PLACE: Dobbs Building, Raleigh, North Carolina

DATE: Tuesday, August 30, 2016

TIME: 10:00 a.m. - 12:15 a.m.

DOCKET NO: G-5, Sub 565

BEFORE: Commissioner ToNola D. Brown-Bland, Presiding
Chairman Edward S. Finley, Jr.
Commissioner Bryan E. Beatty
Commissioner Don M. Bailey
Commissioner Jerry C. Dockham
Commissioner James G. Patterson
Commissioner Lyons Gray

**IN THE MATTER OF:**

Application of Public Service Company of North Carolina, Inc., for a General Increase in Its Rates and Charges.

Volume: 5

A P P E A R A N C E S

**FOR PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.:**

Mary Lynne Grigg, Esq.
McGuireWoods, LLP
434 Fayetteville Street, Suite 2600
Raleigh, North Carolina 27601

Craig Collins, Esq.
Associate General Counsel
SCANA Corporation
MC C222
220 Operation Way
Cayce, South Carolina 29033

William R. Pittman, Esq.
Post Office Box 706
Raleigh, North Carolina 27602

**FOR BLUE RIDGE PAPER & PRODUCTS, INC., d/b/a EVERGREEN PACKAGING:**

Adam Olls, Esq.
Bailey & Dixon, LLP
434 Fayetteville Street, Suite 2500
Raleigh, North Carolina 27601

A P P E A R A N C E S (Cont'd.)

**FOR CAROLINA UTILITY CUSTOMERS ASSOCIATION, INC:**

Robert F. Page, Esq.
Crisp, Page & Currin, LLP
4010 Barrett Drive, Suite 205
Raleigh, North Carolina 27609

**FOR THE USING AND CONSUMING PUBLIC:**

Margaret Force, Esq.
Assistant Attorney General
Attorney General's Office
Post Office Box 629
Raleigh, North Carolina 27602

Gina C. Holt, Esq.
William E. Grantmyre, Esq.
Heather Fennell, Esq.
Public Staff - North Carolina Utilities Commission
4326 Mail Service Center
Raleigh, North Carolina 27699-4300

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P R O C E E D I N G S

COMMISSIONER BROWN-BLAND: Good morning. Let us come to order and go on the record. I am Commissioner ToNola D. Brown-Bland, Presiding Commissioner for this hearing. With me this morning are Chairman Edward S. Finley, Jr.; Commissioners Bryan E. Beatty, Don M. Bailey, Jerry C. Dockham, James G. Patterson and Lyons Gray.

I now call for hearing Docket Number G-5, Sub 565, In The Matter of an Application of Public Service Company of North Carolina, Inc., for a General Increase in Its Rates and Charges.

On February 17, 2016, Public Service Company of North Carolina, Inc., gave notice of its intent to file an Application for a general rate increase.

On March 3, 2016, Carolina Utility Customers Association, Inc., hereafter CUCA, filed a Petition to Intervene, and an Order granting this Petition was issued by the Commission on March 7.

On March 31, 2016, Public Service Company of North Carolina, Inc., hereafter PSNC, filed an Application, direct testimony and exhibits, requesting authority to increase its rates and charges. PSNC has requested approval of various changes to its rates, terms and conditions of service. The Company is requesting an increase in revenues to be produced from its rates and charges for natural gas service, certain changes to the cost allocations and rate designs underlying the existing rates, certain revisions to its current tariff and amortization of certain deferred account balances. The increase in annual revenues of $41,583,020 that PSNC requested in its filed Application represents an annual increase of 10.6 percent over the Company's present rates established in its last rate case filed in 2008.

On April 26, 2016, the Commission issued an Order Scheduling Investigation and Hearing, Suspending Proposed Rates, Establishing Intervention and Testimony Due Dates and Discovery Guidelines and Requiring Public Notice. Pursuant to that Order, this Docket was scheduled for public hearings that began on August 23, 2016, in Gastonia; and on Wednesday, August 24, 2016, public hearing was also held in Asheville; on August 25, 2016, public hearing was held in Statesville, and the final -- well, a public hearing was also held in Raleigh last night, August 29th for the purpose of taking the public witness testimony on the Application. Public witness and expert witness testimony on the Application is scheduled for today, Tuesday, August 30, 2016, at ten o'clock a.m.

On May 31, 2016, Evergreen Packaging filed a Petition to Intervene and that Motion -- Petition was allowed on June 2, 2016.

On June 13, 2016, the Attorney General filed a Notice of Intervention, which is recognized pursuant to General Statute 62-20.

The intervention and participation of the Public Staff of the North Carolina Utilities Commission is recognized pursuant to General Statute 62-15(d) and Commission Rule R1-19(e).

On June 16, 2016, PSNC filed Affidavits of Publication of Public Notice. And on June 23, 2016, PSNC filed Certification that it had provided notice of hearing to each of its customers.

On August 18, 2016, PSNC, CUCA, Evergreen Packaging and the Public Staff, hereafter the Stipulating Parties, filed a Partial Stipulation.

On August 18, 2016, the Public Staff filed direct testimony.

On August 24, 2016, PSNC filed a list of witnesses and -- to testify at the hearing and a

Motion to Excuse -- and a Motion to Excuse witnesses. In addition, PSNC filed supplemental testimony of Robert V. Hevert.

On August 25, 2016, PSNC filed supplemental and rebuttal testimony of Candace A. Paton and rebuttal testimony of Jimmy E. Addison.

On August 29, the Stipulating Parties filed a full Stipulation resolving all issues. And on this morning, on August 30, the Stipulating Parties filed an Amended full Stipulation, not to change the terms but to make certain corrections.

Pursuant to General Statute 138A-15(e), I remind members of the Commission of our duty to avoid conflicts of interest, and inquire at this time as to whether any Commissioner has any known conflict of interest with respect to this docket?

(No response.)

Let the record reflect that no conflicts were identified.

And I now call on counsel for the parties to announce their appearance for the record, starting with the Applicant.

MS. GRIGG: Good morning. Madam Chair, Members of the Commission, I am Mary Lynne Grigg with the Law Firm of McGuireWoods, appearing on behalf of PSNC.

COMMISSIONER BROWN-BLAND: Good morning.

MR. COLLINS: Good morning, Commissioners. My name is Craig Collins. I'm Associate General Counsel for SCANA and I'm also appearing here for PSNC.

MR. PITTMAN: Good morning. My name is William Pittman. I am also appearing on behalf of PSNC.

COMMISSIONER BROWN-BLAND: Good morning to you all.

MR. OLLS: Good morning, Madam Chair, Members of the Commission. My name is Adam Olls. I'm appearing this morning on behalf of Evergreen Packaging. Also, I'd like to enter an appearance for Bo McDonald and Jeffrey McKinney of my firm. One of the two may be here this afternoon.

COMMISSIONER BROWN-BLAND: Thank you, Mr. Olls.

MR. PAGE: I'm Robert Page and I'm appearing this morning on behalf of Carolina Utility Customers Association, one of the Intervenors.

COMMISSIONER BROWN-BLAND: Good morning.

MS. FORCE: Good morning. My name is Margaret Force and I'm with the Attorney General's Office appearing on behalf of the Using and Consuming Public.

MS. HOLT: Good morning. I'm Gina Holt with the Public Staff here on behalf of the Using and Consuming Public.

MR. GRANTMYRE: Good morning. Bill Grantmyre, Public Staff, appearing on behalf of the Using and Consuming Public.

MS. FENNELL: Heather Fennell with the Public Staff here on behalf of the Using and Consuming Public.

COMMISSIONER BROWN-BLAND: Good morning. Glad to have you all with us.

Ms. Holt, have you identified any public witnesses that wish to give testimony this morning?

MS. HOLT: No, I have not.

COMMISSIONER BROWN-BLAND: Is there anyone out in the audience that is here today to provide public witness testimony in this matter?

(No response.)

Let the record reflect that no one has come forward. So, with that, we'll close that portion of the hearing. We'll move to the evidentiary portion of the hearing. And before we get started, are there any preliminary matters or statements to be made on the record?

MS. GRIGG: No, ma'am.

COMMISSIONER BROWN-BLAND: Then the case is with the Applicant.

MS. GRIGG: Thank you, Madam Chair. First of all, the Company asks that the testimony of D. Russell Harris, John J. Spanos, and James A. Spaulding that was prefiled on March 31, 2016, be entered into the record as if given orally from the stand with one exception, I need to make one correction on Mr. Harris' testimony. On page 9, line 10, I need to delete the word "million" so it says the Company is requesting a revenue increase of $41,583,020. With that, we'd like to request that those witnesses who have been excused from appearing at hearing, that their testimony be entered into the record as if given orally from the stand and that the two prefiled exhibits of John J. Spanos and the one exhibit of Mr. Spaulding be entered into evidence as premarked.

COMMISSIONER BROWN-BLAND: Just for my

double clarification, with regard to Mr. Spanos' testimony, is it two exhibits --

MS. GRIGG: Yes, ma'am.

COMMISSIONER BROWN-BLAND: -- or three?

MS. GRIGG: I wrote down two. Let me double check very quickly. Three. I stand corrected. Thank you, Madam Chair.

COMMISSIONER BROWN-BLAND: If there's no objection to the Motion from Ms. Grigg, her Motion will be allowed and the testimony, the prefiled testimony of D. Russell Harris, John J. Spanos, and James A. Spaulding, their direct testimony will be received into the record as if given orally from the witness stand. And the exhibit attached to Mr. Spaulding's direct testimony, the one exhibit will be marked as identified when prefiled and received into evidence.

MS. GRIGG: Yes, ma'am.

COMMISSIONER BROWN-BLAND: And the three exhibits attached to Witness Spanos' direct testimony will be identified as they were marked when prefiled and received into evidence.

MS. GRIGG: Thank you, Madam Chair.

(WHEREUPON, the prefiled direct

testimony of **D. RUSSELL HARRIS** is copied into the record as if given orally from the stand.)

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION.

A. My name is D. Russell Harris and my current business address is 220 Operation Way, Cayce, South Carolina. I am Senior Vice President of Gas Distribution for SCANA Corporation ("SCANA"). In this role I serve as President and Chief Operating Officer of Public Service Company of North Carolina, Inc., d/b/a/ PSNC Energy ("PSNC" or the "Company") and President of Gas Operations for South Carolina Electric & Gas Company ("SCE&G").

Q. PLEASE BRIEFLY OUTLINE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I am a 1986 graduate of Clemson University with a Bachelor of Science in Electrical Engineering. In 1990, I received a Master of Business Administration from the University of South Carolina. From 1986 to 1992 I worked for SCE&G as a Customer Service Engineer and in 1992 became District Manager – Electric Operations. From 1997 to 2003 I served as Vice President – Wires Operation for SCE&G. In 2003 I became Vice President – Operations for PSNC and was promoted to President and Chief Operating Officer in January 2006. In 2012 I was named Senior Vice President of SCANA and in 2013 was given additional management responsibilities over SCE&G's Gas Operations and over SCANA's Gas Services Group. In 2014 I assumed management responsibilities over SCANA's Customer Services Group.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

A. Yes. I presented testimony in each of the Company's last two rate cases, Docket No. G-5, Sub 481, which was filed in 2006, and Docket No. G-5, Sub 495, filed in 2008.

Q. PLEASE DESCRIBE PSNC.

A. PSNC was incorporated in 1938 and is a North Carolina public utility engaged in the business of selling, distributing, and transporting natural gas subject to this Commission's jurisdiction. In 2000, PSNC became a wholly-owned subsidiary of SCANA. PSNC currently provides natural gas to approximately 540,000 customers in 96 cities, towns, and their surrounding areas in a service territory that comprises all or parts of 28 counties in North Carolina. As of December 2015, the Company had approximately 600 miles of transmission mains and 11,000 miles of distribution mains.

PSNC's territory includes the Raleigh/Durham/Chapel Hill ("Triangle") area, the Asheville/Hendersonville area, and the Gastonia/Concord/Statesville area. All of these areas continue to experience significant growth. Growth in the Triangle area has outpaced much of the nation and Raleigh has been cited as the fourth fastest growing city in the United States. Wake County's population is expected to soon exceed that of Mecklenburg County, and the Chatham Park development, when complete, is projected to approximately double Chatham County's current population. The Asheville/Hendersonville area is experiencing significant economic development, and the Gastonia/Concord/Statesville area continues to grow, due in part to its proximity to Charlotte.

Q. WHAT ARE PSNC'S SERVICE GOALS?

A. PSNC's goals are to provide safe and reliable natural gas service in an efficient manner while: (1) growing its customer base and natural gas throughput; and (2) meeting and exceeding the expectations of the Company's customers and the public at large. The safety of the public, PSNC's employees, and its natural gas transmission and distribution system will always be the Company's top priority. PSNC vigorously pursues system expansions to serve new customers, in concert with policy objectives enacted by the North Carolina General Assembly and the rules and regulations of this Commission. PSNC's customers expect the Company to provide reliable natural gas service. PSNC operates efficiently and contains costs so that its customers' rates will remain competitive with other energy choices. PSNC also provides excellent customer service as it strives for natural gas to be the fuel of choice.

Q. WHAT FACTORS HAVE AFFECTED PSNC'S SERVICE GOALS SINCE ITS LAST GENERAL RATE CASE?

A. PSNC filed its last general rate case eight years ago. Of the many factors that have affected PSNC's business since 2008, some of the more significant are: (1) a heightened awareness of and focus on pipeline safety; (2) low and stable natural gas prices; (3) the opportunity to acquire additional pipeline capacity; (4) the need for PSNC to invest in pipeline enhancement projects on its system; and (5) the expanded use of technology and investments in facilities to serve its customers more efficiently.

Q. PLEASE DISCUSS THE COMPANY'S SAFETY GOALS.

A. PSNC is proud of its overall safety record.

First, PSNC is proud of its pipeline safety efforts and compliance with pipeline safety regulations. PSNC has augmented and strengthened its ongoing pipeline safety efforts due to the promulgation of the federal Department of Transportation's ("DOT") Pipeline and Hazardous Materials Safety Administration's ("PHMSA") transmission and distribution integrity management regulations. The Research and Special Programs Administration/Office of Pipeline Safety published the final rule establishing the transmission integrity management regulations in 2003. Responsibility for these regulations was later transferred to PHMSA. PHMSA published the final rule establishing the distribution integrity management regulations in 2009. Both the transmission and distribution integrity regulations place a great responsibility on the Company. The regulations are complex, costly, and they continue to change and evolve; in fact, on March 17, 2016, PHMSA issued its newest pipeline integrity Notice of Proposed Rulemaking. PSNC has complied judiciously with PHMSA's requirements and, as new regulations are promulgated, will continue to develop and implement measures to operate its system consistent with the new requirements.

Second, PSNC is proud of its employee safety record. The Company measures its employee safety efforts by an industry standard known as an

Accident Frequency Ratio ("AFR"). The AFR is the ratio of the number of recordable injuries compared to the number of employee hours worked. PSNC had only eight recordable injuries in 2015, and only one of those was a lost-time injury. This translates to an AFR of 0.98, which is the lowest AFR PSNC has ever achieved, and, in fact, PSNC has been notified that the American Gas Association intends to recognize the Company with a national award for its 2015 safety record.

Q. IS PSNC'S CUSTOMER BASE GROWING?

A. Yes, PSNC's customer base has grown as demand for natural gas continues to grow. This increased demand is driven largely by low and stable natural gas prices, even as consumption on a per-customer basis continues to decline. Since 2008 PSNC has added 77,025 customers, 1,424 miles of transmission and distribution mains, and 83,866 service lines.

The effects of the Great Recession were felt soon after the Commission's order in PSNC's last rate case as new home development and construction practically stopped. PSNC added 15,735 customers in 2007 and 10,587 customers in 2008. In 2011, just 5,466 customers were added. However, even during the recession PSNC's customer base grew each year. This growth was aided by PSNC's emphasis on adding customers located on its existing mains. Since 2008 more than 14,000 of PSNC's additional customers have been on-the-mains conversions. Fortunately, the economy improved and in 2015 PSNC added 12,946 customers, of which 2,046 were on-the-mains conversions.

Q. PLEASE DISCUSS PSNC'S EFFORTS TO SERVE ITS CUSTOMERS RELIABLY.

A. PSNC has taken a number of steps to ensure that its system is well-positioned to serve its customers now and in the future. PSNC contracts for an adequate supply of natural gas to serve a growing firm customer base and also acquires adequate upstream pipeline capacity in order to deliver that gas to its system. PSNC has subscribed to 100,000 dekatherms per day on Transcontinental Pipeline's Leidy Southeast expansion project, 100,000 dekatherms per day on the proposed Atlantic Coast Pipeline, and 17,250 dekatherms per day on the City of Monroe's intrastate pipeline. PSNC projects that these capacity acquisitions will meet customer demand well into the future.

In addition to obtaining adequate upstream supply and capacity, PSNC designs and builds its delivery system so that it can deliver the necessary quantities to meet its firm customers' demand. PSNC experienced new peak-day throughputs in both 2014 and 2015 and the system performed well. However, to ensure the future reliability of its system, PSNC has invested in significant system enhancements. As examples, new compressor stations have been installed in Roxboro and Stem and new transmission and high-pressure distribution pipelines have been installed in Alamance, Durham, Orange, and Wake Counties. A significant pipeline upgrade has been completed in eastern Gaston County, and we are well underway in replacing the Company's T-1 transmission pipeline, which is the main pipeline serving

PSNC's western territory. PSNC has also invested in new equipment and other upgrades to its liquefied natural gas peaking facility in Cary.

Q. WHAT OTHER INVESTMENTS HAS PSNC MADE TO SERVE ITS CUSTOMERS MORE EFFICIENTLY?

A. PSNC is embracing the use of technology to serve its customers more efficiently. Since its last rate case PSNC has completed the conversion to automated meter reading and enhanced its computer-aided dispatch system to enable service calls to be routed more efficiently. This enhancement also enables the system to coordinate the dispatch of routine maintenance calls with the dispatch of service calls. PSNC has also invested in facilities and equipment to serve its customers more efficiently. For example, PSNC currently has ten compressed natural gas ("CNG") filling stations and 154 vehicles operating on CNG. PSNC's tractor-trailer warehouse truck currently utilizes CNG. More than $300,000 in fuel costs was saved in 2015 alone for these vehicles when the CNG cost is compared to the cost of the gasoline or diesel fuel they would otherwise have consumed. Additionally, PSNC has invested in a state-of-the-art warehouse and industrial meter fabrication facility in Gastonia.

Q. PLEASE COMMENT ON PSNC'S CUSTOMER SERVICE EFFORTS.

A. The Company is extremely proud of its customer service efforts and results. PSNC is consistently highly ranked in J. D. Power surveys. PSNC consistently exceeds its call center answer rate standard of 80% of calls answered within 20 seconds. Notably, no customer has filed a formal complaint with the Commission against PSNC since 2008, and PSNC routinely receives positive feedback in its customer service surveys. Finally, the Company has implemented an electronic bulletin board for the industrial customers and the poolers on its system.

In summary, the concepts of PSNC's business philosophy—safety, reliability, growth, efficiency, and excellent customer service—are all necessary and complementary in delivering the results PSNC expects. While new customer growth is driven largely by low and stable natural gas prices, the safe, reliable, and efficient delivery of natural gas, accompanied by excellent customer service, are expectations—of both the Company and its customers—that PSNC meets in order to sustain and grow its customer base. For instance, PSNC's T-1 transmission pipeline was first identified for replacement due to assessments performed pursuant to its pipeline integrity management program. After deciding to replace the pipeline, PSNC determined that it should increase the size of the replacement pipeline in order to better serve the Company's customers in western North Carolina. When Duke Energy decided to convert its Skyland Plant from coal to natural gas, the Company again increased the size of the replacement pipeline in order to serve that incremental load. And, by locating the replacement line in existing right-of-way, PSNC realized an inherent efficiency while minimizing disruption to property owners, which will result in a better experience for both PSNC's customers and the general public along the pipeline's route.

8-30-16 Ktm

Q. HAS PSNC REACHED ANY OTHER MILESTONES SINCE 2008?

A. Yes. PSNC was created almost 80 years ago by the purchase of several manufactured gas plants and the customers they served, but after interstate natural gas facilities were extended through North Carolina these plants ceased production. The Company began the remediation of the manufactured gas sites in the early 1990s and I am pleased to say that the last remaining site will be fully remediated by May of this year.

Q. WHAT IS THE COMPANY SEEKING IN THIS CASE?

A. The Company is seeking:

- A revenue increase of $41,583,020 ~~million;~~
- To implement an integrity management rider to its rates;
- To implement a deferral mechanism for certain distribution integrity management operations and maintenance ("O&M") expenses, and to continue the deferral of certain transmission integrity management O&M expenses;
- To amortize and collect deferred transmission integrity management O&M expenses;
- To amortize and collect deferred environmental and pipeline safety expenses;
- To implement new depreciation rates; and
- To update and revise tariff provisions, including changes to its industrial tariff and pooling agreement, and the implementation of a new Medium General Service rate.

Q. PLEASE INTRODUCE THE WITNESSES WHO WILL TESTIFY ON PSNC'S BEHALF.

A. Jimmy E. Addison, Executive Vice President—SCANA Corporation, will testify to the financial status of the Company and the capital markets view of PSNC.

Robert B. Hevert, CFA, Managing Partner—Sussex Economic Advisors, LLC, will testify to the reasonableness of the requested return on equity.

John J. Spanos—Senior Vice President, Gannett Fleming, LLC, will testify to the proposed depreciation rates.

George B. Ratchford, Vice President—Gas Operations, PSNC Energy, will testify to the proposed Integrity Management Rider, the proposed deferral of distribution integrity management expenses, and the proposed contribution to the Gas Technology Institute.

Sharon D. Boone, Controller—SCANA Services, will testify to the Company's rate base, depreciation expense and other revenue adjustments.

James A. Spaulding, Manger—Financial and Gas Accounting, SCANA Services will testify to the proposed operations, maintenance and general tax adjustments.

Candace A. Paton, Rates and Regulatory Manager—SCANA Services, will testify to the Company's gas accounting and proposed changes in rates, tariffs and rules and regulations, including the billing mechanism for the proposed Integrity Management Rider and the new Medium General Service class of customers.

Rose M. Jackson, General Manager—Gas Supply, SCANA Services, will testify to proposed changes to industrial tariff provisions and transportation pooling agreement.

Q. WHY IS A GENERAL RATE CASE NECESSARY AT THIS TIME?

A. At the end of the test year the Company had invested more than $609 million in capital expenditures and had incurred more than $19 million in deferred environmental and pipeline integrity expenses since the last rate case. In that case the Commission determined a reasonable overall rate of return was 8.54%; PSNC's rate of return at the end of the test year was 7.84%. The Company is requesting an Integrity Management Rider, as PSNC anticipates significant future pipeline integrity capital expenditures as a result of federal pipeline safety regulations; by statute, such a rider can only be established in a rate case. PSNC is requesting a deferral mechanism for certain distribution integrity management O&M expenses to accompany the continued deferral of certain transmission integrity management O&M expenses. These expenses are also significant and a result of federal pipeline safety regulations.

Q. IS THE COMPANY'S REQUEST JUST AND REASONABLE? IF SO, WHY?

A. Yes, it is. As stated above, at the end of the test year PSNC had added $609 million in utility plant since the Company's last rate case, and the Company estimates that approximately $150 million in additional plant will be added by

June 30, 2016. These investments extend service to new customers and strengthen and enhance the safety and reliability of PSNC's system, to the benefit of its customers and the State of North Carolina.

This request is reasonable because, as Company Witness Hevert supports in his testimony, the return that PSNC is proposing will permit the Company to access capital markets and maintain its credit quality, is consistent with the returns of businesses with comparable business risk, and is fair and reasonable to PSNC, its shareholders, and its customers in light of changing economic conditions on customers.

As I have noted, PSNC has not had a general rate case since 2008. As a result, current rates are not sufficient to permit the Company to earn an adequate return on the significant investments that have been made to improve our system and our service. The Commission's grant of the rate increase requested in this Application will permit such recovery and will not unduly burden our customers. The Order in PSNC's last rate case resulted in a residential winter rate of approximately $1.43 per therm. If PSNC's Application is approved, the new residential winter rate will be approximately $0.80 per therm, which is approximately 8% higher than the current rate, but the rate will be 44% lower than it was in 2008.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes, although I reserve the right to supplement or amend my testimony before or during the Commission's hearing in this proceeding.

Spaulding Exhibit 1

(Identified and Admitted)

(WHEREUPON, the prefiled direct testimony of **JAMES A. SPAULDING** is copied into the record as if given orally from the stand.)

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is James A. Spaulding. My business address is 800 Gaston Road, Gastonia, North Carolina 28056.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by SCANA Services, Inc. ("SCANA Services"), a subsidiary of SCANA Corporation ("SCANA"), and serve as the Public Service Company of North Carolina, Inc. ("PSNC" or the "Company") financial accounting manager.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND, WORK EXPERIENCE AND OTHER QUALIFICATIONS.

A. I graduated with distinction from the University of North Carolina at Chapel Hill in 1995 with a Bachelor of Science Degree in Business Administration. Additionally, I received a Master of Accounting degree from The University of North Carolina at Chapel Hill in 1997. In February 1999, I became a Certified Public Accountant. I was employed in 1997 by KPMG in Charlotte and, for the next three years, worked in its audit department. I joined PSNC Energy in 2001 as a Senior Financial Analyst and was promoted to Accountant-Lead in 2006 and to Manager-Financial and Gas Accounting in 2008.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. My testimony presents the accounting and pro forma adjustments related to operations and maintenance ("O&M") expenses shown in Adjustment 3 of

Boone Exhibit 6, page 3, and General Taxes, shown in Adjustment 5 of Boone Exhibit 6, page 3.

Q. PLEASE DESCRIBE THE O&M ADJUSTMENTS.

A. Adjustment 3 increases O&M expenses by $20,134,370. This adjustment reflects 24 separate adjustments, as follows:

A. An increase in PSNC's O&M payroll costs to annualize salaries in effect as of February 12, 2016, and union salary changes to become effective December 2016. One of the factors in this adjustment is an increase in headcount by 12 employees which are anticipated to be hired between December 31, 2015 and June 30, 2016. The principal reason for these additional employees is increased workload associated with pipeline integrity management and customer growth. It also includes a 3% increase in salaries charged to PSNC by SCANA Services. SCANA Services provides administrative services such as legal, accounting, human resources, information systems, and call center support. The 3% increase is representative of the merit salary adjustments awarded to eligible non-union employees in February 2016;

B. Reclassification of interest expense on customer deposits as an operating expense as approved in prior general rate cases;

C. An increase in the regulatory fee, which is based upon the adjustment to revenues as detailed in Company Witness Boone's and Company Witness Paton's testimonies;

D. An increase in pension costs as a reflection of the most current actuarial analysis.

E. A decrease in Other Postretirement Employee Benefit costs, principally health care benefits, to match the amounts to be accrued for these future expenses under the Company's most recent actuarial study, primarily as a result of a drop in the discount rate and favorable claims experience;

F. An increase in 401(k) expenses and other employee benefits related to the above changes in compensation;

G. An increase in uncollectible costs to reflect current provision levels based on recent write-offs, as a percentage of adjusted revenues which are detailed in Company Witness Boone's and Company Witness Paton's testimony;

H. An increase to reflect additional customer accounts expense resulting from the customer growth portion of the revenue adjustment discussed in Company Witness Paton's testimony;

I. An increase in amortization expense for environmental compliance costs associated with manufactured gas plants ("MGP"), reflecting the amortization over three years of the balance projected through June 30, 2016. These costs have been properly accounted for, and the treatment sought for them is as approved in prior Commission Orders. PSNC is proposing to terminate the MGP deferral mechanism effective June 30, 2016 as the remediation efforts subsequent to June 30, 2016 will be groundwater monitoring charges (see also item X below);

J. An increase in expenses for the amortization of projected rate case expenses over three years;

K. An increase in the amortization over three years of the balance of deferred transmission pipeline integrity management expenses;

L. An increase to recognize inflation occurring in O&M accounts which are not adjusted or annualized individually. The 2.39% inflation factor utilized was based upon the 2016 forecasted Consumer Price Index, which is a measure of the expected change in the prices of consumer durable goods and services;

M. An increase in SCANA Services chargebacks to the going level;

N. A decrease in certain O&M expenses for a non-utility allocation;

O. An increase for the cost of transportation as a result of removing a non-recurring CNG tax credit that occurred during the test year as a result of federal legislation.

P. An increase to reflect an ongoing level of O&M costs related to PSNC's distribution integrity management program ("DIMP"). As discussed in the testimony of Company Witness Ratchford, PSNC is proposing in this proceeding to include in its cost of service DIMP O&M costs of $2,000,000. Spaulding Exhibit 1 reflects projected costs related to PSNC's DIMP for 2016 – 2020, which range between $2.1 million and $7.5 million on an annual basis. PSNC is further proposing that DIMP O&M charges in excess of $2,000,000 be accounted for as a regulatory asset, pending the establishment of an appropriate recovery mechanism in a future proceeding;

Q. A decrease to reflect the postage rate decrease to be effective April 1, 2016;

R. A decrease to reflect the going level of amortization related to the SalesForce software contract. SalesForce is a cloud based software solution used by PSNC's marketing department. PSNC began SalesForce implementation in 2014 and will amortize these implementation costs over the life of the software contract;

S. An increase to incentive compensation for both short term ("ST") and long term ("LT") accruals. ST incentive compensation was adjusted to reflect an average three-year (2013-2015) pay-out percentage; LT incentive compensation is based on the annualized accrual as of February 29, 2016;

T. An increase in the fuel cost of PSNC's fleet;

U. A decrease in mileage expense to reflect the most recent Internal Revenue Service rate;

V. To remove a non-recurring long term disability medical credit;

W. An increase to reflect membership dues in the Gas Technology Institute, as discussed in the testimony of Company Witness Ratchford;

X. An increase to reflect anticipated groundwater monitoring charges related to PSNC's MGP environmental remediation efforts. This groundwater monitoring is expected to be completed by 2025. PSNC is proposing to terminate the MGP deferral mechanism effective June 30, 2016 (see also item I above).

Q. PLEASE DESCRIBE THE ADJUSTMENT TO GENERAL TAXES.

A. Adjustment 5 increases general taxes for ad valorem taxes on adjusted plant balances, the inclusion of franchise taxes (there were none in the test year), and increases Federal Insurance Contributions Act taxes related to the wage increases previously discussed.

Q. DOES THIS COMPLETE YOUR PREFILED DIRECT TESTIMONY?

A. Yes; however, I plan to offer information pertaining to relevant changes in costs, revenues, property, returns or any other matter relevant to the Commission's determination of the matters raised in this Application that occur after the filing of my testimony. Also, I reserve the right to supplement or amend my testimony before or during the Commission's hearing on this Application.

JJS-1, JJS-2 and JJS-3

(Identified and Admitted)

(WHEREUPON, the prefiled direct testimony of **JOHN J. SPANOS** is copied into the record as if given orally from the stand.)

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is John J. Spanos. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania, 17011.

Q. ARE YOU ASSOCIATED WITH ANY FIRM?

A. Yes. I am associated with the firm of Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming").

Q. HOW LONG HAVE YOU BEEN ASSOCIATED WITH GANNETT FLEMING?

A. I have been associated with the firm since my college graduation in June 1986.

Q. WHAT IS YOUR POSITION WITH THE FIRM?

A. I am a Senior Vice President.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?

A. I am testifying on behalf of Public Service Company of North Carolina, Inc. ("PSNC" or the "Company").

Q. PLEASE STATE YOUR QUALIFICATIONS.

A. I have 30 years of depreciation experience, which includes expert testimony in over 200 cases before 40 regulatory commissions. The cases include depreciation studies in the electric, gas, water, wastewater, and pipeline industries. Please refer to Exhibit JJS-1 for additional information on my qualifications, which includes my leadership in the Society of Depreciation Professionals.

## II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony will support and explain the Depreciation Study performed for PSNC attached hereto as Exhibit JJS-2 ("Depreciation Study"). The Depreciation Study sets forth the calculated annual depreciation accrual rates by account as of December 31, 2015.

Q. PLEASE SUMMARIZE THE RESULTS OF YOUR DEPRECIATION STUDY.

A. The depreciation rates as of December 31, 2015, appropriately reflect the rates at which the value of PSNC's assets have been consumed over their useful lives to date. These rates are based on the most commonly used methods and procedures for determining depreciation rates. The life and salvage parameters are based on widely used techniques and the depreciation rates are based on the average service life procedure and remaining life method.

Q. ARE THE RECOMMENDED DEPRECIATION ACCRUAL RATES PRESENTED IN YOUR STUDY REASONABLE AND APPLICABLE TO THE PLANT IN SERVICE AS OF DECEMBER 31, 2015?

A. Yes, they are. Based on the Depreciation Study, I am recommending depreciation rates using the December 31, 2015, plant and reserve balances for approval.

Q. WHAT IS THE EFFECT OF THE RECOMMENDED DEPRECIATION ACCRUAL RATES ON THE COMPANY'S COST OF SERVICE?

A. As explained in more detail later in my testimony, the Depreciation Study results in an increase of $3.2 million in depreciation expense. This increase is primarily the result of necessary changes in the life parameters and net salvage accruals, with an emphasis on proper recovery of general plant assets.

III. DEPRECIATION STUDY

Q. PLEASE DEFINE THE CONCEPT OF DEPRECIATION.

A. Depreciation refers to the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which can be reasonably anticipated or contemplated, against which the Company is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and the requirements of public authorities.

Q. DID YOU PREPARE THE DEPRECIATION STUDY FILED BY PSNC IN THIS PROCEEDING?

A. Yes. I prepared the Depreciation Study, and Exhibit JJS-2 is a true and accurate copy of my report. My report is entitled: "2015 Depreciation Study – Calculated Annual Depreciation Accruals Related to Gas Plant as of December 31, 2015." This report sets forth the results of my Depreciation Study for PSNC.

Q. IN PREPARING THE DEPRECIATION STUDY, DID YOU FOLLOW GENERALLY ACCEPTED PRACTICES IN THE FIELD OF DEPRECIATION VALUATION?

A. Yes.

Q. WHAT IS THE PURPOSE OF THE DEPRECIATION STUDY?

A. The purpose of my Deprecation Study was to estimate the annual depreciation accruals for PSNC's plant in service for financial and ratemaking purposes and to determine appropriate average service lives and net salvage percentages for each plant account.

Q. ARE THE METHODS AND PROCEDURES OF THIS DEPRECIATION STUDY CONSISTENT WITH PSNC'S PAST PRACTICES?

A. The methods and procedures of this study are the same as those utilized in the past by this Company as well as other companies appearing before this commission. Both the existing rates and the rates determined in the Depreciation Study are based on the average service life procedure and the remaining life method.

Q. PLEASE DESCRIBE THE CONTENTS OF THE DEPRECIATION STUDY.

A. The Depreciation Study is presented in nine parts: Part I, Introduction, presents the scope and basis for the Depreciation Study. Part II, Estimation of Survivor Curves, includes descriptions of the methodology of estimating survivor curves. Parts III and IV set forth the analysis for determining service life and net salvage estimates. Part V, Calculation of Annual and Accrued Depreciation, includes the concepts of depreciation and amortization using the remaining life. Part VI, Results of Study, presents a description of the results of my analysis and a summary of the depreciation calculations. Parts VII, VIII, and IX include graphs and tables that relate to the service life and net salvage analyses, and the detailed depreciation calculations by account.

Table 1 on pages VI-4 through VI-6 of the Depreciation Study presents the estimated survivor curve, the net salvage percent, the original cost as of December 31, 2015, the book reserve, and the calculated annual depreciation accrual and rate for each account or subaccount. The section beginning on page VII-2 presents the results of the retirement rate analyses prepared as the historical bases for the service life estimates. The section beginning on page VIII-2 presents the results of the salvage analysis. The section beginning on page IX-2 presents the depreciation calculations related to surviving original cost as of December 31, 2015.

Q. PLEASE EXPLAIN HOW YOU PERFORMED YOUR DEPRECIATION STUDY.

A. I used the straight line remaining life method of depreciation, with the average service life procedure. The annual depreciation is based on a method of depreciation accounting that seeks to distribute the unrecovered cost of fixed capital assets over the estimated remaining useful life of each unit, or group of assets, in a systematic and reasonable manner.

For General Plant Accounts 491.1, 491.5, 491.6, 491.8, 493.0, 494.6, 497.0, 497.1, 498.0, and 498.1, I used the straight line remaining life method of amortization.[1] The annual amortization is based on amortization accounting that distributes the unrecovered cost of fixed capital assets over the remaining amortization period selected for each account and vintage.

Q. HOW DID YOU DETERMINE THE RECOMMENDED ANNUAL DEPRECIATION ACCRUAL RATES?

A. I did this in two phases. In the first phase, I estimated the service life and net salvage characteristics for each depreciable group, that is, each plant account or subaccount identified as having similar characteristics. In the second phase, I calculated the composite remaining lives and annual depreciation accrual rates based on the service life and net salvage estimates determined in the first phase.

Q. PLEASE DESCRIBE THE FIRST PHASE OF THE DEPRECIATION STUDY, IN WHICH YOU ESTIMATED THE SERVICE LIFE AND NET SALVAGE CHARACTERISTICS FOR EACH DEPRECIABLE GROUP.

A. The service life and net salvage study consisted of compiling historical data from records related to PSNC's plant; analyzing these data to obtain historical trends of survivor characteristics; obtaining supplementary information from PSNC's management and operating personnel concerning practices and plans as they relate to plant operations; and interpreting the data and the estimates used by other gas utilities to form judgments of average service life and net salvage characteristics.

[1] The account numbers identified throughout my testimony represent those in effect as of December 31, 2015.

Q. WHAT HISTORICAL DATA DID YOU ANALYZE FOR THE PURPOSE OF ESTIMATING SERVICE LIFE CHARACTERISTICS?

A. I analyzed the Company's accounting entries that record plant transactions during the period 1940 through 2015 to the extent available. The transactions I analyzed included additions, retirements, transfers, sales, and the related balances.

Q. WHAT METHOD DID YOU USE TO ANALYZE THESE SERVICE LIFE DATA?

A. I used the retirement rate method for most plant accounts. This is the most appropriate method when retirement data covering a long period of time is available, because this method determines the average rates of retirement actually experienced by the Company during the period of time covered by the Depreciation Study.

Q. PLEASE DESCRIBE HOW YOU USED THE RETIREMENT RATE METHOD TO ANALYZE PSNC'S SERVICE LIFE DATA.

A. I applied the retirement rate analysis to each different group of property in the study. For each property group, I used the retirement rate data to form a life table which, when plotted, shows an original survivor curve for that property group. Each original survivor curve represents the average survivor pattern experienced by the several vintage groups during the experience band studied. The survivor patterns do not necessarily describe the life characteristics of the property group; therefore, interpretation of the original survivor curves is required in order to use them as valid considerations in estimating service life. The "Iowa-type survivor curves" were used to perform these interpretations.

Q. WHAT ARE "IOWA-TYPE SURVIVOR CURVES" AND HOW DID YOU USE SUCH CURVES TO ESTIMATE THE SERVICE LIFE CHARACTERISTICS FOR EACH PROPERTY GROUP?

A. Iowa-type survivor curves are a widely-used group of survivor curves that contain the range of survivor characteristics usually experienced by utilities and other industrial companies. These curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observing and classifying the ages at which various types of property used by utilities and other industrial companies had been retired.

Iowa-type survivor curves are used to smooth and extrapolate original survivor curves determined by the retirement rate method. The Iowa curves and truncated Iowa curves were used in the PSNC Depreciation Study to describe the forecasted rates of retirement based on the observed rates of retirement and the outlook for future retirements. The estimated survivor curve designations for each depreciable property group indicate the average service life, the family within the Iowa system to which the property group belongs, and the relative height of the mode. For example, the Iowa 65-R2.5 indicates an average service life of 65 years; a right-moded, or R, type curve (the mode occurs after average life for right-moded curves); and a moderate height, 2.5, for the mode (possible modes for R type curves range from 0.5 to 5).

Q. DID YOU PHYSICALLY OBSERVE PSNC'S PLANT AND EQUIPMENT AS PART OF YOUR DEPRECIATION STUDY?

A. Yes. I made a field review of PSNC's property as part of this study during January 2016 to observe representative portions of plant. Field reviews are conducted to become familiar with Company operations and obtain an understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements. This knowledge, as well as information from other discussions with PSNC management, was incorporated in the interpretation and extrapolation of the statistical analyses.

Q. HOW DID YOUR EXPERIENCE IN DEVELOPMENT OF OTHER DEPRECIATION STUDIES AFFECT YOUR WORK IN THIS CASE FOR PSNC?

A. Because I customarily conduct field reviews for my depreciation studies, I have had the opportunity to visit scores of similar facilities and meet with operations personnel at many other companies. The knowledge I have accumulated from those visits and meetings provides me with useful information to draw upon to confirm or challenge my numerical analyses concerning asset condition and remaining life estimates.

Q. PLEASE EXPLAIN THE CONCEPT OF "NET SALVAGE."

A. Net salvage is a component of the service value of capital assets that is recovered through depreciation rates. The service value of an asset is its original cost less its net salvage. Net salvage is the salvage value received for the asset upon retirement less the cost to retire the asset. When the cost to retire the asset exceeds the salvage value, the result is negative net salvage.

Because depreciation expense is the loss in service value of an asset during a defined period (*e.g.*, one year), it must include a ratable portion of both the original cost of the asset and the net salvage. That is, the net salvage related to an asset should be incorporated in the cost of service during the same period as its original cost, so that customers receiving service from the asset pay rates that include a portion of both elements of the asset's service value, the original cost, and the net salvage value. For example, the full service value of a $500 regulator also includes $125 of cost of removal and $25 gross salvage, for a total service value of $600.

Q. PLEASE DESCRIBE HOW YOU ESTIMATED NET SALVAGE PERCENTAGES.

A. I estimated the net salvage percentages by incorporating the Company's actual historical data for the period 1987 through 2015, and considered industry experience of net salvage estimates for other gas companies. The net salvage percentages in the Depreciation Study are based on a combination of statistical analyses and informed judgment. The statistical analyses consider the cost of removal and gross salvage ratios to the associated retirements during the 29-year period. Trends of these data are also measured based on three-year moving averages and the most recent five-year indications.

Q. PLEASE DESCRIBE THE SECOND PHASE OF THE PROCESS THAT YOU USED IN THE DEPRECIATION STUDY IN WHICH YOU CALCULATED COMPOSITE REMAINING LIVES AND ANNUAL DEPRECIATION ACCRUAL RATES.

A. After I estimated the service life and net salvage characteristics for each depreciable property group, I calculated the annual depreciation accrual rates for each group using the straight line remaining life method, and using remaining lives weighted consistent with the average service life procedure. The calculation of annual depreciation accrual rates were developed as of December 31, 2015.

Q. PLEASE DESCRIBE THE STRAIGHT LINE REMAINING LIFE METHOD OF DEPRECIATION.

A. The straight line remaining life method of depreciation allocates the original cost of the property, less accumulated depreciation, less future net salvage, in equal amounts to each year of remaining service life.

Q. PLEASE DESCRIBE THE AVERAGE SERVICE LIFE PROCEDURE FOR CALCULATING REMAINING LIFE ACCRUAL RATES.

A. The average service life procedure defines the group or account for which the remaining life annual accrual is determined. Under this procedure, the annual accrual rate is determined for the entire group or account based on its average remaining life and the rate is then applied to the surviving balance of the group's cost. The average remaining life of the group is calculated by first dividing the future book accruals (original cost less allocated book reserve less future net salvage) by the average remaining life for each vintage. The average remaining life for each vintage is derived from the area under the survivor curve between the attained age of the vintage and the maximum age. The sum of the future book accruals is then divided by the sum of the annual accruals to determine the average remaining life of the entire group for use in calculating the annual depreciation accrual rate.

Q. PLEASE DESCRIBE AMORTIZATION ACCOUNTING IN CONTRAST TO DEPRECIATION ACCOUNTING.

A. Amortization accounting is used for accounts with a large number of units, but small asset values. In amortization accounting, units of property are capitalized in the same manner as they are in depreciation accounting. However, depreciation accounting is difficult for these types of assets because depreciation accounting requires periodic inventories to properly reflect plant in service. Consequently, amortization accounting is used for these types of assets, such that retirements are recorded when a vintage is fully amortized rather than as the units are removed from service. That is, there is no dispersion of retirement in amortization accounting. All units are retired when the age of the vintage reaches the amortization period. Each plant account or group of assets is assigned a fixed period that represents an anticipated life during which the asset will render full benefit. For example, in amortization accounting, assets that have a 20-year amortization period will be fully recovered after 20 years of service and taken off the Company's books at that time, but not necessarily removed from service. In contrast, assets that are taken out of service before 20 years remain on the books until the amortization period for that vintage has expired.

Q. IS AMORTIZATION ACCOUNTING BEING UTILIZED FOR CERTAIN PLANT ACCOUNTS?

A. Yes. However, amortization accounting is only appropriate for certain General Plant accounts. These accounts are 491.1, 491.5, 491.6, 491.8, 493.0, 494.6, 497.0, 497.1, 498.0, and 498.1, which represent less than two percent of PSNC's depreciable plant.

Q. PLEASE USE AN EXAMPLE TO ILLUSTRATE HOW THE ANNUAL DEPRECIATION ACCRUAL RATE FOR A PARTICULAR GROUP OF PROPERTY IS PRESENTED IN YOUR DEPRECIATION STUDY.

A. I will use Account 476.3, Mains – Steel, as an example because it is one of the larger depreciable accounts and represents approximately 19 percent of depreciable plant. The retirement rate method was used to analyze the survivor characteristics of this property group. Aged plant accounting data was compiled from 1940 through 2015 and analyzed in periods that best represent the overall service life of this property. The life tables for the 1940-2015 and 1991-2015 experience bands are presented on pages VII-60 through VII-63 of the Depreciation Study. The life tables display the retirement and surviving ratios of the aged plant data exposed to retirement by age interval. For example, page VII-60 of the study shows $255,679 retired at age 0.5 with $259,815,164 exposed to retirement. Consequently, the retirement ratio is 0.0010 and the surviving ratio is 0.9990. These life tables, or original survivor curves, are plotted along with the estimated smooth survivor curve, the 65-R2.5 on page VII-59 of the study.

The combined net salvage analyses for Accounts 476.1 and 476.3, Mains, are presented on pages VIII-20 and VIII-21 of the Depreciation Study. The percentage is based on the result of annual gross salvage minus the cost to remove plant assets as compared to the original cost of plant retired during the period 1987 through 2015. This 29-year period experienced $9,551,106 ($109,356 - $9,660,462) in negative net salvage for $23,177,666 plant retired. The result is negative net salvage of 41 percent ($9,551,106/$23,177,666). Based on the overall negative 41 percent net salvage and the most recent five years of negative 41 percent, as well as industry ranges and Company expectations, it was determined that negative 40 percent is the most appropriate estimate.

My calculation of the annual depreciation related to the original cost at December 31, 2015, of gas plant is presented on pages IX-39 and IX-40 of the study. The calculation is based on the 65-R2.5 survivor curve, 40 percent negative net salvage, the attained age, and the allocated book reserve. The tabulation sets forth the installation year, the original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual. These totals are brought forward to the table on page VI-5 of the Depreciation Study.

Q. PLEASE COMPARE THE PROPOSED DEPRECIATION EXPENSE TO THE CURRENT PRO-FORMA DEPRECIATION EXPENSE AS OF DECEMBER 31, 2015.

A. Exhibit JJS-3 sets forth the proposed versus current depreciation expense as of December 31, 2015. The overall change reflected in the Depreciation Study is an increase of $3.2 million annually.

Q. WHAT ARE THE PRIMARY FACTORS CAUSING THE CHANGE IN DEPRECIATION EXPENSE AS A RESULT OF THE DEPRECIATION STUDY?

A. Depreciation rates and expense are generally affected by four major factors: 1) The life and salvage parameters; 2) the plant activity; 3) the depreciation methods and procedures; and 4) the plant to reserve ratio. As shown in Exhibit JJS-3 the largest change in depreciation expense relates to Accounts 476.1, 476.3, 491.5, and 492.4. The decrease in depreciation expense for Accounts 476.1, Mains – Plastic and 496.3, Mains – Steel is primarily due to the longer estimated average service life and less negative net salvage percent. The increase in depreciation expense for Accounts 491.5, Computer Equipment and 492.4, Transportation Equipment – Trucks is primarily due to the high plant growth and low reserve to plant ratio.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes

MS. GRIGG: And also, without objection, the Company would like to move into evidence the Amended Stipulation entered into and filed on August 29th between PSNC, the Public Staff, Evergreen Packaging and the CUCA.

COMMISSIONER BROWN-BLAND: And it's my understanding that it was actually filed this morning, August 30th.

MS. GRIGG: Yes, ma'am, this morning, August 30th.

COMMISSIONER BROWN-BLAND: Without objection, the Amended Stipulation filed August 30th will be received into the record.

Amended Stipulation

(Admitted)

MS. GRIGG: Thank you. And, with that, PSNC calls to the stand Mr. Addison.

**JIMMY E. ADDISON;** was duly sworn and testified as follows:

DIRECT EXAMINATION

BY MS. GRIGG:

Q Good morning, Mr. Addison.

A Good morning.

Q Will you please state your name and business

address for the record?
A My name is Jimmy E. Addison. My address is 220 Operation Way, Cayce, South Carolina.
Q By whom are you employed and in what capacity?
A I'm employed by PSNC, SCANA and the other SCANA subsidiaries as Chief Financial Officer.
Q Did you cause to be prefiled in this docket on or about March 31, 2016, direct testimony in question and answer form consisting of 11 pages?
A I did.
Q Are there any additions or corrections you would like to make to your testimony at this time?
A No.
Q If I asked you the questions today in your prefiled testimony, would your answers be the same?
A They would.

MS. GRIGG: Madam Chair, I ask that Mr. Addison's direct testimony be copied into the record as if given orally from the stand?

COMMISSIONER BROWN-BLAND: The Motion is granted and his testimony will be received into the evidence as if given orally from the witness stand.

(WHEREUPON, the prefiled direct

testimony of **JIMMY E. ADDISON** is copied into the record as if given orally from the stand.)

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION.

A. My name is Jimmy E. Addison and my business address is 220 Operation Way, Cayce, South Carolina. I am the Executive Vice President and Chief Financial Officer of Public Service Company of North Carolina, Inc. ("PSNC" or the "Company"), SCANA Corporation ("SCANA"), and the other subsidiaries of SCANA.

Q. PLEASE DESCRIBE YOUR EDUCATION AND BUSINESS BACKGROUND.

A. I have a Bachelor of Science Degree in Business Administration and a Master of Accountancy Degree from the University of South Carolina and am a Certified Public Accountant in South Carolina. Prior to my employment by SCANA in March 1991, I was employed for seven years by the certified public accounting firm of Deloitte & Touche in Charlotte and Columbia, where I was designated an Audit Manager as a public utility accounting and audit specialist. I was also a partner in the public accounting firm of Hughes, Boan and Addison immediately prior to joining SCANA.

Q. WHAT ARE YOUR RESPONSIBILITIES WITH PSNC?

A. As Executive Vice President and Chief Financial Officer of PSNC, I am responsible for monitoring the Company's present and prospective financial condition, formulating strategies to ensure that the Company can meet its capital requirements at a reasonable cost, and managing all accounting and financial matters related to the Company. In that regard, I meet regularly with members of the financial community, including Wall Street analysts and credit rating agency personnel who follow the utility industry in general and PSNC specifically. In these meetings, we discuss their perceptions and concerns about PSNC, its financial and business position, the capital markets, and the utility industry in general. We also discuss the various risk factors that PSNC might face as seen by investors.

Q. HAVE YOU EVER TESTIFIED BEFORE THIS COMMISSION?

A. Yes. I presented testimony in each of the Company's last two rate cases, Docket No. G-5, Sub 481, which was filed in 2006, and Docket No. G-5, Sub 495, which was filed in 2008.

Q. WHAT IS THE PURPOSE OF THE TESTIMONY YOU ARE PRESENTING?

A. The purpose of my testimony is to provide an overview of the financial status of the Company as it relates to the decision to seek rate relief at this time. I will discuss the importance and need of the Company's requested rate increase given PSNC's continued need to access capital on favorable terms. I will also discuss the financial community's impression of PSNC and this proceeding and why the Return on Equity ("ROE") requested by the Company is reasonable.

Q. PLEASE DISCUSS THE RATE RELIEF THAT PSNC IS SEEKING IN THIS PROCEEDING.

A. PSNC is seeking an increase in its rates of $41,583,020 million based on a test year ended December 31, 2015. This is an overall increase of approximately 9.7%, which is less than the rate of inflation since the Company's last general rate case proceeding. The requested increase would allow the Company to earn an overall rate of return of 8.14% and a return on equity of 10.60%.

Q. WHY IS THE COMPANY SEEKING RATE RELIEF AT THIS TIME?

A. As stated in the Application, for the adjusted test period ending December 31, 2015, the Company's return on equity is 5.54 %. This return is insufficient to allow the Company to continue to expand and improve its system consistent with the dynamic growth of the North Carolina market, and to attract the capital and investment necessary to meet that demand. The Company's adjusted test year return is significantly less than the authorized return of 10.6% that the Commission deemed to be appropriate for the Company in Docket No. G-5, Sub 495.

As Company Witness Harris testified, PSNC has invested $609 million in its system since July 1, 2008, and the number of customers served has grown by 77,025, or 16.84%. These investments have not only provided natural gas service to additional customers, but they have also ensured the safety of PSNC's system and enhanced its ability to serve its customers reliably, thus providing substantial benefits to the people of North Carolina. Interest rates and inflation have been low, so it was a good time to make these investments. However, these investments have had an impact on PSNC's financial position, as illustrated by the ROE at the end of the adjusted test period. Even with low interest rates, there is a notable impact from such a large investment. The Company anticipates continued demand growth as North Carolina's economy continues to expand, which will place growing pressure on its capital needs in order to meet that demand. As testified by Company Witness Ratchford, the Company also anticipates an increase in capital expenditures associated with its integrity management programs, which will, again, place growing pressure on its capital needs.

Inflation has had an effect, too. Between November 2008 when rates from PSNC's last rate case went into effect and February 2016, inflation rose by 11.72%.

Q. WHAT ROE IS THE COMPANY REQUESTING IN THIS CASE?

A. The Company has filed its Application based on an ROE of 10.60% and is requesting that the Commission set the ROE at that level.

Q. IN YOUR OPINION, IS THAT AN APPROPRIATE ROE FOR THE COMPANY?

A. Yes. The Company's cost of capital witness, Company Witness Hevert, has provided the Commission with a detailed cost of capital analysis concerning PSNC's ROE. He concludes, based on the financial tools and models he has used, that the required ROE for PSNC is in a range of 10% to 10.75%, and he specifically recommends 10.60%.

As Company Witness Hevert explains, in addition to the financial models he used to estimate the Company's required ROE, it is also appropriate to consider the capital market environment in which the Company operates and any Company-specific risk factors when recommending an ROE. Based on my training, experience, and knowledge of the financial community and how it perceives PSNC specifically, I agree with Company Witness

Hevert's conclusion that a 10.60% ROE is appropriate. Adopting an unduly low ROE in this case would ignore the changing economic conditions being experienced nationally and in North Carolina and could increase the cost of capital, a cost ultimately borne by our customers.

In PSNC's opinion, and as I discuss above, a 10.60% ROE would represent a constructive ROE for the Company that is fair to ratepayers. It would support the financial integrity of PSNC and its continued ability to access national capital markets on reasonable terms in this time of financial uncertainty, an ability which ultimately benefits our ratepayers. The return on equity is a key consideration for investors when assessing whether to invest in a company like PSNC, and a 10.60% ROE in this case would give investors confidence that PSNC will continue to be able to raise capital in national markets on reasonable terms. It is my opinion that establishing rates to produce a return on equity of 10.60% would be a reasonable outcome to this proceeding that represents a fair balance between the financial interests of customers and the system growth and service benefits customers will receive as a result of the capital investments PSNC is making.

Q. WHAT FINANCIAL STRUCTURE IS REFLECTED IN THE ADJUSTED TEST PERIOD RETURN NUMBERS?

A. The capital structure proposed by the Company reflects long-term debt of 43.12%, short-term debt of 3.38%, and equity of 53.50%. The short-term debt figure reflects the estimated average of gas inventory for the 13 months ending June 30, 2016, consistent with Commission practice. The long-term debt and equity figures reflect actual balances adjusted for forecasted changes through June 30, 2016. These percentages reflect the methods used to measure capital structure that this Commission has used in past cases involving the Company and in my opinion are the appropriate figures to use in this proceeding given these precedents.

Q. WHAT CHANGES ARE EXPECTED IN THE COMPANY'S LONG-TERM DEBT PRIOR TO JUNE 30, 2016?

A. PSNC plans to issue $100 million in unsecured long-term debt, which is expected to close in June of 2016.

Q. EARLIER IN YOUR TESTIMONY YOU REFERENCED CHANGING ECONOMIC CONDITIONS. HOW SHOULD THE COMMISSION BALANCE PSNC'S SIGNIFICANT CAPITAL NEEDS WITH THE IMPACT OF CHANGING ECONOMIC CONDITIONS ON CUSTOMERS IN SETTING THE COMPANY'S COST OF CAPITAL, AND SPECIFICALLY ITS ROE?

A. I am aware that the North Carolina Supreme Court has recently evaluated the factors that the Commission must take into account when establishing a utility's cost of equity rate and overall rate of return. Specifically, the Court held that, in deciding upon a proper return on common equity in utility rate cases, the Commission must consider and make findings of fact regarding the impact of changing economic conditions on customers in determining the appropriate ROE.

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The Company understands, in light of this precedent, that North Carolina's traditional rate-setting scheme requires the Commission to set just and reasonable rates, including the authorized ROE, in a way that balances the economic conditions facing PSNC's customers with the Company's need to attract equity financing in order to continue providing safe and reliable service. As is always the case, the Commission must meet its statutory and court-mandated responsibilities to strike the appropriate balance between the interests of the Company, its shareholders, and ratepayers based upon current and anticipated financial market and economic conditions. The ROE decision has to be placed within the context of the overall order, and the other individual decisions the order contains.

My testimony highlights the Company's significant, and ongoing, capital needs as well as the important and very real financial consequences that the Commission's determinations regarding rate of return can have in the capital markets and on the terms under which PSNC can access those markets. The Commission's authorization of the capital structure and ROE that PSNC is requesting will assure confidence in the Company's financial soundness and will be minimally adequate, under efficient management, to enable it to maintain and support its credit requirements and to raise the capital necessary to continue providing safe and reliable service.

With regard to ROE specifically, as Company Witness Hevert's testimony demonstrates, the Company's current cost of equity in the competitive, non-regulated capital markets is in the range of 10.00% to

10.75%. Granting the Company an authorized return of 10.60% on common equity will ensure PSNC's ability to compete in the capital markets and raise equity and debt at reasonable rates. Authorizing the Company's requested return on common equity will also enable the Company to meet its responsibility of providing reliable service at an affordable cost and is fundamental to the Company's ability to maintain a strong credit profile. The ability to access the capital markets on reasonable terms will ultimately reduce our borrowing cost for the benefit customers. For all of these reasons, a financially sound utility with a strong credit profile is in the best interest of both the Company and its customers.

In terms of the Commission's obligation to balance PSNC's capital requirements with the impact of changing economic conditions on customers, I would emphasize that the significant infrastructure investments that the Company has made since its 2008 rate case have greatly benefitted our customers by expanding our natural gas service, ensuring the safety of PSNC's system and enhancing its reliability. Similarly, the Company's planned capital investments over the next few years will further improve PSNC's ability to provide safe, reliable, and cost-effective gas service to its customers.

Finally, as demonstrated by the evidence presented in Company Witness Hevert's testimony with regard to unemployment rates, gross domestic product, median household income, and other factors, North Carolina and the counties contained within PSNC's service area are steadily emerging from the economic downturn and have experienced significant economic improvement during the last several years, which is projected to continue.

Q. DOES PSNC'S REQUEST FOR AN INTEGRITY MANAGEMENT RIDER AFFECT INVESTORS' PERCEPTIONS OF THE COMPANY?

A. Expenses incurred for non-revenue producing investments such as system maintenance add to investor perceptions of risk. However, regulatory treatment afforded a company like PSNC to recover those expenses through a deferral or tracker mechanism does not lessen the risk, as this treatment merely accelerates the time in which the investment is recovered, rather than waiting to recover the investment in a rate case. For instance, PSNC currently is allowed to defer and amortize the expenses incurred in managing the integrity of its transmission system. Those expenditures are driven by federal safety regulations and by the Company's desire to be prudent in maintaining a safe, reliable, and efficient transmission system. Those same considerations drive increasing expenditures in managing the integrity of both the transmission and distribution systems as they age. While we expect the rider mechanism we have proposed for the recovery of transmission and distribution integrity management expenses should help enhance our reputation among investors as a prudent, safe, efficient, and reliable company, I would not expect the approval of the rider mechanism to cause an investor to think that PSNC's risk is significantly altered as the Commission is viewed as reasonable and investors are aware of the previous approval of similar mechanisms for other utilities.

Q. WHAT ARE THE KEY RISKS RELATED TO THE COMPANY FROM AN INVESTOR'S PERSPECTIVE?

A. The investment community understands that PSNC provides service to one of the major growth areas in the United States. Investors understand that meeting the energy infrastructure needs of this rapidly growing area safely, reliably, and efficiently will require the Company to maintain a steady pace of capital investment during the coming years.

However, investors have many choices in placing their capital and it is imperative that they see PSNC as a worthwhile investment. The sustained pace of ongoing capital investment will expose PSNC to the risk and volatility of national capital markets in ways that utilities serving less rapidly developing areas will not experience. The Company is subject to all the risks and uncertainties entailed in managing a business with significant ongoing capital needs. Additionally, as Company Witness Hevert testifies, PSNC's smaller size may cause investors to assign more risk to PSNC than they would to larger utility companies.

As discussed above and in the testimony of Company Witness Hevert, numerous economic indicators point to a continued steady improvement in the economic outlook for PSNC customers and North Carolina. From an investor perspective, however, credit remains relatively tight, and debt markets continue to reflect uncertainty left over from the recession and its underlying causes. The Fed's "quantitative easing" which kept interest rates artificially low for most of the last eight years has ended, and its "rate normalization" has begun with an increase in interest rates. Consensus forecasts are for continued increases in long-term interest rates over the next several years. As a consequence, the capital markets have become significantly more volatile and PSNC continues to be in a very capital intensive phase of its history as a business; PSNC's capital budget for 2016 – 2018 is approximately $694 million. Investors rightly see PSNC as a company that will need to access capital from these volatile markets for many years, and that access will be subject to the terms those markets offer. This combination of volatile capital markets and high exposure to them means that investors see businesses like PSNC as bearing substantial risk.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does, although I reserve the right to supplement or amend my testimony before or during the Commission's hearing in this proceeding.

BY MS. GRIGG:

Q Mr. Addison, have you prepared a summary of your direct testimony?

A I have.

Q Would you please give it at this time?

A Certainly. Madam Chair and fellow Commissioners, thank you. We appreciate the opportunity to be before you today to present our case.

My direct testimony provides an overview of the financial status of PSNC as it relates to the decision to seek rate relief in this case. My testimony also discusses the importance of and need for a rate increase given PSNC's continued need to access capital on favorable terms, as well the financial community's impression of PSNC and this proceeding and why the return on equity or ROE requested by the Company is reasonable.

The number of customers served by PSNC has grown by approximately 77,000, or approximately 17 percent, since the Company's last case in 2008. To provide natural gas service to these additional customers and to ensure the safety of PSNC's system and enhance its ability to service its customers reliably, PSNC has invested in excess of $600 million in its system during this time. These investments have in turn impacted PSNC's financial position as illustrated by the ROE at the end of the adjusted test period. That adjusted test period rate of return was 5.54 percent, a return insufficient to allow PSNC to continue to expand and improve its system consistent with the dynamic growth of the North Carolina market, and to attract the capital and investment necessary to meet that demand. The Company anticipates continued demand growth as North Carolina's economy continues to expand, which will place growing pressure on its capital needs in order to meet that demand. As testified by Company Witness Ratchford, the Company also anticipates an increase in capital expenditures associated with its Integrity Management Programs, which will, again, place growing pressure on its capital needs.

My testimony highlights the Company's significant, and ongoing, capital needs as well as the important and very real financial consequences that the Commission's determinations regarding rate of return can have in the capital markets and on the terms under which PSNC can access those markets. The Commission's authorization of the capital structure and ROE that PSNC is requesting will assure confidence in the Company's financial soundness and enable it to maintain and support its credit requirements and raise the capital necessary to continue providing safe and reliable service.

I also testify to the effect of the Pipeline Integrity Management Rider for the recovery of transmission and distribution integrity management expenses on investors' perceptions of the Company. The rider mechanism we have proposed should help enhance our reputation among investors as a prudent, safe, efficient, and reliable company. I would not expect the approval of the rider mechanism to cause an investor to think that PSNC's risk is significantly altered as this Commission is viewed as reasonable and intervenors are aware, excuse me, investors are aware of the previous approval of similar mechanisms for other utilities.

And then, finally, with respect to the need to balance PSNC's capital requirements with the impact of changing economic conditions on customers, the consistent infrastructure investments that PSNC has made since its 2008 rate case have greatly benefited our customers by expanding our natural gas service, ensuring the safety of PSNC's system and enhancing its reliability. Similarly, the Company's planned capital investments over the next few years will further improve PSNC's ability to provide safe, reliable and cost-effective gas service to its customers.

That concludes my summary.

MS. GRIGG: Thank you. Mr. Addison is available for cross-examination and questions from the Commission.

COMMISSIONER BROWN-BLAND: It's my understanding that only Ms. Force has cross-examination questions.

CROSS-EXAMINATION

BY MS. FORCE:

Q Good morning, Mr. Addison.

A Good morning.
Q You were -- let me -- I have some questions about the rate of return of the Company and I think that you're also a witness who talks about that in particular, how the rate of return and the capital structure function together in terms of going to the markets for financing; is that right?
A Correct.
Q So, if we put it in context, the Commission is the body that establishes the rates that Public Service applies to increase. If they want to have an increase in rates, they need to come to the Commission. It's not something they can just do on their own.
A Correct.
Q And when you come in, part of the ratemaking process, a big part of it, is establishing what revenues are required, that's right, isn't it?
A It is.
Q And a big part of that, am I right, is the amount that pays investors whether it's credit holders, long-term debt or shareholders, common shareholders?

A It is an important part, it's not the only large part, but it's an important part.

Q That's true and isn't it often a disputed part particularly as to the return on investment?

A Oh, sure, because some of the other costs are more --

Q Common shareholders. Sorry.

A Sure. Some of the other costs are more straightforward. A lot of the cost of service components, even interest costs, within that rate of return is fairly straightforward. The return on equity for the shareholder involves more seasoned judgment.

Q And you're familiar with the total package in this -- on -- in the Stipulation that's been approved as being that part that's paid to investors is factored as a rate that applies to the investment in rate base and that's -- $947 million is the net that we're talking about?

A Yes. Rate base, yes.

Q The rate base. So when we talk about these rates of return, I think -- would you agree with me that the stipulated rate of return is 9.7 percent for equity shareholders?

A Correct.
Q And 5.52 percent for long-term debt and .77 percent for short-term debt --
A Correct.
Q -- right? And overall that comes out to 7.53 percent?
A Yes, subject to check, I would agree with that. I don't know the --
Q That's fine.
A -- exact overall.
Q That takes into account how much of the investment is allocated to it is in the equity component, how much of it's in the debt component and how much of it's in the short-term debt; is that --
A Well, those are the rates that would apply to the portion that's supported by each of those components. So the actual composition is fifty -- that we agreed to was 52 percent supported by equity and the balance supported by debt, and then you would apply those rates that you recited to those portions.
Q And that's not an exact number of what the -- how those break down I guess, if you just took a

snapshot today?
A That's correct. Our actual equity invested in PSNC was slightly higher than that, about 53.5 percent.
Q And to clarify now, I think you said you're with SCANA and Public Service is a wholly owned subsidiary of SCANA, right, it has one shareholder?
A That's correct. I'm financial officer of both companies.
Q And it's not publicly traded itself --
A Not the equity but the debt -- the debt is directly invested by investors in PSNC's debt. So the stock, though, you're correct is all SCANA stock.
Q And so Public Service goes out to the market itself to obtain long-term debt?
A That's correct.
Q And perhaps the short-term debt as well?
A Correct.
Q And in North Carolina, I think you testified that -- if I'm wrong, direct me to the right witness. We use short-term debt in the capital structure for natural gas companies and there was

a -- you mentioned, I think in your testimony, how that's decided. It's some approximation of gas and inventory; is that right?
A I don't believe that's in my testimony, but --
Q Okay.
A -- that is -- I believe that is the case.
Q You would agree that because so much of the money that you have invested at a particular point in time may be related to the commodity gas, particularly when gas prices are high?
A I think that -- and I'm not intimately familiar with that but I think the historical practice or maybe even regulation in North Carolina is to use that as a proxy for the amount of short-term debt and it's different in other jurisdictions --
Q Okay.
A -- but it's a very reasonable proxy.
Q Now, that overall rate of return of 7.53 percent is one factor. You said that the return on equity is 9.7 percent under the agreement. Did you know what Piedmont's rate of return on equity was in its last case? Are you familiar with that, 10 percent, does that sound right?
A Yes. I was going to say I thought it was

10 percent but I'm not exactly sure of it.
Q That case was in 2013. But the overall rate of return for Piedmont was 7.51 percent. I can show you the Order if you'd like or we can --
A No, I would agree to that, subject to check.
Q Okay. That overall rate of return is a little bit lower than the overall rate of return in this case even though the rate of return on equity was higher. So there are little differences and components that make up that overall rate of return.
A Well, sure. We work in what I call a lumpy business. We make significant investments in rate base; we don't just do it ratably like a linear graph; and we go and raise capital in lumps as well, both equity and debt. And that, of course, results in, dependent upon what point in time you take that snapshot, a different measurement.
Q So, as I understand it, one of the factors involved in the Piedmont case was that they had a lower percentage of -- in the capital structure was equity; would you agree to that subject to check?

A That could certainly affect it as well.

Q And -- I had that number but I don't see it in my notes so I'll have to double check. Maybe I'll check in with you on that later. But the overall rate of return is set forth in the Order and that's an Order on page -- in Docket G-9, Sub 631, page 7. So, in this case, the equity portion is 52 percent. Would you agree with me that the cost, when we're putting it into revenue requirement for the equity portion of that capital structure, is quite a bit more than the cost of debt?

A For PSNC's equity, the 9.7 is higher than the five, approximate 5.5 percent. Yes, I would agree with that.

Q And that 5.5 percent is long-term debt?

A Correct.

Q Now, that long-term debt is, we call that embedded cost.

A Right.

Q And am I right in -- it's my understanding that that's not -- everything isn't 5.52 percent in your portfolio. You have a number of debt issuances and you factor an average by taking the time -- the length of time that you have those different instruments with payments on them and figured out that taking the overall embedded cost it comes to 5.52?

A Not really the length of time but you're right in that you compute it proportionately based upon the amount of the debt and the rate that applies to that amount so you compute a weighted average.

Q Okay. And so they're a little different. And would you agree with me that the cost is lower today than it was in the 1990's?

A I would absolutely agree with that.

Q So you just had a debt issuance in June, didn't you?

A We did.

Q A $100 million, and what was the rate of that interest?

A 4.13 percent.

Q And that's a 30-year?

A That's right. It's a 30-year, a bullet debt we call it, fixed principal so it doesn't amortize. We only pay the interest on it for the next 30 years and then repay the debt at the end, the principal balance.

Q Huh! And is that unsecured or secured?
A It is unsecured.
Q Unsecured, okay. Have you taken a look at Mr. Hevert's testimony that was filed originally?
A I have.
Q When he filed his testimony, he took a look at some of the -- he came up with a proxy group in order to do an assessment of the rate of return on equity. That was primarily what he talked about in his testimony; isn't that right?
A I would agree with that.
Q And when he talked -- at some point in his testimony he also talked about the capital structure that was proposed in the Application, and I think originally the Application was talking about more like fifty three point, well it was a higher percentage of debt than in the Stipulation; is that right?
A A higher percentage of equity. It was about 53.5 percent, right.
Q Thank you. Thank you.
A Because it was based on our actual equity at the time.
Q And that's -- that's your equity in relationship

to your debt and the equity is what's held by SCANA?

A Correct.

Q Now, when Mr. Hevert talked about a comparison of how much equity in the capital structure you have for Public Service compared to how much in the proxy group, he's made a change in his analysis a little bit in his supplemental testimony that I'd like to talk about. As I understand it, in his initial testimony he the capital structure which included short-term debt for Public Service to the proxy group but he didn't include the short-term debt that was held by those other companies. Are you familiar with that?

A Not in detail. You probably need to address that with Mr. Hevert.

Q Talk with him about it? Okay. Would you agree with me that if you leave out the short-term debt when you're evaluating the capital structure of Public Service, you leave it out when you identify what the capital structure is of those other companies that most likely you're overstating the amount of equity?

A You're going to need to address that with

Mr. Hevert.

Q Okay. I can do that. We were talking before about the rate of return and I think you agreed with me about what the stipulated rate of return is the 9.7 equity, 5.52 percent long-term debt, .77 percent short-term debt. Would you also agree -- are you familiar with the gross -- the term "gross up" that's used?

A Generally, yes. In what context?

Q So when we're doing the revenue requirement --

A Oh sure.

Q -- for the Company. First of all, there's the amount that's needed to get the opportunity when you're coming up with a revenue requirement for those different categories of investment to pay the rate of return. But there's also a substantial amount that's needed for income taxes and there are a couple of other items that are included in what's called gross up; am I right about that?

A Correct.

Q And so it's a mathematical formula that's applied to the amount of the revenue in order to come up with -- if you were looking at the rate of return

and how it compares for long-term debt versus equity, isn't it true that it takes quite a bit more money in the revenue requirement for equity in order to pay those taxes?
A Well, that's true for two reasons or two main reasons. Number one, the equity investor has more risk so they're going to require a higher return hence the 9.7 in the Stipulation compared to the approximate 5.5. But the other reason is interest is a tax deductible expense by a company and equity earnings are not, so those are taxed by both federal and state authorities.
Q So, when we look at the tax rate for the federal and the tax rate for the state, those were also items that are included in the revenue requirement?
A Yes, I agree.
Q For your rate -- to determine your rates. And so if we were to --

MS. FORCE: I'm going to ask -- I've got an exhibit. I should give it to the witness.

(Directed to the Witness) You can look at that for a minute, if you'd like.

I ask that we mark this as Attorney General

Addison Cross-Examination Exhibit 1.

COMMISSIONER BROWN-BLAND: It will be so identified.

Attorney General Addison Cross-Examination Exhibit 1

(Identified)

BY MS. FORCE:

Q Mr. Addison, what's shown here is what we were talking about earlier, I'll submit to you, the rates of return, and then that gross-up column is what we talked about, also. So, for the equity, there's a smaller number than for the others so, as I understand it, in order to determine how much extra is needed, that gross up is something that's divided, so the rate of return is divided by that to come up with the gross up on the far right column. Would you agree subject to -- I realize you don't have those gross up specific figures but I'll submit to you that those are in Boswell Exhibit Schedule 5. It changed a little bit since the initial Application.

A Right. So, yes, the 62, roughly 62 percent that applies to equity is basically the inverse of the tax. The combined effective tax rate is about 38 percent so this is the inverse of it.

Q So, if we're looking at how to structure the financing on one hand in terms of cost, it is true it's almost three times as much to include equity in that capital structure as it is to include long-term debt; am I right?
A Well, that's what the mat shows here but there's a delicate balance especially when you've got a company like PSNC that is making a historical change in the level of investment that we're making in North Carolina at this point, what the customers are really requiring and demanding. In the last few years of my tenure as financial officer, we've generally invested roughly $75 to $90 million a year. Over with the next three years, 2016 included, we're investing an estimated $230 million a year on average. So you've got to have a company that's got a sound balance sheet, which PSNC does as does SCANA. And, if you simply were just to say well let's only have a quarter of the company supported by equity rather than 52 percent that we agreed to in the Stipulation, you're not going to end up with 5.52 percent debt cost. Your debt investors are going to say there's a much higher risk

associated with that and, therefore, you're going to end up with a much higher cost. Much like, if I put 5 percent down on a home mortgage versus putting 50 percent down, I'm probably going to get a different interest rate because of the risk perceived.

Q And I think you said 25 percent -- if you had 25 percent of it as equity and the rest were debt?

A Right.

Q Which some businesses do, I expect, but --

A Some do but --

Q -- not so much in the utility business?

A Exactly because we're in a very, very capital intensive business.

Q And what would you say is the safe range then? Is it -- 52 percent is what's required in order to be able to go to the market to get reasonable priced credit -- debt?

A Well, it depends on the company and what's really in front of them. In our case, we've got a substantial amount of investment to make over the next few years in the infrastructure here in North Carolina and we believe this is a reasonable balance. Of course, our actual equity is slightly higher than that at 53.5. So our earned return for equity is going to be lower than 9.7 percent because I'm only earning 9.7 percent on the 52 percent that we agreed to in the Stipulation, so it's actually going to be a little lower than that for actual shareholders' return.

Q It's true though, isn't it, that -- I mean, we're looking -- you're talking about a particular point in time when it's higher than that. But isn't it true that the goal over time for Public Service is to keeping a balance of about 50 percent debt and 50 percent equity?

A Roughly, somewhere in the 50 to 55 percent equity. Like I said, we're in a lumpy business and we make those investments over time. For example, we anticipate raising an additional $250 million of debt in the next couple of years. We anticipate injecting equity from SCANA down to PSNC of about $100 million. So there's a lot of investment going in to support the infrastructure here in the state.

MS. FORCE: I have another exhibit.

COMMISSIONER BROWN-BLAND: Ms. Force, we'll identify this one as Attorney General Addison Cross-Examination Exhibit 2.

Attorney General Addison Cross-Examination Exhibit 2
(Identified)

MS. FORCE: Thank you. You can see that this was a little before the Stipulation filed last night, the revised -- so we have part of our label attached.

BY MS. FORCE:

Q Mr. Addison, I --

MS. GRIGG: I'm sorry. May we have just 30 seconds to read it before you start questions?

MS. FORCE: Of course. Sure.

MS. GRIGG: Thank you.

MS. FORCE: Sorry.

MS. GRIGG: Thank you.

BY MS. FORCE:

Q Mr. Addison, I'm submitting to you that this is a discovery response provided to the Public Staff from Public Service May 24, 2016; do you agree with that?

A I do.

Q And would you read the first line in the response, please, the first paragraph?

A *PSNC strives to maintain an appropriate, excuse me, an approximate balance of 50 percent debt and 50 percent equity excluding goodwill. The decision to issue debt or equity is based solely on the financial needs of PSNC as a stand-alone company.*

Q Okay, thanks. I've already asked if you've read Mr. Hevert's testimony and I'll come back, I guess I need to skip over some questions and direct those to him. Do you -- one of the things that I'm curious about, when we look at the capital structure of Public Service, would you say that SCANA has a similar capital structure to what you're proposing in this case or, am I right, that that is quite a bit higher for SCANA?

A It is. Actually the other regulated utilities have a similar structure to PSNC. SCANA's debt is higher. It's about 56 percent almost the inverse of because we've got more debt than equity at SCANA and the reason for that, interestingly, is PSNC. And so when SCANA acquired PSNC the debt that was issued incremental above the value of the rate base at that point in time, if you will, the premium paid for the Company could not obviously be borne by ratepayers here in North Carolina, our customers, so that debt, that burden is carried by SCANA shareholders.

Q And it's --

A And it's about -- sorry -- it's about $700 million.

Q Okay. And so that's a debt that's on the balance sheet for SCANA?

A That's right and that's what changes the overall balance of debt and equity at SCANA and makes it different than it is at PSNC or the other operating regulated companies in South Carolina.

Q And would you compare the risks involved in SCANA and Public Service, PSNC, excuse me, as being on a par or would you say -- I would tend to think that SCANA would have a little bit higher risk because of the other components of its makeup, it's other subsidiaries and its debt structure.

A When you say the risk do you mean the equity risk or the debt risk? Because I would say the debt risk I would classify as fairly similar. For example, Moody's has them rated the same as SCE&G

and PSNC and they have SCANA slightly lower. But, generally, I would agree that SCANA, the holding company, has more risks than do the operating companies and that's true across our industry sector. Maybe I didn't understand your question.

Q Well, I think one of the objectives that we were talking about earlier, at least as I understood it, for having more equity in the capital structure is that it would reduce the cost of debt when you go to the market. But it sounds like SCANA is rated about the same even though it has -- is it more like 45 percent or sometimes less than that -- equity in its capital structure; isn't that right?

A That's right. We're fortunate, though, at SCANA that we're not issuing debt. So the only reason that we've issued debt in my tenure as financial officer was -- actually maybe and quite before, a little before it -- was to acquire PSNC. So there's no real ongoing business at SCANA of a rate base nature of a long-term investment. It just simply is, is housing in the service company, mutual services that provide benefit to all of the regulated utilities.

Q Now, the other subsidiary that's really the bigger subsidiary of SCANA is South Carolina Electric & Gas. Am I saying that right?

A That's right.

Q SCE&G.

A Uh-huh.

Q They actually have some risk involved in some nuclear plants that are under construction; am I correct?

A I would certainly agree with that.

MS. FORCE: I would like to refer to credit reports at this point. So there's a question -- I discussed it with the Company -- the Company has marked that as a confidential exhibit and under our Non-Disclosure Agreement we won't disclose confidential documents. These are actually reports that are provided by Moody's and Standard & Poor's as a publication that is disseminated; it's not really a trade secret.

MS. GRIGG: Madam Chair, it is a subscription service that they consider to be confidential and they authorized us to provide those reports in response to discovery with the condition that they be treated confidentially, so we do not have the authorization to make those documents public.

COMMISSIONER BROWN-BLAND: All right.

MS. FORCE: It's okay with -- I'll proceed by clearing the hearing room. I think that normally publications would be a fair -- it is a fair use of them in litigation but I --

COMMISSIONER BROWN-BLAND: Without anything to contradict it, I will accept PSNC's representation that they've supplied it on the basis of it being kept confidential. So, if you are going to be disclosing that information or discussing that in your questions --

MS. FORCE: I'm getting ready to pass out an exhibit that has those reports in it.

COMMISSIONER BROWN-BLAND: Is there other confidential material that you have that is --

MS. FORCE: That's it.

COMMISSIONER BROWN-BLAND: Okay.

MS. GRIGG: I believe most of the people in here have probably signed the Non-Disclosure Agreement. I'm sorry, Pia, except for Pia. We'll come get you after this.

COMMISSIONER BROWN-BLAND: Officially, for the record, I would ask that those persons who have not signed on to the Non-Disclosure Agreement at issue that we're discussing please leave and we'll have someone come and get you when we are off the confidential section. Of course, the Commission and the Public Staff may remain.

Ms. Grigg, I'll just rely on you to be sure that the hearing room is appropriately cleared.

MS. GRIGG: Thank you, ma'am, it appears to be.

COMMISSIONER BROWN-BLAND: For the record, this exhibit will be identified as Attorney General Addison Cross-Examination Exhibit 3 and it will be marked and maintained as confidential.

Confidential Attorney General Addison
Cross-Examination Exhibit 3
(Identified)

MS. GRIGG: Thank you, ma'am.

(WHEREUPON, Confidential testimony begins and shall be filed under seal.)

BY MS. FORCE:

Q [redacted]

[redacted]

A [redacted]

Q [redacted]

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COMMISSIONER BROWN-BLAND: [redacted]

MS. FORCE: [redacted]

COMMISSIONER BROWN-BLAND: [redacted]

[redacted]

MS. GRIGG: [redacted]

COMMISSIONER BROWN-BLAND: [redacted]

(WHEREUPON, the Confidential portion of the transcript has concluded.)

MS. FORCE: Should I proceed?

COMMISSIONER BROWN-BLAND: Yes.

BY MS. FORCE:

Q The rate increase under the Stipulation is $19.05 million; is that right? Does that -- subject to check?

A Yes.

Q Do you know what the overall rate increase is? As I understand it, residential is a little over

4 percent and other groups under that.
A I believe it is in the -- the quick math I did yesterday was about 4.3 percent but there may have been some final changes to that.
Q Is that the residential part or --
A That's overall I believe.
Q Overall. Then do you have a sense or can you tell me or point me to another witness who can give us an idea of what sort of revenue increases we're talking about that would be introduced through the IMR before the next rate case?
A Frankly, I'm not sure which witness is best suited to do that. Probably Ms. Paton, I would guess, but I'm not positive about that.
MS. GRIGG: We can start with Ms. Paton.
MS. FORCE: (Laughing) She made a face.
(Laughter.)
MS. GRIGG: Ms. Paton who will go up first and if she can't answer it I'm sure Ms. Boone can.
THE WITNESS: I was confident she would make a face no matter whether or not I was accurate or not.
(Laughter.)
BY MS. FORCE:
Q At any rate, we're talking about rate increases

that could occur twice a year, is that right, relating to these projects?

A Correct, much like other mechanisms, the CUT, et cetera. And I think the whole intention there again is to make the process more efficient so that we're not back here as frequently going through a whole drawn out proceeding.

Q Am I right, the CUT sometimes goes down?

A That's correct.

Q Will this ever go down?

A I don't envision where that would occur.

Q So --

A I was just speaking to the frequency.

Q Yes, okay. And is there any cap on how much of an increase could occur to the revenue requirement and, as such, increases in rates between now and the end of the four-year review period?

A Well, my understanding is that Public Staff will be examining any costs that are -- that we apply to that rider mechanism to verify that they concur with -- that they apply to the law, that the law applies to those costs. And there's been a great deal of negotiation through the discovery process about which projects apply to it, what portions of projects apply to it, et cetera.

Q And when the Public Staff takes a look at it then and it comes before the Commission, is that when the prudence is determined for the projects as well?

A You're getting out of my ballpark now so I'm not sure of the answer to that.

Q Who would be able to help me with that, do you know?

MS. GRIGG: That's Ms. Paton, she's a rate witness.

MS. FORCE: Okay.

MS. GRIGG: Those questions are best directed towards her, please.

BY MS. FORCE:

Q But there is a four-year time period before there is a review, and there's going to be a review and audit unless you have a rate case between now and that four-year period, is that right?

A You're going to need to address that to her.

Q Oh, okay, I'm sorry. Well, I'm going to ask you this, I don't know who would be best but I think you're maybe in the best position. Just for

clarification, there's a Stipulation, there are a number of points that clarify and tailor the Application of the tracker to -- some costs are not going to be included, the percentages, and those are agreed to in the Stipulation. There is also a paragraph 17 in the Stipulation that says that this Stipulation is not precedent in other proceedings and the parties agree not to cite this as precedent. But presumably those provisions that apply to the IMR, those are intended to be applicable when the Company comes in for a rate increases and provides the documentation that's required, is that right?
A Again, not my area of expertise but that seems reasonable to me.
Q It might not be anybody's area of expertise in terms of how it's accounted for. Either it's a commitment really from the Company but this is -- these provisions of the Stipulation, as I understand it, are forward-looking and so that's something that the Company is going to honor. It's not right in the tariff but --
A Right. And, of course, when we're --
Q -- even in a different docket.

A And, of course, when we're in for a full proceeding, I mean, it's going to be in rate base one way or the other right through the -- either through the rider mechanism or through base rates, assuming it's judged prudent.
Q Right, and thank you. So, in other words, what we're talking about in terms of introducing the tracker mechanism or -- and, for instance, when there's some limits on what can go through that tracker mechanism -- we're not saying they're not recoverable at all, right, those are costs that are recoverable through a general rate proceeding?
A The ones that do not go through the mechanism?
Q That's right.
A Correct.
Q Presuming that they are prudent --
A Prudent.
Q -- and reasonable?
A Sure.

MS. FORCE: I don't have any other questions. Thank you very much.

THE WITNESS: You're welcome.

COMMISSIONER BROWN-BLAND: Redirect?

MS. GRIGG: I have no redirect.

COMMISSIONER BROWN-BLAND: Questions from the Commission?

(No response.)

I have one for you, Mr. Addison.

EXAMINATION

BY COMMISSIONER BROWN-BLAND:

Q In your prefiled testimony you discuss the need for PSNC to have access to the capital markets. Are you familiar with the Company's participation in SCANA's Utility Money Pool?

A I am.

Q The Commission notes that in the 56 months from March 2010 through October 2014, the end of month balance reported to the Commission in G-5, Sub 484 showed PSNC -- showed loans from PSNC to the SCANA Pool in every month except one, with the average end-of-month balance loaned by PSNC over that period being in excess of $46 million and the highest end-of-month balance for borrowing by PSNC from the Pool was $12.8 million while the highest end-of-month lending balance by PSNC to the Pool was $103.7 million. What benefits do you see PSNC receiving from participating in that Utility Money Pool?

A The Pool is set up so that the different Companies can take advantage of each others' cash flow or investment abilities at different points in time. So, the historical period you're referring to, PSNC has not had as much capital to invest in the business as it does prospectively, so we've not had to issue a great deal of long-term debt, anything like that, not been into the commercial paper markets a lot in the past. That has changed now and so now PSNC is a net borrower just like SCE&G is. They've got -- in fact, they're both in a significant growth phase on a relative basis, not that different. Now, obviously, nuclear plants are a different size than the expansion here in North Carolina in the gas business, but relative to the rate base of the Companies it's not that different. So now PSNC is going to be moving back into that period where they're going to likely be a net borrower until the points that we go out and issue long-term debt. And all that does is allow, when they've been in this excess cash perspective in the past, it's allowed them to earn some return.

Although granted we've been in the lowest interest rates in any of our lifetimes during that period but they've been able to earn something on it, more than they likely would have if it were invested at a financial institution. It allows a give-and-take between those regulated bodies within a regulated-approved structure.

Q So heretofore you do see that as a prudent use of PSNC's capital?

A I do. I do. I think it's an efficient use. We could have, for example, changed the dividend structure and just moved more of it permanently to SCANA but we wanted to keep that capital structure, maintain those credit ratings at PSNC, so we've kept the dividend payouts ratio very similar over the period of time.

COMMISSIONER BROWN-BLAND: Is there any follow up from Commissioners?

(No response.)

Any follow up on Commission's questions from the Attorney General?

MS. FORCE: No.

MS. GRIGG: No, ma'am.

COMMISSIONER BROWN-BLAND: Ms. Force, did you want to move your exhibits?

MS. FORCE: Oh, yes.

COMMISSIONER BROWN-BLAND: I think there are three.

MS. FORCE: I move the introduction of Attorney General Addison Cross-Examination Numbers 1, 2 and 3.

COMMISSIONER BROWN-BLAND: There being no objection, those exhibits will be received into evidence.

Attorney General Addison
Cross-Examination Exhibits 1 and 2
(Admitted)

Confidential Attorney General Addison
Cross-Examination Exhibit 3
(Admitted)

COMMISSIONER BROWN-BLAND: Ms. Grigg, do you wish this witness to be excused?

MS. GRIGG: Yes, ma'am. Thank you.

COMMISSIONER BROWN-BLAND: You may be excused and thank you for your testimony.

THE WITNESS: Thank you.

(The witness is excused.)

COMMISSIONER BROWN-BLAND: I think this will be a good time for a short break. So let's take a break and come back on the record at 11:35.

(Recess at 11:19 a.m., until 11:35 a.m.)

COMMISSIONER BROWN-BLAND: It looks like everybody is back and it looks like we have an anxious witness.

(Laughter.)

The case remains with you, Ms. Grigg.

MS. GRIGG: Thank you, Madam Chair. PSNC calls Mr. Hevert to the stand.

**ROBERT B. HEVERT**; was duly sworn and testified as follows:

COMMISSIONER BROWN-BLAND: You may be seated.

MR. HEVERT: Thank you.

DIRECT EXAMINATION

BY MS. GRIGG:

Q Good morning, Mr. Hevert.

A Good morning.

Q Please state your name and business address for the record.

A My name is Robert Hevert. Last name is spelled H-E-V, as in Victor, E-R-T. My business address is 1900 West Park Drive in Westborough, Massachusetts.

Q By whom are you employed and in what capacity?

A I am a partner with ScottMadden, Incorporated.

Q Did you cause to be prefiled in this docket on March 31, 2016, direct testimony in question and answer form consisting of 95 pages, and 13 exhibits which were premarked for identification?

A Yes, I did.

Q Did you also cause to be filed 14 pages of supplemental testimony and two exhibits on August 24, 2016?

A Yes, I did.

Q Are there any additions or corrections you would like to make to your direct or supplemental testimony at this time?

A I have no changes to my direct testimony. I do have one change I'd like to make on my supplemental testimony.

Q Okay.

A Which is on page 6, and page 6, line 8, toward the right-hand margin there's a parenthetical clause that says *like North Carolina*, and just to make it more clear I'd like to strike that clause. Beyond that, I have no further changes.

Q Okay. If I asked you the questions today in your prefiled direct and supplemental testimony, would your answers be the same?

A Yes, they would.

MS. GRIGG: Madam Chair, I request that Mr. Hevert's direct and supplemental testimony be entered into the record as if given orally from the stand?

COMMISSIONER BROWN-BLAND: That will be allowed and Mr. Hevert's direct and supplemental testimony, filed respectively on March 31st and August 24th, will be received into evidence and treated as if given orally from the witness stand.

MS. GRIGG: Thank you.

Exhibits RBH-1 through RBH-13
(Identified)

(WHEREUPON, the prefiled direct testimony of **ROBERT B. HEVERT** is copied into the record as if given orally from the stand.)

## I. INTRODUCTION

**Q. PLEASE STATE YOUR NAME AND AFFILIATION.**

A. My name is Robert B. Hevert. I am Managing Partner of Sussex Economic Advisors, LLC.

**Q. ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?**

A. I am submitting this direct testimony ("Direct Testimony") before the North Carolina Utilities Commission ("Commission") on behalf of Public Service Company of North Carolina, Inc. ("PSNC" or the "Company"), a wholly-owned subsidiary of SCANA Corporation ("SCANA").

**Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

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

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

A. I have worked in regulated industries for over twenty-five years, having served as an executive and manager with consulting firms, a financial officer of a publicly-traded natural gas utility (at the time, Bay State Gas Company), and an analyst at a telecommunications utility. In my role as a consultant, I have advised numerous energy and utility clients on a wide range of financial and economic issues including corporate and asset-based transactions, asset and enterprise valuation, transaction due diligence, dividend policy, and strategic matters. As an expert witness, I have provided testimony in more than 150 proceedings regarding various financial and regulatory matters before numerous state utility regulatory agencies and the Federal Energy Regulatory Commission. A summary of my professional and educational background, including a list of my testimony in prior proceedings, is included in Attachment A to my Direct Testimony.

## II. PURPOSE AND OVERVIEW OF TESTIMONY AND SUMMARY OF RECOMMENDATIONS

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. The purpose of my Direct Testimony is to present evidence and provide a recommendation regarding the Return on Equity ("ROE") that should be adopted for the Company in order to establish rates.[1] My analyses and conclusions are supported by the data presented in Exhibit RBH-1 through Exhibit RBH-13, which have been prepared by me or under my direction.

**Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE APPROPRIATE COST OF EQUITY?**

A. My analyses indicate that the Company's Cost of Equity currently is in the range of 10.00 percent to 10.75 percent. Based on the quantitative and qualitative analyses discussed throughout my Direct Testimony, I conclude that an ROE of 10.60 percent is reasonable and appropriate.

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

**Q. BEFORE ADDRESSING THE SPECIFIC ASPECTS OF THIS PROCEEDING, PLEASE PROVIDE AN OVERVIEW OF THE ISSUES SURROUNDING THE COST OF EQUITY IN REGULATORY PROCEEDINGS, GENERALLY.**

A. In very general terms, the Cost of Equity is the return that investors require to make an equity investment in a company. That is, investors will only provide funds to a company if the return that they expect is equal to, or greater than, the return that they require. From the company's perspective, that required return, whether it is provided to debt or equity investors, has a cost. Individually, we speak of the "Cost of Debt" and the "Cost of Equity;" together, they are referred to as the "Cost of Capital."

The Cost of Capital (including the costs of both debt and equity) is based on the economic principle of "opportunity costs." Investing in any asset, whether debt or equity securities, implies a forgone opportunity to invest in alternative assets. For any investment to be sensible, its expected return must be at least equal to the return expected on alternative, comparable investment opportunities. Because investments with like risks should offer similar returns, the opportunity cost of an investment should be comparable to the return available on an investment of similar risk.

Although both debt and equity have required returns, they are different in certain fundamental ways. Most noticeably, the Cost of Debt is contractually defined and can be directly observed as the interest rate, or yield, on debt securities. The Cost of Equity, on the other hand, is neither directly observable nor a contractual obligation. Rather, equity investors have a claim on the firm's cash flows only after debt holders are paid; the uncertainty (or risk) associated with those residual cash flows determines the Cost of Equity. Because equity investors bear that "residual risk," they take greater risks and require higher returns than debt holders. In that basic sense, equity and debt investors differ: they invest in different securities, face different risks, and require different returns.

Because the Cost of Equity cannot be directly observed, it must be estimated, or inferred, based on market data and various financial models. As discussed throughout my Direct Testimony, all of those models are subject to certain assumptions, which may be more or less applicable under differing market conditions. In addition, because the Cost of Equity is premised on opportunity costs, those models typically are applied to a group of "comparable" or "proxy" companies. The choice of models (including their inputs), the selection of proxy companies, and the interpretation of the model results all require the application of judgment. That judgment also should consider data and information that is not necessarily included in the models themselves. In the end, the estimated Cost of Equity should reflect the return that investors require in light of the subject company's risks, and the returns available on comparable investments.

**Q. PLEASE PROVIDE A BRIEF OVERVIEW OF THE ANALYSES THAT LED TO YOUR ROE RECOMMENDATION.**

A. As discussed in more detail in Section V, in light of recent market conditions, and given the fact that equity analysts and investors tend to use multiple methodologies in developing their return requirements, it is important to consider the results of several analytical approaches in determining the Company's ROE. To develop my ROE recommendation, I therefore applied the Constant Growth and Multi-Stage forms of the Discounted Cash Flow ("DCF") model, the Capital Asset Pricing Model ("CAPM"), and the Bond Yield Plus Risk Premium approach. As discussed later in my testimony, it is important to consider a range of factors, both quantitative and qualitative, in arriving at an ROE determination.

In addition to the methods discussed above, my recommendation also takes into consideration the capital market environment in which the Company operates, as well as certain company-specific risk factors. Although I did not make any explicit adjustments to my ROE estimates for those factors, I did take them into consideration when determining the Company's Cost of Equity.

**Q. WHAT ARE THE KEY FACTORS CONSIDERED IN YOUR ANALYSES AND UPON WHICH YOU BASE YOUR RECOMMENDED ROE?**

A. My analyses and recommendations considered the following:

- The *Hope* and *Bluefield* decisions[2] that established the standards for determining a fair and reasonable allowed return on equity including: consistency of the allowed return with other businesses having similar risk; adequacy of the return to provide access to capital and support credit quality; and that the end result must lead to just and reasonable rates.
- The effect of the current capital market conditions on investors' return requirements, and in particular, the Company's continuing need to access the capital markets.
- The Company's business risks relative to the proxy group of comparable companies and the implications of those risks in arriving at the appropriate ROE.

Based on the analyses and considerations discussed throughout the balance of my Direct Testimony, it is my view that a reasonable range of estimates is from 10.00 percent to 10.75 percent, and within that range, an ROE of 10.60 percent is reasonable and appropriate.

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

A. The balance of my Direct Testimony is organized as follows:

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

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

Section IV – Explains my selection of the proxy group of natural gas distribution utilities used to develop my analytical results;

Section V – Explains my analyses and the analytical bases for my ROE recommendation;

Section VI – Provides a discussion of specific business risks and other considerations that have a direct bearing on the Company's Cost of Equity;

Section VII – Discusses current capital market conditions and the effect of those conditions on the Company's Cost of Equity;

Section VIII – Discusses the economic conditions in North Carolina;

Section IX – Discusses the reasonableness of the Company's proposed capital structure; and

Section X – Summarizes my conclusions and recommendations.

## III. REGULATORY GUIDELINES AND FINANCIAL CONSIDERATIONS

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

A. The Court established the guiding principles for establishing a fair return for capital in two cases: (1) *Bluefield Water Works and Improvement Co. v. Public Service Comm'n.* ("*Bluefield*");[3] and (2) *Federal Power Comm'n v. Hope Natural Gas Co.* ("*Hope*").[4] In *Bluefield*, the Court stated:

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3 *Bluefield Waterworks & Improvement Co., v. Public Service Commission of West Virginia*, 262 U.S. 679, 692-93 (1923).

4 *Federal Power Commission v Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944).

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

The Court therefore recognized that: (1) a regulated company cannot remain financially sound unless the return it is allowed to earn on its invested capital is at least equal to the Cost of Capital (the principle relating to the demand for capital); and (2) a regulated company will not be able to attract capital if it does not offer investors an opportunity to earn a return on their investment equal to the return they expect to earn on other investments of the same risk (the principle relating to the supply of capital).

In *Hope*, the Court reiterated the financial integrity and capital attraction standards stated the *Bluefield* case:

> From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock... By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.[6]

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5 *Bluefield Waterworks & Improvement Co., v Public Service Commission of West Virginia*, 262 U.S. 679, 692-93 (1923).

6 *Federal Power Commission v Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944).

In summary, the Court clearly has recognized that the fair Return on Equity should be: (1) comparable to returns investors expect to earn on other investments of similar risk; (2) sufficient to assure confidence in the company's financial integrity; and (3) adequate to maintain and support the company's credit and to attract capital.

Q. **HAS THE COMMISSION ALSO LOOKED TO THE HOPE AND BLUEFIELD STANDARDS AS GUIDANCE FOR SETTING RATES?**

A. Yes, it has. In Docket No. E-7, Sub 1026, the Commission noted that:

> First, there are, as the Commission noted in the DEP Rate Order, constitutional constraints upon the Commission's return on equity decision, established by the United States Supreme Court decisions in Bluefield Waterworks & Improvement Co., v. Pub. Serv. Comm'n of W. Va., 262 U.S. 679 (1923) (Bluefield), and Fed. Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944) (Hope):
>
> To fix rates that do not allow a utility to recover its costs, including the cost of equity capital, would be an unconstitutional taking. In assessing the impact of changing economic conditions on customers in setting an ROE, the Commission must still provide the public utility with the opportunity, by sound management, to (1) produce a fair profit for its shareholders, in view of current economic conditions, (2) maintain its facilities and service, and (3) compete in the marketplace for capital. State ex rel. Utilities Commission v. General Telephone Co. of the Southeast, 281 N.C. 318, 370, 189 S. E.2d 705, 757 (1972). As the Supreme Court held in that case, these factors constitute "the test of a fair rate of return declared" in Bluefield and Hope. Id.[7]

[7] North Carolina Utilities Commission, Docket No. E-7, Sub 1026, Order Granting General Rate Increase, September 24, 2013, at 23; see also State of North Carolina Utilities Commission. Docket No. E-22, Sub 479, Order on Remand, July 23, 2015, at 12-16 (discussing the *Hope* and *Bluefield* decisions) ("DNCP Remand Order").

**Q. ASIDE FROM THE STANDARDS ESTABLISHED BY THE COURT AND THE COMMISSION, WHY IS IT IMPORTANT FOR A UTILITY TO BE ALLOWED THE OPPORTUNITY TO EARN A RETURN ADEQUATE TO ATTRACT EQUITY CAPITAL AT REASONABLE TERMS?**

A. A return that is adequate to attract capital at reasonable terms enables the utility to provide service while maintaining its financial integrity. In keeping with the *Hope* and *Bluefield* standards, that return should be commensurate with the returns expected elsewhere in the market for investments of equivalent risk. Based on those standards, the Commission's decision in this case should provide the Company with the opportunity to earn an ROE that is: (1) adequate to attract capital at reasonable terms, thereby enabling it to continue to provide safe and reliable natural gas service; (2) sufficient to ensure its financial integrity; and (3) commensurate with returns on investments in enterprises having corresponding risks.

To the extent the Company is provided a reasonable opportunity to earn its market-based Cost of Equity, neither customers nor shareholders should be disadvantaged. In fact, a return that is adequate to attract capital at reasonable terms enables PSNC to provide safe, reliable gas utility service while maintaining its financial integrity.

**Q. HOW IS THE COST OF EQUITY ESTIMATED IN REGULATORY PROCEEDINGS?**

A. As noted earlier (and as discussed in more detail later in my Direct Testimony), in regulatory proceedings the Cost of Equity is estimated by the use of various financial models. By their very nature, those models produce a range of results from which the ROE is determined. In regulatory proceedings, therefore, the ROE determination should be based on a comprehensive review of relevant data and information; it does not necessarily lend itself to a strict mathematical or formulaic solution. The key consideration for regulators in determining the ROE is to ensure that the overall analysis reasonably reflects investors' view of the financial markets in general, and the subject company (in the context of the proxy companies) in particular. Both practitioners and academics, however, recognize that financial models simply are tools to be used in the ROE estimation process, and that strict adherence to any single approach, or to the results of any single approach, can lead to flawed or misleading conclusions. That position is consistent with the *Hope* and *Bluefield* principle that it is the analytical result, as opposed to the methodology employed that is controlling in arriving at ROE determinations.[8] Thus, a reasonable ROE estimate arising from regulatory proceedings appropriately considers alternative methodologies and the reasonableness of their individual and collective results in the context of observable, relevant market information.

[8] *See* Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591, 603 (1944).

In summary, the Cost of Equity is established by the market, but estimated in the regulatory process. That is, the market-required ROE is not established by regulatory decisions, it is estimated based on the various analyses and data presented to the presiding commission. Although the standards established in prior cases provide considerable guidance in assessing that information, the authorized return may not always approximate the market-required return. To the extent that the authorized return falls well short of investors' return requirements, it is quite possible that investors would see an additional element of risk, and the market-required return would increase. In that regard, regulatory commissions have the considerable task of estimating the return required by investors without influencing that return by virtue of their ROE determination. The analyses and information provided in the balance of my Direct Testimony are meant to assist the Commission in that task.

## IV. PROXY GROUP SELECTION

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

A. In this proceeding, we are focused on estimating the Cost of Equity for PSNC, a wholly owned subsidiary of SCANA. Since the ROE is a market-based concept and PSNC is not a separately traded entity, it is necessary to establish a group of companies that are both publicly traded and reasonably comparable to the Company in certain fundamental respects to serve as its "proxy" in the ROE estimation process.

Even if PSNC were a publicly traded entity, it is possible that transitory events could bias its market value in one way or another over a given period of time. A significant benefit of using proxy groups, therefore, is to moderate the effects of anomalous, temporary events that may be associated with any one company. As discussed later in my Direct Testimony, the proxy companies used in my analyses all possess a set of operating and risk characteristics that are substantially comparable to PSNC, and therefore provide a reasonable basis for the derivation and assessment of ROE estimates.

**Q. PLEASE PROVIDE A SUMMARY PROFILE OF PSNC.**

A. PSNC provides natural gas distribution service to approximately 539,000 customers in North Carolina. PSNC currently has long term issuer credit ratings of: (1) BBB+ from Standard & Poor's; and (2) BBB from Fitch Ratings.[9] PSNC's senior unsecured debt ratings are: (1) BBB+ from Standard & Poor's; (2) A3 from Moody's Investors Service; and (3) BBB+ from Fitch Ratings.[10]

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9 Source: SNL Financial.

10 Source: SNL Financial.

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

A. I began with the universe of companies that Value Line classifies as Electric or Natural Gas Utilities, which includes a group of 55 domestic U.S. utilities, and applied the following screening criteria:

- I excluded companies that do not consistently pay quarterly cash dividends;
- I excluded companies not covered by at least two utility industry equity analysts;
- I excluded companies that do not have investment grade senior bond and/or corporate credit ratings from Standard and Poor's ("S&P);
- To incorporate companies that are primarily regulated gas distribution utilities, I excluded companies with less than 60.00 percent of net operating income from regulated natural gas utility operations; and
- I excluded companies that are currently known to be party to a merger, or other significant transaction.

**Q. DID YOU INCLUDE SCANA IN YOUR ANALYSIS?**

A. No, in order to avoid the circular logic that otherwise would occur, it has been my consistent practice to exclude the subject company (or its parent) from the proxy group. In any event, the percentage of operating income derived from SCANA's regulated gas operations relative to the combined entity would not have met my 60.00 percent threshold.

**Q. WHAT COMPANIES MET THOSE SCREENING CRITERIA?**

A. The criteria discussed above resulted in a proxy group of the following seven companies:

**Table 1: Proxy Group Screening Results**

| Company | Ticker |
|---|---|
| Atmos Energy | ATO |
| Laclede Group, Inc. | LG |
| New Jersey Resources | NJR |
| Northwest Natural Gas | NWN |
| South Jersey Industries | SJI |
| Southwest Gas | SWX |
| Washington Gas Light | WGL |

**Q. IS A PROXY GROUP OF SEVEN COMPANIES SUFFICIENT TO DETERMINE THE COST OF EQUITY?**

A. Yes, I believe so. The analyses performed in estimating the ROE are more likely to be representative of the subject utility's Cost of Equity to the extent that the chosen proxy companies are fundamentally comparable to the subject utility. Because all analysts use some form of screening process to arrive at a proxy group, the group, by definition, is not randomly drawn from a larger population. Consequently, the selected proxy group reasonably reflects the Company's natural gas distribution operations.

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

A. Not necessarily. Notwithstanding the care taken to ensure risk comparability, market expectations with respect to future risks and growth opportunities will vary from company to company. Therefore, even within a group of similarly situated companies, it is common for analytical results to reflect a seemingly wide range.

## V. COST OF EQUITY ESTIMATION

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

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

**Q. HOW IS THE REQUIRED ROE DETERMINED?**

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

Although we cannot directly observe the Cost of Equity, we can observe the methods frequently used by analysts to arrive at their return requirements and expectations. As discussed below, investors and analysts tend to use multiple approaches in developing their estimate of return requirements. Each methodology, however, requires certain judgment with respect to the reasonableness of assumptions and the validity of proxies in its application. In essence, analysts and academics understand that ROE models are tools to be used in the ROE estimation process and that strict adherence to any single approach, or the specific results of any single approach, can lead to flawed or irrelevant conclusions. That position is consistent with the *Hope* and *Bluefield* finding that it is the analytical result, as opposed to the methodology employed that is controlling in arriving at ROE determinations. A reasonable ROE estimate therefore considers alternative methodologies, observable market data, and the reasonableness of their individual and collective results.

Consequently, it is both prudent and appropriate to use multiple methodologies in order to mitigate the effects of assumptions and inputs associated with relying exclusively on any single approach. Such use, however, must be tempered with due caution as to the results generated by each individual approach. As such, I have considered the results of the Constant Growth form and the Multi-Stage Growth form of the DCF model, the Capital Asset Pricing Model, and the Bond Yield Plus Risk Premium approach.

*Constant Growth DCF Model*

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

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

**Q. PLEASE DESCRIBE THE DCF APPROACH.**

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

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

Where $P$ represents the current stock price, $D_1$ … $D_\infty$ represent expected future dividends, and $k$ is the discount rate, or required ROE. Equation [1] is a standard present value calculation that can be simplified and rearranged into the familiar form:

$$k = \frac{D_0\,(1+g)}{P} + g \quad [2]$$

Equation [2] often is 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 annual 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 average annual growth rate for earnings and dividends; (2) a stable dividend payout ratio; (3) a constant Price-to-Earnings ("P/E") multiple; and (4) a discount rate greater than the expected growth rate. In addition, the Constant Growth DCF model assumes that the same return will be required every year, in perpetuity (*see* Equation [1], above).

As explained more fully in Section VIII below, consensus forecasts project substantial increases in long-term interest rates over the next several years (*i.e.*, the time period in which rates will be in effect). Consequently, the fundamental assumption in the Constant Growth DCF model that the return required today is the same return that will be required three or more years from now is suspect. As also discussed below, the proxy companies' average P/E multiple has recently traded well in excess of its historical average and at times, in excess of the market-wide P/E multiple. As such, market conditions are inconsistent with the Constant Growth DCF model's fundamental assumptions. As a consequence, it is necessary to recognize that the Constant Growth DCF model's results likely understate the required future Cost of Equity. It also is all the more important to interpret the Constant Growth DCF model results in conjunction with the results of multiple methodologies, and with reasoned judgment.

**Q. WHAT MARKET DATA DID YOU USE TO CALCULATE THE DIVIDEND YIELD COMPONENT OF YOUR 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 day periods as of February 12, 2016.

**Q. WHY DID YOU USE THREE AVERAGING PERIODS TO CALCULATE AN AVERAGE STOCK PRICE?**

A. I did so to ensure that the model's results are not skewed by anomalous events that may affect stock prices on any given trading day. At the same time, the averaging period should be reasonably representative of expected capital market conditions over the long term.

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

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

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

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

**Q. IS IT COMMON IN PRACTICE TO RELY ON ANALYSTS' FORECASTS AS THE BASIS OF GROWTH RATE PROJECTIONS?**

A. Yes. The Cost of Equity is a forward-looking concept that focuses on investor expectations regarding future returns. The estimation of such returns, therefore, should be based on forward-looking or projected data; academic research has demonstrated the relationship between analysts' forecasts and

[11] *See* Exhibit RBH-1.

investor expectations.[12] In my view, therefore, Value Line, First Call and Zacks (the latter two of which are consensus earnings forecast estimates) provide appropriate sources of earnings growth forecasts.

**Q. PLEASE DESCRIBE THE RETENTION GROWTH ESTIMATE AS APPLIED IN YOUR CONSTANT GROWTH DCF MODEL.**

A. The Retention Growth estimate[13] is a generally recognized and widely taught method of estimating long-term growth. In essence, the method is based on the proposition that a firm's growth is a function of its expected earnings, and the extent to which it retains earnings to invest in the enterprise. In its simplest form, the model represents long-term growth as the product of the retention ratio (*i.e.,* the percentage of earnings not paid out as dividends, referred to below as "b") and the expected return on book equity (referred to below as "r"). As such, the simple "b x r" form of the method projects growth as a function of internally generated funds. That form of the method is limiting, however, in that it does not provide for growth funded from external equity.

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12 In *The Risk Premium Approach to Measuring a Utility's Cost of Equity*, published in Financial Management, Spring 1985. Brigham, Shome and Vinson noted that "evidence in the current literature indicates that (i) analysts' forecasts are superior to forecasts based solely on time series data; and (ii) investors do rely on analysts' forecasts." Similarly, in a review of literature regarding the extent to which analyst forecasts are reflected in stock prices (*Using Analyst's Growth Forecasts to Estimate Shareholder Required Rates of Return*, Financial Management, Spring 1986), Harris noted: "VanderWeide and Carleton recently compare consensus [financial analyst forecasts] of earnings growth to 41 different historical growth measures. They conclude that 'there is overwhelming evidence that the consensus analysts' forecast of future growth is superior to historically-oriented growth measures in predicting the firm's stock price…consistent with the hypothesis that investors use analysts' forecasts, rather than historically-oriented growth calculations, in making stock buy and sell decisions.'"

13 The retention growth method is a means to estimating the growth rate, and is not considered a separate model for estimating the Cost of Equity.

The "br + sv" form of the Retention Growth estimate used in my DCF analysis is meant to reflect growth from both internally generated funds *(i.e.,* the "br" term) and from issuances of equity *(i.e.,* the "sv" term). The first term, which is the product of the retention ratio *(i.e.,* "b", or the portion of net income not paid in dividends) and the expected return on equity *(i.e.,* "r") represents the portion of net income that is "plowed back" into the Company as a means of funding growth. The "sv" term is represented as:

$$\left(\frac{m}{b} - 1\right) x\ Growth\ rate\ in\ Common\ Shares \quad [3]$$

where $\frac{m}{b}$ is the Market-to-Book ratio.

In this form, the "sv" term reflects an element of growth as the product of (a) the growth in shares outstanding, and (b) that portion of the market-to-book ratio that exceeds unity. As shown in Exhibit RBH-2, all of the components of the Retention Growth estimate can be derived from data provided by Value Line.

**Q. PLEASE EXPLAIN HOW YOU APPLIED THE CONSTANT GROWTH DCF MODEL.**

A. I applied the DCF model to the proxy group of natural gas utility companies using the following inputs for the price and dividend terms:

1. The average daily closing prices for the 30-trading days, 90-trading days, and 180-trading days ended February 12, 2016, for the term $P_0$; and
2. The annualized dividend per share as of February 12, 2016, for the term $D_0$.

I then calculated my DCF results using the following growth terms:

1. The Zacks consensus long-term earnings growth estimates;
2. The First Call consensus long-term earnings growth estimates;
3. The Value Line long-term earnings growth estimates; and
4. An estimate of Retention Growth.

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

A. I calculated the proxy group mean high DCF result using the maximum Earnings Per Share ("EPS") growth rate as reported by Value Line, Zacks, First Call, and the retention growth estimate for each proxy group company in combination with the dividend yield for each of the proxy group companies. The proxy group mean high result then reflects the average maximum DCF result for the proxy group as a whole. I used a similar approach to calculate the proxy group mean low results, using instead the minimum growth rate as reported by Value Line, Zacks, First Call, and the retention growth estimate for each proxy group company.

**Q. WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF ANALYSES?**

A. My Constant Growth DCF results are summarized in Table 2, below (*see* also Exhibit RBH-1).

**Table 2: Summary of Constant Growth DCF Results**

| | *Mean Low* | *Mean* | *Mean High* |
|---|---|---|---|
| 30-Day Average | 8.14% | 9.36% | 11.08% |
| 90-Day Average | 8.24% | 9.46% | 11.18% |
| 180-Day Average | 8.38% | 9.61% | 11.32% |

*Multi-Stage DCF Model*

**Q. IS IT REASONABLE TO CONSIDER ANALYTICAL MODELS IN ADDITION TO THE CONSTANT GROWTH DCF MODEL?**

A. Yes. First, as noted earlier, it is both prudent and appropriate to use multiple methodologies in order to mitigate the effects of assumptions and inputs associated with any single approach. Second, the Constant Growth DCF model assumes that earnings, dividends and book value will grow at the same, constant rate in perpetuity; that the payout ratio will remain constant in perpetuity; that the P/E ratio will remain constant; and that the return required today will be the same return required every year in the future. However, those assumptions are not likely to hold. In particular, it is likely that over time, payout ratios will increase from their current levels. In addition, to the extent that long-term interest rates increase over the next few years, it is likely that the Cost of Equity also will increase. For these reasons, it is appropriate to consider more than one analytical model in estimating the ROE.

**Q. WHAT OTHER FORMS OF THE DCF MODEL HAVE YOU USED?**

A. To address the considerations underlying the Constant Growth form of the DCF model, discussed above, I also considered the Multi-Stage (three-stage)

Discounted Cash Flow Model. The Multi-Stage model, which is an extension of the Constant Growth form, enables the analyst to specify growth rates over three distinct stages (*i.e.*, time periods). As with the Constant Growth form of the DCF model, the Multi-Stage form defines the Cost of Equity as the discount rate that sets the current price equal to the discounted value of future cash flows. Unlike the Constant Growth form, however, the Multi-Stage model must be solved in an iterative fashion. As such, the Multi-Stage DCF model enables analysts to address the limiting, and likely unrealistic assumptions underlying the Constant Growth form of the model.

**Q. PLEASE DESCRIBE THE STRUCTURE OF YOUR MULTI-STAGE MODEL.**

A. As noted above, the model sets the subject company's stock price equal to the present value of future cash flows received over three "stages." In the first two stages, "cash flows" are defined as projected dividends. In the third stage, "cash flows" equal both dividends and the expected price at which the stock will be sold at the end of the period (*i.e.*, the "terminal price"). I calculated the terminal price based on the Gordon model, which defines the price as the expected dividend divided by the difference between the Cost of Equity (*i.e.*, the discount rate) and the long-term expected growth rate. In essence, the terminal price is defined by the present value of the remaining "cash flows" in perpetuity. In each of the three stages, the dividend is the product of the projected earnings per share and the expected dividend payout ratio. A summary description of the model is provided in Table 3 (below).

**Table 3: Multi-Stage DCF Model Structure**

| Stage | 0 | 1 | 2 | 3 |
|---|---|---|---|---|
| Cash Flow Component | Initial Stock Price | Expected Dividend | Expected Dividend | Expected Dividend + Terminal Value |
| Inputs | Stock Price<br>Earnings Per Share ("EPS")<br>Dividends Per Share ("DPS") | Expected EPS<br>Expected DPS | Expected EPS<br>Expected DPS | Expected EPS<br>Expected DPS<br>Terminal Value |
| Assumptions | 30-, 90-, and 180-day average stock price | EPS Growth Rate<br>Payout Ratio | Growth Rate Change<br>Payout Ratio Change | Long-term Growth Rate<br>Long-term Payout Ratio |

**Q. WHAT ARE THE ANALYTICAL BENEFITS OF YOUR THREE-STAGE MODEL?**

A. The primary benefits relate to the flexibility provided by the model's formulation. Since the model provides the ability to specify near, intermediate, and long-term growth rates, for example, it avoids the sometimes limiting assumption that the subject company will grow at the same, constant rate in perpetuity. In addition, by calculating the dividend as the product of earnings and the payout ratio, the model enables analysts to reflect assumptions regarding the timing and extent of changes in the payout ratio to reflect, for example, increases or decreases in expected capital spending, or transition from current payout levels to long-term expected levels. In that regard, because the model relies on multiple sources of earnings growth rate assumptions, it is not limited to a single source, such as

Value Line, for all inputs, and mitigates the potential bias associated with relying on a single source of growth estimates.[14]

The model also enables an assessment of the reasonableness of the inputs and results by reference to certain market-based metrics. For example, the stock price estimate can be divided by the expected earnings per share in the final year to calculate an average P/E ratio. Similarly, the terminal P/E ratio can be divided by the terminal growth rate to develop a Price to Earnings Growth ("PEG") ratio. To the extent that either the projected P/E or PEG ratios are inconsistent with either historical or expected levels, it may indicate incorrect or inconsistent assumptions within the balance of the model.

**Q. PLEASE SUMMARIZE YOUR INPUTS TO THE MULTI-STAGE DCF MODEL.**

A. I applied the Multi-Stage model to the proxy group described earlier in my Direct Testimony. My assumptions with respect to the various model inputs are described in Table 4 (below).

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

**Table 4: Multi-Stage DCF Model Assumptions**

| | Stage | | | |
|---|---|---|---|---|
| | **Initial** | **First** | **Transition** | **Terminal** |
| Stock Price | 30-, 90-, and 180-day average stock price as of February 12, 2016 | | | |
| Earnings Growth | 2014 actual EPS escalated by Period 1 growth rate | EPS growth as average of (1) Value Line; (2) Zacks; (3) First Call; (4) Retention Growth rates | Transition to Long-term GDP growth | Long-term GDP growth |
| Payout Ratio | | Value Line company-specific | Transition to long-term industry payout ratio | Long-term industry average payout ratio |
| Terminal Value | | | | Expected dividend in final year divided by solved Cost of Equity less long-term growth rate |

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

A. The long-term growth rate of 5.31 percent is based on the real GDP growth rate of 3.24 percent from 1929 through 2014, and an inflation rate of 2.01 percent. The GDP growth rate is calculated as the compound growth rate in the chain-weighted GDP for the period from 1929 through 2014.[15] The rate of inflation of 2.01 percent is an average of two components: (1) the compound annual forward rate starting in ten years (*i.e.*, 2025, which is the beginning of the terminal period) based on the 30-day average spread between yields on long-term nominal Treasury Securities and long-term Treasury Inflation Protected Securities, known as the "TIPS spread" of 1.82 percent;[16] and (2) the projected Blue Chip Financial Forecast of CPI for 2022 – 2026 of 2.20 percent.[17]

I averaged these two measures of inflation because nominal Treasury yields are related to inflation, which includes the effect of commodities such as oil, which may cause the current TIPS spread to somewhat understate long-term expected inflation. To account for that effect, I also considered the 2.20 percent long-term projected rate of inflation as provided by Blue Chip Financial Forecast.[18] As noted above, my long-term inflation rate, therefore, is the average of those two estimates, or 2.01 percent.

I also performed a series of analyses in which the terminal value is based on the current 30-day average P/E ratio for the proxy group.

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15 *See* Bureau of Economic Analysis, "Current-Dollar and 'Real' Gross Domestic Product," January 29, 2016 update.

16 *See* Board of Governors of the Federal Reserve System, "Table H.15 Selected Interest Rates."

17 *Blue Chip Financial Forecasts*, December 1, 2015, at 14.

18 *Blue Chip Financial Forecasts*, December 1, 2015, at 14.

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

A. As noted in Table 4, for the first two periods I relied on the first year and long-term projected payout ratios reported by Value Line for each of the proxy companies.[19] I then assumed that by the end of the second period (*i.e.*, the end of year 10), the payout ratio will converge to the long-term industry average of 67.67 percent.[20]

**Q. PLEASE SUMMARIZE THE RESULTS OF YOUR MULTI-STAGE DCF ANALYSES.**

A. Table 5a (below), (*see* also Exhibit RBH-3), presents the results of the Multi-Stage DCF analyses. The Multi-Stage DCF analysis produces a range of results from 8.96 percent to 10.07 percent. Table 5b, below, presents the results of the Multi-Stage DCF analyses using the current proxy group P/E ratio to calculate the terminal value. That analysis produces a range of results from 9.26 percent to 11.97 percent.

**Table 5a: Multi-Stage Discounted Cash Flow Model Results**

| | *Low* | *Mean* | *High* |
|---|---|---|---|
| 30-Day Average | 8.96% | 9.28% | 9.74% |
| 90-Day Average | 9.07% | 9.41% | 9.88% |
| 180-Day Average | 9.22% | 9.57% | 10.07% |

19 As reported in the Value Line Investment Survey as "All Div'ds to Net Prof." Please note that Value Line is a source frequently relied upon in rate proceedings, and is the only source that consistently provides intermediate-term payout ratio projections.

20 Source: Bloomberg Professional.

**Table 5b: Multi-Stage Discounted Cash Flow Model Results Current P/E Ratio**

| | *Low* | *Mean* | *High* |
|---|---|---|---|
| 30-Day Average | 9.26% | 10.09% | 11.24% |
| 90-Day Average | 9.56% | 10.40% | 11.56% |
| 180-Day Average | 9.96% | 10.80% | 11.97% |

*CAPM Analysis*

**Q. DID YOU UNDERTAKE ANY ANALYSES IN ADDITION TO THE DCF METHODS DISCUSSED ABOVE?**

A. Yes, I also applied the Capital Asset Pricing Model to estimate the Company's Cost of Equity.

**Q. PLEASE BRIEFLY DESCRIBE THE GENERAL FORM OF THE CAPM.**

A. The CAPM is a risk premium approach that estimates the Cost of Equity for a given security as a function of the risk-free return (to compensate for the time value of money), and a risk premium (to compensate investors for the non-diversifiable or "systematic" risk of that security). As shown in Equation [6], the CAPM is defined by four components, each of which theoretically must be a forward-looking estimate:

$$k = r_f + \beta(r_m - r_f) \quad [6]$$

where:

$k$ = the required market ROE;

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

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

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

In Equation [6], the term $(r_m - r_f)$ represents the Market Risk Premium. According to the theory underlying the CAPM, since unsystematic risk can be diversified away by adding securities to their investment portfolio, investors should be concerned only with systematic or non-diversifiable risk. Non-diversifiable risk is measured by the Beta coefficient, which is defined as:

$$\beta_j = \frac{\sigma_j}{\sigma_m} x \; \rho_{j,m} \quad [7]$$

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

**Q. WHAT ASSUMPTIONS REGARDING THE RISK-FREE RATE DID YOU INCLUDE IN YOUR CAPM ANALYSIS?**

A. Because utility assets are long-term investments and utility equities are long-duration securities, I used two different estimates of the risk-free rate: (1) the current 30-day average yield on 30-year Treasury bonds (*i.e.*, 2.79 percent); and (2) the near-term (that is, through the second calendar quarter of 2017) projected 30-year Treasury yield (*i.e.*, 3.35 percent).[21]

[21] *See*, Blue Chip Financial Forecasts, Vol. 35, No. 2, February 1, 2016, at 2.

**Q. PLEASE DESCRIBE YOUR *EX-ANTE* (*I.E.* FORWARD-LOOKING) APPROACH TO ESTIMATING THE MARKET RISK PREMIUM.**

A. The approach is based on the market-required return, less the current 30-year Treasury bond yield. To do so, I relied on projected Dividend Yield and EPS estimates from two sources: (1) Bloomberg; and (2) Value Line. For both Bloomberg and Value Line, I calculated the market capitalization weighted expected dividend yield (using the same one-half growth rate assumption described earlier), and combined that amount with the market capitalization weighted projected earnings growth rate to arrive at the market capitalization weighted average DCF result. I then subtracted the current 30-year Treasury yield from that amount to arrive at the market DCF-derived *ex-ante* Market Risk Premium estimate. The results of those calculations are provided in Exhibit RBH-4.

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

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

**Q. WHAT BETA COEFFICIENTS DID YOU USE IN YOUR CAPM ANALYSIS?**

A. As shown in Exhibit RBH-5, I included the Beta coefficients reported by two sources: Bloomberg and Value Line. For both sources, I relied on the average of the reported Beta coefficient for the proxy companies. Both services adjust their calculated (or "raw") Beta coefficients to reflect the tendency of the Beta coefficient to regress to the market mean of 1.00, although Value Line calculates the Beta coefficient over a five-year period, whereas Bloomberg's calculation is based on two years of data.

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

A. The results of my CAPM analysis are summarized in Table 6 (below; *see also*, Exhibit RBH-6).

**Table 6: Summary of CAPM Results**

| | *Bloomberg Derived Market Risk Premium* | *Value Line Derived Market Risk Premium* |
|---|---|---|
| *Average Bloomberg Beta Coefficient* | | |
| Current 30-Year Treasury (2.79%) | 9.55% | 9.13% |
| Near-Term Projected 30-Year Treasury (3.35%) | 10.11% | 9.69% |
| *Average Value Line Beta Coefficient* | | |
| Current 30-Year Treasury (2.79%) | 10.86% | 10.35% |
| Near-Term Projected 30-Year Treasury (3.35%) | 11.42% | 10.92% |

*Bond Yield Plus Risk Premium Approach*

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

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

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

A. As suggested above, I first defined the Risk Premium as the difference between the authorized ROE and the then-prevailing level of long-term (*i.e.*, 30-year) Treasury yield. I then gathered data for the 1,031 natural gas rate proceedings between January, 1980 and February 12, 2016 reported by Regulatory Research Associates ("RRA").[22] In addition to the authorized ROE, I calculated the average period between the filing of the case and the date of the final order (the "lag period"). To reflect the prevailing level of interest rates during the pendency of the proceedings, I calculated the average 30-year Treasury yield over the average lag period (approximately 188 days). Because the data cover a number of economic cycles,[23] the analysis also may be used to assess the stability of the Equity Risk Premium. Prior research, for example, has shown that the Equity Risk Premium is inversely related to the

[22] Excluding limited issue rate riders.

[23] National Bureau of Economic Research, U.S. Business Cycle Expansion and Contractions.

level of interest rates.[24] That analysis is particularly relevant given the historically low level of current Treasury yields.

**Q. HOW DID YOU MODEL THE RELATIONSHIP BETWEEN INTEREST RATES AND THE EQUITY RISK PREMIUM?**

A. The basic method used was regression analysis, in which the observed Equity Risk Premium is the dependent variable, and the average 30-year Treasury yield is the independent variable. Because the analytical period includes interest rates and authorized ROEs that during one period (*i.e.*, the 1980's) are quite high and another (the post-Lehman bankruptcy period) that are quite low relative to the long-term historical average, I used the semi-log regression, in which the Equity Risk Premium is expressed as a function of the natural log of the 30-year Treasury yield:

$$RP = \alpha + \beta(\mathrm{LN}(T_{30})) \quad [8]$$

As shown on Chart 1 (below), the semi-log form is useful when measuring an absolute change in the dependent variable (in this case, the Risk Premium) relative to a proportional change in the independent variable (the 30-year Treasury yield).

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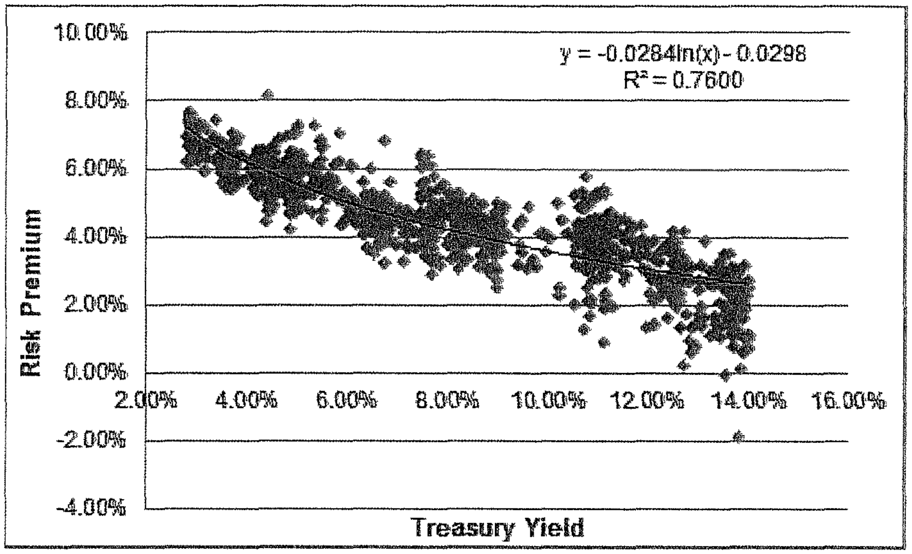
[24] *See*, for example, Robert S. Harris and Felicia C. Marston, *Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts*, Financial Management, Summer 1992, at 63-70; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *The Risk Premium Approach to Measuring a Utility's Cost of Equity*,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

**Chart 1: Equity Risk Premium**




As Chart 1 demonstrates, over time there has been a statistically significant, negative relationship between the 30-year Treasury yield and the Equity Risk Premium. Consequently, simply applying the long-term average Equity Risk Premium of 4.52 percent (*see* Exhibit RBH-7) would significantly under-state the Cost of Equity; assuming the current projected 30-year Treasury yield of 2.79 percent, for example, the simple average Equity Risk Premium would suggest an ROE of 7.31 percent. That, of course, is well below any reasonable estimate. Based on the regression coefficients in Chart 1, however, the implied ROE ranges from 9.98 percent to 10.39 percent (*see* Table 7, below; Exhibit RBH-7).

**Table 7: Bond Yield Plus Risk Premium Results**

| *Treasury Yield* | *ROE Estimate* |
|---|---|
| Current 30-Year Treasury (2.79%) | 9.98% |
| Near Term Projected 30-Year Treasury (3.35%) | 10.02% |
| Long Term Projected 30-Year Treasury (4.65%) | 10.39% |

## VI. BUSINESS RISKS AND OTHER CONSIDERATIONS

**Q. WHAT ADDITIONAL INFORMATION DID YOU CONSIDER IN ASSESSING THE ANALYTICAL RESULTS NOTED ABOVE?**

A. Because the analytical methods discussed above provide a range of estimates, there are additional factors that should be taken into consideration when establishing a reasonable range for the Company's Cost of Equity. In particular, those factors include: (1) the combined dilutive effects of operating expense increases and increasing capital investments on the Company's operating income; (2) the Company's relatively high capital expenditure program; (3) the Company's relatively small size; (4) the effect of the proposed infrastructure recovery mechanism on the Company's Cost of Equity; and (5) the regulatory environment in which the Company operates. I also have considered equity flotation costs, but have not made a specific adjustment for the effect of those costs.

*Operating Income Dilution*

**Q. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING THE OPERATING INCOME DILUTION THAT PSNC FACES AND ITS EFFECT ON THE COST OF EQUITY.**

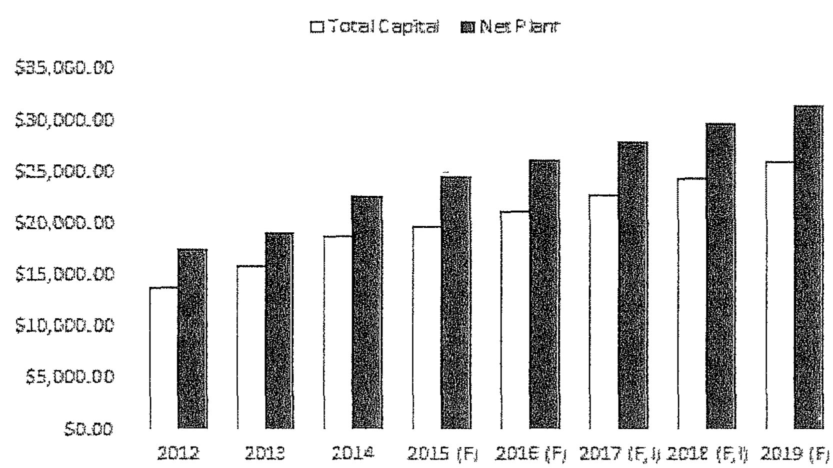
A. As discussed in more detail below, whereas many utilities can rely on operations and maintenance ("O&M") expense reductions to bridge the gap between the revenues produced by rates and the revenues required to replace non-revenue producing plant, that is not the case for PSNC. That is, PSNC cannot rely on profitability generated through reduced O&M costs to fund its infrastructure replacements, or to sustain its financial integrity while those investments are being undertaken.

This presents considerable financial challenges especially for companies that, like PSNC, have a continuing need to invest significant amounts of capital in non-revenue producing infrastructure. The earnings pressure becomes even more acute when the rate of capital expenditures accelerates, as currently is the case for PSNC.

**Q. IS THE NEED FOR INCREASED CAPITAL INVESTMENT IN ITS SYSTEM UNIQUE TO PSNC?**

A. No. Value Line has recognized that the natural gas utility industry likely is in a period of increased capital investment and related funding requirements. In that regard, Value Line expects significant increases in both Net Plant and Total Capital within the Proxy Group (see Chart 2, below).

**Chart 2: Proxy Group Net Plant and Total Capital, 2012 – 2019 (in millions)[25]**

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[25] Source. Value Line. F: Forecast; I: Interpolated

Value Line's perspective that Total Capital must increase to support additional investment is an important consideration. The ability to efficiently acquire the capital needed to fund the growing level of infrastructure investments is dependent on the ability to recover that investment in a timely manner. As noted by the American Gas Association:

> Timely cost recovery of prudently incurred safety and reliability investments is of utmost importance to the financial stability of natural gas utilities. Because traditional ratemaking allows recovery of infrastructure investments only following approval in a rate case, there is often a multi-year delay before the recovery of such investments begins. Investments that are recovered long after they are incurred cause the utility to bear carrying costs without the opportunity to recover these prudent expenditures. Credit agencies criticize companies with lag in the recovery of their costs and assign a lower credit rating to such utilities that ultimately translates into higher rates for customers. The only alternative is to file a rate case each year, which is a costly activity that also leads to higher rates for customers.[26]

**Q. HAS PSNC'S RATE OF CAPITAL INVESTMENT BEEN CONSISTENT WITH OTHER NATURAL GAS DISTRIBUTION UTILITIES?**

A. Yes, it has. Since 2008, PSNC has invested in its system at a pace that is highly consistent with that of its peers (*see* Chart 3, below), and as discussed below, is expected to continue at a relatively high level compared to the proxy group.

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[26] American Gas Association, *Infrastructure Cost Recovery Update*, June, 2012, at 2.

**Chart 3: Cumulative Capital Investments (2008 – 2014, $000)**[27]


PSNC's ability to fund its invested capital with internally generated cash, however, is complicated by the nature of those investments. The Company's increasing capital expenditures are due largely to federal and state regulations; they are not just associated with new customers that may bring additional revenues.

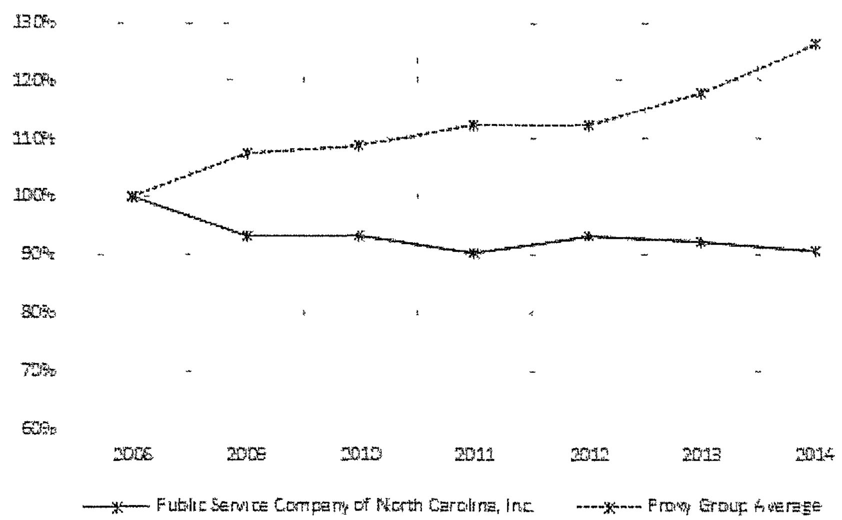
**Q. IS IT LIKELY THAT THE COMPANY WOULD BE ABLE TO INCREASE THE CASH FLOW AVAILABLE TO FUND CAPITAL INVESTMENTS BY MATERIALLY REDUCING ITS OPERATING EXPENSES?**

A. It does not appear so. The Company continuously scrutinizes O&M expenses, and has implemented cost-saving initiatives such as shifting toward mobile meter reading, and using mobile data systems to more efficiently dispatch service crews. In doing so, PSNC has been able to control increases in

[27] Source SNL Financial

operating expenses. In fact, relative to its peers, the Company's O&M expenses have grown at a considerably slower pace (*see* Chart 4, below).

**Chart 4: Cumulative Change in Total Operating Expenses (2008 – 2014)**[28]




**Q. HAS THE COMPANY'S ABILITY TO CONTROL ITS OPERATING EXPENSES SIGNIFICANTLY INCREASED ITS PROFITABILITY?**

A. No, it has not. Despite its ability to contain operating expenses, the Company's Operating Margin has been well below that of its peers. That is the case even though PSNC has contained the growth in operating expenses. That finding is important since (as discussed below) Operating Margin is an important factor in the Company's ability to realize a reasonable rate of return.

[28] Source SNL Financial

**Q. PLEASE NOW SUMMARIZE HOW INCREASING CAPITAL INVESTMENTS AND THE COMPANY'S COST CONTAINMENT INITIATIVES HAVE COMBINED TO AFFECT ITS OVERALL RATE OF RETURN.**

A. The combined effect of those factors can be seen in the following relationships:

**Figure 1: Factors Determining Return on Rate Base**

$$\textit{Operating Margin} \times \textit{Asset Turnover} = \textit{Return on Rate Base}$$

$$\downarrow$$

$$\frac{\textit{Operating Income}}{\textit{Non} - \textit{Gas Revenue}} \times \frac{\textit{Non} - \textit{Gas Revenue}}{\textit{Rate Base}} = \frac{\textit{Operating Income}}{\textit{Rate Base}}$$

Figure 1 notes that in general, the overall Return on Rate Base depends on: (1) the percentage of margin generated by each dollar of revenue (*i.e.*, the Operating Margin); and (2) the dollars of revenue generated by each dollar of assets (*i.e.*, the Asset Turnover). As Figure 1 also suggests, the Company's diminished return is directly related to increased non-growth related capital investments, which further reduce the Asset Turnover. In a very real sense, the Company's profitability has been squeezed by high investments in non-growth assets, despite its continuing focus on operating expense control.

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**Q. HOW DOES PSNC'S PROPOSED INFRASTRUCTURE RECOVERY MECHANISM AFFECT THE FACTORS THAT YOU HAVE DISCUSSED ABOVE?**

A. The Company's proposed infrastructure recovery mechanism enables the timelier recovery of costs associated with capital investments, helping to contain the dilutive effect of increased, non-growth related capital investments. If the infrastructure recovery mechanism is not approved, the Company will face higher capital costs and experience increasing pressure on its credit profile.

**Q. WHAT CONCLUSIONS DO YOU DRAW FROM THE ANALYSES DISCUSSED ABOVE?**

A. In essence, the need to invest increasing amounts of capital in non-revenue producing assets, without the ability to fund those investments through significant reductions in operating costs, has prevented the Company from earning a reasonable rate of return. That has been the case despite PSNC's continuing focus on operating cost control, and the adoption of Commission-approved regulatory mechanisms. As a practical matter, the inability to earn its authorized return weakens the Company's financial profile and, therefore, its ability to compete for capital with other natural gas utilities. Absent a reasonable authorized ROE, it is difficult to see how the Company will be able to mitigate those factors.

*Capital Expenditures*

**Q. PLEASE SUMMARIZE PSNC'S CAPITAL EXPENDITURE PLANS.**

A. The Company's capital expenditure program is significant. As discussed in more detail below, that investment represents a significant increase over its existing net plant. As also discussed below, in the context of existing net plant, the Company's capital investment plans are substantial relative to the proxy companies' projected capital expenditures. PSNC currently plans to invest approximately $694 million of additional capital over the period including 2016-2018.[29]

**Q. HOW DO PSNC'S EXPECTED CAPITAL EXPENDITURES COMPARE TO THE PROXY GROUP?**

A. In order to reasonably make that comparison, as shown in Exhibit RBH-8, I calculated the ratio of expected capital expenditures to net plant for each of the companies in the proxy group. For the projected period from 2016-2018, I performed that calculation using the Company's projected capital expenditures over this period as compared to its total net plant, property, and equipment as of December 31, 2014. As shown in Exhibit RBH-8, relative to the proxy group, PSNC's ratio of projected capital expenditures to net plant is above the proxy group average and is higher than all but one proxy company.

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[29] *See* Direct Testimony of Jimmy E. Addison.

**Q. WHY IS IT IMPORTANT FOR A UTILITY TO BE ALLOWED THE OPPORTUNITY TO EARN A RETURN THAT IS ADEQUATE TO ATTRACT CAPITAL AT REASONABLE TERMS?**

A. The allowed ROE should enable the subject utility to finance capital expenditures and working capital requirements at reasonable rates, and to maintain its financial integrity in a variety of economic and capital market conditions. As discussed throughout my Direct Testimony, a return that is adequate to attract capital at reasonable terms enables the utility to provide safe, reliable service while maintaining its financial soundness. To the extent a utility is provided the opportunity to earn its market-based cost of capital, neither customers nor shareholders should be disadvantaged.

The ratemaking process is predicated on the principle that, in order for investors and companies to commit the capital needed to provide safe and reliable utility services, the utility must have the opportunity to recover the return of, and the market-required return on, invested capital. Regulatory commissions recognize that since utility operations are capital intensive, regulatory decisions should enable the utility to attract capital at reasonable terms; doing so balances the long-term interests of the utility and its ratepayers.

Further, the financial community carefully monitors current and expected financial condition of utility companies, as well as the regulatory environment in which those companies operate. In that respect, the regulatory environment is one of the most important factors considered in both debt and equity investors' assessments of risk. That is especially important during periods in which the utility expects to make significant capital investments and, therefore, may require access to capital markets.

**Q. HOW DO THESE CONSIDERATIONS APPLY TO PSNC AND ITS CAPITAL SPENDING PLANS?**

A. It is clear that PSNC's capital expenditure program is significant. It also is clear that the financial community recognizes the need for timely cost recovery for those capital expenditures. From a credit perspective, the additional pressure on cash flows associated with high levels of capital expenditures exerts corresponding pressure on credit metrics and, therefore, credit ratings.

**Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE EFFECT OF PSNC'S CAPITAL INVESTMENT PLAN ON ITS RISK PROFILE AND COST OF CAPITAL?**

A. Relative to the proxy group, PSNC's capital expenditure program is above average and will place additional pressure on its cash flows, making regulatory support more important in terms of PSNC's ability to finance these expenditures and earn a reasonable return on its planned investments. As such, the Commission's decision in this proceeding will have a direct bearing on PSNC's ability to maintain its financial profile, and its ability to access the capital market at reasonable cost rates.

*Small Size Premium*

**Q. HOW DOES PSNC COMPARE IN SIZE TO THE PROXY COMPANIES?**

A. For the purpose of determining the Company's Cost of Equity in the context of the Cost of Equity estimates discussed in Section V, the appropriate comparison is the Company's size relative to the proxy companies. PSNC's gas utility operations are significantly smaller than the average for the proxy group companies both in terms of number of customers and annual revenues. Exhibit RBH-9 estimates the implied market capitalization for PSNC (*i.e.*, the implied market capitalization of PSNC's jurisdictional gas operations). That is, because PSNC's jurisdictional gas operations do not compose the entirety of the Company, an estimated stand-alone market capitalization for PSNC's jurisdictional gas operations must be calculated. The implied market capitalization of PSNC is calculated by applying the median market-to-book ratio for the proxy group of 1.85 to the Company's implied total common equity of $508 million.[30] The implied market capitalization based on that calculation is $949 million, which is less than 20.00 percent of the proxy group median of $2.72 billion.

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

A. Both the financial and academic communities have long accepted the proposition that the Cost of Equity for small firms is subject to a "size

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[30] Equals the Company's proposed rate base multiplied by the proposed equity ratio (949,341,460 x 53.50%).

effect."[31] While empirical evidence of the size effect often is based on studies of industries beyond regulated utilities, utility analysts also have noted the risks associated with small market capitalizations. Specifically, Ibbotson Associates noted: "For small utilities, investors face additional obstacles, such as a smaller customer base, limited financial resources, and a lack of diversification across customers, energy sources, and geography. These obstacles imply a higher investor return."[32] Small size, therefore, leads to two categories of increased risk for investors: (1) liquidity risk (*i.e.*, the risk of not being able to sell one's shares in a timely manner due to the relatively thin market for the securities); and (2) fundamental business risks.

**Q. HOW DOES THE COMPARATIVELY SMALL SIZE OF PSNC AFFECT ITS BUSINESS RISKS RELATIVE TO THE PROXY GROUP OF COMPANIES?**

A. In general, smaller companies are less able to withstand adverse events that affect their revenues and expenses. Capital expenditures for non-revenue producing investments such as system maintenance and replacements will put proportionately greater pressure on customer costs and affect the company's risk profile. These risks affect the return required by investors for smaller companies.

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31 *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.

32 Michael Annin, *Equity and the Small-Stock Effect*, Public Utilities Fortnightly, October 15, 1995.

**Q. HAVE YOU CONSIDERED THE COMPARATIVELY SMALL SIZE OF PSNC IN YOUR ESTIMATED RETURN ON COMMON EQUITY?**

A. Yes. Although I have quantified the small size effect, rather than proposing a specific premium, I have considered the small size of PSNC in my assessment of business risks in order to determine where, within a reasonable range of returns, PSNC's required ROE appropriately falls.

**Q. HOW DID YOU ESTIMATE THE SIZE PREMIUM FOR PSNC?**

A. In its *2015 Ibbotson SBBI Market Report*, Morningstar Inc. ("Morningstar") presents its calculation of the size premium for deciles of market capitalizations relative to the S&P 500 Index. An additional estimate of the size premium associated with PSNC, therefore, is the difference in the Morningstar size risk premiums for the proxy group median market capitalization relative to the implied market capitalization for PSNC.

As shown on Exhibit RBH-9, based on recent market data, the median market capitalization of the proxy group was approximately $2.72 billion, which corresponds to the sixth decile of Morningstar's market capitalization data. Based on the Morningstar analysis, that decile has a size premium of 1.63 percent (or 163 basis points). The implied market capitalization for PSNC is approximately $938 million, which falls within the eighth decile and corresponds to a size premium of 2.18 percent (or 218 basis points). The difference between those size premiums is 55 basis points (2.18 percent – 1.63 percent).

*Infrastructure Recovery Mechanism*

**Q. PLEASE DESCRIBE THE COMPANY'S PROPOSED INFRASTRUCTURE RECOVERY MECHANISM.**

A. As discussed in Company Witnesses George B. Ratchford's and Candace A. Paton's direct testimony, PSNC is proposing to implement an Integrity Management Rider designed to recover the return of and on prudently incurred capital investments associated with Federal pipeline safety requirements.

**Q. ARE INFRASTRUCTURE RECOVERY MECHANISMS COMMON WITHIN THE INDUSTRY IN GENERAL?**

A. Yes, they are. As the RRA notes, infrastructure investments have long been a focus for natural gas local distribution companies ("LDCs") in the United States.[33] In some parts of the U.S., LDC infrastructure is nearly as old as the community it was constructed to serve, and consists of materials that degrade over an extended period of time. While these facilities continue to provide adequate service, they require more extensive integrity management efforts, including more frequent surveys and efforts to maintain their condition for service.[34]

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33 Regulatory Research Associates, "RRA study finds that two-thirds of states allow expedited recovery of gas infrastructure spending," July 1, 2015.

34 Yardley Associates, *Gas Distribution Infrastructure: Pipeline Replacement and Upgrades – Cost Recovery Issues and Approaches,* prepared for the American Gas Foundation, July 2012, at 3.

Advances in modern technology and several high-profile incidents[35] suggest that extensive portions of gas utility infrastructure need to be replaced at an accelerated pace in the coming years in order to prevent similar occurrences in the future.[36]

In 2011, the Department of Transportation ("DOT"), which regulates the safety of certain gas pipelines, announced a "Pipeline Safety Action Plan," calling for industry stakeholders to pursue policies that support the accelerated replacement of at-risk LDC infrastructure with more resilient materials, including protected steel and plastic.[37] According to the DOT's Pipeline and Hazardous Materials Safety Administration ("PHMSA"), which regulates pipeline safety, roughly eight percent of the nation's 1.2 million miles of gas distribution mains is made of material that the industry opines is ripe for replacement.[38]

The DOT's plan calls for state utility commissions to adopt constructive ratemaking policies that would support the DOT's plan. Although many regulatory commissions previously had approved replacement plans for the utilities under their purview and adopted supportive ratemaking

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[35] *See for example*, the 2014 explosion in East Harlem, New York caused by a gas leak in an 1887-vintage main, and the 2010 explosion in San Bruno, California caused by a compromised pipeline.

[36] Regulatory Research Associates, RRA Topical Special Report "Gas Utility Infrastructure Investments: the Who, What, When, Where, How, and Why," July 1, 2015, at 1.

[37] U.S. Department of Transportation Call to Action to Improve the Safety of the Nation's Energy Pipeline System, April 4, 2011, at 2-3. http://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/110404%20Action%20Plan%20Executive%20Version%20_2.pdf

[38] 2014 Gas Distribution Annual Data, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation.

practices to address the related costs, the DOT's plan prompted regulators in other jurisdictions to give the issue increased attention.[39]

Because infrastructure replacement is necessary to maintain safe and reliable distribution systems, public utility commissions across the U.S. have identified the need for non-traditional cost recovery mechanisms. Those mechanisms, whose principal purpose is to reduce regulatory lag, may be classified into three broad categories: (1) infrastructure cost trackers; (2) infrastructure base rate surcharges; and (3) deferred regulatory assets. Timely cost recovery is an essential element of replacement programs because, unlike investments that connect new customers and load, replacement facilities do not lead to increased revenues that offset investment costs. Although utilities, regulatory commissions and other stakeholders traditionally have relied on base rate cases to provide cost recovery of capital expenditures, increasing proportions of non-revenue producing assets and an ongoing focus on operating efficiency has made the timely recovery of such investments through base increasingly difficult.[40]

As a 2012 Yardley Associates report (the "Yardley Report") noted, new recovery mechanisms also have several valuable benefits related to efforts to address safety and reliability concerns associated with leak-prone elements of distribution systems including:

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[39] Regulatory Research Associates, RRA Topical Special Report, *Gas Utility Infrastructure Investments: the Who, What, When, Where, How, and Why*, July 1, 2015, at 1-2.

[40] Yardley Associates, *Gas Distribution Infrastructure: Pipeline Replacement and Upgrades – Cost Recovery Issues and Approaches*, prepared for the American Gas Foundation, July 2012, at ES-2.

- Eliminating disincentives to the efficient deployment of capital for safety and reliability through timely cost recovery;
- Enabling accelerated investment in infrastructure replacement and enhancement to achieve benefits more rapidly;
- Providing appropriate, timely, and effective regulatory oversight of LDC initiatives to replace and upgrade important infrastructure; and
- Allowing LDCs to reduce investment costs through broad scale, multi-year commitments that lead to maximum efficiency in managing workflow, reduced outside contractor costs, and better coordination with municipalities.[41]

As further noted in the Yardley Report, cost recovery mechanisms complement rather than substitute for the base rate case process, applying the same fundamental cost-of-service ratemaking principles. Thus, they are designed to yield rates that are just and reasonable and recover prudently incurred costs, including a return on investment. Timely recovery helps preserve the matching principle as the incremental revenues are calculated to recover the incremental costs attributable to the infrastructure investments that occur after the conclusion of the test year relied upon to design base rates.[42]

In summary, gas infrastructure replacement cost recovery mechanisms serve an important public policy role by encouraging replacement of old pipeline facilities which may have degraded over time, and therefore allow gas utilities to continue to provide safe and reliable service.

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[41] *Ibid.* at 15.
[42] *Ibid.* at 16.

**Q. ARE INFRASTRUCTURE RECOVERY MECHANISMS COMMON AMONG THE PROXY COMPANIES AS WELL?**

A. Yes, they are. Exhibit RBH-10 provides a summary of infrastructure recovery mechanisms currently in effect at each natural gas utility subsidiary of the proxy companies. As Exhibit RBH-10 demonstrates, all of the proxy companies employ infrastructure recovery mechanisms similar to that proposed by the Company.

**Q. HOW HAVE YOU REFLECTED THAT INFORMATION IN YOUR ASSESSMENT OF THE COMPANY'S COST OF EQUITY?**

A. First, my analyses and conclusions recognize that developing the Cost of Equity necessarily is a comparative assessment. As such, even if it were the case that infrastructure recovery mechanisms mitigate "risk," they only would affect the Cost of Equity if: (1) the effect of the mechanism was to reduce risk below the levels faced by the subject company's peers in the proxy group; and (2) investors knowingly reduced their return requirements for the Company as a direct consequence of the mechanisms. The first analytical step, therefore, is to understand whether infrastructure recovery mechanisms are in place at the proxy companies.

I have addressed the question of the extent to which infrastructure recovery mechanisms are in place at comparable companies in Exhibit RBH-10. There, I note that all of the seven proxy companies have such mechanisms in place in at least one jurisdiction. Because infrastructure recovery mechanisms are so common among natural gas distribution utilities, there is no reason to believe that by the approval of an infrastructure recovery mechanism, the Company is less risky than its peers.

With respect to infrastructure cost recovery, such as the Company's proposed infrastructure recovery mechanism, absent the timely recovery of infrastructure costs, the additional investment will dilute earnings and cash flow, and put further pressure on the ability to earn authorized rates of return. The only alternative to infrastructure cost recovery mechanisms is more frequent rate filings, a costly alternative that would increase rates for customers.

Although capital investment recovery mechanisms accelerate the recovery of certain costs, utilities continue to face significant risks associated with incomplete cost recovery due to factors such as inflation in O&M expenses, the need for additional projects as a result of the safety-related assessments, and changes in costs that are beyond the Company's control (due to permitting, population density, material prices, and other factors). I therefore do not believe it would be appropriate to reduce the Company's ROE in connection with its proposed infrastructure recovery mechanism.

***Regulatory Environment***

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

A. The regulatory environment can significantly affect both the access to, and cost of, capital in several ways. The proportion and cost of debt capital available to utility companies are influenced by the rating agencies' assessment of the regulatory environment. In that regard, the Company's credit rating and outlook depend substantially on the extent to which rating agencies view the regulatory environment as credit supportive, or not. In fact, Moody's finds the regulatory environment to be so important that 50.00 percent of the factors that weigh in the Company's ratings determination are determined by the nature of regulation.[43] Similarly, Standard & Poor's has noted that:

> The assessment of regulatory risk is perhaps the most important factor in Standard & Poor's Ratings Services' analysis of a U.S. regulated, investor-owned utility's business risk. Each of the other four factors we examine--markets, operations, competitiveness, and management--can affect the quality of the regulation a utility experiences, but we believe the fundamental regulatory environment in the jurisdictions in which a utility operates often influences credit quality the most.[44]

The regulatory environment is therefore one of the most important issues considered by both debt and equity investors in assessing the risks and prospects of utility companies. From the perspective of debt investors, the authorized return should enable the Company to generate the cash flow needed to meet its near-term financial obligations, make the capital investments needed to maintain and expand its system, and maintain sufficient levels of liquidity to fund unexpected events.

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[43] *See* Moody's Investors Service, *Rating Methodology; Regulated Gas and Electric Utilities*, December 23, 2013, at 6.

[44] Standard & Poor's, *Utilities: Assessing U.S. Utility Regulatory Environments*, November 15, 2011.

Moreover, because fixed income investors have many investment alternatives, even within a given market sector, the Company's financial profile must be adequate on a relative basis to ensure its ability to attract capital under a variety of economic and financial market conditions. From the perspective of equity investors, the authorized return must be adequate to provide a risk-comparable return on the equity portion of the Company's capital investments.

**Q. AS A POINT OF REFERENCE, IS NORTH CAROLINA GENERALLY CONSIDERED A CONSTRUCTIVE REGULATORY JURISDICTION?**

A. Yes, it is. RRA provides an assessment of the extent to which regulatory jurisdictions are constructive, or not. As RRA explains, less constructive environments are associated with higher levels of risk:

> RRA maintains three principal rating categories, Above Average, Average, and Below Average, with Above Average indicating a relatively more constructive, lower-risk regulatory environment from an investor viewpoint, and Below Average indicating a less constructive, higher-risk regulatory climate. Within the three principal rating categories, the numbers 1, 2, and 3 indicate relative position. The designation 1 indicates a stronger (more constructive) rating; 2, a mid range rating; and, 3, a weaker (less constructive) rating within each higher-level category. Hence, if you were to assign numeric values to each of the nine resulting categories, with a "1" being the most constructive from an investor viewpoint and a "9" being the least constructive from an investor viewpoint, then Above Average/1 would be a "1" and Below Average/3 would be a "9."[45]

[45] Regulatory Research Associates, *Regulatory Focus*, State Regulatory Evaluations October 28, 2015, at 3.

North Carolina is ranked "Average/1," which places it in the top one-third of the jurisdictions ranked by RRA.[46]

**Q. HOW DID YOU TAKE THOSE RANKINGS INTO CONSIDERATION IN REVIEWING RECENTLY AUTHORIZED RETURNS?**

A. I applied RRA's rankings to the jurisdictions reported in Exhibit RBH-11 for all natural gas utility rate cases reported since 2013. My principal observation is that the median ROE for companies operating in jurisdictions that are considered "Above Average," which is only one rank higher than North Carolina, was 10.20 percent.[47]

**Q. WHAT CONCLUSIONS DO YOU DRAW FROM THAT DATA?**

A. First, authorized ROEs tend to be correlated with the degree of regulatory supportiveness in that utilities in jurisdictions considered to be more supportive tend to be authorized somewhat higher returns. Similarly, utilities with higher credit ratings tend to be authorized higher returns. Given the need for capital-intensive utilities to access external capital when needed, regardless of market conditions, such support is an important consideration to both debt and equity investors.

Second, my recommended range (10.00 percent to 10.75 percent) is well within the range of returns authorized in constructive regulatory jurisdictions. Given the increase in market-based measures of risk discussed in the following section of my Direct Testimony, I believe that my

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46 Regulatory Research Associates, accessed March 9, 2016.

47 The average authorized ROE in jurisdictions ranked Average/1 was 10.00 percent.

recommendation is consistent with observable data considered by investors as they arrive at their return requirements.

*Flotation Costs*

**Q. WHAT ARE FLOTATION COSTS?**

A. Flotation costs are the expenses incurred in connection with the sale of new shares of equity. As discussed below, such costs include expenditures for the preparation, filing, and underwriting of common equity offerings.

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

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

**Q. ARE FLOTATION COSTS PART OF A UTILITY'S INVESTED COSTS OR PART OF THE UTILITY'S EXPENSES?**

A. Flotation costs are part of the invested costs of the utility, which are properly reflected on the balance sheet under "paid in capital." They are not current expenses, and therefore, are not reflected on the income statement. Rather, like investments in rate base or the issuance costs of long-term debt, flotation costs are incurred over time. As a result, the great majority of flotation costs are incurred prior to the test year, remain part of the cost structure that exists during the test year and beyond, and should be recognized for ratemaking purposes. Therefore, recovery of flotation costs is appropriate even if no new issuances are planned in the near future because failure to allow such cost recovery may deny PSNC the opportunity to earn its required rate of return in the future.

**Q. IS THE NEED TO CONSIDER FLOTATION COSTS ELIMINATED BECAUSE PSNC IS A WHOLLY-OWNED SUBSIDIARY OF SCANA?**

A. No. Although the Company is a wholly-owned subsidiary of SCANA, it is appropriate to consider flotation costs because wholly owned subsidiaries receive equity capital from their parents and provide returns on the capital that roll up to the parent, which is designated to attract and raise capital based on the returns of those subsidiaries. To deny recovery of issuance costs associated with the capital that is invested in the subsidiaries ultimately would penalize the investors that fund the utility operations and would inhibit the utility's ability to obtain new equity capital at a reasonable cost. This is important for companies such as PSNC that are planning continued capital expenditures in the near term, and for which access to capital (at reasonable cost rates) to fund such required expenditures will be critical.

**Q. DO THE DCF AND CAPM MODELS ALREADY INCORPORATE INVESTOR EXPECTATIONS OF A RETURN IN ORDER TO COMPENSATE FOR FLOTATION COSTS?**

A. No. The models used to estimate the appropriate ROE assume no "friction" or transaction costs, as these costs are not reflected in the market price (in the case of the DCF model) or risk premium (in the case of the CAPM and the Bond Yield Plus Risk Premium model).

**Q. IS THE NEED TO CONSIDER FLOTATION COSTS RECOGNIZED BY THE ACADEMIC AND FINANCIAL COMMUNITIES?**

A. Yes. The need to reimburse investors for equity issuance costs is justified by the academic and financial communities in the same spirit that investors are reimbursed for the costs of issuing debt. This treatment is consistent with the philosophy of a fair rate of return. As explained by Dr. Shannon Pratt:

> Flotation costs occur when a company issues new stock. The business usually incurs several kinds of flotation or transaction costs, which reduce the actual proceeds received by the business. Some of these are direct out-of-pocket outlays, such as fees paid to underwriters, legal expenses, and prospectus preparation costs. Because of this reduction in proceeds, the business's required returns must be greater to compensate for the additional costs. Flotation costs can be accounted for either by amortizing the cost, thus reducing the net cash flow to discount, or by incorporating the cost into the cost of equity capital. Since flotation costs typically are not applied to operating cash flow, they must be incorporated into the cost of equity capital.[48]

**Q. HAVE YOU ESTIMATED THE EFFECTS OF FLOTATION COSTS?**

A. Yes, I modified the DCF calculation to derive the dividend yield that would reimburse investors for direct issuance costs. Based on the weighted average issuance costs shown in Exhibit RBH-12, a reasonable estimate of flotation costs is approximately 0.13 percent (13 basis points).

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

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**Q. ARE YOU PROPOSING TO ADJUST YOUR RECOMMENDED ROE BY 13 BASIS POINTS TO REFLECT THE EFFECT OF FLOTATION COSTS ON PSNC'S ROE?**

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

## VII. ECONOMIC CONDITIONS IN NORTH CAROLINA

**Q. DID YOU CONSIDER THE ECONOMIC CONDITIONS IN NORTH CAROLINA IN ARRIVING AT YOUR ROE RECOMMENDATION?**

A. Yes, I did. As a preliminary matter, I understand and appreciate that the Commission must balance the interests of investors and customers in setting the Return on Equity. As the Commission has stated, "…the Commission is and must always be mindful of the North Carolina Supreme Court's command that the Commission's task is to set rates as low as possible consistent with the dictates of the United States and North Carolina Constitutions."[49] In that regard, the return should be neither excessive nor confiscatory; it should be the minimum amount needed to meet the *Hope* and *Bluefield* Comparable Risk, Capital Attraction, and Financial Integrity standards.

[49] State of North Carolina Utilities Commission, Docket No. E-7, Sub 1026, Order Granting General Rate Increase, Sept. 24, 2013 at 24; see also State of North Carolina Utilities Commission, Docket No. G-9, Sub 631, Order Approving Partial Rate Increase and Allowing Integrity Management Rider at 26, Dec. 17, 2013 (noting North Carolina Supreme Court's determination that the provisions of G.S. 62-133 "effectively require the Commission to fix rates as low as may be reasonably consistent with the requirements of the Due Process Clause of the Fourteenth Amendment to the Constitution of the United States, those of the State Constitution, Art. I, § 19, being the same in this respect"), DNCP Remand Order at 40 ("the Commission in every case seeks to comply with the North Carolina Supreme Court's mandate that the Commission establish rates as low as possible within Constitutional limits.")

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The Commission also has found that the role of Cost of Capital experts is to determine the investor-required return, not to estimate increments or decrements of return in connection with consumers' economic environment. As the Commission pointed out:

> … adjusting investors' required costs based on factors upon which investors do not base their willingness to invest is an unsupportable theory or concept. The proper way to take into account customer ability to pay is in the Commission's exercise of fixing rates as low as reasonably possible without violating constitutional proscriptions against confiscation of property. This is in accord with the "end result" test of Hope. This the Commission has done.[50]

The Supreme Court agreed, and upheld the Commission's Order on Remand.[51] The Supreme Court has also, however, made clear that the Commission "must make findings of fact regarding the impact of changing economic conditions on customers when determining the proper ROE for a public utility."[52] In *Cooper II*, which addressed an appeal of the Commission's order on Dominion North Carolina Power's previous base rate application, the Supreme Court directed the Commission on remand to "make additional findings of fact concerning the impact of changing economic conditions on customers."[53] The Commission made such additional findings of fact in its order on remand.[54] In light of the Cooper II decision and the

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50 State of North Carolina Utilities Commission, Docket No. E-7, Sub 989, Order on Remand, October 23, 2013, at 34 – 35; see also DNCP Remand Order at 26 (stating that the Commission is not required to "isolate and quantify the effect of changing economic conditions on consumers in order to determine the appropriate rate of return on equity").

51 State of North Carolina ex rel. Utilities Commission v. Cooper, 766 S.E.2d 827 (2014).

52 State of North Carolina ex rel. Utilities Commission v. Cooper, 758 S.E.2d 635, 642 (2014) ("Cooper II").

53 Cooper II, 758 S.E.2d at 643.

54 DNCP Remand Order at 4-10.

Supreme Court precedent that preceded it,[55] I appreciate the Commission's need to consider economic conditions in the State and as such, I have undertaken several analyses to provide such a review.

**Q. PLEASE NOW SUMMARIZE YOUR ANALYSES AND CONCLUSIONS.**

A. As to the rate of unemployment, it has fallen substantially in North Carolina, and the U.S. generally since late 2009 and early 2010, when the rates peaked at 10.00 percent and 11.30 percent, respectively. Although the unemployment rate in North Carolina and in PSNC's service territory exceeded the national rate during and after the 2008/2009 financial crisis, by the latter portion of 2013, the two were largely consistent. By December 2015, the unemployment rate had fallen to one-half of those peak levels, to 5.00 percent nationally, 5.60 percent in North Carolina, and 5.30 percent in PSNC's service territory (*see* Chart 5, below).

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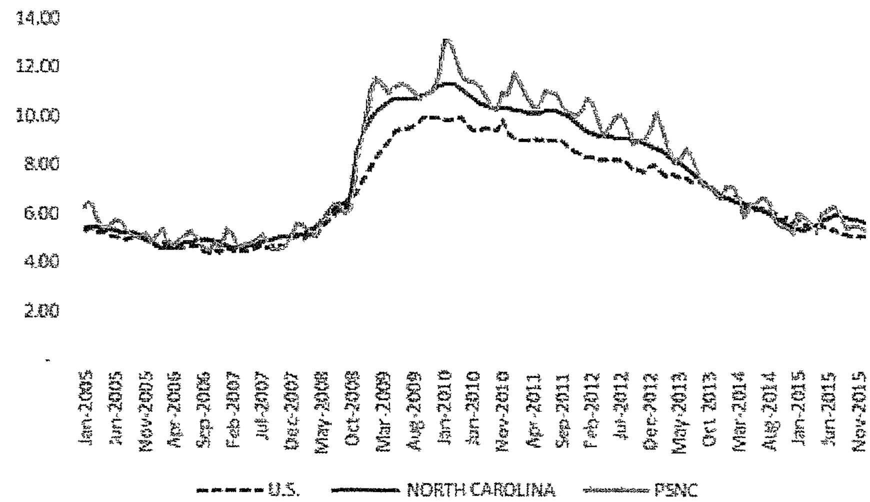
55 State of North Carolina ex rel. Utilities Commission v. Cooper, 366 N.C. 484, 739 S.E.2d 541 (2013) ("Cooper I").

**Chart 5: Unemployment Rate**[56]



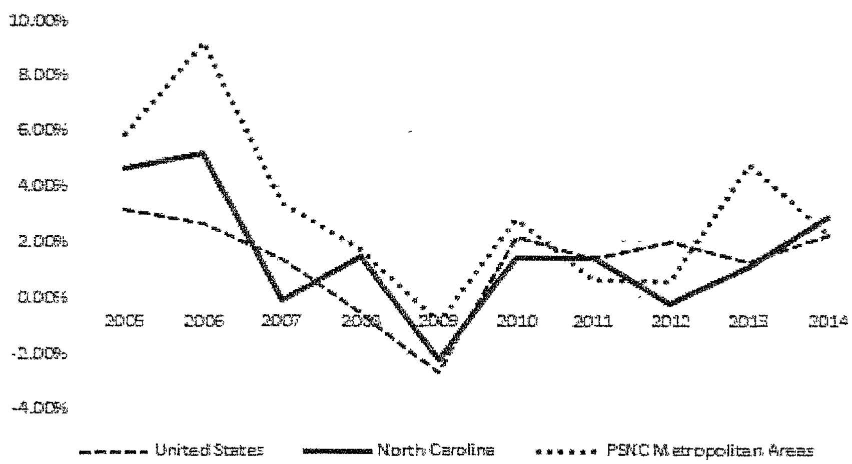

Since the Company's last rate filing in March 2008, the unemployment rate in North Carolina increased from 5.30 percent to a high of 11.30 percent in January 2010. Since January 2010, the unemployment rate in North Carolina has fallen back to approximately 2008 levels to 5.60 percent, a reduction of 5.70 percentage points, which is a somewhat greater reduction than the decline in the U.S. unemployment rate (4.80 percentage points). Still, over the entire period of 2005 through 2015, the correlation between North Carolina's unemployment rate and the national rate was nearly 99.00 percent. Furthermore, economic growth at the national level is projected to generate

[56] Source: Bureau of Labor Statistics. The national and state level unemployment rate data is seasonally adjusted, whereas the county level data is not. The PSNC service territory was calculated based on the unemployment rates in the following counties: Alamance, Alexander, Buncombe, Cabarrus, Caswell, Chatham, Cleveland, Durham, Franklin, Gaston, Granville, Haywood, Henderson, Iredell, Jackson, Lee, Madison, McDowell, Orange, Person, Polk, Rowan, Rutherford, Swain, Transylvania, Vance and Wake.

9.80 million new jobs from 2014-2024 (*i.e.*, 6.50 percent growth over that period).[57]

Looking to annual real Gross Domestic Product growth, again there has been a relatively strong correlation between North Carolina and the national economy (approximately 79.00 percent). Since the financial crisis the national rate of growth at times (during portions of 2010 and 2012) outpaced North Carolina. In 2014, the State exceeded the national growth rate. Looking at the major metropolitan service areas within PSNC's service territory, the correlation with the national average is approximately 58.00 percent.

**Chart 6: Real Gross Domestic Product Growth Rate**[58]




As to median household income, the correlation between North Carolina and the U.S. is relatively strong (nearly 75.00 percent from 2005

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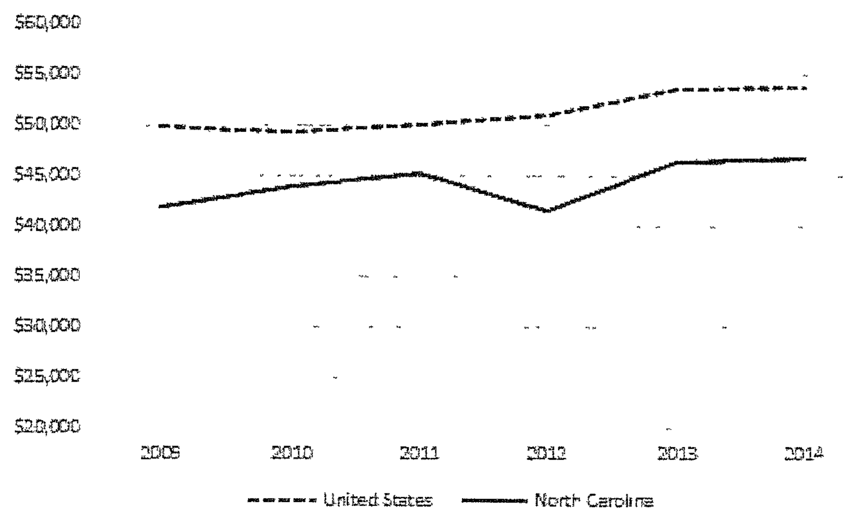
[57] U.S. Bureau of Labor Statistics, *Employment Projections: 2014-2024 Summary*, December 8, 2015.

[58] Source: Bureau of Economic Analysis. The PSNC Metropolitan Areas include Asheville, Charlotte-Concord-Gastonia, Durham-Chapel Hill and Raleigh, North Carolina.

through 2015). Since 2009 (that is, the years subsequent to the financial crisis), median household income in North Carolina has grown at a somewhat faster annual rate than the national median income (2.23 percent vs. 1.51 percent; *see* Chart 7, below). To help put household income in perspective, the Missouri Economic Research and Information Center reports that in 2015, North Carolina had the 21st lowest cost of living index of the 50 states and the District of Columbia.[59]

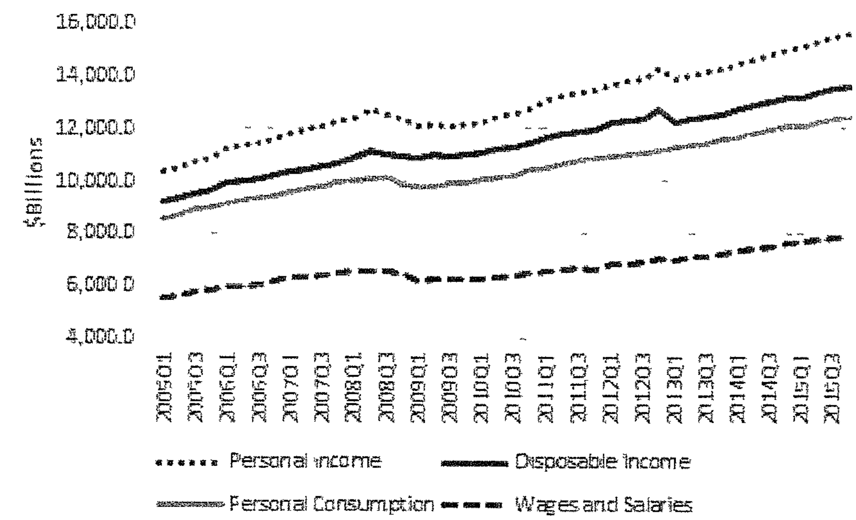
**Chart 7: Median Household Income**




Similarly, as shown in Chart 8, below, since 2009, total personal income, disposable income, personal consumption, and wages and salaries have generally been on an increasing trend at the national level.

[59] Source: https://www.missourieconomy.org/indicators/cost_of_living/, accessed 2/12/2016

**Chart 8: United States Income and Consumption**[60]




Based on the data presented above, I observe the following:

- North Carolina's unemployment rate has fallen by one-half since its peak in the 2009-2010 period, such that as of December 2015, it stood at 5.60 percent. Although the current rate is somewhat higher than the national average, it fell by 5.70 percentage points from its peak, whereas the national average rate fell by 5.00 percentage points. Similarly, the unemployment rate in the Company's service territory fell 5.30 percent from its peak.
- The State's and PSNC Metropolitan Areas' Gross Domestic Product remains highly correlated with national GDP, and has grown at a somewhat faster rate than the national economy since the 2009 financial crisis.

60 Source: Bureau of Economic Analysis Data is seasonally adjusted.

- Similarly, median household income has grown at a faster pace in North Carolina than has the national average. Although the median remains below the national average, the overall cost of living in North Carolina also is below the national average. Furthermore, at the national level, income has generally been increasing since the financial crisis.

**Q. DID YOU REVIEW ANY OTHER DATA?**

A. Yes, I did. The Federal Reserve Bank of Richmond ("Richmond Fed") reported in its March 2016 Snapshot of North Carolina[61] that "North Carolina's economy improved in recent months, with continued employment growth and steady household conditions; however, housing market reports were somewhat downbeat."[62] North Carolina gained 6,900 net jobs in December and in the past year payrolls have expanded 2.10 percent. Household employment remained unchanged at 5.60 percent. North Carolina residents reported a 1.10 percent increase in real personal income, 5.00 percent higher than the third quarter of 2014.[63]

In the housing market, the Richmond Fed reported a decline in both housing permits and housing starts. New home permits were down 31.70 percent in January 2016 compared with December and housing starts fell 22.70 percent from the previous month. In addition, home prices in January

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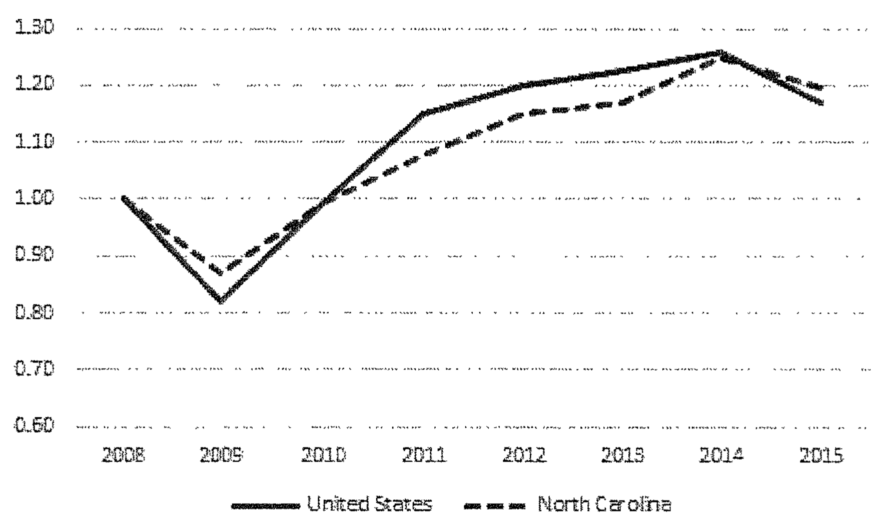
61 Federal Reserve Bank of Richmond, *Snapshot of North Carolina,* March 2016.
62 *Ibid.*
63 *Ibid.*

2016 were 4.75 percent higher than in January 2015, compared to a 6.25 percent increase in the United States over the same period.[64]

Consumer confidence as measured by the Organisation for Economic Co-operation and Development's ("OECD") Consumer Confidence Index ("CCI") increased from approximately 96.70 in early 2009 to approximately 100.70 in February 2016. The current level of the CCI is above the long-term average of 100.00.[65] In addition, credit card delinquency rates rose modestly in the second and third quarters in 2015 but remained at a low rate of 2.17 percent as of the third quarter of 2015.[66]

As shown in Chart 9, total exports in North Carolina have increased since 2008 at a rate slightly higher than the national average.

**Chart 9: Total Exports Indexed**[67]

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[64] *Ibid.*

[65] Since its inception in January 1960, the OECD's CCI has ranged from a low of approximately 96.20 to a high of approximately 102.80.

[66] Source: St. Louis FRED.

[67] Source: U.S. Department of Commerce.

On July 29, 2015, *Forbes Magazine* ranked Raleigh, Asheville, Charlotte, and Durham as the 2nd, 12th, 14th, and 20th Best Places for Business and Careers in the Nation and, on October 21, 2015, *Forbes* ranked North Carolina as the second best state for business. In June of 2015 North Carolina was ranked the third best state for business by *Chief Executive Magazine*. Companies frequently cited the quality of the North Carolina labor force as a significant attraction. For example, the CEO of Krystal Engineering, LLC stated that, "an excellent pool of local talent" was one of the factors that attracted them to invest $20.9 million in a new production facility over the next five years.[68] The CEO of Uniquetex, LLC, Inc. described their choice to invest $31.6 million to build a new facility in North Carolina stating:

> We are extremely excited to start up our first U.S. operations in Cleveland County, N.C. The combination of a skilled workforce, access for quality transportation infrastructure and the pro-business attitude of the community is what attracted us here.[69]

Similarly, the CEO of Linamar Corp. described the company's new plant in North Carolina saying, "[t]his will be our fourth plant in North Carolina, an area where we have thrived thanks to a fantastic workforce and a great business environment."[70]

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68 North Carolina Office of the Governor, *Krystal Engineering Launches New Facility in Caldwell County, Creating 82 New Jobs*, February 16, 2016.

69 North Carolina Office of the Governor, *Uniquetex to Bring 150 Jobs to Cleveland County*, March 10, 2016.

70 North Carolina Office of the Governor, *Governor McCrory Announces 350 New Manufacturing Jobs for Henderson County*, February 22, 2016.

**Q. HOW WOULD YOU SUMMARIZE THE ECONOMIC INDICATORS THAT YOU HAVE ANALYZED AND DISCUSSED IN YOUR TESTIMONY?**

A. It is my opinion that, based on the indicators discussed above, North Carolina and the counties contained within PSNC's service area continue to steadily emerge from the economic downturn that prevailed during the Company's previous rate case, and have experienced significant economic improvement during the last several years. As also discussed above, that improvement is projected to continue.

**Q. IN YOUR OPINION, IS THE PROPOSED ROE FAIR AND REASONABLE TO PSNC, ITS SHAREHOLDERS AND ITS CUSTOMERS, AND NOT UNDULY BURDENSOME TO PSNC CUSTOMERS CONSIDERING THE IMPACT OF THESE CHANGING ECONOMIC CONDITIONS?**

A. Yes. Based on the factors I have discussed here, I believe that PSNC's proposed ROE of 10.60 percent is fair and reasonable to PSNC, its shareholders, and its customers in light of the effect of those changing economic conditions.

## VIII. CAPITAL MARKET ENVIRONMENT

**Q. DO ECONOMIC CONDITIONS INFLUENCE THE REQUIRED COST OF CAPITAL AND REQUIRED RETURN ON COMMON EQUITY?**

A. Yes. As discussed in Section V, the models used to estimate the Cost of Equity are meant to reflect, and therefore are influenced by, current and

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expected capital market conditions. To the extent that certain ROE estimates are incompatible with such data or inconsistent with basic financial principles, it is appropriate to consider whether alternative estimation techniques are likely to provide more meaningful and reliable results.

**Q. DO YOU HAVE ANY GENERAL OBSERVATIONS REGARDING THE RELATIONSHIP BETWEEN CURRENT CAPITAL MARKET CONDITIONS AND THE COMPANY'S COST OF EQUITY?**

A. Yes, I do. Much has been reported about the Federal Reserve's market intervention since 2007, and its effect on interest rates. Although the Federal Reserve completed its Quantitative Easing initiative in October 2014, it was not until December 2015 that it raised the Federal Funds rate, and began the process of rate normalization.[71] A significant issue, then, is how investors will react as that process continues, and eventually is completed. A viable outcome is that investors will perceive greater chances for economic growth, which will increase the growth rates included in the Constant Growth DCF model. At the same time, higher growth and the absence of Federal market intervention could provide the opportunity for interest rates to increase, thereby increasing the dividend yield portion of the DCF model. In that case, both terms of the Constant Growth DCF model would increase, producing higher ROE estimates.

At this time, however, market data remains somewhat disjointed. As a consequence, it is difficult to rely on a single model to estimate the

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71 *See* Federal Reserve Press Release (December 16, 2015).

Company's Cost of Equity. A more reasoned approach is to understand the relationships among Federal Reserve policies, interest rates and risk, and assess how those factors may affect different models and their results. For the reasons discussed below, the current market is one in which it is very important to consider a broad range of data and models when determining the Cost of Equity.

**Q. PLEASE SUMMARIZE THE EFFECT OF RECENT FEDERAL RESERVE POLICIES ON INTEREST RATES AND THE COST OF CAPITAL.**

A. Beginning in 2008, the Federal Reserve proceeded on a steady path of initiatives intended to lower long-term Treasury yields.[72] The Federal Reserve policy actions "were designed to put downward pressure on longer-term interest rates by having the Federal Reserve take onto its balance sheet some of the duration and prepayment risks that would otherwise have been borne by private investors."[73] Under that policy, "Securities held outright" on the Federal Reserve's balance sheet increased from approximately $489 billion at the beginning of October 2008 to $4.24 trillion by mid-February 2016.[74] To put that increase in context, the securities held by the Federal Reserve represented approximately 3.29 percent of GDP at the end of September 2008, and had risen to approximately 23.40 percent of GDP in

72 *See* Federal Reserve Press Release (June 19, 2013).

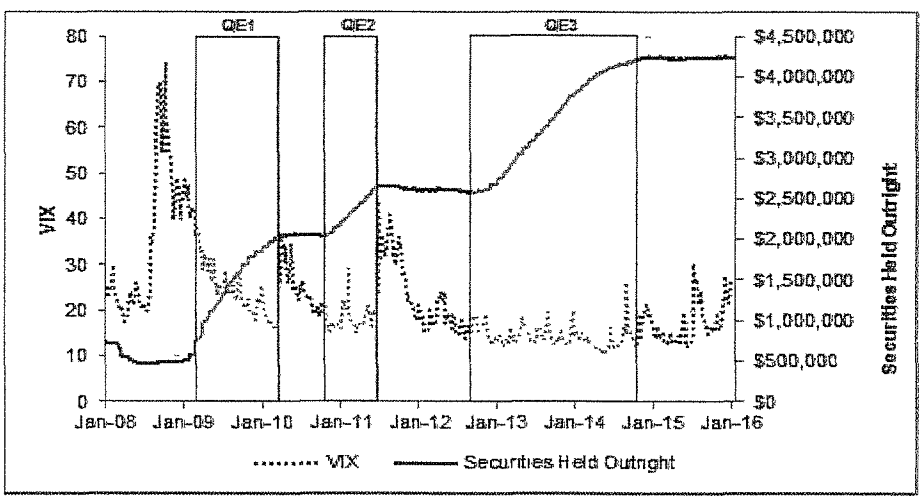
73 Federal Reserve Bank of New York, *Domestic Open Market Operations During 2012*, April 2013, at 29.

74 Source: Federal Reserve Board Schedule H.4.1. "Securities held outright" include U.S. Treasury securities, Federal agency debt securities, and mortgage-backed securities.

February 2016.[75] As such, the Federal Reserve policy actions have represented a significant source of liquidity, and have had a substantial effect on capital markets.

Just as market intervention by the Federal Reserve has reduced interest rates, it also has had the effect of reducing market volatility. As shown in Chart 10 (below), each time the Federal Reserve began to purchase bonds (as evidenced by the increase in "Securities Held Outright" on its balance sheet), volatility subsequently declined. In fact, in September 2012, when the Federal Reserve began to purchase long-term securities at a pace of $85 billion per month, volatility (as measured by the CBOE Volatility Index, known as the "VIX") fell, and through October 2014 remained in a relatively narrow range. The reason is quite straight-forward: Investors became confident that the Federal Reserve would intervene if markets were to become unstable.

**Chart 10: VIX and Federal**

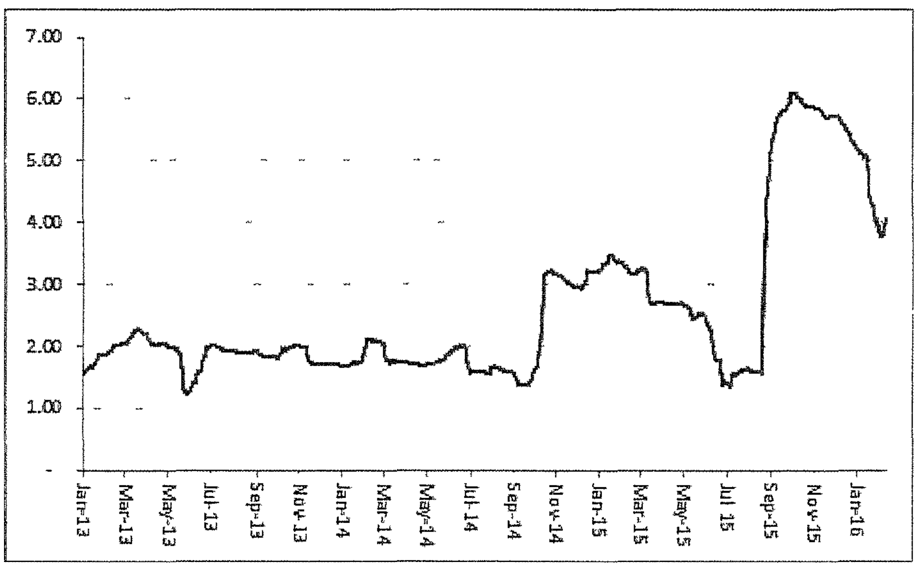



75 Source: Federal Reserve Board Schedule H.4.1; Bureau of Economic Analysis

**Reserve Asset Purchases**[76]

A further measure of market uncertainty is the volatility of the VIX itself. That is, we can look to the volatility of volatility, as measured by the standard deviation of the VIX. As Chart 11 (below) demonstrates, the volatility of the VIX moved in a relatively narrow range prior to September 2014, but since then has noticeably increased. Such volatility indicates that, although interest rates are still near historical lows, there remains significant, if not greater, uncertainty in today's equity markets, with investors requiring greater returns to bear that risk.

**Chart 11: Standard Deviation (100 days) of VIX**[77]




Those findings are consistent with the Chicago Board Options Exchange VVIX Index ("VVIX"), which is a traded index of the expected volatility of the VIX. Over the long-term, the VVIX has averaged

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[76] Source Federal Reserve Economic Data (FRED), Federal Reserve Bank of St Louis, Federal Reserve Statistical Release H 4 1, Factors Affecting Reserve Balances

[77] Source Bloomberg Professional

approximately 87.00; its 2014 average was somewhat below that level (83.01). In 2015, the VVIX increased to (on average) 94.82, and to date in 2016, has averaged 104.47; the 2015-2016 average has been 95.81. Just as the backward-looking standard deviation of the VIX indicates that observed volatility increased considerably in 2015 and 2016, the VVIX indicates that expected volatility also has been well above the 2013 levels.[78]

The important analytical question is whether we can infer that risk aversion among investors is at a historically low level, implying a Cost of Equity that is well below recently authorized returns. Given the negative relationship between the expansion of the Federal Reserve's balance sheet and the VIX, it is difficult to conclude that fundamental risk aversion and investor return requirements have fallen. If it were the case that investors believe that volatility will remain at low levels (that is, that market risk and uncertainty will remain low), it is not clear why they would decrease their return requirements for defensive sectors such as utilities. In that respect, it appears that the Constant Growth DCF results are at odds with market conditions.

**Q. HAS THE FEDERAL RESERVE'S QUANTITATIVE EASING POLICY BEEN ASSOCIATED WITH CHANGES IN THE PROXY COMPANIES' TRADING LEVELS?**

A. Yes, that appears to be the case. From January 2000 through the end of August 2012 (that is, immediately prior to the third round of Quantitative Easing), the proxy group's average P/E ratio traded at a 9.00 percent discount

[78] Source: Bloomberg Professional.

to the market. From September 2012 through May 2013, when the Federal Reserve announced it would begin to taper its asset purchases, the proxy group traded at a 13.00 percent premium to the market. In fact, between September 2012 and February 12, 2016, the proxy group P/E ratio traded at a 10.00 percent premium to the market.

**Q. DOES YOUR RECOMMENDATION ALSO CONSIDER THE INTEREST RATE ENVIRONMENT?**

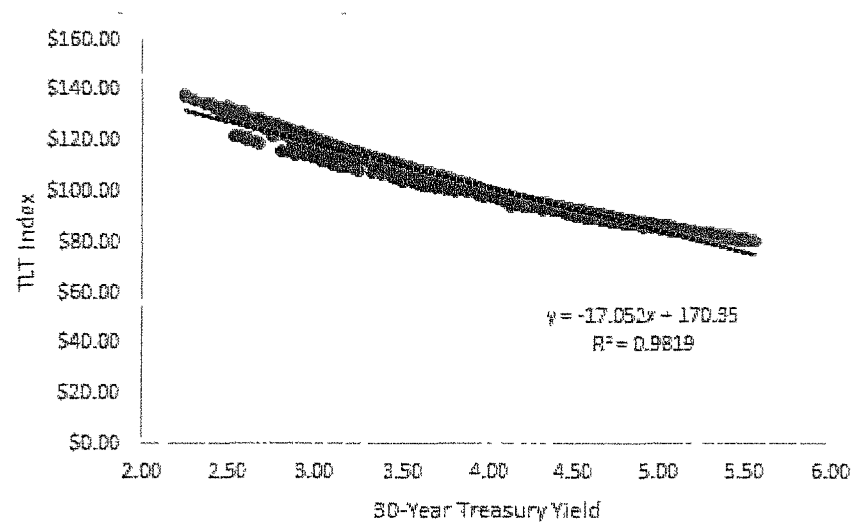
A. Yes, it does. From an analytical perspective, it is important that the inputs and assumptions used to arrive at an ROE recommendation, including assessments of capital market conditions, are consistent with the recommendation itself. Although I appreciate that all analyses require an element of judgment, the application of that judgment must be made in the context of the quantitative and qualitative information available to the analyst and the capital market environment in which the analyses were undertaken. Because the Cost of Equity is forward-looking, the salient issue is whether investors see the likelihood of increased interest rates during the period in which the rates set in this proceeding will be in effect.

As to long-term interest rates, the approximately 50 economists surveyed by Blue Chip Financial Forecast see the 30-year Treasury yield as increasing to 4.00 percent by 2017.[79] In addition to consensus economists' forecasts, we can look to the TLT, an exchange-traded fund of long-term U.S. Government bonds, to assess investors' views of the likelihood of increased

79 *See* Blue Chip Financial Forecast, Vol. 34 No. 12, December 1, 2015, at 14.

interest rates in the future. Because the price of bonds is inversely related to interest rates, the TLT has increased in value as interest rates have fallen over time (*see* Chart 12, below).

**Chart 12: TLT Index vs. 30-Year Treasury Yield**[80]




A market-based way of understanding whether investors believe interest rates will increase or decrease is to review the premium they are willing to pay for the option to buy or sell the TLT, at the current market price, in the future. If investors are willing to pay more for the option to sell the TLT in the future at today's price than they are willing to pay for the option to buy the TLT (also at today's price), those relative values indicate that on balance, the market sees a greater prospect of increases in interest rates than decreases. Based on data from NASDAQ, we see that as of January 2016, the option to sell the TLT in January 2018 (the furthest priced option) at the current price is approximately twice the value of the option to buy the

[80] Source: Yahoo! Finance.

TLT.[81] Since bond prices fall as interest rates increase, investors see a greater likelihood of increases in long-term interest rates, than decreases.

Given that: (1) Federal monetary policy has begun its process of "normalization;" and (2) economists and market data indicate expectations for increasing interest rates into 2018 and beyond, I believe that an ROE in the range of 10.00 percent to 10.75 percent reflects the prevailing and expected interest rate environment.

**Q. HAVE CAPITAL MARKETS CHANGED SINCE PIEDMONT NATURAL GAS ("PIEDMONT") WAS AUTHORIZED ITS CURRENT 10.00 PERCENT ROE IN DECEMBER 2013?**

A. Yes, they have. The volatility of the gas utility sector (as measured by the Proxy Group) has rather substantially increased relative to the broader market since the Commission authorized Piedmont's current 10.00 percent ROE on December 17, 2013.[82] To make that assessment, I calculated the standard deviation of returns for the S&P 500 and the Proxy Group, respectively, on a five-year rolling basis from December 2013 through February 2016. I then divided the standard deviation of the Proxy Group by the standard deviation of the S&P 500 each day during that period. Chart 13 illustrates that, since December 2013, relative volatility has increased, suggesting greater increasing uncertainty in the natural gas utility industry.

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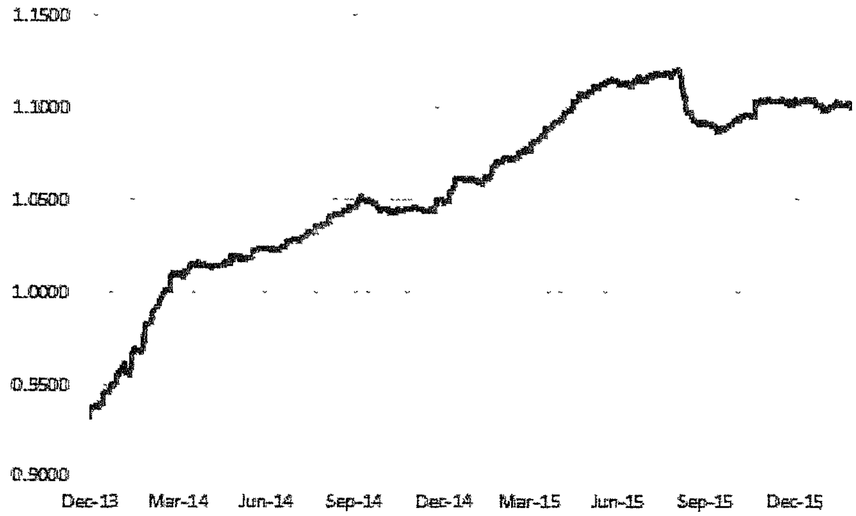
[81] Source: http://www.nasdaq.com/symbol/tlt/option-chain?dateindex=7.

[82] *See* State of North Carolina Utilities Commission, Docket No. G-9, Sub 631, Order Approving Partial Rate Increase and Allowing Integrity Management Rider, December 17, 2013.

**Chart 13: Relative Volatility of the Proxy Group**




Similarly, credit spreads have increased since 2013. The "credit spread" is the incremental return required by debt investors to take on the default risk associated with securities of differing credit quality. Because U.S. Treasury securities are considered to have essentially no default risk, credit spreads typically are measured by reference to benchmark Treasury securities. In 2013 the average credit spread between the Moody's A-rated Utility Index yield and the 30-year Treasury yield was 103 basis points. Over the twelve months ended February 12, 2016 it was 131 basis points, and recently, has increased to 143 basis points.[83] To the extent that credit spreads have increased, it is an observable measure of the capital markets' increased risk aversion; increased risk aversion clearly is associated with an increased Cost of Equity.

[83] The credit spread associated with the Moody's Baa-rated Utility Bond Index increased to a greater extent, from 154 basis points to 227 basis points (264 basis points in the 30 days ending February 12, 2016). Source: Bloomberg Professional, February 12. 2016.

**Q. WHAT CONCLUSIONS DO YOU DRAW FROM YOUR ANALYSES OF CAPITAL MARKET CONDITIONS?**

A. From an analytical perspective, it is important that the inputs and assumptions used to arrive at an ROE determination, including assessments of capital market conditions, are consistent with the conclusion itself. Although I appreciate that all analyses require an element of judgment, the application of that judgment must be made in the context of the quantitative and qualitative information available to the analyst and the capital market environment in which the analyses were undertaken. Because the application of financial models and interpretation of their results often is the subject of differences among analysts in regulatory proceedings, I believe that it is important to review and consider a variety of data points; doing so enables us to put in context both quantitative analyses and the associated recommendations.

## IX. CAPITAL STRUCTURE

**Q. WHAT IS YOUR PROPOSED CAPITAL STRUCTURE?**

A. The Company is proposing a capital structure comprising 43.12 percent long-term debt, 3.38 percent short-term debt, and 53.50 percent common equity.

**Q. ARE THERE GENERALLY ACCEPTED APPROACHES TO DEVELOPING THE APPROPRIATE CAPITAL STRUCTURE FOR A REGULATED NATURAL GAS UTILITY?**

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

**Q. HOW DOES THE CAPITAL STRUCTURE AFFECT THE COST OF CAPITAL?**

A. It is well understood that from a financial perspective, there are two general categories of risk: business risk and financial risk. Business risk includes operating, market, regulatory, and competitive uncertainties, whereas financial risk is the incremental risk to investors associated with additional levels of debt (sometimes referred to as "financial leverage") in the capital structure. As the degree of financial leverage increases, the risk that cash flows will be inadequate to meet the firm's financial obligations on a timely basis (that is, the risk of financial distress), also increases. If two firms face identical business risks, the company with meaningfully higher levels of debt in its capital structure will face greater financial risk and, therefore, is likely to have higher costs of both debt and equity. Since the capital structure can affect the subject company's overall level of risk, it is an important consideration in establishing a just and reasonable rate of return.

**Q. IS THERE SUPPORT FOR THE PROPOSITION THAT THE CAPITAL STRUCTURE IS A KEY CONSIDERATION IN ESTABLISHING THE APPROPRIATE RETURN ON EQUITY?**

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

> Although the determination of whether bonds or stocks should be issued is for management, the matter of debt ratio is not exclusively within its province. Debt ratio substantially affects the manner and cost of obtaining new capital. It is therefore an important factor in the rate of return and must necessarily be considered by and come within the authority of the body charged by law with the duty of fixing a just and reasonable rate of return.[84]

Perhaps ultimate authority for balancing the issues of cost and financial integrity is found in the Supreme Court's statement in *Hope Natural Gas*:

> The rate-making process under the Act, i.e., the fixing of "just and reasonable' rates, involves a balancing of the investor and the consumer interests." 320 U.S. at 603, 64 S. Ct. at 288. The equity investor's stake is made less secure as the company's debt rises, but the consumer rate-payer's burden is alleviated.[85]

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[84] *New England Telephone & Telegraph Co. v. State,* 98 N.H. 211, 220, 97 A.2d 213, 220 (1953), citing *New England Tel. & Tel. Co. v. Department of Pub. Util., (Mass.)* 327 Mass. 81, 97 N.E. 2d 509, 514; *Petitions of New England Tel. & Tel. Co.* 116 Vt. 480, 80 A2d 671.

[85] *Communications Satellite Corp. v. FCC,* 198 U.S. App. D.C. 60, 63-64, 611 F.2d 883 (1977)

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

**Q. PLEASE SUMMARIZE YOUR ANALYSIS OF THE PROXY COMPANIES' CAPITAL STRUCTURES.**

A. First, it is important to keep in mind that the proxy group has been selected to reflect comparable companies in terms of financial and business risk. As such, it is appropriate to review the proxy companies' capital structures as a means of assessing whether the proposed capital structure is consistent with industry practice. To make that assessment, I calculated the median of the 56 common equity ratios for the proxy companies over the last eight fiscal quarters. The median common equity ratio for the proxy group is 55.25 percent.

In addition, I calculated the average capital structure for each of the proxy companies over the last eight fiscal quarters. As shown in Table 8 (below, *see* also Exhibit RBH-13), the proxy group average common equity ratios range from 49.33 percent to 60.04 percent.

**Table 8: Historical Average Capital Structure**[86]

| Company | Ticker | Long-Term Debt | Common Equity |
|---|---|---|---|
| Atmos Energy | ATO | 43.78% | 56.22% |
| Laclede Group, Inc. | LG | 50.67% | 49.33% |
| New Jersey Resources | NJR | 40.77% | 59.23% |
| Northwest Natural Gas | NWN | 46.13% | 53.87% |
| South Jersey Industries | SJI | 50.53% | 49.47% |
| Southwest Gas | SWX | 49.83% | 50.17% |
| Washington Gas Light | WGL | 39.96% | 60.04% |

**Q. DID YOU UNDERTAKE ANY ADDITIONAL ANALYSES OF THE PROXY COMPANIES' CAPITAL STRUCTURES?**

A. Yes, I did. To determine if the proposed capital structure is reasonable, I calculated the *pro forma* EBIT/Interest coverage ratio for the Company and compared it to the proxy companies. Using a debt cost rate of 5.66 percent,[87] an ROE of 10.60 percent and a 53.50 percent equity ratio results in a *pro forma* EBIT/Interest coverage ratio of 4.80. The proxy group median and average EBIT/Interest coverage ratios in 2015 were 4.29 and 4.79, respectively. Over the period 2012 through 2015, the median and average EBIT/Interest coverage ratios for the proxy group were 4.07 and 4.47, respectively.

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86 Source: SNL Financial.

87 *See* Direct Testimony of Sharon Boone.

**Q. PLEASE EXPLAIN THE CONCEPT OF MATURITY MATCHING AND HOW IT AFFECTS THE COMPANY'S RISK PROFILE.**

A. A common financing practice, sometimes referred to as "maturity matching," involves matching the lives of the assets being financed with the maturity of the securities issued to finance those assets, such that exposure to changes in the cost of capital is minimized. In non-financial institutions such as utilities, the practice involves matching the overall source of funding with the lives of the assets being financed.[88] In essence, the overall term structure of the subject company's long-term liabilities – including both debt and equity – should correspond to the life of its permanent assets. As noted by Brigham and Houston, "[t]his strategy minimizes the risk that the firm will be unable to pay off its maturing obligations."[89]

Because it is perpetual in nature, adding equity to the capital structure extends the weighted average life of long-term liabilities, and mitigates incremental refinancing risk. Conversely, relying more heavily on debt as the means of financing long-lived assets increases the risk of refinancing maturing obligations during less accommodating market environments.

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88 This is not to say that an individual dollar may be traced from its source to its use.

89 Brigham, Eugene F. and Houston, Joel F., Fundamentals of Financial Management, Concise 4th Ed., Thomson South-Western, 2004, at 574.

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

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

**Q. WHAT WOULD BE THE EFFECT OF INCREASING THE DEBT COMPONENT AND REDUCING THE COMMON EQUITY COMPONENT OF PSNC'S CAPITAL STRUCTURE?**

A. Lowering PSNC's common equity ratio would have a negative effect on its cost of capital. Based on criteria established by S&P, credit ratings reflect the combination of the "Business Risk" and "Financial Risk" ratings. There is little question that the rating agencies such as S&P consider the regulatory environment, including the extent to which the presiding regulatory commission is supportive of issues affecting credit quality, to be an important determinant of the subject company's credit profile.

Similarly, as I have noted, Moody's considers the regulatory structure to be so important that 50.00 percent of the factors that weigh in a ratings determination are related to the nature of regulation.[90] Among the factors considered by Moody's in assessing the regulatory framework are the predictability and consistency of regulatory actions:

[90] Moody's Investors Service, *Rating Methodology; Regulated Gas and Electric Utilities* at 6 (Dec. 23, 2013).

> As the revenues set by the regulator are a primary component of a utility's cash flow, the utility's ability to obtain predictable and supportive treatment within its regulatory framework is one of the most significant factors in assessing a utility's credit quality. The regulatory framework generally provides more certainty around a utility's cash flow and typically allows the company to operate with significantly less cushion in its cash flow metrics than comparably rated companies in other industrial sectors.
>
> ***
>
> In situations where the regulatory framework is less supportive, or is more contentious, a utility's credit quality can deteriorate rapidly.[91]

A decision by the Commission to increase PSNC's debt ratio (*i.e.*, to increase PSNC's financial leverage) could adversely affect both the Company's Business Risk rating and investors' perception of the regulatory environment in North Carolina. Both would have the eventual effect of increasing the Company's overall cost of capital.

**Q. TO YOUR LAST POINT, HOW WOULD AN ADVERSE CHANGE IN INVESTORS' PERCEPTION OF NORTH CAROLINA'S REGULATORY ENVIRONMENT AFFECT THE COMPANY'S COST OF CAPITAL?**

A. RRA rates North Carolina as having an "Average / 1" regulatory environment from an investor viewpoint, which represents the middle of its three tier scale from below average to above average.[92] Consequently, a decrease in the perception of regulatory supportiveness in North Carolina may increase

[91] Moody's Investors Service, Regulatory Frameworks – Ratings and Credit Quality for Investor-Owned Utilities at 2 (June 18, 2010).

[92] Source: Regulatory Research Associates, Commission Profiles, accessed March 15, 2016.

investors' assessment of the Company's regulatory risk (and therefore its business risk and Business Risk rating), further increasing PSNC's cost of capital.

**Q. WHAT IS YOUR CONCLUSION REGARDING THE APPROPRIATE CAPITAL STRUCTURE FOR PSNC?**

A. In my view, an equity ratio of 53.50 percent is reasonable for PSNC, as it is consistent with the median common equity ratio for the proxy companies, within the range of average common equity ratios for the proxy companies, and results in an EBIT/Interest coverage ratio that is consistent with the proxy group. Combined with the continuing uncertainty in the current capital markets, I believe it is likely that the increased financial and regulatory risk resulting from an increase in the Company's financial leverage would increase investors' required return.

## X. CONCLUSIONS AND RECOMMENDATION

**Q. WHAT IS YOUR CONCLUSION REGARDING THE COMPANY'S COST OF EQUITY?**

A. As described earlier in my testimony, I believe it is both prudent and appropriate to use multiple methodologies in estimating the cost of equity, a practice that is supported by academic theory and practice. As such, I have considered the results of the Constant Growth and Multi-Stage Growth forms of the DCF model, the Capital Asset Pricing Model, and the Bond Yield Plus Risk Premium approach. My ROE recommendation, and the analytical results on which it is based, considers a variety of factors faced by PSNC, including:

(1) the combined dilutive effects of operating expense increases, and increasing capital investments on the Company's operating income; (2) the Company's relatively high capital expenditure program; (3) the Company's relatively small size; (4) the effect of the proposed infrastructure recovery mechanism on the Company's Cost of Equity; (5) the regulatory environment in which the Company operates; and (6) flotation costs. In light of these factors, I believe that a rate of return on common equity in the range of 10.00 percent to 10.75 percent represents the range of equity investors' required rate of return for investment in natural gas utilities, such as PSNC. Within that range, I recommend that the Company's ROE should be set at 10.60 percent. Tables 9a and 9b summarize my analytical results.

**Table 9a: Summary of DCF Results**

| | *Mean Low* | *Mean* | *Mean High* |
|---|---|---|---|
| *Constant Growth DCF Results* | | | |
| 30-Day Average | 8.14% | 9.36% | 11.08% |
| 90-Day Average | 8.24% | 9.46% | 11.18% |
| 180-Day Average | 8.38% | 9.61% | 11.32% |
| *Multi-Stage DCF Results* | | | |
| | *Low* | *Mean* | *High* |
| 30-Day Average | 8.96% | 9.28% | 9.74% |
| 90-Day Average | 9.07% | 9.41% | 9.88% |
| 180-Day Average | 9.22% | 9.57% | 10.07% |
| Multi-Stage DCF Results Current P/E Ratio | | | |
| | *Low* | *Mean* | *High* |
| 30-Day Average | 9.26% | 10.09% | 11.24% |
| 90-Day Average | 9.56% | 10.40% | 11.56% |
| 180-Day Average | 9.96% | 10.80% | 11.97% |

**Table 9b: Summary of Risk Premium Results**

| | ***Bloomberg Derived Market Risk Premium*** | ***Value Line Derived Market Risk Premium*** |
|---|---|---|
| *Average Bloomberg Beta Coefficient* | | |
| Current 30-Year Treasury (2.79%) | 9.55% | 9.13% |
| Near-Term Projected 30-Year Treasury (3.35%) | 10.11% | 9.69% |
| *Average Value Line Beta Coefficient* | | |
| Current 30-Year Treasury (2.79%) | 10.86% | 10.35% |
| Near-Term Projected 30-Year Treasury (3.35%) | 11.42% | 10.92% |
| ***Bond Yield Plus Risk Premium Results*** | | |
| Current 30-Year Treasury (2.79%) | 9.98% | |
| Near Term Projected 30-Year Treasury (3.35%) | 10.02% | |
| Long Term Projected 30-Year Treasury (4.65%) | 10.39% | |

**Q. WHAT IS YOUR CONCLUSION REGARDING THE COMPANY'S CAPITAL STRUCTURE?**

A. Based on a review of capital structures employed by the proxy companies, I conclude that a capital structure that consists of 53.50 percent common equity, 3.38 percent short-term debt, and 43.12 percent long-term debt is reasonable and appropriate.

**Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

A. Yes, it does.

Supplemental Exhibits RBH-1 and RBH-2
(Identified)
(WHEREUPON, the prefiled supplemental testimony of **ROBERT B. HEVERT** is copied into the record as if given orally from the stand.)

## I. INTRODUCTION

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

**A.** My name is Robert B. Hevert. At the time I filed my Direct Testimony in this proceeding, I was Managing Partner of Sussex Economic Advisors, LLC ("Sussex"). Since then, Sussex became part of ScottMadden, Inc., where I am a Partner.

**Q. ARE YOU THE SAME ROBERT B. HEVERT WHO SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?**

**A.** Yes, I filed direct testimony ("Direct Testimony") on behalf of Public Service Company of North Carolina, Inc. ("PSNC" or the "Company"), a wholly-owned subsidiary of SCANA Corporation ("SCANA"). In my Direct Testimony I recommended an ROE of 10.60 percent, within a range of 10.00 percent to 10.75 percent,[1] and found that the Company's proposed 53.50 percent Equity Ratio was reasonable relative to the capital structures in place among its peers.[2]

**Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY?**

**A.** The purpose of my testimony is to explain my support for the Partial Stipulation dated August 18. 2016 (the "Stipulation"), among the Company, Public Staff, Carolina Utility Customers Association, Inc., and Blue Ridge

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1 Direct Testimony of Robert B. Hevert, at 2.

2 Direct Testimony of Robert B. Hevert, at 92.

Paper Products, Inc. (collectively, the "Stipulating Parties"). In particular, my testimony addresses the agreed-upon Return on Equity ("ROE" or "Cost of Equity"), capital structure (the "Stipulated Capital Structure"), and overall Rate of Return (the "Stipulated ROR").[3]

**Q. HAVE YOU PREPARED ANY EXHIBITS IN CONJUCTION WITH YOUR TESTIMONY?**

**A.** Yes. Supplemental Exhibit No. RBH-1 and Supplemental Exhibit No. RBH-2 have been prepared by me or under my direct supervision.

## II. <u>STIPULATION AGREEMENT</u>

**Q. ARE YOU FAMILIAR WITH THE TERMS OF THE AGREEMENT AMONG THE STIPULATING PARTIES AS IT RELATES TO THE COMPANY'S RETURN ON EQUITY, CAPITAL STRUCTURE, AND OVERALL RATE OF RETURN?**

**A.** Yes. I understand that the Stipulating Parties have agreed to an ROE of 9.70 percent; a capital structure consisting of 52.00 percent Common Equity, 3.38 percent Short-Term Debt, and 44.62 percent Long-Term Debt; and an overall Rate of Return of 7.53 percent.[4]

**Q. IN GENERAL, DO YOU SUPPORT THE COMPANY'S DECISION TO AGREE TO THE STIPULATED ROE?**

**A.** Yes, I do. Although the Stipulated ROE is somewhat below the lower bound of my recommended range (*i.e.*,10.00 percent), I recognize that the

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[3] *See*, Partial Stipulation, Docket No. G-5, Sub 565, August 18, 2016, at 5.

[4] Partial Stipulation, Docket No. G-5, Sub 565, August 18, 2016, at 5.

Stipulation represents the give-and-take among the Stipulating Parties regarding multiple, otherwise-contested issues. If it is the Company's determination that the terms of the Stipulation, taken as a whole, are such that it will be able to raise the external capital required to continue the investments required to provide safe and reliable service, and that it will be able to do so when needed and at reasonable cost rates, I appreciate and respect that decision.

Although the Stipulated ROE falls within the range of analytical results presented in my Direct Testimony, current capital market conditions are such that the models used to estimate the Cost of Equity continue to produce a wide range of sometimes conflicting estimates. Such conditions often indicate a degree of instability and uncertainty that suggest somewhat higher, rather than lower capital costs. In that regard, it remains my position that in a fully litigated proceeding, a range of 10.00 percent to 10.75 percent would represent a reasonable and appropriate measure of the Company's Cost of Equity. Nonetheless, I recognize the benefits associated with the decision to enter into the Stipulation and as such, it is my view that the 9.70 percent Stipulated ROE is a reasonable resolution of an otherwise contentious issue.

**Q. HAVE YOU ALSO CONSIDERED THE STIPULATED ROE IN THE CONTEXT OF AUTHORIZED RETURNS FOR OTHER NATURAL GAS UTILTIES?**

A. Yes, I have. Since 2014, authorized returns of 9.70 percent and higher have been common for natural gas utilities. In fact, 24 of 54 returns authorized for natural gas utilities were 9.70 percent or above; the average authorized ROE over all 54 cases was 9.65 percent.

**Q. ARE THERE OTHER DISTINCTIONS THAT ARE IMPORTANT TO CONSIDER WHEN REVIEWING AUTHORIZED RETURNS?**

A. Yes, there are. As noted in my Direct Testimony, the Company's credit rating and outlook depend substantially on the extent to which rating agencies view the regulatory environment credit supportive, or not.[5] I noted, for example, that Moody's finds the regulatory environment to be so important that 50.00 percent of the factors that weigh in its ratings determination are determined by the nature of regulation. I further noted that Standard & Poor's also considers the regulatory environment to be an important factor in its rating process.[6]

Given the Company's need to access external capital, and in light of the weight that both Moody's and S&P place on the nature of the regulatory environment, I believe that it also is important to consider the extent to

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5 Direct Testimony of Robert B. Hevert, at 63.

6 *Ibid.*, at 58.

which the jurisdictions that recently have authorized ROEs for natural gas utilities are viewed as having constructive regulatory environments.

**Q. IS NORTH CAROLINA GENERALLY CONSIDERED TO HAVE A CONSTRUCTIVE REGULATORY ENVIRONMENT?**

A. Yes, it is. By way of background, Regulatory Research Associates ("RRA"), which is a widely referenced source of rate case data, provides an assessment of the extent to which regulatory jurisdictions are constructive from investors' perspectives, or not. As RRA explains, less constructive environments are associated with higher levels of risk:

> RRA maintains three principal rating categories, Above Average, Average, and Below Average, with Above Average indicating a relatively more constructive, lower-risk regulatory environment from an investor viewpoint, and Below Average indicating a less constructive, higher-risk regulatory climate from an investor viewpoint, Within the three principal rating categories, the numbers 1, 2, and 3 indicate relative position. The designation 1 indicates a stronger (more constructive) rating; 2, a mid range rating; and, 3, a weaker (less constructive) rating. We endeavor to maintain an approximately equal number of ratings above the average and below the average.[7]

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7 Source: Regulatory Research Associates, accessed August 18, 2016.

Within RRA's ranking system, North Carolina is rated "Average/1", which falls in the top one-third of jurisdictions.[8]

**Q. HAVE YOU CONSIDERED THOSE DISTINCTIONS IN YOUR REVIEW OF AUTHORIZED RETURNS RELATIVE TO THE STIPULATED ROE?**

A. Yes, I have. Sorting authorized ROEs by Regulatory Research Associates rankings, there is approximately a 55 to 65 basis point difference between the average return authorized in states that ~~(like North Carolina)~~ are ranked in the top one-third of jurisdictions, and those that fall in the middle or bottom-one third (*see* Table 1, below). Interestingly, the average and median authorized ROE for jurisdictions that rank in the top one-third (*i.e.*, 10.13 percent, and 10.20 percent) fall within my recommended range.

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**Table 1: Authorized Natural Gas Utility ROEs: 2014 - 2016[9]**

| | Overall | RRA RANKING | | |
|---|---|---|---|---|
| | | Top One-Third | Middle One-Third | Bottom One-Third |
| Average | 9.65% | 10.13% | 9.60% | 9.38% |
| Median | 9.60% | 10.20% | 9.55% | 9.39% |
| Maximum | 10.80% | 10.40% | 10.80% | 9.75% |
| Minimum | 9.00% | 9.75% | 9.00% | 9.05% |
| Count | 54 | 8 | 40 | 6 |

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8 *See*, also, Direct Testimony of Robert B. Hevert, at 59 – 60.

9 Source: Regulatory Research Associates. It is interesting to note that 40 of the 54 decisions were issued by jurisdictions ranked in the middle one-third of RRA's rating system. The eight decisions in the Top One-Third ranked jurisdictions were issued in Virginia (1) and Wisconsin (7).

**Q. WHAT CONCLUSIONS DO YOU DRAW FROM THAT DATA?**

A. First, the Stipulation ROE is within five basis points of the average return (and ten basis points of the median) authorized for natural gas utilities from 2014 through 2016. Looked at from that perspective, it is a reasonable outcome. At the same time, the Stipulation ROE falls 43 basis points below the average (and 50 basis points below the median) authorized ROE for jurisdictions that are comparable to North Carolina's constructive regulatory environment. Taken from that perspective, the Stipulation ROE is a somewhat conservative measure of the Company's Cost of Equity.

**Q. HAVE YOU ALSO REVIEWED THE CAPITAL STRUCTURE INCLUDED IN THE PARTIAL SETTLEMENT?**

A. Yes, I have. In Exhibit RBH-13 to my Direct Testimony, I found that the proxy group average equity ratio over the eight calendar quarters ended December 2015 (based on Common Equity and Long-Term Debt) was 54.05 percent. I understand, however, that the Stipulation calls for a ratemaking capital structure that includes Short-Term Debt (3.38 percent) in addition to Common Equity (52.00 percent), and Long-Term Debt (44.62 percent). As shown in Exhibit RBH-2, those capital structure proportions fall well within the range of those in place at the proxy companies (from the first calendar quarter of 2014 through the second calendar quarter of 2016). On that basis, I believe the Stipulated Capital Structure is reasonable.

**Q. LASTLY, HAVE YOU CONSIDERED THE OVERALL RATE OF RETURN CONTAINED IN THE STIPULATION AGREEMENT?**

A. Yes. As with the authorized ROE, we can observe the overall Rate of Return authorized across the United States; we also can review those returns according to RRA's ranking of the jurisdictions authorizing those returns. As Table 2 (below) indicates, the overall average ROR was 7.41 percent; the median was 7.53 percent (that is, the same as the Stipulated ROR). Among the jurisdictions with rankings in the top one-third of RRA's rating structure, the average and median authorized ROR was approximately 45 basis points above the Stipulated ROR.

**Table 2: Authorized Natural Gas Utility RORs: 2014 - 2016[10]**

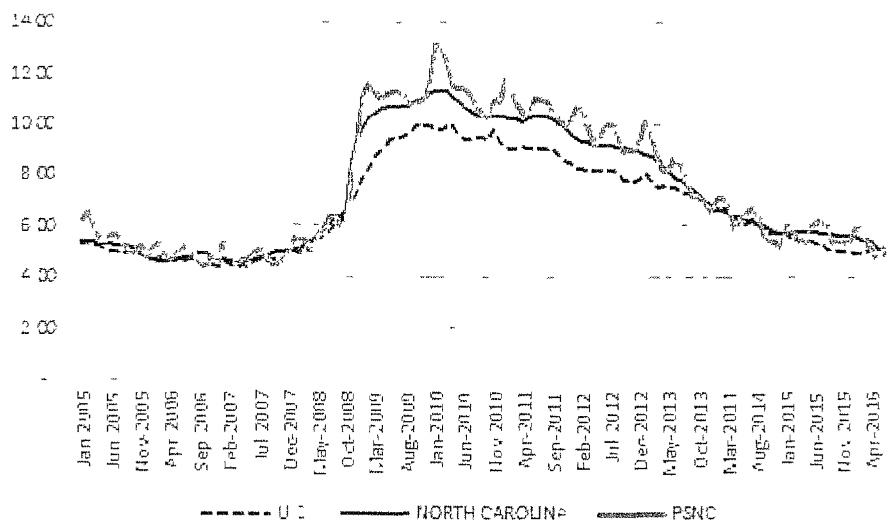
| | | RRA RANKING | | |
|---|---|---|---|---|
| | Overall | Top One-Third | Middle One-Third | Bottom One-Third |
| Average | 7.41% | 7.98% | 7.34% | 7.26% |
| Median | 7.53% | 7.95% | 7.46% | 7.44% |
| Maximum | 8.60% | 8.60% | 8.46% | 7.96% |
| Minimum | 5.33% | 7.35% | 5.33% | 6.26% |
| Count | 52 | 7 | 39 | 6 |

As with the Stipulated ROE, the Stipulated ROR is very consistent with the average return authorized across the Country, but noticeably lower than those authorized in the top-ranked regulatory jurisdictions. From that perspective, the Stipulated ROR is a reasonable, although somewhat

10 Source: Regulatory Research Associates 39 of the 52 decisions were issued by jurisdictions ranked in the middle one-third of RRA's rating system. The eight decisions in the Top One-Third ranked jurisdictions were issued in Virginia (1) and Wisconsin (7).

the national and North Carolina unemployment rates fell to 4.90 percent[15] (the rate in PSNC's service territory was only slightly higher, at 5.14 percent).

**Chart 1: Seasonally Adjusted Unemployment Rates[16]**




As Chart 2 demonstrates, personal income and consumption have continued to expand at the national level.

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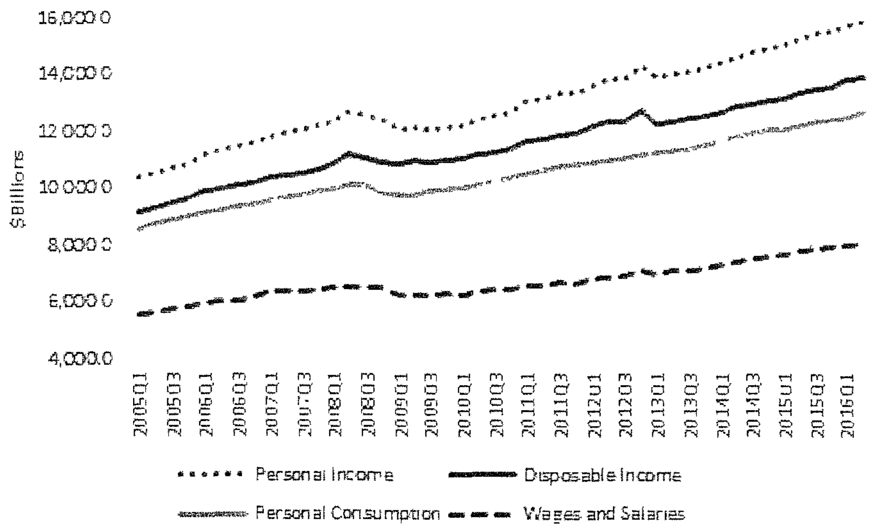
[15] Source: Bureau of Labor Statistics; monthly data, seasonally adjusted

[16] Source: Bureau of Labor Statistics, seasonally adjusted

**Chart 2: United States Income and Consumption**[17]




Lastly, in its August 2016 "Snapshot of North Carolina", the Federal Reserve Bank of Richmond (the "Richmond Fed") noted that "North Carolina's economy strengthened, according to recent reports, as total employment grew notably, household conditions continued to improve, and housing market indicators were mostly positive." The Richmond Fed also observed the following:

- Employers in North Carolina added 19,400 jobs (0.50 percent) in June as every industry except financial services and "other" services expanded payrolls in the month.
- North Carolina's unemployment rate fell 0.2 percentage point to 4.90 percent in June and declined 0.9 percentage point since June 2015. In

[17] Source Bureau of Labor Statistics, monthly data, seasonally adjusted

the first quarter of 2016, the share of mortgages with payments 90 or more days past due fell 0.2 percentage point to 1.50 percent.

- North Carolina issued 5,210 new residential permits in June, up 7.10 percent from the prior month and up 11.9 percent from June 2015.[18]

**Q. WHAT CONCLUSIONS DO YOU DRAW FROM THAT INFORMATION?**

A. First, I note that economic conditions continue to improve from the very difficult 2008 – 2009 recessionary period: unemployment in North Carolina has fallen substantially, and is now equal to the national unemployment rate; the real GDP growth rate in North Carolina has somewhat exceeded the national average since 2012: personal income and consumption (at the national level) continue to improve; and the Richmond Fed has noted increases in employment, and housing permits over the past several months.

Second, it is important to keep in mind that the models used to estimate the Cost of Equity reflect capital markets and, therefore, general economic conditions. Given that changes in economic conditions in North Carolina are related to the domestic economy, it is reasonable to conclude that both are reflected in ROE estimates.

It therefore continues to be my view that on balance, economic data regarding North Carolina and the United States do not alter the Cost of Equity estimates, or my recommendation, one way or the other.

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18 Federal Reserve Bank of Richmond, *Snapshot of North Carolina*, August 2016.

Q. **DOES THIS CONCLUDE YOUR SETTLEMENT SUPPORT AND REBUTTAL TESTIMONY?**

A. Yes, it does.

BY MS. GRIGG:

Q Mr. Hevert, have you prepared a summary of your direct testimony?

A Yes, I have.

Q Could you please give it to the Commission at this time?

A Yes. Thank you. Good morning. My direct testimony presents evidence and provides a recommendation regarding the return on equity or ROE, which also sometimes is referred to as the "Cost of Equity" that should be adopted for PSNC in order to establish the Company's rates in this case, and discusses the reasonableness of the Company's proposed capital structure.

With regard to the ROE, I discuss the issues surrounding the cost of equity in regulatory proceedings generally, explain the relationship between the cost of equity and the cost of capital, and explain further that the estimated cost of equity should reflect the return that investors require in light of the Company's risks, and the returns available on comparable investments. I also discuss the regulatory guidelines and financial considerations that relate to developing the overall cost of capital, and explain my selection of the proxy group of natural gas distribution utilities used to develop my ROE estimate for PSNC.

My direct testimony also describes each of the analytical approaches that i used to arrive at my ROE recommendation for this case - the constant growth and multi-state forms of the Discounted Cash Flow or "DCF" model, the Capital Asset Pricing Model or "CAPM", and the Bond Yield Plus Risk Premium approach - and explains my analyses based on each of these approaches.

Lastly, my direct testimony discusses specific business risks, current capital market conditions, and other considerations that have a direct bearing on the Company's cost of equity. I discuss the current economic conditions in North Carolina and conclude that, based on the indicators I discus, North Carolina and the counties contained within PSNC's service area continue to steadily emerge from the economic downturn that prevailed during the Company's previous rate case, and have experienced significant economic improvement during the last several years, and that improvement is expected to continue. I conclude that PSNC's proposed ROE is fair and reasonable to PSNC, its shareholders and its customers in light of the effect of those changing economic conditions.

Q Thank you. Have you also prepared a summary of your supplemental testimony?

A Yes, I have.

Q Would you please give that at this time?

A Yes. Thank you. My supplemental testimony explains my support for the Partial Stipulation among PSNC, the Public Staff, Carolina Utility Customers Association and Blue Ridge Paper Products, whom I will refer to collectively as the Stipulating Parties. In particular, my supplemental testimony addresses the agreed-upon return on equity or "Stipulated ROE", the stipulated capital structure and the stipulated overall rate of return. I explain that although the Stipulated ROE of 9.70 percent is somewhat below the lower bound of my recommended range as presented in my direct testimony, and while it remains my position that in a fully litigated proceedings, a range of 10.00 percent to 10.75 percent would represent a reasonable and appropriate measure of the Company's cost of equity, I also recognize that the Stipulation represents the give-and-take among the Stipulating Parties regarding multiple, otherwise-contested issues. If it is the Company's determination that the terms of the Stipulation, taken as a whole, are such that it will be able to raise the external capital required to continue the investments required to provide safe and reliable service, and that it will be able to do so when needed and at reasonable cost rates, then I appreciate and respect that decision.

I note that since 2014, authorized returns of 9.70 percent and higher have been common for natural gas utilities, with 24 of 54 returns authorized for such utilities being 9.70 percent or above. In summary, it is my view that the 9.70 percent Stipulated ROE is a reasonable resolution of an otherwise contentious issue.

My supplemental testimony also

explains the importance to rating agencies of the regulatory environment's support of credit, and notes that North Carolina is generally considered to have a constructive regulatory environment. I explain further that, as the Stipulation ROE is within five basis points of the average return and 10 basis points of the median return authorized for natural gas utilities from 2014 through 2016, from that perspective it is a reasonable outcome. I also note, however, that as the Stipulation ROE falls s43 basis points below the average, and 50 basis points below the median, authorized ROE for jurisdictions that are comparable to North Carolina's constructive regulatory environment, from this alternative perspective, the Stipulation ROE is a somewhat conservative measure of the Company's cost of equity.

My supplemental testimony also presents my conclusions on the stipulated capital structure of 3.38 percent short-term debt, 52.00 percent common equity, and 44.62 percent long-term debt. Based on the fact that those proportions fall well within the range of the proportions in place at the proxy companies from the first quarter of 2014 through the second quarter of 2016, I believe the stipulated capital structure is reasonable. I also present my conclusion that the stipulated rate of return of 7.53 percent is reasonable, although somewhat conservative, estimate of PSNC's overall investor-required rate of return.

Lastly, in my supplemental testimony I discuss my updated analysis of economic conditions in North Carolina, which continues to support my conclusion as presented in my direct testimony that the reasonable, excuse me, regional economic challenges in North Carolina were substantially similar to those in the rest of the country, such that there was no direct effect of those conditions on PSNC's cost of equity.

That concludes my summaries. Thank you very much for your time.

Q Thank you. Mr. Hevert, are you aware that the Company has entered into an Amended Stipulation since you filed your supplemental testimony?

A Yes, I am.

Q And that the ROE and the cap structure remained unchanged from the Partial Stipulation to the final Amended Stipulation?
A Yes, I understand that.

MS. GRIGG: Thank you. Mr. Hevert, is available for cross examination.

COMMISSIONER BROWN-BLAND: Ms. Force.

CROSS-EXAMINATION

BY MS. FORCE:

Q Good morning, Mr. Hevert.
A Good morning.
Q I have questions for you obviously about the rate of return, particularly return on equity but also on the capital structure, and I'd like to start with some questions about the capital structure.
A Okay.
Q You support the 52 percent equity ratio in your supplemental testimony, right?
A Yes, that's correct.
Q And initially Public Service proposed a higher ratio, I think it was 53.5 percent; does that sound right?
A That's correct.
Q And you provided testimony in support of that

high ratio in part by comparing the ratio for other companies in your proxy group; is that right?

A I did.

Q And so I'm talking about a proxy group and that's -- I think there were seven companies that you identified that you found to be similar and characteristic to Public Service?

A That's right.

Q And just to elaborate on that, am I right that the idea or the objective there is to find comparables in the marketplace to see what it looks like investors are looking to receive or are receiving in the market and those other companies; is that essentially it?

A That's largely it. But just to clarify a little bit, the use of proxy companies is necessary when we look at the issue of opportunity costs and when we sometimes go back to the Hope and Bluefield requirements, the comparable return standard for example. The cost of equity is necessarily based on the principle of opportunity costs which means that the return that you require is the return that you forego on a comparable investment. That's largely why we put together proxy groups. We want to find those comparable investments and calculate the return required on those as the measure of that foregone return.

Q And when we're talking about the capital structure and what portion of that capital structure is equity versus debt, you would agree with me, wouldn't you, that from the standpoint of how much it costs ratepayers it's more expensive to have equity for every dollar of investment that comes from equity? It's a higher rate of return than for debt.

A It is for the fundamental reason that equity holders bear what's referred to as the "residual risk". Equity holders are last in line to get the cash flows generated by the Company. They do not have a contractual right or claim on cash flows, they get what's left. The cost of debt is contractually defined. There's a term -- there are, excuse me, by term I mean maturity, and there are contractual provisions with regard to security and priority; equity has none of those. As a consequence, equity holders bear more risk than debt holders and, therefore, require a higher return.

Q And when you're looking at the reasonableness of how much of the structure in the case is equity, one of the things that you did in this case was to look at some other, well the other companies or corporations that are traded to see what their structure is; is that right?

A Yes, that's right. We looked at the capital structure for the seven proxy companies.

Q And in your supplemental exhibit where you looked at the percentage of equity, the percentage of long-term debt and the percentage of short-term debt, all three of those in the capital structure, the mean, average of the proxy group was 49 -- oh gosh, I can't read -- 49.75 percent; is that right?

A It is small type but yes, that's correct.

Q I'll get my glasses just right. Sorry.

A That's okay.

Q And that's on your Supplemental RBH-2?

A Right. And, as you pointed out, this exhibit does include short-term debt and short-term debt is a little bit different. Mr. Addison used a term earlier today, a technical term "lumpy" that I agree with. It's been awhile since I raised capital for utility but I did spend time raising capital for utilities, for a utility. And long-term debt and common equity get raised in large discreet amounts. The short-term debt on the other hand changes day-to-day and it changes based on the liquidity requirements of the firm. It's typically used to finance short-term network and capital requirements. The -- and you can almost see a pattern when you look at the short-term debt balances there with the second quarter average generally being the lowest. That gives you a sense of the seasonal nature of short-term debt. But one concern that I often have presenting data this way, although we have really no alternative, is that short-term debt can change day-to-day. What we have here is a snapshot of the balance on one day of the quarter, the last day of the month. It may have been considerably lower during the course of that month and so, while I do present the short-term debt ratios here, I just want to be sure that we're all aware that it is a snapshot at the end of the month. It doesn't necessarily indicate what the sort of minimum level of short-term debt would be.

Q And so it's a snapshot but you have taken a few of them, right, a few snapshots over the course of your exhibit?

A We try to do that because --

Q 16 or so?

A Right. We've got eight quarters.

Q Oh, okay.

A Yes, eight calendar quarters. Well actually we extended that a little bit --

Q 10.

A -- being the supplemental. That's right, and we do that because of the seasonal nature. But again, because of the way short-term debt fluctuates day-to-day, this is not necessarily a full snapshot of what the average balance would be during the course of the month, it's the balance at the end of the month.

Q I have an exhibit that I'll give to you to look at.

A Thank you.

MS. FORCE: I'd ask that this be marked as

Attorney General Hevert Cross-Examination Exhibit 1.

COMMISSIONER BROWN-BLAND: It will be so identified.

Attorney General Hevert Cross-Examination Exhibit 1 (Identified)

BY MS. FORCE:

Q Mr. Hevert, I'll submit to you that this is a response to the Public Staff, but was prepared by Public Service in this case, and it reflects at different points in time the capital structure for SCANA on pages 1 and 2 and then on pages 3 and 4 for Public Service.

A Yes, I see that.

Q Does that appear to be correct?

A Yes.

Q And just looking for Public Service, that's on page 3, you were talking about a snapshot in time, if you look at that December of 2010, it looks like the short-term debt at that point was 17.85 percent of the capital structure. Now, that's not typical, is it?

A No, that would not be typical.

Q But it does -- it is something -- I assume -- I think, didn't -- you said you were with a gas

utility -- with a utility for a time; wasn't it a gas utility?
A It was, indeed. Right.
Q And so in your experience, I would imagine, that the commodity price of gas, and the fluctuation, and the consumption can make quite a difference in the amount of -- I'm calling it short-term debt, but the amount of investment on a temporary basis to get the gas to customers?
A When we're talking about a short-term debt balance, I agree with you, that's part of it. You do have the need to fund inventory. You've got receivables that may not have come out -- come in, payables that went out. You may have paid for capital investments that you've not yet, what we would sometimes call, "termed out", refinanced with longer-termed debt. So there are a number of variables --
Q Sure.
A -- that could drive the short-term debt balance at any given point in time. Nonetheless, there typically is a seasonal aspect to it.
Q And gas, in particular, the commodity part of it is one that appears on a regular basis although

in different amounts. I would assume that it's a short term -- short time between the time the Company delivers the gas to its customers and it's --
A Well, there's that aspect --
Q -- recovering revenues.
A I'm sorry. I didn't mean to interrupt you. There are companies and, again, I don't know this company's gas supply portfolio, but there are companies, for example, that will inject gas into storage during the summer to be used later in the winter and as they inject gas into storage there is a fund setter needed to pay for that. And so, again, the seasonal nature of the gas inventory requirements can have an affect on the short-term debt balance.
Q Well, I didn't mean to take up a lot of time with that but it is something that short-term debt is part of the capital structure. Now, when you first filed your direct testimony you didn't include the short-term debt when you evaluated the proxy companies; isn't that right?
A That's correct, I did not.
Q But I kind of got the impression, when I first

read your supplemental testimony, that that wasn't included in the capital structure that was proposed by the Company, the short-term debt component, it was, right? You just didn't take it into account.
A I'm not quite sure I understand your question.
Q I'm sorry. I guess that was a little of confusing. So in the initial testimony, excuse me, the initial Application that the Company filed they did have short-term debt as part of their capital structure, right?
A Right.
Q Okay. But you compared the equity portion to the equity portion of the proxy companies, not including short-term debt in theirs?
A Right, that's exactly right.
Q Am I right that that tended to overstate the equity portion of the capital structure?
A Well, it could depending upon -- depending upon the circumstances of each company and depending upon whether short-term debt is rightfully where it's placed at any given point in time. But I would say that, generally speaking, if you look at what is Supplemental Exhibit RBH-2 to the

capital structure provided to my direct testimony, then certainly the common equity balances are lower in this case, if that's your question.
Q Well that is -- that is my question. I think you said that your -- in your direct testimony I think you found -- did you find an average of 54.05 percent was the average?
A Let me go back.
Q That's on page 7 of your supplemental testimony, lines 12 through 15. And you say, *In Exhibit RBH-13 to my Direct Testimony, I found that the proxy group average equity ratio over the eight calendar quarters ended December 2015 (based on Common Equity and Long-Term Debt) was 54.05 percent.*
A Right. And then go on to say that the Stipulation calls for a capital structure including short-term debt. And in order to assess the Stipulation relative to the proxy companies in my supplemental testimony I included short-term debt in the analysis.
Q Right. And when you did that it went from 54 -- well, the numbers speak for themselves, but 54.05

is what you got the first time and if we look at it I think the comparable number is forty-nine point, whatever that is, seven five.

A Sure. But I've not suggested -- I don't think I've suggested it -- that what we ought to do is target the average. In fact, if you were to go back to my direct testimony in the table, table 8 on page 88, I present the range. And what we talk about is the extent to which the companies' capital structure is consistent with the range. Now, if we were to go back to Supplemental Exhibit RBH-2, and even if we look at that last column, that last average column, you'll see the equity ratio and average equity ratio as high as 54.04 percent, and so 52 certainly falls within the range. My point simply is that including short-term debt in the capital structure does not change my conclusion that 52 percent is reasonable. It's certainly within the range of what we see.

Q Another thing that you indicated in your initial testimony is that you could look at the capital structure of the holding company to get a sense of how their capital structure is and --

A Can you point out to me where in my direct testimony?
Q Let me see. Your testimony on capital structure is way at the back, 85.
A It is way in the back.
Q So on the top of page 85, *in cases in which the subject company does not have -- does not issue its own securities*. And, granted, in this case I think we know that Public Service issues its own securities.
A Right.
Q But you say it may be reasonable to look at the parent's capital structure. So is it your position that it's not reasonable to look at it if they have their own security issuances?
A My position when it comes to operating company capital structure is, if they issue their own securities and, if the capital structure that the company has is reasonable, and I use reasonable by reference to industry practice, perhaps even rating agency criteria, then it's not necessarily important to look up to the parent's capital structure. The way I look at capital structure is to say that utilities in general have certain

things in common. They have to finance very large, essentially irreversible, long-lived investments. They have to be able to enter the capital markets at any given point in time, regardless of market conditions. They do not have the ability or the option to defer those decisions. They have those things in common and so we often think it's good to look at capital structure at the operating company level. Because when you look across holding companies there may be subsidiaries to which those conditions do not apply. So my focus typically would be at the operating company and, in this case, I think it's reasonable to look at the operating company as opposed to looking up to the SCANA level.

Q I think there -- there are indications though, aren't there, that SCANA has used debt to invest its -- the equity that it has in Public Service so that money, the cost of debt is relatively quite a bit lower than the cost of new equity; isn't that right?

A I'm sorry. I'm not following your question. If your question is generally speaking is the cost of debt lower than the cost of equity, I agree with that.

Q Okay. Let's move to that. We'll talk more about that unless -- I think I got my point. We're not always going to agree on things, I guess, as we go forward.

A We try though.

Q Just to follow up I've passed out that two-page exhibit that's my first cross-examination exhibit for you and I've put it -- here it is -- the four-page exhibit. The first two pages were the capital structure for SCANA, am I right?

A Yes, that's what it reads.

Q And you would agree with me, wouldn't you, that the portion in SCANA that's equity is not the same at all times. As you said, it will change there, too, but it is more in the range of 45 percent or less?

A It is. And for the reasons I just spoke about, I don't think I would look to that as a reference for PSNC's capital structure.

Q Well, let's talk about the rate of return on equity then. We can turn to that now.

A Okay.

Q You testified that return on equity is not specified in the market as is the return on debt and so we talked about those a little bit already. It's estimated on observable market information.
A Right.
Q Does that sound right?
A Right. We can observe the cost of debt in interest rates. We cannot observe the cost of equity.
Q And a key factor in doing that examination, you've indicated is to try to quantify what investor expectations are.
A That's correct. Investor expectations are important and investor requirements, likewise, are important. They're not always the same thing but a required return isn't always the same thing as an expected return but, nonetheless, expectations are important.

(Sidebar among counsel while an exhibit is being distributed.)

MS. FORCE: I'd ask that the SCANA, excuse me, these are Value Line reports that I'll talk to the witness about in a minute. One of them is for SCANA and I'd ask that that be marked as Attorney General Hevert Cross-Examination Exhibit 2.

COMMISSIONER BROWN-BLAND: That one will be so marked and identified.

Attorney General Hevert Cross-Examination Exhibit 2
(Identified)

MS. FORCE: The other is a stapled together -- and there are two sides to the copies -- Value Line for the proxy group. I'd ask that that be marked Attorney -- Oh, I should have -- it's a little confusing. This is a response to a request from Public Service so if you'll look at the top of the page marked "ATMOS" it says "Attorney General Data Request No. 2" but over to the side I put a little sticker, Attorney General Hevert Cross-Examination Number 3.

COMMISSIONER BROWN-BLAND: It will be so identified.

Attorney General Hevert Cross-Examination Exhibit 3
(Identified)

BY MS. FORCE:

Q Mr. Hevert, you've had a chance to look at these and I'm sure you've seen them before. Would you agree with me that this is the Value Line report

for SCANA Corporation that I've handed you and we just marked as Cross-Examination Number 2, dated November 20, 2015, and then the -- and that's not a response that you provided. This is not part of your proxy group, am I right?
A Correct.
Q Okay. But the others that are Cross-Examination Exhibit Number 3, are those not the Value Line reports that you relied on when you were looking at the proxy companies?
A Yes, that's right.
Q Look through it, you'll see all seven of your proxy companies.
A Yes, I've noticed that.
Q And they're all dated December 4, 2015, which would have, I assume was -- what was available at the time you prepared your testimony.
A That's right.
Q And, by comparison, can you tell us why the SCANA is November 20th?
A The Value Line, they separate the companies that they cover into various sectors and they provide their updates at different times during different quarters. So it's simply a matter of the

schedule during which Value Line updates their reports.
Q So we don't have the same date for SCANA's because there's not one issued that date, but this is about as close as you'd get to the date of the issuance for the others, would you agree?
A It's very close. It's within a couple of weeks.
Q Right. And it's Value Line -- I passed this out because, at the risk of going blind with all of the small print, it provides a lot of information about these companies and I notice that you used quite a bit -- you refer to Value Line in your testimony. So, for instance, for ATMOS, it gives the recent price on that date as 62.38; that's the stock price?
A Correct.
Q Am I right? And if you look at the P/E Ratio is that price-to-earnings ratio?
A It is the price-to-earnings ratio. The way Value Line presents that 19.4 is earnings are based on one half historical and one half projected. You'll see there is a parenthetical that says -- *Trailing 20.2*, those would be 12 months trailing earnings.

Q Okay. There's lots of other information, we'll come back to this, but this is something that -- this is something that Value Line provides to subscribers, I assume, pretty much its investors who like to look at this stuff, am I right? Maybe there's other people who --
A Unless people have odd hobbies but, yes, maybe.
(Laughter.)
Q I got some -- (inaudible) -- looking at it.
A Right.
Q But, if I were investing or looking at comparables, I would have all kinds of information about each of these companies in a similar format that I can look at for the information?
A That's right.
Q So -- all right, I'm going to go back to your testimony then. You've performed three types of analyses to come up with the ROE, right; essentially three, the DCF, the, what you call the CAPM and risk premium. Those are a lot of alphabet letters.
A Lots of acronyms but, yes, that's right.
Q And discounted cash flow is the first one?

A That's correct.
Q And you did it a couple of different ways when you looked at discounted cash flow, but this is really putting it in layman's terms because that's what I am. If you're looking at a discounted cash flow analysis, trying to evaluate about how much cash you're going to get and how much growth you're going to get over time from the stock, is that basically what's involved?
A That's basically it. It assumes that cash flow has come in two pieces, one are the dividends that you receive when you hold the stock and the second is the price you receive when you sell the stock.
Q And so when you're evaluating it, when you do your study of DCF or discounted cash flow, you look at the dividends and you look at the growth -- that's how I've seen it termed usually -- and it's the sum of those two essentially, isn't it, with some modification?
A Yes. In the constant growth form, that's essentially right.
Q Okay. And that's the one that you did first and we can turn to that but I have a few questions

for you before we get to that. I guess, well, first of all, we haven't really talked about it but you've -- in your testimony you have said that you support the ROE of 9.7 percent in the context of the settlement; is that fair to say?

A That's right.

Q But your rate -- you continue to maintain that the range that you would recommend would be between 10 and 10.75; is that right?

A That's correct.

Q And the rate itself that you recommended was 10.6 percent, right?

A Correct.

Q So when we're looking at settling at 9.7 percent, that's lower than the low end of your range, right?

A It is.

Q So we've seen you here before, Mr. Hevert, and I remember there were a series of cases, three of them were Duke cases; two Duke Energy Carolinas and one of them was Duke Energy Progress. And similar to this case where you're at about 30 -- well, you are 30 basis points below the bottom of your range. In those Duke cases you were also below the bottom of your range in the settlement. Okay. That didn't come out very well.

(Laughter.)

But the rate, the rate that you -- in the end was settled on by the company because all of those Duke cases were settled; do you remember that?

A Yes.

Q And the rate that they settled on in those cases was lower than the bottom of your range you recommended the return on equity?

A It was.

Q And, in fact, 30 basis points like this one is 30 basis points lower. I think one of them was 25 basis points lower, pretty close. And we also had a case involving Dominion, Dominion North Carolina Power, you know that Company, too. They're back in.

A So I've heard.

(Laughter.)

Q I guess you have. And in that case it wasn't a settled case, was it? It was a litigated case and the Commission decided a rate of return. And, as in the other cases, the rate of return on equity that the Commission determined was 30 basis points lower than the bottom of the range that you recommended in that case. Does that sound right, subject to check?

A That sounds about right.

Q I can provide the cases and the sites but, if you agree with me, I'll say subject to check or I could ask the Commission to take judicial notice of those other Orders.

COMMISSIONER BROWN-BLAND: The Commission will take judicial notice of its Orders.

MS. FORCE: Okay. And, though, I can give you the specifics of those or -- but they were three Duke rate cases and one Dominion.

COMMISSIONER BROWN-BLAND: Do you have the docket numbers?

MS. FORCE: I do.

COMMISSIONER BROWN-BLAND: If you could read them into the record.

MS. FORCE: So the first case on my list is the Duke 2013 case in Docket Number E-7, Sub 1026, and there was an Order Adopting Settlement issued on September 24, 2013. The second is also a Duke Energy Carolinas case in E-7, Sub 989, and there was an Order that was issued January 27, 2012. And the third is Dominion North Carolina Power in E-22, Sub 479, the Order was issued December 21, 2012. And the fourth was Duke Energy Progress in E-2, Sub 1023. The Order was issued May 30, 2013.

COMMISSIONER BROWN-BLAND: Ms. Force, if this is a good time, we'll take a break for lunch.

MS. FORCE: Okay.

COMMISSIONER BROWN-BLAND: And we will come back with Mr. Hevert on the stand at 1:35.

(WHEREUPON, the proceedings were recessed at 12:15 p.m., to be reconvened at 1:35 p.m.)

CERTIFICATE

I, KIM T. MITCHELL, DO HEREBY CERTIFY that the Proceedings in the above-captioned matter were taken before me, that I did report in stenographic shorthand the Proceedings set forth herein, and the foregoing pages are a true and correct transcription to the best of my ability.

Kim T. Mitchell

Kim T. Mitchell
Court Reporter II