	\$2.48	\$2.64	\$2.80	\$2.97	\$3.17	\$3.38	\$3.59	\$3.80	\$4.02	\$4.25	\$4.50	\$94.90	14.09
Ameren Corp.	AEE	\$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	\$3.93	\$68.18	11.58
Avista Corp.	AVA	\$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	\$2.42	\$54.88	15.15
Black Hills Corp.	BKH	\$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	\$2.88	\$73.86	17.11
Center Point Energy	CNP	\$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	\$		

COMBINATION PROXY GROUP - MULTI-STAGE DCF MODEL - 180-DAY AVERAGE PRICE

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Stock Price	EPS Growth	GP Growth	2012	2015	2026	Delta	Solver Cells k(e)	Near Term Growth	Intermediate Growth	Long Term Growth
Alliant Energy Corp.	ALE	\$39.71	5.33%	5.77%	68.00%	62.00%	66.78%	\$0.00	9.91%	5.53%	5.77%
Alliant Energy Corp.	LNT	\$41.12	5.75%	5.77%	65.00%	64.00%	66.78%	\$0.00	10.96%	5.75%	5.77%
Ameren Corp.	AEE	\$30.82	4.00%	5.77%	67.00%	70.00%	66.78%	\$0.00	12.13%	4.00%	5.77%
Avista Corp.	AVA	\$24.92	4.40%	5.77%	64.00%	68.00%	66.78%	\$0.00	10.48%	4.40%	5.77%
Black Hills Corp.	BKH	\$32.01	6.50%	5.77%	73.00%	66.00%	66.78%	\$0.00	10.07%	6.50%	5.77%
Center Point Energy	CNP	\$19.48	4.53%	5.77%	65.00%	66.00%	66.78%	\$0.00	9.68%	4.53%	5.77%
Consolidated Edison	ED	\$57.24	3.43%	5.77%	65.00%	62.00%	66.78%	\$0.00	9.69%	3.44%	5.77%
Domination Resources, Inc.	D	\$50.14	5.07%	5.77%	67.00%	65.00%	66.78%	\$0.00	9.64%	3.41%	5.42%
DTE Energy Co.	DTE	\$51.48	4.32%	5.77%	63.00%	63.00%	66.78%	\$0.00	10.84%	4.32%	5.77%
Integrus/WPS Resources	TEG	\$51.06	9.13%	5.77%	77.00%	68.00%	66.78%	\$0.00	12.18%	9.13%	5.77%
Pepco Holdings, Inc.	POM	\$19.37	3.40%	5.77%	83.00%	69.00%	66.78%	\$0.00	10.11%	3.40%	5.77%
PG&E Corp.	PCG	\$41.26	3.44%	5.77%	61.00%	50.00%	66.78%	\$0.00	10.07%	3.44%	5.77%
SCANA Corp.	SCG	\$41.94	3.89%	5.77%	63.00%	59.00%	66.78%	\$0.00	10.32%	3.17%	4.83%
Sempra Energy	SRE	\$53.51	6.18%	5.77%	45.00%	43.00%	66.78%	\$0.00	11.24%	6.18%	5.97%
TECO Energy, Inc.	TE	\$18.15	5.64%	5.77%	65.00%	64.00%	66.78%	\$0.00	10.87%	6.74%	5.77%
UIL Holdings Corp.	UIL	\$33.64	4.03%	5.77%	79.00%	72.00%	66.78%	\$0.00	9.97%	4.03%	5.77%
Vectren Corp.	VVC	\$28.14	4.93%	5.77%	73.00%	70.00%	66.78%	\$0.00	10.13%	4.93%	5.53%
Wisconsin Energy	WEC	\$32.56	6.93%	5.77%	53.00%	60.00%	66.78%	\$0.00	10.62%	6.93%	5.77%
Xcel Energy, Inc.	XEL	\$25.44	5.12%	5.77%	58.00%	63.00%	66.78%	\$0.00	10.26%	5.12%	5.44%
MEAN:			5.05%	5.77%	66.00%	63.37%	66.78%		10.48%	4.98%	5.41%
MEDIAN:								10.26%			
MIN:								9.64%			
MAX:								12.18%			

Earnings per Share	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Alliant Energy Corp.	ALE	\$2.19	\$2.31	\$2.43	\$2.56	\$2.70	\$2.84	\$2.99	\$3.15	\$3.33	\$3.51	\$3.71	\$3.92	\$4.14	\$4.38	\$4.64	\$4.90
Alliant Energy Corp.	LNT	\$2.75	\$2.91	\$3.08	\$3.25	\$3.44	\$3.64	\$3.85	\$4.07	\$4.30	\$4.55	\$4.81	\$5.09	\$5.38	\$5.69	\$6.02	\$6.37
Ameren Corp.	AEE	\$2.77	\$2.88	\$3.00	\$3.12	\$3.24	\$3.37	\$3.50	\$3.66	\$3.82	\$4.01	\$4.22	\$4.45	\$4.70	\$4.98	\$5.26	\$5.57
Avista Corp.	AVA	\$1.65	\$1.72	\$1.80	\$1.88	\$1.96	\$2.05	\$2.14	\$2.24	\$2.34	\$2.46	\$2.59	\$2.74	\$2.90	\$3.06	\$3.24	\$3.43
Black Hills Corp.	BKH	\$1.66	\$1.77	\$1.88	\$2.01	\$2.14	\$2.27	\$2.42	\$2.58	\$2.74	\$2.91	\$3.08	\$3.26	\$3.45	\$3.65	\$3.86	\$4.08
Center Point Energy	CNP	\$1.07	\$1.12	\$1.17	\$1.22	\$1.28	\$1.34	\$1.40	\$1.46	\$1.53	\$1.61	\$1.70	\$1.79	\$1.90	\$2.01	\$2.12	\$2.25
Consolidated Edison	ED	\$3.47	\$3.57	\$3.69	\$3.82	\$3.95	\$4.09	\$4.23	\$4.39	\$4.57	\$4.78	\$5.02	\$5.29	\$5.60	\$5.92	\$6.26	\$6.62
Domination Resources, Inc.	D	\$2.89	\$2.76	\$2.90	\$3.05	\$3.20	\$3.36	\$3.53	\$3.72	\$3.92	\$4.13	\$4.36	\$4.60	\$4.87	\$5.15	\$5.45	\$5.76
DTE Energy Co.	DTE	\$3.74	\$3.90	\$4.07	\$4.25	\$4.43	\$4.62	\$4.82	\$5.04	\$5.28	\$5.55	\$5.84	\$6.16	\$6.52	\$6.89	\$7.29	\$7.71
Integrus/WPS Resources	TEG	\$3.24	\$3.54	\$3.86	\$4.21	\$4.60	\$5.02	\$5.47	\$5.94	\$6.42	\$6.90	\$7.37	\$7.84	\$8.29	\$8.77	\$9.27	\$9.81
Pepco Holdings, Inc.	POM	\$1.24	\$1.28	\$1.33	\$1.37	\$1.42	\$1.47	\$1.52	\$1.57	\$1.64	\$1.71	\$1.80	\$1.90	\$2.01	\$2.12	\$2.24	\$2.37
PG&E Corp.	PCG	\$2.82	\$2.92	\$3.02	\$3.12	\$3.23	\$3.34	\$3.46	\$3.59	\$3.74	\$3.91	\$4.11	\$4.33	\$4.58	\$4.84	\$5.12	\$5.41
SCANA Corp.	SCG	\$2.98	\$2.97	\$3.09	\$3.21	\$3.33	\$3.46	\$3.59	\$3.75	\$3.91	\$4.10	\$4.31	\$4.55	\$4.81	\$5.09	\$5.38	\$5.69
Sempra Energy	SRE	\$4.02	\$4.27	\$4.53	\$4.81	\$5.11	\$5.43	\$5.76	\$6.11	\$6.48	\$6.87	\$7.28	\$7.70	\$8.15	\$8.62	\$9.11	\$9.64
TECO Energy, Inc.	TE	\$1.13	\$1.27	\$1.34	\$1.42	\$1.50	\$1.58	\$1.67	\$1.77	\$1.87	\$1.97	\$2.07	\$2.20	\$2.33	\$2.47	\$2.61	\$2.76
UIL Holdings Corp.	UIL	\$1.99	\$2.07	\$2.13	\$2.19	\$2.25	\$2.32	\$2.39	\$2.45	\$2.51	\$2.58	\$2.64	\$2.70	\$2.76	\$2.82	\$2.88	\$2.94
Vectren Corp.	VVC	\$1.64	\$1.72	\$1.81	\$1.89	\$1.99	\$2.09	\$2.19	\$2.30	\$2.42	\$2.55	\$2.69	\$2.84	\$3.00	\$3.18	\$3.36	\$3.56
Wisconsin Energy	WEC	\$1.92	\$2.05	\$2.20	\$2.35	\$2.51	\$2.68	\$2.87	\$3.06	\$3.26	\$3.47	\$3.69	\$3.91	\$4.13	\$4.37	\$4.62	\$4.89
Xcel Energy, Inc.	XEL	\$1.56	\$1.64	\$1.72	\$1.81	\$1.90	\$2.00	\$2.10	\$2.21	\$2.33	\$2.46	\$2.60	\$2.74	\$2.90	\$3.07	\$3.25	\$3.43

COMBINATION PROXY GROUP - MULTI-STAGE DCF MODEL - 180-DAY AVERAGE PRICE

Dividend Payout Ratio	[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
Alliant Energy Corp.	ALE	68.00%	66.00%	64.00%	62.00%	62.68%	63.37%	64.05%	64.73%	65.41%	66.10%	66.78%	66.78%	66.78%	66.78%
Alliant Energy Corp.	LNT	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%
Ameren Corp.	AEE	67.00%	66.00%	65.00%	64.00%	64.54%	65.08%	65.62%	66.16%	66.70%	67.24%	66.78%	66.78%	66.78%	66.78%
Avista Corp.	AVA	64.00%	65.33%	66.67%	68.00%	67.83%	67.62%	67.48%	67.30%	67.13%	66.95%	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%
Center Point Energy	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%
Consolidated Edison	ED	65.00%	64.00%	63.00%	62.00%	62.68%	63.37%	64.05%	64.73%	65.41%	66.10%	66.78%	66.78%	66.78%	66.78%
Domination Resources, Inc.	D	67.00%	66.33%	65.67%	65.00%	65.25%	65.51%	65.76%	66.02%	66.27%	66.52%	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%
Integrus/WPS Resources	TEG	77.00%	74.00%	71.00%	68.00%	67.83%	67.65%	67.48%	67.30%	67.13%	66.95%	66.78%	66.78%	66.78%	66.78%
Pepco Holdings, Inc.	POM	83.00%	78.33%	73.67%	69.00%	68.68%	68.37%	68.05%	67.73%	67.41%	67.10%	66.78%	66.78%	66.78%	66.78%
PG&E Corp.	PCG	61.00%	57.33%	53.67%	50.00%	52.40%	54.79%	57.19%	59.59%	61.98%	64.38%	66.78%	66.78%	66.78%	66.78%
SCANA Corp.	SCG	63.00%	61.67%	60.33%	59.00%	60.11%	61.22%	62.33%	63.44%	64.56%	65.67%	66.78%	66.78%	66.78%	66.78%
Sempra Energy	SRE	45.00%	44.33%	43.67%	43.00%	46.40%	49.70%	53.19%	56.59%	59.98%	63.38%	66.78%	66.78%	66.78%	66.78%
TECO Energy, 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%
UIL 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%
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%
Wisconsin Energy	WEC	53.00%	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%
Xcel Energy, Inc.	XEL	58.00%	59.67%	61.33%	63.00%	63.54%	64.08%	64.62%	65.16%	65.70%	66.24%	66.78%	66.78%	66.78%	66.78%

Dividends per Share and Terminal Market Value	[44]	[45]	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	
Company	Ticker	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Terminal Price	Terminal P/E Ratio
Alliant Energy Corp.	ALE	\$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	\$3.46	\$88.47	17.06
Alliant Energy Corp.	LNT	\$2.00	\$2.10	\$2.21	\$2.33	\$2.48	\$2.64	\$2.80	\$2.97	\$3.17	\$3.38	\$3.59	\$3.80	\$4.02	\$4.25	\$4.50	\$91.52	13.59
Ameren Corp.	AEE	\$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	\$3.93	\$65.30	11.09
Avista Corp.	AVA	\$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	\$2.42	\$54.30	14.99
Black Hills Corp.	BKH	\$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	\$2.88	\$70.90	16.42
Center Point Energy	CNP	\$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			

ELECTRIC UTILITY AND COMBINATION UTILITY PROXY GROUP MULTI-STAGE DCF NOTES

- [1] Source: Bloomberg Professional; based on 30, 90, or 180-day averaging period
- [2] Source: Exhibit No. \_\_\_(RBH-1); Yahoo! Finance, Zacks & Value Line; equals average earnings growth estimate
- [3] Source: EIA Annual Energy Outlook 2011, 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  $(\text{Column [18]} / \text{Column [12]})^{(1/(2016-2010))} - 1$
- [10] Equals  $(\text{Column [23]} / \text{Column [18]})^{(1/(2021-2016))} - 1$
- [11] Equals  $(\text{Column [28]} / \text{Column [23]})^{(1/(2026-2021))} - 1$
- [12] Source: Value Line
- [13] Equals Column [12] x (1 + Column [2]) or Value Line if actual data is available
- [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  $(1 + (\text{Column [2]} + (((\text{Column [3]} - \text{Column [2]}) / (2021 - 2016 + 1)) \times (2017 - 2016)))) \times \text{Column [18]}$
- [20] Equals  $(1 + (\text{Column [2]} + (((\text{Column [3]} - \text{Column [2]}) / (2021 - 2016 + 1)) \times (2018 - 2016)))) \times \text{Column [19]}$
- [21] Equals  $(1 + (\text{Column [2]} + (((\text{Column [3]} - \text{Column [2]}) / (2021 - 2016 + 1)) \times (2019 - 2016)))) \times \text{Column [20]}$
- [22] Equals  $(1 + (\text{Column [2]} + (((\text{Column [3]} - \text{Column [2]}) / (2021 - 2016 + 1)) \times (2020 - 2016)))) \times \text{Column [21]}$
- [23] Equals  $(1 + (\text{Column [2]} + (((\text{Column [3]} - \text{Column [2]}) / (2021 - 2016 + 1)) \times (2021 - 2016)))) \times \text{Column [22]}$
- [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  $\text{Column [29]} + ((\text{Column [32]} - \text{Column [29]}) / 3)$
- [31] Equals  $\text{Column [30]} + ((\text{Column [32]} - \text{Column [29]}) / 3)$
- [32] Equals Column [5]
- [33] Equals  $\text{Column [32]} + ((\text{Column [39]} - \text{Column [32]}) / 7)$
- [34] Equals  $\text{Column [33]} + ((\text{Column [39]} - \text{Column [32]}) / 7)$
- [35] Equals  $\text{Column [34]} + ((\text{Column [39]} - \text{Column [32]}) / 7)$
- [36] Equals  $\text{Column [35]} + ((\text{Column [39]} - \text{Column [32]}) / 7)$
- [37] Equals  $\text{Column [36]} + ((\text{Column [39]} - \text{Column [32]}) / 7)$
- [38] Equals  $\text{Column [37]} + ((\text{Column [39]} - \text{Column [32]}) / 7)$
- [39] Equals Column [6]
- [40] Equals Column [6]
- [41] Equals Column [6]
- [42] Equals Column [6]
- [43] Equals Column [6]
- [44] Equals Column [14] x Column [29]
- [45] Equals Column [15] x Column [30]
- [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  $(\text{Column [58]} \times (1 + \text{Column [3]})) / (\text{Column [8]} - \text{Column [3]})$
- [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]



Schedule RBH-3

Capital Asset Pricing Model

PROXY GROUP BETAS

<b>Electric Proxy Group</b>		<b>Bloomberg</b>	<b>Value Line</b>
American Electric Power	AEP	0.67	0.70
Cleco Corp.	CNL	0.77	0.70
Edison International	EIX	0.72	0.80
First Energy Corp.	FE	0.74	0.80
Great Plains Energy Inc.	GXP	0.80	0.75
Hawaiian Electric	HE	0.76	0.70
IDACORP, Inc.	IDA	0.83	0.70
Integrus/WPS Resources	TEG	0.80	0.90
Otter Tail Corp.	OTTR	0.88	0.90
Pepco Holdings, Inc.	POM	0.72	0.80
Pinnacle West Capital	PNW	0.73	0.70
Portland General	POR	0.75	0.75
Southern Co.	SO	0.54	0.55
Westar Energy	WR	0.72	0.75
MEAN		0.74	0.75

<b>Gas Proxy Group</b>		<b>Bloomberg</b>	<b>Value Line</b>
Atmos Energy	ATO	0.79	0.70
Laclede Group	LG	0.71	0.60
New Jersey Resources	NJR	0.77	0.65
Northwest Nat. Gas	NWN	0.78	0.60
Piedmont Natural Gas	PNY	0.83	0.70
South Jersey Industries	SJI	0.87	0.65
Southwest Gas	SWX	0.86	0.75
WGL Holdings Inc.	WGL	0.79	0.65
MEAN		0.80	0.66

<b>Electric and Gas Proxy Group</b>		<b>Bloomberg</b>	<b>Value Line</b>
Weighted Average		0.76	0.73

<b>Combination Proxy Group</b>		<b>Bloomberg</b>	<b>Value Line</b>
ALLETE	ALE	0.82	0.70
Alliant Energy Corp.	LNT	0.79	0.75
Ameren Corp.	AEE	0.71	0.80
Avista Corp.	AVA	0.81	0.70
Black Hills Corp.	BKH	0.92	0.85
Center Point Energy	CNP	0.79	0.80
Consolidated Edison	ED	0.55	0.60
Dominion Resources, Inc.	D	0.62	0.70
DTE Energy Co.	DTE	0.74	0.75
Integrus/WPS Resources	TEG	0.80	0.90
Pepco Holdings, Inc.	POM	0.72	0.80
PG&E Corp	PCG	0.58	0.55
SCANA Corp.	SCG	0.71	0.70
Sempra Energy	SRE	0.80	0.80
TECO Energy, Inc.	TE	0.89	0.85
UIL Holdings Corp.	UIL	0.72	0.70
Vectren Corp.	VVC	0.75	0.70
Wisconsin Energy	WEC	0.64	0.65
Xcel Energy, Inc.	XEL	0.62	0.65
MEAN		0.74	0.73

CAPM AND MARKET RISK PREMIUM CALCULATIONS

	[3]	[4]	[5]	[6]	[7]	[8]
	Risk-Free Rate	Average Beta	Market Risk Premium		Return on Equity CAPM	
			Sharpe Ratio Derived	Market DCF Derived	Sharpe Ratio Derived	Market DCF Derived
<b>ELECTRIC AND GAS PROXY GROUP AVERAGE BLOOMBERG BETA</b>						
[1] Current 30-Year Treasury (30-day average)	3.16%	0.760	8.48%	10.03%	9.60%	10.78%
[2] Near-Term Projected 30-Year Treasury	3.42%	0.760	8.48%	10.03%	9.86%	11.03%
					9.73%	10.90%
<b>ELECTRIC AND GAS PROXY GROUP AVERAGE VALUE LINE BETA</b>						
[1] Current 30-Year Treasury (30-day average)	3.16%	0.726	8.48%	10.03%	9.32%	10.44%
[2] Near-Term Projected 30-Year Treasury	3.42%	0.726	8.48%	10.03%	9.58%	10.70%
					9.45%	10.57%

	Risk-Free Rate	Average Beta	Market Risk Premium		Return on Equity CAPM	
			Sharpe Ratio Derived	Market DCF Derived	Sharpe Ratio Derived	Market DCF Derived
<b>COMBINATION PROXY GROUP AVERAGE BLOOMBERG BETA</b>						
[1] Current 30-Year Treasury (30-day average)	3.16%	0.735	8.48%	10.03%	9.40%	10.53%
[2] Near-Term Projected 30-Year Treasury	3.42%	0.735	8.48%	10.03%	9.65%	10.79%
					9.53%	10.66%
<b>COMBINATION PROXY GROUP AVERAGE VALUE LINE BETA</b>						
[1] Current 30-Year Treasury (30-day average)	3.16%	0.734	8.48%	10.03%	9.39%	10.52%
[2] Near-Term Projected 30-Year Treasury	3.42%	0.734	8.48%	10.03%	9.64%	10.78%
					9.52%	10.65%

MARKET RISK PREMIUM USING EXPECTED MARKET VOLATILITY				
[9]	[10]	[11]	[12]	[13]
$RP_h$	$Vol_h$	$VOL_e$	Historical Market Sharpe Ratio	$RP_e$
6.60%	20.36%	26.16%	32.42%	8.48%

	[14]	[15]	[16]	[17]
	Date	Jul 12 VIX Futures	Aug 12 VIX Futures	Sep 12 VIX Futures
	03/16/2012	20.37	25.90	26.60
	03/15/2012	20.54	25.95	26.65
	03/14/2012	20.75	26.20	26.95
	03/13/2012	19.60	25.75	26.55
	03/12/2012	20.81	26.30	27.10
	03/09/2012	21.22	26.75	27.60
	03/08/2012	21.84	27.25	27.95
	03/07/2012	22.72	27.60	28.25
	03/06/2012	23.90	28.30	28.85
	03/05/2012	21.99	27.95	28.60
	03/02/2012	21.26	27.75	28.30
	03/01/2012	21.03	27.05	27.60
	02/29/2012	21.80	27.70	28.35
	02/28/2012	21.60	27.85	28.45
	02/27/2012	21.87	28.35	28.85
	02/24/2012	21.18	28.00	28.60
	02/23/2012	20.78	27.40	28.10
	02/22/2012	22.09	27.65	28.20
	02/21/2012	22.35	28.25	28.85
	02/17/2012	22.39	27.95	28.55
	02/16/2012	23.17	27.65	28.25
	02/15/2012	24.12	28.00	28.45
	02/14/2012	22.82	27.15	27.75
	02/13/2012	22.12	26.65	27.25
	02/10/2012	23.28	27.05	27.55
	02/09/2012	21.34	26.55	27.00
	02/08/2012	20.68	25.75	26.35
	02/07/2012	20.14	25.50	26.10
	02/06/2012	20.39	25.55	26.15
	02/03/2012	20.05	26.05	26.50
Average		26.16		

Notes:  
[1] Source: Bloomberg  
[2] Source: Blue Chip Financial Forecasts, Vol. 31, No. 3, March 1, 2012, at 2  
[3] see Notes [1] and [2]  
[4] see Notes [1] and [2]  
[5] Equals Col. [13]  
[6] Equals RBH-3, pg 3 of 8, column [5]  
[7] Equals (Col. [4] x Col. [5]) + Col. [3]  
[8] Equals (Col. [4] x Col. [6]) + Col. [3]  
[9] Source: Morningstar, Inc. 2012 Valuation Yearbook  
 $RP_h$  = historical arithmetic average Risk Premium  
[10] Source: Morningstar, Inc. 2012 Valuation Yearbook  
 $Vol_h$  = historical market volatility  
[11]  $Vol_e$  = expected market volatility (average of Cols. [14]-[17])  
[12] Equals Col. [9] / Col. [10]  
[13] Equals Col. [11] x Col. [12]  
[14] Source: Bloomberg  
[15] Source: Bloomberg  
[16] Source: Bloomberg  
[17] Source: Bloomberg

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

ESTIMATED MARKET RISK PREMIUM DERIVED FROM ANALYSTS LONG-TERM GROWTH ESTIMATES

[1] Estimated Weighted Index Dividend Yield	[2] Weighted Index Long-Term Growth Rate	[3] S&P 500 Est. Required Market Return
2.09%	10.98%	13.19%
[4] Current 30-Year Treasury (30-day average)		3.16%
[5] Implied Market Risk Premium:		10.03%
[6] Percent of Index Capitalization Represented by Estimate:		97.85%

STANDARD AND POOR'S 500 INDEX

Name	Ticker	[7] Weight in Index	[8] Long-Term Growth Est.	[9] Cap-Weighted Long-Term Growth Est.	[10] Estimated Dividend Yield	[11] Cap-Weighted Dividend Yield
3M 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%
AMERISOURCEBERGER 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%
AGON 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	na
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	n/a	na	na
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	na
BIOGEN IDEC INC	BIIB	0.22%	12.90%	0.03%	0.00%	0.00%
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	na
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%
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	na
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%	n/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%
ENERGY 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	na
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%
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	na
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%
KOHL'S 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	na
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	na
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%
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%
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	na
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	na
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	na
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	na
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	na
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	SY	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	na
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%
TRIPADVISOR INC	TRIP	0.03%	12.67%	0.00%	n/a	na
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	na
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	na
WW GRAINGER INC	GWV	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. [11]  
[2] Equals sum of Col. [9]  
[3] Equals  $([1] \times (1 + (0.5 \times [2]))) + [2]$   
[4] Source: Bloomberg  
[5] Equals [3] - [4]  
[6] Equals sum of Col. [7] if Col. [8]  $\neq$  n/a  
[7] Equals weight in S&P 500 based on market capitalization  
[8] Source: Bloomberg  
[9] Equals Col. [7] x Col. [8] if Col. [8]  $\neq$  n/a, otherwise equals zero  
[10] Source: Bloomberg  
[11] Equals Col. [7] x Col. [10] if Col. [8]  $\neq$  n/a, otherwise equals zero



Schedule RBH-4

Bond Yield Plus Risk Premium

WEIGHTED AVERAGE BOND YIELD  
PLUS RISK PREMIUM RESULTS

Electric Utility Risk Premium Results:

	U.S. Govt. 30-year Treasury	Risk Premium	ROE
Current 30-Day Average	3.16%	6.95%	10.11%
Blue Chip Consensus Forecast (Q1 2012 - Q2 2013)	3.42%	6.80%	10.21%
Blue Chip Consensus Forecast (2013 - 2022)	5.30%	5.64%	10.94%
<b>AVERAGE</b>			<b>10.42%</b>

Natural Gas Utility Risk Premium Results:

	U.S. Govt. 30-year Treasury	Risk Premium	ROE
Current 30-Day Average	3.16%	6.76%	9.92%
Blue Chip Consensus Forecast (Q1 2012 - Q2 2013)	3.42%	6.61%	10.03%
Blue Chip Consensus Forecast (2013 - 2022)	5.30%	5.50%	10.80%
<b>AVERAGE</b>			<b>10.25%</b>

Weighted Average Bond Yield Risk Plus Risk Premium Results (73% Electric Utility / 27% Natural Gas Utility)

	U.S. Govt. 30-year Treasury	Risk Premium	ROE
Current 30-Day Average	3.16%	6.90%	10.06%
Blue Chip Consensus Forecast (Q1 2012 - Q2 2013)	3.42%	6.75%	10.16%
Blue Chip Consensus Forecast (2013 - 2022)	5.30%	5.60%	10.90%
<b>AVERAGE</b>			<b>10.37%</b>

BOND YIELD PLUS RISK PREMIUM - ELECTRIC

	[1]	[2]	[3]
	Average Authorized ROE	U.S. Govt. 30-year Treasury	Risk Premium
1992.1	12.38%	7.84%	4.55%
1992.2	11.83%	7.88%	3.94%
1992.3	12.03%	7.42%	4.62%
1992.4	12.14%	7.54%	4.60%
1993.1	11.84%	7.01%	4.83%
1993.2	11.64%	6.86%	4.78%
1993.3	11.15%	6.23%	4.92%
1993.4	11.04%	6.21%	4.84%
1994.1	11.07%	6.66%	4.40%
1994.2	11.13%	7.45%	3.68%
1994.3	12.75%	7.55%	5.20%
1994.4	11.24%	7.95%	3.29%
1995.1	11.96%	7.52%	4.44%
1995.2	11.32%	6.87%	4.45%
1995.3	11.37%	6.66%	4.71%
1995.4	11.58%	6.14%	5.45%
1996.1	11.46%	6.39%	5.07%
1996.2	11.46%	6.92%	4.54%
1996.3	10.70%	7.00%	3.70%
1996.4	11.56%	6.54%	5.02%
1997.1	11.08%	6.90%	4.18%
1997.2	11.62%	6.88%	4.73%
1997.3	12.00%	6.44%	5.56%
1997.4	11.06%	6.04%	5.02%
1998.1	11.31%	5.89%	5.43%
1998.2	12.20%	5.79%	6.41%
1998.3	11.65%	5.32%	6.33%
1998.4	12.30%	5.11%	7.20%
1999.1	10.40%	5.43%	4.97%
1999.2	10.94%	5.82%	5.12%
1999.3	10.75%	6.07%	4.68%
1999.4	11.10%	6.31%	4.79%
2000.1	11.21%	6.15%	5.06%
2000.2	11.00%	5.95%	5.05%
2000.3	11.68%	5.78%	5.90%
2000.4	12.50%	5.62%	6.88%
2001.1	11.38%	5.42%	5.96%
2001.2	10.88%	5.77%	5.11%
2001.3	10.76%	5.44%	5.32%
2001.4	11.57%	5.21%	6.36%
2002.1	10.05%	5.55%	4.50%
2002.2	11.41%	5.57%	5.83%
2002.3	11.25%	4.96%	6.29%
2002.4	11.57%	4.93%	6.63%
2003.1	11.43%	4.78%	6.65%
2003.2	11.16%	4.57%	6.60%
2003.3	9.88%	5.15%	4.72%
2003.4	11.09%	5.11%	5.98%
2004.1	11.00%	4.86%	6.14%
2004.2	10.64%	5.31%	5.33%
2004.3	10.75%	5.01%	5.74%
2004.4	10.91%	4.87%	6.04%
2005.1	10.56%	4.69%	5.87%
2005.2	10.13%	4.34%	5.78%
2005.3	10.85%	4.43%	6.41%
2005.4	10.59%	4.66%	5.93%
2006.1	10.38%	4.69%	5.69%
2006.2	10.63%	5.19%	5.44%
2006.3	10.06%	4.90%	5.16%
2006.4	10.33%	4.70%	5.64%
2007.1	10.39%	4.81%	5.58%
2007.2	10.27%	4.98%	5.28%
2007.3	10.02%	4.85%	5.16%
2007.4	10.36%	4.53%	5.83%
2008.1	10.37%	4.34%	6.03%
2008.2	10.54%	4.57%	5.97%
2008.3	10.38%	4.44%	5.95%
2008.4	10.36%	3.49%	6.86%
2009.1	10.46%	3.62%	6.85%
2009.2	10.58%	4.23%	6.34%
2009.3	10.46%	4.18%	6.28%
2009.4	10.54%	4.35%	6.19%
2010.1	10.66%	4.59%	6.08%
2010.2	10.08%	4.20%	5.87%
2010.3	10.34%	3.73%	6.61%
2010.4	10.34%	4.14%	6.20%
2011.1	10.32%	4.53%	5.80%
2011.2	10.23%	4.33%	5.90%
2011.3	10.13%	3.54%	6.58%
2011.4	10.29%	3.03%	7.26%
2012.1	10.57%	3.01%	7.56%
AVERAGE	11.00%	5.48%	5.53%
MEDIAN	11.00%	5.31%	5.58%



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.834677
R Square	0.696686
Adjusted R Square	0.692847
Standard Error	0.004868
Observations	81

ANOVA

	df	SS	MS	F	Sig. F
Regression	1	0.004299	0.004299	181.456109	0.000000
Residual	79	0.001872	0.000024		
Total	80	0.006171			

	Coefficients	Std. Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.088990	0.002561	34.742173	0.000000	0.083891	0.094088	0.083891	0.094088
U.S. Govt. 30-year Treasury	-0.615669	0.045705	-13.470565	0.000000	-0.706642	-0.524696	-0.706642	-0.524696

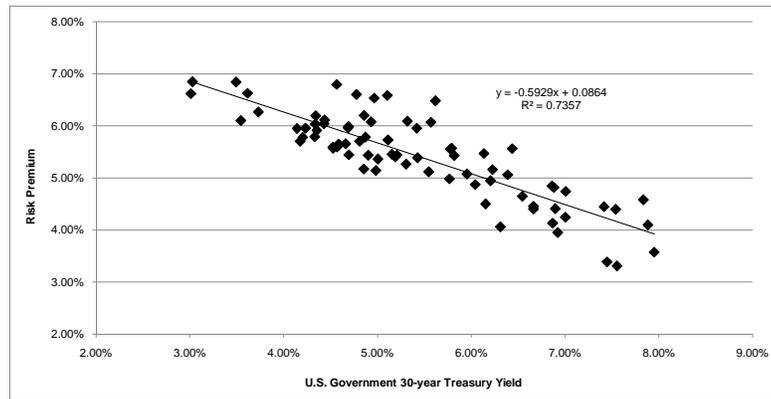
	[7]	[8]	[9]
	U.S. Govt. 30-year Treasury	Risk Premium	ROE
Current 30-Day Average [4]	3.16%	6.95%	10.11%
Blue Chip Consensus Forecast (Q1 2012 - Q2 2013) [5]	3.42%	6.80%	10.21%
Blue Chip Consensus Forecast (2013 - 2022) [6]	5.30%	5.64%	10.94%
<b>AVERAGE</b>			<b>10.42%</b>

Notes:

- [1] Source: Regulatory Research Associates, accessed March 16, 2012.
- [2] Source: Bloomberg Professional, quarterly bond yields are the average of the last trading day of each month in the quarter.
- [3] Equals Column [1] - Column [2]
- [4] Source: Bloomberg Professional
- [5] Source: Blue Chip Financial Forecasts, Vol. 31, No. 3, March 1, 2012, at 2.
- [6] Source: Blue Chip Financial Forecasts, Vol. 30, No. 12, December 1, 2011, at 14.
- [7] See notes [4], [5] & [6]
- [8] Equals 0.088990 + (-0.615669 x Column [7])
- [9] Equals Column [7] + Column [8]

BOND YIELD PLUS RISK PREMIUM - GAS

	[1] Average Authorized ROE	[2] U.S. Govt. 30-year Treasury	[3] Risk Premium
1992.1	12.42%	7.84%	4.58%
1992.2	11.98%	7.88%	4.10%
1992.3	11.87%	7.42%	4.45%
1992.4	11.94%	7.54%	4.40%
1993.1	11.75%	7.01%	4.74%
1993.2	11.71%	6.86%	4.85%
1993.3	11.39%	6.23%	5.16%
1993.4	11.16%	6.21%	4.95%
1994.1	11.12%	6.66%	4.46%
1994.2	10.84%	7.45%	3.39%
1994.3	10.87%	7.55%	3.31%
1994.4	11.53%	7.95%	3.58%
1995.2	11.00%	6.87%	4.13%
1995.3	11.07%	6.66%	4.40%
1995.4	11.61%	6.14%	5.47%
1996.1	11.45%	6.39%	5.06%
1996.2	10.88%	6.92%	3.95%
1996.3	11.25%	7.00%	4.25%
1996.4	11.19%	6.54%	4.65%
1997.1	11.31%	6.90%	4.41%
1997.2	11.70%	6.88%	4.82%
1997.3	12.00%	6.44%	5.56%
1997.4	10.92%	6.04%	4.87%
1998.2	11.37%	5.79%	5.57%
1998.3	11.41%	5.32%	6.09%
1998.4	11.69%	5.11%	6.59%
1999.1	10.82%	5.43%	5.39%
1999.2	11.25%	5.82%	5.43%
1999.4	10.38%	6.31%	4.06%
2000.1	10.66%	6.15%	4.50%
2000.2	11.03%	5.95%	5.08%
2000.3	11.33%	5.78%	5.56%
2000.4	12.10%	5.62%	6.48%
2001.1	11.38%	5.42%	5.96%
2001.2	10.75%	5.77%	4.98%
2001.4	10.65%	5.21%	5.44%
2002.1	10.67%	5.55%	5.12%
2002.2	11.64%	5.57%	6.07%
2002.3	11.50%	4.96%	6.54%
2002.4	11.01%	4.93%	6.08%
2003.1	11.38%	4.78%	6.61%
2003.2	11.36%	4.57%	6.80%
2003.3	10.61%	5.15%	5.46%
2003.4	10.84%	5.11%	5.73%
2004.1	11.06%	4.86%	6.20%
2004.2	10.57%	5.31%	5.27%
2004.3	10.37%	5.01%	5.36%
2004.4	10.66%	4.87%	5.79%
2005.1	10.65%	4.69%	5.96%
2005.2	10.54%	4.34%	6.19%
2005.3	10.47%	4.43%	6.04%
2005.4	10.32%	4.66%	5.66%
2006.1	10.68%	4.69%	5.99%
2006.2	10.60%	5.19%	5.41%
2006.3	10.34%	4.90%	5.44%
2006.4	10.14%	4.70%	5.45%
2007.1	10.52%	4.81%	5.71%
2007.2	10.13%	4.98%	5.14%
2007.3	10.03%	4.85%	5.17%
2007.4	10.12%	4.53%	5.59%
2008.1	10.38%	4.34%	6.04%
2008.2	10.17%	4.57%	5.60%
2008.3	10.55%	4.44%	6.12%
2008.4	10.34%	3.49%	6.85%
2009.1	10.24%	3.62%	6.63%
2009.2	10.19%	4.23%	5.96%
2009.3	9.88%	4.18%	5.70%
2009.4	10.27%	4.35%	5.92%
2010.1	10.24%	4.59%	5.65%
2010.2	9.99%	4.20%	5.78%
2010.3	10.00%	3.73%	6.27%
2010.4	10.09%	4.14%	5.95%
2011.1	10.10%	4.53%	5.57%
2011.2	10.12%	4.33%	5.79%
2011.3	9.65%	3.54%	6.11%
2011.4	9.88%	3.03%	6.85%
2012.1	9.63%	3.01%	6.62%
AVERAGE	10.85%	5.44%	5.41%
MEDIAN	10.82%	5.19%	5.56%



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.857732
R Square	0.735705
Adjusted R Square	0.732181
Standard Error	0.004276
Observations	77

ANOVA					
	df	SS	MS	F	Sig. F
Regression	1	0.003817	0.003817	208.773585	0.000000
Residual	75	0.001371	0.000018		
Total	76	0.005189			

	Coefficients	Std. Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.086382	0.002284	37.814772	0.000000	0.081831	0.090932	0.081831	0.090932
U.S. Govt. 30-year Treasury	-0.592886	0.041033	-14.448999	0.000000	-0.674628	-0.511144	-0.674628	-0.511144

	[7] U.S. Govt. 30-year Treasury	[8] Risk Premium	[9] ROE
Current 30-Day Average [4]	3.16%	6.76%	9.92%
Blue Chip Consensus Forecast (Q1 2012 - Q2 2013) [5]	3.42%	6.61%	10.03%
Blue Chip Consensus Forecast (2013 - 2022) [6]	5.30%	5.50%	10.80%
AVERAGE			10.25%

Notes:

- [1] Source: Regulatory Research Associates, accessed March 16, 2012
- [2] Source: Bloomberg Professional, quarterly bond yields are the average of the last trading day of each month in the quart
- [3] Equals Column [1] - Column [2]
- [4] Source: Bloomberg Professional
- [5] Source: Blue Chip Financial Forecasts, Vol. 31, No. 3, March 1, 2012, at 2
- [6] Source: Blue Chip Financial Forecasts, Vol. 30, No. 12, December 1, 2011, at 14
- [7] See notes [4], [5] & [6]
- [8] Equals 0.086382 + (-0.592886 x Column [7])
- [9] Equals Column [7] + Column [8]



Schedule RBH-5

Regulatory Risk Assessment

REGULATORY RISK ASSESSMENT

		[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
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
Integrus/WPS Resources	Illinois	Less credit supportive	2	Below Average / 2	2
	Michigan	Credit supportive	3	Average / 1	6
	Minnesota	Credit supportive	3	Average / 2	5
	Wisconsin	More credit supportive	4	Above Average / 2	8

REGULATORY RISK ASSESSMENT

		[1]	[2]	[3]	[4]
		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
SCANA Corp.	South Carolina	More credit supportive	4	Average / 1	6
Sempra Energy	California	More credit supportive	4	Average / 1	6
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
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			2.82		5.31
Narragansett Electric	Rhode Island	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] AA/1= 9, AA/2= 8, AA/3= 7, A/1= 6, A/2= 5, A/3= 4, BA/1= 3, BA/2= 2, BA/3= 1



Schedule RBH-6

Size Premium Analysis

COMBININATION UTILITY PROXY GROUP SIZE PREMIUM CALCULATION

Company Name (Ticker)	Ticker	Customers (Mil) [1]	Market Cap (\$Bil) [2]	Market to Book Ratio [2]
Allete	ALE	0.17	1.55	1.44
Alliant Energy Corp.	LNT	1.39	4.78	1.59
Ameren Corp.	AEE	3.38	7.71	0.97
Avista Corp.	AVA	0.68	1.48	1.25
Black Hills Corp.	BKH	0.76	1.40	1.23
Center Point Energy	CNP	5.40	8.11	1.92
Consolidated Edison	ED	4.80	17.10	1.50
Dominion Resources, Inc.	D	3.73	28.81	2.52
DTE Energy Co.	DTE	3.30	9.22	1.31
Integrus/WPS Resources	TEG	2.17	4.17	1.40
Pepco Holdings, Inc.	POM	1.96	4.47	1.03
PG&E Corp	PCG	9.51	17.30	1.43
SCANA Corp.	SCG	1.46	5.85	1.51
Sempra Energy	SRE	8.00	14.04	1.43
TECO Energy, Inc.	TE	1.01	3.86	1.70
UIL Holdings Corp.	UIL	0.37	1.78	1.63
Vectren Corp.	VVC	1.12	2.40	1.64
Wisconsin Energy	WEC	2.12	7.96	2.00
Xcel Energy, Inc.	XEL	5.28	12.87	1.52
MEDIAN		2.12	5.85	1.50
MEAN		2.98	8.15	1.53

SIZE PREMIUM CALCULATION

Narragansett Electric Company Common Equity (\$ Mil)	1,338,794.00	[3]
Median Market to Book for Proxy Group	1.50	
Narragansett Electric Company Implied Market Cap (\$ Mil)	2,001,680.00	

Market Capitalization (in \$millions)

Decile	Low	High	Size Premium (percent) [4]
2	\$ 6,927.557	\$ 15,408.314	0.78
3	\$ 3,596.535	\$ 6,896.389	0.94
4	\$ 2,366.464	\$ 3,577.774	1.17
5	\$ 1,621.096	\$ 2,362.532	1.74
6	\$ 1,090.652	\$ 1,620.860	1.75
7	\$ 683.059	\$ 1,090.515	1.77
8	\$ 422.999	\$ 682.750	2.51
9	\$ 206.802	\$ 422.811	2.80
10	\$ 1.028	\$ 206.795	6.10
Proxy Group Median	\$ 5,851.21	\$ -	0.94
Narragansett Electric Company Implied Market Capitalization	\$ 2,001.68		1.74
Difference from Proxy Group Median			0.80 [5]

NOTES

[1] Source: SNL Financial. Includes electric and gas.

[2] Bloomberg 30-day average.

[3] Source: Narragansett Electric 2010 FERC Form-1 Total Proprietary Capital less Preferred Stock Issued, at 112.

[4] Source: 2012 Morningstar Risk Premia Over Time Report

[5] Equals 1.74 - 0.94



Schedule RBH-7

Proxy Group Capital Structure Analysis

CAPITAL STRUCTURE ANALYSIS  
COMMON EQUITY RATIO

Electric Proxy Group Company	Ticker	2011 Q3	2011 Q2	2011 Q1	2010 Q4	2010 Q3	2010 Q2	2010 Q1	2009 Q4	Average
Allele	ALE	57.75%	58.92%	58.73%	56.70%	57.48%	58.61%	58.29%	57.62%	58.01%
Alliant Energy Corp.	LNT	50.37%	49.49%	49.42%	49.15%	49.69%	48.50%	47.73%	48.02%	49.05%
Ameren Corp.	AEE	55.84%	55.47%	54.62%	54.92%	52.62%	50.96%	50.61%	50.81%	53.23%
Avista Corp.	AVA	48.65%	48.82%	48.87%	47.08%	48.11%	47.23%	47.03%	46.41%	47.78%
Black Hills Corp.	BKH	50.90%	50.82%	50.91%	52.13%	52.35%	52.56%	53.05%	52.51%	51.90%
Center Point Energy	CNP	N/A								
Consolidated Edison	ED	49.27%	48.73%	48.24%	48.36%	46.71%	47.48%	48.25%	47.55%	48.07%
Dominion Resources, Inc.	D	53.40%	52.11%	52.85%	52.63%	52.78%	50.94%	53.04%	50.04%	52.22%
DTE Energy Co.	DTE	48.21%	47.40%	48.50%	48.96%	48.93%	48.55%	48.85%	48.67%	48.51%
Integrus	TEG	57.72%	56.38%	56.43%	57.22%	56.88%	58.29%	59.16%	57.52%	57.45%
Pepeco Holdings, Inc.	POM	46.34%	45.45%	45.20%	44.72%	45.22%	43.95%	44.79%	45.00%	45.08%
PG&E Corp	PCG	47.96%	47.46%	46.77%	46.27%	46.50%	46.80%	46.15%	46.75%	46.83%
SCANA Corp.	SCG	51.36%	50.86%	51.27%	52.55%	52.48%	51.49%	50.88%	50.64%	51.44%
Sempra Energy	SRE	51.61%	53.54%	53.03%	50.81%	49.95%	52.92%	55.22%	54.74%	52.73%
TECO Energy, Inc.	TE	52.01%	51.51%	51.32%	50.54%	51.56%	50.53%	51.20%	50.12%	51.10%
UIL Holdings Corp.	UIL	45.88%	46.44%	46.87%	45.38%	45.50%	46.15%	46.82%	47.22%	46.28%
Vectren Corp.	VVC	50.52%	49.77%	49.84%	49.33%	50.48%	49.59%	49.52%	48.33%	49.67%
Wisconsin Energy	WEC	56.66%	58.48%	59.19%	58.09%	59.63%	56.94%	58.08%	57.28%	58.04%
Xcel Energy, Inc.	XEL	54.51%	53.72%	54.25%	53.12%	54.89%	55.01%	54.01%	53.96%	54.18%
MEAN		50.76%	50.80%	50.86%	50.09%	50.69%	50.37%	50.74%	50.45%	50.60%
LOW		45.88%	45.45%	45.20%	44.72%	45.22%	43.95%	44.79%	45.00%	45.08%
HIGH		56.66%	58.48%	59.19%	58.09%	59.63%	56.94%	58.08%	57.28%	58.04%

COMMON EQUITY RATIO - ELECTRIC UTILITY OPERATING COMPANIES

Company Name	Ticker	2011 Q3	2011 Q2	2011 Q1	2010 Q4	2010 Q3	2010 Q2	2010 Q1	2009 Q4	Average
ALLETE (Minnesota Power)	ALE	56.28%	58.10%	57.49%	56.82%	56.79%	59.07%	58.70%	58.65%	57.74%
Superior Water, Light and Power Company	ALE	59.22%	59.74%	59.97%	56.59%	58.17%	58.15%	57.88%	56.60%	58.29%
Interstate Power and Light Company	LNT	47.66%	46.33%	47.24%	47.33%	47.69%	46.32%	45.62%	45.50%	46.71%
Wisconsin Power and Light Company	LNT	53.09%	52.65%	51.60%	50.98%	51.70%	50.67%	49.83%	50.53%	51.38%
Ameren Illinois Company	AEE	58.92%	58.83%	57.28%	57.58%	N/A	N/A	N/A	N/A	N/A
Union Electric Company	AEE	52.76%	52.11%	51.97%	52.26%	52.62%	50.96%	50.61%	50.81%	51.76%
Avista Corporation	AVA	48.65%	48.82%	48.87%	47.08%	48.11%	47.23%	47.03%	46.41%	47.78%
Black Hills Colorado Electric Utility Company, LP	BKH	40.75%	41.85%	42.93%	45.52%	47.35%	50.90%	53.85%	56.05%	47.40%
Black Hills Power, Inc.	BKH	54.38%	53.58%	53.28%	52.81%	52.25%	49.90%	48.95%	45.81%	51.37%
Cheyenne Light, Fuel and Power Company	BKH	57.56%	57.03%	56.51%	58.06%	57.44%	56.88%	56.34%	55.66%	56.94%
CenterPoint Energy Houston Electric, LLC	CNP	N/A								
Consolidated Edison Company of New York, Inc.	ED	50.58%	50.13%	49.03%	49.92%	47.08%	47.72%	47.68%	48.63%	48.85%
Orange and Rockland Utilities, Inc.	ED	47.96%	47.34%	47.45%	46.80%	46.34%	47.24%	48.82%	46.48%	47.30%
Virginia Electric and Power Company	D	53.40%	52.11%	52.85%	52.63%	52.78%	50.94%	53.04%	50.04%	52.22%
Detroit Edison Company	DTE	48.21%	47.40%	48.50%	48.96%	48.93%	48.55%	48.85%	48.67%	48.51%
Upper Peninsula Power Company	TEG	60.38%	58.86%	59.55%	59.27%	58.52%	61.63%	63.36%	60.48%	60.26%
Wisconsin Public Service Corp	TEG	55.05%	53.89%	53.30%	55.17%	55.24%	54.95%	54.95%	54.57%	54.64%
Atlantic City Electric Company	POM	40.66%	37.47%	37.90%	37.49%	39.16%	36.32%	36.06%	37.10%	37.77%
Delmarva Power & Light Company	POM	48.76%	49.89%	49.26%	48.56%	48.55%	47.45%	50.35%	49.90%	49.09%
Potomac Electric Power Company	POM	49.61%	48.98%	48.43%	48.12%	47.94%	48.08%	47.97%	48.01%	48.39%
Pacific Gas and Electric Company	PCG	47.96%	47.46%	46.77%	46.27%	46.50%	46.80%	46.15%	46.75%	46.83%
South Carolina Electric & Gas Co.	SCG	51.36%	50.86%	51.27%	52.55%	52.48%	51.49%	50.88%	50.64%	51.44%
San Diego Gas & Electric Co.	SRE	51.61%	53.54%	53.03%	50.81%	49.95%	52.92%	55.22%	54.74%	52.73%
Tampa Electric Company	TE	52.01%	51.51%	51.32%	50.54%	51.56%	50.53%	51.20%	50.12%	51.10%
United Illuminating Company	UIL	45.88%	46.44%	46.87%	45.38%	45.50%	46.15%	46.82%	47.22%	46.28%
Southern Indiana Gas and Electric Company, Inc.	VVC	50.52%	49.77%	49.84%	49.33%	50.48%	49.59%	49.52%	48.33%	49.67%
Wisconsin Electric Power Company	WEC	56.66%	58.48%	59.19%	58.09%	59.63%	56.94%	58.08%	57.28%	58.04%
Northern States Power Company - MN	XEL	52.27%	52.27%	52.20%	51.14%	51.15%	52.47%	52.24%	51.80%	51.94%
Northern States Power Company - WI	XEL	56.86%	55.87%	56.10%	55.42%	57.66%	57.47%	54.33%	56.29%	56.25%
Public Service Company of Colorado	XEL	56.64%	57.06%	57.87%	55.53%	60.20%	59.65%	58.32%	57.01%	57.79%
Southwestern Public Service Company	XEL	52.27%	49.66%	50.85%	50.40%	50.55%	50.43%	51.17%	50.72%	50.76%

CAPITAL STRUCTURE ANALYSIS  
LONG-TERM DEBT RATIO

Electric Proxy Group Company	Ticker	2011 Q3	2011 Q2	2011 Q1	2010 Q4	2010 Q3	2010 Q2	2010 Q1	2009 Q4	Average
Allele	ALE	42.25%	41.08%	41.27%	41.11%	42.52%	41.39%	41.71%	42.38%	41.71%
Alliant Energy Corp.	LNT	45.82%	46.64%	45.55%	45.56%	45.89%	47.01%	41.54%	44.20%	45.28%
Ameren Corp.	AEE	42.91%	43.26%	44.14%	43.86%	46.36%	47.58%	47.91%	47.72%	45.47%
Avista Corp.	AVA	47.29%	47.99%	48.35%	48.01%	48.29%	48.73%	49.53%	49.44%	48.45%
Black Hills Corp.	BKH	29.35%	29.80%	30.07%	29.71%	30.10%	30.32%	31.57%	32.84%	30.47%
Center Point Energy	CNP	N/A								
Consolidated Edison	ED	49.32%	49.84%	49.22%	50.20%	49.22%	46.85%	49.04%	50.96%	49.33%
Dominion Resources, Inc.	D	41.42%	40.81%	42.01%	41.56%	43.58%	42.35%	45.14%	45.06%	42.74%
DTE Energy Co.	DTE	51.03%	51.22%	50.07%	50.82%	50.82%	50.34%	50.78%	50.96%	50.76%
Integrus	TEG	36.58%	39.25%	38.26%	38.43%	39.28%	40.23%	37.21%	36.82%	38.26%
Pepco Holdings, Inc.	POM	52.82%	53.27%	51.87%	52.36%	52.44%	52.96%	53.39%	53.72%	52.85%
PG&E Corp	PCG	46.79%	47.00%	46.98%	49.25%	48.40%	47.84%	47.49%	48.59%	47.79%
SCAN A Corp.	SCG	41.57%	42.27%	41.56%	41.63%	42.31%	44.90%	45.69%	45.29%	43.15%
Sempra Energy	SRE	47.26%	45.25%	45.75%	47.91%	48.74%	44.49%	42.78%	43.69%	45.73%
TECO Energy, Inc.	TE	47.99%	48.30%	48.68%	49.46%	47.93%	47.41%	48.31%	48.38%	48.31%
UIL Holdings Corp.	UIL	45.90%	46.44%	47.07%	50.01%	49.94%	47.78%	48.46%	48.58%	48.02%
Vectren Corp.	VVC	45.56%	46.02%	46.17%	45.69%	46.40%	46.37%	47.50%	47.61%	46.41%
Wisconsin Energy	WEC	40.63%	36.62%	37.25%	37.34%	38.89%	39.13%	40.22%	40.21%	38.79%
Xcel Energy, Inc.	XEL	44.48%	43.20%	43.77%	44.31%	44.21%	44.02%	45.29%	44.91%	44.27%
MEAN		45.89%	45.37%	45.46%	46.44%	46.59%	46.10%	46.57%	46.78%	46.15%
LOW		40.63%	36.62%	37.25%	37.34%	38.89%	39.13%	40.22%	40.21%	38.79%
HIGH		52.82%	53.27%	51.87%	52.36%	52.44%	52.96%	53.39%	53.72%	52.85%

LONG-TERM DEBT RATIO - ELECTRIC UTILITY OPERATING COMPANIES

Company Name	Ticker	2011 Q3	2011 Q2	2011 Q1	2010 Q4	2010 Q3	2010 Q2	2010 Q1	2009 Q4	Average
ALLETE (Minnesota Power)	ALE	43.72%	41.90%	42.51%	43.18%	43.21%	40.93%	41.30%	41.35%	42.26%
Superior Water, Light and Power Company	ALE	40.78%	40.26%	40.03%	39.04%	41.83%	41.85%	42.12%	43.40%	41.17%
Interstate Power and Light Company	LNT	47.08%	48.28%	46.24%	46.18%	45.86%	47.10%	40.90%	41.44%	45.39%
Wisconsin Power and Light Company	LNT	44.57%	45.00%	44.86%	44.94%	45.92%	46.92%	42.17%	46.95%	45.17%
Ameren Illinois Company	AEE	39.60%	39.68%	41.30%	41.01%	N/A	N/A	N/A	N/A	N/A
Union Electric Company	AEE	46.22%	46.85%	46.99%	46.70%	46.36%	47.58%	47.91%	47.72%	47.04%
Avista Corporation	AVA	47.29%	47.99%	48.35%	48.01%	48.29%	48.73%	49.53%	49.44%	48.45%
Black Hills Colorado Electric Utility Company, LP	BKH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Black Hills Power, Inc.	BKH	45.62%	46.42%	46.72%	47.19%	47.75%	47.84%	51.05%	54.19%	48.35%
Cheyenne Light, Fuel and Power Company	BKH	42.43%	42.97%	43.49%	41.94%	42.55%	43.12%	43.66%	44.34%	43.06%
CenterPoint Energy Houston Electric, LLC	CNP	N/A								
Consolidated Edison Company of New York, Inc.	ED	48.36%	48.80%	47.66%	49.01%	47.79%	50.87%	48.84%	50.27%	48.95%
Orange and Rockland Utilities, Inc.	ED	50.28%	50.88%	50.77%	51.39%	50.64%	42.83%	49.24%	51.65%	49.71%
Virginia Electric and Power Company	D	41.42%	40.81%	42.01%	41.56%	43.58%	42.35%	45.14%	45.06%	42.74%
Detroit Edison Company	DTE	51.03%	51.22%	50.07%	50.82%	50.82%	50.34%	50.78%	50.96%	50.76%
Upper Peninsula Power Company	TEG	36.84%	35.19%	33.99%	34.97%	36.74%	38.37%	32.33%	31.50%	34.99%
Wisconsin Public Service Corp	TEG	36.32%	43.31%	42.54%	41.89%	41.82%	42.09%	42.09%	42.13%	41.52%
Atlantic City Electric Company	POM	56.83%	58.69%	53.31%	53.77%	53.99%	54.39%	58.47%	59.08%	56.07%
Delmarva Power & Light Company	POM	51.24%	50.11%	50.74%	51.44%	51.27%	52.55%	49.65%	50.10%	50.89%
Potomac Electric Power Company	POM	50.39%	51.02%	51.57%	51.88%	52.06%	51.92%	52.03%	51.99%	51.61%
Pacific Gas and Electric Company	PCG	46.79%	47.00%	46.98%	49.25%	48.40%	47.84%	47.49%	48.59%	47.79%
South Carolina Electric & Gas Co.	SCG	41.57%	42.27%	41.56%	41.63%	42.31%	44.90%	45.69%	45.29%	43.15%
San Diego Gas & Electric Co.	SRE	47.26%	45.25%	45.75%	47.91%	48.74%	44.49%	42.78%	43.69%	45.73%
Tampa Electric Company	TE	47.99%	48.30%	48.68%	49.46%	47.93%	47.41%	48.31%	48.38%	48.31%
United Illuminating Company	UIL	45.90%	46.44%	47.07%	50.01%	49.94%	47.78%	48.46%	48.58%	48.02%
Southern Indiana Gas and Electric Company, Inc.	VVC	45.56%	46.02%	46.17%	45.69%	46.40%	46.37%	47.50%	47.61%	46.41%
Wisconsin Electric Power Company	WEC	40.63%	36.62%	37.25%	37.34%	38.89%	39.13%	40.22%	40.21%	38.79%
Northern States Power Company - MN	XEL	46.74%	47.64%	47.66%	48.83%	48.82%	45.90%	47.73%	48.16%	47.69%
Northern States Power Company - WI	XEL	40.08%	40.30%	40.49%	40.50%	41.90%	42.53%	43.59%	41.94%	41.41%
Public Service Company of Colorado	XEL	43.36%	40.93%	41.55%	40.86%	39.80%	40.35%	41.01%	40.27%	41.02%
Southwestern Public Service Company	XEL	47.73%	43.93%	45.36%	47.03%	46.31%	47.30%	48.83%	49.28%	46.97%

CAPITAL STRUCTURE ANALYSIS  
PREFERRED EQUITY RATIO

Electric Proxy Group Company	Ticker	2011 Q3	2011 Q2	2011 Q1	2010 Q4	2010 Q3	2010 Q2	2010 Q1	2009 Q4	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%	3.81%	4.36%	4.35%	4.35%	4.43%	4.38%	4.46%	4.24%
Ameren Corp.	AEE	1.26%	1.27%	1.23%	1.22%	1.03%	1.46%	1.47%	1.47%	1.30%
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%
Center Point Energy	CNP	N/A								
Consolidated Edison	ED	0.53%	0.53%	0.52%	0.53%	0.52%	0.54%	0.54%	0.55%	0.53%
Dominion Resources, Inc.	D	1.56%	1.54%	1.58%	1.60%	1.67%	1.70%	1.81%	1.81%	1.66%
DTE Energy Co.	DTE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Integrus	TEG	1.29%	1.27%	1.25%	1.23%	1.23%	1.24%	1.24%	1.24%	1.25%
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	1.03%	1.03%	1.04%	1.04%	1.06%	1.08%	1.09%	1.10%	1.06%
SCANA Corp.	SCG	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sempra Energy	SRE	1.13%	1.21%	1.22%	1.28%	1.30%	1.43%	1.54%	1.57%	1.34%
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%
Wisconsin Energy	WEC	0.55%	0.57%	0.58%	0.58%	0.60%	0.61%	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%
MEAN		0.30%	0.31%	0.32%	0.33%	0.34%	0.36%	0.37%	0.38%	0.34%
LOW		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
HIGH		1.13%	1.21%	1.22%	1.28%	1.30%	1.43%	1.54%	1.57%	1.34%

PREFERRED EQUITY RATIO - ELECTRIC UTILITY OPERATING COMPANIES

Company Name	Ticker	2011 Q3	2011 Q2	2011 Q1	2010 Q4	2010 Q3	2010 Q2	2010 Q1	2009 Q4	Average
ALLETE (Minnesota Power)	ALE	0.00%	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%	0.00%
Interstate Power and Light Company	LNT	5.26%	5.39%	6.52%	6.50%	6.45%	6.58%	6.42%	6.53%	6.20%
Wisconsin Power and Light Company	LNT	2.21%	2.22%	2.21%	2.21%	2.26%	2.29%	2.35%	2.39%	2.27%
Ameren Illinois Company	AEE	1.49%	1.49%	1.42%	1.41%	N/A	N/A	N/A	N/A	N/A
Union Electric Company	AEE	1.03%	1.04%	1.04%	1.04%	1.03%	1.46%	1.47%	1.47%	1.20%
Avista Corporation	AVA	0.00%	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%	0.00%
Black Hills Power, Inc.	BKH	0.00%	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%	0.00%
CenterPoint Energy Houston Electric, LLC	CNP	N/A								
Consolidated Edison Company of New York, Inc.	ED	1.05%	1.06%	1.04%	1.07%	1.04%	1.08%	1.07%	1.11%	1.07%
Orange and Rockland Utilities, Inc.	ED	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Virginia Electric and Power Company	D	1.56%	1.54%	1.58%	1.60%	1.67%	1.70%	1.81%	1.81%	1.66%
Detroit Edison Company	DTE	0.00%	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%	0.00%
Wisconsin Public Service Corp	TEG	2.58%	2.54%	2.50%	2.46%	2.46%	2.47%	2.47%	2.48%	2.50%
Atlantic City Electric Company	POM	0.00%	0.00%	0.00%	0.33%	0.33%	0.33%	0.35%	0.36%	0.21%
Delmarva Power & Light Company	POM	0.00%	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%	0.00%
Pacific Gas and Electric Company	PCG	1.03%	1.03%	1.04%	1.04%	1.06%	1.08%	1.09%	1.10%	1.06%
South Carolina Electric & Gas Co.	SCG	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
San Diego Gas & Electric Co.	SRE	1.13%	1.21%	1.22%	1.28%	1.30%	1.43%	1.54%	1.57%	1.34%
Tampa Electric Company	TE	0.00%	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%	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%	0.00%
Wisconsin Electric Power Company	WEC	0.55%	0.57%	0.58%	0.58%	0.60%	0.61%	0.62%	0.62%	0.59%
Northern States Power Company - MN	XEL	0.00%	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%	0.00%
Public Service Company of Colorado	XEL	0.00%	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%	0.00%

CAPITAL STRUCTURE ANALYSIS  
SHORT-TERM DEBT RATIO

Electric Proxy Group Company	Ticker	2011 Q3	2011 Q2	2011 Q1	2010 Q4	2010 Q3	2010 Q2	2010 Q1	2009 Q4	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%	0.94%	0.06%	0.06%	6.35%	3.33%	1.44%
Ameren Corp.	AEE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Avista Corp.	AVA	4.05%	3.19%	2.78%	4.91%	3.59%	4.05%	3.44%	4.14%	3.77%
Black Hills Corp.	BKH	19.75%	19.38%	19.02%	18.16%	17.55%	17.12%	15.38%	14.65%	17.63%
Center Point Energy	CNP	N/A								
Consolidated Edison	ED	0.88%	0.89%	2.03%	0.90%	3.55%	5.13%	2.17%	0.93%	2.06%
Dominion Resources, Inc.	D	3.62%	5.54%	3.56%	4.20%	1.97%	5.01%	0.00%	3.08%	3.37%
DTE Energy Co.	DTE	0.77%	1.38%	1.42%	0.21%	0.25%	1.11%	0.36%	0.37%	0.73%
Integrus	TEG	4.42%	3.10%	4.06%	3.12%	2.61%	0.24%	2.40%	4.42%	3.05%
Pepco Holdings, Inc.	POM	0.84%	1.28%	2.93%	2.80%	2.23%	2.99%	1.71%	1.15%	1.99%
PG&E Corp	PCG	4.23%	4.52%	5.21%	3.44%	4.04%	4.28%	5.27%	3.56%	4.32%
SCANA Corp.	SCG	7.07%	6.87%	7.16%	5.82%	5.20%	3.61%	3.43%	4.07%	5.40%
Sempra Energy	SRE	0.00%	0.00%	0.00%	0.00%	0.00%	1.16%	0.46%	0.00%	0.20%
TECO Energy, Inc.	TE	0.00%	0.19%	0.00%	0.00%	0.51%	2.06%	0.49%	1.50%	0.60%
UIL Holdings Corp.	UIL	8.22%	7.12%	6.06%	4.61%	4.56%	6.07%	4.72%	4.20%	5.69%
Vectren Corp.	VVC	3.92%	4.21%	3.99%	4.99%	3.13%	4.03%	2.98%	4.06%	3.91%
Wisconsin Energy	WEC	2.17%	4.33%	2.98%	3.99%	0.88%	3.33%	1.07%	1.88%	2.58%
Xcel Energy, Inc.	XEL	1.01%	3.09%	1.98%	2.57%	0.90%	0.97%	0.69%	1.13%	1.54%
MEAN		3.05%	3.51%	3.37%	3.14%	2.38%	3.17%	2.31%	2.40%	2.92%
LOW		0.00%	0.00%	0.00%	0.00%	0.00%	0.97%	0.46%	0.00%	0.20%
HIGH		8.22%	7.12%	7.16%	5.82%	5.20%	6.07%	5.27%	4.20%	5.69%

SHORT-TERM DEBT RATIO - ELECTRIC UTILITY OPERATING COMPANIES

Company Name	Ticker	2011 Q3	2011 Q2	2011 Q1	2010 Q4	2010 Q3	2010 Q2	2010 Q1	2009 Q4	Average
ALLETE (Minnesota Power)	ALE	0.00%	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%	0.55%
Interstate Power and Light Company	LNT	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.06%	6.53%	1.70%
Wisconsin Power and Light Company	LNT	0.13%	0.13%	1.32%	1.87%	0.12%	0.12%	5.65%	0.12%	1.18%
Ameren Illinois Company	AEE	0.00%	0.00%	0.00%	0.00%	N/A	N/A	N/A	N/A	N/A
Union Electric Company	AEE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Avista Corporation	AVA	4.05%	3.19%	2.78%	4.91%	3.59%	4.05%	3.44%	4.14%	3.77%
Black Hills Colorado Electric Utility Company, LP	BKH	59.25%	58.15%	57.07%	54.48%	52.65%	49.10%	46.15%	43.95%	52.60%
Black Hills Power, Inc.	BKH	0.00%	0.00%	0.00%	0.00%	0.00%	2.26%	0.00%	0.00%	0.28%
Cheyenne Light, Fuel and Power Company	BKH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CenterPoint Energy Houston Electric, LLC	CNP	N/A								
Consolidated Edison Company of New York, Inc.	ED	0.00%	0.00%	2.27%	0.00%	4.09%	0.33%	2.40%	0.00%	1.14%
Orange and Rockland Utilities, Inc.	ED	1.77%	1.79%	1.79%	1.81%	3.02%	9.93%	1.93%	1.87%	2.99%
Virginia Electric and Power Company	D	3.62%	5.54%	3.56%	4.20%	1.97%	5.01%	0.00%	3.08%	3.37%
Detroit Edison Company	DTE	0.77%	1.38%	1.42%	0.21%	0.25%	1.11%	0.36%	0.37%	0.73%
Upper Peninsula Power Company	TEG	2.78%	5.95%	6.45%	5.75%	4.73%	0.00%	4.31%	8.03%	4.75%
Wisconsin Public Service Corp	TEG	6.06%	0.25%	1.66%	0.48%	0.48%	0.48%	0.48%	0.82%	1.34%
Atlantic City Electric Company	POM	2.51%	3.84%	8.79%	8.41%	6.52%	8.97%	5.12%	3.46%	5.95%
Delmarva Power & Light Company	POM	0.00%	0.00%	0.00%	0.00%	0.18%	0.00%	0.00%	0.00%	0.02%
Potomac Electric Power Company	POM	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Pacific Gas and Electric Company	PCG	4.23%	4.52%	5.21%	3.44%	4.04%	4.28%	5.27%	3.56%	4.32%
South Carolina Electric & Gas Co.	SCG	7.07%	6.87%	7.16%	5.82%	5.20%	3.61%	3.43%	4.07%	5.40%
San Diego Gas & Electric Co.	SRE	0.00%	0.00%	0.00%	0.00%	0.00%	1.16%	0.46%	0.00%	0.20%
Tampa Electric Company	TE	0.00%	0.19%	0.00%	0.00%	0.51%	2.06%	0.49%	1.50%	0.60%
United Illuminating Company	UIL	8.22%	7.12%	6.06%	4.61%	4.56%	6.07%	4.72%	4.20%	5.69%
Southern Indiana Gas and Electric Company, Inc.	VVC	3.92%	4.21%	3.99%	4.99%	3.13%	4.03%	2.98%	4.06%	3.91%
Wisconsin Electric Power Company	WEC	2.17%	4.33%	2.98%	3.99%	0.88%	3.33%	1.07%	1.88%	2.58%
Northern States Power Company - MN	XEL	0.99%	0.10%	0.14%	0.03%	0.03%	1.62%	0.03%	0.04%	0.37%
Northern States Power Company - WI	XEL	3.05%	3.84%	3.42%	4.08%	0.44%	0.00%	2.09%	1.77%	2.34%
Public Service Company of Colorado	XEL	0.00%	2.00%	0.57%	3.61%	0.00%	0.00%	0.67%	2.72%	1.20%
Southwestern Public Service Company	XEL	0.00%	6.41%	3.79%	2.57%	3.15%	2.27%	0.00%	0.00%	2.27%



Schedule RBH-8

Narragansett Electric Capital Structure

NARRAGANSETT ELECTRIC COMPANY  
CAPITAL STRUCTURE  
As of December 31, 2011

	Capital Structure As of Dec 31, 2011		Ratemaking Adjustments Balance (\$000)	Capital Structure For Ratemaking Purposes		Impact of Financing Petition Balance (\$000)	Capital Structure For Ratemaking Purposes After Financing	
	Balance (\$000)	Ratio		Balance (\$000)	Ratio		Balance (\$000)	Ratio
Long-Term Debt	604,339	26.7%		604,339	39.2%	150,000	754,339	49.0%
Short-Term Debt*	168,950	7.5%		168,950	11.0%	(150,000)	18,950	1.2%
Preferred Stock	2,454	0.1%		2,454	0.2%		2,454	0.2%
Common Equity (1)	1,489,739	65.8%	(724,810) (A)	764,930	49.6%		764,930	49.6%
Total Capitalization	2,265,483	100.0%		1,540,673	100.0%		1,540,673	100.0%

(1) Excludes Other Comprehensive Income

(A) Removal of goodwill

\* Point in time short term debt balances are inappropriate to measure typical levels of short-term debt. Rather a twelve-month normalized average should be employed. Due to proposed term-out of short-term debt after approval of financing petition, the balance as of Dec 31, 2011 is presented above.



Schedule RBH-9

Weighted Average Cost of Debt

NARRAGANSETT ELECTRIC COMPANY  
WEIGHTED AVERAGE COST OF DEBT  
For Period Ending December 31, 2011

**Panel A: Long-term debt**

	Interest Rate	Maturity Date	Amount Outstanding in \$000	Annual Interest Expense in \$000	Annual Amortization of DD&E in \$000	Total Expense in \$000	Cost of Debt
Unsecured notes:							
Senior Note	4.534%	March 15, 2020	\$250,000	\$11,335	105.7	\$11,440.7	4.58%
Senior Note	5.638%	March 15, 2040	300,000	16,914	77.7	16,991.7	5.66%
Subtotal							<b>5.17%</b>
First mortgage bonds <sup>1</sup>							
FMB Series N	9.630%	May 30, 2020	10,000	963	4.1	967.1	9.67%
FMB Series O	8.460%	September 30, 2022	12,500	1,058	4.3	1,061.8	8.49%
FMB Series P	8.090%	September 30, 2022	6,875	556	3.5	559.6	8.14%
FMB Series R	7.500%	December 15, 2025	10,500	788	4.1	791.6	7.54%
FMB Series S	6.820%	April 1, 2018	14,464	986	7.0	993.5	6.87%
Subtotal							<b>8.05%</b>
30-Year Senior Notes	4.850%	November 1, 2042	150,000	7,275	37.5	7,312.5	4.88%
Total			<b>\$754,339</b>	<b>\$39,875</b>	<b>\$244</b>	<b>\$40,118</b>	<b>5.32%</b>

**Panel B: Weighted Average Cost of Debt by Segment**

Electric Operations	73%	553,637	28,096	175	28,271	5.11%
Gas Operations	27%	200,702	11,778	69	11,847	5.90%
Total		<b>\$754,339</b>	<b>\$39,875</b>	<b>\$244</b>	<b>\$40,118</b>	<b>5.32%</b>

<sup>1</sup> Backed entirely by gas assets. This debt was assumed by the Narragansett Electric Company when National Grid purchased the gas assets of the New England Gas Company from the Southern Union Company and merged them into Narragansett Electric.



Schedule RBH-10

Weighted Average Cost of Capital

NARRAGANSETT ELECTRIC COMPANY  
COST OF CAPITAL FOR RATE YEAR

**Panel A: Electric Distribution Cost of Capital**

	<u>Capitalization</u>	<u>Cost Rate</u>	<u>Weighted</u>
	<u>Ratio</u>		<u>Average Cost</u>
Long-Term Debt	49.0%	5.11%	2.50%
Short-Term Debt <sup>1</sup>	1.2%	0.8%	0.01%
Preferred Stock	0.2%	4.50%	0.01%
Common Equity	<u>49.6%</u>	10.75%	<u>5.34%</u>
Total <sup>2</sup>	100.0%		7.85%

**Panel B: Gas Distribution Cost of Capital**

	<u>Capitalization</u>	<u>Cost Rate</u>	<u>Weighted</u>
	<u>Ratio</u>		<u>Average Cost</u>
Long-Term Debt	49.0%	5.90%	2.89%
Short-Term Debt <sup>1</sup>	1.2%	0.8%	0.01%
Preferred Stock	0.2%	4.50%	0.01%
Common Equity	<u>49.6%</u>	10.75%	<u>5.34%</u>
Total <sup>2</sup>	100.0%		8.24%

<sup>1</sup> Cost rate is the average short-term debt interest rate projected for the Rate Year.

<sup>2</sup> Capitalization ratios include impact of refinancing and exclude goodwill and accumulated other comprehensive income.



**PRE-FILED DIRECT TESTIMONY**

**OF**

**MAUREEN P. HEAPHY**

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1 **I. Introduction and Qualifications**

2 **Q. Please state your name and business address.**

3 A. My name is Maureen P. Heaphy. My business address is One MetroTech Center,  
4 Brooklyn, New York 11201.

5

6 **Q. By whom are you employed and in what capacity?**

7 A. I am employed by National Grid Corporate Services LLC, a subsidiary of National Grid  
8 USA (“National Grid”), and currently hold the position of Vice President of U.S.  
9 Compensation, Benefits and Pensions. My responsibilities include overseeing  
10 compensation, benefit and pension strategy and policy for all of National Grid’s U.S.  
11 operations, including The Narragansett Electric Company d/b/a National Grid (the  
12 “Company”).

13

14 **Q. Please describe your educational background and business experience.**

15 A. I received Bachelor of Science degrees in Accounting and Computer Applications &  
16 Information Systems from New York University in 1983. In 1991, I received a Master of  
17 Business Administration in Finance from St. John’s University. I joined KeySpan  
18 Corporation (“KeySpan”) in 1983 and held several professional and managerial positions  
19 in Treasury and Accounting. In 1991, I joined the Human Resources organization where  
20 my focus has been on design, strategy, administration, and implementation of  
21 compensation, benefit and pension programs for employees and retirees.

22

1 **Q. Have you previously testified before the Rhode Island Public Utilities Commission**  
2 **(the “Commission”) or any other regulatory commissions?**

3 A. I have not previously testified before the Commission. However, I testified before the  
4 New York State Public Service Commission in Case No. 10-E-0050. I have also  
5 submitted testimony before the Federal Energy Regulatory Commission on behalf of  
6 National Grid Generation, LLC concerning matters related to employee benefits and  
7 compensation.

8  
9 **Q. What is the purpose of your testimony?**

10 A. My testimony is being submitted in support of the Company’s electric and gas base rate  
11 filings. My testimony serves two purposes. First, I support the overall level of employee  
12 compensation, benefit and pension costs reflected in the Company’s revenue  
13 requirements by demonstrating that National Grid’s overall compensation package is  
14 market competitive and that National Grid has proactively managed and controlled the  
15 costs of its compensation, benefit and pension programs. Second, I explain how National  
16 Grid’s restructuring efforts have affected the overall employee headcount during the Test  
17 Year and Rate Year relevant to these proceedings. Specifically, my testimony addresses  
18 and supports the Company’s employee compensation, benefit and pension costs,  
19 including those associated with medical, dental, life insurance, pension and other post-  
20 employment benefit (“OPEB”) plans for the Test Year ended December 31, 2011 and the  
21 forecast Rate Year ending January 31, 2014. The information concerning projected cost  
22 changes was provided to Company Witness Michael D. Laflamme and used to develop

1 the electric and gas revenue requirements proposed by the Company in these  
2 proceedings.

3  
4 In my testimony, I will demonstrate that the costs of the total compensation, benefit and  
5 pension programs included in the Company's revenue requirements, which include the  
6 costs of base salary, performance-based variable pay and various benefits, are reasonable  
7 and necessary and must be incurred by the Company to meet its obligations to provide  
8 safe and reliable utility service to its customers. To that end, I will explain and support  
9 detailed studies of the Company's total compensation and benefit programs for its  
10 management workforce. The results of these studies demonstrate that the Company's  
11 total overall management compensation and benefit programs are reasonable and market  
12 competitive.

13  
14 In addition, I will provide support for the proposed ratemaking treatment for pension and  
15 OPEB expense that is discussed in the testimonies of Company Witness Laflamme and  
16 Company Witness Stephen F. Doucette. I will also describe the impact of National  
17 Grid's recent U.S. Restructuring program on National Grid's workforce and discuss  
18 National Grid's ongoing efforts to monitor and control the costs of various elements of  
19 the Company's employee compensation, benefit and pension package.

20  
21 **Q. Do you sponsor any schedules as part of your testimony?**

22 A. Yes, I am sponsoring the following schedules, which were prepared or compiled under  
23 my direction and supervision:

- 1           • Schedule MPH-1 sets forth the combined results of Towers Watson’s evaluation  
2           of National Grid’s compensation and benefits for management (non-union)  
3           employees compared to 38 peer organizations (the same peer organizations are  
4           used in Schedules MPH-2, MPH-3 and MPH-4);
- 5           • Schedule MPH-2 sets forth Towers Watson’s comprehensive evaluation of  
6           National Grid’s benefits program for management (non-union) employees;
- 7           • Schedule MPH-3 sets forth Towers Watson’s study of total compensation offered  
8           by National Grid;
- 9           • Schedule MPH-4 sets forth Towers Watson’s study of variable pay offered by  
10          National Grid;
- 11          • Schedule MPH-5 sets forth information provided by Towers Watson concerning  
12          increases in management base salary costs during the periods relevant to these  
13          proceedings; and
- 14          • Schedule MPH-6 sets forth historical information concerning increases in cash  
15          compensation provided by National Grid since 2002.
- 16

17 **II. Overview of National Grid Human Resources Function**

18 **Q. How is the oversight of the human resources function conducted at National Grid?**

19 A. The oversight of National Grid’s compensation, benefit and pension plans is performed  
20 on a centralized basis and, with certain limited exceptions, uniform compensation, benefit  
21 and pension packages have been instituted for all of National Grid’s U.S.-based  
22 operations, including the Company. As discussed in the testimony of Company Witness  
23 Laflamme, National Grid is proceeding with the consolidation of four service companies

1 into two, but this will not affect the way compensation, benefits and pensions are  
2 overseen.

3

4 **Q. Is a portion of the Company's workforce unionized?**

5 A. Yes. The majority of the Company's employees are members of collective bargaining  
6 units. The Utility Workers Union of America ("UWUA") Local 310 supports the  
7 Company's electric and gas businesses. The United Steelworkers Union  
8 ("Steelworkers") Local 12431 and UWUA Local 310C support our Rhode Island gas  
9 business. The total compensation for these workers is determined by collective  
10 bargaining.

11

12 **Q. Has National Grid recently restructured the management of its U.S. operations?**

13 A. Yes. In 2011, National Grid restructured its U.S. operations in a manner that was  
14 intended to achieve as efficient a management structure as possible, while continuing to  
15 enable National Grid to meet its obligations to provide safe and reliable service in all of  
16 its U.S. jurisdictions. Among the goals of the restructuring was to better align the cost of  
17 National Grid's U.S. operations with the revenue it was recovering for that purpose. The  
18 restructuring has resulted or will result in the elimination of approximately 1,400  
19 positions. The restructuring will effectuate a considerable "flattening" of National Grid's  
20 management structure. The restructuring is described in greater detail in the testimony of  
21 Mr. Laflamme.

22

1 **Q. As a result of the recent restructuring, does National Grid’s workforce as of**  
2 **December 31, 2011 include employees whose positions will be eliminated prior to the**  
3 **Rate Year?**

4 A. Yes. As a consequence of the restructuring, the National Grid management workforce as  
5 of December 31, 2011 includes 137 positions that are characterized as “non-enduring  
6 roles.” These are positions that are being eliminated over time as National Grid  
7 restructures its U.S. businesses. The removal of the allocated costs of these positions  
8 from the Company’s revenue requirements is discussed in the testimony of Mr.  
9 Laflamme.

10

11 **Q. Do the Company’s revenue requirements also include costs associated with**  
12 **management positions that (i) were created by the restructuring, (ii) were vacant as**  
13 **of the end of the Test Year, and (iii) are expected to be filled before the Rate Year?**

14 A. Yes, there are also 118 vacancies in management positions that National Grid forecasts to  
15 be filled prior to the start of the Rate Year beginning February 1, 2013. The vacant  
16 positions that have been created in the new organization require individual skill sets that  
17 in many cases have required, or will require, National Grid to look for qualified  
18 employees outside the organization. National Grid believes that by filling these positions  
19 it will implement a highly efficient management structure that will enable it to continue  
20 to provide safe and reliable service in all of its U.S. jurisdictions. The inclusion of the  
21 costs of these positions in the Company’s revenue requirements is discussed in the  
22 testimony of Mr. Laflamme.

23

1 **Q. Does National Grid have any other open positions that affect the Company's**  
2 **revenue requirements and are forecast to be filled before the Rate Year?**

3 A. Yes. National Grid expects to fill 26 incremental positions associated with ongoing  
4 operation of the US Foundations Program.

5

6 **Q. Does the Company's union workforce also have vacant positions as of the end of**  
7 **the Test Year that will be filled before the beginning of the Rate Year?**

8 A. Yes. As of December 31, 2011, the Company has 19 union positions in UWUA Local  
9 310 that are vacant, which reflect minimum staffing levels established in the Company's  
10 collective bargaining agreement.

11

12 **Q. Does the Company's representative workforce level as of December 31, 2011 include**  
13 **any National Grid management or union workforces associated with the sale of its**  
14 **New Hampshire distribution operations?**

15 A. No, it does not.

16

17 **III. Description of National Grid Wages and Benefits**

18 **Q. Please describe National Grid's philosophy concerning employee wages and**  
19 **benefits.**

20 A. National Grid's overall approach to compensation is designed to ensure that (i) a  
21 significant portion of employee compensation is tied to the attainment of performance  
22 goals that create benefits for customers and are consistent with the policy goals  
23 established by National Grid's regulators; (ii) employees' total compensation is

1 comparable to median compensation for comparable positions in both general industry  
2 and the utility industry and is reasonable after considering base and variable pay and  
3 benefits on *an aggregate basis*; and (iii) variable pay is based on both the overall  
4 performance of National Grid and the performance of each individual in achieving goals  
5 that are tied to the attainment of customer satisfaction, safety and reliability objectives.  
6 To provide safe, reliable and efficient utility service to its customers, National Grid must  
7 attract, retain and engage high performing, qualified personnel. To accomplish this,  
8 National Grid provides a total compensation package that recognizes and rewards  
9 excellence, maintains fair and competitive market pay and benefits for employees, and  
10 encourages employees to improve skills while providing a safe working environment.  
11 Doing so under the cost containment pressures faced by all companies is a critical  
12 challenge. To meet this challenge, National Grid has developed a “Total Rewards  
13 Program” to provide employees with an overall compensation, benefit and pension  
14 package that is market competitive, offers flexibility and choice, and supports a high  
15 performance culture by directly linking performance to rewards. By maintaining a  
16 comprehensive and competitive approach to total rewards that establishes appropriate  
17 levels of pay and benefits, National Grid can attract and retain a high quality workforce  
18 and motivate employees to improve their performance.

19  
20 **Q. What are the elements of the total reward package?**

21 A. The compensation elements of the total reward package are cash compensation, which  
22 includes both fixed and variable pay, and a number of benefits, which include medical  
23 and dental plans, life insurance, a 401(k) savings plan, pensions, OPEBs , vacations and

1 holidays. It is National Grid's philosophy to require employees to share the costs of  
2 certain benefits, consistent with market practice.

3  
4 **IV. Efforts by National Grid to Ensure the Costs of Wages and Benefits are Reasonable**

5 **Q. Please describe National Grid's efforts to ensure the reasonableness of the cost of**  
6 **the wages and benefits it offers to employees.**

7 A. As part of its effort to provide a market competitive package while controlling the cost of  
8 compensation, benefit, and pension programs, National Grid monitors the marketplace to  
9 ensure that its cash compensation and benefit programs are both cost-effective and  
10 sufficient to enable it to attract, retain and engage the highly skilled workforce needed to  
11 deliver excellent customer service and achieve the financial success required by the  
12 capital markets. National Grid utilizes the services of Towers Watson to provide  
13 information concerning the overall competitiveness of its compensation and benefits  
14 package.

15  
16 **Q. Did Towers Watson recently conduct studies of the competitiveness of the overall**  
17 **compensation packages offered by National Grid to its management employees?**

18 A. Yes. Towers Watson recently conducted studies of the competitiveness of the overall  
19 compensation package offered by National Grid to its management workforce. This  
20 study involved analyses of the total cash compensation (fixed and variable) and employee  
21 benefit package offered by National Grid. On an overall basis, this study concluded that  
22 the value of National Grid's overall compensation, benefit and pension package is  
23 slightly below the median value of the peer group's package, but generally within the 10

1 percent corridor that is considered in the zone of reasonableness. The results of the  
2 management study are attached hereto as Schedules MPH-1 through MPH-4.

3  
4 **Q. Please explain how Towers Watson performed its study of the competitiveness of**  
5 **National Grid's management compensation.**

6 A. Towers Watson compared the total management compensation and benefits package  
7 provided by National Grid to the total management compensation and benefit packages  
8 provided by 38 peer companies. These peer companies include companies that are  
9 combination gas and electric companies (e.g., Consolidated Edison Company of New  
10 York, Inc. and Constellation Energy Group, Inc.), utility companies that operate outside  
11 the energy business (e.g., American Water and Verizon), and general businesses that have  
12 significant workforces in the United States (e.g., 3M, American Express Company and  
13 Citigroup).

14  
15 **Q. Does the peer group provide a representative sample of the types of entities that**  
16 **National Grid competes with to attract management employees?**

17 A. Yes. On an overall basis, it is reasonable to compare National Grid's total management  
18 compensation package to the companies set forth in the peer group used by Towers  
19 Watson. National Grid believes that, if its total compensation package falls within a 10  
20 percent corridor (90 percent-110 percent) of the median level of these companies, then  
21 that overall package is reasonably designed to enable National Grid to attract and retain  
22 highly qualified management employees. While the results of the study show that  
23 National Grid's total compensation package is slightly below median, National Grid is

1 proposing certain adjustments, discussed more fully below, that will ensure that National  
2 Grid's compensation will continue to approach the median level.

3  
4 **Q. Please explain how Towers Watson performed its comparison of the total**  
5 **compensation package provided by National Grid to that provided by the peer**  
6 **group companies.**

7 A. This comparison was performed by analyzing (i) the total cash compensation, including  
8 both fixed and variable pay, provided to employees in approximately 81 percent of the  
9 total management positions at National Grid to the total compensation, including both  
10 fixed and variable pay, provided by the peer group companies; and (ii) the relative value  
11 of the benefits provided to National Grid employees in comparison to the relative value  
12 of the benefits provided by the peer group. These management positions represent  
13 approximately 4,400 employees out of National Grid's total management workforce of  
14 approximately 5,170 employees as of October 31, 2011. The results of these  
15 comparisons were then added to arrive at the total compensation and benefits value. The  
16 result of the total compensation study is that National Grid's total package of  
17 management compensation is within seven percent of the median level of the peer group,  
18 as shown by Schedule MPH-1.

19  
20 **Q. Please explain why Towers Watson's study compares the relative value of National**  
21 **Grid's total compensation to the relative value of the total compensation provided**  
22 **by the peer group.**

1 A. The purpose of performing an overall compensation study is to determine whether the  
2 total level of cash compensation and benefits is sufficient to attract a highly qualified  
3 workforce. In order to conduct an accurate study, cash compensation and benefit  
4 package components of the overall compensation package are analyzed differently.

5  
6 Cash compensation – fixed and variable – is best analyzed by comparing the cash  
7 compensation provided to various positions at National Grid to cash compensation  
8 provided by other peer-group companies to comparable positions. In this case, Towers  
9 Watson has analyzed the cash compensation provided by members of the peer group to  
10 management positions that fall within various salary bands to the cash compensation  
11 provided to the equivalent positions at National Grid. The comparison of total  
12 compensation for various benchmarked positions produces an overall comparison of cash  
13 compensation that permits National Grid to evaluate whether management positions  
14 within various salary bands are receiving a reasonable (i.e., within the 10 percent corridor  
15 of the median) level of cash compensation that will ensure that National Grid remains  
16 competitive in the labor market.

17  
18 In contrast to the cash compensation component of an overall compensation plan, the  
19 employee benefit plan component cannot be meaningfully compared to other peer-group  
20 employee benefits plans based on actual plan costs alone. The reason for this is that the  
21 cost of various benefits can vary dramatically from year to year and from company to  
22 company. For example, the cost of pension and OPEBs can change as a result of changes  
23 in the funded status of the plans established to provide those benefits, the investment

1 performance of the plans, and the mortality rate of those participating in the plan.

2 Similarly, the cost of health insurance can vary because of the claims experience of  
3 individual companies and the age and health of individual employees in the workforce  
4 and their dependents. Changes in costs associated with these factors do not determine  
5 whether the benefits being provided by a particular company are competitive. Instead, it  
6 is the relative value of the benefits that provides the proper measurement of whether a  
7 benefits package is sufficient to attract, retain and engage highly qualified personnel.  
8 The analyses performed by Towers Watson properly consider the relative value of the  
9 benefits being provided by National Grid and the peer group.

10

11 **Q. How did Towers Watson determine the relative value of the benefits package**  
12 **provided by National Grid and the peer group?**

13 A. The relative value of the various benefits is established based on a common set of  
14 actuarial assumptions and a single employee population. This establishes a controlled  
15 environment in which differences in value are exclusively a function of the differences in  
16 benefit plan provisions. The relative value of various benefits is determined by dividing  
17 the value of particular benefits for individual companies by the average value of all the  
18 companies in the peer group. Relative values are developed for each benefit and for the  
19 entire benefit plan.

20

21 **Q. Are all of the elements of National Grid's compensation package – fixed**  
22 **compensation, variable compensation and benefits – necessary elements of its**  
23 **overall compensation package?**

1 A. Yes. National Grid's overall management compensation package is designed to be  
2 competitive with the marketplace. It is the total compensation package – fixed cash  
3 compensation, variable pay, benefits and pension – that permits National Grid to be  
4 competitive with the marketplace. The fixed component of National Grid's cash  
5 compensation package, alone, along with the benefits package is not sufficient to be  
6 competitive with the marketplace. It is the combination of fixed and variable pay and all  
7 other benefits that permits National Grid's compensation to approach competitive levels.

8

9 **Q. In addition to an analysis of total compensation, does National Grid also separately**  
10 **analyze the individual elements of its compensation package?**

11 A. Yes. While it is important that National Grid's total compensation package remains  
12 competitive with the marketplace, it is also important that individual elements of the  
13 compensation package remain competitive as well. Thus, National Grid also attempts to  
14 ensure that its total cash compensation (fixed and variable pay) and the various benefits  
15 that are included in the total compensation package, such as healthcare and retirement  
16 benefits, individually track the market. National Grid needs to stay abreast of what  
17 workers want in today's labor market. To that end, in addition to ensuring that its overall  
18 compensation is reasonable, National Grid utilizes the services of Towers Watson to  
19 ensure that its total cash compensation (fixed and variable) is at or near median levels as  
20 compared to our peer group, and that its various key benefits remain at that level as well.  
21 Analyses of individual elements of National Grid's benefits package are included in  
22 Schedule MPH-2. Analyses of National Grid's total compensation and variable pay are  
23 included in Schedules MPH-3 and MPH-4, respectively. As can be seen from the data

1 provided in the schedules, National Grid is currently in a competitive position with  
2 respect to total cash compensation and with respect to total benefits.  
3

4 **Q. Please describe how National Grid monitors the marketplace for benefits.**

5 A. In addition to the total compensation studies provided by Towers Watson, National Grid  
6 participates in both industry groups and benefit councils to learn best practices and stay  
7 abreast of market developments. National Grid also seeks new ideas and best practices  
8 from its vendors. Finally, representatives of National Grid attend conferences and  
9 participate in webinars with respect to these matters.  
10

11 **Q. You mentioned that the total compensation of employees is intended, on average, to**  
12 **approximate median compensation levels. Do individual employee salaries deviate**  
13 **from these levels?**

14 A. Yes. Individual salaries deviate above and below the median levels based on individual  
15 performance and length of time in a position.  
16

17 **Q. Is the officer compensation program similar in philosophy and operation to the**  
18 **management cash compensation program?**

19 A. Yes. The approach taken with respect to officer compensation is basically the same as  
20 described for the management employee program. Overall compensation for officers,  
21 including National Grid's most senior officers, is benchmarked to median compensation  
22 of an appropriate peer group and includes a variable pay component. For purposes of  
23 preparing the revenue requirements, the Company has included payroll expense for only

1 the fixed, base pay and benefit component of the compensation package for the most  
2 senior officers, referred to as Band A employees. The variable pay component for  
3 National Grid's officers in Band A is not included in the Company's revenue  
4 requirements.

5  
6 **Q. Please describe the "Banded" approach to overall compensation.**

7 A. National Grid's compensation structure comprises six bands. Band A consists of the  
8 most senior corporate officers, such as executive and senior vice presidents. Band B  
9 consists of less senior officers (vice presidents). Employees in Band C are generally  
10 directors who report directly to an officer.<sup>1</sup> Band D includes managers who have at least  
11 one direct report and may directly report to an officer, while Band E includes supervisors  
12 who have at least one direct report who themselves report to a director or manager. Band  
13 F contains general administrative staff. Bands D, E and F are also for individuals with  
14 unique career paths. Each band has a salary range that consists of a minimum and a  
15 maximum salary as well as multiple market reference points within the band. The market  
16 reference points track the varying level of compensation for positions within the bands.  
17 The structure is reviewed annually by the Human Resources organization. The band  
18 structure employed by National Grid generally corresponds to the market study prepared  
19 by Towers Watson in analyzing National Grid's total compensation.

20  
21 **Q. Please describe National Grid's variable pay program.**

---

<sup>1</sup> As referenced more generally later in my testimony, the variable pay component for National Grid's officers in Band B and management employees in Band C associated with the achievement of financial goals is not included in the Company's revenue requirements.

1 A. National Grid’s variable pay program is known as the Annual Performance Plan (the  
2 “Plan”). As discussed above, this Plan is an important element of National Grid’s total  
3 compensation package. The purpose of the Plan is to ensure that employees are working  
4 toward common goals that incorporate the interests of customers and regulators and also  
5 to provide that high performance is recognized. The Plan is intended to motivate  
6 employees to achieve the highest possible individual performance, while ensuring that, at  
7 all times, all safety, health, and environmental requirements are adhered to, and standards  
8 of customer service are achieved.

9  
10 **Q. Please elaborate on the goals established under the Plan.**

11 A. In the past, the goals of the variable pay plan were focused on financial measures as well  
12 as on individual employee goals. For the 2012-13 performance year, the goals of the plan  
13 were modified to include clearer linkage between the variable compensation plan and the  
14 customer. As a result, National Grid has included customer responsiveness, safety and  
15 reliability, stewardship and optimization of cost of service measures for all employees in  
16 the Plan. These measures are critical to how National Grid runs its business. So much  
17 so, that they have largely replaced the financial performance measures in the Plan for  
18 U.S. management employees in Bands D through F. Specifically, the Plan has been  
19 structured to establish the following percentages for payouts under the Plan:

20  
21 (i) Bands D through F – 50 percent of variable pay is based on attaining safety and  
22 reliability, stewardship, customer responsiveness and cost of service optimization  
23 objectives and 50 percent is based on individual objectives; and

1  
2 (ii) Bands B and C – 20 percent of variable pay is based on attaining safety and  
3 reliability, stewardship, customer responsiveness and cost of service optimization  
4 objectives; 40 percent of variable pay is based on individual objectives; and 40 percent is  
5 based on financial objectives.

6  
7 Bands D, E and F comprise the majority of National Grid’s management employees and  
8 are the employees that have the greatest amount of contact with our customers. The  
9 variable pay plan is, thus, designed to focus this specific employee group on objectives  
10 that benefit customers.

11  
12 **Q. Please describe the performance measures that the Company will use to determine**  
13 **whether it has met its safety and reliability, stewardship, customer-responsiveness,**  
14 **and cost-of-service optimization goals.**

15 A. To evaluate performance in the safety and reliability category, National Grid will  
16 measure its performance against a number of safety and reliability metrics applicable to  
17 the jurisdictions in which it operates, including those approved by the Commission. With  
18 respect to stewardship, National Grid will consider its performance under certain surveys  
19 such as JD Power’s Corporate Citizenship measure. With regard to customer  
20 responsiveness, National Grid will evaluate both customer survey data and National  
21 Grid’s performance in comparison to certain customer service metrics. Finally, in the  
22 cost-of-service optimization category, National Grid will measure its performance against  
23 goals concerning the containment of controllable costs. The measures that National Grid

1 will use to evaluate employee performance are intended to focus the workforce on  
2 providing better, more efficient service to customers.

3  
4 **Q. How are individual objectives established under the Plan?**

5 A. Individual objectives for management employees are established by an employee in  
6 consultation with his or her supervisor. These objectives are tailored to ensure that  
7 individuals are enhancing their expertise and performing their assigned tasks at the  
8 highest possible levels. Thus, for example, the individual objectives for a manager  
9 charged with completing regulatory reports might include (i) completing all required  
10 reports in a timely fashion, (ii) taking continuing education classes to ensure that the  
11 manager is aware of recent changes in reporting requirements and regulatory policies that  
12 may affect these reports, and (iii) leading and developing their team. Objectives are  
13 established for individual employees at the start of the Plan year.

14  
15 **Q. Please explain why National Grid includes a variable pay component as part of total  
16 cash compensation for its employees.**

17 A. Variable cash compensation provides direct and specific incentives to employees who  
18 achieve or exceed certain operating performance goals of importance to National Grid, its  
19 customers, and its regulators. Accordingly, the variable pay component of National  
20 Grid's overall employee compensation package aligns the interests of National Grid and  
21 the Company with the interests of its customers and regulators, and assists the Company  
22 in meeting its public policy objectives. Moreover, as noted above, under National Grid's  
23 total compensation structure, base pay and benefits alone are not an adequate level of

1 compensation to allow National Grid to meet its goal of attracting and retaining highly  
2 qualified employees to provide safe, reliable, and efficient service to customers. Today's  
3 marketplace dictates that variable pay is a fundamental component of any private-sector  
4 entity's efforts to attract qualified employees, as demonstrated by the fact that 85 percent  
5 of the positions in the peer group have variable pay included in their compensation  
6 packages. Top talent in the market demands compensation that is directly linked to  
7 performance. For National Grid to compete in this marketplace and be viewed as an  
8 employer of choice, variable pay must be a part of the overall compensation package.  
9 Without a variable pay component, National Grid would be out of step with the market  
10 and likely would not be able to attract the same level of talented and highly motivated  
11 employees.

12  
13 **Q Is it correct that the variable pay plan at National Grid is pay-at-risk?**

14 A. Yes, that is correct. National Grid's variable pay plan is designed to be part of a total  
15 compensation program; it is a pay-at-risk plan, not extra or bonus pay. This conclusion is  
16 borne out by the analysis of total compensation prepared by Towers Watson. The  
17 variable pay component is labeled "pay-at-risk" because, if performance measures are not  
18 achieved, employees will not receive the variable pay. This "at-risk" compensation  
19 allows National Grid to align pay with performance and achieve the goals of customers  
20 and regulators. Thus, variable compensation is not "additional" or "optional"  
21 compensation that National Grid provides to employees, but a required element in the  
22 total compensation program and a necessary and prudent cost of doing business.

23

1 **Q. How has the Company determined the level of variable pay expense included in its**  
2 **proposed revenue requirements?**

3 A. The Company has assumed that the target levels of performance and payout will be  
4 attained. The level of variable pay expense is discussed in greater detail in the testimony  
5 of Mr. Laflamme.

6  
7 **Q. What do you mean by “target levels?”**

8 A. “Target levels” represent a level of performance that is judged to be approximately 45  
9 percent of stated maximums. Target performance is best described as an above-average  
10 level of performance that is consistent with overall expectations. Achieving target  
11 performance requires employees to perform at a high, but nonetheless expected level.  
12 High performers would exceed “target levels” while below average performers would fall  
13 below “target levels.”

14  
15 **Q. Are you aware of recent Commission decisions concerning variable pay?**

16 A. Yes, I am. In Docket RIPUC No. 4065, the Commission disallowed 50 percent of the  
17 Company’s request for variable pay because the variable pay was based partly on  
18 National Grid’s attainment of certain financial goals. The Commission’s decision was  
19 affirmed by the Rhode Island Supreme Court on January 23, 2012. Consistent with the  
20 Commission’s decision in Docket RIPUC No. 4065, the Company is not seeking  
21 recovery in these proceedings for any variable pay relating to the achievement of  
22 financial goals.

23

1 **Q. Is National Grid projecting additional management wage increases in the period**  
2 **covered by the Company's rate filing in these proceedings?**

3 A. Yes. National Grid is projecting the following increases:

4	<u>Effective Date</u>	<u>Percentage</u>
5	July 1, 2012	3.37%
6	July 1, 2013	3%

7

8 The forecast of proposed increases in management wages is based on the market studies  
9 that are currently available to National Grid, including the information set forth in  
10 Schedule MPH-5. These increases are also in line with the average wage increases  
11 provided over the last ten years as set forth on Schedule MPH-6. Nonetheless, National  
12 Grid will continue to monitor market information and may revise its projections if market  
13 conditions require such adjustments.

14

15 **Q. Please explain why the July 1, 2012 management increase is projected to be 3.37**  
16 **percent.**

17 A. The 3.37 percent includes a 3.00 percent average increase in base pay provided to the  
18 entirety of National Grid's management workforce. The remaining 0.37 percent  
19 represents increases targeted to certain positions where National Grid's market studies  
20 show that increases in compensation are necessary to bring cash compensation levels  
21 closer to the market median. These increases are being provided to engineers and first  
22 line supervisors – two groups of employees that are presently provided a level of total  
23 compensation that is sufficiently below market to require an additional adjustment.

1 **Q. Does National Grid follow the same compensation philosophy with regard to its**  
2 **union employees as it does for its management employees?**

3 A. Yes. However, the compensation provided to union workers is the result of collective  
4 bargaining. Pursuant to the collective bargaining agreements, union workers were  
5 provided the following base wage increases during 2011 and 2012:

6  
7 **Local 12431**

8 2.5% (as of May 21, 2011)

9 2.5% (as of May 19, 2012)

10

11 **Local 310**

12 2.5% (as of May 12, 2011)

13 2.5% (as of May 12, 2012)

14

15 **Local 310C**

16 2.5% (April 1, 2011)

17 2.5% (April 1, 2012)

18

19 **Q. Does compensation for union employees also include a variable pay component?**

20 A. Yes. Variable pay gives union employees a stake in the Company's performance and  
21 provides direct incentives for employees to strive to meet or exceed metrics tied to safe,  
22 reliable, and efficient performance, which, in turn, results in better service for customers.

23 As with the management program, the variable compensation component is part of the

1 total compensation package designed to link rewards and results. Because this  
2 philosophy toward compensation is an important part of National Grid's effort to deliver  
3 value to customers, including a component of variable pay as a component of  
4 compensation for union employees has been one of National Grid's priorities in labor  
5 negotiations. Under the current collective bargaining agreements, the Company's union  
6 workers participate in a variable pay plan with a target payment of 3.5 percent of total  
7 pay for both the Steelworkers Local 12431 and the UWUA Local 310 and Local 310C.  
8 The plan has similar goals to the Plan for management workers.

9  
10 **Q. What are the performance objectives of the union variable pay plan?**

11 A. The performance objectives are tied to the attainment of customer satisfaction, safety and  
12 reliability goals. These goals are consistent with the Commission's policies and  
13 objectives. The union variable pay plan is designed to encourage the Company's union  
14 workers to assist the Company in providing safe and reliable utility service.

15  
16 **V. Efforts by National Grid to Ensure the Costs of Health and Welfare Programs are**  
17 **Reasonable**

18 **Q. What efforts has National Grid undertaken to control costs associated with its**  
19 **health and welfare programs?**

20 A. National Grid self-insures its health and welfare benefit plans, which affords it a greater  
21 ability to control costs than it would have under third-party insurance programs. Because  
22 these plans are self-insured, the program costs are directly linked to the utilization of  
23 benefits. National Grid's medical plans also provide extensive health and wellness

1 programs designed to reduce health risks and the occurrence of costly diseases. These  
2 programs, combined with coverage for preventive check-ups and screenings, provide a  
3 benefit structure that, over time, should help to mitigate costs and improve employee  
4 wellness. In addition, National Grid conducts a competitive bidding process and  
5 aggressively negotiates with vendors to achieve the lowest administrative service fees  
6 and premiums and to obtain maximum discounts when rolling out a new program or upon  
7 the expiration of an existing contract.

8  
9 **Q. What efforts have been made to control the cost of union health and welfare plans?**

10 A. National Grid also self-insures the union health and welfare plans and has successfully  
11 encouraged union employees to opt for managed care plans by offering them at a lower  
12 cost than other plan designs. As of January 1, 2012, the prescription drug program was  
13 carved out of each medical plan and replaced in its entirety with a CVS Caremark plan.  
14 Because CVS Caremark is National Grid's Pharmacy Benefits Manager ("PBM") for its  
15 entire U.S. business, the Company has been able to generate savings by leveraging a  
16 volume discount.

17  
18 **Q. Please describe any changes that have been made to the management health and  
19 welfare plans since the Company's last rate filing.**

20 A. In an effort to reduce costs, National Grid made a number of changes in benefit plan  
21 design that lowered the costs of benefits but still maintained market competitiveness:

- 22 • The office visit co-pay for a specialist in the Exclusive Provider Organization  
23 ("EPO"), plan increased from \$15 to \$20 as of January 1, 2012;

24

- 1           •       The co-pays for preferred brand drugs in all medical plans increased from \$20  
2           retail/\$40 mail order to \$25 retail/\$50 mail order and co-pays for non-preferred  
3           brand drugs in all medical plans increased from \$35 retail/\$70 mail order to \$40  
4           retail/\$80 mail order as of January 1, 2012.

5       The savings associated with these initiatives are reflected in the Company's revenue  
6       requirements. In addition to these initiatives, as of January 1, 2011, the Company also  
7       eliminated the \$750 waiver credit for opting out of medical coverage.

8  
9       **Q.     Please describe any changes that have been made to the union health and welfare**  
10       **plans since the last rate filing.**

11       A.     In an effort to reduce costs and still provide market competitive benefit plans, National  
12       Grid negotiated a number of changes in benefit plan design with members of  
13       Steelworkers Local 12431 that affect the costs of the benefits for those union employees:

- 14       •       Consolidation of medical plan offerings – as of January 1, 2011, two higher cost  
15       medical options were eliminated and a new base PPO plan was introduced that was  
16       more competitive with the market.

- 17  
18           ○     Employee contributions for the new base PPO were introduced:

Effective Date	Employee Contribution
1/1/2011	10.0%
1/1/2012	12.5%
1/1/2013	15.0%

- 19  
20  
21  
22  
23  
24  
25           ○     Employees who opt to participate in the richer Custom Choice PPO plan pay  
26       the full differential between the cost of the plan and the company contribution  
27       to the base plan.

- 28  
29       •       Dental Plan – employee contributions for the dental plan were introduced;  
30       contributions are 10 percent per year as of January 1, 2011.  
31  
32       •       Medical opt-out credit was reduced from \$3,000 for family and \$1,800 for single  
33       employee to \$1,500 for family and \$1,000 for single employee effective 1/1/2011 and  
34       further reduced to \$750 for family or single effective 1/1/2012.  
35

- 1           • Prescription drug coverage was carved out of the medical plans to our national PBM,  
2           CVS Caremark, effective 1/1/2012 (this change was implemented for members of  
3           Local 310 as well).  
4

5           No changes have been made to the collective bargaining agreements of UWUA Local  
6           310 or Local 310C associated with these benefits, given that such agreements have not  
7           been subject to renegotiation since the Company's last rate filing.  
8

9   **Q.    Please describe any adjustments to the Test Year expense for employee medical and**  
10   **dental benefit plans that the Company is including in its proposed revenue**  
11   **requirements.**

12   A.    National Grid is projecting annual increases of nine percent in the costs associated with  
13    medical benefits and annual increases of seven percent in the costs associated with dental  
14    benefits during the Rate Year. These projected increases are consistent with National  
15    Grid's actual experience and are also consistent with national projections for health care  
16    trends and the projections gathered by Towers Watson.  
17

18   **VI.   Efforts by National Grid to Ensure Pension/OPEB Costs are Reasonable**

19   **Q.    Do you support the annual pension/OPEB adjustment mechanism ("PAM")**  
20   **proposal for Narragansett Electric – similar to the mechanism approved by the**  
21   **Commission in Docket RIPUC No. 3943 for Narragansett Gas – that is discussed by**  
22   **Mr. Doucette and Mr. Laflamme in their testimonies?**

23   A.    Yes, I do. As noted by Mr. Doucette, the implementation of the PAM is appropriate  
24    because pension and OPEB expense represents a significant operating cost, with a high  
25    degree of variability not subject to the control of the Company. In fact, the nature of the

1 expense that the Company must record to its books in relation to pension and OPEB costs  
2 in any given year differs substantially from other expenses incurred to conduct  
3 operations. Namely, the Company's ultimate pension and OPEB costs are not fully  
4 known until many years in the future, and the associated expense, which must be  
5 recorded each year by the Company, is, by design, a forward-looking estimation of those  
6 future retirement costs. A reconciling mechanism will address the expense variability in  
7 a manner that ensures that customers do not pay any more or less than they should over  
8 time to support this aspect of electric utility operations.

9  
10 **Q. Has National Grid made efforts to manage its Pension/OPEB costs?**

11 A. Yes, National Grid has taken significant steps to manage its Pension/OPEB costs, as  
12 discussed further herein.

13  
14 **Q. Please describe National Grid's efforts to manage Pension/OPEB program costs.**

15 A. The process of ensuring fair, competitive, and efficient benefit programs for employees  
16 and retirees is one of the core activities of National Grid's U.S. Compensation, Benefits  
17 and Pensions department. Compensation, Benefits and Pensions personnel continually  
18 undertake efforts to ensure proper vendor performance and compliance with federal and  
19 state laws and regulations. Trends in compensation, benefit and pension plan design are  
20 continually monitored and compared to National Grid's plans to ensure that those plans  
21 continue to be fair, reasonable and competitive.

22

1 On an annual basis, National Grid analyzes the funding, recording and administration of  
2 OPEBs. Less frequently, but on a consistent basis, National Grid considers more  
3 significant changes designed to reduce the overall cost of the OPEB plan.

4  
5 In addition, National Grid continuously reviews the delivery and administration of the  
6 benefits under the retiree medical plan with the ultimate objective to reduce  
7 administration costs and improve the delivery of services.

8  
9 **Q. What has National Grid done specifically to control the cost of managing retirement**  
10 **benefits since Narragansett Electric's last base-rate filing?**

11 A. In late 2009, as part of the ongoing consolidation of National Grid with KeySpan,  
12 National Grid conducted an evaluation of the retirement benefits that are offered to all  
13 management employees, including the Company's. This review encompassed all retiree  
14 benefits, including pension plans, post-retirement medical benefits, post retirement life  
15 insurance benefits and 401(k) plans. The primary objective of the review was to better  
16 align the retirement benefits offered under the legacy KeySpan and National Grid  
17 management benefit programs and to maintain the overall competitive value of the  
18 benefits while managing the costs. The alignment of the programs would allow National  
19 Grid to gain efficiencies by simplifying benefit administration and communication. This  
20 review was completed in late 2010. In addition, in 2010, all active and retiree benefit  
21 plan administration was consolidated with a single vendor.

22

1 **Q. What changes have been made to management post-employment retiree medical**  
2 **benefits?**

3 A. National Grid was successful in more closely aligning legacy National Grid and legacy  
4 KeySpan future retiree contributions for medical coverage for management employees  
5 hired before January 1, 2011, while preserving the value of the benefits, sustaining  
6 competitiveness with the market and managing costs. National Grid will continue to  
7 share the cost of pre-65 coverage, and in most cases will also share in the cost of post-65  
8 retiree coverage. Generally, contribution amounts are based on years of service at  
9 retirement.

10

11 **Q. What changes have been made to management post-employment retiree medical**  
12 **benefits for employees hired on or after January 1, 2011?**

13 A. Management employees hired on or after January 1, 2011 will also be eligible for retiree  
14 medical coverage if they are at least 60 years of age with at least 10 years of service. For  
15 pre-65 medical coverage, employees will receive a fixed company subsidy equal to 50  
16 percent of the cost of the plan set at retirement. The subsidy paid by National Grid  
17 remains fixed to age 65 and the retiree is responsible for all future premium increases.  
18 Once the retiree reaches age 65 or if they retire at age 65 or later, they can continue to  
19 participate in the National Grid plans; however, they are required to pay for the full cost  
20 of the coverage. There is no subsidy for post-65 retiree coverage. Because this change  
21 involves newly hired employees, there are no immediate savings associated with the  
22 change, but it will enable the Company to avoid costs over time.

23

1 **Q. What changes have been made to management post-employment retiree life**  
2 **insurance benefits as a result of the review?**

3 A. The post-employment life insurance benefit for future management retirees from legacy  
4 National Grid is typically \$20,000. Employees at legacy KeySpan had a more favorable  
5 post-employment life insurance benefit. As a result of the review the post-employment  
6 life insurance benefit will be aligned for all management retirements on and after May 1,  
7 2012. The retiree life insurance benefit for both pre-65 and post-65 coverage will be  
8 \$20,000. In addition, employees hired on or after January 1, 2011 are not eligible for  
9 retiree life insurance benefits.

10

11 **Q. What has National Grid done to manage union post-employment benefit costs since**  
12 **the last rate filing?**

13 A. As of January 1, 2011, National Grid implemented a new design to provide its union  
14 retirees with prescription drug benefits. The benefits were carved out of the medical  
15 plans and are now provided through CVS Caremark. The carve-out is expected to reduce  
16 administrative expenses through economies of scale and deeper discounts.

17

18 **Q. Is the Retiree Drug Subsidy (“RDS”) Program being affected by the federal health**  
19 **care reform law?**

20 A. Yes. The Patient Protection and Affordable Care Act (“PPACA”) enacted in March 2010  
21 changes the tax savings associated with the RDS Program. Because the favorable tax  
22 treatment for the RDS will be eliminated as of January 1, 2013, National Grid has  
23 reevaluated its retiree health care strategy and developed alternative means to deliver

1 post-65 retiree prescription drug benefits that will be financially advantageous to  
2 National Grid and the Company. The alternative plan that National Grid is implementing  
3 as of January 1, 2013 is known as an Employer Group Waiver Plan.  
4

5 **Q. What is an Employer Group Waiver Plan (“EGWP”)?**

6 A. An EGWP is a financially advantageous alternative to delivering post-65 retiree  
7 prescription drug coverage. It will replace National Grid’s employer sponsored  
8 prescription plan with a government sponsored plan that is contracted directly through a  
9 PBM, such as CVS Caremark. The PBM handles all administration, federal interactions,  
10 and collection of subsidies and assumes all compliance responsibilities.  
11

12 **Q. Why is this program financially advantageous to National Grid and its customers?**

13 A. An EGWP provides access to direct subsidy payments from the federal government that  
14 will grow over time. In addition, further savings can be realized from the impact of  
15 coordinating pharmaceutical manufacturer discounts on brand drugs under the PPACA,  
16 as well as federal catastrophic reinsurance payments.  
17

18 **Q. What savings does National Grid expect to realize as a result of the move to an  
19 EGWP strategy?**

20 A. National Grid projects that the movement to EGWP will result in a one-time reduction in  
21 National Grid’s plan obligations of approximately \$375 million and ongoing annual  
22 savings of approximately \$62 million on a FAS 106 basis.  
23

1 **Q. Has National Grid taken advantage of any other subsidies offered by the federal**  
2 **government?**

3 A. Yes. National Grid participates in the Early Retiree Reinsurance Program that was  
4 established through the PPACA.

5

6 **Q. Please describe the Early Retiree Reinsurance Program.**

7 A. Under the PPACA, the federal government set up a temporary \$5 billion retiree  
8 reinsurance program for employers providing health insurance coverage to early retirees  
9 (ages 55 to 64) and dependents. The program provides reimbursement to participating  
10 employment-based plans for a portion of the cost of providing health insurance coverage  
11 to early retirees (and eligible spouses, surviving spouses and dependents of retirees).  
12 Employer plans can receive reimbursement for 80 percent of the costs attributable to an  
13 early retiree's (or spouse/dependent's) aggregate health claims that fall between \$15,000  
14 and \$90,000 per plan year until the funds run out or January 1, 2014. The reinsurance  
15 proceeds may be used to reduce the premium costs of the employer or the retiree  
16 premium contributions.

17

18 **Q. How much has been received from this program thus far?**

19 A. As of March 2012, National Grid has received a total of approximately \$4.6 million from  
20 this program.

21

1 **Q. What has National Grid done to control pension costs since the Company's last rate**  
2 **filing?**

3 A. Management employees who were hired between July 15, 2002 and December 31, 2010  
4 will continue to participate in the cash balance pension plan, which is essentially a  
5 "hybrid" pension plan that includes both a defined benefit option and cash contributions.  
6 As a result of the retirement benefit review, previously discussed in this testimony, the  
7 two existing cash balance formulae for management participants were aligned. Effective  
8 January 1, 2011, all cash balance benefits earned are calculated under one formula. The  
9 contribution from National Grid ranges from four percent to eight percent of total cash  
10 compensation; however, the amount contributed will now be based on age and years of  
11 service.

12  
13 Another change that was implemented as a result of this review was the discontinuance of  
14 a defined benefit pension plan for new management participants. As noted in the  
15 testimony of Mr. Doucette, the trend in the marketplace today is moving from defined-  
16 benefit pension plans to defined-contribution or 401(k)-only plans in which the  
17 investment risk is shifted from the company to the employee. This trend is visible in  
18 most industries, with over 69 percent of the Fortune 100 companies offering a 401(k)  
19 plan only, and no traditional defined benefit pension plan.

20  
21 As a result, effective January 1, 2011, any newly hired management employee will  
22 participate in a defined contribution/401(k) plan only; they will not be participating in the  
23 traditional defined benefit pension plan. National Grid will make a core contribution into

1 the employee's 401(k) plan based on the same formula used for the newly aligned cash  
2 balance pension plan formula discussed previously in my testimony. National Grid will  
3 contribute a percentage of eligible pay ranging from four percent to eight percent based  
4 on the employees combined age and years of service into the 401(k) plan. The employee  
5 can manage their investments and are afforded both flexibility and portability, which is  
6 more attractive to employees in today's mobile workforce.

7  
8 National Grid also encourages greater participation and investment management in our  
9 401(k) plan so that employees will take greater ownership and responsibility for funding  
10 their own retirement by saving more and investing wisely. Finally, in an effort to gain  
11 economies of scale and streamline administration, effective July 2, 2010, all 401(k) plan  
12 administration was moved to a single vendor, Vanguard, and effective December 1, 2011,  
13 all pension administration was moved to a single outsourced vendor, Towers Watson.

14  
15 **Q. Are all of the cost savings previously discussed in your testimony reflected in the**  
16 **revenue requirements?**

17 A. Yes, they are.

18  
19 **VII. Conclusion**

20 **Q. Does this conclude your direct testimony?**

21 A. Yes, it does.



**Index of Schedules**

Schedule MPH-1	Competitive Assessment of National Grid's Total Compensation and Benefits Package
Schedule MPH-2	BENVAL Analysis for Management Benefits
Schedule MPH-3	Target Compensation as a Percent of Market Assessment
Schedule MPH-4	Target Variable Pay as a Percent of Market Assessment
Schedule MPH-5	Market Merit Increases
Schedule MPH-6	10 Year Wage Increase History



Schedule MPH-1

Competitive Assessment of National Grid's Total Compensation and Benefits Package

## Competitive Assessment of National Grid's Total Compensation and Benefits Package

	National Grid	General & Energy Industry	National Grid as a Percent of Market
Total Cash Compensation	\$108.1	\$118.4	91%
Benefits	\$28.0	\$27.9	100%
<b>Total</b>	<b>\$136.1</b>	<b>\$146.3</b>	<b>93%</b>

- The above analysis combines average total cash compensation (salary and incentive) and benefit value results from the Management compensation study and the Management BENVAL
- Compensation results are average results across salary bands for National Grid and the peer group
- BENVAL results are average dollar values for National Grid and the peer group
- Compensation data is based on actual data as reported by each peer company
  - Due to antitrust regulations specific peer company information is unavailable
- Benefit data is based on the value of benefits for each peer company
  - The value is determined by applying a standard set of actuarial methods and assumptions to a common employee population. This establishes a controlled environment in which differences in value are exclusively a function of the differences in plan provisions.
  - The relative values are not intended to represent actual costs incurred by plan sponsors. Plan sponsors may experience difference in benefit costs due to factors not reflected in the BENVAL including but not limited to – varying participant demographics, regional cost differences, or differences in funding or provider arrangements, etc.
- If National Grid did not provide variable pay, National Grid salary compensation would average nineteen percent below median market levels of total cash compensation (salary and incentive) and National Grid total compensation (salary and benefits) would average fifteen percent below median market levels of total compensation (salary, incentive and benefits)



Schedule MPH-2

BENVAL Analysis for Management Benefits

# National Grid

## BENVAL Analysis for 2012 Non-Union Benefits

APRIL 2, 2012

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## Table of contents

- Overview of Competitive Assessment
- Entire Benefit Program
- Retirement Benefits
- Active Benefits
- Summary

## Overview of competitive assessment

- Towers Watson maintains a database of benefit provisions for over 1,300 companies
- BENVAL determines a value for these benefits by applying a standard methodology to a standard employee population
- Benefit programs are:
  - Compared on a relative value basis between employers — a score of 100 represents the average value for the comparator group
  - Scores are determined on a dollar value basis relative to the average value
- This report includes the following:
  - List of peer companies included in the study
  - Executive summary of study results
  - Overview of the benefits environment
  - Relative value comparison for the total program and individual benefit programs
  - Breakdown of benefit values by component programs
- Throughout this document, “total value” refers to the positioning of the benefit programs including the value of employee contributions; “employer value” refers to the value after employee contributions have been deducted
- The Entire Benefit Program total and employer values are primarily driven by the value of the retirement plans, active and post-retirement medical plans, and vacation and holiday programs, which comprise the vast majority of the program values

## Overview of competitive assessment

- Towers Watson has conducted a competitive assessment comparing benefit levels for both National Grid (NGG) and KeySpan (KEY) relative to 38 peer organizations:
  - 3M
  - Ameren Corporation
  - American Electric Power System
  - American Express Company
  - American International Group, Inc.
  - American Water
  - CenterPoint Energy, Inc.
  - Citigroup
  - Consolidated Edison Company of New York, Inc.
  - Constellation Energy Group, Inc.
  - DTE Energy
  - Duke Energy Corporation
  - Energy Future Holdings Corp.
  - Energy Corporation
  - Exelon Corporation
  - FedEx Ground
  - Fidelity Investments
  - Hess Corporation
  - Integrys Energy Group, Inc.
  - International Business Machines Corporation
  - ISO New England
  - MasterCard Worldwide
  - MDU Resources Group, Inc.
  - Northeast Utilities Service Company
  - NSTAR
  - NYISO
  - ONEOK, Inc.
  - Pacific Gas and Electric Company
  - Pitney Bowes Inc.
  - PPL
  - Progress Energy, Inc.
  - Public Service Enterprise Group
  - Sempra Energy
  - Southern California Edison
  - TransCanada USA Services Inc.
  - United States Steel Corporation
  - United Technologies Corporation
  - Verizon
- Throughout this document, we have included plan summary charts for each benefit
  - In the Retirement section, we provide plan summaries for each benefit program for National Grid
  - In the Active section, we provide plan summaries for each benefit program and National Grid, as well as ranges (the lowest to highest value for the group of values), averages (the mean of a group of values), and modes (the most frequent value in a group of values), where possible for the competitor group; where averages could not be calculated, we calculated a range and/or mode only
- For benefits that differ for Legacy National Grid and Legacy KeySpan, we have included both benefit summaries

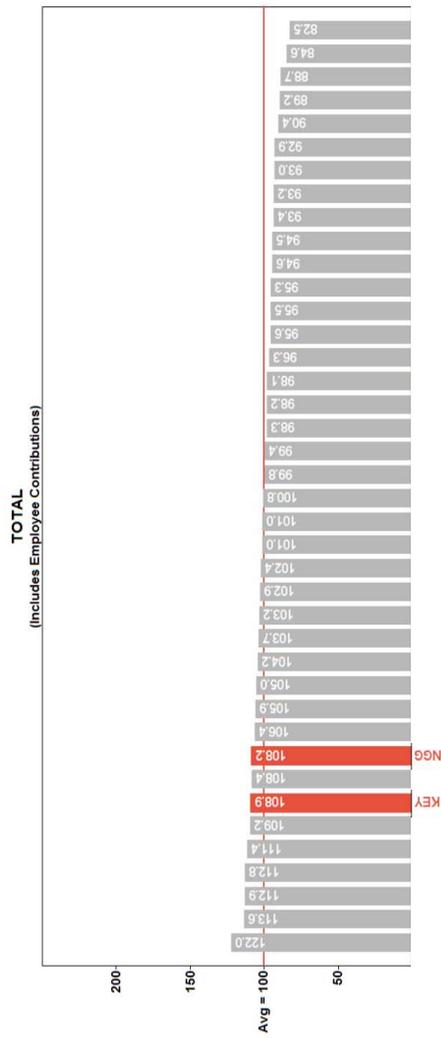
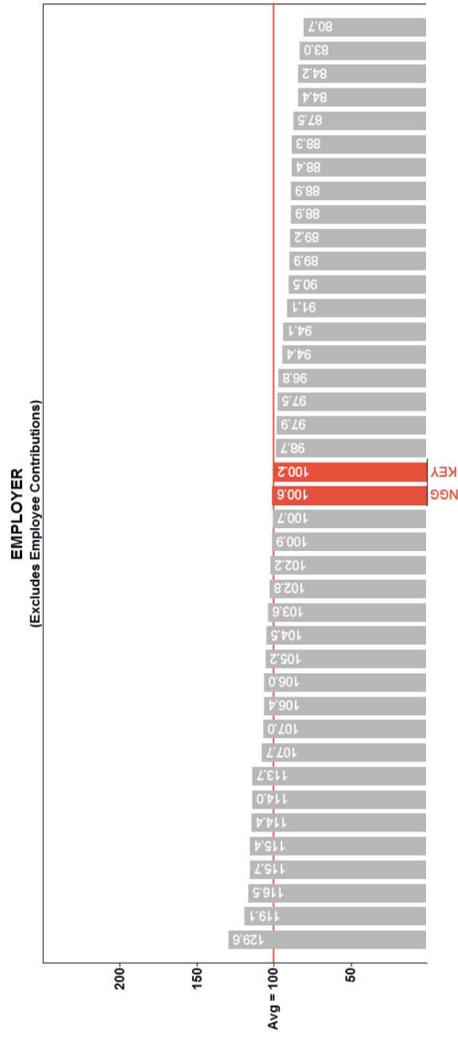
# Entire Benefits Program

## Entire benefit program score and rank

Entire Benefit Program Score and Rank		
Employer Value	Score	Rank
Legacy National Grid	100.6	20/40
Legacy Keyspan	100.2	21/40
<b>Total Value</b>		
Legacy National Grid	108.2	7/40
Legacy Keyspan	108.9	9/40

- National Grid's and KeySpan's employer and total values are almost identical. Although program design has been aligned for most benefits, a few still differ:
  - Post-retirement medical
  - Short-/long-term disability
- National Grid's and KeySpan's scores indicate that programs, based on employer value, are at the average
- Total value reflects the value after employee contributions; employer value represents value net of employee contributions. Lower employer values than total values indicate that employee contributions are greater than peers'

# Entire benefit program



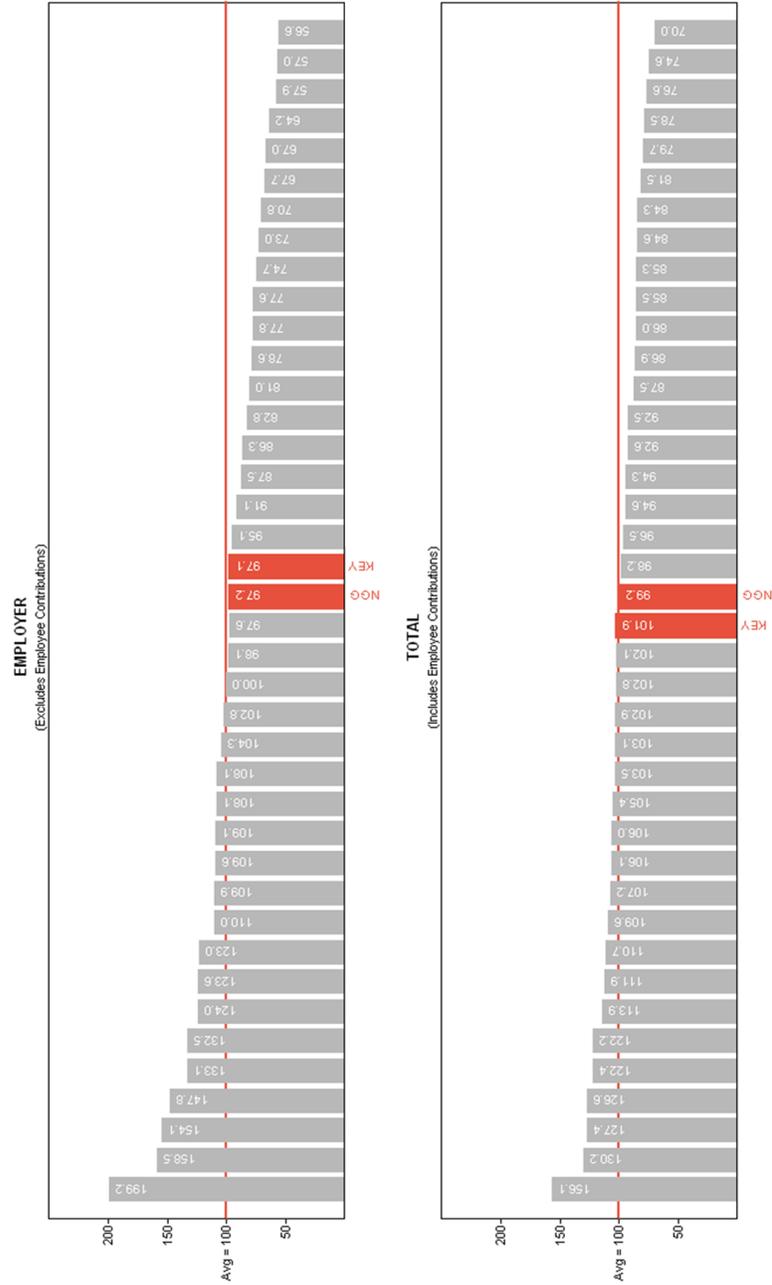
## Retirement Benefits

## All retirement events score and rank – excluding stock purchase plan

- Retirement events refer to the various benefits that become available upon an employee's retirement. This would encompass defined benefit/defined contribution benefits, post-retirement medical and/or dental benefits and post-retirement life insurance/AD&D coverage. Other long-term incentive programs such as employee stock purchase plans and profit-sharing plans would fall in this category as well.
- National Grid's and KeySpan's employer plan values are below average. Lower employer values than total values indicate greater employee cost-share relative to peers

Retirement Event Score and Rank - excluding Stock Purchase Plan		
Employer Value	Score	Rank
Legacy National Grid	97.2	21/40
Legacy Keyspan	97.1	22/40
<b>Total Value</b>		
Legacy National Grid	99.2	21/40
Legacy Keyspan	101.9	20/40

# All retirement events excluding stock purchase plan



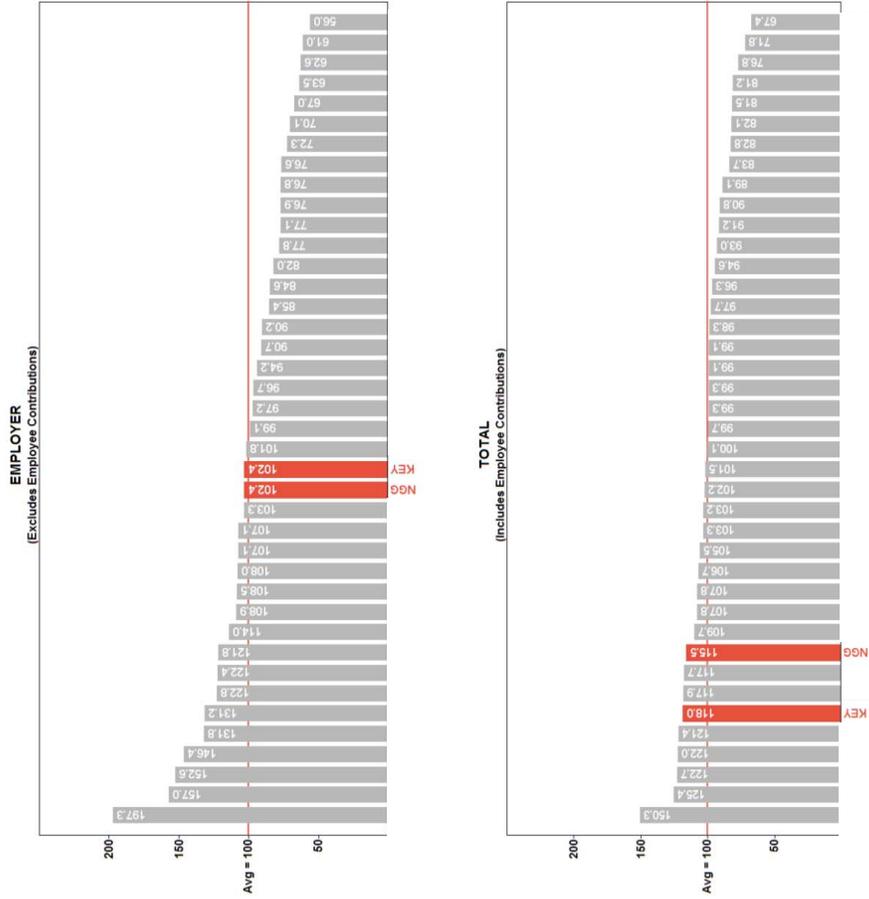
## All retirement events score and rank – including stock purchase plan

- When stock purchase is added, National Grid's and KeySpan's retirement event plan values increase. Both employer value and total value are above average
- In addition to the stock purchase plan, the primary driver of National Grid's and KeySpan's above-average scores and ranks for retirement events is the defined contribution plan

Retirement Event Score and Rank - including Stock Purchase Plan		
Employer Value	Score	Rank
Legacy National Grid	102.4	17/40
Legacy Keyspan	102.4	17/40
<b>Total Value</b>		
Legacy National Grid	115.5	9/40
Legacy Keyspan	118.0	6/40

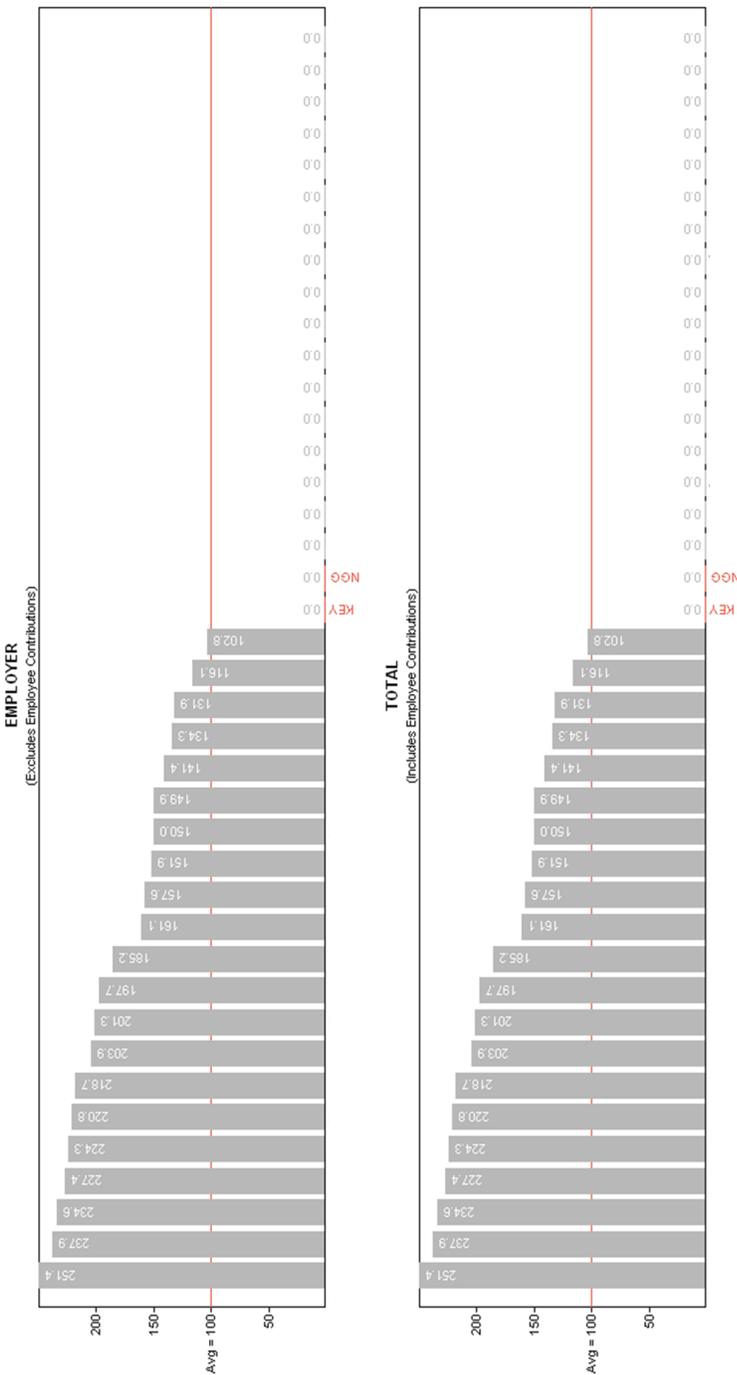
## All retirement events including stock purchase plan

- Relative rankings change when the Stock Purchase Plan is added in



## Defined benefit

- 21 of the competitors provide a defined benefit plan in addition to a defined contribution plan
- Like National Grid, 17 comparator companies do not offer a defined benefit plan



## Defined contribution design

- No defined benefit plan is available to new hires
- National Grid (including Legacy KeySpan) provides a points-based defined contribution program

	National Grid
<b>Defined Contribution Plan</b>	
<u>Matched Contributions</u>	
Employee contributions:	1% to 8% of pay pre- and/or post-tax
Employer contributions - match:	50% of employee contributions matched
Auto-enrollment:	6%
Auto-escalation:	None
<u>Employer Contributions - Core*</u>	4% to 8% based on age and years of service 100% at 3 years of service
<u>Vesting</u>	

\*Employee contribution not required

## Defined contribution score and rank – excluding stock purchase plan

Defined Contribution Score and Rank		
Employer Value	Score	Rank
Legacy National Grid	162.1	5/40
Legacy Keyspan	162.1	5/40
<b>Total Value</b>		
Legacy National Grid	135.1	4/40
Legacy Keyspan	135.1	4/40

- National Grid's defined contribution plan is above the average. This is attributable to the fact that National Grid offers a defined contribution plan with core employer contributions in lieu of a defined benefit plan
  - All of the competitor retirement programs include a savings plan; 16 of them also provide a company automatic or profit sharing element; 10 of them also provide a stock purchase program
  - Except for three, all of those providing a profit sharing are above average
- Four of the competitors provide a maximum matching contribution above 6%; 11 provide 6%; 8 provides 3% or less; and the others provide between 3% and 6%

# Defined contribution excluding stock purchase plan

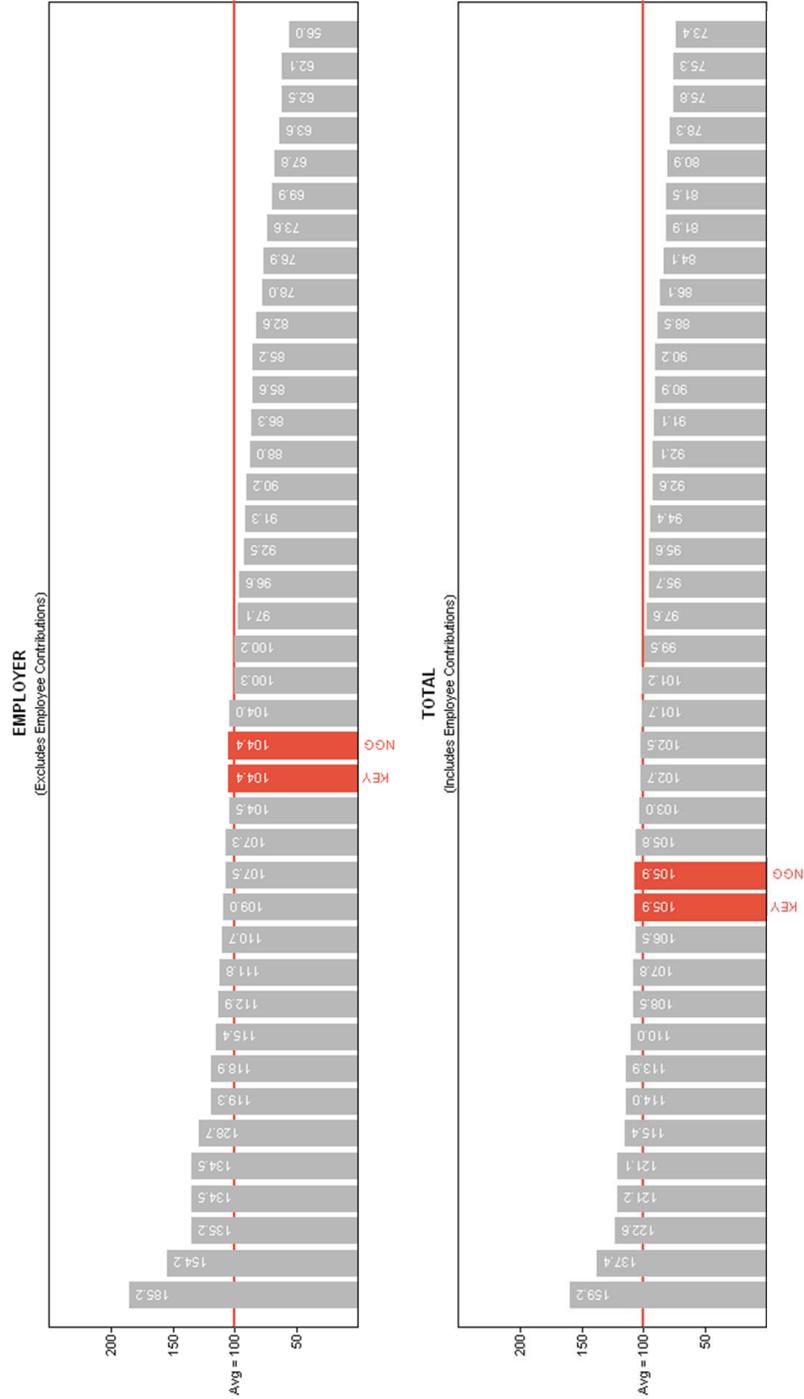


## Defined contribution and defined benefit score and rank – excluding stock purchase

Defined Benefit and Contribution Score and Rank		
	Score	Rank
<b>Employer Value</b>		
Legacy National Grid	104.4	17/40
Legacy Keyspan	104.4	17/40
<b>Total Value</b>		
Legacy National Grid	105.9	13/40
Legacy Keyspan	105.9	13/40

- 21 companies offer both a defined benefit and a defined contribution plan
  - National Grid only offers a defined contribution plan
- National Grid's plan ranks and scores above average when considering the employer value of retirement benefits
  - Its lower employer plan value than total value indicates higher-than-average employee contributions

# Defined benefit and defined contribution – excluding stock purchase



## Post-retirement medical benefits comparison

- The following table compares National Grid's and KeySpan's plan designs
- National Grid offers a Medicare Supplement to post-65 retirees; KeySpan offers a post-65 PPO plan

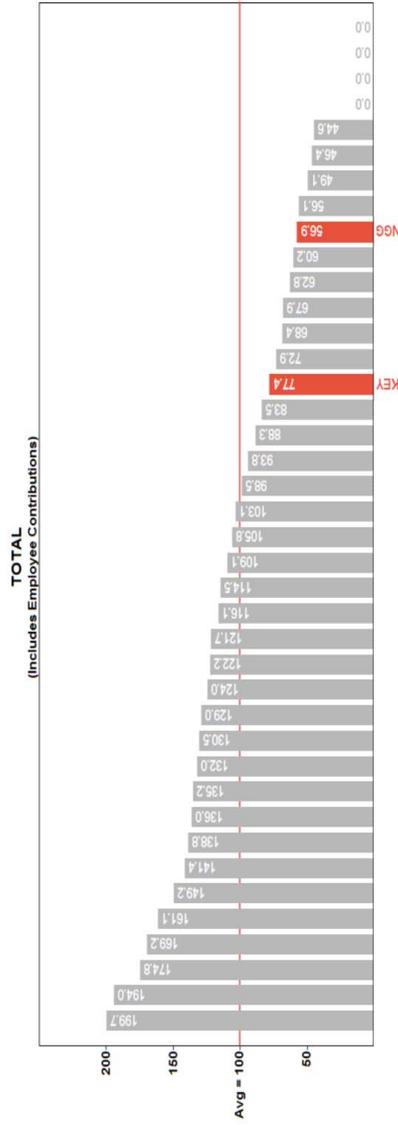
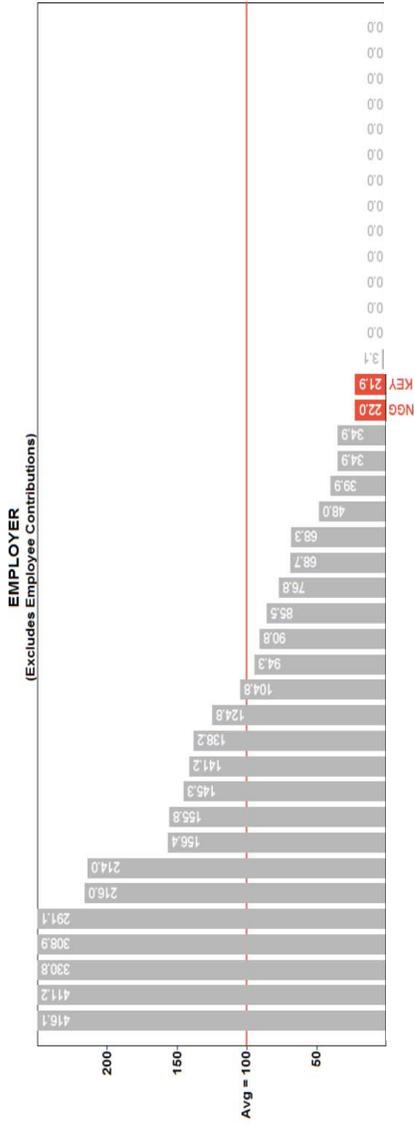
	Legacy National Grid	Legacy KeySpan
<b>Pre-65</b>		
Type of Plan	EPO	EPO
Plan Design	Same as Active	Same as Active
Participation Requirements	Age 60 & 10 years of service	Age 60 & 10 years of service
Defined Dollar Benefit	None	None
Retiree Contributions	50% of premium at retirement + 100% of cost increases thereafter	50% of premium at retirement + 100% of cost increases thereafter
<b>Post-65</b>		
Type of Plan	Medicare Supplement	PPO
Participation Requirements	10 years of service	10 years of service
Plan Design	Person: \$100; Family Max: none	Same as Active
Deductible	Person: none; Family Max: none	Person: \$250; Family Max: \$500
Out-of-pocket maximum (includes deductible)		Person: \$1,250; Family Max: \$2,500
Prescription Drugs (retail)		100%; \$10 copay
Generic	100%	100%; \$25 copay form/\$40 non-form.
Brand	80%	100% of premium
Retiree Contributions	100% of premium	

## Post-retirement medical benefits score and rank

Post-retirement Medical Score and Rank		
Employer Value	Score	Rank
Legacy National Grid	22.0	25/40
Legacy Keyspan	21.9	26/40
<b>Total Value</b>		
Legacy National Grid	56.9	32/40
Legacy Keyspan	77.4	26/40

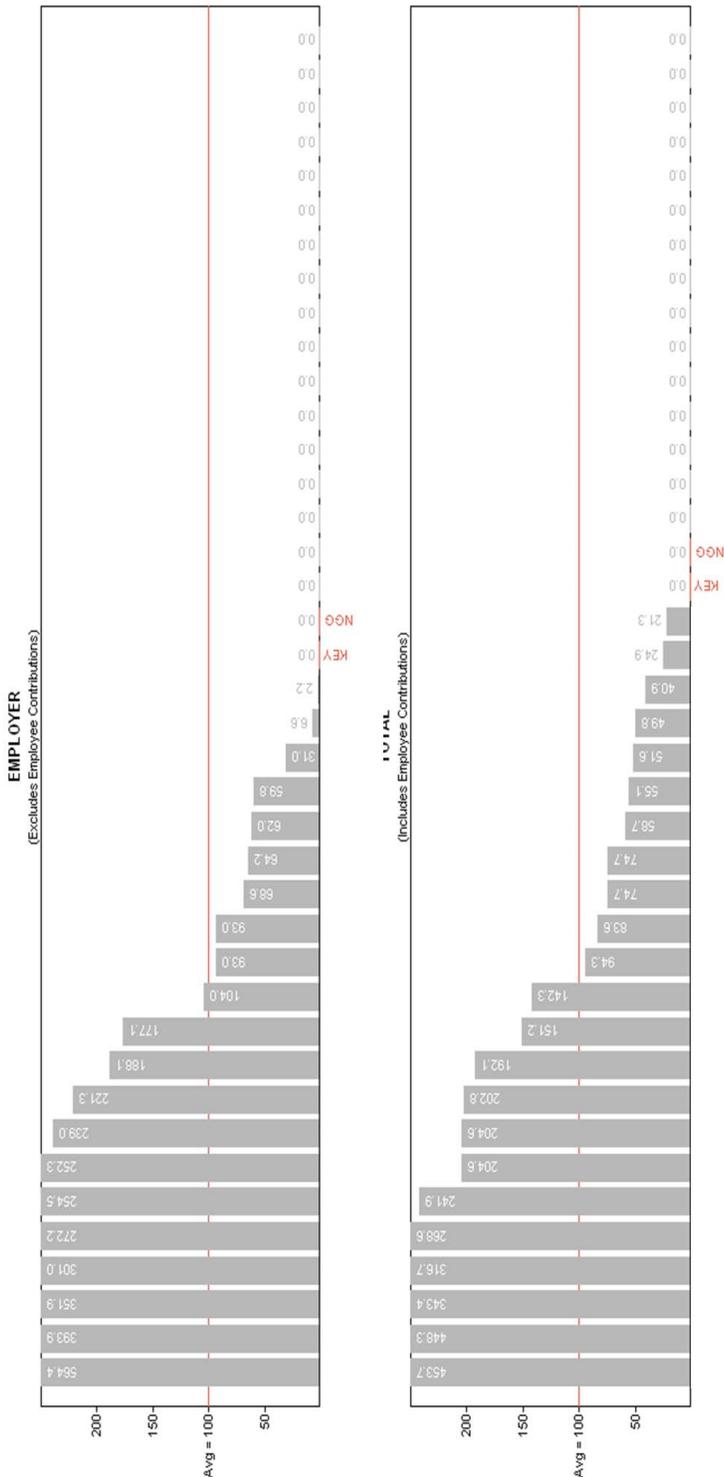
- The table above summarizes National Grid's and KeySpan's competitive positioning relative to competitors in terms of post-retirement medical programs
- Based on employer value, National Grid's and KeySpan's plans rank slightly below average
- The comparator group includes:
  - Four companies that offer no post-retirement medical benefits
  - Nine companies that offer retiree-pay-all coverage
- Of companies that offer and subsidize coverage, National Grid ranks second to last

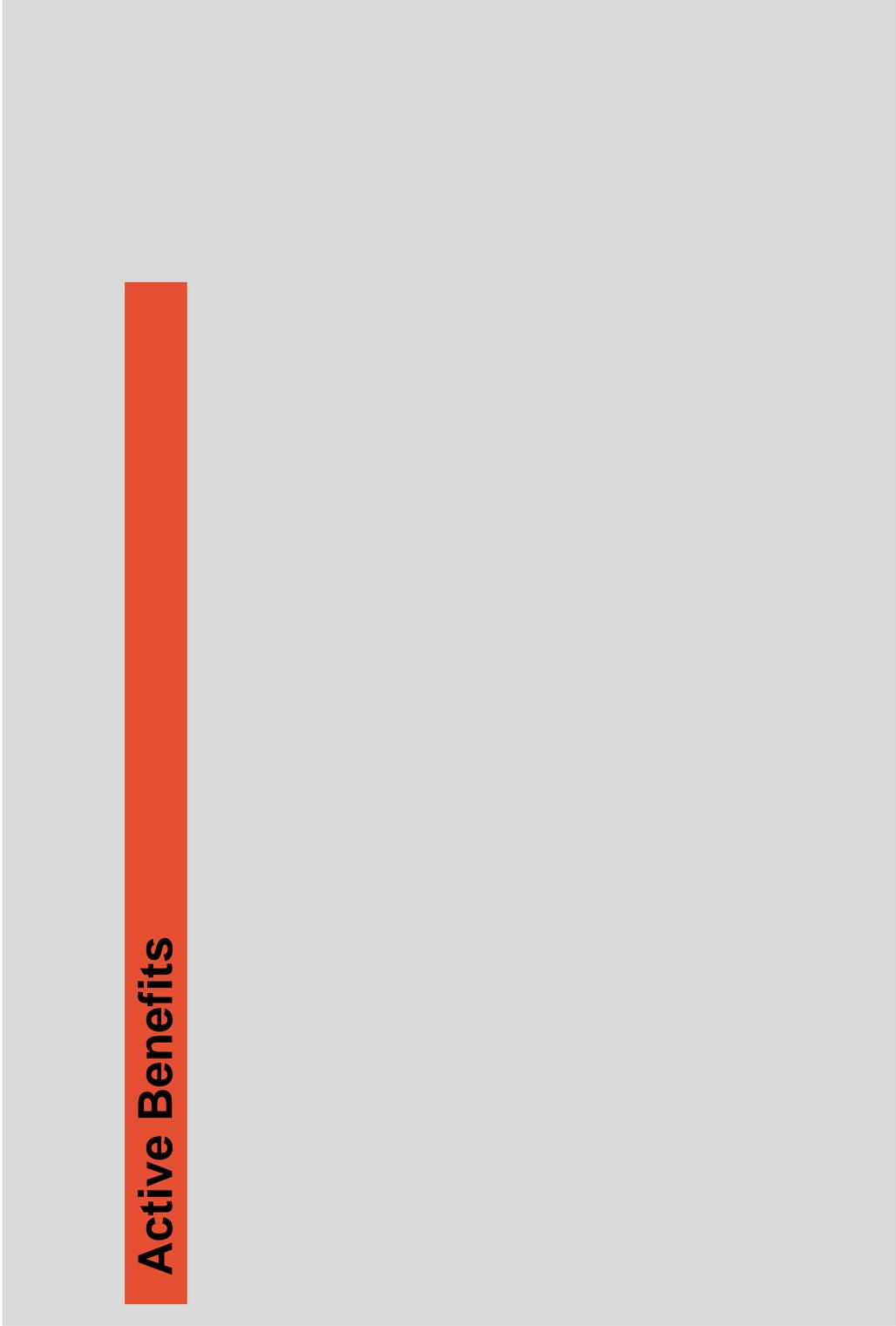
# Post-retirement medical benefits



## Post-retirement death

- National Grid does not offer post-retirement death benefits
- 23 competitor companies offer post-retirement life insurance and AD&D benefits. The plans of two of these companies are group universal life plans; 100% of costs are paid by retirees





**Active Benefits**

## Active medical plan delivery models

- For purposes of the BENVAL®, we evaluated only the option with highest enrollment
- Of the competitor companies' highest-enrolled plan:
  - 27 include out-of-network coverage; 24 of these plans are PPO/POS plans and two are consumer-driven options
  - 11 include in-network coverage only; 10 are HMO/EPO plans and one is a consumer-driven option
- The highest-enrolled plan for National Grid's nonunion population is an EPO

## Active medical benefits comparison

- The following table compares National Grid's plan design relative to its peer group

	National Grid	Range	Comparator Group Average	Mode
<b>In-Network</b>				
Annual Deductible - Per Person	\$0	\$0-\$1,800	\$516	500
Annual Deductible - Family Maximum	\$0	\$0-\$3,600	\$1,183	1,000
Annual OOP Max - Per Person (Includes Ded)	\$0	\$0-\$6,811	\$2,392	1,000
Annual OOP Max - Family (Includes Ded)	\$0	\$0-\$13,200	\$5,316	3,000
Hospital Room and Board - Coinsurance	100%	80%-100%	331%	100%
Hospital Room and Board - Copay	\$150/stay	\$0-\$500	\$46	\$0
Emergency Room - Coinsurance	100%	80%-100%	92%	100%
Emergency Room - Copay	\$100/visit	\$0-\$150	\$55	\$0
Office Visits - Primary - Copay	\$15/visit	\$0-\$40	\$14	\$0
Office Visits - Specialist - Copay	\$20/visit	\$0-\$60	\$20	\$0
Prescription Drugs - Retail - Generic - Coinsurance	100%	80%-100%	94%	100%
Prescription Drugs - Retail - Generic - Copay	\$10	\$5-\$50	\$12	\$10
Prescription Drugs - Retail - Brand - Formulary - Coinsurance	100%	70%-100%	86%	100%
Prescription Drugs - Retail - Brand - Formulary - Copay	\$25	\$10-\$125	\$38	\$20
Prescription Drugs - Retail - Brand - Non-Formulary - Coinsurance	100%	45%-100%	78%	100%
Prescription Drugs - Retail - Brand - Non-Formulary - Copay	\$40	\$20-\$225	\$62	\$40
Mental Health - Outpatient - Copay	\$15/visit	\$10-\$60	\$23	\$25
Monthly Employee Contributions - Employee Only	\$140	\$0-\$164.93	\$79	N/A
Monthly Employee Contributions - Family	\$390	\$111.56-\$463.11	\$275	N/A
<b>Out-of-Network</b>				
Annual Deductible - Per Person	N/A	\$200-\$3,600	\$937	\$500
Annual Deductible - Family Maximum	N/A	\$400-\$7,200	\$2,352	\$1,000
Annual OOP Max - Per Person (Includes Ded)	N/A	\$1,000-\$13,200	\$5,091	5,000
Annual OOP Max - Family (Includes Ded)	N/A	\$0-\$26,400	\$11,623	\$6,000

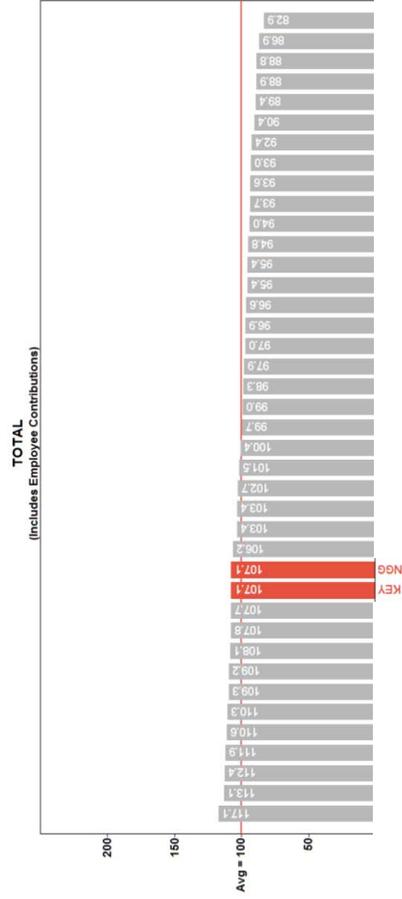
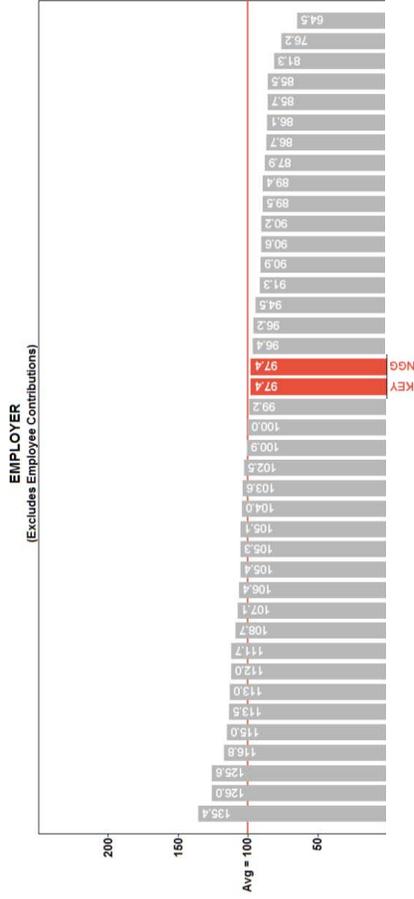
## Active medical score and rank

Active Medical Score and Rank		
Employer Value	Score	Rank
Legacy National Grid	97.4	22/40
Legacy Keyspan	97.4	22/40
<b>Total Value</b>		
Legacy National Grid	107.1	12/40
Legacy Keyspan	107.1	12/40

- National Grid ranks 22<sup>nd</sup> and 12<sup>th</sup>, respectively, in active medical employer value and total plan value
- National Grid's employer value is lower than total value because of higher-than-average employee contributions

## Active medical benefits

- With respect to employer value:
  - The top three plans feature 100% in-network coverage with minimal member deductibles and low employee cost share
  - The lowest plan features 90% coinsurance with a \$500 in-network individual deductible



## Active dental benefits comparison

- The following table compares National Grid's plan design relative to their competitors

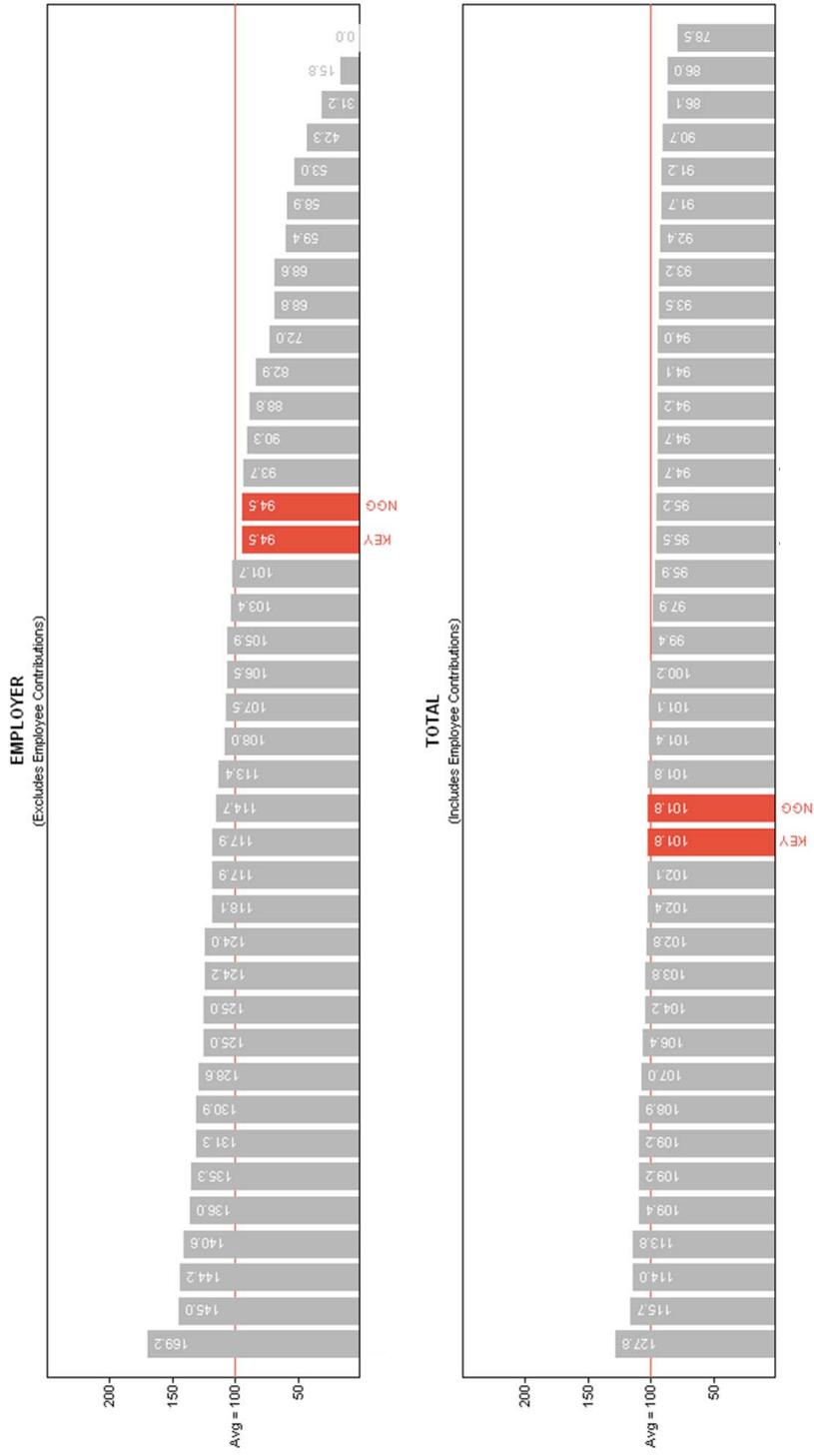
	National Grid		Comparator Group	
	Range	Average	Range	Mode
<b>In-Network</b>				
Annual Deductible - Per Person	\$50		\$25-\$125	\$50
Annual Deductible - Family	\$150		\$50-\$150	\$150
Annual Maximum	\$2,500 (excludes Orthodontia)		\$1000-\$3000	\$1,500
Preventive/Type I (Cleanings)	100%		80%-90%	100%
Basic/Type II (Fillings)	80%		70%-100%	80%
Major/Type III (Crowns)	50%		50%-100%	50%
Orthodontia - Coverage	100%		50%-100%	50%
Orthodontia - Maximum	\$2,000 per lifetime		\$750-\$3000	\$2,000
Monthly Employee Contributions - Employee Only	\$16		\$4-\$46.99	None
Monthly Employee Contributions - Family	\$45		\$14.1-\$147.32	None
<b>Out-of-Network</b>				
Annual Deductible - Out-Of-Network - Per Person	N/A		\$25-\$250	\$50
Annual Deductible - Out-Of-Network - Family	N/A		\$50-\$150	\$150
Annual Maximum - Out-Of-Network	N/A		\$1500-\$3000	\$1,500

## Active dental benefits score and rank

Dental Score and Rank	Score	Rank
<b>Employer Value</b>		
Legacy National Grid	94.5	25/40
Legacy Keyspan	94.5	25/40
<b>Total Value</b>		
Legacy National Grid	101.8	16/40
Legacy Keyspan	101.8	16/40

- One company offers an employee-pay-all program
- The plans of eight companies, including the highest ranked company, have no member deductible

# Active dental benefits



# Active life insurance/AD&D comparison

National Grid		Comparator Group	
	Range	Average	Mode
<b>Basic</b>			
Basic Benefit Amount	1 x pay		1x pay
Benefit Max - Basic	\$1,500,000	N/A	\$1,000,000
<b>Supplemental</b>			
Highest Benefit Level	5 x pay	N/A	8 x pay
<b>Dependent</b>			
Spouse - Highest Benefit Level	\$100,000	\$127,167	\$250,000
Child - Highest Benefit Level	\$10,000	\$12,155	\$10,000
<b>AD&amp;D</b>			
Participation Requirements	None	N/A	None
Monthly Employee Contributions	None	N/A	None
Benefit Amount	2 x pay	N/A	1 x pay
Benefit Maximum	\$600,000	\$1,153,478	\$1,000,000

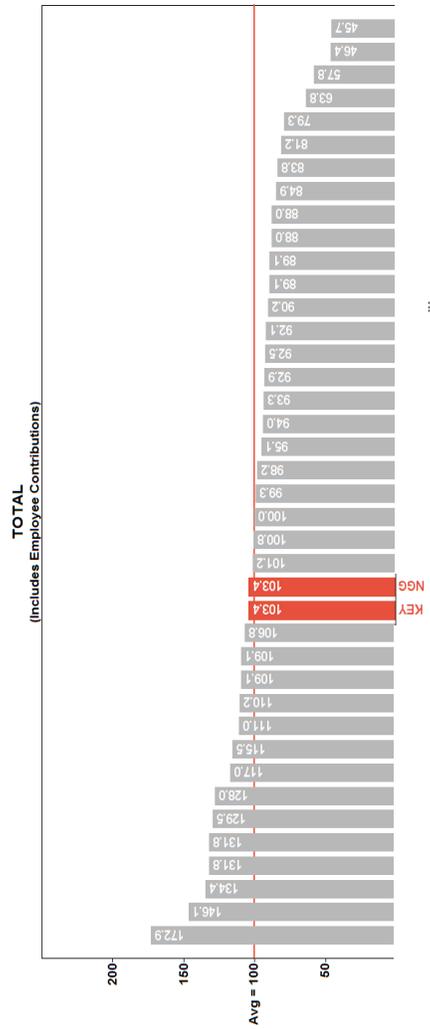
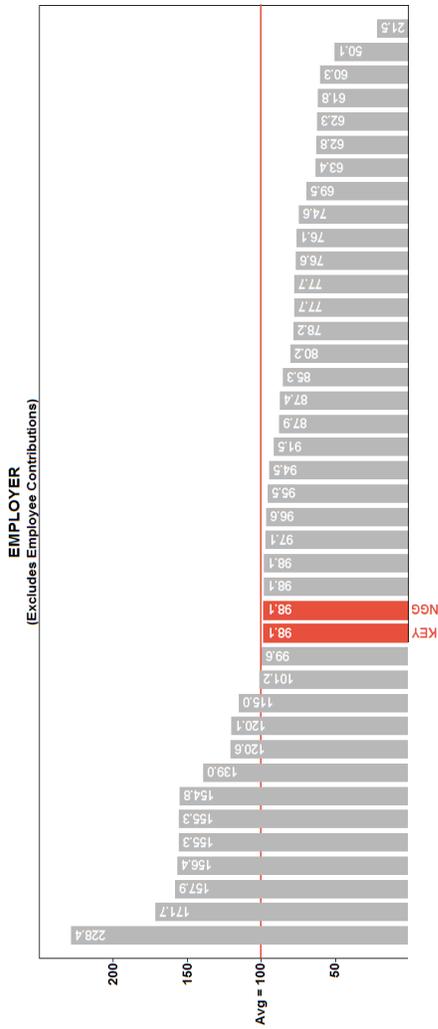
- Twelve competitors do not offer supplemental employee life insurance. Ranges, averages and modes above reflect supplemental plans in place
- National Grid's basic life amount is in line with competitive norms; its basic life maximum is above the average of \$1,000,000
- National Grid's supplemental life benefit of 1 to 5x pay in multiples of 1x pay with a maximum of \$1,000,000 is below the competitive mode of 1 to 8x pay in multiples of 1x pay
  - Most companies have a supplemental maximum of \$2,000,000; the average is about \$2,400,000
  - The highest supplemental maximum is \$10,000,000
- Spouse life benefits are below competitive norms as other companies offer spouse benefits in excess of \$100,000 (National Grid's highest level); the highest child life option is in line with norms
- National Grid's AD&D maximum is lower than the average of over \$1,000,000

## Active life/AD&D insurance score and rank

- The following table illustrates National Grid's and KeySpan's competitive positioning relative to their peer group in terms of life insurance and AD&D programs
  - Employer values are driven by the optional benefits (e.g., optional life, spouse and dependent life) and the associated employee contribution

Life Insurance/AD&D - Active Score and Rank		
Employer Value	Score	Rank
Legacy National Grid	98.1	14/40
Legacy Keyspan	98.1	14/40
<b>Total Value</b>		
Legacy National Grid	103.4	15/40
Legacy Keyspan	103.4	15/40

# Active life insurance and AD&D benefit



## Short-term disability comparison

	Legacy National Grid	Legacy KeySpan	Comparator Group	
	1st day of disability	1st day of disability	Range	Average
<b>Sick Pay Commencement:</b>	1st day of disability			
<b>Sick Pay @ 100% (Number of Weeks):</b>				
<1 Year of Service	1	1	0.6-4	1.5
1 Year of Service	1	1	0.6-9	1.9
5 Years of Service	5	5	0.6-26	3.1
10 Years of Service	10	10	0.6-26	4.3
15 Years of Service	15	15	0.6-26	4.5
20 Years of Service	20	20	0.6-26	4.7
<b>Salary Continuance</b>				
% of Pay	70%	50%	-	97%
<b>Duration (Number of Weeks):</b>				
<1 Year of Service	52	13	0-52	12.9
1 Year of Service	52	13	0-52	14.1
5 Years of Service	52	13	0-52	18.9
10 Years of Service	52	13	4-52	22.0
15 Years of Service	52	13	4-52	23.2
20 Years of Service	52	13	4-52	23.9
25 Years of Service	52	13	4-52	24.0
				100%

- The table above compares National Grid's and KeySpan's short-term disability program with those of competitor companies
- National Grid's and KeySpan's plan grants two weeks of sick pay at 100% with two years of service, and an additional one week for each year of service thereafter

## Long-term disability comparison

	Legacy National Grid	Legacy KeySpan	Comparator Group	
			Range	Average
Definition of Disability	Own occ first 24 months; any occ after 24 months Base Salary	Own occ first 24 months; any occ after 24 months Base Salary	N/A	N/A
Covered Pay	After exhaustion of STD benefits	Later of 90 calendar days or exhaustion of STD	3 months - 12 months	N/A
Commencement	60%	60%	50%-70%	6 months
Benefit - Amount	SS Primary	SS Family	N/A	59%
Benefit - Offsets	70% of pay	\$15,000	N/A	N/A
Maximum Benefit (After Offsets)				
				Own occ first 24 months; any occ after 24 months Base Salary
				6 months
				60%
				SS Family, Pension
				Unlimited

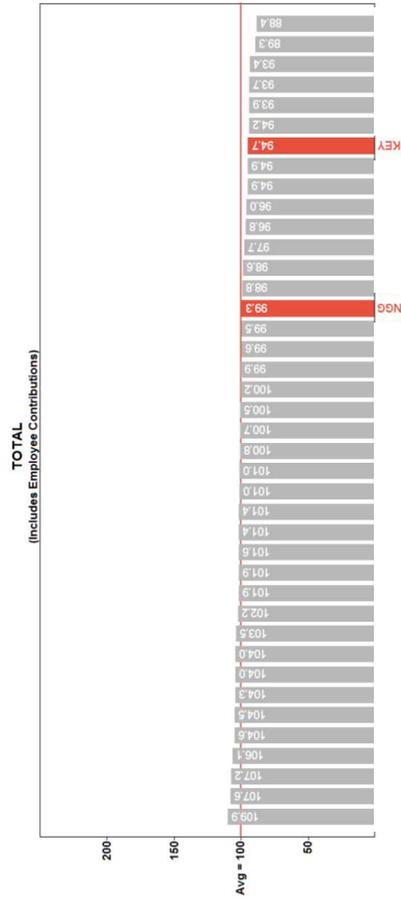
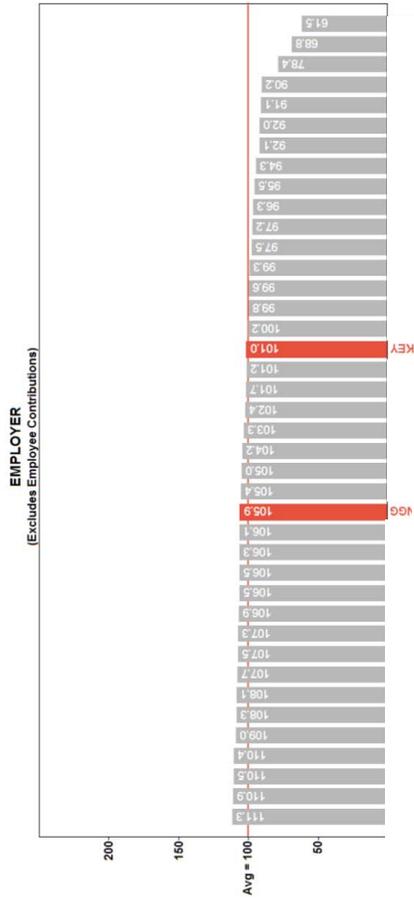
- The table summarizes National Grid's and KeySpan's competitive positioning relative to their peer group in terms of LTD programs
- Total value results for LTD are largely driven by the benefit commencement date, duration of the benefit, the percent of pay covered, and maximum benefit
- Both National Grid and KeySpan offer a basic benefit of 60% of pay, which is in line with competitive norms
- Fourteen competitors require employee contributions for LTD

## Short-term disability and long-term disability score and rank

Short Term and Long Term Disability Score and Rank		
Employer Value	Score	Rank
Legacy National Grid	105.9	16/40
Legacy Keyspan	101.0	24/40
<b>Total Value</b>		
Legacy National Grid	99.3	26/40
Legacy Keyspan	94.7	34/40

- Because differing elimination periods can skew results when looking at STD and LTD benefits individually, it is also important to look at the entire disability continuum
- When STD and LTD are assessed in combination, National Grid's and KeySpan's plan are more closely aligned

# Short-term disability and long-term disability



## Vacation and holiday benefits comparison

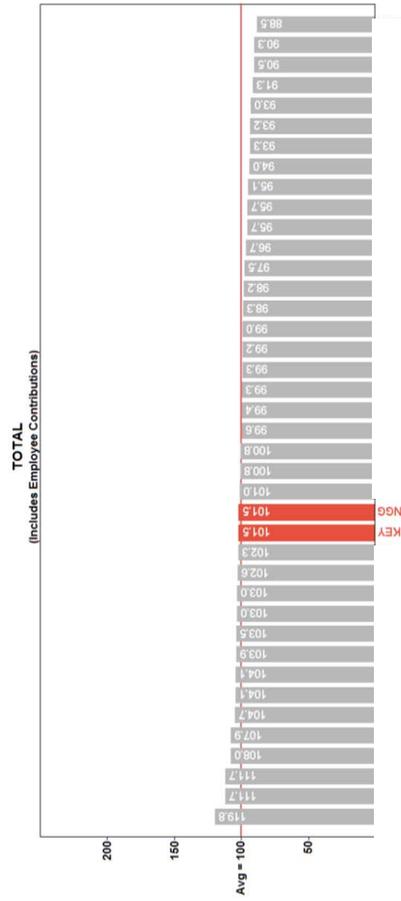
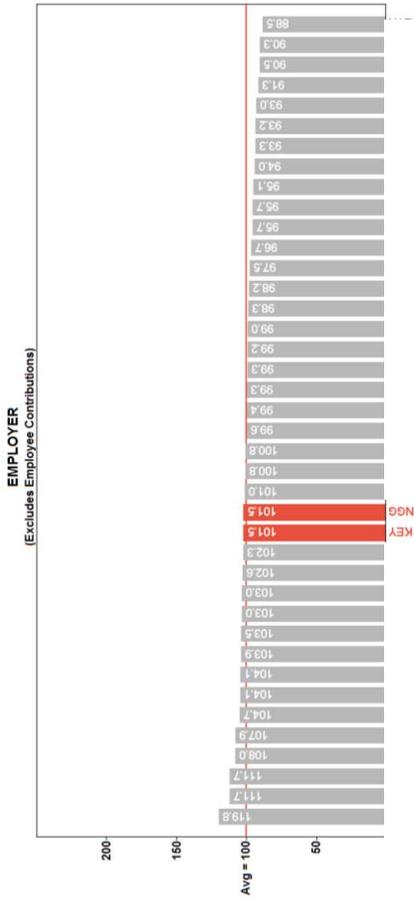
- The following table compares National Grid's and KeySpan's plan design relative to their peer group plan designs
- Overall vacation days per year of service are in-line/slightly more generous than the competitor average

	National Grid		Comparator Group	
	Range	Average	Range	Mode
<b>Number of Days</b>				
Vacation At Hire	15	12	0 - 27.5	15
Vacation With 1 Year of Service	15	13	5 - 27.5	10
Vacation With 3 Years of Service	15	13	10 - 27.5	15
Vacation With 7 Years of Service	15	16	10 - 27.5	15
Vacation With 15 Years of Service	20	20	15 - 27.5	20
Vacation With 25 Years of Service	25	25	20 - 30	25
Vacation With 35 Years of Service	25	26	20 - 30	25
Employer Scheduled Holidays	10	9	6 - 12	9
Employee Scheduled Holidays	2	3	0 - 7	3

## Vacation and holiday score and rank

Vacation and Holiday Score and Rank		
Employer Value	Score	Rank
Legacy National Grid	101.5	15/40
Legacy Keyspan	101.5	15/40
<b>Total Value</b>		
Legacy National Grid	101.5	15/40
Legacy Keyspan	101.5	15/40

# Vacation and holiday score and rank



**Summary**

## Score summary

Provision	Legacy National Grid		Legacy Keyspan	
	Employer Value	Total Value	Employer Value	Total Value
<b>Entire Benefit Program</b>	<b>100.6</b>	<b>108.2</b>	<b>100.2</b>	<b>108.9</b>
Defined Benefit	0.0	0.0	0.0	0.0
Defined Contribution	162.1	135.1	162.1	135.1
Defined Benefit + Defined contribution	104.4	105.9	104.4	105.9
Post-retirement Medical	22.0	56.9	21.9	77.4
Post-retirement Death	0.0	0.0	0.0	0.0
Retirement Events*	102.4	115.5	102.4	118.0
Active Medical	97.4	107.1	97.4	107.1
Dental	94.5	101.8	94.5	101.8
Life Insurance/AD&D	98.1	103.4	98.1	103.4
STD	106.3	102.5	98.2	94.7
LTD	104.1	87.7	112.3	94.6
Vacation + Holiday	101.5	101.5	101.5	101.5

\*Including stock purchase plan

- As noted throughout this document, there are some benefit provisions that are more generous than the competitor group, and others that are less generous than the competitor group, which ultimately contribute to the overall Entire Benefit Program score
- From an employer value perspective, National Grid is in line with the market

## **BENVAL<sup>®</sup> valuation methodology**

Relative values are determined based on a representative employee group and a standardized set of valuation assumptions/methods; results are not intended to represent actual program costs.

- Plan provisions valued are those applicable to newly hired salaried employees; benefits available only to grandfathered groups of employees are not reflected.

- Standard population

Average age: 44 years

Average service: 13 years

Average base salary: \$76,121

Average total compensation: \$84,389

- Key economic assumptions

Investment return assumption/discount rate: 7%

Salary increase rate: 4%

Inflation: 2.5%

One-year Treasury bond yield: 4.4%

30-year Treasury bond yield: 5.5%

Health care cost trend: 8% graded to 5% over six years



Schedule MPH-3

Target Compensation as a Percent of Market Assessment

**National Grid USA**  
Target Compensation as a Percent of Market Assessment  
Utility & General Industry Peer Group

Salary Bands <sup>1</sup>	Number of Incumbents <sup>2</sup>	Percent of Incumbents	National Grid Average Target Compensation by Market Salary Band		Market Average Target Compensation by Market Salary Band <sup>3</sup>		National Grid Compensation as a Percent of Market <sup>5</sup>	
			Salary	Target Total Cash Compensation <sup>4</sup>	Salary	Target Total Cash Compensation <sup>4</sup>	Salary	Salary Plus Target Incentive
\$40,000 - \$60,000	144	3%	\$54.9	\$57.9	\$57.4	\$61.3	96%	94%
\$60,000 - \$80,000	840	19%	\$70.0	\$75.8	\$74.2	\$80.6	94%	94%
\$80,000 - \$100,000	1,883	43%	\$89.2	\$98.7	\$95.1	\$105.5	94%	94%
\$100,000 - \$120,000	960	22%	\$109.1	\$123.7	\$117.6	\$133.9	93%	92%
\$120,000 - \$140,000	356	8%	\$129.5	\$149.2	\$145.3	\$172.1	89%	87%
\$140,000 - \$160,000	148	3%	\$149.7	\$176.5	\$174.7	\$213.5	86%	83%
> \$160,000	98	2%	\$188.9	\$234.4	\$211.9	\$281.8	89%	83%
<b>Average<sup>6</sup></b>	<b>4,429</b>	<b>100%</b>	<b>\$96.2</b>	<b>\$108.1</b>	<b>\$104.1</b>	<b>\$118.4</b>	<b>92%</b>	<b>91%</b>

(1) This primary sort of salary bands is based on National Grid salaries.  
(2) The total number of incumbents in this analysis is 4,429 within 399 titles, which reflects 85.75% of the total management employee population as of 10/31/2011.  
(3) Market compensation data has been updated by 3.0% to April 1, 2012 based on the 2011-2012 Towers Watson Salary Budget Survey.  
(4) Target total cash compensation reflects 2012 base salaries plus target annual incentive award.  
(5) Reflects the National Grid Salary and Target Total Cash divided by the Market Salary and Target Total Cash for each salary band.  
(6) Average reflects weighted average based on the number of incumbents in each salary band.

**National Grid salary and target total compensation are below the competitive market but within the 10% corridor**



Schedule MPH-4

Target Variable Pay as a Percent of Market Assessment

**National Grid USA**  
**Target Variable Pay as a percent of Market Assessment**  
**Utility & General Industry Peer Group**

Salary Bands <sup>1</sup>	Number of Incumbents <sup>2</sup>	Percent of Incumbents	National Grid Average Target Variable % by Market Salary Band	Market Average Target Variable % by Market Salary Band	National Grid Target Variable % as a Percent of Market <sup>3</sup>
\$40,000 - \$60,000	144	3%	5%	7%	76%
\$60,000 - \$80,000	840	19%	8%	8%	100%
\$80,000 - \$100,000	1,883	43%	11%	10%	101%
\$100,000 - \$120,000	960	22%	13%	14%	93%
\$120,000 - \$140,000	356	8%	15%	19%	78%
\$140,000 - \$160,000	148	3%	18%	24%	74%
> \$160,000	98	2%	23%	32%	73%
<b>Average<sup>4</sup></b>	<b>4,429</b>	<b>100%</b>	<b>11%</b>	<b>12%</b>	<b>92%</b>

(1) This primary sort of salary bands is based on National Grid salaries.  
(2) The total number of incumbents in this analysis is 4,429 within 399 titles, which reflects 85.75% of the total management employee population as of 10/31/2011.  
(3) Reflects the average National Grid Target Variable % divided by the average Market Target Variable % for each salary band.  
(4) Average reflects weighted average based on the number of incumbents in each salary band.

**On average, National Grid target incentives are below the market average but within the 10% corridor**



Schedule MPH-5

Market Merit Increases

# Market Merit Increases

General industry salary growth remains relatively flat

Year	U.S. Merit Budget Increases*				
	Executive	Management	Exempt	Non-exempt Salaried	Non-exempt Hourly
2008	3.7%	3.5%	3.5%	3.5%	3.4%
2009	3.3%	2.9%	2.8%	2.8%	2.8%
2010	3.0%	2.8%	2.8%	2.7%	2.7%
2011 <sup>P</sup>	3.0%	3.0%	3.0%	2.9%	2.8%
2012 <sup>F</sup>	3.0%	3.0%	3.0%	3.0%	3.0%

P = Projected; F = Forecast.

\* Data represents median merit increases. Includes participants providing no merit increases.

Source: Towers Watson Data Services.



Schedule MPH-6

10 Year Wage Increase History

National Grid  
Union and Non-Union Wage Increase History (2002-2011)

Year	Non-Union		Non-Union		Local 310	Local 310C	Local 12431
	<u>Merit</u>	<u>Prom/Equity</u>	<u>Total</u>	<u>GW I *</u>	<u>GW I *</u>	<u>GW I *</u>	<u>GW I *</u>
2002	3.20%	0.80%	4.00%	3.00%	3.00%	3.00%	0.00%
2003	0.00%	2.00%	2.00%	6.25% **	3.00%	3.00%	0.00%
2004	2.60%	0.70%	3.30%	6.25% **	3.00%	3.00%	3.00%
2005	3.50%	0.35%	3.85%	3.25%	3.00%	3.00%	3.00%
2006	3.00%	0.40%	3.40%	3.25%	8.00%	3.00%	3.00%
2007	3.15%	0.50%	3.65%	3.00%	4.00%	3.00%	3.00%
2008	3.40%	0.50%	3.90%	3.00%	3.00%	3.00%	3.00%
2009	0.00%	1.50%	1.50%	3.00%	3.00%	3.00%	3.00%
2010	2.00%	0.35%	2.35%	3.00%	2.50%	2.50%	2.50%
2011	3.00%	0.19%	3.19%	2.50%	2.50%	2.50%	2.50%

\* Excludes progression step increases which are similar to non-union job family promotions

\*\* Includes the conversion of existing annual Guaranteed Lump Sum payment into base wages